Tourism in Selected Countries of Central Europe: An Evaluation of Policies and Economic Impacts

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Abstract: This paper aims to compare tourism policies and economic impact in selected countries of Central Europe (Austria, the Czech Republic, Germany, Hungary, Poland, and Slovakia), contributing to a discussion on tourism development and its role in economic potential as an important issue of national economies. This study identifies similarities in national tourism policies. Exploring the economic impacts of tourism employing data from Tourism Satellite Accounts (TSA) and international and national statistics. Furthermore, correlations are calculated between tourism indicators such as arrivals and overnight stays and the economic impacts, specifically GDP and employment. Tourism intensity is assessed as well to illustrate tourism activity in analyzed countries. By analyzing selected key indicators, the paper provides a comparative evaluation of these countries' economic performance and their respective strategic tourism documents.

Keywords: Tourism, Evaluation, Policy, Economic Impacts

JEL Classification codes: Z30, Z32, Z38

INTRODUCTION

Central Europe is a safe and attractive tourist destination for both domestic and international inbound tourism. Tourism represents a significant element of economic development, with its role in the economy varying across countries depending on various indicators and metrics. However, it can also serve as the basic starting point for conceptual and successful development when strategies and policy measures are adopted.

This paper aims to compare tourism policies and economic impacts in six selected Central European countries: Austria (AT), the Czech Republic (CZE), Germany (DE), Hungary (HU), Poland (PL), and Slovakia (SK). By analyzing key economic indicators derived from Tourism Satellite Accounts (TSA) and national and international statistics, this study provides a comparative evaluation of each country's economic performance in the tourism sector. Furthermore, based on the comparative analysis of national strategic documents, the study identifies common policy approaches with potential for cooperation, as well as distinct national strategies that differentiate analyzed countries. The objective is to identify similarities in national tourism policies, common goals, and initiatives and compare these countries' economic performance and strategic priorities in tourism policy documents.

The discussion on tourism and evaluation in Central European countries can provide valuable insights into its role in national economies.

1 LITERATURE REVIEW

Tourism plays a crucial role in economic development, with Tourism Satellite Accounts (TSA) serving as a standardized tool for measuring its direct contributions to GDP, employment, and regional growth. Figini & Patuelli (2021) highlight the heterogeneity of tourism's economic impact across EU member states. Furthermore, it identifies gaps in data availability and inconsistencies in TSA methodologies across countries, despite the existence of an international methodology. Their study emphasizes the need for standardized and regularly updated TSA data to enhance cross-country comparability. Liu et al. (2022) reinforce TSA's role as the most important method for assessing tourism's direct economic impact while supporting the need for standardized TSAs. Pratt (2015) applied TSA to assess the economic value of cruise tourism in Fiji, illustrating its capacity to capture the complex interrelations between tourism activities and other economic sectors. The latest Tourism Satellite Accounts in Europe (2023) report by EUROSTAT confirms the importance of measuring gross value added (GVATI), tourism direct GDP (TDGDP), fand direct employment for policy planning. UNWTO (2025) presents an optimistic outlook for the sector, although economic and geopolitical uncertainties pose risks. United Nations (2010) emphasized in The International Recommendations for Tourism Statistics 2008 that a comprehensive methodological framework is essential for global tourism data collection. Wahyuni et al. (2022) underscore tourism's reciprocal relationship with economic growth, benefiting both industry stakeholders and community welfare. Studies conducted by other authors further demonstrate tourism's role in employment generation and regional economic development, reducing regional disparities by providing economic benefits and opportunities, highlighting the importance of strategic investment in tourism, stimulating regional economies, and fostering balanced development (Bădulescu et al., 2018; Tohmo, 2018; Xu, Jones & Munday, 2019; Tafel & Szolnoki, 2020).

Strategic tourism documents are crucial in shaping the industry's resilience, innovation, and sustainability. Salahodjaev et al. (2022) compare tourism policies in Austria, Hungary, and Poland, demonstrating the impact of different policy approaches on economic outcomes, identifying Austria's focus on cultural tourism and environmental sustainability contrasts with Hungary and Poland's emphasis on infrastructure development and foreign tourist attraction. Adedoyin et al. (2022) argue that strong institutional frameworks are essential for sustainable tourism-led growth, warning that weak governance can hinder effective policy implementation. Hamaguchi (2020) further underscores the need for well-structured environmental and tourism policies to balance economic benefits with sustainability. Novacká et al. (2020) identified key tourism factors in the current socio-economic period, and development perspectives are presented by the following partial topics: innovation environment in tourism, risks and crises in tourism, and collaborative economy. Other authors, such as Ferreira et al. (2023) and Wut et al. (2021), stress the importance of tourism policies and documents to enhance destinations' resilience and competitiveness, leveraging big data and smart technologies, especially during crises. Novacká et al. (2022) analyze economic responses to the COVID-19 pandemic across European hotel industries, identifying key financial support measures and initiatives. Zhou et al. (2024) highlight the need for smart destination strategies to attract different segments of visitors, such as digital nomads, and recognize their needs.

The metaverse is becoming a key component of strategic tourism documents as it expands opportunities for tourist experiences and interactions between destinations and visitors. As Kılıçarslan et al. (2024) noted, the metaverse not only stimulates interest in physical travel but can also serve as a substitute when travel is impossible. Buhalis et al. (2023) emphasize its transformative impact on customer experience and value co-creation. Hassan and Saleh (2024) highlight the role of attribution theory in understanding tourists' decision-making in the metaverse, while Zhang et al. (2024) confirm that motivation and perceived behavioral control

play a crucial role in its adoption, particularly among Generation Z and Y. Zhong et al. (2024) introduce the MIEB model to capture customer journey systematically. Rainoldi et al. (2025) analyze the integration of work and leisure among digital nomads in the metaverse. These findings underscore the growing importance of the metaverse in tourism and its potential for innovation and the personalization of tourist experiences. The Tourism in the 2030 Agenda further advocates for sustainable policies, digitalization, and resilience strategies to ensure long-term economic viability (UNWTO, n.d.).

2 METHODOLOGY

This study aims to conduct a comparative analysis of tourism policies and economic impacts in six Central European countries: Austria, Czech Republic, Germany, Hungary, Poland, and Slovakia. First, secondary data analysis was conducted by obtaining data from the satellite tourism accounts (TSA) of individual countries from 2018 to 2022 to give a particular view of pre-pandemic and post-pandemic numbers. This analysis provided information on the contribution of tourism to gross domestic product (GDP), gross value added (GVA), and employment. The harmonized data were then systematically synthesized into tables to facilitate comparative analysis across analyzed countries. Two research questions were established:

Q1: To what extent do national tourism policies focus on cooperation and define opportunities for collaborative engagement among analyzed countries?

Q2: What are the main differences in the economic impacts of tourism among the analyzed Central European countries?

The national statistics published by national statistical offices were also utilized for secondary data analysis to obtain data on tourist arrivals, the number of overnight stays, and the population in each country. Based on this data, the tourism intensity indicator was calculated to analyze further the significance of the tourism sector within each analyzed country. The results were again systematically synthesized into tables to allow for comparative analysis. Tourism intensity was calculated by using the following formula:

$$Tourism intensity = \frac{Number of residents}{Number of overnight stays}$$
(1)

A correlation analysis was conducted using the Statistica software to examine the relationships between selected tourism-related variables. Pearson's correlation coefficient was used to assess the strength and direction of these relationships using the following equation:

$$r = \frac{\sum (x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum (x_i - \overline{x})^2 \sum (y_i - \overline{y})^2}}$$
(2)

The analysis focused on the correlations between tourist arrivals and tourism's contribution to GDP, the number of overnight stays and tourism's contribution to GDP, tourist arrivals and employment in the tourism sector, and the number of overnight stays and employment in tourism. This analysis aimed to determine the strength of the relationships between these important indicators and identify differences among analyzed countries variables, providing a deeper insight into the interconnections between economic and visitor-related indicators of tourism. The analysis results were processed into a table to allow for comparison.

Comparative analysis is applied to assess the relative significance of tourism in each national economy and identify common principles and divergences in policy frameworks, highlighting the potential for future partnership and cooperation among the analyzed countries. This paper contributes to the academic discourse on tourism's role in national economic development and offers empirical evidence for policymakers to refine and enhance tourism strategies for sustainable growth. The study's findings aim to provide insights into the economic impacts

of tourism and tourism policies, thereby supporting informed decision-making and fostering resilience in the tourism sector across Central Europe.

3 RESULTS AND DISCUSSION

3.1 Economic Impacts of Tourism in CEC

Tourism is a significant component of the economy in many Central European countries (CEC). Table 1 shows the economic impacts based on three indicators: Contribution of Tourism to the GDP, to the GVA and to the total employment.

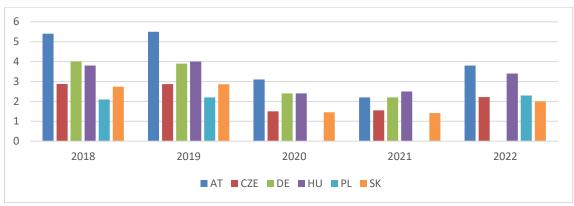
Direct Contribution of Tourism to Gross Domestic Product (GDP)							
2018	2019	2020	2021	2022			
5.4	5.5	3.1	2.2	3.8			
2.88	2.87	1.5	1.55	2.22			
4	3.9	2.4	2.2	x			
3.80	4.00	2.40	2.50	3.40			
2.1	2.2	x	x	2,3			
2.74	2.86	1.45	1.41	2			
bution of Tourism	to the Gross Va	lue Added (GVA))				
2018	2019	2020	2021	2022			
5.4	5.5	3.1	2.2	3.8			
2.77	2.76	1.47	1.53	2.18			
4	3.9	2.4	2.2	х			
3.00	3.40	1.50	1.60	2.20			
x	x	x	х	1,6			
2.51	2.6	1.36	1.23	1.82			
bution of Tourism	to the Total Em	ployment					
2018	2019	2020	2021	2022			
6	6.2	4.3	3.4	4.7			
4.4	4.41	4.13	4.02	4.15			
6.2	6.1	4.8	4.4	x			
9.4	9.5	9.1	8.8	8.9			
x	x	x	х	3.4			
6	6.6	6.3	6.1	6.2			
	2018 5.4 2.88 4 3.80 2.1 2.74 bution of Tourism 2018 5.4 2.77 4 3.00 x 2.51 bution of Tourism 2018 6 4.4 6.2 9.4 x	2018 2019 5.4 5.5 2.88 2.87 4 3.9 3.80 4.00 2.1 2.2 2.74 2.86 button of Tourism to the Gross Va 2018 2019 5.4 5.5 2.77 2.76 4 3.9 3.00 3.40 x x 2.51 2.6 button of Tourism to the Total Em 2018 2019 6 6.2 4.4 4.41 6.2 6.1 9.4 9.5 x x	2018 2019 2020 5.4 5.5 3.1 2.88 2.87 1.5 4 3.9 2.4 3.80 4.00 2.40 2.1 2.2 x 2.74 2.86 1.45 button of Tourism to the Gross Value Added (GVA) 2018 2018 2019 2020 5.4 5.5 3.1 2.77 2.76 1.47 4 3.9 2.4 3.00 3.40 1.50 x x x 2.51 2.6 1.36 button of Tourism to the Total Employment 2018 2018 2019 2020 6 6.2 4.3 4.4 4.41 4.13 6.2 6.1 4.8 9.4 9.5 9.1 x x x	2018 2019 2020 2021 5.4 5.5 3.1 2.2 2.88 2.87 1.5 1.55 4 3.9 2.4 2.2 3.80 4.00 2.40 2.50 2.1 2.2 x x 2.74 2.86 1.45 1.41 bution of Tourism to the Gross Value Added (GVA) 2020 2021 5.4 5.5 3.1 2.2 2018 2019 2020 2021 5.4 5.5 3.1 2.2 2.77 2.76 1.47 1.53 4 3.9 2.4 2.2 3.00 3.40 1.50 1.60 x x x x x 2.51 2.6 1.36 1.23 bution of Tourism to the Total Employment 2018 2019 2020 2021 6 6.2 4.3 3.4 4.4 4.4 9.4			

Tab. 1 Economic Impacts of Tourism in Analyzed Countries

Source: elaborated by authors based on national TSAs named in references

In 2019, the contribution of tourism to GDP remained stable, with AT having the highest contribution of 5.5%, followed by HU with 4%. However, the year 2020 saw dramatic shifts due to the COVID-19 pandemic. The most significant decline was observed in AT (from 5.5%)

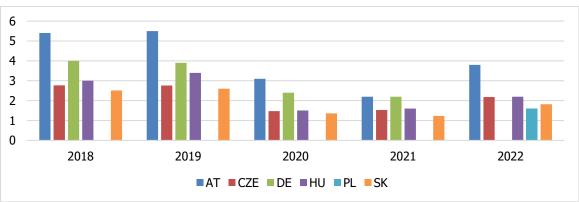
to 3.1%) and HU (from 4% to 2.4%); in other countries, the contribution has decreased by 1.3 to 1.5%. The years 2021 and 2022 indicate a gradual recovery of the sector, with some economies, such as HU, nearly returning to pre-pandemic levels and PL even having a higher contribution than in 2019. This data is visualized in Figure 1, showing the difference between countries.





Source: elaborated by authors based on national TSAs named in references

The trends in the gross value added of the tourism sector closely mirror those in GDP, as GVA reflects the added economic value generated by tourism, with AT and DE even listing the same values as the contribution to the GDP, as shown in Table 1. AT had the highest GVA of 5.5% in 2019 out of the analyzed countries, followed by DE with 3.9% and HU with 3.4%. The pandemic caused a significant decline in GVA, where AT dropped to 2.2% in 2021, the most profound drop (3.4%) out of all the countries. The tourism sector slightly recovered in 2022, not reaching pre-pandemic levels.



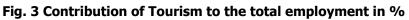


Source: elaborated by authors based on national TSAs named in references

Tourism also plays an important role in total employment in analyzed countries, with HU having the highest contribution of tourism to total employment of almost 10%. SK is in second place, with a contribution ranging from 6% to 6.6%, and CZE has the lowest ranging from 4% to 4.4%, with other countries having around 6% in pre-pandemic levels. In 2019, HU had a share of 9.5%, while CZE recorded 4.41%. The pandemic led to a decline in these figures, most notably in AT, where the share fell from 6.2% to 4.3% in 2020 and 3.4% in 2021. By 2022, there was partial recovery, yet AT remained below its 2019 level. The least significant decline was in HU, where employment dropped from 9.5% in 2019 to 9.1% in 2020 and 8.8% in 2021. This was followed by SK with a decline of 0.3% from 6.6% in 2019 to 6.3% in 2020 and 6,1%

in 2021. The data from Table 1 are visualized in Figure 3, showcasing the differences between analyzed countries, especially those between HU and other countries. This indicator shows a shift among countries, with AT being first in the contribution of tourism to the GDP and GVA being third in analyzed years and even last behind CZE in 2021.





Source: elaborated by authors based on national TSAs named in references

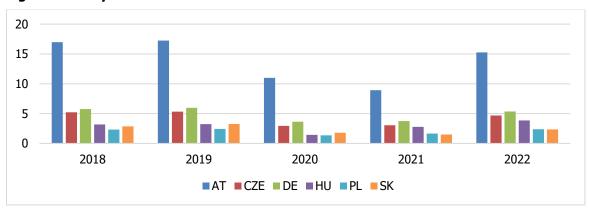
Tourism intensity is a crucial indicator of the importance and role of the tourism sector in the national economy, which measures the number of overnight stays per inhabitant of a given country. Based on data in Table 2, AT leads in this regard, with a ratio of 17.24 overnight stays per capita in 2019, almost three times the amount of DE, with a tourism intensity of 5,96 in 2019. PL had the lowest intensity in the pre-pandemic levels of 2.31 in 2018 and 2.43 in 2019. However, it surpassed SK at post-pandemic levels, indicating a slower recovery of the tourism sector in SK. The most significant drop was recorded in AT, where the intensity fell from 17.24 in 2019 to 11 in 2020 and 8.91 in 2021, which is a drop of 8.33 in comparison to pre-pandemic levels showcasing the decline of the tourism sector during the pandemic.

	2018	2019	2020	2021	2022
AT	1698	17.24	11.00	8.91	15.25
CZE	5.21	5.33	2.93	3.04	4.67
DE	5.76	5.96	3.64	3.73	5.34
HU	3.18	3.22	1.43	2.79	3.84
PL	2.31	2.43	1.35	1.66	2.38
SK	2.85	3.25	1.79	1.50	2.34

Source: elaborated by authors based on data available from the national statistical offices named in references

The difference in tourism intensity can be seen in Figure 4, displaying the vast difference between AT and other European countries. Further, it highlights the importance and performance of the Austrian tourism sector. However, it also poses various risks. High tourism intensity can have significant economic, environmental, and social impacts. Economically, it can boost local businesses, create jobs, and generate tax revenue, but excessive tourism may also lead to rising living costs and economic dependence on the sector. Environmentally, high tourism intensity can strain natural resources, contribute to pollution, and increase carbon emissions, particularly in fragile ecosystems. Socially, it can enhance

cultural exchange and community development but may also lead to overcrowding, housing shortages, and conflicts between residents and tourists. Balancing these factors is crucial for sustainable tourism development, ensuring long-term benefits while minimizing negative consequences.





Source: elaborated by authors based on data available from the national statistical offices named in references

Table 3 presents the calculated Pearson correlation coefficient between the number of visitors, the number of overnight stays, and the contribution of tourism to GDP in million EUR, revealing a strong relationship, almost perfect positive correlation (r=1) between number of visitors and overnight stays and economic performance. The highest correlation values are observed in DE, indicating that tourism contribution to the GDP changes almost proportionately to the number of visitors and overnight stays. CZE, SK, and AT show similarly high correlations, CZE showing r=0.98847 for visitors and 0.98410 for overnight stays, AT with r=0.98619 for visitors and r=0.98678 for overnight stays, and SK showcasing a correlation of r=98300 for visitors and r=0.96207 for overnight stays. Meanwhile, HU has a lower correlation than its Central European counterparts, implying that the change in the number of visitors and overnight stays has a lower effect on the contribution of tourism to the GDP than in previous countries. This could be caused by a higher share of short-term visitors and r=0.67837 for overnight stays. This result should not be considered as valid as the others due to the missing data regarding tourism's contribution to GDP in PL.

	AT	CZE	DE	HU	PL	SK
Number of visitors	0.98619	0.98847	0.99471	0.80958	0.67839	0.98300
Overnight stays	0.98678	0.98410	0.99810	0.74033	0.67837	0.96207

Source: elaborated by authors based on data available from the national statistical offices named in references

Next, the correlation between the number of visitors, the number of overnight stays, and the number of people employed in the tourism sector was calculated. Table 4 shows the results in the Pearson correlation coefficient, revealing a relation between the number of visitors and overnight stays and the number of people employed in tourism. The strongest correlation was calculated in DE and AT, indicating a strong relation and dependency of these variables. CZE

exhibits strong correlations, particularly for visitors r=0.90794, but a relatively weaker relation with the number of overnight stays of r=0.46757, showing that the change in overnight stays does not affect employment as much as the number of visitors. SK shows a slightly weaker but still strong correlation in both variables, suggesting a meaningful link between tourism and employment. In contrast, HU displays one of the lowest correlations out of the analyzed countries, r=0.38487 for visitors and r=0.25358 for overnight stays. Based on previous research conducted by one of the authors, this difference in comparison to other countries can be attributed to the fact that HU kept relatively high and stable employment in tourism even during the pandemic crisis, with minimal decline due to the high financial aid from the Hungarian government primarily for the hospitality sector (Novacká et al., 2022). PL exhibited lower correlations as well. However, it is important to note that this result is not as valid as the others due to the missing data.

	AT	CZE	DE	HU	PL	SK
Number of visitors	0.95017	0.90794	0.95229	0.38487	0.37526	0.82991
Overnight stays	0.95211	0.46757	0.98401	0.25358	0.39942	0.88643

Source: elaborated by authors based on data available from the national statistical offices named in references

3.1 Tourism policies in the CEC

Analyzed CEC countries' destinations proclaim sustainability, but there are differences in their content and effects. Economically successful DE and AT refine individual aspects of sustainability and support new progressive solutions. Less developed destinations are discovering and implementing sustainability elements into tourism practice. Environmental sustainability, regarding environmental quality and new technologies, has significant backing in DE and AT.

All CEC countries apply the TSA methodology for recording tourism performance data. However, the processing of input data at the national level is not entirely uniform, leading to certain discrepancies in the expression of specific data. All countries focus on creating added value in tourism at the national level. AT also emphasizes added value at regional and local levels—for regions, businesses, visitors, and local residents.

Tourism financing has its specifics in different countries. DE (with its environmental fund) and SK (with its tourism fund) have established special financial sources for tourism needs. AT ensures funding opportunities through the specialized **Austrian Bank for Tourism Development (ÖHT).** Indirect financial support for tourism through EU funds is utilized by all observed countries, mainly in INTERREG projects and other interdisciplinary projects related to tourism. Direct financial support within the EU **European Capital of Culture** program was used by cities from AT, DE, and HU during the observed period.

All countries present their tourism products in relation to nature, cultural heritage, and traditions. PL and HU showcase international-level festivals. MICE (Meetings, Incentives, Conferences, and Exhibitions) is a key tourism product in AT, DE, CZE, and PL. Business travel is significant in Germany's inbound tourism. The quality of tourism products is a continuous effort from previous periods in all analyzed countries. DE and AT promote quality in terms of unique offerings, care for local resources, their sustainable use, and the provision of accurate

information for visitors. A local destination as a sustainable product emphasizing the environment as a part of the marketing support for sustainable tourism within the **EDEN program** in all CEC countries except SK. Different themes and principles included in national tourism policies are synthesized in Table 5. Themes addressed by all analyzed CEC countries with potential for cooperation are marked in the first rows of designated sections.

Tourism Policy	AT	CZ	DE	HU	PL	SK
Management				1	1	I
Sustainable tourism destination	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
TSA National statistics evidence	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Value added national level	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Digitalization generally	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Digitalization for guest needs in destination	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Green destination	\checkmark					
Environmental Quality of products	\checkmark		\checkmark			
Environmentally responsible source in accommodation and restaurants	\checkmark		\checkmark			
Direct financial support to cities by EU program ECC	\checkmark	√past	\checkmark	\checkmark		√past
Value added to everybody (visitors, local people, region, regions	\checkmark					
Quality of life	\checkmark					
New co-operation models for exchange of life	\checkmark					
Attractive business friendly environment	\checkmark					
Permanent Data Analysis	\checkmark	\checkmark	\checkmark			
High developed digitalization in tourism, public and private sector	\checkmark		\checkmark			
Business						
Safeguarding opportunities for the next generation	\checkmark					
Minimize administration for SME in tourism	\checkmark					
Regulation of VAT to support tourism services	\checkmark					\checkmark

Tab. 5 Themes and principles in Tourism Policies in CEC

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Tourism Policy	AT	CZ	DE	HU	PL	SK
Product		1		I.	I	I.
Satisfaction of the guests	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Nature, Culture, traditions	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Human wellbeing and satisfaction of guests and local people	\checkmark					
Special request for tourist product Q	\checkmark					
Tourism for all (especially silver, youth, handicapped, etc.)	~	\checkmark				
MICE convention bureau, worldwide important international events	~	\checkmark	\checkmark		\checkmark	
MICE business travel and worldwide important fairs	\checkmark					
International festivals				\checkmark	\checkmark	
Destination Marketing						
Long Haul Source Markets	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Destination well known as a brand in the world market	\checkmark		\checkmark			
Destination known as a brand in the European market	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Green destination in EU program EDEN	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

Source: elaborated by authors based on national policies named in references

CONCLUSION

In Conclusion, the authors present the findings of this study; it is evident that tourism plays a significant role in the economies of Central European countries, with its contribution to GDP, gross value added, employment, and tourism intensity showcasing both the resilience and vulnerabilities of the sector.

The analysis of tourism policies in CEC countries reveals a shared commitment to sustainability, financial support, and quality assurance, though with varying approaches and levels of advancement. While DE and AT lead in refining sustainability practices and innovative solutions, less developed destinations are still integrating these principles. Financial support structures differ, with DE and SK establishing dedicated tourism funds, AT providing specialized financing through ÖHT, and all countries benefiting from EU funding, mainly through INTERREG. Product offerings reflect cultural and natural heritage, with PL and HU excelling in international festivals, while AT, DE, and the CZE dominate MICE tourism. Despite these differences, cooperation within the region presents opportunities for joint product development, knowledge exchange, and enhanced competitiveness, underscoring the potential for more aligned and strategic collaboration in the future, even though the fact that

the national policies do not primarily focus on cooperation between analyzed countries giving the answer to Q1.

The impact of the COVID-19 pandemic led to a sharp decline in tourism-related economic indicators across all analyzed countries, with AT experiencing the most profound drop. However, the data indicates a gradual recovery. The study also highlights structural differences in the tourism sector among the analyzed economies, answering Q2, with AT leading in terms of tourism intensity and economic contribution even with a relatively low share of tourism in total employment; on the other hand, HU leading in the share of tourism on total employment. Regarding economic impacts expressed by contribution to GDP, GVA, and employment, CZE consistently ranks in the middle among the analyzed countries, achieving average results across all indicators and indicating tourism's balanced but non-dominant role in its economy. SK stands out with one of the highest employment shares in tourism yet records some of the lowest values in other indicators. One of the most important indicators is the economic impact of added value. The leaders are AT and DE, which have reached the highest numbers. The minimal value added was identified in SK, reaching the lowest shares except for 2022, where PL had the lowest GVA out of the analyzed countries. Moreover, correlation analyses confirm a strong relationship between the number of visitors, overnight stays, and economic performance. However, variations exist, particularly in HU and PL, where government interventions and data limitations may have influenced the results.

These findings underscore the importance of reliable and comparable data for cross-country analyses, as discrepancies in national TSA methodologies and data availability can affect the accuracy and comparability of economic assessments in the tourism sector. Despite internationally recognized recommendations and methodologies for compiling tourism satellite accounts, their implementation varies across countries, limiting the comparability of results. These differences pertain not only to the processing of input data but also to their presentation and the frequency of publication. The most significant discrepancy was observed in PL, where the TSA is published as a textual document with limited availability of historical data.

REFERENCES

Adedoyin, F. F., Erum, N., & Bekun, F. V. (2022). How does institutional quality moderates the impact of tourism on economic growth? Startling evidence from high earners and tourism-dependent economies. *Tourism Economics*, *28*(5), 1311-1332. https://doi.org/10.1177/1354816621993627

Aktuelle Daten zur Tourismuswirtschaft – Kurzfassung – Tourismussatellitenkonto für
Wirtschaft und Umwelt (TSA-EE) – 2015 bis 2021 / Statistisches Bundesamt (Destatis). (2024).Retrieved several times in January 2025, from
https://www.destatis.de/DE/Themen/Wirtschaft/Volkswirtschaftliche-Gesamtrechnungen-
Inlandsprodukt/Publikationen/Downloads-Input-Output-Rechnung/aktuelle-daten-
tourismuswirtschaft-kurzfassung.html

Arrivals & overnight stays / STATISTICS AUSTRIA. (2025). Retrieved several times in January and February 2025, from https://www.statistik.at/en/statistics/tourism-and-transport/tourism/accommodation/arrivals-overnight-stays.

Bădulescu, A., Bădulescu, D., & SimuS, R. (2018). The complex relationship between international tourism demand and economic growth: an analysis on central and eastern european economies. *Amfiteatru Economic*, *20*(S12), 935. https://doi.org/10.24818/ea/2018/s12/935

Bevölkerung: Bundesländer, Stichtag / Statistisches Bundesamt (Destatis). (n.d.). Retrieved several times in January and February 2025, from https://www-genesis.destatis.de/datenbank/online/statistic/45412/table/45412-0001.

Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management, 97*, 104724. https://doi.org/10.1016/j.tourman.2023.104724

Ferreira, J. J., Teixeira, S. J., Shi, F., Wanke, P., & Buhalis, D. (2023). Guest editorial: Tourism and hospitality economics at times of crisis. *Journal of Hospitality and Tourism Insights, 6*(4), 1441–1446. https://doi.org/10.1108/JHTI-09-2023-639

Figini, P., & Patuelli, R. (2022). Estimating the Economic Impact of Tourism in the European Union: Review and Computation. *Journal of Travel Research*, *61*(6), 1409–1423. https://doi.org/10.1177/00472875211028322

Hamaguchi, Y. (2020). Do pollution havens restrict tourism-led growth? Achieving sustainable tourism via a mix of environmental and tourism policies. *Tourism Economics*, *26*(7), 1175-1196. https://doi.org/10.1177/1354816619868086

Hassan, T., & Saleh, M. I. (2024). Tourism metaverse from the attribution theory lens: A metaverse behavioral map and future directions. *Tourism Review*, *79*(5), 1088–1104. https://doi.org/10.1108/TR-07-2023-0516

Kılıçarslan, Ö., Yozukmaz, N., Albayrak, T., & Buhalis, D. (2024). The impacts of Metaverse on tourist behaviour and marketing implications. *Current Issues in Tourism*, *28*(4), 622–642. https://doi.org/10.1080/13683500.2024.2326989

Legislatíva a koncepčné dokumenty v cestovnom ruchu / Ministerstvo cestovného ruchu a športu Slovenskej republiky. (n.d.). Retrieved from https://mincrs.sk/legislativa-a-koncepcne-dokumenty/.

Liu, A., Kim, Y. R., & Song, H. (2022). Toward an accurate assessment of tourism economic impact: A systematic literature review. *Annals of Tourism Research Empirical Insights*, *3*(2), 100054. https://doi.org/10.1016/j.annale.2022.100054

Making Tourism More Sustainable / Deutsche Zentrale für Tourismus (DZT). (2022). Retrieved several times in January and February 2025, from https://www.germany.travel/media/en/redaktion/ueber_uns_1/ueber_uns/2022/DZT_Fortsch rittsbericht_210x280_DE_WEB36_barrierefrei-1.pdf.

National tourism satellite accounts / STATISTICS AUSTRIA. (2024). Retrieved several times in January 2025, from https://www.statistik.at/en/statistics/tourism-and-transport/tourism/tourism-satellite-accounts/national-tourism-satellite-accounts.

Návštevnosť a kapacity ubytovacích zariadení – SR, kraje, okresy | Statistical Office of the Slovak Republic. (n.d.). Retrieved several times in January and February 2025, from https://datacube.statistics.sk/#!/view/sk/VBD_SLOVSTAT/cr2001rs/v_cr2001rs_00_00_osk

Návštěvnost hromadných ubytovacích zařízení | Český statistický úřad. (n.d.). Retrieved several times in January in February 2025, from https://csu.gov.cz/navstevnost-hromadnych-ubytovacích-zarizeni.

Novacká L. et al. (2020). *Current Tourism and Its Future Trajectory, Súčasnosť cestovného ruchu v trajektórii budúcnosti*. Radim Bačuvčík - VeRBuM

Novacká, L., Gáll, J., & Topaloğlu, C. (2022). *COVID-19 Pandemic in the Hotel Industry*. Vydavateľstvo EKONÓM Bratislava., https://www.academia.edu/97690603/COVID_19_Pandemic_in_the_Hotel_Industry

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Novacká, Ľ., Gáll, J., & Topaloğlu, C. (2022). *COVID-19 Pandemic in the Hotel Industry: La Fondation pour la Formation Hôtelière project outputs*. Vydavateľstvo EKONÓM.

Number of the Population by Sex – SR, Areas, Regions, Districts, Urban, Rural (yearly) / Statistical Office of the Slovak Republic. (n.d.). Retrieved several times in January and February 2025, from

https://datacube.statistics.sk/#!/view/sk/vbd_dem/om7102rr/v_om7102rr_00_00_sk.

Plan T – Master Plan for Tourism / Federal Ministry of Labour and Economy (BMAW). (n.d.). Retrieved several times in January and February 2025, from https://www.bmaw.gv.at/en/Topics/tourism/plan-t.html.

Počet, struktura a projekce obyvatel / Český statistický úřad. (2024). Retrieved 17 May 2024, from https://csu.gov.cz/pocet-struktura-a-projekce-obyvatel.

Population by age/sex / STATISTICS AUSTRIA. (2025). Retrieved several times in January andFebruary2025,fromhttps://www.statistik.at/en/statistics/population-and-society/population/population-stock/population-by-age-/sex.

Population by nationality groups / Statistisches Bundesamt (Destatis). (2024). Retrieved several times in January and February 2025, from https://www.destatis.de/EN/Themes/Society-Environment/Population/Current-Population/Tables/population-by-nationality-groups.html.

Population by sex and average age | Hungarian Central Statistical Office. (2025). Retrieved several times in January and February 2025, from https://www.ksh.hu/stadat_files/nep/en/nep0002.html.

Pratt, S. (2015). The economic impact of tourism in SIDS. *Annals of Tourism Research, 52*, 148–160. https://doi.org/10.1016/j.annals.2015.03.005

Rachunek satelitarny turystyki dla Polski za rok 2022 i 2023 | Ministerstwo Sportu i Turystyki. (2025). Retrieved several times in January 2025, from https://www.gov.pl/web/sport/rachunek-satelitarny-turystyki-dla-polski-za-rok-2022-i-2023.

Rainoldi, M., Ladkin, A., & Buhalis, D. (2025). Digital nomads' work-leisure management practices. *Annals of Tourism Research, 111*, 103904. https://doi.org/10.1016/j.annals.2025.103904

Salahodjaev, R., Sharipov, K., Rakhmanov, N., & Khabirov, D. (2022). Tourism, renewable energy and CO2 emissions: Evidence from Europe and Central Asia. *Environment, Development and Sustainability, 24*(11), 13282–13293. https://doi.org/10.1007/s10668-021-01993-x

Satelitní účet cestovního ruchu | Český statistický úřad. (n.d.). Retrieved several times in January 2025, from https://csu.gov.cz/satelitni-ucet-cestovniho-ruchu.

Strategie rozvoje cestovního ruchu ČR 2021–2030 / Ministerstvo pro místní rozvoj ČR (MMR). (n.d.). Retrieved from https://www.mmr.gov.cz/cs/ministerstvo/cestovni-ruch/pro-profesionaly/koncepce-strategie/strategie-rozvoje-cestovniho-ruchu-cr-2021-2030.

Structure of the population | Statistics Poland. (2024). Retrieved several times in January in February 2025, from https://stat.gov.pl/en/topics/population/population/structure-of-the-population,7,1.html.

Tafel, M., & Szolnoki, G. (2020). Estimating the economic impact of tourism in German wine regions. *International Journal of Tourism Research, 22*(6), 788–799. https://doi.org/10.1002/jtr.2380

Tohmo, T. (2018), "The economic impact of tourism in Central Finland: a regional input–output study", *Tourism Review, 73*(4), 521-547. https://doi.org/10.1108/TR-04-2017-0080

Tourism / Statistics Poland. (n.d.). Retrieved several times in January in February 2025, from https://stat.gov.pl/en/topics/culture-tourism-sport/tourism/.

Tourism in the 2030 Agenda / UNWTO. (n.d.). Retrieved from https://www.unwto.org/tourism-in-2030-agenda.

Tourism industries – economic indicators / Eurostat. (2022). Retrieved from https://ec.europa.eu/eurostat/documents/7870049/16527548/KS-FT-22-011-EN-N.pdf/c0fa9583-b1c9-959a-9961-94ae9920e164?version=4.0&t=1683792112888

Tourism Satellite Account / Statistical Office of the Slovak Republic. (2024). Retrieved severaltimesinJanuary2025,fromhttps://slovak.statistics.sk/wps/portal/ext/products/informationmessages/inf_sprava_detail/e79004eb-7056-46d4-a490-7c88f1107a11.

Tourism Satellite Accounts (TSA) | Központi Statisztikai Hivatal. (2025). Retrieved several times in January 2025, from https://www.ksh.hu/stadat_files/tur/en/tur0031.html.

Tourism, catering | Hungarian Central Statistical Office. (n.d.). Retrieved several times in January and February 2025, from https://www.ksh.hu/tourism-catering.

TourMIS: Tourism Marketing Information System / MU Vienna. (n.d.). Retrieved from Retrieved several times in January and February 2025 https://www.tourmis.info/cgi-bin/tmintro.pl.

Turizmusfejlesztési stratégia | Magyar Turisztikai Ügynökség (MTÜ). (n.d.). Retrieved from https://mtu.gov.hu/cikkek/strategia/.

United Nations (2010). *International Recommendations for Tourism Statistics 2008*. https://doi.org/10.18111/9789211615210

Wahynui, N., Mediaty, M., & Rasyid, S. (2022). The influence of the tourism sector on regional financial performance with economic growth as a mediating variable in improving community welfare. *Journal of Tourism Economics and Policy, 2*(3), 192-202. https://doi.org/10.38142/jtep.v2i3.405

World Tourism Barometer, Volume 23, Issue 1 / UNWTO. (2025). Retrieved from https://www.e-unwto.org/toc/wtobarometereng/23/1.

Wut, T. M., Xu, J. (Bill), & Wong, S. (2021). Crisis management research (1985–2020) in the hospitality and tourism industry: A review and research agenda. *Tourism Management, 85*, 104307. https://doi.org/10.1016/j.tourman.2021.104307

Xu, C., Jones, C., & Munday, M. (2019). Tourism inward investment and regional economic development effects: perspectives from tourism satellite accounts. *Regional Studies, 54*(9), 1226–1237. https://doi.org/10.1080/00343404.2019.1696954

Zhang, J., Quoquab, F., & Mohammad, J. (2024). Metaverse tourism and Gen-Z and Gen-Y's motivation: "Will you, or won't you travel virtually?". *Tourism Review, 79*(2), 304–320. https://doi.org/10.1108/TR-06-2023-0393

Zhong, L., Xu, Z., Morrison, A. M., Li, Y., & Zhu, M. (2024). Metaverse customer journeys in tourism: Building viable virtual worlds. *Tourism Review, 79*(1), 54–68. https://doi.org/10.1108/TR-11-2022-0582

Zhou, L., Buhalis, D., Fan, D. X. F., Ladkin, A., & Lian, X. (2024). Attracting digital nomads: Smart destination strategies, innovation and competitiveness. *Journal of Destination Marketing* & *Management, 31*, 100850. https://doi.org/10.1016/j.jdmm.2023.100850