Original Scientific Paper

IMPACT OF THE COVID-19 PANDEMIC ON THE ECONOMIC EFFECTS OF TOURISM IN CENTRAL, EASTERN AND SOUTHEASTERN EUROPE (CESEE) COUNTRIES

UDC 616.98:578.834]:338.48(4)

Tanja Stanišić, Miljan Leković, Sonja Milutinović

University of Kragujevac, Faculty of Hotel Management and Tourism in Vrnjačka Banja,
Republic of Serbia

ORCID iD:	Tanja Stanišić	https://orcid.org/0000-0001-5809-794X
	Miljan Leković	https://orcid.org/0000-0002-4952-3991
	Sonja Milutinović	https://orcid.org/0000-0001-9913-4495

Abstract. *The Covid-19 pandemic has brought numerous challenges and limitations globally. Countries around the world are facing the negative socio-economic consequences of the global health crisis. As the tourism sector is one of the most important sectors of the global economy and also one of the sectors hit hardest by the crisis, the consequences of the negative impact of this crisis in tourism are very wide. The subject of this paper is to investigate the impact of the Covid-19 pandemic on the economic effects of tourism in Central, Eastern and Southern European (CESEE) countries. The aim of this paper is to analyse the homogeneity, i.e. heterogeneity of the analysed countries in terms of the negative impacts of the crisis on the economic effects of tourism through the analysis of the reduction of the contribution of tourism to key macroeconomic indicators under the influence of the Covid-19 pandemic. By applying cross-country comparison and cluster analysis, it was concluded that CESEE countries are not homogeneous in this sense, as well as that countries in which the importance of tourism for the national economy is greater are more severely affected by the crisis.*

Key words: *tourism, economic effects, Covid-19*

JEL Classification: Z30, Z32

1. INTRODUCTION

Tourism is an industry that has shown exceptional sensitivity to various types of crises of economic and non-economic nature. The data show that tourist demand has always shown a high degree of elasticity in relation to the influence of external factors. On the other hand, tourism has usually shown an exceptional ability to recover in the previous period. Tourist traffic reached the level of the pre-crisis period very quickly in the years after the crisis or even exceeded it. However, none of the crises recorded so far in the modern development of tourism has had such intense negative effects as the still current health crisis, i.e. the Covid-19 pandemic. The world is currently facing a health crisis that has a number of specifics in general, but also in terms of the way it affects the tourism sector. The dramatic decline in tourist traffic is of a global character and applies to all countries of the world, and a complete recovery is uncertain even after a little more than two years. The economic collapse caused by the crisis has been extremely dramatic, the impact on the tourism industry is very destructive, the crisis has led and is expected to lead to further changes in many tourism segments (Kreiner & Ram, 2020; Škare et al., 2021). The Covid-19 pandemic has brought a number of lessons to learn from both demand side and supply side in tourism.

In addition to its sensitivity, tourism is a strategic sector of the economy in many countries around the world with numerous economic effects (Luković & Stojković, 2020). The contribution of tourism to key macroeconomic aggregates, i.e. gross domestic product (GDP) and employment is significant. This fact further deepens the serious negative effects of the crisis. Considering the differently perceived importance of tourism for the national economy of a certain country, but also considering their different possibilities, in the past period, different responses of the tourism policy of countries have been recorded when it comes to mitigating the negative effects of the crisis on tourism. When it comes to the economic effects of tourism, it can be generally concluded that all countries are facing a serious reduction in the share of tourism in GDP and employment.

Despite numerous papers published on the topic of the Covid-19 impact on tourism, there is still, to the knowledge of the authors, no significant academic discussion on the impact of the pandemic on the economic effects of tourism, nor have significant efforts to perform comparative cross-country analysis been made. The paper is an attempt to contribute to filling this gap in the literature. The subject of the analysis are the Central, Eastern and Southeastern Europe (CESEE) countries, with the intention to review and compare the intensity of the reduction of tourism share in GDP and employment of the analysed countries under the influence of the Covid-19 pandemic. The aim of this paper is to analyse the participation of tourism in key macroeconomic indicators in the year before the crisis and the first year of the crisis, to see the homogeneity and heterogeneity of the analysed countries in terms of negative impacts of the crisis on economic effects of tourism. The analysis will provide an answer to the question of whether countries in which tourism is more important in the national economy are more affected by the negative effects of the crisis.

2. LITERATURE REVIEW

As tourism is based on the movement of people, it is not surprising that the Covid-19 pandemic has made tourism one of the most vulnerable activities. Namely, governments around the world have made enormous efforts to prevent the spread of the virus, and

these efforts have largely related to restricting the movement of people. Restrictions on mobility have had a direct negative impact on tourism (Özen & Özdemir, 2021). Drastic measures taken by certain countries, which were reflected in the locking in a certain period of the country as a whole or its most endangered cities and areas and banning or restricting the entry of foreign citizens into the country, resulted in a huge blow to the tourism sector, tourist destinations and tourism economy (Fotiadis et al., 2021; Radić et al., 2021). It should be emphasized that the states on the one hand made efforts to support tourism, but also that tourism is often characterized by governments during the pandemic as a potentially risky activity. Residents are urged not to travel abroad. Also, in many countries there were different entry conditions for foreign and domestic citizens. In the academic literature, the issue of interdependence between international tourism and COVID-19 cases has been addressed by Farzanegan et al. (2020). Using regression analysis, they confirmed that countries with developed international tourism and a higher number of foreign tourist arrivals are more prone to cases of the COVID-19. Restrictions imposed by governments around the world are one of the causes of the decline in tourism, but other equally important causes are the tourists themselves. Concerned about their safety and security, with the spread of news about the Covid-19 pandemic, travellers often decided to cancel or delay the trips immediately and showed a high degree of sensitivity to the effects of this external shock (Uğur & Akbıyık, 2020). Certain authors emphasize that the pandemic has changed, not only behaviour, but also the psyche of tourists and that it will likely settle on a different, i.e. new equilibrium in the post-crisis period (Kock, 2020; Perčić & Spasić, 2021). This new balance will most likely be characterized by an increased level of fear, concern and carefulness of tourists.

In the literature, in addition to analysing the impact of the pandemic on consumer behaviour, indicators of tourism development and tourism enterprises, with special emphasis on the sensitivity of the hospitality and air travel industry, special attention is paid to the fact that the new circumstances represent a challenge, but also a chance for significant changes in tourism and the establishment of a certain new, more desirable paradigm of tourism development. The success of modern tourism development has been measured and expressed by the growing number of tourists for decades. Intense growth has led to over-tourism, and the Covid-19 pandemic is an opportunity to critically rethink this way of looking at success. The massiveness of global tourism carries a number of interrelated risks and increases the negative contribution of the tourism sector to climate change. The current pandemic is an opportunity for collective learning how to transform tourism into a sustainable form and to rethink the model of tourism growth (Gössling et al., 2020; Payne et al., 2021). Sharma et al. (2021) state that this challenge may be an opportunity for long-discussed forms of tourism, but which do not yet have the position they deserve, such as local tourism and sustainable tourism. The current situation is seen as an opportunity for awakening and desirable transformations in tourism, which will become more sustainable, inclusive and in which the needs and interests of all stakeholders will have equal importance and attention (Cheer, 2020). The changes that are taking place point to the need to re-respect the needs of host communities in the survival and development strategy of tourism (Lapointe, 2020). In this context, it can be concluded that we are at a crossroads which is a perfect opportunity to choose the path that the future development of tourism will takeby taking advantage of favourable environmental and other impacts brought by the Covid-19 pandemic (Ioannides & Gyimóthy, 2020; Nagaj & Žuromskaitė, 2021). A

more balanced and sustainable tourism development is currently seen as an option with no alternative.

The question that can be asked is whether the cost of potential greater environmental sustainability will be paid by the economic importance and role of tourism. Also, residents of tourist destinations themselves have shown a willingness to sacrifice the economic well-being in order to avoid the risks posed by the Covid-19 pandemic, i.e. potential social costs. (Qiu et al., 2020). The revenues generated by the tourism industry are seriously threatened by the Covid-19 pandemic. Polyzos et al. (2020), predicting the impact of the current pandemic on tourist arrivals, emphasize that they will not so easily return to previous trend values, which can cause a number of devastating economic effects. The problems faced by the enterprises of the tourism industry due to the reduction and cancellation of travels in the past two years have led and will continue to lead to a reduction in the number of employees in the future as one of the ways of cost cutting. The other side of the problem is the fact that tourism is a labour-intensive activity and that many workers have direct contact with tourists, which accelerates the transmission of the virus (Volkmann et al., 2021).

As tourism is a significant generator of GDP and employment in many countries, some authors have focused their research on the impact of the Covid-19 pandemic on the economic effects of tourism. Zhang et al. (2021) use a combination of econometric and qualitative methodology to predict the recovery of tourist demand and evaluate the economic effects of the COVID-19 pandemic on the tourism industry. Salehnia et al. (2020), examining the impact of the Covid-19 pandemic on the tourism industry of European countries, conclude that the impact is much more acute than expected, and that countries, especially those in which tourism generated high incomes, must seek solutions to compensate tourism industry losses. In the European Union, either at the supranational level or at the national level, i.e. at the level of individual member states, a number of tourism policy measures have been implemented which were expected to enable the recovery of tourism. These measures were of a financial nature, through various types of assistance to companies in the field of tourism, but also measures aimed at ensuring a higher level of safety and security of tourists and health protection. A joint action and recovery plan at the EU level is unlikely, due to the fact that tourism is not equally important for the all EU member states (Bera et al., 2020).

In the existing literature, there are attempts to compare the impact of the Covid-19 pandemic on the economic effects of tourism between individual countries or groups of countries. Investigating the effects of Covid-19 in Central European countries, Romisch (2020) states that economic effects vary by country, but that Italy, as the first country affected by the pandemic in Europe, and Croatia, as the country that suffered a sharp decline in tourism, experienced the greatest negative economic consequences in 2020. The author estimates that the intensity of the negative impact of the decline in tourism on the countries of the region will depend on the importance of tourism as a source of income and employment. Xu (2021) is researching the impact of the Covid-19 pandemic on the international tourism of Northern and Southern European countries. The author estimates that the impact of the crisis on tourism is worse in the North than in the Southern European countries. As one of the arguments for such a situation, he cites the fact that in countries in which economic development is more dependent on tourism, greater efforts are being made to stabilize the effect of external shocks on tourism. This is in contradiction with the conclusions reached by Barkas et al. (2020). Namely, they state that the economic contributions of tourism, in terms

of both output and employment, are not significantly correlated with the measures that countries are taking to respond to the crisis. The governments of many countries have prioritized the preservation of employee income and in this regard have given priority to financial support to companies to retain their employees, preserve their salaries or provide retraining of workers in tourism, regardless of the level of tourism contribution to key macroeconomic aggregates. Given the unprecedented decline in the number of tourist arrivals at the global level, there is a certain degree of persistence in the movement of both indicators, the contribution of tourism to GDP and the contribution of tourism to employment, but the indicators are much lower than before the pandemics (Payne et al., 2021).

3. METHODOLOGICAL FRAMEWORK OF RESEARCH

The methodological basis of the research is cross-country comparison and cluster analysis. The cross-country comparison is made based on data on the economic effects of tourism in CESEE countries. Cluster analysis as a set of multivariate statistical analysis methods is widely used in tourism research (Brida et al., 2020; Hrubcova et al., 2016; Roman et al., 2020) and in this paper it is used as a quantitative method of classifying CESEE countries according to the intensity of the impact of the Covid-19 pandemic on the economic effects of tourism.

The economic effects of tourism are measured by the contribution of tourism to GDP and employment as the basic macroeconomic aggregates. The information base of the research consists of data of the World Tourism and Travel Council (WTTC). The classification of countries into Central, Eastern, and Southeastern Europe countries is performed according to the methodology of the International Monetary Fund (IMF, 2016).

In accordance with the defined subject and the aim of the research, the paper starts from the following hypotheses:

H1: Central, Eastern, and Southeastern European countries (CESEE) are not homogeneous in terms of the negative impact of the Covid-19 pandemic on the economic effects of tourism.

H2: The negative impact of the Covid-19 pandemic is greater in CESEE countries in which the contribution of tourism to basic macroeconomic aggregates is higher.

The presentation of research results and their discussion are divided into two segments. First, the information base of the research is presented, with cross-country comparisons performed according to the analysed indicators (contribution of tourism to GDP and contribution of tourism to employment). The main goal of this part of the analysis is to identify CESEE countries in which tourism in regular circumstances is of relatively great economic importance. After that, the results of the cluster analysis are presented in order to determine the homogeneity, i.e. heterogeneity of CESEE countries according to the intensity of the negative effects of the Covid-18 pandemic on the economic effects of tourism.

4. RESEARCH RESULTS AND DISCUSSIONS

4.1. Cross-country comparison

Table 1 shows data on the contribution of tourism to GDP and employment in CESEE countries in the year before the crisis (2019) and the first year of the crisis (2020), as well as the percentage reduction of tourism contribution to these macroeconomic aggregates

2020 compared to 2019. Also, the average values of tourism share in GDP and employment for the observed group of countries are given, primarily with the aim of identifying countries in which tourism is of relatively greater economic importance.

Table 1 The contribution of tourism to GDP and employment in CESEE countries (2019 and 2020)

Country	Contribution to GDP			Contribution to employment		
	2019 (% of total GDP)	2020 (%)	20/19 (%)	2019 (% of total employment)	2020 (%)	20/19 (%)
Albania	20.5	10.6	-51.6	21.3	17.5	-20.2
Belarus	6.1	2.8	-54.6	5.9	4.6	-21.8
Bosnia and Herzegovina	9.8	3.5	-66.1	10.5	8.4	-21.2
Bulgaria	10.7	4.8	-57.4	10.6	9.5	-13.3
Croatia	24.3	10.2	-61.9	22.2	19.0	-15.6
Czech Republic	6.2	3.9	-40.0	8.2	7.5	-9.6
Estonia	11.8	5.6	-53.5	11.3	11.4	-2.3
Hungary	7.8	3.8	-54.4	9.2	8.7	-6.7
Latvia	7.7	4.0	-50.4	8.3	4.6	-11.1
Lithuania	6.0	2.7	-55.2	4.8	3.9	-20.3
Moldova	6.6	3.1	-55.7	11.4	10.0	-17.6
Montenegro	30.9	8.8	-75.0	31.9	27.3	-20.3
North Macedonia	6.6	3.3	-53.0	6.8	5.7	-17.7
Poland	4.7	2.2	-54.1	5.0	4.8	-4.6
Romania	6.1	2.9	-55.5	6.8	6.7	-2.8
Russia	4.9	2.7	-47.0	5.6	5.4	-5.1
Serbia	5.9	2.8	-54.0	6.3	5.0	-19.3
Slovak Republic	6.4	3.2	-53.0	6.3	5.9	-8.9
Slovenia	10.5	6.5	-42.3	11.0	10.6	-4.7
Turkey	11.0	5.0	-54.2	9.3	8.1	-16.3
Ukraine	6.3	3.4	-44.2	6.9	6.3	-11.9
Average	10.3	4.5	-	10.4	9.1	-

Note: ■ Country with an indicator value that is above the group average.
Source: Authors based on WTTC (2021)

If the economic effects of tourism in CESEE countries in 2019 are observed, it can be concluded that countries in which tourism is relatively important for their economic development are the following: Albania, Bulgaria, Croatia, Estonia, Montenegro, Slovenia and Turkey. In these countries, the share of tourism in GDP was higher than the average for the analysed group as a whole. At the same time, Montenegro is the country with the largest share of tourism in GDP in 2019. The mentioned countries are also the countries that recorded a percentage share of tourism in GDP higher than the average for the CESEE group of countries as a whole in 2020. When it comes to the importance of tourism as a generator of jobs, i.e. the driver of employment, the countries in which this importance can be assessed relatively large according to data for 2019 are: Albania, Slovenia, Bulgaria, Estonia, Moldova, Montenegro and Bosnia and Herzegovina. With the exception of Bosnia and Herzegovina, these are also countries that record the share of tourism in employment higher than the average share for the group as a whole in 2020.

The leader in the contribution of tourism to employment is Montenegro, with the highest percentage in both years.

If the average values of tourism share in the basic macroeconomic indicators of the analysed group of countries are observed, another conclusion can be reached. Namely, it is evident that the Covid-19 pandemic had a much more negative impact on the share of tourism in GDP than a negative impact on employment in tourism during 2020. This may be a consequence of the intensive efforts of governments to maintain employment as much as possible in the country, which have been reflected in various measures and support programs. This is in line with the conclusions reached by Barkas et al. (2020), which state that many countries have made as a priority in the fight against the Covid-19 pandemic to preserve employment, in general, and, above all, in the tourism sector as the most affected part of the economy.

4.2. Results of cluster analysis

Cluster analysis is used for the purpose of grouping CESEE countries into three separate clusters, where the criteria for the classification of countries are the percentage reduction in the contribution of tourism to GDP and the percentage reduction in the contribution of tourism to employment in 2020 compared to 2019. The K-Means Cluster analysis is applied and the Final Cluster Centres are shown in table 2.

Table 2 Final Cluster Centres

Variables	Cluster		
	1	2	3
Contribution to GDP [20/19 (%)]	-55.29	-49.44	-70.55
Contribution to Employment [20/19 (%)]	-18.01	-6.77	-20.75

Source: Author's research

Based on the data shown in table 2, cluster 3 can be identified as the cluster with the worst performance, i.e. the cluster that includes countries with the most intensive reduction in tourism contribution to GDP and employment in 2020 compared to 2019. It is followed by cluster 1, while cluster 2 can be marked as a cluster with the best performance, i.e. this cluster includes countries with the lowest percentage reduction in the contribution of tourism to GDP and employment.

In order to test the statistical significance of the difference between clusters according to the observed variables, the Post Hoc Test is applied in the research. The test results are shown in Table 3. These results indicate that there is a statistically significant difference between the selected clusters according to the analysed indicators, i.e. according to the percentage reduction of tourism contribution to GDP and the percentage reduction of tourism contribution to employment 2020 compared to 2019 in almost all observed comparative combinations. In this way, the first initial assumption of the research was confirmed. Specifically, cluster 2, which was designated as cluster with the best performance or the cluster that includes countries in which the negative effects of the Covid-19 pandemic on the economic effects of tourism are least pronounced, is statistically significantly different from cluster 1 and cluster 3 according to both observed indicators (contribution of tourism to GDP and contribution of tourism to employment).

Table 3 Multiple Comparisons (Post Hoc Test)

Variables	(I) Cluster	(J) Cluster	Mean Difference (I-J)	Std. Error	Sig.
	1.00	2.00	-5.84889 [*]	2.15710	0.036
		3.00	15.26111 [*]	3.67008	0.002
Contribution to GDP	2.00	1.00	5.84889 [*]	2.15710	0.036
[20/19 (%)]		3.00	21.11000 [*]	3.63656	0.000
	3.00	1.00	-15.26111 [*]	3.67008	0.002
		2.00	-21.11000 [*]	3.63656	0.000
	1.00	2.00	-11.24111 [*]	1.38178	0.000
		3.00	2.73889	2.35095	0.488
Contribution to	2.00	1.00	11.24111 [*]	1.38178	0.000
Employment		3.00	13.98000 [*]	2.32948	0.000
[20/19 (%)]	3.00	1.00	-2.73889	2.35095	0.488
		2.00	-13.98000 [*]	2.32948	0.000

Note: [*]The mean difference is significant at the 0.05 level
Source: Author's research

There is a statistically significant difference between cluster 1 and cluster 3 when it comes to the percentage reduction in the contribution of tourism to GDP. On the other hand, a statistically significant difference is not observed only in the comparison of cluster 1 and cluster 3 when it comes to the percentage reduction of the contribution of tourism to employment. In other words, there are no significant oscillations of the percentage reduction in the contribution of tourism to employment between countries classified in cluster 3, as the cluster with the most intense negative impact of the Covid-19 pandemic on the economic effects of tourism, and countries classified in cluster 2, with a relatively moderate negative impact of the Covid-19 pandemic on the economic effects of tourism. The differentiation between the countries of the first and third clusters was primarily based on the difference in the negative impacts of the Covid-19 pandemic on the contribution of tourism to GDP. The number of countries in each cluster, as well as their membership to defined clusters, is shown in table 4.

Table 4 Number of cases in each cluster and cluster membership

Cluster	Number of cases	Cluster membership
1	9	Albania, Belarus, Bulgaria, Croatia, Lithuania, Moldova, North Macedonia, Serbia, Turkey
2	10	Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russia, Slovak Republic, Slovenia, Ukraine
3	2	Bosnia and Herzegovina, Montenegro

Source: Author's research

Taking into account the intensity of the impact of the Covid-19 pandemic on the economic effects of tourism in CESEE countries, i.e. the intensity of reducing the contribution of tourism to GDP and employment in 2020 compared to 2019, the following cluster structure of CESEE countries is identified:
- ▪ Cluster 1 – Albania, Belarus, Bulgaria, Croatia, Lithuania, Moldova, North Macedonia, Serbia, Turkey. This cluster includes countries in which the negative effects of the crisis on the economic effects of tourism are more moderate compared to CESEE countries belonging to cluster 3, and more intense than in CESEE

countries belonging to cluster 2. If the results of cross-country comparison are taken into account Table 1) four out of nine countries in this cluster are identified in the previous segment of the analysis as countries that in regular circumstances had a contribution of tourism to basic macroeconomic aggregates higher than the average of the CESEE group of countries (Albania, Bulgaria, Croatia, Turkey).

- Cluster 2 – Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Russia, Slovak Republic, Slovenia, Ukraine. This cluster includes countries in which the negative effects of the crisis on the economic effects of tourism were least pronounced in 2020 in the observed group of countries. The results of the cross-country comparison (Table 1) show that one out of ten countries in this cluster is marked as a country that had a share of tourism in GDP and employment in the year before the crisis higher than the CESEE average (Estonia).

- Cluster 3 – Bosnia and Herzegovina, Montenegro. This cluster includes the countries with the most pronounced negative impact of the Covid-19 pandemic on the economic effects of tourism, i.e. the countries that recorded the largest percentage reduction in the share of tourism in GDP and employment. While Montenegro is undoubtedly a country that, compared to other countries in the analysed group, based its development on tourism in the period before the crisis, Bosnia and Herzegovina recorded a share of tourism in GDP lower than the average of the analysed group of countries and tourism in employment more than the average of the analysed group of countries in 2019.

Previous results of cross-country comparisons have made it possible to single out countries in which the importance of tourism for the economy in regular circumstances is relatively large. Comparing these results and the results shown in Table 4, it can be concluded that almost all of these countries (except Estonia) are in cluster 1 or cluster 3 identified as clusters with a greater impact of the Covid-19 pandemic on the economic effects of tourism, which confirms the second starting assumption of the research. This is in line with the findings of the research of the authors Romisch (2020) and Škare et al. (2021) and which indicate that the level of negative effects depends on the importance that the tourism industry has for the national economy of a particular country.

5. CONCLUSION

The tourism sector is one of those most affected by the Covid-19 pandemic. The reason for this is the specificity of the sector itself, but also the specificity of the still current health crisis. Numerous measures aimed at the prevention of the pandemic had a direct negative impact on tourism. On the other hand, the tourism sector was considered one of the fastest growing sectors of the global economy in the period before the pandemic, but also its driving force, as a sector with a significant contribution to global GDP and jobs. In this way, the challenges facing the tourism sector due to the Covid-19 pandemic are also part of the challenges of the global economy. It is evident that the unprecedented decrease in the number of tourists has resulted in numerous economic constraints, drastic reduction in the level of income generated by the tourism sector and a serious loss of jobs in tourism and related sectors.

The impact of the Covid-19 pandemic on the economic effects of tourism in CESEE countries is analysed in the paper. The contribution of tourism to key macroeconomic

aggregates (GDP and employment) in the countries of the selected group is observed. The results of the research are divided into two segments, the findings of which complement each other. Namely, the cross-country comparison of selected countries made it possible to identify countries whose economic development and employment in regular circumstances rely relatively heavily on tourism. The second part of the research results, i.e. the results of the applied cluster analysis, indicate that CESEE countries can be divided into three clusters among which there is a statistically significant difference when it comes to the intensity of declining tourism contributions to GDP and employment under the influence of the Covid-19 pandemic. In this way, it was concluded that CESEE countries are not homogeneous in terms of the negative impact of the Covid-19 pandemic on the economic effects of tourism. Although the impact of the Covid-19 pandemic on tourism and its economic effects in all countries around the world can be assessed as unprecedented negative, there are still some differences in the intensity of this impact in specific countries. Concluding from the findings of cross-country comparison and cluster analysis, it can further be argued that countries in which the economic importance of tourism is greater are more affected by the negative impact of the Covid-19 pandemic.

In theoretical sense, the paper is an attempt to contribute to the academic debate on the negative impacts of the crisis on tourism and its economic effects. In practical terms, the paper may have implications for the creators of post-crisis tourism recovery strategies at the national level, pointing to those countries where the negative impacts of the pandemic on the analysed indicators were relatively lower. The practical implications would be broader if the research findings included a comprehensive analysis of the applied measures in specific countries, both epidemiological which affected the tourism sector and measures to support this sector, which can be considered as limitation of this research. It is generally possible to look for one of the causes of the greater or lesser impact of the crisis on the economic effects of tourism in specific countries in these measures and in the tourism policy of individual countries. The combination of a qualitative approach to this issue with the quantitative research applied in this paper is a recommendation for future research on the impact of the Covid-19 pandemic on the economic effects of tourism in selected countries or other groups of countries.

REFERENCES

Barkas, P., Honeck, D., & Rubio, E. (2020). *International trade in travel and tourism services: Economic impact and policy responses during the COVID-19 crisis (No. ERSD-2020-11)*. WTO Staff Working Paper. http://dx.doi.org/10.30875/3514a476-en

Bera, A., Drela, K., Malkowska, A., & Tokarz-Kocik, A. (2020). Mitigating risk of the tourism sector in the European Union member states during the COVID-19 pandemic. *European Research Studies Journal*, *XXIII*(4), 107-122. https://www.um.edu.mt/library/oar/handle/123456789/75501

Brida, J. G., Gómez, D. M., & Segarra, V. (2020). On the empirical relationship between tourism and economic growth. *Tourism Management*, *81*, 104131. https://doi.org/10.1016/j.tourman.2020.104131

Cheer, J. M. (2020). Human flourishing, tourism transformation and COVID-19: A conceptual touchstone. *Tourism Geographies*, *22*(3), 514-524. https://doi.org/10.1080/14616688.2020.1765016

Farzanegan, M. R., Gholipour, H. F., Feizi, M., Nunkoo, R., & Andargoli, A. E. (2021). International tourism and outbreak of coronavirus (COVID-19): A cross-country analysis. *Journal of Travel Research*, *60*(3), 687-692. https://doi.org/10.1177/0047287520931

Fotiadis, A., Polyzos, S., & Huan, T. C. T. (2021). The good, the bad and the ugly on COVID-19 tourism recovery. *Annals of Tourism Research*, *87*, 103117. https://doi.org/10.1016/j.annals.2020.103117

Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, *29*(1), 1-20. https://doi.org/10.1080/09669582.2020.1758708

Hrubcova, G., Loster, T., & Obergruber, P. (2016). The taxonomy of the least developed countries based on the tourism economic impact analysis. *Procedia Economics and Finance*, *39*, 446-450. https://doi.org/10.1016/S2212-5671(16)30347-1

International Monetary Fund (IMF). (2016). *Central, Eastern, and Southeastern Europe: How to Get Back on the Fast Track. Regional Economic Issues*. IMF: Washington.

Ioannides, D., & Gyimóthy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, *22*(3), 624-632. https://doi.org/10.1080/14616688.2020.1763445

Kock, F., Nørfelt, A., Josiassen, A., Assaf, A. G., & Tsionas, M. G. (2020). Understanding the COVID-19 tourist psyche: The evolutionary tourism paradigm. *Annals of Tourism Research*, *85*, 103053. https://doi.org/10.1016/j.annals.2020.103053

Kreiner, N. C., & Ram, Y. (2020). National tourism strategies during the Covid-19 pandemic. *Annals of Tourism Research, 89*, 103076. https://dx.doi.org/10.1016%2Fj.annals.2020.103076

Lapointe, D. (2020). Reconnecting tourism after COVID-19: The paradox of alterity in tourism areas. *Tourism Geographies*, *22*(3), 633-638. https://doi.org/10.1080/14616688.2020.1762115

Luković, S., & Stojković, D. (2020). Covid-19 pandemic and global tourism. *Hotel and Tourism Management*, *8*(2), 79-87. https://doi.org/10.5937/menhottur2002079L

Nagaj, R., & Žuromskaitè, B. (2021). Tourism in the Era of Covid-19 and Its Impact on the Environment. *Energies*, *14*(7), 2000. https://doi.org/10.3390/en14072000

Özen, E., & Özdemir, L. (2021). How did Covid-19 pandemic affect the tourism index in Borsa Istanbul?. *Facta Universitatis, Series: Economics and Organization*, *18*(3), 229-242. https://doi.org/10.22190/FUEO210501016O

Payne, J. E., Gil-Alana, L. A., & Mervar, A. (2021). Persistence in Croatian tourism: The impact of COVID-19. *Tourism Economics*, *1354816621999969*. https://doi.org/10.1177/1354816621999969

Perčić, K., & Spasić, N. (2021). How Millennials and Generation Z organise travel during the COVID-19 pandemic. *Hotel and Tourism Management*, *9*(2), 79-94. https://doi.org/10.5937/menhottur2102079P

Polyzos, S., Samitas, A., & Spyridou, A. E. (2020). Tourism demand and the COVID-19 pandemic: An LSTM approach. *Tourism Recreation Research*, 1-13. https://doi.org/10.1080/02508281.2020.1777053

Qiu, R. T., Park, J., Li, S., & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals of Tourism Research*, *84*, 102994. https://doi.org/10.1016/j.annals.2020.102994

Radić, N., Radić, V., & Grujić, B. (2021). Economic impact of the coronavirus pandemic on air traffic. *Ekonomika*, *67*(2), 59-68. https://doi.org/10.5937/ekonomika2102059R

Roman, M., Roman, M., Prus, P., & Szczepanek, M. (2020). Tourism competitiveness of rural areas: Evidence from a region in Poland. *Agriculture*, *10*(11), 569. https://doi.org/10.3390/agriculture10110569

Romisch, R. (2020). *Covid-19 effects on Central Europe*. Interreg Central Europe. Retrieved from: https://www.interreg-central.eu/Content.Node/discover/Covid-19-effects-on-Central-Europe.pdf__Accessed on: 16 February 2022.

Salehnia, N., Zabihi, S. M., & Khashayar, S. (2020). The impact of COVID-19 pandemic on tourism industry: A statistical review in European countries. In *2nd International Conference on Geography and Tourism Development and Sustainable Development 2020* (pp. 1-11). Tehran.

Sharma, G. D., Thomas, A., & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, *37*, 100786. https://doi.org/10.1016/j.tmp.2020.100786

Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, *163*, 120469. https://doi.org/10.1016/j.techfore.2020.120469

Uğur, N. G., & Akbıyık, A. (2020). Impacts of COVID-19 on global tourism industry: A cross-regional comparison. *Tourism Management Perspectives*, *36*, 100744. https://doi.org/10.1016/j.tmp.2020.100744

Volkmann, C., Tokarski, K. O., Dincã, V. M., & Bogdan, A. (2021). The Impact of COVID-19 on Romanian Tourism. An Explorative Case Study on Prahova County, Romania. *Amfiteatru Economic*, *23*(56), 196-205.

WTTC (2021). *Economic Impact Reports*. Retrieved from: https://wttc.org/Research/Economic-Impact, Accessed on: 23 January 2022.

Xu, H. (2021). The Impact of COVID-19 on European Tourism Industry. *In 2021 International Conference on Transformations and Innovations in Business and Education (ICTIBE 2021)* (pp. 142-149). Atlantis Press.

Zhang, H., Song, H., Wen, L., & Liu, C. (2021). Forecasting tourism recovery amid COVID-19. *Annals of Tourism Research*, *87*, 103149. https://doi.org/10.1016/j.annals.2021.103149

UTICAJ PANDEMIJE COVID-19 NA EKONOMSKE EFEKTE TURIZMA U ZEMLJAMA CENTRALNE, ISTOČNE I JUGOISTOČNE EVROPE (CESEE)

Pandemija Covid-19 donela je brojne izazove i ograničenja globalno. Zemlje širom sveta suočavaju se sa negativnim socio-ekonomskim posledicama globalne zdravstvene krize. Kako je sektor turizma jedan od najznačajnijih sektora globalne ekonomije i ujedno jedan od sektora koji je najteže pogođen krizom, konsekvence negativnog uticaja ove krize u turizmu veoma su široke. Predmet ovog rada jeste istraživanje uticaja pandemije Covid-19 na ekonomske efekte turizma u zemljama Centralne, Istočne i Jugoistočne Evrope (Central, Eastern and Southeastern Europe – CESEE). Cilj rada je da se kroz analizu smanjenja doprinosa turizma ključnim makroekonomskim indikatorima pod uticajem pandemije Covid-19 sagleda homogenost, odnosno heterogenost analiziranih zemalja po pitanju negativnih uticaja krize na ekonomske efekte turizma. Primenom metoda komparacije zemalja i klaster analize zaključeno je da CESEE zemlje nisu homogene u ovom smislu, kao i da su zemlje u kojima je značaj turizma za nacionalnu ekonomiju veći ozbiljnije pogođene krizom.

Ključne reči: *turizam, ekonomski efekti, Covid-19*