

COMPARATIVE ASSESSMENT OF CRISES AND RECOVERY IN THE ROMANIAN TOURISM MARKET

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Abstract

The Romanian tourism industry has yet to prove that it is a resilient economic sector that can adapt to global crises. This study provides a contextual analysis of the sector's performance during two international crises – the global financial crisis (GFC) and the COVID-19 pandemic (C19). The main question is: How do tourism demand and accommodation supply in the Romanian tourism sector respond to global shocks, and what patterns of resilience or vulnerability do these crises reveal? Previous studies have focussed on tourist satisfaction and the differential impact of tourism activities after EU integration, but have rarely examined the resilience of the sector in the midst of two different global crises. The need for this research stems from its comparative nature – assessing the pre- and post-crisis periods of the GFC and C19 – thus contributing to a comprehensive understanding of the sector's dynamics. This work fills a gap in the existing literature and applies a longitudinal approach to assess Romanian tourism resilience, market confidence and response to economic and health-related shocks. The study applies a quantitative methodological framework and uses time series data from 2002-2022, with descriptive statistics, comparisons and trend analyses serving as the main pillars for interpreting the evolution of tourism demand, accommodation supply and occupancy rates. The analysis shows that the Romanian tourism sector has proven to be resilient, as operational capacity exceeded pre-crisis levels after the COVID-19 crisis, although demand fell sharply and has not fully recovered to date. Occupancy rates fell significantly during both crises and have only partially recovered.

Keywords: global financial crisis, Covid-19 pandemic, crisis, resilience, recovery, tourism

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1. Introduction

The crises that have manifested themselves at the beginning of the 21st century have generally affected all areas of the political-economic system worldwide (Kumar and Ekka, 2023). At the level of the tourism sector, their impact has been quite significant (Cohen, 2012; Čaušević, 2023). The way in which economies around the world were affected by the major crises at the beginning of the 21st century

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requires an intimate knowledge of the international business environment, institutions and politics. All these aspects are likely to lead to major changes in tourism, one of the most important economic sectors affecting the quality of life of local populations (Hornoiu et. al, 2022) and which in 2019 ranked third in the world in terms of exports and provides one in ten jobs (UNWTO, 2019).

Since the beginning of the 21st century, the tourism sector has been hit by different types of crises: Natural disasters, terrorist attacks, political instability, economic recessions, wars and epidemics/pandemics. Depending on their severity, they have affected a country's tourism sector to varying degrees. At a global level, two crises have naturally stood out: the economic and financial crisis of 2008-2010 and the health crisis triggered by the COVID-19 pandemic of 2020-2022. The Great Recession (Global Financial Crisis, GFC) (2007-2009) and the COVID-19 (C19) pandemic (2020-2021) have impacted the global economy in an unprecedented way. The tourism industry was hit hard by both crises, but the impact and nature of the two crises were different. During the 2007-2008 crisis, the impact was felt through the speculative bubbles and the financial sector. In contrast, the most recent crisis had unforeseen external causes – the COVID-19 pandemic. In the context of the pandemic crisis, the recovery of the tourism industry has been analysed through the lens of factors such as the contribution of tourism to the country's economy (Popescu et al., 2022), the impact of COVID-19 at country level and the degree of competitiveness of the tourism industry. The impact of the COVID-19 pandemic has highlighted the inherent vulnerability and sensitivity of tourism development. At the same time, it has accelerated the process of digitalisation in the urban environment and spread to the tourism sector, where competition remains intense (Coroş et al., 2022).

Despite the different characteristics of the two crises and although Romania is currently in a recovery process after the imposed austerity measures, there has been no study to date that has simultaneously analysed defining indicators of the two main crises and their recovery phase in Romania. Consequently, the present study aims to examine the theoretical elements defining the types of crises affecting tourism and to identify the main crises in Romania in the last two decades (2002-2022), focusing on the GFC and the subsequent pandemic triggered by COVID-19. The research is based on a comparative analysis of the main macroeconomic indicators both during the crises and in the recovery phase. This research provides a comprehensive overview of how the Romanian tourism sector has dealt with critical economic challenges.

2. Literature review

Crises in tourism are being covered in more and more publications as the events leading to these crises become more frequent. The impact of crises is significant and affects destinations (Abbas et al., 2021; Gaki and Koufodontis, 2022; Kumar and Ekka, 2023; Lamhour, Safaa and Perkumienè, 2023). Duan, Xie and Morrison (2021) analysed 302 articles on tourism crises from 1991-2020 to identify event types, local distribution, impact and other aspects. There is no consensus on the classification of tourism crises. The study found that most articles deal with security crises (42.7%), followed by natural disasters (27%) and economic and financial disasters (13%). In fourth place are security crises (12.5%), which also include disease outbreaks, including epidemics. Casal-Ribeiro et al. (2023) analysed the period from 2000 to 2022 and the results show 14 major crisis management frameworks that highlight both common and distinct elements. Lamhour, Safaa and Perkumienè (2023) analyse 114 Scopus-indexed articles from 2020-2023 on tourism resilience to identify trends in tourism research, and Persson-Fischer and Liu (2021) examine how the COVID-19 pandemic is perceived in relation to tourism through the lens of the sustainability perspective.

Until 2010, mainly financial crises and various events such as the attacks of 11 September 2001 in the USA and the oil crises were studied (Hall, 2010). It is also important to examine how tourism can recover after a crisis (OECD, 2020) and how travelling to visit family and friends can sustain destinations after crises (Backer and Ritchie, 2017). However, on a global scale, the pandemic crisis triggered by the Covid-19 virus has caused unprecedented damage to global tourism than any disaster in recent decades. In contrast to previous crises, pandemics only cause damage to human capital (Ortega Palmo et. al, 2022). Of the five pandemics that became known to the public in the last two decades - SARS and avian flu (2003), influenza A-H1N1 (2009) and MERS (2012) - COVID-19 was by far the most aggressive in terms of socio-economic impact (Ortega Palmo et. al, 2022).

The disruption on the global financial markets caused by the crisis on the US property market that broke out in July 2007 escalated significantly in the second half of 2008. According to Roubini and Mihm (2010), the core of the international financial crisis can be traced back to the overemphasis on financial instruments of the nominal economy (Zaman and Georgescu, 2009) as opposed to the material economy when it comes to fulfilling the criteria for sustainable development.

The impact of the financial crisis on European emerging markets was exacerbated by the persistent inflationary pressures triggered by the rise in the cost of energy, commodities and agricultural products from 2007 into the second half of 2008. In addition, there was a notable outflow of foreign capital in this environment. Some of these countries (including Romania) experienced a significant devaluation of their currencies and a decline in investor interest, leading to an increase in financial imbalances abroad (Zaman and Georgescu, 2009). Nevertheless, the effects of the financial crisis became more evident in the first quarter of 2009, when Romania's GDP fell by 2.6% compared to the fourth quarter of 2008 and by 6.4% compared to the first quarter of 2008. As a result, Romania fell into recession in 2009 (Zaman and Georgescu, 2009) and the tourism sector was one of the hardest hit sectors of the economy (Strat et. al. 2016). The decline in consumer demand was felt in both business and leisure tourism and had a negative impact on companies in the tourism industry (Strat et. al. 2016).

Similar to other countries (Narayan et al., 2022), the pandemic has also largely penetrated the market in Romania. However, the extent of the impact was not the same in all sectors. Sectors such as the food industry, healthcare and information technology recorded significant positive returns during the COVID-19 outbreak, while sectors such as transport, entertainment and hospitality suffered significant declines. Despite the challenges posed by the pandemic, the Romanian tourism sector demonstrated a commendable level of resilience by proving its ability to adapt to new trends, changing demands and new tourist preferences such as virtual reality (Șchiopu et al., 2022). Before travel restrictions were eased, there was a tendency for tourists to travel locally (Hornoiu et al., 2022), and the tourism sector in Romania skilfully adapted to this change in consumer behaviour.

A similar comparative analysis of the dynamics of key macroeconomic indicators during the 2008 and 2020 recessions was conducted by Yussuf et al. (2023) to assess the losses to the global economy during the COVID-19 pandemic. Li et al. (2022) analysed the impact of the 2008 global financial crisis and the COVID-19 pandemic on macroeconomic variables in the US economy. Their results showed that the pandemic was much more severe in terms of economic activity than the 2008 crisis, with an immediate impact on tourism (Ibănescu and Cehan, 2022). Recovery from a shock was also addressed by Duro et al. (2024), who also introduced the concept of resilience dynamics of destinations. In Romania, the recovery behaviour of rural destinations after the 2008 economic crisis was analysed to determine their resilience performance (Ibănescu, Eva and Gheorghiu, 2020). Surugiu et al. (2023) analysed the evolution of tourism in Romania and shed light on the ability of regions to cope with crisis-related challenges, and Crețu et al. (2021) analysed tourists' perceptions during the health crisis.

The landscape of tourism recovery is full of a number of analytical modalities that have been studied by scholars with the aim of refining the recovery processes in the tourism sector after different types of crises. In most cases, the academic discourse questions the premise of returning to a pre-crisis normality and calls for a reassessment of the future development of tourism as a relevant part of any economy. Given the importance of the two major Romanian crises of the last two decades and the context of different potential recovery paths, the present study aims to offer an informed analysis of the post-crisis recovery of the tourism sector by analysing key market indicators.

3. Methodology

The main objective of this research is to analyse the Romanian tourism sector before, during and after the main crises of the last two decades: the global financial crisis and the Covid-19 pandemic. The research aims to assess the performance and trends of the Romanian market by conducting a comparative analysis to evaluate the main market indicators and gain insights, with the aim of identifying and better understanding the similarities and differences in terms of impact and recovery capacity of the tourism market. The empirical analysis focuses on the similarities and differences between the crises on two main sides – supply and demand and the impact and degree of recovery. The research uses a quantitative approach and analyses a time series of data spanning from 2002 to 2022.

This longitudinal study design allows for the examination of changes in tourism indicators over time and helps to identify underlying trends. The primary data source for this analysis is the National Institute of Statistics (NIS), specifically the Tempo online database. The NIS data series provide official, comprehensive statistics and ensure a high degree of reliability and accuracy. Given the comprehensive nature of the national statistical databases, no specific sampling procedure is required and the indicators are compared from year to year or period to period. The data collected for this study is secondary in nature and accessible through the public domain (NIS database), so there are minimal ethical concerns. Descriptive statistical methods will be used to analyse the data collected. This includes calculating mean values and trends over time. The analysis focuses on four key indicators for the tourism market defined according to the NIS classification (2024):

a) *Tourist arrivals*: the total number of tourists visiting Romania within the specified period. The number of tourists staying in accommodation establishments includes all persons (Romanians and foreigners) travelling outside their permanent residence for a period of less than 12 months and staying at least one night in an accommodation establishment in the visited areas of the country; the main reason for the trip is not to carry out a paid activity in the visited places (NIS, 2024).

b) *Average stay*: the average length of stay of tourists, measured in days. The tourist overnight stay is the 24-hour period from the hotel time for which a person is registered in the tourist accommodation and receives accommodation based on the rate for the occupied room, even if the actual length of stay is less than the stated period. Overnight stays for extra beds (paid by the customer) are also taken into account (NIS, 2024).

c) *Accommodation capacity consists of two sub-indicators*:

c1) *Capacity in operation*: the number of accommodation units available for tourists. The accommodation capacity in operation represents the number of accommodation places made available to tourists by the accommodation establishments, taking into account the number of days on which the establishments are open during the period under consideration. It is expressed in bed days. Excludes places in rooms or units that are temporarily closed due to lack of tourists, repairs or other reasons (NIS, 2024).

c2) *Existing capacity*: the maximum number of accommodation units that could be in operation. The existing (installed) accommodation capacity is the number of accommodation places registered in the latest accommodation unit's admission, authorisation or classification certificate, excluding the additional beds that can be installed if necessary. The places associated with accommodation structures with complementary accommodation functions (holiday homes, campsites, etc.) at a basic accommodation structure (hotel, motel, campsite, etc.) and the use of these places are included in the basic structure (NIS, 2024).

d) *Net use index of accommodation (occupancy rate)*: The percentage measure of accommodation capacity actually used by tourists.

These indicators were selected because they reflect both supply and demand dynamics in the tourism market and are commonly used in tourism studies to measure the health and growth of the industry.

4. Results and discussions

4.1 Demand-side empirical analysis

4.1.1 Tourist Arrivals

Between 2002 and 2012, the tourism industry in Romania went through various phases, which are reflected in the development of the total number of tourists and their distribution between Romanians and foreigners. The period from 2002 to 2007 was characterised by an increase in the total number of tourists, both Romanians and foreigners. Thereafter, the economic and financial crisis led to a sudden drop in arrivals, which can be linked to a decline in purchasing power and economic uncertainty. After the crisis, there is a clear upturn with an upward trend for both categories of tourists, which marks the best period for Romanian tourism and is closely linked to developments in the global tourism sector (Appendix A, Figure 1).

The COVID-19 pandemic has had a significant impact on the tourism industry worldwide, and Romania has not been spared. In 2020, a sudden and unprecedented drop in tourist numbers was recorded due to travel restrictions and health uncertainties. With the management of the pandemic and the revival of travel, a gradual recovery can be observed in the period 2021-2022. Although the decline during the crises shows the vulnerability of the tourism industry to economic instability and pandemics, there is a clear recovery after each shock, demonstrating the resilience of the tourism sector (Appendix B, Table 1).

The highlighted periods will form the basis for the following analysis.

4.1.2 Arrivals during the Global Financial Crisis

The period before the crisis (2002-2008). Between 2002 and 2008, the number of tourists increased continuously for six consecutive years, by 47% over the entire period, with an average annual rate of 6.6%. A similar trend can be observed for both categories of tourists, Romanians and foreigners. However, for foreign tourists there are fluctuations in the period 2006-2008, with decreases in 2006 and 2008, but with a significant increase in 2007.

Impact of the crisis (2009-2010). The global financial crisis had a significant impact on the tourism industry. In the period 2009-2010, arrivals decreased for two years (a decrease of 14% in 2009 and 1% in 2010). This decline affected both Romanian and foreign tourists, with an overall decrease of 14.77% for the first and 16.5% for the second tourists.

Recovery (2011-2012). A clear recovery in arrivals has been observed since 2011. Romanian tourists recorded an increase of 16.7% in 2011, and 2012 saw a full recovery, with arrivals even 6.5% higher than in 2008. Foreign tourists also recorded an increase of 5.5% in 2010, followed by growth of 16.7% in 2011 and surpassing the previous peak of 2007 by 6.8% in 2012.

These developments reflect both the tourism industry's ability to adapt to major economic changes and its ability to recover from difficult times and record significant growth.

4.1.3 Arrivals during COVID-19 pandemic Crisis

The period before the crisis (2011-2019). In the period 2011-2019, tourist arrivals increased for 9 consecutive years (+120% over the entire period, 9.16% annually, +74% after the full post-crisis recovery), with both Romanian and foreign tourists contributing to this remarkable growth. An impressive 126% increase in Romanian tourists between 2010 (the year after the crisis) and 2019, with an average rate of 9.5%. Following the full post-crisis recovery achieved in 2012, the number of arrivals recorded a 77% increase by 2019 (+8.52% average rate). Foreign tourists also made a notable contribution with a cumulative growth of 107% between 2010 and 2018, at an average rate of 9.6%. Even after the full recovery in 2012, post-crisis growth was 69% (9.12% average rate).

Impact of the crisis (2020). The year 2020 was characterised by a dramatic drop in tourist arrivals (-52%), with the pandemic significantly affecting both categories of tourists. Romanian tourists decreased by 44.4% in 2020, while the decrease in foreign tourists was even more significant at -83%, reflecting a greater vulnerability to travel restrictions and the global impact of the pandemic. It is worth noting that foreign tourists had already recorded a decline (by 4%) in 2019.

Recovery (2021-2022): In 2021, a significant recovery can be observed with a 59.5% increase in tourist numbers (+57% for Romanian tourists, +94% for foreign tourists). In 2022, the overall growth was 23%, but the recovery was not complete (6% fewer tourists compared to 2019). The 17% increase in the number of Romanian tourists meant their full recovery (+2% compared to 2019). However, despite a growth rate of 90.5% in 2022, the number of foreign tourists did not reach the previous level (37.6% less), indicating a slower recovery in this segment.

The COVID-19 pandemic has had a significant impact on tourist behaviour and flows, but this period illustrates the complexity of the tourism industry in the face of abrupt changes and crises, as well as its resilience during recovery phases.

4.1.4 Arrivals - comparative assessment between GFC and C19 impact

A comparison of the two major crises in terms of arrival figures reveals a number of similarities and significant differences (Appendix B, Table 2):

- During the Great Financial Crisis (GFC) there is a continuous growth period of 6 years, while in the COVID-19 crisis (C19) the period of continuous growth spans 9 years;
- Before the GFC, the average growth rate for Romanian and foreign tourists was 6.63% and 6.64% respectively. In the case of C19, these annual rates were higher: 8.23% for Romanians and 8.52% for foreigners;
- The COVID-19 crisis had a far greater impact than the Great Financial Crisis. The overall impact of the GFC was 15%, compared to 52% in the case of C19 for total arrivals. For Romanian tourists, the overall impact was 16.5% during the GFC and 44.4% during C19, while for foreign tourists it increased from 17.8% during the GFC to 83.1% during C19;
- The GFC impacted the tourism industry for 2 consecutive years, while C19 only had a major impact for one year;
- After the GFC, the first increase was 15.79%, while in C19 it was much higher at 59.49%. Foreign tourists also recorded a significant increase in the first year after both crises;
- After the GFC, both categories of tourists were able to fully recover. In the case of C19, Romanian tourists were able to recover, while foreign tourists experienced a partial recovery.

A partial conclusion that can be drawn is that the COVID-19 crisis had a deeper impact and the recovery process was different for Romanian and foreign tourists.

4.2 Supply side empirical analysis

4.2.1 Accommodation capacity

In the first decade of the millennium, from 2002 to 2012, we observed a constant growth in accommodation capacity in Romania. The growth rate fluctuated, but the post-crisis period from 2011 to 2012 brought an acceleration of this trend. Regarding the impact of crises, the global financial crisis of 2008 had little impact on accommodation capacity and the tourism industry was able to recover quickly, reaching a full recovery in 2012. In contrast, the COVID-19 crisis (C19) had a significant impact in 2020 and led to a sudden drop in operational accommodation capacity. However, the tourism sector has started to recover and the figures from 2022 reflect a partial recovery, although still below pre-crisis levels (Appendix A, Figure 2).

Over the entire period analysed, the existing accommodation capacity recorded constant growth with minor annual fluctuations. A significant expansion can be observed in the period 2010-2012, after which the numbers fluctuated but continued to increase overall. The years following the 2011-2012 crisis in particular marked a period of accelerated growth. The global financial crisis (GFC) of 2008 had a moderate impact on existing capacities, but was followed by a phase of recovery and expansion. In contrast, the COVID-19 crisis in 2020 acted more like a brief temporary brake on the well-established upward trend (Appendix A, Figure 3).

Accommodation capacity has thus demonstrated the tourism industry's ability to adapt to economic changes and the effects of crises. Despite the challenges posed by economic crises and pandemics, the tourism industry has managed to recover and resume its growth trajectory.

4.2.2 Accommodation capacity during The Global Financial Crisis

The period before the crisis (2002-2008). In the period 2002-2008, operational accommodation capacity grew by a total of 16.6% in six consecutive years. The average annual growth rate was 2.6%. In the same period, the growth of existing capacity was only four years (with the exception of 2007) and recorded an overall increase of 7.9% with an average annual growth rate of only 1%.

Impact of the crisis (2009-2010). Unlike the number of arrivals, both indicators of accommodation supply recorded a moderate increase during the crisis (2009-2010). Operational accommodation capacity showed a cumulative growth of 7.8%, while existing capacity showed a cumulative growth of 5.9%.

Recovery (2011-2012). There was no recovery in operational accommodation capacity, but rather a continuation of growth with a significant increase of 7.2% in 2011. In contrast, 2011 saw a significant decline in existing capacity (-10.6%), but 2012 saw a return to positive growth at a rate of 8.11%. As a result, operational accommodation capacity continued to grow, but only exceeded the pre-crisis level (2010) in 2015 (+5.33% compared to 2010).

4.2.3 Accommodation capacity during COVID-19 pandemic

The period before the crisis (2011-2019). In the period before the crisis, operational accommodation capacity grew continuously until 2018. In the period from 2010 to 2018, the number of overnight stays increased by 39.6%. Looking at the entire 16-year growth period (2002-2018), the average annual growth rate was 3.6%, which means that the number of overnight stays increased by 75.5% by 2018 compared to 2002. Existing capacity grew steadily from 2011 onwards at an average rate of 3.1% for the period 2011-2019. In 2018, there were 13.5% more accommodation units than in 2010 and 29.8% more than in 2002 (average rate of 1.8%, despite fluctuations over the 16 years).

Impact of the crisis (2020). The operational accommodation capacity already started to decrease in 2019 (-0.3%) and the crisis had a significant impact, leading to a 28% decrease in 2020. In contrast, there was no significant impact on existing capacity.

Recovery (2021-2022). Operational accommodation capacity recovered quickly, with an increase of 36.2% in the first year after the crisis (2021) and further growth of 6.6% in the second year (2022). In 2022, it had fully recovered and exceeded the 2018 level by 4.4%. Existing capacities continued to develop positively. In 2022, 51.5% more accommodation was recorded than in 2010, the year before the decline in 2011.

4.2.4 Accommodation capacity – comparative analysis between GFC and C19 impact

As far as the indicator - operating capacity - is concerned, a comparative analysis of the impact of the two crises shows that (Appendix B, Table 3):

- In the context of the global financial crisis (GFC), the accommodation sector went through a period of stability before the crisis, with six consecutive years of growth. In contrast, the COVID-19 crisis (C19) came after 8 years of continuous growth, which corresponds to a much longer period of economic expansion;
- During the GFC, operational accommodation capacity remained relatively unaffected and did not decline significantly. In contrast, there was a significant decline of 28% in C19, reflecting the massive impact of the crisis on the tourism industry;
- No recovery phase was required after the GFC as operational accommodation capacity continued to increase. In contrast, C19 was followed by a rapid recovery with an increase of 36.2% in the first year after the crisis and a full return to pre-crisis levels in 2022 with a growth of 4.4%;

In terms of the indicator - existing accommodation capacity - a comparative analysis of the impact of the two crises shows that (Appendix B, Table 3):

- During the global financial crisis, there was a significant decrease in existing capacity of 10.6%, reflecting the economic difficulties caused by the crisis. In contrast, the C19 had no significant impact on existing capacity, which remained relatively stable;
- The average growth rate before the crisis was more pronounced in the case of C19, indicating a period of faster growth before the crisis compared to the GFC. While the post-GFC recovery was sustained and continuous, the post-C19 recovery was very strong with an increase of 51.5% in 2022 compared to 2010.

Both crises had a significant impact on the supply of accommodation - the GFC had a greater impact on existing capacity, while C19 had a major impact on operational accommodation capacity. The post-GFC recovery was sustainable, while C19 emphasised the adaptability and resilience of the tourism industry, which quickly returned to pre-crisis levels.

4.3 Market Analysis: Demand vs Supply

4.3.1 Tourism market during The Global Financial Crisis

The period before the crisis (2002-2008). In the pre-crisis period (2002-2008), tourism demand, as measured by the arrivals indicator, grew steadily over a 6-year period, with the total number of international tourists increasing by 47%. This corresponds to a high average annual rate of 6.6%. Supply, expressed as operational accommodation capacity, also recorded a significant increase in the period before the crisis (2002-2008). In the same 6-year period, however, it only grew by a total of 16.6% and thus significantly slower than demand (2.6%). Existing accommodation capacity only grew for 4 consecutive years (5 in total, with a decline in 2007), with overall growth in the period 2002-2007 being much more modest at only 4% (at an annual rate of less than 1%).

Impact of the crisis (2009-2010). During the crisis (2009-2010), tourism demand (arrivals) fell by 14% in 2009 and by a further 1% in 2010. Nevertheless, there was a recovery from 2011 onwards. In contrast, the operational accommodation capacity continued to grow despite the crisis, with a cumulative increase of 7.8% in the period 2009-2010. As the clear development of supply shows, the existing accommodation capacity also grew during the crisis (2009-2010), with a cumulative rate of 5.9% for 2009-2010.

Recovery (2011-2012). After the crisis, tourism demand recovered quickly in the period 2011-2012, with a growth of 16% in the first year after the crisis. Full recovery was achieved the following year, with 2012 even recording 8% more arrivals than 2008. As the crisis had virtually no impact on the supply side, subsequent developments confirmed the decoupling from demand. While operational capacity increased by 7.2% in 2011, existing capacity fell significantly in 2011 (-10.6%) and then grew by 8.11% in the first year after the crisis (2012). This was followed by a continuous increase up to and including 2022.

4.3.2 Tourism market during COVID-19 pandemic

The period before the crisis (2011-2019). During the pre-crisis period (2011-2019), tourism demand grew continuously, recording 9 consecutive years of expansion. With an average annual rate of 8.23% in the post-crisis period (2012-2019), the tourism sector benefited from an extremely favourable period. From the perspective of tourism supply, the development was also positive, with small differences. The operational accommodation capacity grew continuously until 2018, at an average annual rate of 3.6% over a period of 16 years (2002-2018). Existing accommodation capacity has grown continuously since 2011, at an average annual rate of 3.1% in the period 2011-2019

Impact of the crisis (2020). In 2020, demand fell sharply by 52%, which is a significant impact of the pandemic crisis. The drop in demand also impacted supply and led to a significant reduction in operational accommodation capacity by 28, a practical adjustment to the drastic drop in demand due to the restrictions and uncertainties caused by the pandemic. Remarkably, the available capacity did not decrease significantly during the pandemic crisis, but remained relatively stable.

Recovery (2021-2022). In the years of recovery (2021-2022), tourism demand increased significantly, with growth of 59.5% in the first year after the crisis and a further +23% in the second year (2022). In 2022, however, demand had not yet reached the level of 2019, as the number of tourist arrivals was 6% lower than before the crisis. In terms of operational accommodation supply, the recovery was rapid, with growth of 36.2% in 2021 and a full recovery in 2022, even exceeding the 2018 level (accommodation capacity was almost 1% lower in 2018 than in 2019) by 4.4%. The significant development of existing accommodation capacity is reflected in the fact that it increased by a further 14.6% in 2021 and in 2022 the total number of accommodation places was 51.5% higher than in 2010.

4.4 Market efficiency: Occupancy rate & Average Stay

4.4.1 Occupancy rate

The occupancy rate is an important indicator that reflects the percentage utilisation of available accommodation capacity. If we analyse the development of the occupancy rate in tourism for the period

2002-2022, we can observe significant trends that can be correlated with important events, including economic crises and the COVID-19 pandemic (Appendix A, Figure 4):

- In the pre-crisis period, from 2002 to 2008, the occupancy rate rose steadily, reaching a level of 36% in 2007. The global financial crisis from 2007 to 2009 had a significant impact and led to a drastic drop in the occupancy rate to 28.4% in 2009. This was a consequence of the adjustment to the new economic conditions. The recovery began in 2011, but the occupancy rate did not return to pre-crisis levels in the following years.
- As part of the global economic recovery and the tourism sector, the occupancy rate rose steadily between 2011 and 2019, reaching a new high of 33.9% in 2019 (although, as mentioned above, this is still below the 2007 level). The pandemic had a devastating impact in 2020 and led to a sharp drop in the occupancy rate to 22.8%, the lowest value in the entire period analysed. The recovery began in 2021 with a significant increase from 22.8% to 29.1%, but the values are still below those of the previous decade.

The occupancy rate, which is crucial for assessing the health of the industry, has been significantly impacted by the global financial crisis (GFC) and the COVID-19 pandemic. Its development has several characteristics:

Before the crises: Before the global financial crisis, the occupancy rate showed oscillating fluctuations, with a period of growth between 2006 and 2008. In contrast, the period before the pandemic crisis was characterised by constant growth, which continued for six consecutive years (2013-2019);

Crises impact: During the global financial crisis, the occupancy rate fell significantly, by a total of 10.9 percentage points, mainly due to three consecutive years of decline (2007-2010). In 2020, the pandemic had an immediate impact, causing a sharp decline of 11.1 percentage points, reflecting the severity of the crisis caused by COVID-19;

After the crises: After the financial crisis, the occupancy rate recorded a modest increase of 1.1 percentage points in the first year after the crisis (2011), but the 2007 level was never reached again. In the case of the pandemic, the recovery was more dynamic, with an increase of 3.3 percentage points in the first year after the crisis (2021) and a further 3 percentage points in the second year (2022). However, the occupancy rate did not fully recover in 2022 and recorded a decline of 4.8 percentage points compared to 2019.

The trends observed show the resilience of the tourism industry, but also the major challenges posed by economic crises and pandemics. The post-crisis recovery was a combination of adaptation to new conditions and economic recovery, with the tourism industry continuing its efforts to recover and adapt to the ongoing changes.

A comparison of the two crisis periods shows that the impact and recovery in occupancy rates was more pronounced in the case of the COVID-19 pandemic. The pandemic led to a sharp and significant decline in 2020, with a rapid but incomplete recovery in 2022. In contrast, the global financial crisis had a longer-lasting impact and a slower recovery (Appendix B, Table 4).

4.4.2 Average stay

If we analyse the development of the average length of stay in days from 2002 to 2022, we can identify important trends and determine how external shocks have influenced them (Appendix A, Figure 5):

- In the period 2002-2008, the average length of stay gradually decreased and stood at 2.9 days in 2008. During the global financial crisis, the average length of stay decreased further, indicating a preference for shorter stays;
- The unfavourable situation continued until 2018, when the unfavourable trend seemed to have stopped. From 2019 to 2020, the average length of stay increased slightly (insignificant). The most recent development after the crisis corresponds to the same characteristic trend of the last two decades.

The average length of stay in days is an important measure of tourists' behaviour and their preferences in terms of the length of their stay at the destination. If we compare the development of the average

length of stay in the periods of the global financial crises (GFC) and the COVID-19 pandemic, we can see the following:

Before the crises: In the period before the GFC, the average length of stay fell continuously over a period of 6 years (2002-2008), by an average of -0.12 days per year. In 2008, there was a decrease of 0.7 days compared to 2002. In the period before the pandemic crisis, the average length of stay decreased only slowly, by less than 0.1 days every 2 years;

Effects of crises: During the financial crisis, the average length of stay continued to decrease, by a total of 0.5 days between 2007 and 2012. In contrast to the previous crisis, there was no significant decrease in the average length of stay. In 2020, there was even an increase of 0.1 days, which peaked in the period 2018-2022;

Recovery after crises: In the case of the GFC, no significant recovery in the average length of stay was observed after the crisis. No significant recovery was observed after the COVID-19 crisis either.

If we compare the development of the average length of stay in days during the two crisis periods, we see that the COVID-19 pandemic had a different impact than the global financial crisis (GFC). While the GFC caused a continuous decline in the average length of stay, the pandemic had only a limited impact and even led to an increase in 2020 (Appendix B, Table 5).

5. Conclusions

The Romanian tourism sector has proven its resilience to the global financial crisis and the COVID-19 pandemic. After a continuous increase in tourist arrivals from 2002 to 2008, the Romanian tourism industry experienced a sharp decline (2009-2010) caused by the global economic crisis. Nevertheless, by 2011-2012, the sector had not only recovered but also experienced astonishing growth, proving its organic ability to recover and expand after significant economic challenges.

The period before the C19 pandemic was also characterised by significant growth, with a 120% increase in arrivals from 2011 to 2019, demonstrating the vitality of the Romanian tourism sector and a rising standard of living as an emerging European economy. Nevertheless, this expansion was abruptly halted by the pandemic in 2020, resulting in a sharp decline that proved the industry's vulnerability to both health and global crises, as well as its inability to adapt to force majeure scenarios. However, the subsequent recovery indicates a steady revival, especially among Romanian tourists, who returned to pre-pandemic numbers in 2021 by showing a great interest in more sustainable forms of tourism (e.g. ecotourism or agritourism), as previous studies have also found (Hornoiu et al., 2022).

Even though the recovery rate among foreign tourists is considerably low, the Romanian tourism sector is proving to be resilient. While the GFC impacted tourism for about two years, C19 saw a one-off and sharp annual decline. Both crises were characterised by a strong rebound, with C19 showing a more pronounced initial upturn, particularly evident in the first year after the crisis.

Romanian tourists returned faster to the pre-crisis level of C19, which was very different from the different trends in foreign arrivals. This could be due to the psychological adaptability of domestic tourists to the travel restrictions or related to the possible shift of preferences to local destinations in uncertain times. A high level of recovery among foreign tourists could also be a sign that the reluctance to travel or long-lasting psychological restrictions on international mobility have been left far behind. While Romanian tourists have recovered quickly after C19, the delay in foreign tourist arrivals suggests that new strategies need to be developed to restore international confidence in Romania's tourism potential at least to pre-pandemic levels.

If we look at accommodation capacity before and during the GFC and the C19 pandemic, we can see some patterns that may go some way to explaining the evolution of the hospitality sector. Prior to the GFC (2002-2008), the tourism industry experienced consistent growth, with operational accommodation capacity increasing for 6 consecutive years. During this period, the national economy was dynamic and performing well, which likely influenced spending and travel demand, resulting in annual GDP growth of 2.6%. However, the increase in existing capacity was comparatively modest at 7.9% over four years, suggesting that the development of new accommodation was delayed relative to operational capacity, possibly due to a focus on optimising resource utilisation before deciding on future

investment. Nevertheless, there was a moderate increase in accommodation supply during the 2009-2010 crisis, possibly due to investments made before the onset of the financial crisis and a delayed response to the economic downturn within the sector. Interestingly, despite the financial setback that characterised this period, growth did not come to a complete standstill, indicating a certain resilience of the Romanian tourism sector.

The recovery after the crisis illustrates the differences between operational and existing accommodation capacity. In 2011, a significant increase in operational capacity was observed, possibly due to a catch-up effect after the GFC, while the sharp decline in existing capacity could be a sign of the exit of less competitive competitors or a strategic contraction in anticipation of fluctuations in demand in Romania.

The period before the C19 crisis showed steady growth, with cumulative overnight stays increasing significantly from 2002 to 2018. This steady trend may have been driven by the expanding global and local economy as more people travelled worldwide. The stability of existing accommodation capacity during the C19, in contrast to the decline during the GFC, could indicate a more robust pre-C19 investment environment or the implementation of more comprehensive protective measures, such as government assistance programmes to support businesses during the pandemic.

Right at the beginning of the C19 pandemic (2020), a significant decrease in operational capacity (over 28%) was recorded, although existing capacity remained largely unaffected. This could indicate that accommodation providers were able to adapt to the abrupt change in scenario, particularly the sharp and sudden drop in travel demand, by temporarily closing their facilities or ceasing operations, as happened globally. While the GFC essentially started as a financial shock, C19 led to direct operational restrictions for the travel and hospitality industry due to health measures and travel restrictions. The rapid recovery of accommodation capacity in the post-2020 period underlines the industry's adaptability and strong appetite for travel as restrictions were quickly lifted. In 2022, capacity in Romania surpassed 2018 figures, which could indicate the resilience of the sector by highlighting the dynamism of an industry open to expansion and further sustainable progress. This could be a testament to the Romanian tourism sector's ability to innovate, adapt and thrive in adverse times.

The comparative analysis of the Romanian tourism market during the GFC and the C19 crisis shows different patterns in terms of two important indicators: tourism demand and accommodation supply. Both periods were characterised by a steady growth in tourism demand before the start of the respective crisis. The period before 2020 was characterised by a higher growth rate, indicating a potentially more optimistic market environment. The supply dynamics observed before the GFC showed a tendency towards a cautious expansion of operating capacity as opposed to demand, indicating a possible delay in the industry's ability to adapt to the increasing influx of tourists or even a fear of taking higher risks. Conversely, supply-side adjustments in the pre-C19 period appeared to be more aligned with demand trends, indicating a stronger response to market dynamics. Looking at the impact of each crisis, it can be seen that the GFC was characterised by a less pronounced drop in demand and a steady growth in operating capacity, while the C19 led to an almost immediate drop in demand and a significant reduction (or cessation) of operating capacity. Therefore, it can be assumed that during the GFC, the corporate sector reacted to economic stress with a lag and was less directly affected, while C19 led to a seismic effect that manifested itself in the form of restrictions, health concerns and general unrest.

The post-GFC recovery showed a rapid resurgence in demand and a steep decline in existing capacity in 2011, indicating a possible correction in the industry at this time. After C19, the industry recovered quickly and even reached a level of growth that exceeded pre-crisis levels of operational capacity. However, demand has not quite reached pre-C19 figures, suggesting lingering effects of the pandemic on tourist behaviour. Finally, the resilience of existing capacity during C19 contrasts with the post-GFC downturn, suggesting that the Romanian accommodation sector is more resilient, possibly due to stronger support systems and long-term market confidence.

Occupancy rates in the Romanian tourism industry from 2002 to 2022 show the sector's vulnerability to global shocks, but also its ability to fight back. Before the onset of the global economic crisis, occupancy rates were on the rise until they were severely affected by the economic downturn, which brought rates to a significant low in 2009. Unfortunately, further attempts at recovery followed, but occupancy rates were unable to return to the highs seen during the previous peak.

This pattern of a deep slump followed by a gradual recovery was also seen during the C19 pandemic, with occupancy rates reaching their lowest point in 2020. The subsequent recovery in 2021 and 2022, while remarkable, was still not sufficient to reach pre-pandemic levels. While the immediate impact of COVID-19 was more severe and led to a sharper decline in occupancy rates, the recovery was faster than during the GFC. However, neither recovery was able to fully reverse the declines, suggesting that the Romanian tourism sector has long-term challenges to overcome and adapt to sudden economic changes or global health crises.

The analysis of the average length of stay in the Romanian tourism sector from 2002 to 2022 shows a general trend towards shorter stays, with a significant decline before the global economic crisis. This trend persisted during the GFC and continued until 2018, indicating a lasting preference for shorter stays during economic downturns. In addition, the pre-C19 period showed a stabilisation with only minor fluctuations in length of stay. Overall, the pandemic had a limited impact on the average length of stay, which increased slightly in 2020. After the crisis, neither a significant recovery nor a further decline was observed. This suggests that while the crisis had a strong impact on occupancy rates, it had less of an impact on the average length of stay. This suggests that consumer behaviour may have changed in response to the pandemic compared to the financial crisis.

This paper provides valuable insights into the impact of two different crises on the Romanian tourism sector over the last two decades. However, the analysis is subject to certain limitations. Firstly, comparing the Great Financial Crisis (GFC) and the COVID-19 (C19) pandemic crisis poses a methodological challenge due to the different nature, causes and global context of the two crises. While the GFC was an economic event that had a progressive impact on travel behaviour, the C19 crisis was triggered by health concerns that led to immediate and widespread restrictions on global travel.

Secondly, the post-C19 recovery phase was analysed with data available until 2022, which may not capture the full long-term recovery path. Continued restrictions or a shift in tourist preferences could alter future trends. Therefore, a later analysis with extended data could be useful for future insights, predictions and even for the development of a resilience tourism strategy. Third, while this work relies on solid data sources (national tourism statistics), the numbers may be underestimated, especially given the impact of the informal economy in some regions and the rapid and dynamic changes in travel policies during the pandemic. Despite these limitations, this work contributes to the discourse by comparing the impact of two major crises on Romanian tourism and provides a basis for further research as more data is collected in the coming years.

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Appendix A: List of figures

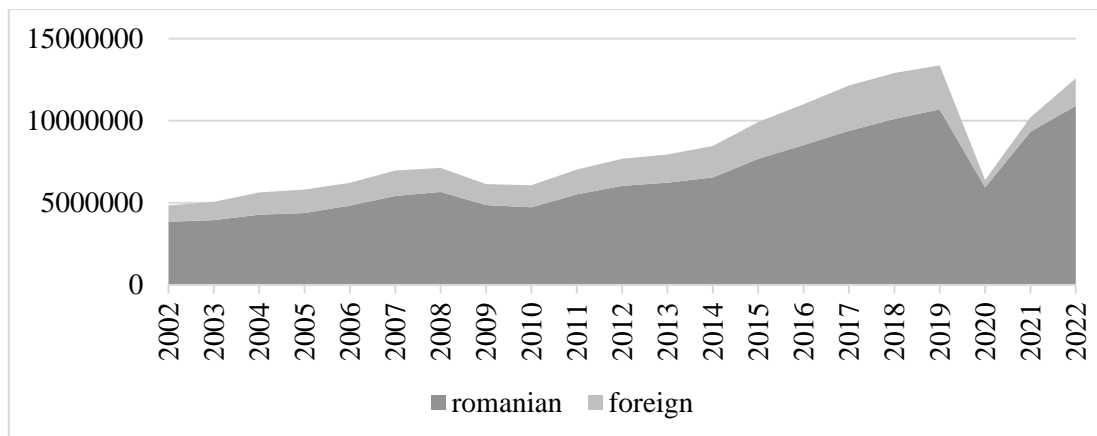


Fig. no. 1: Distribution and number of tourists (2002-2022)

Source: Self-developed based on NIS (2024) statistics

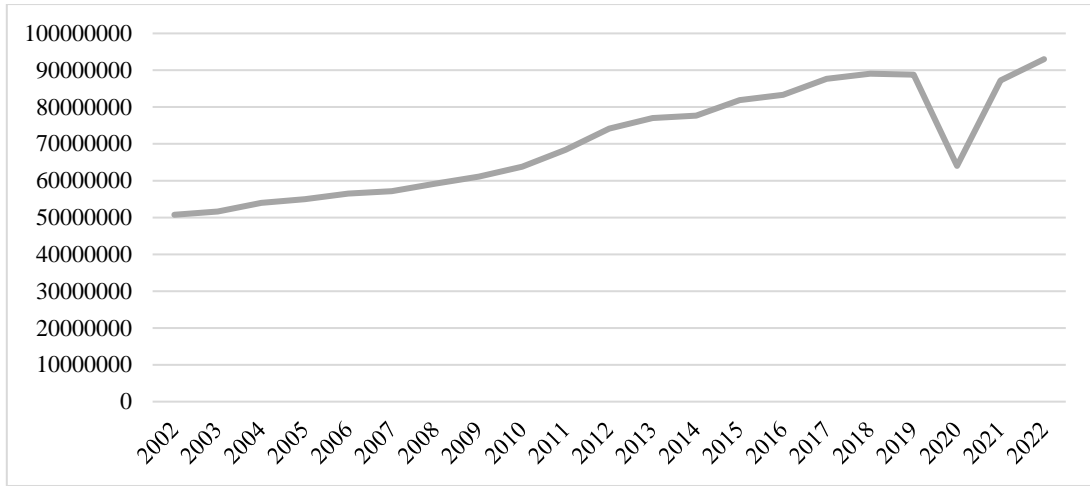


Fig. no. 2: Operational accommodation capacity (2002-2022)
 Source: Self-developed based on NIS (2024) statistics

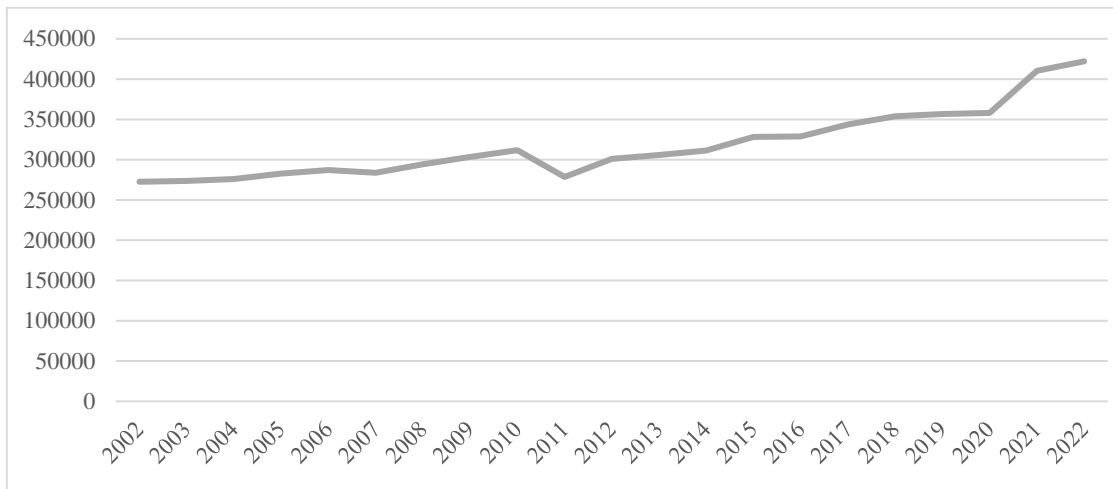


Fig. no. 3: Existing accommodation capacity (2002-2022)
 Source: Self-developed based on NIS (2024) statistics

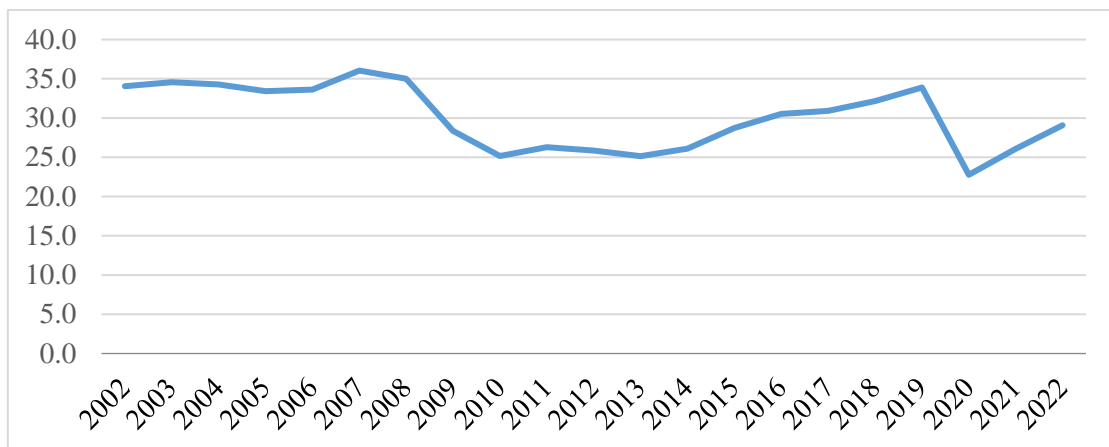


Fig. no. 4: Occupancy rate (2002-2022)
 Source: Self-developed based on NIS (2024) statistics

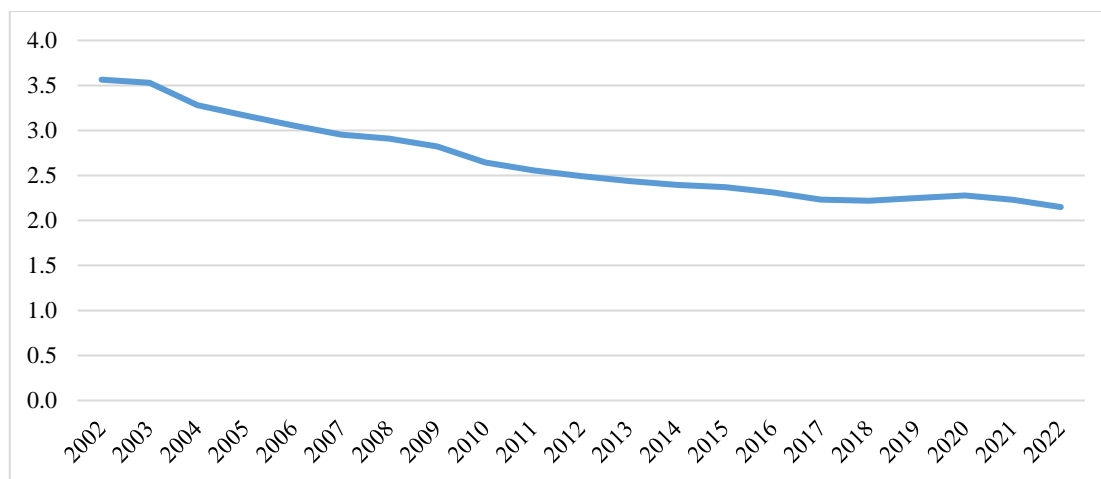


Fig. no. 5: Average stay (2002-2022)

Source: Self-developed based on NIS (2024) statistics

Appendix B: List of tables

Table no. 1: Title should be formatted with Times New Roman 11 bold

	The Global Financial Crisis	COVID-19 pandemic
The period before the crisis	2002-2008	2011-2019
Crisis (-)	2009-2010	2020
Recovery (+)	2011-2012	2021-2022

Source: Self-developed by the authors

Table no. 2: Tourist Arrivals

	Total arrivals		Romanian tourists		Foreign tourists	
	GFC	C19	GFC	C19	GFC	C19
Consecutive years of growth	6 years	9 years	6 years	9 years	3 years	8 years
Previous average growth rate	6.63%	8.23%	6.64%	8.52%	6.6%	9.12%
Total crisis impact	15%	52%	16.5%	44.4%	17.8%	83.1%
Crisis years	2 years	1 year	2 years	1 year	2 years	1 year
Growth rate the first year after the crisis	15.79%	59.49%	16.68%	56.88%	5.5%	83%
Total recovery	Yes, +7.88%	No, -5.88%	Yes, +6.5%	Yes, +2.1%	Yes, +6.8%	No, -37.6%

Source: Self-developed based on NIS (2024) statistics

Table no. 3: Accommodation capacity: in operation vs. existing

	Accommodation capacity: in operation		Accommodation capacity: existing	
	GFC	C19	GFC	C19
Consecutive years of growth	6 years	8 years	4 years	8+ years
Previous average growth rate	2,6%	4,23%	0,8%	3,10%
Total crisis impact	no	28%	10,6%	no
Crisis years	not the case	2 years	1 year	not the case
Growth rate the first year after the crisis	not the case	36,20%	8,11%	not the case
Total recovery	not the case	yes	yes	Not the case

Source: Self-developed based on NIS (2024) statistics

Table no. 4: Occupancy rate comparison

	GFC	C19
Consecutive years of growth	2 years	6 years
Previous average growth rate	0.16 pp/year	1 pp/year
Total crisis impact	10,9 pp	11,1 pp
Crisis years	3 (+1) years	1 year
Growth rate the first year after the crisis	1,1 pp	3,3 pp
Total recovery	No, -10,2 pp	No, - 4,8 pp

Source: Self-developed based on NIS (2024) statistics

Table no. 5: Average stay comparison

	GFC	C19
Consecutive years of growth	6 years +	9 years +
Previous average growth rate	0,12 days/year	0,04 days/year
Total crisis impact	0,5 days	not the case, +0,1
Crisis years	the whole period	not the case
Growth rate the first year after the crisis	0,1	not the case
total recovery	not the case	not the case

Source: Self-developed based on NIS (2024) statistics