Growth Dynamics of Accommodation Platforms in V4 countries

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Abstract: The development of digital technologies and the rise of the collaborative economy over the past decade have fundamentally redefined the global tourism market. Online platforms for short-term accommodation are no longer merely a marginal alternative, but have become an established competitor to traditional hospitality, creating the need for systematic monitoring. The aim of this paper is to evaluate the growth dynamics and market penetration of digital accommodation platforms in the Visegrad countries between 2018 and 2024. Utilizing a quantitative comparative approach based on harmonized secondary data from Eurostat, the study employs index analysis and market share assessments to identify regional recovery trajectories following the COVID-19 pandemic. The findings demonstrate a shift in consumer behavior and confirm the increasing share of digital platforms in total overnight stays in the examined destinations. The conclusions provide valuable insights into the transformation of the accommodation sector and can serve as a basis for strategic planning.

Keywords: accommodation platforms, collaborative economy, growth dynamics, regional disparities, market penetration

JEL Classification codes: Z32

INTRODUCTION

The global tourism landscape has been redefined by the relentless momentum of the collaborative economy and digital mediation. Leading platforms - Airbnb, Booking.com, Expedia Group, and TripAdvisor have shifted from fringe alternatives to dominant market disruptors, shaking the traditional hospitality sector. This digitalization has increased price transparency and fundamentally altered traveler behaviors, establishing peer-to-peer and short-term rentals as mainstream for both international and domestic guests. Although the COVID-19 pandemic briefly interrupted this trajectory, the recovery has exposed structural changes and uneven resilience across European regions. Despite global trends, the Visegrad Group reveals distinct growth paths shaped by local market specifics and varying speeds of recovery. This paper aims to evaluate the growth dynamics and market penetration of digital accommodation platforms in Czechia, Hungary, Poland, and Slovakia between the years 2018 and 2024. By analyzing harmonized Eurostat data, the study identifies key trends in overnight stays, assesses the impact of seasonality, and quantifies the increasing share of platform-mediated services within the V4 region's total tourism capacity.

1 LITERATURE REVIEW

The adoption of information and communication technologies has fundamentally transformed traditional industries, shifting economic dynamics toward greater scalability and abundance. This digital disruption is most evident in the rise of e-business, e-commerce, and e-tourism, which have reshaped how hospitality services are delivered and consumed (Adeyinka-Ojo & Abdullah, 2019). Recent technological progress, including Industry 4.0 and digital platforms, has altered customer interactions, forcing firms to embrace innovation to maintain long-term relevance in an increasingly digitalized market (Zeqiri, 2024).

A pivotal driver of this contemporary economic activity is the sharing economy, often described as collaborative consumption. This model leverages digital technologies to facilitate peer-to-peer exchange, allowing both individuals and commercial entities to monetize underutilized assets. For many participants, these platforms, ranging from ride-sharing to home-sharing, provide essential opportunities for supplementary income (Ključikov et al., 2020). By significantly reducing transaction costs, these platforms are fundamentally reshaping competitive relationships, particularly in the accommodation sector. Here, dominant players like Airbnb have revolutionized the matching of supply and demand, creating a global marketplace for short-term lodging (Li & Srinivasan, 2019).

The impact on the tourism and hospitality industries has been profound. Peer-to-peer accommodation services have emerged as significant competitors to established hotel chains by offering more spacious, cost-effective, and socially immersive alternatives. These platforms enable direct connections between travelers and residents, enhancing the authentic dimension of the travel experience (Ključnikov et al., 2020). We can distinguish between various digital business models, ranging from pure peer-to-peer platforms like Airbnb to online travel agencies such as Booking.com and Expedia, and meta-search or review sites like TripAdvisor.

Despite these benefits, the expansion of short-term rentals has generated mixed reactions. While contributing to economic growth, employment, and tax revenues, it also raises concerns about safety, regulatory compliance, and disruption to local housing markets (DiNatale et al., 2018). The growing scale of platform-based accommodation continues to highlight the need for balanced policy responses. As Codagnone and Martens (2016) argue, while regulation is necessary for consumer protection and data governance, overly rigid frameworks may hinder innovation and prove difficult to reverse as platform characteristics evolve.

In the specific context of Central and Eastern Europe, digital platforms have played a dual role. On one hand, they intensify competition in established urban tourism hubs like Prague or Budapest, where they often act as direct substitutes for traditional hotels. On the other hand, they facilitate tourism development in peripheral or rural areas with limited hotel infrastructure (Ključnikov et al., 2018). The ability to monitor these shifts has been significantly enhanced by recent data-sharing agreements between international platforms and official statistical bodies, such as Eurostat, allowing for a more precise evaluation of market penetration and regional disparities.

Seasonality represents one of the most persistent structural challenges in tourism, characterized by recurring demand fluctuations concentrated in specific periods of the year. The emergence of collaborative economy platforms introduced the theoretical expectation of greater temporal flexibility, given their lower fixed costs and decentralized supply. Whether collaborative platforms in the V4 countries exhibit the same seasonal rigidity as conventional accommodation constitutes a relevant empirical question with practical implications for destination management (Rosselló & Sansó, 2017).

However, the steady evolution of these regional markets was further complicated by the COVID-19 pandemic, which caused an unprecedented disruption to global mobility (Curtale et al., 2023). The hospitality sector faced extensive revenue losses and uneven recovery

trajectories, particularly in tourism-dependent economies. Beyond the immediate economic shock, the pandemic permanently reshaped consumer preferences. Modern tourists now prioritize health and safety standards, flexible booking conditions, and less-crowded, nature-based destinations, with digital information sources playing an increasingly vital role in their decision-making (Farxodova, 2026).

Taken together, the existing literature establishes a solid theoretical foundation for understanding collaborative economy platforms as agents of digital disruption, market restructuring, and shifting consumer behavior in tourism. However, several gaps remain. First, while the COVID-19 pandemic has been identified as a structural disruption, the extent to which it has altered the competitive position of platform-mediated accommodation relative to conventional hospitality in post-transition economies remains underexplored. Second, despite theoretical arguments suggesting that platforms may reduce seasonal concentration through flexible supply, this hypothesis has not been systematically tested in the V4 context. These gaps motivate the present study.

2 METHODOLOGY

The aim of this study is to evaluate the growth dynamics and market penetration of digital accommodation platforms in Czechia, Hungary, Poland, and Slovakia between the years 2018 and 2024. This study applies a quantitative comparative approach based on secondary data analysis. The empirical investigation relies on harmonized statistical data obtained from Eurostat, ensuring cross-country comparability and methodological consistency. The timeframe captures pre-pandemic baselines, the pandemic-induced disruption, and the subsequent recovery phase, enabling the assessment of structural shifts in accommodation demand. The selected timeframe also reflects data availability constraints, as complete annual data for the year 2025 were not yet available at the time of analysis.

The dataset comprises two complementary indicators. The first captures total overnight stays across all tourist accommodation establishments including hotels, holiday dwellings, camping sites, and other collective accommodation forms, as defined by Eurostat (n.d.a). The second captures overnight stays recorded exclusively within the collaborative economy segment, understood in this study as platform-mediated short-stay accommodation facilitated by digital intermediaries between hosts and guests (Codagnone & Martens, 2016), and operationalized through data collected from Airbnb, Booking.com, Expedia, and TripAdvisor (Eurostat, n.d.b). These two categories enable a direct assessment of the relative weight and growth dynamics of the collaborative economy segment within the broader accommodation market.

For the purposes of this study, total nights spent refers to all nights recorded across tourist accommodation establishments as defined by Eurostat (n.d.a), while collaborative economy platforms are treated as a growing portion within this total, as operationalized through Eurostat (n.d.b). However, this boundary carries inherent limitations. The platforms included in the Eurostat (n.d.b) dataset represent distinct business models, from pure peer-to-peer intermediaries such as Airbnb to online travel agencies such as Booking.com and Expedia, and meta-search platforms such as TripAdvisor. This means that the collaborative economy segment may include a proportion of conventionally classified accommodation. Furthermore, the dataset captures only officially recorded activity of platforms participating in data-sharing agreements with Eurostat, representing a portion of the broader short-term rental market that also encompasses unmediated and informally arranged rentals outside the scope of any tracked platform. Additionally, as the Eurostat (n.d.a) dataset includes collective accommodation forms such as holiday dwellings and camping sites, a degree of definitional overlap between the two categories cannot be entirely excluded. These constraints are inherent to harmonized secondary data and should be considered when interpreting the

reported market penetration figures. Moreover, while Figures 3 and 4 provide normalized perspectives through market share and index analysis, the absence of per capita or per accommodation capacity indicators represents a further limitation on cross-country comparability, and future research should incorporate such relative measures to enable more precise structural comparisons. Building on the theoretical framework outlined above the following research questions were formulated:

RQ1: To what extent have collaborative economy accommodation platforms penetrated the total tourist accommodation market in the Visegrad countries?

RQ2: What seasonal patterns characterize overnight stays in collaborative economy accommodation platforms in the Visegrad countries?

To evaluate temporal development and growth patterns, the study employs descriptive statistical methods and index analysis. Index analysis represents a widely used analytical approach in tourism demand studies, allowing the identification of temporal growth patterns and seasonal concentration effects while ensuring comparability across destinations. Growth dynamics are assessed using the base index, which enables comparison of values across time relative to a selected reference period. The base index was calculated by using 2018 as the reference year, enabling the assessment of relative growth dynamics of platform-mediated accommodation over the analyzed period. The base index is calculated as follows:

$$I_b = \frac{y_t}{y_0} \times 100 \quad (1)$$

where:

I_b — base index;

y_t — value of the indicator in the analyzed period *t*;

y_0 — value of the indicator in the reference period.

Seasonal variability in accommodation demand is examined using the seasonality index, which captures the relative deviation of each period from the overall average overnight stay level. Values above 100 indicate above-average seasonal concentration of overnight stays, while values below 100 represent periods of lower demand relative to the annual average. The seasonality index is calculated as follows:

$$S_i = \frac{X_i}{\bar{X}} \times 100 \quad (2)$$

where:

S_i — seasonality index for month *i*;

X_i — number of overnight stays in month *i*;

$\bar{X}$ — average monthly number of overnight stays in the analyzed year.

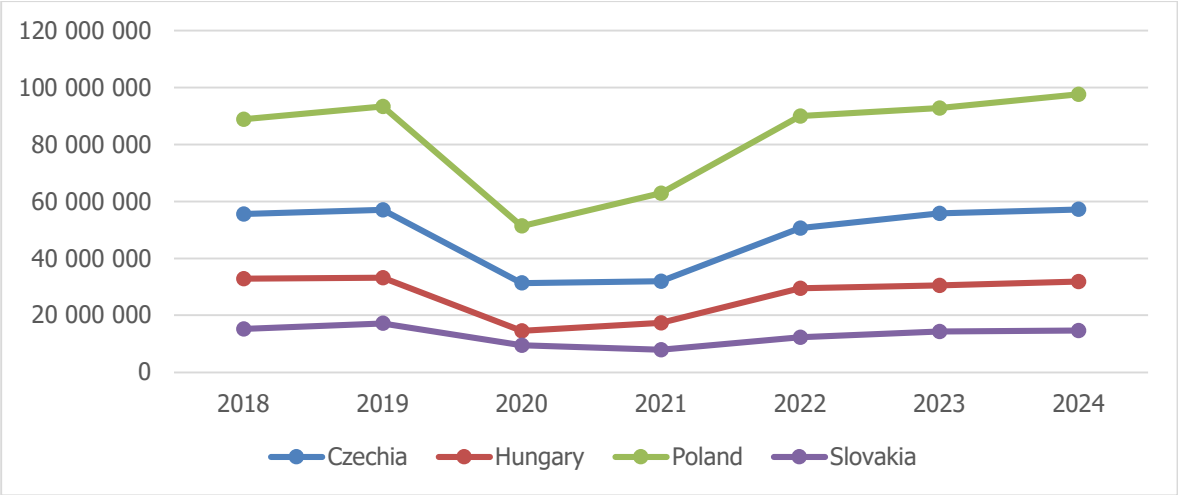
Additionally, a comparative analytical approach is applied to identify cross-country differences in platform market penetration and growth trajectories. This approach allows for the detection of regional disparities as well as similarities in adoption patterns across the examined tourism markets. The methodological framework adopted in this study provides a structured basis for evaluating growth dynamics, seasonal patterns, and market penetration of accommodation platforms in the Visegrad region, contributing to a deeper understanding of the ongoing digital transformation of the accommodation sector.

3 RESULTS AND DISCUSSION

This chapter presents the findings of the study regarding the growth dynamics, market penetration, and seasonal patterns of accommodation platforms in the Visegrad countries between 2018 and 2024. The results are structured to provide a clear overview of temporal trends, cross-country differences, and platform-specific patterns, based on the secondary data from Eurostat and major online accommodation providers, including Airbnb, Booking.com, Expedia Group, and TripAdvisor.

The following figure presents the total number of nights spent at all tourist accommodation establishments in Czechia, Hungary, Poland, and Slovakia over the given period. The data reveals considerable differences in the volume and growth dynamics of overnight stays across the four Visegrad countries. As absolute figures are inherently influenced by country size and the overall scale of national tourism infrastructure, cross-country comparisons based on volume alone should be treated with caution. The normalized indicators presented in Figures 3 and 4 are therefore essential complements to the absolute figures shown here.

Fig. 1 Total nights spent at tourist accommodation establishments from 2018 to 2024



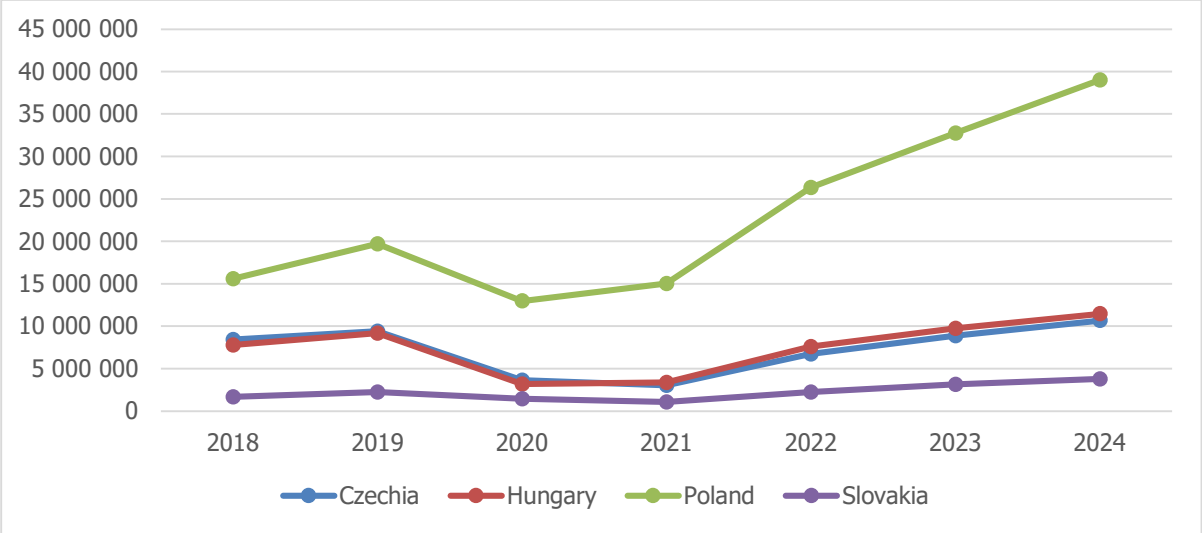
Source: Eurostat (n.d.a)

Poland consistently dominates in absolute terms throughout the entire observed period, recording 88.9 million nights in 2018 and reaching 97.6 million by 2024. Czechia ranks second, with 55.6 million nights in 2018, though the country experienced a pronounced decline to 31.4 million in 2020 and a further drop to 31.9 million in 2021 before recovering to 57.2 million by 2024, effectively returning to its pre-pandemic level. Hungary follows a broadly similar trajectory, falling from 32.8 million nights in 2018 to 14.6 million in 2020, with a gradual recovery to 31.8 million by 2024. Slovakia records the lowest volumes across the entire period, declining from 15.2 million nights in 2018 to 9.4 million in 2020, then to a further low of 7.9 million in 2021, before recovering to 14.7 million in 2024. This number of nights spent is still marginally below its 2018 level, making it the only country that had not fully recovered to its pre-pandemic baseline by the end of the observed period. The COVID-19 impact is clearly visible across all four countries in 2020 and 2021, with Czechia and Hungary recording declines of approximately 55% and 56% respectively, relative to 2019. Poland, while also affected, proved comparatively more resilient, declining by 45% between 2019 and 2020, and recovering most rapidly, surpassing its 2019 peak already by 2022. This figure serves as the baseline for the subsequent comparison with overnight stays booked through collaborative

economy platforms, enabling an assessment of the relative market penetration of short-term rental accommodation in the region.

The following figure focuses exclusively on overnight stays recorded within collaborative economy accommodation platforms in the four Visegrad countries in the same time frame. This data enables an evaluation of the scale, growth trajectory, and pandemic-related volatility of the short-term rental segment in the region. As with Figure 1, absolute volumes reflect differences in country size and market scale, and should be understood in conjunction with the normalized indicators in Figures 3 and 4.

Fig. 2 Total nights spent via collaborative economy accommodation platforms from 2018 to 2024



Source: Eurostat (n.d.b)

Figure 2 illustrates the total number of nights spent in short-stay accommodations offered via collaborative economy platforms across the listed countries. Poland again dominates in absolute terms, recording 15.6 million nights in 2018 and growing to 39.0 million by 2024, 2.5 times higher than the observed value over the period. Czechia and Hungary show broadly comparable volumes throughout, with Czechia reaching 10.7 million nights in 2024 (up from 8.4 million in 2018) and Hungary recording 11.5 million (up from 7.8 million). Slovakia consistently records the lowest values, growing modestly from 1.7 million in 2018 to 3.8 million in 2024, standing well below the remaining three countries throughout the entire period.

According to Cui and Attard (2025), prior to the pandemic, modern accommodation platforms experienced rapid expansion and strong financial performance, with hosts frequently generating income that surpassed their initial expectations. This trend is consistent with the pattern observed in the dataset analyzed in the figure above. Furthermore, the overall growth trends that follow after the COVID-19 pandemic align with broader European evidence presented by Mendieta-Aragón et. al. (2025), who document the rapid pre-pandemic expansion of collaborative economy platforms across EU member states and their growing structural role in the accommodation market. The article suggests that there is a considerable degree of inequality in the collaborative economy platform usage across the EU states, with Central and Eastern Europe showing lower market penetration.

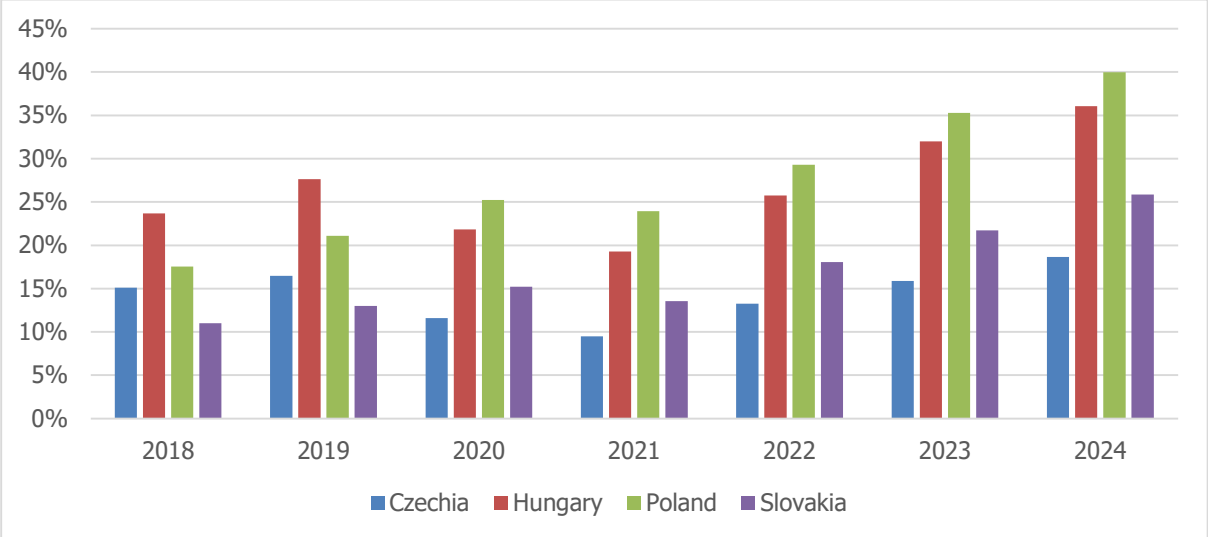
While Figure 1 showed that conventional accommodation demand also declined during the COVID-19 pandemic, the collaborative economy segment experienced considerably sharper contractions. Czechia declined from 9.4 million nights in 2019 to just 3.0 million in 2021,

representing a drop of 68%. Hungary fell from 9.2 million to 3.3 million between 2019 and 2021, a decline of 64%. Poland proved more resilient, falling from 19.7 million to 13.0 million in 2020 (-34%), and recovering to 15.0 million already in 2021. Slovakia followed a similar pattern to Poland in 2020 (-36%), but continued declining to 1.1 million in 2021, its lowest recorded value. By contrast, conventional accommodation in the same period declined by approximately 45 - 56%. This is a substantial drop, but consistently shallower than the collaborative economy figures for Czechia and Hungary in particular. This suggests that short-term rental platforms were disproportionately exposed to the collapse of international leisure travel, while conventional accommodation retained a portion of domestic demand. Recovery across all four countries began in 2022 and accelerated through 2023 and 2024, with all countries surpassing their 2018 baseline by 2024, and Poland in particular recording volumes more than double its pre-pandemic level.

This recovery trajectory was particularly evident in the case of Airbnb, which, after experiencing a steep drop in bookings during 2020, managed to rebound strongly over the following two years. The revival of international travel in 2022 proved instrumental in this turnaround, enabling the platform's gross booking value to more than double compared to its pandemic low, with total nights and experiences booked ultimately exceeding pre-pandemic levels (Armstrong, 2023).

Having established the absolute volumes of total overnight stays and of short-term rentals on collaborative economy accommodation platforms, it is equally important to examine the relative weight of the short-term rental segment within the broader accommodation market. Figure 3, therefore, expresses the number of collaborative economy overnight stays as a share of the total overnight stays presented in Figures 1 and 2, providing a more nuanced picture of market penetration across the four countries. This ratio directly measures the structural importance of short-term rental platforms within each country's accommodation sector, independent of differences in absolute volume.

Fig. 3 The share of the number of overnight stays via collaborative economy platforms relative to the total number of overnight stays from 2018 to 2024



Source: Own processing according to Eurostat (n.d.a; n.d.b)

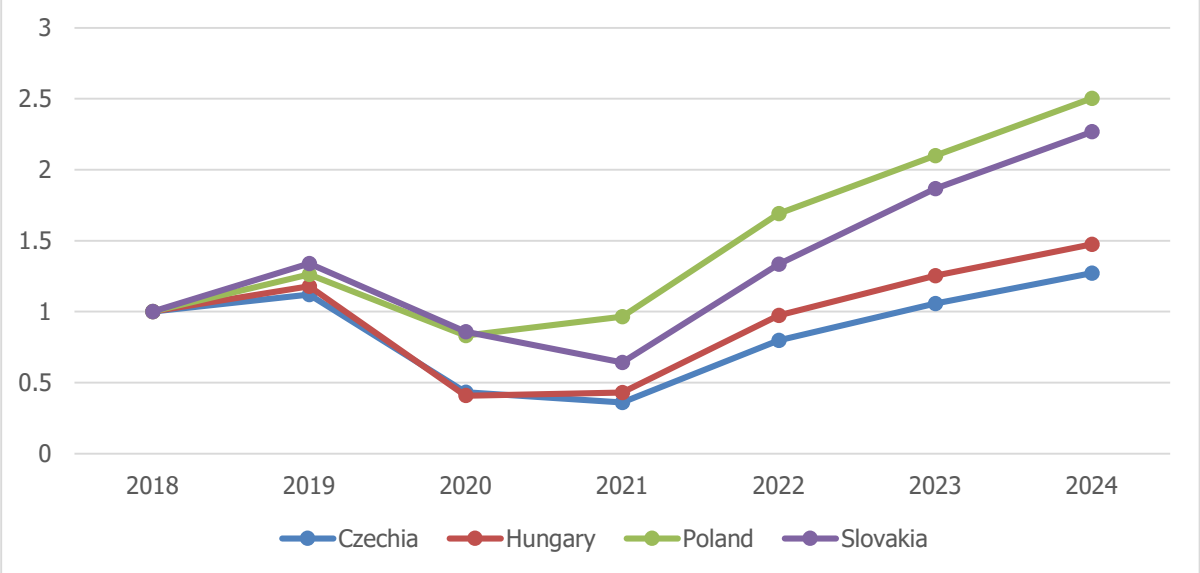
Figure 3 suggests that the COVID-19 pandemic led to a measurable decline in the collaborative economy's share in most countries in 2020 and 2021. Czechia saw the sharpest drop, falling to 9.5% in 2021. This is also its lowest recorded value in our time frame. At the same time, Slovakia declined to 13.6%. Hungarian share fell to 19.3% in 2021, remaining above the other

two countries but still well below its 2019 peak. From 2022 onwards, a consistent upward trend is evident across all four countries. Poland surpassed its pre-pandemic share level already in 2020 and has continued to grow since, reaching 40.0% by 2024. This refers to the highest share among all four countries and is a clear indicator of the deepening penetration of collaborative economy platforms within Polish tourism. Hungary recovered to 36.1% in 2024, while Slovakia reached 25.8% and Czechia 18.7%. Czechia consistently lags behind the other three countries throughout the entire observed period, suggesting a more limited structural role of short-term rental platforms within its accommodation market. The overall trajectory across all four countries points to a growing, though uneven, integration of collaborative economy platforms into the regional tourism structure.

The data visualized in Figures 1 through 3 provide a comprehensive overview of market dynamics across the V4 region, which directly addresses and answers RQ1.

While Figure 3 examined the relative share of collaborative economy overnight stays within the total accommodation market, it is equally valuable to assess the internal growth dynamics of the short-term rental segment itself. Figure 4, therefore, presents a base index of the development in the number of overnight stays at collaborative economy platform establishments, with 2018 serving as the reference year. Values above 1 indicate growth relative to 2018, while values below 1 reflect a decline in overnight stays compared to the reference year.

Fig. 4 Base index of the development in the number of overnight stays via collaborative economy platforms (base = 2018)



Source: Eurostat (n.d.b)

The base index confirms and further supports the trends observed in the preceding figures. All four countries recorded modest growth in 2019 relative to the base year, with Slovakia achieving the highest pre-pandemic increase (index = 1.34), followed by Poland (1.26), Hungary (1.18), and Czechia (1.12). The impact of the COVID-19 pandemic is starkly visible in 2020 and 2021, when all countries experienced a considerable decline, which is obviously reflected and displayed in the figure. Czechia was hit the hardest, falling to an index of just 0.36 in 2021, meaning overnight stays in collaborative economy establishments dropped to barely one third of the 2018 level. Hungary followed a similar trajectory (0.41 in 2020, 0.43 in 2021), while Poland and Slovakia proved comparatively more resilient, recording index values of 0.83 and 0.86 respectively, in 2020. The recovery phase from 2022 onwards reveals

significant differences between countries. Poland demonstrates the most impressive rebound, surpassing the 2018 baseline already in 2022 (1.69) and reaching an index of 2.50 by 2024. This means that overnight stays in Polish collaborative economy establishments were two and a half times higher than in the base year. Slovakia similarly shows a strong recovery, reaching 2.27 in 2024. Hungary (1.47) and Czechia (1.27) recover more gradually, remaining closer to the 2018 baseline by the end of the observed period. These diverging growth trajectories suggest that the collaborative economy accommodation segment has not recovered uniformly across the region, with Poland and Slovakia emerging as the most dynamic markets in the post-pandemic period. These patterns are consistent with the theoretical argument that collaborative platforms are structurally more exposed to shocks curtailing international leisure mobility than conventional accommodation (Curtale et al., 2023). The sharper contraction in Czechia and Hungary reflects their dependence on inbound tourism concentrated in capital cities, while Poland's resilience supports the view that platforms embedded in markets with substantial domestic demand can act as a buffer during periods of restricted international travel (Ključnikov et al., 2020).

Having examined the overall volume and growth dynamics of collaborative economy overnight stays, the analysis now turns to the distribution of demand within the calendar year. Table 1 presents the monthly seasonality indices for overnight stays in collaborative economy platform establishments, revealing the extent to which short-term rental demand is concentrated in particular months of the year.

Tab. 1 Monthly seasonality indices for overnight stays via collaborative economy platforms

	Czechia	Hungary	Poland	Slovakia
January	0.6687	0.5686	0.6346	0.8762
February	0.8553	0.6132	0.7221	1.1208
March	0.6867	0.6526	0.5737	0.6558
April	0.8049	0.8048	0.6688	0.5730
May	0.9501	0.8619	0.8368	0.6863
June	0.9921	1.0395	1.1198	0.8663
July	1.6540	1.8131	2.0347	1.9230
August	1.6730	2.0118	2.0476	2.0926
September	1.0305	1.0048	1.0552	0.9684
October	1.0227	0.9455	0.8389	0.7869
November	0.6513	0.7427	0.6189	0.5164
December	1.0106	0.9416	0.8487	0.9345
Amplitude	1.0217	1.4432	1.4739	1.5762

Source: Own processing according to Eurostat (n.d.b)

The seasonality index expresses the ratio of the average overnight stays in each month to the overall monthly average, where a value of 1.00 represents the annual average, values above 1.00 indicate above-average months, and values below 1.00 indicate below-average months.

The results presented in Tab. 1 confirm a strongly monoseasonal pattern of collaborative economy accommodation demand across all four Visegrad countries, with overnight stays heavily concentrated in the summer months of July and August. Poland records the highest

summer peaks among all four countries, with indices of 2.0347 in July and 2.0476 in August, indicating that overnight stays in these months are more than double the monthly average. Hungary follows closely, reaching 1.8131 in July and 2.0118 in August, while Czechia and Slovakia display similarly pronounced summer peaks. Interestingly, Slovakia records the highest August index of all four countries at 2.0926, despite its overall lower absolute volumes, suggesting that its collaborative economy demand is even more sharply concentrated in peak summer than the other countries. A noteworthy exception is Slovakia in February, where the index of 1.1208 points to a secondary winter season, most likely driven by ski tourism demand and school holidays. However, this pattern is absent in the remaining three countries. June and September show near-average values across most countries, suggesting these months function as shoulder seasons with moderate demand.

In contrast, the weakest months occur in different parts of the year in the V4 countries. Czechia and Slovakia record a significant decline to 0.6513 and 0.5164, respectively, reaching both countries' minima in November. For Hungary, the absolute minimum is January with a score of 0.5686. March is consistently the weakest non-winter month, with Poland recording its lowest spring index of 0.5737. Additionally, April shows a marginal improvement but remains below 0.8 in all four countries, indicating that Easter and spring travel have not translated into meaningful platform demand in the region.

The overall amplitude for Slovakia (from 0.5164 in November to 2.0926 in August) represents a range of 1.5762, the widest among the four countries, confirming Slovakia as the most seasonally concentrated market. Poland follows with an amplitude of 1.4739 (from 0.5737 in March to 2.0476 in August), followed by Hungary (from 0.5686 in January to 2,0118 in August), while Czechia has the narrowest amplitude at 1.0217 (from 0.6513 in November to 1.6730 in August), suggesting a comparatively more balanced distribution of demand across the calendar year. Overall, the results indicate that collaborative economy platforms in the Visegrad region are subject to strong seasonal concentration.

The diverging recovery paths observed in Figure 2 and Figure 4 suggest a fundamental difference in market composition across the V4 region. Poland's exceptional growth, reaching 250% of its 2018 baseline by 2024, can be attributed to its robust domestic market and the geographical diversity of its platform supply. Unlike Czechia and Hungary, where platform-mediated accommodation is heavily concentrated in the capital cities (Prague and Budapest) and highly dependent on international inbound tourism, Poland and Slovakia benefit from a more significant share of domestic demand in mountainous and coastal regions. This domestic resilience acted as a buffer during the pandemic and served as a catalyst for the rapid post-pandemic expansion of short-term rentals. While tourism in Prague and Budapest collapsed due to the absence of international flights, the Polish and Slovak markets were sustained by domestic travelers who shifted their preference toward private, nature-based accommodations.

The increasing market penetration of collaborative platforms, which reached 40% in Poland and 36.1% in Hungary by 2024, raises questions regarding the substitution effect between digital platforms and traditional hospitality. These figures should nonetheless be interpreted in light of the methodological limitations outlined earlier. As the Eurostat (n.d.b) dataset includes platforms with distinct business models, among them online travel agencies that also distribute traditional accommodation inventory, the reported penetration shares may not reflect pure peer-to-peer platform adoption exclusively.

The data suggest a growing structural role of platform-mediated accommodation within the tourism market of V4 countries. However, given that the dataset encompasses different platforms, this trend should be interpreted as reflecting the broader digitalization of accommodation distribution rather than the exclusive growth of peer-to-peer short-term rentals. This shift is likely driven by the perceived value proposition of platform-based stay,

offering more space and local authenticity at a competitive price point, which, as noted by Ključnikov et al. (2020), constitutes a key competitive advantage over established hotel chains.

Interestingly, Czechia consistently records the lowest market penetration share among the V4 countries, hovering around 18.7% in 2024. The consistently lower market penetration observed in Czechia throughout the entire period warrants further investigation. While the underlying drivers remain beyond the scope of this study, the divergence suggests that country-specific factors potentially including regulatory frameworks, market structure, or the composition of inbound tourism may have constrained the growth of platform-mediated accommodation relative to the other V4 countries. Future research should examine these factors systematically and with appropriate empirical grounding. The analysis of monthly seasonality patterns across the selected countries provided the necessary data for a comprehensive response to RQ2.

CONCLUSION

The aim of this study was to evaluate the growth dynamics and market penetration of digital accommodation platforms in Czechia, Hungary, Poland, and Slovakia between 2018 and 2024. By analyzing harmonized data from Eurostat, the study identified key trends in overnight stays, examined the impact of seasonality, and quantified the increasing share of platform-mediated services within the total tourism capacity of the Visegrad region.

Taken together, the results paint a coherent picture of collaborative economy accommodation platforms that grew rapidly before 2020, declined during the pandemic, and has since recovered, but unevenly. The analysis confirms that Poland and Slovakia have exceeded their pre-pandemic trajectories by a considerable margin, while Czechia and Hungary have recovered more slowly, both in absolute volume and in market share relative to traditional accommodation. This divergence suggests that markets with a stronger reliance on domestic demand and a more geographically diversified supply were better positioned to absorb the pandemic shock and capitalize on the subsequent recovery.

Across all four countries, nights spent by collaborative economy platforms remain strongly concentrated in the summer months, suggesting that the segment has not succeeded in extending the tourism season beyond its traditional boundaries. Despite the inherent flexibility of digital platforms, they remain bound by the traditional seasonal constraints of the Visegrad region.

The empirical findings of this study provide comprehensive answers to the formulated research questions. In response to RQ1, the analysis demonstrated a significant structural shift, with platform market penetration reaching record levels, particularly in Poland, where it hit 40% by 2024. Regarding RQ2, the evidence confirms that despite the flexibility of digital platforms, they remain bound by traditional monoseasonal patterns, with demand heavily concentrated in the summer months across the entire V4 region.

These findings have practical implications for destination management organizations and accommodation policy, particularly regarding the regulation and seasonal distribution of short-term rental supply in markets where platform-based accommodation now constitutes a structurally significant portion of total overnight stays. From a strategic perspective, the study highlights the need for integrated data-driven management to balance the growth of the platform economy with sustainable tourism development.

Furthermore, this research contributes to the existing body of knowledge by providing a replicable analytical framework for assessing platform-mediated accommodation in regional contexts. Future research should examine the role of specific regulatory frameworks, such as those applied in Prague, in explaining the observed differences in market penetration between

countries. Moreover, it should also focus on extending the time horizon beyond 2024 to assess whether the market share gap between the pre- and post-pandemic periods observed in all four countries represents a temporary lag or a permanent structural realignment.

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