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SAFETY AND SECURITY: KEY DRIVERS OF TOURISM DEVELOPMENT

Abstract: The global order is facing a series of systemic crises, including wars, political polarization, ecological disruptions, and pandemics. The tourism sector is particularly sensitive to the effects of these factors. Although destination choice and tourist arrivals are influenced by other factors (such as attractions, infrastructure, and economic development), safety and security are among the key determinants of tourism development and the competitiveness of tourist destinations.

The Travel & Tourism Development Index (TTDI) assesses the factors influencing the development of the tourism sector and ranks countries according to their capacity to develop tourism sustainably over the long term. One of the key pillars of this index is Safety and Security. The data suggest that countries with higher levels of safety and security tend to attract more tourists.

This paper focuses on the analysis of the Safety and Security pillar as a factor of Serbia's competitiveness in the international tourism market. According to the 2024 TTDI report, Serbia achieved a score of 6.10 in the Safety and Security pillar, the highest among all pillars, and ranked 32nd out of 119 countries.

Keywords: Safety and Security; Tourism Development; Competitiveness; Travel & Tourism Development Index (TTDI); Serbia.

1. INTRODUCTION

Tourism has experienced the worst crisis in the history of the sector due to the COVID-19 pandemic. Globally, international arrivals in 2020 fell by 72% compared to 2019, while international tourism receipts fell by 63%, which is also 10 times higher than the loss of tourism receipts during the 2009 global economic and financial crisis (WTO, 2023). The year 2024 marked a recovery in international tourism, with most destinations having more international tourists than before the pandemic, with 1.4 billion tourist arrivals recorded worldwide (UN Tourism, 2024). Further growth in international arrivals continued in 2025, with the growth rate approaching pre-pandemic growth trends. Although the estimated 1.52 billion international arrivals recorded worldwide in 2025 reached pre-pandemic levels, some destinations are still recovering and lagging behind pre-pandemic levels (UN Tourism, 2025).

The presented data clearly demonstrate the high vulnerability of tourism to various risks - ranging from disease outbreaks and natural disasters to terrorist attacks (Quintal, Lee, & Soutar, 2010; Fuchs & Reichel, 2011). Changes on the world stage can strongly influence changes in tourist behavior, and international tourism is particularly sensitive to safety and security issues (Seabra, Dolnicar, Abrantes, & Kastenholz, 2013). In addition to the fact that the tourism industry is highly vulnerable to changes in the global security environment, security risks also have a so-called

“spillover effect” because problems in one destination can affect the perception of a wider region or even the entire tourism system, as was the case with the COVID-19 pandemic (Hall, Timothy, & Duval, 2012).

Safety and security are fundamental factors in the development of tourism, especially in the context of increased global instability due to current geopolitical tensions and conflicts. Tourism is largely dependent on the perceived safety of a destination, as tourists usually consider potential risks before making a decision about where to travel. Tourist behavior, and therefore destinations, is largely driven by perceptions of security and the management of safety, security, and risk (Hall, Timothy, & Duval, 2012).

Given that safety and security are important concerns among tourists (Poon & Adams, 2000), the aim of the paper is to examine the role of safety and security in the development of tourism in conditions of global instability. A special focus of the paper is directed at the analysis of the safety and security of Serbia in order to determine its connection with the development and resilience of tourism.

2. THEORETICAL BACKGROUND

Tourism as an activity inherently involves the movement of people from a familiar to an unfamiliar environment, which increases the level of uncertainty and perception of risk. According to Wang & Wang (2018), travel represents a transition from a familiar to an unfamiliar environment, where changes in the environment can increase risk and uncertainty during the tourism experience. The following risk factors relevant to tourism have been highlighted in the literature (Floyd, Gibson, Pennington-Gray, & Thapa, 2004):

1. War and political instability
2. Health concerns
3. Crime
4. Terrorism.

In addition to the above factors, increasing attention is being paid to the impact of natural disasters on tourism demand, while terrorism and political instability have a particularly strong impact on changing travel intentions (Floyd, Gibson, Pennington-Gray, & Thapa, 2004). Something similar is found in Hall, Timothy and Duval (2012), who state that contemporary crises indicate a change in the nature of security and that health, social and environmental factors are becoming increasingly important, in addition to crime and terrorism. UN Tourism (2025) points to the relevance of the above factors, according to which uncertainty arising from geopolitical risks and ongoing conflicts, trade tensions and extreme weather conditions could affect traveler confidence and pose an increasing risk to tourism in 2026.

In this context, it should be emphasized that the literature distinguishes between the terms “safety” and “security”. *Safety* refers to protection from unintentional events such as natural disasters or health risks, while *security* is associated with protection from intentional threats, such as terrorism and criminal activities. The distinction is based on intent - *safety* refers to accidental risks (e.g., industrial accidents), while *security* refers to intentional actions (e.g. terrorism or sabotage). This distinction reflects the different nature of incidents and different approaches to risk management (Jore, 2019). Both aspects have a major impact on tourism development, as they strongly influence the perception of a destination as safe and desirable.

In addition to objective indicators, the subjective perception of risk among tourists also plays a significant role. Therefore, especially in an era of turbulent global relations, the need for destination marketing organizations to demonstrate that they are safe for tourists is becoming increasingly important. Negative publicity, which is often unrelated to reality on the ground, can often affect tourist perceptions (Hall, Timothy, & Duval, 2012). Research shows that risk perception negatively affects destination evaluation and tourist satisfaction, which is reflected in the destination image (Xie, Huang, Lin, & Chen, 2020). The media, which reports on various crisis events such as terrorist attacks, wars, epidemics, and natural disasters, play a role in shaping potential tourists' risk perceptions, which also contributes to changing their travel intentions. Consequently, tourists often redirect their travel to alternative destinations that they perceive as safer (Scott, Laws, & Prideaux, 2010). Within this framework, special attention should be given to Maslow's theory of the hierarchy of needs (Maslow, 1943), according to which the need for safety and security is among the basic human needs. Therefore, destinations that instill a sense of security become preferred by tourists, while the perception of insecurity can lead to the avoidance of such destinations even in cases where the objective risks are not high.

The literature therefore suggests that the perception of personal safety risks of potential tourists has a major impact on tourism demand patterns and that safety is one of the most fundamental conditions for tourism development (Fletcher & Morakabati, 2008; Seabra et al., 2013). Creating conditions for tourists to feel safe before and during their trip can be crucial for the success of a destination in the international tourism market (Huan & Beaman, 2004, cited in Seabra et al., 2013).

The importance of safety and security for tourism development is highlighted by the Travel and Tourism Development Index (TTDI), in which one of the key pillars is Safety and Security. The Safety and Security pillar measures the extent

to which a country exposes locals, tourists and businesses to security risks (WEF, 2024a, p. 8). This pillar includes indicators such as confidence in local police, as well as terrorism and organized violence (WEF, 2024a, p. 56). Given that safety and security are an important factor in attracting tourists, but also a key prerequisite for the resilience of the tourism sector, especially in conditions of global instability, the next segment of the paper will analyze the assessment of Serbia's Safety and Security and its global position according to this factor.

3. RESEARCH METHODOLOGY

Safety and Security is one of the pillars that make up the Travel and Tourism Development Index (TTDI). Although the Travel and Tourism Development Index (formerly TTCI Travel and Tourism Competitiveness Index) has undergone various methodological changes since its inception, the Safety and Security pillar has been an integral part of this index in all editions.

The analysis includes Serbia's score and ranking for the Safety and Security pillar from 2009 to the latest TTDI edition for 2024. Data on international tourist arrivals to Serbia are also included for the same period to in order to examine potential relationship between safety and security and tourism demand.

In addition to the aggregate pillar results, individual variables that compose the Safety and Security pillar will also be analyzed for 2024 to provide a more detailed insight into its structure.

The data sources for the individual pillar variables include the 2023 Legatum Prosperity Index, United Nations Office on Drugs and Crime (UNODC), Institute for Economics & Peace, Global Terrorism Index 2023: Measuring the Impact of Terrorism, Uppsala Conflict Data Program, and the World Bank World Development Indicators (WEF, 2024a, p. 67). Data on international tourist arrivals are based on publications of the World Tourism Organization and the Statistical Office of the Republic of Serbia.

The study applies a descriptive and comparative analysis of the TTDI pillar and international tourist arrivals to identify trends and relationships.

4. RESEARCH RESULTS AND DISCUSSION

An examination of Table 1 shows a long-term trend of improvement in Serbia's performance within the Safety and Security pillar in the period from 2009 to 2024. The pillar value records a continuous increase from 4.8 in 2009 to 6.1 in 2024, which confirms a significant improvement in the perception and objective indicators of safety and security. At the same time, Serbia's rank shows certain oscillations - from 85th place in 2009 to the best rank (17th place) in 2021, followed by a slight decline to 32nd place in 2024. This divergence between the growth of results and changes in rank can be explained by the relative progress of other countries, which is in line with the findings that the competitiveness of tourist destinations has a distinctly relative character (Dwyer & Kim, 2003).

Table 1: Score and Rank of the Safety and Security Pillar for Serbia

Safety and Security	2009	2011	2013	2015	2017	2019	2021	2024
Score (1-7)	4.8	4.9	5	5.46	5.4	6.03	6.16	6.1
Rank	85	66	55	59	72	26	17	32

Source: Authors' presentation based on TTCI and TTDI reports

A more detailed analysis of the structure of the Safety and Security pillar (Table 2) indicates that Serbia scores exceptionally high on indicators related to the absence of terrorism and organized violence (maximum score 7 and shares first place with several other countries with the highest score), which represents a significant comparative advantage. These results confirm the thesis that macro-security factors, such as political stability and low levels of violence, play a key role in the perception of a destination as safe (Pizam & Mansfeld, 2006). In contrast, the lower score and lower rank in the indicator of confidence in the police (4.53; 65th place) indicate the existence of institutional challenges that may affect tourists' subjective sense of safety. This is in line with the literature emphasizing that the perception of safety is not determined exclusively by objective security indicators, but also by the quality of institutions and trust in them (Fuchs & Reichel, 2011).

Table 2: Scores and Ranks of the Safety and Security Pillar Variables for Serbia, 2024

Safety and Security	Score	Rank
Confidence in local police	4.53	65
Safety walking alone at night	5.2	35
Homicide rate	6.79	36
Global Terrorism Index	7	1
Organized violence, deaths	7	1

Source: Authors' presentation based on the Economy Profiles in the TTDI 2024 Edition

Data on international tourist arrivals (Table 3) further suggests a positive relationship between improvements in safety and security and tourism demand. Between 2009 and 2019, the number of tourist arrivals grew almost continuously, in parallel with the improvement of Serbia's safety and security score.

Table 3: International tourist arrivals in Serbia

Year	International tourist arrivals (1000)
2009	645
2010	683
2011	764
2012	810
2013	922
2014	1029
2015	1132
2016	1281
2017	1497
2018	1710
2019	1847
2020	446
2021	871
2022	1773
2023	2134
2024	2385

Source: Authors' presentation based on UNWTO and Statistical Office of the Republic of Serbia reports.

This trend was abruptly interrupted in 2020 due to the COVID-19 pandemic (Figure 1), confirming the vulnerability of the tourism sector to global crises. However, recovery began in 2021, and in 2024 a historical maximum of 2.385 million international arrivals in Serbia was reached. The recovery and further growth of tourism may be partly associated with the relatively high level of safety and security in Serbia, which is consistent with the view that safety and security are among the key determinants of destination choice.

**Figure 1: International tourist arrivals in Serbia**

Source: Authors' presentation based on UNWTO and Statistical Office of the Republic of Serbia reports

However, it should be emphasized that the relationship between safety and security and tourist arrivals is not linear or unidirectional. Although improving security indicators contribute to the growth of tourism demand, the results are also influenced by other factors, such as infrastructure development, destination promotion and general economic conditions (Ritchie & Crouch, 2003). In this sense, Serbia's high position in the pillar of Safety and Security is a necessary, but not sufficient condition for long-term competitiveness in the international tourism market.

5. CONCLUSION

Tourism is an industry that is highly vulnerable to various risks, of which terrorism, political instability and crime have a particular impact on changing travel intentions. In addition to objective risks, the subjective perception of risk among tourists significantly influences tourism demand.

Since one of the basic human needs is the need to feel safe and secure, potential tourists will choose destinations that they perceive as safe and secure. The importance of safety and security for tourism development is confirmed by the Travel and Tourism Development Index, where one of the pillars that make up its structure is the Safety and Security pillar.

Looking at the TTDI editions from 2009 to the last one published in 2024, a continuous improvement in Serbia's Safety and Security pillar score can be observed, while at the same time Serbia's ranking in this pillar improved over the observed period. Serbia's score for the Safety and Security pillar increased from the initial 4.8 to 6.16 (out of a maximum of 7) in 2021, while it dropped slightly to 6.1 in 2024. At the same time, in addition to the highest score in 2021, Serbia also had the most favorable ranking according to this pillar, placing 17th on the list.

An analysis of the structure of this pillar and its individual variables shows that Serbia ranks below 50th place in most indicators, except for one. However, in the Global Terrorism Index and Organized violence indicators, Serbia achieves the maximum score of 7, sharing first place with countries that also have the highest score.

Considering that safety and security are of great importance when choosing tourist destinations, and that the current circumstances of geopolitical instability and conflict in Europe and the Middle East are placing additional pressure on the tourism sector (WEF, 2024a), promoting Serbia as a relatively safe and secure tourist destination can be a key factor in attracting tourists and contributing to maintaining stability and resilience in conditions of global instability.

REFERENCES

- Dwyer, L., & Kim, C. (2003). Destination competitiveness: determinants and indicators. *Current issues in tourism*, 6(5), 369-414.
- Fletcher, J., & Morakabati, Y. (2008). Tourism activity, terrorism and political instability within the Commonwealth: The cases of Fiji and Kenya. *International Journal of Tourism Research*, 10(6), 537-556.
- Floyd, M. F., Gibson, H., Pennington-Gray, L., & Thapa, B. (2004). The effect of risk perceptions on intentions to travel in the aftermath of September 11, 2001. *Journal of Travel & Tourism Marketing*, 15(2-3), 19-38.
- Fuchs, G., & Reichel, A. (2011). An exploratory inquiry into destination risk perceptions and risk reduction strategies of first time vs. repeat visitors to a highly volatile destination. *Tourism management*, 32(2), 266-276.
- Hall, C. M., Timothy, D. J., & Duval, D. T. (2012). *Security and Tourism: Towards a New Understanding?* In C. M. Hall, D. J. Timothy, & D. T. Duval (Eds.), *Safety and Security in Tourism* (pp. 1-18). Routledge.
- Jore, S. H. (2019). The conceptual and scientific demarcation of security in contrast to safety. *European journal for security research*, 4(1), 157-174.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- Pizam, A., & Mansfeld, Y. (2006). *Tourism, Security and Safety: From Theory to Practice*. Elsevier.
- Poon, A., & Adams, E. (2000). How the British will travel 2005. *Bielefeld: Tourism Intelligence International*.
- Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism management*, 31(6), 797-805.
- Ritchie, J. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. Cabi.
- Scott, N., Laws, E., & Prideaux, B. (2010). Safety and security in tourism. *Recovery Marketing after Crises*, New York and London: Routledge.

- Seabra, C., Dolnicar, S., Abrantes, J. L., & Kastenhof, E. (2013). Heterogeneity in risk and safety perceptions of international tourists. *Tourism Management*, 36, 502-510.
- Statistical Office of the Republic of Serbia (2025). *Statistical Yearbook of the Republic of Serbia*. Available at: <https://publikacije.stat.gov.rs/G2025/Pdf/G20252058.pdf> (accessed on 5 March 2026).
- UN Tourism (2024). *International tourism recovers pre-pandemic levels in 2024*. Available at: <https://www.untourism.int/news/international-tourism-recovers-pre-pandemic-levels-in-2024> (accessed on 3 March 2026).
- UN Tourism (2025). *International tourist arrivals up 4% in 2025 reflecting strong travel demand around the world*. Available at: <https://www.untourism.int/news/international-tourist-arrivals-up-4-in-2025-reflecting-strong-travel-demand-around-the-world> (accessed on 3 March 2026).
- Wang, W., & Wang, C. (2018). Cognition and Assessment of Tourism Disaster Risk Based on a Tourism Spot of Green Island. *Environment and Natural Resources Research*, 8(4), 32-45.
- World Economic Forum (2009). *The Travel & Tourism Competitiveness Report 2009*. Available at: <https://www.hospitalitynet.org/file/152003764.pdf> (accessed on 3 March 2026).
- World Economic Forum (2011). *The Travel & Tourism Competitiveness Report 2011*. Available at: <https://www.globalwellnesssummit.com/wp-content/uploads/Industry-Research/Global/2011-WEF-Travel-Tourism-Competitiveness-Report.pdf> (accessed on 3 March 2026).
- World Economic Forum (2013). *The Travel & Tourism Competitiveness Report 2013*. Available at: https://www3.weforum.org/docs/WEF_TT_Competitiveness_Report_2013.pdf (accessed on 3 March 2026).
- World Economic Forum (2015). *The Travel & Tourism Competitiveness Report 2015*. Available at: https://www3.weforum.org/docs/TT15/WEF_Global_Travel&Tourism_Report_2015.pdf (accessed on 3 March 2026).
- World Economic Forum (2017). *The Travel & Tourism Competitiveness Report 2017*. Available at: https://www3.weforum.org/docs/WEF_TTCR_2017_web_0401.pdf (accessed on 3 March 2026).
- World Economic Forum (2019). *The Travel & Tourism Competitiveness Report 2019*. Available at: https://www3.weforum.org/docs/WEF_TTCR_2019.pdf (accessed on 3 March 2026).
- World Economic Forum (2021). *Travel & Tourism Development Index 2021*. Available at: https://www3.weforum.org/docs/WEF_Travel_Tourism_Development_2021.pdf (accessed on 3 March 2026).
- World Economic Forum (2024a). *Travel & Tourism Development Index 2024*. Available at: https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf (accessed on 3 March 2026).
- World Economic Forum (2024b). *Travel & Tourism Development Index 2024 Edition, Interactive data and economy profiles*. Available at: <https://www.weforum.org/publications/travel-tourism-development-index-2024/interactive-data-and-economy-profiles-afaa00a59c/> (accessed on 3 March 2026).
- World Tourism Organization (2012). *UNWTO Tourism Highlights, 2012 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284414666> (accessed on 12 March 2026).
- World Tourism Organization (2015). *UNWTO Tourism Highlights, 2015 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284416899> (accessed on 12 March 2026).
- World Tourism Organization (2016). *UNWTO Tourism Highlights, 2016 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284418145> (accessed on 12 March 2026).
- World Tourism Organization (2017). *UNWTO Tourism Highlights, 2017 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284419029> (accessed on 12 March 2026).
- World Tourism Organization (2018). *UNWTO Tourism Highlights, 2018 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284419876> (accessed on 12 March 2026).
- World Tourism Organization (2019). *International Tourism Highlights, 2019 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284421152> (accessed on 12 March 2026).
- World Tourism Organization (2023). *International Tourism Highlights, 2023 Edition – The Impact of COVID-19 on Tourism (2020–2022)*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284424986> (accessed on 12 March 2026).
- World Tourism Organization (2024). *International Tourism Highlights, 2024 Edition*. Available at: <https://www.e-unwto.org/doi/pdf/10.18111/9789284425808> (accessed on 12 March 2026).
- Xie, C., Huang, Q., Lin, Z., & Chen, Y. (2020). Destination risk perception, image and satisfaction: The moderating effects of public opinion climate of risk. *Journal of Hospitality and Tourism Management*, 44, 122-130.