

SHORT-STAY ACCOMMODATION OFFERED VIA ONLINE COLLABORATIVE PLATFORMS IN ROMANIA. A PRE- AND POST-PANDEMIC COMPARISON

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Abstract: *The tourism industry has experienced significant growth in recent years, except for the COVID-19 pandemic. The pre-pandemic period was quite favorable for accommodation platforms, but the COVID-19 pandemic had a significant impact on them between 2020 and 2021, which however were able to recover in the post-pandemic period. Once the travel restrictions were imposed in 2020, the possibilities for international travel were also limited, both in terms of the legal regulations imposed by the authorities and the desire of people to avoid unnecessary exposure to health risks. However, in 2021, some countries have lifted restrictions, which has led to a gradual recovery. In this article we want to analyze some statistics on short-stay accommodation in Romania in the period 2018 - 2022. The article is based on data provided to Eurostat by four international platforms (Airbnb, Booking, Expedia Group and Tripadvisor). Following the analysis of the data at the Romanian level, we could observe that in the pre-pandemic period the number of nights spent via collaborative platforms registered an increase, after which the pandemic period determined a significant decrease in the number of nights spent. After the pandemic period the number of nights spent was again on an upward trend, even exceeding the pre-pandemic period. However, the ratio of domestic to foreign overnight stays changed in the post-pandemic period. In Romania, the share of domestic guest nights has increased.*

Keywords: short-stay accommodation; Romania; pre- and post-pandemic

JEL Classification: L83; Z31

1. Introduction and background

The collaborative economy is present in many fields of activity and is constantly developing both at European level but also in Romania, especially in the field of tourism (Stiubea, 2018; Stiubea, 2020; Badulescu et al., 2022a, Badulescu et al., 2022b). It is interesting to follow how bookings through the main collaborative platforms have evolved in the pre-pandemic, pandemic and post-pandemic periods. Accommodations through these platforms are an option for many who are looking to rent accommodation on a short-term basis and do not want to stay in a hotel. The COVID-19 pandemic has had a significant impact on tourism and therefore on the accommodations that can be booked through these collaborative platforms. This caused in the first half of 2020 a drop of more than 65% in global tourist arrivals and threatened 100 million jobs, especially in small and medium-sized businesses, including short-term accommodation businesses (International Monetary Fund, 2020). At European level, the pandemic has caused a 52% decrease in the number of nights spent at accommodation establishments in the EU (Eurostat, 2021), which has also had implications for short-term accommodation. Due to the restrictions imposed by most

European countries, but also due to the health risks they might have been exposed to, many tourists limited or even cancelled their trips. The accommodations provided through collaborative platforms were thus affected by the measures implemented by the authorities (Liang et al., 2021; Xu et al., 2021). A consequence of the measures taken by the authorities resulted in making renting through these platforms difficult or in some cases even impossible (Farmaki et al., 2020). For example, short-term bookings through the Airbnb platform registered a steady decline almost to the bottom in the first three months of 2020 compared to the same period of the previous year (Jang et al., 2021). In 2021, many countries began to lift their travel restrictions for tourists, which led to a slight improvement in the number of tourists booking accommodation through collaborative platforms. However, tourists' behaviour tended to be cautious, seeking safety first and foremost when it came to renting short-term accommodation (Jang et al., 2021). Even though international mobility was again allowed in 2021, tourism anxiety associated with international travel, uncertainty about future regulations and public policies aimed at supporting domestic tourism contributed to a more persistent shift towards domestic tourism (Arbulú et al., 2021; Gyimóthy et al., 2022; UNWTO, 2020).

2. Short-stay accommodation offered via collaborative economy platforms in Romania

2.1. Data

The tourism market in Romania had an upward trend before the COVID-19 pandemic. Thus, in 2019, 13.3 million tourists were registered, while in 2018, 12.8 million tourists were recorded, with an increase of 4% (INS, Statistical Brief, 2020). In 2020, the number of Romanian and foreign tourists arriving in tourist accommodation facilities in Romania was 6.4 million. This decrease, compared to 2019, can be attributed to travel restrictions imposed in the context of the COVID-19 pandemic. Therefore, the number of international arrivals decreased by 83% from 2.68 million (in 2019) to 0.45 million (in 2020) incoming foreign tourists, while the number of incoming Romanian tourists decreased by 44% from 10.7 million (in 2019) to 5.9 million (in 2020) (INS, Tempo Online, n. d.).

The AirDna.co website presents a series of data on Airbnb accommodation in the main cities in Romania. This demonstrates a rapid evolution in the number of listings in these cities. In Bucharest, in 2013, 312 accommodations were listed for rent, in 2016 there were 3,541 accommodations available for rent, and in 2018 this figure reached 4,234. There has been a considerable increase in the number of Airbnb accommodation units in Romania over the past few years. According to the AirDna.co website, the average annual increase has been approximately 69% over the past five years. The majority of Airbnb offerings are two-bedroom apartments, with 1,557 (53%) available, followed by three-bedroom apartments with 692 (24%) and then studios with 472 (16%) (AirDna.co, 2019). The average rating of accommodation offered through Airbnb, based on over 145,000 reviews, is 4.7 out of a maximum of five stars. Occupancy varies throughout the year, with a high of 66% in September and a low of 37% in January. Daily rates remain stable at €35 (AirDna.co, 2019). The article is based on data provided to Eurostat by four international platforms (Airbnb, Booking, Expedia Group and Tripadvisor) following data exchange agreements concluded in early 2020. The data cover short-stay accommodation in the EU and EFTA countries offered by service providers through one of these four online collaborative economy platforms.

In Romania, short-term accommodation through collaborative platforms had an upward trend in the pre-pandemic period, followed by a steep decline with the outbreak of the COVID-19 pandemic, but recovered after the pandemic period to pre-2020 levels and even exceeded them.

2.2. Analysis

City destinations were impacted particularly hard by the pandemic, but have recovered much in 2022. Figure 1 shows the number of guest nights for the six most popular cities in Romania in the period 2018 – 2022 by residence of the guest.

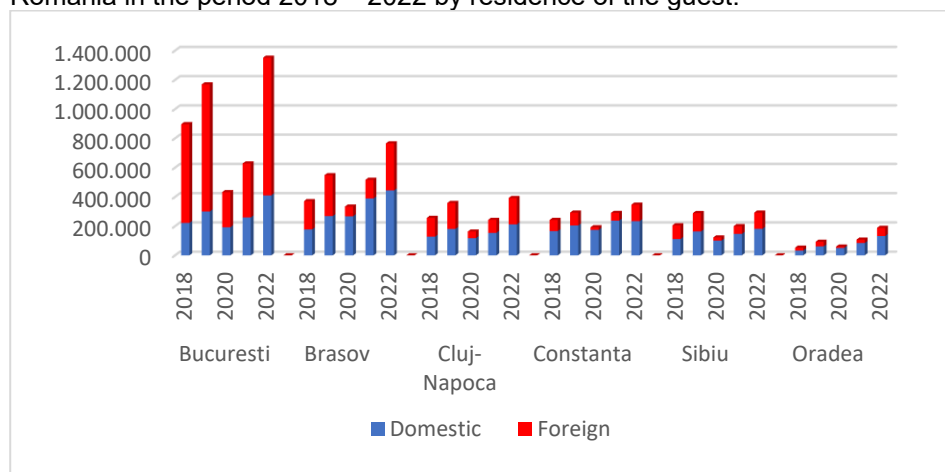


Figure 1: Nights spent in short-stay accommodation offered via online platforms by residence of the guest

Source: own elaboration based on data collected from Eurostat

In the pre-pandemic years there is an increasing trend in the number of nights spent by domestic guests as well as nights spent by foreign guests. In 2020, the year in which the COVID-19 pandemic started, there was a decrease in the number of nights spent by tourists, the most significant decrease being among foreign visitors. In 2021 there is a slight increase in nights spent compared to 2020 in all 6 cities. The slight increase in the number of nights spent is due to the fact that travel restrictions were not as drastic as in 2020. In the year 2022 there is a strong increase compared to the pandemic period. For the cities analysed, the year 2022 brought a complete recovery in the number of nights spent in short-stay accommodation, even surpassing the number of nights spent in pre-pandemic years. This increase is mainly due to domestic guests.

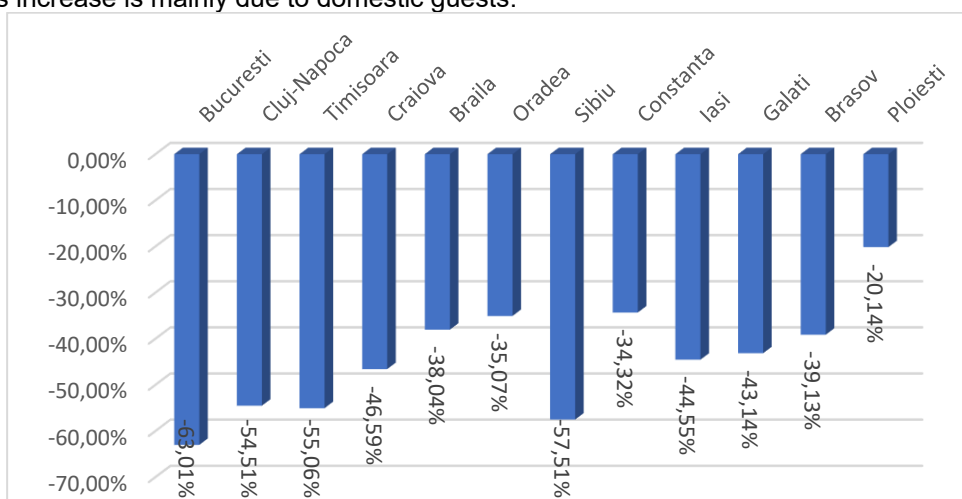


Figure 2: Decrease in nights spent by city, 2020 compared with 2019

Source: own elaboration based on data collected from Eurostat

Figure 2 shows the percentage decrease in the number of overnight stays in 12 representative cities in Romania. The impact on short-stay accommodation offered through online platforms was not uniform across the cities analyzed. The cities with the largest decreases in the number of nights spent were Bucharest (- 63.01%), Sibiu (- 57.51%), Timisoara (- 55.06%). At the opposite pole, the smallest decreases in the number of nights spent were recorded in Ploiesti (- 20.14%), Constanta (- 34.32%) and Oradea (- 35.07%).

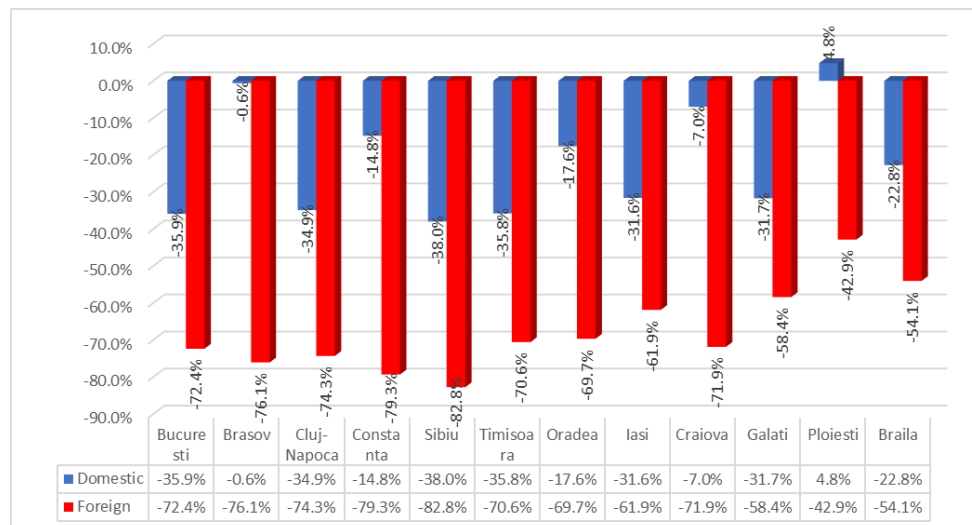
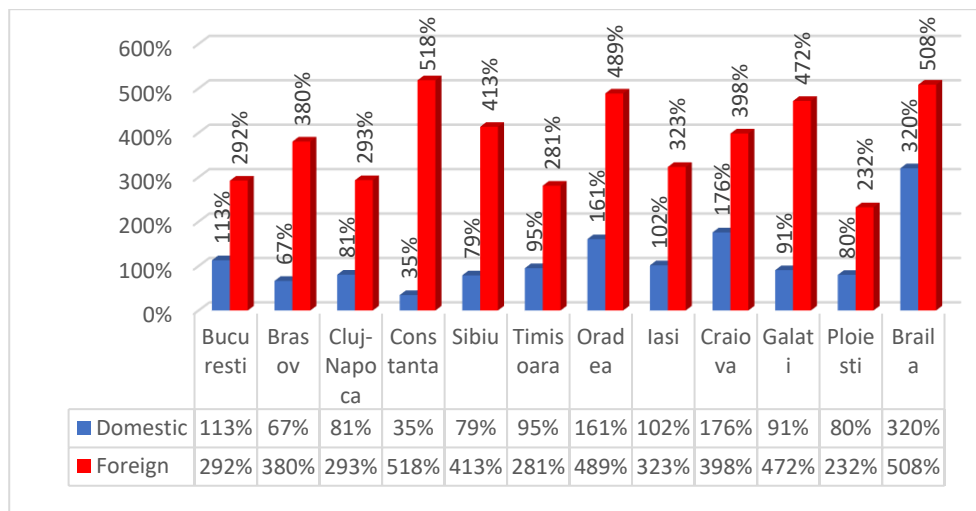


Figure 3: Decrease in nights spent by origin of the guest, 2020 compared with 2019

Source: own elaboration based on data collected from Eurostat

Figure 3 shows the percentage decrease in nights spent in 2020 compared to 2019 according to the origin of the visitors (domestic/foreign). It can be seen that the biggest decrease in the 12 cities in Romania was registered by foreign tourists. This decrease is mainly due to international travel restrictions during the pandemic period. The biggest decrease was recorded by Sibiu where the number of nights spent by foreign guests decreased by 82.8% compared to the previous year (2019). Domestic tourism suffered less as many tourists opted to spend their holidays in the country due to the risks associated with foreign travel.



Figure

4: Increase in nights spent by origin of the guest, 2022 compared with 2020

Source: own elaboration based on data collected from Eurostat

Figure 4 illustrates the recovery of short-stay accommodation through online platforms in the post-pandemic period. It can be seen that the increase is much higher for foreign tourists, which is understandable considering that international tourism suffered most during the pandemic period.

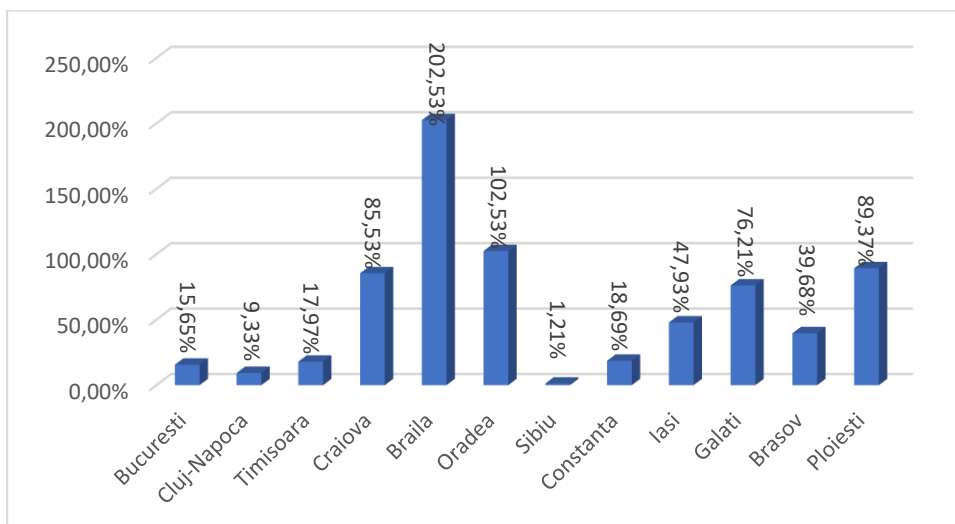


Figure 5: Change in nights spent in short-stay accommodation offered via collaborative economy platforms by city, 2022 (post-pandemic) compared with 2019 (pre-pandemic)

Source: own elaboration based on data collected from Eurostat

In Figure 5 we can see the percentage increase in the number of nights spent in the post-pandemic period compared to the pre-pandemic period. Although in the pandemic period there was a decrease in the number of nights spent (see Figure 5), in the post-pandemic period nights spent increased, even surpassing the 2019 level. One of the possible reasons for these increases is that people are more open and willing to travel since they were not able to travel much during the pandemic restrictions.

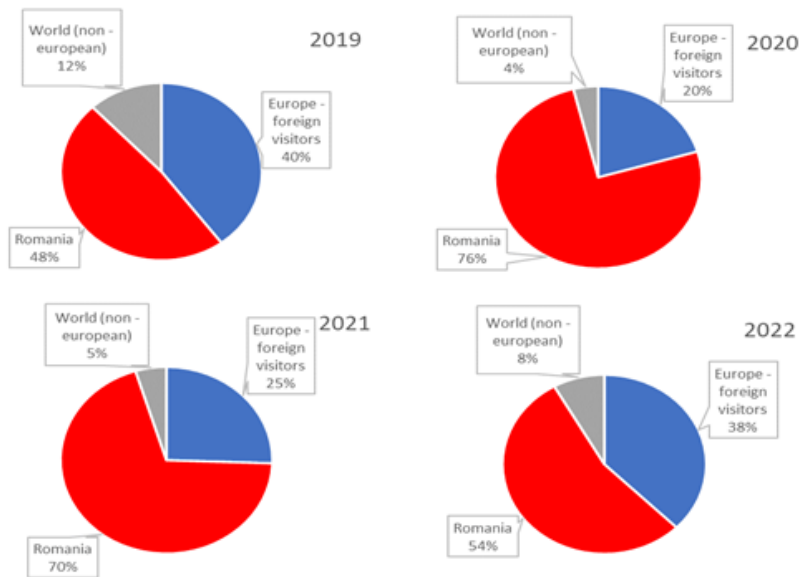


Figure 6: Guest nights spent in short-stay accommodation offered via collaborative economy platforms by origin of the guest

Source: own elaboration based on data collected from Eurostat

In 2019, domestic tourism (which refers to overnight stays spent by tourists in their country of residence) was responsible for about half of the total number of overnight stays. Tourists from EU countries other than Romania accounted for around 40% of guest overnight stays, while 12% of travellers came from outside Europe. In 2020, the year the COVID-19 pandemic began as international travel became increasingly restricted, the share of domestic tourists increased to 76%. Travel within the EU had a smaller share of only 20%, unchanged from the previous year. Travel from outside Europe fell sharply to just 4%.

In 2021, the total number of nights spent by tourists from Romania accounted for 70% of guest overnight stays, the inflow of travellers from outside Europe remained low compared to pre-pandemic levels, accounting for only 25% of guest overnight stays. A very small share is represented by tourists from outside Europe, 5%. In 2022, the share of Romanian tourists shows a decreasing trend compared to the pandemic period, representing 54% of the total number of nights spent by tourists and an increase in the share of foreign tourists is observed, now representing 38% of the total number of nights spent by tourists. Tourists from outside Europe staying in Romania represent 8% of the number of overnight stays.

In the pre-pandemic period, the share of Romanian tourists accounted for about half of the number of overnight stays spent by tourists, while in the pandemic period (2020 - 2021), the share of domestic tourists remained at a very high level (about 70%) and the number of overnight stays by foreign tourists remained relatively low compared to the pre-pandemic situation. If we make a comparison of the data from 2022 with those from 2019, we can see that the biggest decrease was recorded for tourists from outside Europe. The number of foreign tourists from Europe registered a slight decrease, dropping to 38% of total overnight stays (Figure 6), while the number of domestic guest nights increased to 54% of total overnight stays (Figure 6).

Table 1. Guest nights spent at short-stay accommodation offered via collaborative economy platforms by mode of accommodation

Time	2018	2019	2020	2021	2022
Total	2,992,968	4,191,792	2,312,171	3,601,903	5,732,807
Shared accommodation	123,179	147,859	60,041	77,135	105,877
Entire accommodation	2,869,789	4,043,933	2,252,130	3,524,768	5,626,930

Source: own elaboration based on data collected from Eurostat

Table 1 illustrates the preferences of the tourists that have stayed in Romania regarding the type of accommodation they preferred. Therefore, the majority of tourists preferred whole accommodation, not shared accommodation. In the pre-pandemic period, the number of nights spent at short-stay accommodation offered via collaborative economy platforms had an increasing trend, decreasing sharply in the year of the outbreak of the COVID-19 pandemic (from 4,191,792 guest nights spent in 2019 to 2,312,171 guest nights spent in 2020). Even though there were still some travel restrictions, still the number of guest nights spent increased in 2021 by 55.8% compared to 2020 (Table 1). In 2022 the number of guest nights spent at short-stay accommodation offered via collaborative economy platforms by mode of accommodation exceeded the pre-pandemic level by 36.7% (from 4,191,792 guest nights spent in 2019 to 5,732,807 guest nights spent in 2022) (Table 1).

Table 2. Guest nights spent at short-stay accommodation offered via collaborative economy platforms by size class of accommodation

Time	2018	2019	2020	2021	2022
Total	2,992,968	4,191,792	2,312,171	3,601,903	5,732,807
Less than 10 bedplaces	2,779,947	3,894,548	2,143,273	3,327,266	5,333,194
10 bedplaces or more	213,021	297,244	168,898	274,637	399,613

Source: own elaboration based on data collected from Eurostat

Table 2 above provides data on the evolution of the number of guest nights spent at short-stay accommodation offered via collaborative economy platforms by size class of accommodation. Analysing this data we observe that during the pandemic period, in 2020 compared to 2019, the number of overnight stays in accommodation with less than 10 bedplaces decreased by approximately 45%, a percentage very close to the decrease in the number of overnight stays in accommodation with 10 bedplaces or more, which was 43% (Table 2). After the end of the pandemic, in 2022, both the number of overnight stays in accommodation with less than 10 bedplaces and the number of overnight stays in accommodation with 10 bedplaces or more managed to recover and even exceed the number of pre-pandemic nights by 37% and 34.4% respectively (Table 2). The number of guest nights spent at short-stay accommodation with less than 10 bedplaces accounted for 93% of all guest nights in 2022.

3. Conclusions

The tourism sector has been strongly influenced by the COVID-19 pandemic. Thus, nights spent at short-stay accommodation offered via collaborative economy platforms have also suffered as a result of measures taken by the authorities to combat and stop the spread of the virus. If the pre-pandemic period was favourable for accommodation via collaborative platforms, 2020 brought a dramatic drop in bookings with border closures, flight cancellations and other measures. In 2020 only 272 million guest nights were spent in accommodation booked through online platforms, compared to 512 million in 2019 (Eurostat, 2023).

In Romania, the pre-pandemic period was favourable for accommodation via collaborative platforms. As at European level, during the COVID-19 pandemic, the number of bookings decreased drastically, especially the number of bookings made by foreign tourists. These platforms were kept afloat by domestic tourists. The post-pandemic period has brought a rebound in bookings made through collaborative platforms. All the cities analysed in Romania have reached or even surpassed the pre-pandemic level.

References

1. Arbulú, I., Razumova, M., Rey-Maqueira, J., & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20, 100568. <https://doi.org/10.1016/j.jdmm.2021.100568>
2. Badulescu A, Badulescu D, Simut R, Herte E, Borma A, Pandelica I. (2022a). Digitalisation and the sharing economy. A survey-based research on Airbnb in Romania. *International Journal Of Computers Communications & Control*. Dec 14;17(6).
3. Badulescu, D., Simut, R., Simut, C. and Badulescu, A.V. (2022b). Tourism at the crossroads between well-being, public health and the environment: Panel data evidence from the European Union. *International Journal of Environmental Research and Public Health*, 19(19), p.12066.
4. Eurostat (2021). EU tourism halved in 2020. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210315-2>
5. Eurostat (2023). Short-stay accommodation offered via collaborative economy platforms by residence of the guest and cities - experimental statistics (tour_ce_oarc)
6. Eurostat (2023). Guest nights spent at short-stay accommodation offered via collaborative economy platforms by country of residence of the guest - experimental statistics, Online data code: tour_ce_oar
7. Eurostat (2023). Guest nights spent at short-stay accommodation offered via collaborative economy platforms by NUTS1 and NUTS 2 regions, by world regions of residence of the guest - experimental statistics, Online data code: tour_ce_oaw
8. Eurostat (2023). Guest nights spent at short-stay accommodation offered via collaborative economy platforms by mode of accommodation - experimental statistics, Online data code: tour_ce_oam
9. Eurostat (2023). Guest nights spent at short-stay accommodation offered via collaborative economy platforms by size class of accommodation - experimental statistics, Online data code: tour_ce_oasc
10. Farmaki, A., Miguel, C., Drotarova, M. H., Aleksic, A., Casni, A. C., & Efthymiadou, F. (2020). Impacts of COVID-19 on peer-to-peer accommodation platforms: Host perceptions and responses. *International Journal of Hospitality Management*, 91, 102663.
11. Gyimóthy, S., Braun, E., & Zenker, S. (2022). Travel-at-home: Paradoxical effects of a pandemic threat on domestic tourism. *Tourism Management*, 93, 104613. <https://doi.org/10.1016/j.tourman.2022.104613>
12. INS, Breviar Statistic, 2020 165. Institutul Național de Statistică (2020). Turismul României. Breviar Statistic. Available at: https://insse.ro/cms/sites/default/files/field/publicatii/turismul_romaniei_2017-2019_breviar_statistic.pdf
13. INS, Tempo Online, n. d. 168. Institutul Național de Statistică (n. d.). Tempo Online. Available at: <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>
14. International Monetary Fund (2020). Tourism-dependent economies are among those harmed the most by the pandemic. <https://www.imf.org/en/Publications/fandd/issues/2020/12/impact-of-the-pandemic-on-tourism-behsudi>.
15. Jang, S., & Kim, J. (2022). Remedying Airbnb COVID-19 disruption through tourism clusters and community resilience. *Journal of Business Research*, 139, 529–542.
16. Liang, S., Leng, H., Yuan, Q., & Yuan, C. (2021). Impact of the COVID-19 pandemic: Insights from vacation rentals in twelve mega cities. *Sustainable Cities and Society*, 74, 103121.
17. Știubea, E. (2018). New Tendencies In Tourism: The Sharing Economy. *Emerging Markets Economics and Business. Contributions of Young Researchers*. p.239.
18. Știubea, E. (2020). The Use of Collaborative Platforms in Romania and EU: A Comparative View. *Oradea Journal of Business and Economics*, p.144.
19. Xu, X. E., Huang, D., & Chen, Q. (2021). Stress and coping among micro-entrepreneurs of peer-to-peer accommodation. *International Journal of Hospitality Management*, 97, 103009.
20. UNWTO. (2020). UNWTO Briefing Note – Tourism and COVID-19, Issue 3. Understanding Domestic Tourism and Seizing its Opportunities. <https://doi.org/10.18111/9789284422111>.

