

**Europe in the World Economic System**

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**DIVERSIFICATION OF THE EU
TOURISM MARKET AS A DRIVER
OF TRANSFORMATION IN THE HOTEL
INDUSTRY CONSUMPTION MODEL**

Abstract

This study empirically assesses the impact of the European Union tourism market diversification on hotel service consumption. The hypothesis being tested

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is that diversification leads to a redistribution of market shares between traditional hotels and providers of flexible accommodation. The research methodology is based on quantitative methods applied to 2022 data from Eurostat, UNWTO, and Statista. Descriptive statistics, Pearson's correlation, and linear regression were used to examine the influence of international tourist arrivals on hotel demand and revenue, and to identify structural market changes. The hypothesis is supported. However, a paradoxical trend was identified: although international tourist arrivals show a strong positive correlation with total overnight stays, they show a moderate negative correlation with hotel market revenue. This indicates revenue redistribution towards alternative formats, driven by shifting consumer preferences. A forecast up to 2031 suggests that the number of guests will grow faster than per-client revenue. The study provides evidence of the growing disconnect between tourist flows and hotel revenue in the EU, demonstrating that an increase in tourist numbers no longer guarantees proportional revenue growth for hotels due to competition from alternative formats of accommodation.

Key Words:

consumption model, hotel industry, regression model, tourism market diversification, traditional and alternative accommodation formats.

JEL: Z32, D12, M31, O52, F15, L89.

1 figure, 1 formula, 4 tables, 48 references.

Problem Statement

Tourism is a significant driver of sustainable economic development for countries and regions. It contributes to income growth, job creation, infrastructure development, and the attraction of investments (Chenguang Wu et al., 2022; Brida et al., 2016; UNWTO, 2024; World Economic Forum, 2025). Due to its multiplier effect, tourism stimulates related sectors such as transportation, restaurant and hotel industries, generates foreign exchange earnings, and supports the bal-

ance of payments of nations (Pablo-Romero & Molina, 2013; Seetanah, 2011; Alcalá-Ordóñez et al., 2024). In 2023, the travel and tourism sector accounted for 9.1% of global GDP (WTTC, 2024). The substantial contribution of this industry to the world's GDP explains why tourism is prioritized as a key driver of economic growth in many countries (Oladipo, 2024).

Changes in consumer behavior and the advancement of digital technologies have stimulated a shift from traditional formats of tourism services toward more flexible, personalized, and innovative products (Guttentag, 2019; Pappas & Farmaki, 2022). These transformations aim to improve the accessibility of tourism services and to create new forms of tourist experiences grounded in locality, authenticity, and the sustainable use of regional resources (Ioannides & Gyimóthy, 2020; Gössling et al., 2021). In this context, the very model of tourism consumption is undergoing transformation. Despite economic uncertainty, tourist spending continues to rise (WTTC, 2025), reflecting the resilience and adaptability of the tourism industry. In 2022, a total of 2.75 billion nights were spent in all types of tourist accommodation within the EU. This figure reflects both the length of stay and the number of tourists but excludes stays in non-rented accommodations and same-day trips without overnight stays (Eurostat, n.d.-a; Eurostat, n.d.-b; Statista, n.d.).

The research is based on data from UNWTO, the World Travel and Tourism Council (WTTC), Eurostat, and Statista. These information sources provide a foundation for a comparative analysis of trends in the development of the tourism market within the European Union. Particular attention is given to changes in the structure of demand for hotel services driven by digitalization, the expansion of online booking platforms, and the growing importance of sustainable and conscious tourism.

Literature Review

Directions of Tourism Market Diversification

In academic discourse, the process of tourism market diversification is conceptualized as a multidimensional phenomenon aimed at expanding, diversifying, and reorienting tourism flows and products (Buhalis & Costa, 2006; Hall, 2008; Mihalic, 2016; Song et al., 2012) within the context of globalization, digitalization, and the transition toward sustainable development models (Sigala, 2018; UNWTO, n.d.). In particular, Buhalis and Costa (2006) identify diversification as a key instrument for enhancing the adaptability of destinations to dynamic changes in demand structures, seasonality, and market fluctuations. At the same time, Can and Gozgor (2018), Redko et al. (2022) and Saboori et al. (2023) emphasize its

critical role in overcoming crises, fostering economic growth, and strengthening the resilience of tourism systems.

Expanding the range of tourism products and markets helps reduce destinations' dependence on specific consumer segments and geographic areas (Hall, 2008). Such a strategy transforms the structure of demand for different types of hotels, stimulating the emergence of new accommodation formats (Mihalic, 2016). This implies that attracting diversified customer segments requires the hotel sector to adopt flexible adaptation strategies, develop innovative services, and create new forms of tourism experiences (Sigala, 2018). Moreover, according to the meta-analysis conducted by Song et al. (2012), the numerous and interdependent factors influencing tourism demand make diversification a critically important condition for market stability and the maintenance of competitive advantages. This approach has created the prerequisites for the evolution of tourism offerings in response to changes in consumer behavior, global competition, and external challenges, including climate change, geopolitical risks, and technological transformations (Novelli, 2015; Redko et al., 2022).

Within the framework of current EU policy, diversification is viewed as an integral component of sustainable development strategies aimed at balancing tourism flows, reducing pressure on over-visited destinations, and promoting the development of lesser-known areas (UNWTO, n.d.; European Commission, n.d.; European Parliament, n.d.; OECD, 2024). The implementation of such approaches takes place through the development of specialized routes, modernization of infrastructure, and enhancement of local community participation (Redko et al., 2022; Statista, n.d.-a; OECD, 2024).

Changes in the Consumption Model within the Hotel Sector

Alongside the analysis of tourism market diversification policies and strategies, academic literature reveals a growing interest in studying consumption models in the hotel sector and their transformations driven by evolving tourist needs and behaviors. Historically, this model has evolved from meeting basic accommodation needs to shaping a comprehensive tourism experience that integrates personalized services, unique design, and memorable impressions (Boo & Busser, 2018; Quadri-Felitti et al., 2022; Guan et al., 2021). In the 21st century, against the backdrop of the rise of creative and experience-based tourism, there has been an increasing demand for uniqueness, thematic concepts, and personalization of hotel products (Gustavo et al., 2022; Ojino et al., 2022). This transformation is driven not only by changes in consumer preferences but also by external factors such as technological progress, urbanization processes, and intensifying competition in the global tourism market.

At the same time, increasing attention is being paid to issues of sustainable development and corporate social responsibility, as well as to the growing prevalence of hybrid travel formats such as «workation» and «bleisure», which generate new demands for hotel services (Rawal et al., 2022; Redko, 2023).

An analysis of contemporary traveler behavior confirms a structural shift in demand (Booking.com, n.d.). As travel experience increases, the number of domestic trips per capita generally declines in favor of international travel. For long-haul journeys, hotels remain the dominant form of accommodation, accounting for approximately 80% of travelers, whereas in short- and medium-distance trips, the popularity of alternative lodging options continues to grow (15% compared to 12%) (Deloitte, 2024). This indicates a segmentation of demand, wherein traditional hotels retain advantages in specific niches while simultaneously facing intensified competition in others (Deloitte, 2024).

Thus, academic research convincingly demonstrates that the growth of international tourist arrivals to the EU is accompanied by qualitative changes in consumer behavior that drive diversification of demand within the accommodation market. This process gradually reduces the traditional dependence of hotel revenues on classical tourist flows. The dynamics of the tourism market can no longer be assessed solely through the performance of the hotel sector, as alternative accommodation formats – often excluded from official statistics – are gaining popularity (Guttentag, 2015; Zekan & Gunter, 2022; Hall et al., 2022; Gunter et al., 2025).

The relationship between market diversification and transformation is complex and multidimensional. Bei and Celata (2023) demonstrated that the growth of tourist arrivals stimulates an increase in demand for short-term rentals, thereby exerting competitive pressure on the traditional hotel sector. Kim et al. (2025) note that only a strategic transformation of hotel supply in accordance with new demand models can ensure sustainable growth in the number of overnight stays.

Despite the abundance of research, the academic literature still lacks a comprehensive understanding of how the diversification of the EU tourism market affects hotels' adaptation of business models, the structure of their services, and their response to competition from alternative accommodation formats. Additionally, according to Deloitte (2024), by 2040 the compound annual growth rate of tourist arrivals in the Middle East (3.5%) and Africa (5%) will surpass that of Europe, although the latter currently remains the global leader in terms of international arrivals. These trends point to intensifying global competition and the urgent need for the European hotel sector to adapt to evolving consumption patterns.

In response to this research gap and in line with scholars' direct recommendations to assess the impact of EU tourism market diversification on the structural and dynamic characteristics of hotel consumption, the following working hypothesis was formulated. The hypothesis suggests that the diversification of the European Union tourism market influences the dynamics and structure of hotel

service consumption. This process leads to a redistribution of market share between traditional and alternative accommodation providers as a result of growing demand for innovative, personalized, and sustainable service formats.

The **purpose of this study** is to empirically assess the impact of EU tourism market diversification on the dynamics and structure of hotel service consumption. The study aims to identify key challenges and opportunities for the traditional hotel sector amid increasing competition from alternative accommodation formats and to forecast potential trends in consumer behavior in the coming years.

Methodology

The research methodology is based on a quantitative approach employing descriptive, correlation, and regression statistical methods. The analysis uses official 2022 statistical data from Eurostat, UNWTO, and Statista, including such indicators as «international tourist arrivals to the EU», «number of accommodation establishments and overnight stays in EU tourist facilities», «revenues of the European hotel market», and «number of consumers of package tours and hotel services in Europe».

At the first stage, descriptive statistics were applied to characterize the sample and verify data distribution. Mean values, standard deviations, coefficients of skewness, and kurtosis were calculated. At the second stage, a Pearson correlation analysis was conducted to determine the strength and direction of relationships between variables. Subsequently, linear regression analysis was performed to assess the impact of the number of international tourist arrivals (X) on the number of hotel service consumers in Europe (Y). Model quality was tested using coefficients of determination (R^2 , Adjusted R^2) and Analysis of Variance (ANOVA).

The results were used to construct an economic-mathematical forecasting model of hotel service demand in Europe for 2025-2031. Data and results visualization was carried out using MS Excel graphical tools (charts and tables) to ensure clear presentation of trends and interrelationships between indicators.

Research Results and Discussion

The analysis of the data presented in Table 1 indicates that the sample demonstrates considerable variability, reflected in high standard deviations across the indicators. The dataset exhibits left-skewed distributions, suggesting that most observed values exceed the sample mean. In several cases, kurtosis coefficients

indicate a sharper-than-normal distribution (for instance, in the number of package-holiday users). The confidence intervals show relatively wide ranges within which the true mean may lie with a 95% probability, confirming the high variability of the data.

Table 1

Correlation matrix of selected indicators of tourism-market diversification and hotel-service consumption in Europe, 2022

Indicator	International tourist arrivals to Europe	Number of tourist accommodation establishments in the EU	Number of overnight stays in EU tourist accommodation establishments	Revenue of the hotel market in Europe	Number of package-holiday users in Europe	Hotel service users in Europe
International tourist arrivals to Europe	1					
Number of tourist accommodation establishments in the EU	−0.094	1				
Number of overnight stays in EU tourist accommodation establishments	0.970	0.041	1			
Revenue of the hotel market in Europe	−0.355	0.270	−0.318	1		
Number of package-holiday users in Europe	−0.149	0.714	−0.060	0.088	1	
Hotel service users in Europe	0.689	0.700	−0.054	−0.018	0.972	1

Source: authors' calculations.

The analysis reveals a strong positive correlation between international tourist arrivals and the number of overnight stays in the EU (0.971). This close relationship reflects the fact that most international tourists travel for multi-day stays, which naturally entails accommodation usage. Consequently, the growth in international arrivals serves as a key driver of hotel and lodging occupancy. At the same time, a moderate negative correlation (–0.355) was identified between international tourist arrivals and revenue of the hotel market in Europe. This finding indicates that an increase in visitor inflows coincides with declining revenues within the traditional hotel sector (Bei & Celata, 2023).

A very weak negative correlation was observed between international tourist arrivals and the total number of accommodation establishments in the EU (–0.094). This dynamic likely reflects a mature market, where demand is met through efficiency gains – such as digital booking systems and optimized management – rather than extensive new construction. Additionally, official statistics may not fully capture the proliferation of informal or non-traditional accommodation units (e.g., private apartments via short-term rental platforms) operating outside formal registries (Statista, n.d.-b).

Moreover, weak negative correlations were found between international tourist arrivals and both package-tours users (–0.149). These findings are significant for understanding shifting consumption behavior. They indicate that even as total arrivals increase, the share of tourists choosing traditional hotels or package tours is declining, confirming strong competitive pressure from alternative lodging formats (Guttentag, 2019; Farmaki & Miguel, 2022).

The correlation analysis reveals a strong positive relationship between international tourist arrivals to Europe and the number of hotel service users in Europe (0.689). This value indicates a substantial degree of linear association, suggesting that an increase in international tourist arrivals is closely linked to a corresponding rise in hotel service usage across European destinations (Statista, n.d.-b; World Tourism Organization, 2025).

The magnitude of the correlation implies that international tourism flows remain a key demand driver for the European hotel industry. Although the coefficient does not reach unity, which would indicate a perfect linear relationship, its level is sufficiently high to confirm that variations in tourist arrivals explain a significant share of changes in hotel service utilization. The remaining unexplained variation may be attributed to structural shifts in accommodation preferences, including the growing popularity of alternative lodging options, package tours, and short-term rental platforms.

A positive but statistically insignificant correlation (0.088) was observed between the number of package-holiday users and hotel market revenue. This weak relationship is attributed to several factors. Firstly, a large proportion of package holidays targets the mass market, which frequently utilizes budget hotels or economy accommodation options. Secondly, intense price competition among tour

operators and the prevalence of fixed package rates constrain price and revenue growth, even when the volume of users increases. This suggests that the number of tourists and the average cost of their hotel stays are not growing at the same pace. Furthermore, this trend reflects a growing consumer shift toward individually organized trips, where tourists independently select accommodation and plan itineraries without travel organizers.

The correlation between hotel market revenue and the number of hotel users (-0.018) is weak and negative, indicating no direct dependence between the number of guests and the overall industry revenue. This can be explained by the fact that revenues depend not only on the number of visitors but also on cost structures, seasonality, pricing levels, and on the share of the premium segment. Moreover, the growing tendency toward alternative accommodation reduces the role of traditional hotels in shaping the industry's total income. According to Statista (n.d.-b), in 2024, the share of short-term rentals via peer-to-peer platforms exceeded 24% of the European accommodation market, while the average hotel room rate in the EU rose by only 2.3%, which is insufficient to offset inflationary fluctuations. Meanwhile, according to WTTC (2024), hotel market revenue in the EU amounted to about US\$230 billion, but its growth rate slowed compared to the pre-COVID level due to rising demand in the short, individual, and budget travel segments. This confirms the redistribution of demand between traditional and alternative accommodation formats. Furthermore, Eurostat (n.d.-b) records a decline in the average length of hotel stays from 3.2 nights in 2019 to 2.7 nights in 2024, which also negatively affects total revenues of hotel enterprises. Thus, the number of consumers is not a decisive factor for the market's financial performance. Rather, the key determinants are demand structure, pricing policy, service differentiation, and digitalization of sales channels.

Analysis indicates a strong positive correlation between the number of tourist accommodation establishments and the uptake of traditional lodging formats, specifically package-holiday users (0.714) and hotel users (0.700). The analysis also reveals a very high positive correlation (0.972) between the number of package holiday users and the number of hotel users, indicating an almost linear relationship. This strong association is primarily because hotel accommodation is an integral component of most package tours. Furthermore, consumers of organized travel typically seek the convenience, comprehensive service (e.g., accommodation, transport, meals), and time efficiency that this bundled model provides.

At the same time, the development of hotel infrastructure – serving diverse market segments from budget to premium – directly satisfies consumer demand for conventional lodging. Tourists are often attracted by reliable service standards, convenient locations, and specific amenities (e.g., pools, conference halls, restaurants), which collectively provide hotels with a sustained competitive advantage. A well-developed accommodation network increases the market's ability to receive larger tourist flows and ensures diversification of supply by type and price.

A positive, albeit relatively weak, correlation (0.27) was identified between the number of tourist accommodation establishments and hotel-market revenue. This suggests that revenue levels are influenced less by the sheer quantity of facilities and more by qualitative factors, such as service quality, innovation, and brand reputation. Evidence indicates that premium hotels adhering to high service standards can yield higher margins, irrespective of the total number of market establishments (Kim et al., 2025). The sector faces mounting competitive pressure from alternative accommodation formats (for example, Airbnb, apartments, hostels), particularly within the mid- and low-price segments (Bei & Celata, 2023; Gunter et al., 2025).

A weak positive correlation between accommodation establishments and overnight stays (0.041) shows that infrastructure growth does not directly mirror demand for nights spent. The EU tourism infrastructure is already highly saturated; new facilities primarily aim to enhance quality and modernize capacity. In mature destinations, new properties are developed less to expand capacity than to refresh the market through thematic or eco-friendly formats, thereby strengthening competitiveness. The weak negative correlation between accommodation establishments and international arrivals (−0.094) indicates this minimal direct linkage. The duration of stays depends largely on behavioral factors such as the popularity of short-term travel, «workations» and alternative lodging choices. Hence, accommodation growth is driven more by investment and regional strategy than by changes in the volume of stays. Increasing reliance on alternative lodging further decouples the relationship between infrastructure and inbound arrivals.

A moderate negative correlation (−0.318) was observed between the total number of overnight stays in the EU and European hotel-market revenue. This finding indicates that an increase in the aggregate volume of overnight stays does not necessarily lead to proportional revenue growth within the conventional hotel sector. This disconnect may be explained by structural shifts in tourist behavior, notably the growing popularity of budget and non-traditional lodging types. Tourists opting for alternative accommodation (e.g., short-term rentals, hostels) often spend less on lodging than those staying in traditional hotels, partially diverting customers from the conventional market.

Weak negative correlations were identified between the total number of overnight stays in EU tourist accommodation establishments and both package-holiday users (−0.06) and hotel users (−0.054). These results indicate a relative degree of autonomy among these market segments. The revealed correlations may reflect shifting tourist behavior. Consumers of package services typically choose intensive but shorter travel programs (for example, 3-7 days), which reduces the average number of overnight stays per tourist compared with independent travelers (Eurostat, n.d.-b). This trend is associated with the growing popularity of short-term trips, such as city breaks, and the increasing prevalence of frequent but brief travel.

Summarizing the results of the analysis, the following conclusions can be drawn:

- Package tours remain a key driver of hotel utilization in Europe, as they provide service comprehensiveness and convenience for consumers.
- The development of tourism infrastructure is a critical factor in attracting users, forming the foundation for the growth of both domestic and international tourism.
- Hotel market profitability does not always correlate with the number of users, which is associated with price fluctuations, seasonality, and rising competition from alternative accommodation formats.
- Changing tourist preferences require the hotel sector to adapt its business models through digitalization and the implementation of innovative hospitality formats.

Thus, the results of the study confirm that the European hotel market is undergoing structural adaptation, and traditional accommodation models are gradually giving way to more flexible and decentralized formats that align with contemporary trends in sustainable and individual tourism.

The regression analysis examining the impact of the indicator «international tourist arrivals to the European region» on the indicator «hotel service users in Europe» (Table 2) revealed a moderate positive relationship between these variables. The multiple correlation coefficient (Multiple $R = 0.689$) confirms a moderate linear dependence between the indicators. The coefficient of determination (R -squared = 0.49) shows that approximately 48.98% of the variation in the dependent variable (hotel service users in Europe) is explained by changes in the independent variable (international tourist arrivals to the European region).

Table 2

Regression statistics for the indicators «international tourist arrivals to the European region» and «hotel service users in Europe»

Multiple R	0.689
R-squared	0.49
Adjusted R-squared	0.426
Standard Error	43089.77
Observations	10

Source: authors' calculations.

The adjusted R -squared value (0.426) accounts for the number of independent variables in the model, indicating that, after adjustment, the model explains 42.60% of the variation in the dependent variable. With a standard error of approximately 43,000 units and an average Y value in the hundreds of thousands, this level is acceptable.

In the regression analysis presented in Table 2, a limited number of observations ($n = 10$) was employed, which to some extent constrains the generalizability of the obtained results. Accordingly, the findings of the regression analysis should be interpreted as preliminary and exploratory in nature. The resulting quantitative estimates reflect the specific conditions of the analyzed period, in particular the year 2022. Therefore, the reported quantitative results possess limited generalizability and require further empirical verification in future studies. These results allow the model to be used for strategic analysis and managerial decision-making in the tourism and hotel sectors.

To further examine the relationship between the analyzed indicators, the analysis of variance (ANOVA) was conducted (Table 3).

Table 3

Results of the ANOVA for the relationship between «international tourist arrivals to the European Region» and «hotel service users in Europe»

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	1.43E+10	1.43E+10	7.68	0.024
Residual	8	1.49E+10	1.86E+09		
Total	9	2.91E+10			

Source: authors' calculations.

The ANOVA results confirm the statistical significance of the constructed regression model. The F -statistic (7.68) with a significance level of $p = 0.024 < 0.05$ indicates that the independent variable has a significant effect on the dependent variable at the 5% significance level. Therefore, the model is statistically significant. The coefficient of determination ($R^2 = 0.49$) shows that nearly half of the variation in the dependent variable (hotel service users in Europe) is explained by changes in the independent variable (international tourist arrivals). Consequently, the obtained model adequately reflects the relationship between the studied indicators.

Based on the above data, an economic and mathematical linear regression model was proposed to forecast the number of hotel users depending on international tourist arrivals to the European region. The forecast model is as follows:

$$\hat{Y} = 447577.6 + 468.22 * X \quad (1)$$

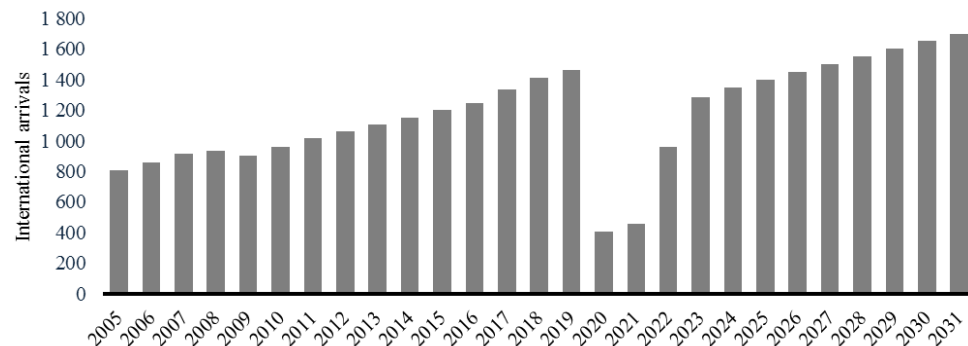
Where: \hat{Y} – the projected number of hotel service users in Europe; X – international tourist arrivals to the European region (millions); $\beta_0 = 447577.6$ – intercept (constant term); $\beta_1 = 468.22$ – coefficient for the independent variable X .

Thus, an increase of 1 million international tourists leads to a rise in the hotel service users in Europe by approximately 468.22 persons (or units in the corresponding scale). Based on this model, a forecast of the hotel service users in Europe for the period 2025-2031 was developed.

To construct this forecast, it is necessary to take into account the volume of international tourist arrivals worldwide, considering the dynamics of post-pandemic recovery. It is reasonable to expect a gradual increase in the volume of tourist arrivals (Figure 1).

Figure 1

Forecast of international tourist arrivals in Europe, 2005–2031



Source: Compiled by the authors based on data from UNWTO (2024), WTTC (2024, 2025), and authors' forecast using the economic and mathematical linear regression model.

Based on the linear regression model equation, the forecast of hotel service users in Europe was made, taking into account the forecast of international tourist arrivals in Europe (see Table 4).

Table 4

Forecast of the hotel service users in Europe

Year	X (million tourists)	Y (hotel users, conventional units)
2025	1400	$447577.6 + 468.22 \times 1400 \approx 1,104,095$
2026	1450	$447577.6 + 468.22 \times 1450 \approx 1,127,506$
2027	1500	$447577.6 + 468.22 \times 1500 \approx 1,150,917$
2028	1550	$447577.6 + 468.22 \times 1550 \approx 1,174,328$
2029	1600	$447577.6 + 468.22 \times 1600 \approx 1,196,730$
2030	1650	$447577.6 + 468.22 \times 1650 \approx 1,220,141$
2031	1700	$447577.6 + 468.22 \times 1700 \approx 1,243,552$

Source: authors' calculations.

The results of the forecasting analysis provide important insights into the medium- and long-term development trends of the European hotel market in the context of international tourism growth.

The dynamics of international tourist arrivals to Europe over the period 2005–2031 (Figure 1) demonstrate a persistent upward trend, interrupted by a sharp decline in 2020–2021 caused by the COVID-19 pandemic. The projected values indicate a relatively rapid recovery of tourist flows from 2022 onwards, followed by stable growth until 2031. This trajectory confirms the resilience of the European tourism market and its capacity to recover from external shocks while maintaining long-term growth potential.

The estimated linear regression model enabled the quantification of the relationship between international tourist arrivals and hotel service users in Europe. Based on the projected growth in international arrivals from 1.4 billion in 2025 to 1.7 billion in 2031, the number of hotel service users is forecast to increase from approximately 1.10 million to 1.24 million conventional units (Table 4). These results indicate a positive and economically meaningful relationship between tourism inflows and hotel service demand.

Theoretical and Practical Implications

From a theoretical perspective, the obtained results expand the scholarly understanding of diversification as a multifactor process that integrates economic, technological, and behavioral dimensions. The study confirms that the growth in international tourist arrivals stimulates not only quantitative expansion but also qualitative transformation of demand, fostering the development of alternative and traditional-oriented hospitality formats. The strong positive relationship (0.971) between international tourist arrivals and overnight stays, and the negative relationship (−0.355) between international tourist arrivals and hotel market revenue, demonstrate the growing influence of alternative accommodation options and the evolution of consumer preferences towards more affordable and flexible lodging models. Thus, the efficiency of the hotel industry is now more determined by service quality, innovation capacity, and digital adaptability than by the volume of tourist arrivals or the scale of infrastructure expansion.

From a practical standpoint, the regression analysis results ($R^2 = 0.49$; $p = 0.024$) confirm that international tourist arrivals significantly affect the demand for hotel services; however, the forecast for 2025–2031 indicates a faster growth rate of hotel users compared to revenue per customer, implying intensified competition and reduced profitability. The results demonstrate that the EU accommodation market is highly diversified, characterized by the coexistence of multiple parallel segments serving different needs and consumption models. This underlines the importance of developing specialized accommodation formats and creating integrated offers for various tourist categories. Such approaches can enhance the competitiveness of the European lodging market by supporting more effective diversification of tourism demand. Furthermore, the gradual decrease in the average length of stay and the growing popularity of short-term and self-organized travel require the implementation of flexible pricing strategies, optimization of digital distribution channels, and the adoption of a customer-centric approach.

Conclusions

The forecasting outcomes confirm that international tourist arrivals remain a key driver of hotel service consumption in Europe, which is consistent with the results of the correlation analysis and the theoretical foundations of tourism economics. Although the relationship is not perfectly proportional, the estimated regression coefficient suggests that increases in tourist arrivals systematically translate into higher levels of hotel service usage. At the same time, the moderate explanatory power of the linear model indicates the presence of additional factors in-

fluencing hotel demand, including structural changes in accommodation markets, the growing popularity of alternative lodging options (such as short-term rentals and peer-to-peer platforms), the expansion of package tourism, and shifts in consumer behavior driven by digitalization.

Overall, the findings suggest favorable long-term prospects for the European hotel sector under conditions of sustained growth in international tourism, while also highlighting the need for hotel enterprises to adapt to an increasingly competitive and diversified accommodation environment.

Despite the obtained results, this study has several limitations that outline directions for further research. First, the analysis is primarily based on aggregated statistical data, which do not account for cross-country differences in the structure of tourism demand, the level of hotel infrastructure development, and the socio-economic characteristics of EU member states. This constrains the potential for a more detailed comparative analysis of individual national markets. Second, the quantitative regression model developed within the study predominantly reflects macro-level trends in the relationship between international tourist arrivals and hotel service demand, without considering behavioral and motivational factors influencing consumers' accommodation choices.

Future research should prioritize a comprehensive examination of the interrelationships between the expansion of international tourist flows and the proliferation of alternative accommodation formats, including short-term rentals and peer-to-peer lodging platforms. Particular attention should be devoted to identifying the economic and social determinants underpinning tourists' increasing preference for budget-oriented accommodation, as well as to assessing the resulting transformation of revenue structures within tourism markets under shifting demand patterns.

Advancing the analytical framework requires the integration of cross-country datasets, consumer survey evidence, and region-specific indicators to enhance model precision and to deepen understanding of the adaptive mechanisms employed by the hotel sector in response to market diversification. Methodologically, the robustness and predictive validity of hotel demand forecasts can be strengthened through the incorporation of additional explanatory variables and the application of multifactor regression techniques or panel data models.

Further improvements may be achieved by extending the temporal scope of the dataset and employing complementary forecasting approaches, such as time series modeling and scenario analysis. The combined use of these methodological instruments will contribute to greater forecast reliability and reinforce the generalizability of conclusions concerning the structural interaction between tourism and hotel markets in Europe.

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