FROM HERITAGE TOURISM TO SUN AND BEACH DESTINATIONS: THE EXPLANATORY ROLE OF ENVIRONMENTAL FACTORS ON THE AVERAGE DAILY RATE

Pedro AZNAR, Associate Professor
ESADE Business and Law School, Economics,
Finance and Accounting department
E-mail: juanpedro.aznar@esade.edu

Abstract

Purpose – This study aims to analyse whether the impact of external factors on the average daily rate (ADR) varies according to the type of destination. The study measures the effects of length of stay, share of international tourism and seasonality on hotel rates for sun and beach tourism, city tourism and heritage destinations..

Methodology/Design/Approach –We collected monthly data from January 2021 to June 2023 and conducted a regression analysis to measure how international tourism, length of stay or seasonality differ by destination type and what impact these factors have on ADR. The data refers to the 106 tourist destinations defined by the Spanish Statistics Institute (INE).

Findings – Increasing the length of stay has a positive effect on ADR for cultural heritage destinations. In all types of destinations, a higher share of international tourism increases ADR, but the effect is particularly strong for city tourism. Greater seasonality is associated with higher hotel prices and is particularly relevant for sun and beach destinations.

Originality of the research –A better understanding of ADR determinants, depending on the different destination types, is important for hotel managers and those designing tourism policies at destination level.

Keywords Average daily rate (ADR), seasonality, international tourism, heritage tourism, urban tourism, sun and beach destination.

INTRODUCTION

Understanding which factors are more relevant in explaining hotels' profitability is a key question for hotel managers, investors in the hospitality industry, and local and regional governments that play a relevant role in destination management through their policies and investments. A substantial body of academic literature on Tourism Economics has tried to shed light on how different internal and external factors influence profitability. The first question to address is which indicators to use when measuring profitability. Part of the academic literature has considered well-known financial indicators such as the return on assets (ROA) or the return on equity (ROE) (Segarra-Ona et al., 2012; Aissa & Goiaded, 2016; Aznar et al., 2016; Menicucci, 2018; Dimitrić et al., 2019; Bacik et al., 2020), but there is a wide range of alternative options scholars have used to measure profitability: earnings before interest and taxes (EBIT) over sales (Lado-Sestayo et al.,2016), gross operating profit per available room (Menicucci, 2018), or net operating income (O'Neill & Mattila, 2006), to mention a few examples. Furthermore, many attempts to measure the influence of internal and external factors on hotels' profitability have considered some specific key indicators commonly used in the hospitality industry as dependent variables, mainly Average Daily Rate (ADR), Available Revenue per Room (RevPAR) and occupancy rate (Chen et al., 2016; Blengini & Heo, 2020; Pereira-Moliner et al., 2021).

Such a wide variety in profitability indicators hinders the possibility of reaching applicable conclusions. Many papers do not clarify the reason for choosing a specific variable to measure profitability. Additionally, using different metrics for profitability can result in contradictory results when measuring the effect a given variable on profitability. One such example is hotel size. Hotel size increases profitability if measured by ROE and ROA (Menicucci, 2018), but for the same geographical area--Italy--hotel size does not influence Available Revenue Per Room (RevPAR) (Bresciani et al., 2015).

Similarly, the role of market concentration (measured by the Herfindahl-Hirschmann index) is unclear. Some empirical evidence suggests that profits are higher in markets with higher values of market concentration (Lado-Sestayo et al., 2016). On the other hand, some empirical evidence supports the idea that prices are lower in highly concentrated markets (Gan & Hernandez, 2013). Once again, this contradiction is explained by using different variables to measure profitability. An additional element that complicates reaching relevant conclusions is that academic papers differ in methodology and geographical scope. For example, the two cited papers about the role of market concentration have analyzed information from the two distant markets of Spain and the United States of America, respectively.

Internal and external factors can influence hotel prices, as some factors increase prices they can raise profitability. Hedonic pricing is a standard methodology to analyze the influence of internal and external factors in the hospitality industry, allowing us to measure how individual factors influence prices. This technique has been applied to the tourism industry for both hotels (Chen & Rothschild,2010; Soler & Gemar, 2018) and alternative accommodations such as Airbnb apartments (Sainaghi &

Chica-Olmo, 2022). Among the internal factors that influence hotels' setting price power, the distance between the hotel and spots valued by tourists and the quality of the service offered to guests have been tested as explanatory variables for differences in hotel's ADRs. Less distance from the hotel to the city center (urban destination) or from the hotel to the beach (sun and beach destination) increases ADR (Rigall-I-Torrent et al., 2011; Illescas-Manzano et al., 2023). Higher quality signalled by the hotel also increases ADR. A proxy for quality may be the number of stars (Becerra et al.,2013; Moro et al., 2018), but ratings by online reviewers are recognized as a dynamic approach to perceived quality (Öğüt & Onur, 2012; Oses et al.,2016; Illescas-Manzano et al., 2023). Understanding how each individual factor influences hotel prices may help guide the firms' strategies, such as improving online reputation or finding the optimal location for new hotels in a particular market.

External factors (e.g., the length of stay, the share of international tourism, or the seasonality associated with each market) can also influence the ADR. At a basic level, ADR differences can be explained by factors related to each particular region. Empirical evidence for the United States (O'Neill et al.,2023), Italy (Giannotti et al.,2010), and Portugal (Moro et al.,2018) support this hypothesis. Regarding individual factors, an increase in the share of international tourism over total tourism is one element that may increase ADR (Aissa & Goaied,2016). In many countries, average disposable income is higher for international tourists than for residents; the higher income combined with the inelasticity of the demand (Qu et al., 2002; Canina & Carvell, 2005) explains why an increase in international tourists is associated with higher ADR. Seasonality is also a relevant external factor; hotels operating in markets where demand is much higher in peak seasons have higher price variability, having to reduce their prices in the lower seasons to improve their occupancy rate. Some authors suggest that markets with strong seasonality also show higher ADR on average (Pan, 2007). Another external condition is the current macroeconomy, such as the evolution of exchange rates, economic growth, and consumer confidence, which change over time and may influence hotel prices and strategies. For example, the willingness to pay for accommodation may differ during recessions or periods of strong economic growth, and hotels' strategies adapt to the economic conditions (Gan & Hernandez,2013; Chen et al., 2016; Blengini & Heo, 2020).

Although a few papers have included the destination type, usually as a dummy variable for coastal destinations or urban hotels, as explanatory variables for hotel prices (O'Neill & Mattila, 2006; Menicucci, 2018; Can et al., 2023), there is a gap in the academic literature on how external factors influence hotel prices (ADR) and may interact with destination type. For example, length of stay can have a different relevance for sun and beach destinations than for urban tourism destinations. Additionally, most of the academic literature has a specific geographical scope, such as only one city in many cases. Looking at one specific market prevents seeing how external factors influence differs depending on the destination type. To the best of our knowledge, there is no paper that measures the influence of external factors by destination type. This paper is a first attempt to shed some light on the effect external factors have on the ADR and how these influences differ depending on the destination type. We consider three main categories of destination type: sun and beach, urban, and heritage.

1. LITERATURE REVIEW

The hospitality industry can be characterized as an oligopolistic market structure with product differentiation (Tsionas & Assaf, 2021; Nababan et al.,2023). One of the characteristics of oligopolistic markets is the influence of competitors' strategies in each individual firm strategy; therefore, competitors' prices matter when a firm decides its pricing strategy. Price setting power depends, among other factors, on the extent of product differentiation. Product differentiation has several dimensions: hotels differ in their location, the quality of the service offered to guests, the range of additional services to accommodation their offer, or their approach to sustainability, to mention a few options (Lee, 2015; Pereira-Moliner et al.,2021; Butters & Hubbard,2023). Product differentiation allows for some degree of price-setting power, explaining why hotel prices vary according to the specific characteristics of each hotel. Understanding the influence of each internal or external factor is relevant for hotel managers, as this knowledge will help to develop the best strategy to adopt. When defining the hotel strategy, managers consider the resources' availability and the expected competitors' behaviour but also must consider the influence each factor, internal or external, has on prices. For example, understanding the influence of each additional point on online review ratings on the ADR or the influence location has on ADR is crucial in defining the hotel strategy. The literature review analysis covers the analysis of internal and external factors as explanatory variables for ADRsfollowed by the introduction of the hypotheses to test external factors' influence on ADR depending on the destination type.

1.1. Average Daily Rate: explanatory factors at the individual level

Internal factors are the ones that each hotel decides, such as the location, the gamut of facilities guests may enjoy when staying at the hotel, or the quality and variety of services offered to them, to cite a few. These individual factors are relevant to consumers, as their willingness to pay may depend on them. A tourist visiting a city on a weekend may value a location close to the center, as it reduces the time to see all the spots planned to visit. Similarly, customers may value cleanliness, comfort, safety or their interaction with staff differently, items commonly rated on online rating reviews. Let's consider the price as a function of a set of characteristics. It is possible to measure each characteristic's influence on the price by applying the hedonic pricing methodology (Rosen,1974). The most common methodology is a regression analysis in which the price, or the logarithm of the price, is the dependent variable. There are several options depending on the aim of the research. It is common to use multiple regression models (OLS) (Chen & Rothschild, 2010; Tochawak & Likitanupak, 2017), a panel regression test when using

longer time series (Giannotti et al.,2010; Oses et al.,2016), regression models including autoregressive components if the model assumes that the price of the last period influences current prices (Blengini & Heo, 2020), geographically weighted regression if similar hotels concentrate in concrete areas (Soler & Gemar, 2018) or quantile regression depending on the characteristics of the data analyzed (Illescas-Manzano et al., 2023). Some authors use as an alternative methodology Structural Equation Modelling or combine structural equations with regression analysis (Becerra et al., 2013; Pereira-Moliner et al., 2021).

A long-term decision hoteliers take when entering a particular market is the hotel's location; once decided, it is difficult to reverse it. An attractive location increases Average Daily Rates (ADR) and occupancy rates. Location has been shown to positively influence profitability measured as EBIT over sales (Lado-Sestayo et al., 2016) or the return on investment (ROA and ROE) (Menicucci, 2018). However, it is relevant to consider that more attractive locations also imply higher costs; properties are expensive in areas where we observe hotel agglomeration, and we can expect more intense competition. Hotels that invested in markets that later on have shown strong growth may benefit from the first-mover advantage. Empirical research has analyzed if there is a premium, in terms of higher ADR, associated with hotels located in particular countries. An analysis of four European countries, Spain, France, Italy, and the United Kingdom, found that the premium country effect was significant for France and the United Kingdom (Illescas-Manzano et al., 2023). The premium may be associated with higher tourism flows or a higher disposable income related to the mix of tourists visiting a particular country. A similar methodology has been used to compare cities with some cities showing a higher price when controlled by all other variables (e.g., Portuguese cities (Moro et al., 2018), coastal villages in Thailand's Andaman coast (Thaothampitak et al.,2023), Spanish cities (Sellers-Rubio & Casado-Diaz, 2018) or the urban markets in the United States (O'Neill et al.,2023).

The location analysis also refers to the influence of distance to the city center at urban destinations. The empirical evidence concludes that less distance to the city center is associated with higher ADR. Similarly, being close to a bus station or metro station, which reduces the time needed to visit what tourists have planned to visit, has a positive effect on ADR or Available Revenues per Room (RevPAR) (Soler & Gemar,2018). The same effect is observed when analyzing apartments available at Airbnb, although the influence location has on prices was lower during the COVID-19 pandemic period (Sainaghi & Chica-Olmo, 2022). Location, and therefore distance to a concrete spot, is relevant for urban tourism, but similar results have also been found in the analysis of sun and beach destinations. The ADR positively correlates with being closer to the beach. On the coast of Catalonia, empirical results suggest that being close to the beach increases prices by 13% to 17% (Rigall-I-Torrent et al., 2011). Focus on good locations has a potential adverse effect in terms of residents' well-being as agglomeration of hotels and, more recently, Airbnb apartments implies higher rent prices for residents and other negative effects associated with a higher density of tourists in a subset of the city (Quattrone et al.,2016).

Hotels can differentiate vertically by the quality associated with the services they provide to their customers. By improving the quality of the service, hotels can increase guests' perceived satisfaction, consequently increasing hotel performance (Nazari et al.,2020). However, quality is a multidimensional concept and perceived quality depends on the hotel facilities, cleanliness, room comfortability, or the customers' interactions with the hotel staff, among other factors. Improving quality requires more investment in the hotel's physical assets, but human resources management is also key. The proper combination of training, the capacity to motivate the staff, and an appropriate reward system may increase employees' productivity and customers perceived quality, positively impacting ADR and hotel performance (Pereira-Moliner et al., 2021). Higher quality increases customers' willingness to pay. Still, higher prices do not necessarily mean higher profitability; quality investment is costly, and the effect on prices may be moderated by other factors such as competition in a particular market and the degree of differentiation between a specific hotel and its competitors.

The academic literature has found consistent evidence of the importance of the number of stars to signal quality and how much RevPAR increases as the number of stars rises (Bresciani et al., 2015; Murimi et al., 2021). The number of stars also positively correlates with ADR (Becerra et al., 2013; Moro et al.,2018). Regarding financial performance, the number of stars is associated with higher profitability, measured by ROA or ROE (Bacik et al., 2020). It is also relevant to ask if investing in quality increases hotel prices or profitability, fixing the number of stars. In that sense, a hotel can decide if it is more worthwhile to focus the efforts on alternative ways of signalling quality, such as online reputation, rather than increasing the number of stars. One of the few attempts to compare these two alternatives concluded that increasing the hotel category increases prices by 13.4% to 22.7%, whereas one additional point in one's online rating increases prices by 7.9% (Sánchez-Pérez et al.,2020). However, a gap in academic literature is to compare the cost of improving the number of stars versus improving online reputation, a cost-benefit analysis of the different alternatives that may guide hotel managers' decisions.

In the last two decades, how customers book a room has experienced a great change. Online consumption and the use of platforms such as Booking or TripAdvisor change the paradigm of how consumers take their decisions. These platforms offer customers online ratings and the possibility to check comments from past customers. As a signal for quality, online ratings are more dynamic than the number of stars and change constantly as customers post their reviews and comments. The academic literature on online ratings has grown considerably in the last decade. Although online ratings are very relevant and hotel managers pay considerable attention to them, they have their own biases and weaknesses. For example, customer comments seem to be more subjective for luxury hotels (Roy, 2023). Some authors have compared the categories guests can rate, such as cleanliness, comfort, or staff, with the mining text analysis of reviewers' comments, concluding that a revision of these categories may be beneficial to improve online ratings as a measure of guests' satisfaction (Komen & Vujičić,2002). Ratings are also influenced

by the scale they use: when Booking changed the rating scale from 2.5-10 to 1-10, average scores consistently dropped (Leoni & Boto-García, 2023). Although there exists biases and weaknesses, online ratings are relevant to hotel managers and clearly influence hotel prices. A higher TripAdvisor score increases ADR (Soler & Gemar, 2018; Moro et al., 2018), and price elasticity to ratings is around 2.6 for urban cities such as Paris or London (Öğüt & Onur, 2012). Hotel managers monitor their online ratings because they are an internal factor that influences ADR.

Table 1 summarizes some of the most relevant literature on how internal factors influence ADR; papers are ordered by publication date, and the information includes authors, the geographical scope, the methodology, and the main findings.

Table 1: **Summary of the academic literature for the analysis of internal factors influence on ADR**

Authors	**Geographical scope**	**Methodology**	**Main findings**
Rigall-I-Torrent et al., 2011	Spain (Catalan coast) 2002	Semi-logarithmic regression	The hotel's location in front of a beach increases prices by 13% to 17%. Getting a blue flag recognition for a beach increases hotel prices by 11.5%.
Öğüt & Onur, 2012 Paris and London, January 2009 to May 2009		Log-linear regression model	A 1% increase in online ratings increases prices by 2.6% in both cities.
Bresciani et al., 2015	Italy, 2011	Regression model	RevPAR is associated with the number of stars. The size of the hotel is not significant in explaining differences in RevPAR.
2018	Portugal, 2016-2017	Simulation of booking rooms using MAPE (Mean Absolute Percentage Error)	Price is positively correlated with TripAdvisor scores. Location in the city or at the beach increases ADR.
Soler & Gemar, 2018	Spain (Málaga) October and November 2014	Geographically weighted regression	Less distance to the city center and the train station are associated with higher hotel prices. TripAdvisor scores influence hotel prices.
Menicucci, 2018	Italy, 2008-2016	Panel data regression	ROE and ROA are higher when hotels are located in coastal or scenic areas.
Sellers-Rubio & Casado-Diaz,2018	Spain, 2008-2016	Stochastic Data Envelopment Analysis	Sun and beach destination hotels present a higher efficiency score. Empirical evidence suggests a negative relationship between quality and efficiency.
Bacik et al., 2020	Visegrad countries: Czech Republic, Poland, 2017	Kruskall-Wallis and Wilcoxon tests	Hotel performance, explained by ROE and ROA, is higher as the hotel category, measured by the number of stars, increases.
Sánchez-Pérez et al., 2020	Spain, 2017	Quantile regression	One additional star increases hotel prices by 13.4% to 22.7%. Online reputation matters; one additional point in online ratings increases prices by an average of 7.9%
Sainaghi & Chica-Olmo, 2022	Italy (Milan) January 2020 and March 2021	Regression analysis including spatial autoregressive model (SAR)	Hotel and Airbnb apartment prices benefit from less distance to the city center. Distance to a bus or metro station influences hotel and apartment prices.
Illescas-Manzano et al., 2023	Spain, France, Italy and the United Kingdom, 2017	Quantile regression	A higher online reputation increases ADR. ADR increases if the hotel is located in the city.
Thaothampitak et al.,2023	Thailand's Andaman coast	Regression model	Tourism business growth depends on location.

1.2. Average Daily Rate: explanatory factors at the environmental level

Environmental factors, also called external factors, also help to explain differences in hotels' profitability and ADR. Markets differ in the importance international tourism has over total demand. This variable can be relevant as, in many cases, international

tourists have a higher income level than residents or may stay longer. Both higher daily expenditure and longer stays benefit hotels' performance. Markets also differ in their level of seasonality. Seasonality is present in most tourist destinations, however the level of seasonality is not the same for a sun and beach destination versus an urban destination with excellent airport connections with other countries. Seasonality not only explains higher price variability over the year but may also affect the average ADR value, depending on how long the peak and low demand periods are. It is also relevant when deciding hotel capacity regarding the number of rooms. Another particular characteristic of each market is its level of market concentration, measured by the Herfindahl-Hirschmann index. A Higher market concentration may increase the likelihood of tacit collusion, implying higher prices. Lastly, macroeconomic conditions can also be considered as external factors that influence hotel prices and performance: economic growth and higher disposable income can increase hotel demand, exchange rate variability affects a particular destination's level of competitiveness based on prices, and how confident consumers are about the future may influence their demand and willingness to pay. These macroeconomic variables are relevant in terms not only of ADR and profitability but they also influence hotel strategies.

Analysis at the country level consistently concludes that hotel performance and prices differ by region or city level. Some analyses include countries such as Italy (Giannotti et al., 2010), the United States (O'Neill et al.,2023), Portugal (Moro et al.,2018) and Spain (Sellers-Rubio & Casado-Díaz, 2018). In some cases, the analysis of regional or city-level performance, usually as regression analysis, has included some particular destination types as dummy variables, mainly for sun and beach destinations or urban cities. The analysis of hotel industry efficiency at the market level suggests that in Spain, hotels located at sun and beach destinations are more efficient (Sellers-Rubio & Casado-Díaz, 2018). Similarly, urban destinations in the United States have a higher Net Operating Income (NOI) than hotels located in rural areas (O'Neill & Mattila, 2006). The higher performance can be associated with the additional willingness to pay for a particular destination type but may also be a consequence of the composition of the demand for a specific destination type, with more tourists from regions or countries with higher disposable income or even related to a demand composition in which guests are more inclined to stay longer. A gap in the literature is the lack of analysis of what drives differences at the regional level or for some destination types.

From an economic perspective, market concentration is also a characteristic that shows relevant differences for different destinations. The most common measure of market concentration is the Herfindahl-Hirschmann index, constructed by adding the square of the market share for each firm operating in a defined market. A higher market concentration favours tacit collusion, although it is not the only condition that matters (demand uncertainty, governments' response to tacit collusion, the level of product differentiation or asymmetries in firms' cost structure also play a role in the likelihood of tacit collusion (Ivaldi et al., 2007)). Tacit collusion can take different forms but is generally associated with higher prices and profitability. The evidence for the hospitality industry corroborates that higher market concentration is associated with performance, as higher market concentration is associated with a higher ratio of Earnings Before Interest and Taxes (EBIT) over sales (Lado-Sestayo et al.,2016). However, some authors have found contradictory evidence, such as in the United States hospitality markets with higher market concentration showed lower price levels (Gan & Hernandez, 2013). The market concentration does not only affect prices but also influences firms' strategies. Investing in idle capacity as a deterrence mechanism is associated with a higher concentration market for the hospitality industry (Conlin & Kadiyali, 2006). Hotels operating in more competitive markets may rely more on product differentiation to increase their ADR over competitors (Becerra et al., 2013).

When considering external factors, macroeconomic conditions, which change according to the economic cycle, directly influence hotel prices or profitability and the consequential strategy. Lowering prices to attract customers is more likely to be applied in recessions, where the lack of demand causes lower occupancy rates (Singh et al.,2014; Menicucci, 2018). Recessions are a context in which customers may be more sensitive to prices, making demand for tourism slightly more elastic than when the economy shows a strong growth rate (O'Neill & Mattila, 2006). Willingness to pay for quality explains why hotels offering higher quality service tend to experience a higher revenue per room (RevPAR); however, the relationship between quality and revenues per room does not have the same strength depending on the economic cycle, in booming periods everyone benefits from the higher demand making quality less relevant (Chen et al., 2016). These results confirm that the demand for hotels has a positive income elasticity, although lower than one (Canina & Carvell, 2005). Economic growth and consumer confidence are not the only macroeconomic relevant conditions. Exchange rates also reflect changes in how competitive is a country's industry compared with other countries, as the evidence for Switzerland suggests that an appreciation of the exchange rate is associated with lower ADR by having to compensate for the higher cost of the domestic currency by lowering prices (Blengini & Heo, 2020).

This paper analyzes three main external factors that influence hotel prices: the share of international tourism, seasonality, and length of stay. Previous academic literature had considered these factors, although without considering if there are relevant differences depending on the destination type. International tourists tend to stay longer than domestic tourists, and an increase in international tourism correlates with higher profitability (Aissa & Goaied, 2016). In many destinations, international tourists have higher disposable income than domestic tourists, which explains the higher daily expenditure and that higher international tourism leads to increases in ADR (Sellers-Rubio & Casado-Díaz, 20118). With varying strength, seasonality is present in most tourism markets. The volatility of the demand according to the period of the year has implications in terms of the size of the hotel, its financial structure, and the hotel's performance in terms of profitability. Both ADR and RevPAR fluctuate according to seasonality (Pan, 2007; Blengini & Heo, 2020), gross operating profit per available room (GOPPAR) is also partially explained by seasonality (Giannotti et al., 2010), with higher demand periods helping to improve occupancy rates at higher prices. Seasonality pattern is not easy to change and influences hotel performance. Opening a hotel in a market with

higher volatility can be considered a riskier investment than in a market with a more stable demand. Empirical evidence about the financial structure of hotels reveals that hotels in markets with higher seasonality rely more on long-term debt. In contrast, the equity ratio over total assets is higher for hotels in markets with less seasonality, perceived as less risky investments (Sikveland et al., 2022). Finally, length of stay is a relevant external factor influencing hotel prices and performance. Length of stay is associated with better economic and financial performance (Sellers-Rubio & Casado-Díaz,2018), and with a higher average expenditure per day (Aissa & Goaied,2016). Although this is considered an external variable, depending on the demand structure and composition, hotels can adopt strategies that increase the length of stay, such as improving quality (Barros & Machado, 2012). Table 2 summarizes the main contribution of the academic literature related to external factors that influence ADR and profitability. Papers are ordered by year of publication.

Table 2: **Summary of the academic literature for the analysis of external factors influence on ADR and profitability**

Authors	Geographical scope	Methodology	Main findings
Qu et al., 2002	Hong Kong, 1980-1998	Panel data linear regression model	ADR is sensitive to macroeconomic and financial conditions. In recession periods, ADR decreases. ADR increases when there is an increase in occupancy rate.
Canina & Carvell,2005	The United States, 1989-2000	Linear regression model	A hotel's price is relatively inelastic to the prices of competitors. Hotel demand is sensitive to income changes with positive income elasticity but lower than 1.
Conlin & Kadiyali, 2006	The United States (Texas), 1991-1997	Panel data linear regression model	Hotels invest more in idle capacity as a deterrence mechanism when the market is more concentrated.
O'Neill & Mattila, 2006	The United States, 2002-2003	Hierarchical regression analysis	In recession periods, hotels competing in a market are likelier to lower prices, concluding in a war price to keep their occupancy rates.
Pan,2007	Taiwan (Taipei), 2001-2004	Linear regression model	Room rate differences between peak and valley demand periods depend on the length of these periods. As hotel size increases, the optimal rate for peak demand season decreases.
Barros & Machado, 2010	Madeira, 2008	Survival Weibull model	The quality of the hotel is positively associated with the length of stay.
Giannotti et al.,2010	Italy, 2004-2008	Linear regression model	Seasonality influences gross operating profit per available room. Periods of higher demand show a higher operating profit.
Aissa & Goiaed,2016	Tunisia, 2000-2010	Panel data linear regression model	An increase in international tourism is associated with a higher Return on Assets (ROA).
Lado-Sestayo et al., 2016	Spain, 2005-2011	Dynamic data panel model, generalized method of moments (GMM)	Markets with higher market concentration, measured by HHI, show higher profitability.
Chen et al., 2016	Taiwan, 2000-2010	Panel data linear regression model	Lodging demand is price inelastic. In periods of high economic growth, hotels increase RevPAR, making quality differentiation less relevant as a price explanatory factor. Market concentration is associated with less competition and higher prices.
Menicucci, 2018	Italy, 2008-2016	Panel data linear regression model	Foreign tourism demand is correlated with higher occupancy rates. Profitability decreases in recession periods.
Sellers-Rubio & Casado-Díaz, 2018	Spain, 2008-2016	Stochastic data envelopment analysis (DEA)	Efficiency, understood as better performance, increases for markets with a higher share of international tourism and longer the length of stay.
Blengini & Heo, 2020	Switzerland, 2000-2018	Linear regression analysis with autoregressive component	An appreciation of the real exchange rate decreases ADR. ADR depends on seasonality.
Sikveland et al.,2022	Norway,2008-2018	Linear regression model	Seasonality influences the financial structure of hotels; higher seasonality increases the share of long-term debt over total assets.

Previous academic literature proves the relevance of external factors in explaining hotel prices and performance. The share of international tourism over total demand influences prices through mechanisms related to the demand price elasticity and income elasticity differences for international and domestic tourists. Seasonality has strategic implications for hotel size, financial structure, and pricing strategies. Length of stay also influences ADR and RevPAR, as longer average accommodation periods may reflect higher disposable income levels and willingness to pay. However, the gap in the literature that this research has focused on is the analysis of how the relevance of these external factors as explanatory variables for hotel prices, measured using ADR, varies according to the destination type. The following section introduces the hypotheses to test.

1.3. Hypotheses

The existing academic literature has produced a substantial body of empirical evidence about the importance of internal and external factors as explanatory variables for hotels' price-setting capability; therefore, for hotel managers deciding the optimum price level, measuring the impact of these factors on the ADR is relevant. The main gap in the current academic literature is that most of the research is based on a concrete market or destination type, whereas having a more comprehensive understanding of how external factors, such as seasonality, the share of international tourist demand over total demand, or the length of the stay influence interact with destination type to influence the ADR may add value to the research on Tourism Economics.

We propose the following hypotheses:

According to previous academic literature, the Average Daily Rate (ADR) differs for different regions or cities when controlled by other variables (Moro et al.,2018; O'Neill et al.,2023). The regression models of profitability and prices for the hospitality industry has included dummy variables to control for specific destination types, sun and beach destinations (Sellers-Rubio & Casado-Diaz,2018), mountains, beaches, or destinations well-known for their cultural heritage (Becerra et al., 2013). In most of these models, these dummy variables are significant, suggesting that the destination type influences the ADR of each market. The analysis for different geographical areas, Spain and Tunisia, suggests that hotels located in sun and beach destinations perform better than hotels in other destination types (Aissa & Goaied, 2016; Sellers-Rubio & Casado-Díaz, 2018), the higher profitability may be a consequence of the capability to set higher prices for sun and beach markets. When comparing urban destinations with rural destinations, the empirical evidence also suggests a better performance for urban hotels (O'Neill &Mattila, 2006). Therefore, we propose the following hypothesis:

 H1. The destination type is relevant in terms of the Average Daily Rate (ADR)
 H1a. The destination type with higher ADR, ceteris paribus, is sun and beach destinations
 H1b. The second destination type with a higher ADR is, ceteris paribus, urban tourism, particularly big cities oriented towards international tourism demand

To test the particular influence of each destination type on the ADR, it is possible to run different regressions for the three destination types, in which the explanatory variables are the external factors. When controlled by other variables, the values of the intercepts reflect the differences in ADR associated with each destination type.

One relevant external factor in which markets differ is the average length of stay. A higher average number of days may reflect a higher disposable income and daily expenditure, benefiting hotels' operating profits. Suppose length of stay is related to income level and willingness to pay (Aissa & Goaied, 2016). In that case, we expect markets with longer average accommodation periods to show a higher Average Daily Rate (ADR). An alternative explanation exists for the relationship between length of stay and ADR: providing guests with services of higher quality increases the length of stay and additional quality is correlated with an increase in the ADR (Barros & Machado, 2010). Therefore, we propose the following hypothesis:

 H2. The length of stay is associated with a higher Average Daily Rate (ADR)

The hospitality market is characterized by seasonality (Sikveland et al.,2022), but seasonality may differ according to the destination type. Tourists looking for sun and beach destinations want to enjoy periods of warm weather. The demand and, consequentially the ADR values, may vary according to the weather pattern along the year. We expect sun and beach destinations to show a seasonality level much more pronounced than those in urban destinations or heritage tourism, wherein weather is less relevant. We also know that the level of seasonality influences average values for ADR and ADR differences between peak and valley demand periods (Pan,2007), and empirical evidence suggests that seasonality affects ADR (Giannotti et al.,2010; Blengini & Heo, 2020). The cultural activities in heritage tourism sites or the life of urban cities throughout the year may provide them with a more stable demand, making ADR less dependent on seasonality. We suggest the following hypothesis:

 H3. The higher the level of seasonality, the higher the difference observed between peak demand and low demand Average Daily rates (ADR), particularly for sun and beach destinations

One of the external factors more present in previous academic literature is the share of international tourists over the total demand. An increase in the number of international tourists is associated with higher prices and higher revenue per available room; ADR and RevPAR increase when international tourist flows rise (Sellers-Rubio & Casado-Díaz, 2018). A higher share of international tourists over total demand increases the length of the stay and the expenditure per day, positively affecting hotels and other businesses oriented toward tourists, such as restaurants or leisure activities (Aissa & Goaied, 2016). Based on the previous academic literature, we propose to test the following hypothesis:

H4. Foreign tourism is positively correlated with the Average Daily Rate (ADR)
H4a. The influence of foreign tourism shows the highest value for sun and beach destinations
H4b. The influence of foreign tourism shows the lowest value for heritage tourism

We run different regression models for each destination type to test the hypotheses. For each destination type, the ADR is the dependent variable explained by the external factors we have described, the length of stay, seasonality, and the relevance of international tourism. The regression coefficients associated with each explanatory factor measure the influence each factor has on ADR for each destination type. Regression coefficients that are statistically significant and show different values according to the destination type will support our hypotheses and show that external factors influence on the ADR interacts with the destination type.

2. DATA AND METHODOLOGY

2.1. Data

The main objective of this research is to assess the influence of external factors on hotel prices, measured by the Average Daily Rate (ADR), differentiating by destination type. A prior condition to the analysis is to find a database that includes a variety of tourism destinations. According to Statista, Spain ranked as the second European country in terms of international tourism arrivals (2019-2022) (Statista, 2023). Before the Covid-19 pandemic, Spain received 83.5 million international tourists (2019). With a population of close to 47 million tourists, the tourism industry accounts for close to 14% of the Spanish Gross Domestic Product (GDP) with some regions, such as the Balearic or Canary Islands, reaching values above 35% of the GDP (data from Exceltur, 2019). The Spanish Statistics Office (INE) publishes monthly data for 106 tourist spots, defined as towns in which tourism is a relevant industry. The 106 tourist spots include Canary and Balearic Islands towns, sun and beach spots on the Mediterranean coast, including Andalusia, Catalonia, and Valencia. It also includes urban tourism destinations such as the cities of Madrid, Barcelona, Seville, and Malaga. Some tourist spots fall under the category of heritage tourism destinations, such as the cities of Salamanca, Tarragona, Caceres, Cordoba, Segovia, and Granada (the UNESCO World Heritage List has recognized all these cities based on their historical and cultural interest). Table 1 summarizes the number of tourist spots by destination type.

Table 3: **Number of tourist spots by destination type**

Destination type	Number of spots	Comment
Balearic and Canary	15	Balearic and Canary Islands strongly depend on tourism, with direct employment in the tourism industry accounting for more than 30% of total employment. They can also be considered sun and beach destinations.
Sun and beach destination (Mediterranean coast)	52	The Mediterranean coast of Spain is divided into different areas, Costa Brava and Costa Daurada, both in Catalonia, Costa del Sol, Málaga, and Costa del Azahar in Valencia.
Urban tourism	11	It includes tourist cities with over 350,000 inhabitants, including Madrid, Barcelona, Valencia, Seville, and Málaga.
Cultural Heritage tourism	15	UNESCO has recognized the towns selected for their relevance in terms of their cultural or historical assets, such as the Alhambra in Granada, the old town of Caceres, the old town of Segovia, and the archaeological Roman site in Tarragona, to mention a few.

Source: Own elaboration based on Spanish Statistics Office (INE) data.

Annex I includes the list of the 106 tourist spots indicating the destination type. For each tourist spot, the table adds dummy variables with value 1 if they belong to the following categories: sun and beach destination, Balearic Islands, Canary Islands, urban tourism, or cultural heritage.

The dependent variable in our analysis is the Average Daily Rate (ADR). The Spanish Statistics Office (INE) provides the monthly ADR means for each of the 106 tourist spot destinations. According to the Spanish Statistics Office (INE), tourist spots are defined as towns in which the tourism industry is particularly relevant, either from an economic or social perspective. Our database includes the monthly ADR from January 2021 to June 2023. The total number of observations is 1639. Including

two complete years of 2021 and 2022, plus the available information data for the first semester of 2023, allows for measuring seasonality and confirming the differences observed by destination type. However, it may be noted that although in the summer of 2021 flows of international tourism were recovering from the worst period of the pandemic, they were still close to 60% below pre-pandemic values and around 65% higher than the previous year. This strong recovery influenced the strong growth observed in terms of ADR. Focusing on external factors that may affect the Average Daily Rate (ADR), this research considers the length of the stay, the share of international tourism, and the level of seasonality. The length of the stay is published monthly by the Spanish Statistics Office (INE). The importance of international tourism has been measured as the percentage of the number of international tourist arrivals over the total number of tourists at each destination, including international and domestic ones. It is worth mentioning that foreign tourism in Spain comes mainly from the United Kingdom, France, and Germany, countries with higher disposable income per capita than Spain. Therefore, the average expenditure by tourists is higher for international tourists than for domestic ones. Regarding seasonality, there are different ways of measuring it. The approach of this paper is based on hotel supply. The number of rooms available each month changes, with more hotels and rooms available during the peak season. For each month, t, and location, i, we have figured out the following ratio:

$$Supply\ seasonality\ index_{it} = \frac{Number\ of\ rooms_{it}}{\frac{\sum_{t=1}^{t=12} Number\ of\ rooms_{it}}{12}} \qquad (1)$$

If the supply index reaches 1, the number of rooms available in one month equals the average number of rooms for the entire year. A value close to 2 would mean that in that specific month, the room supply from the hotel industry is 200% of the average value for the whole year. Considering the database this paper has worked with, we observe that in a destination with a high level of seasonality, such as Benidorm, a sun and beach destination on the Mediterranean coast, this ratio fluctuates between a minimum value of 0.10 and a maximum of 1.58. These values mean that at the valley period of the year, the number of rooms available is only 10% of the average value for the year, but the number of rooms supplied is 58% higher at the peak season than the annual average. In other words, for each room available in the moment of lowest demand of the year, there are 15 rooms available at the peak season. As expected, seasonality is less pronounced for heritage tourism destinations. For instance, if we consider Granada, a city well known for the impressive Alhambra monument, the minimum seasonality ratio is 0.61 and the maximum index is 1.36. To see how the differences in seasonality differs by destination type, we have produced Graph 1, which includes the evolution of the supply seasonality index by type destination from July 2022 to June 2023.

Graph 1: **Supply index seasonality by destination type**
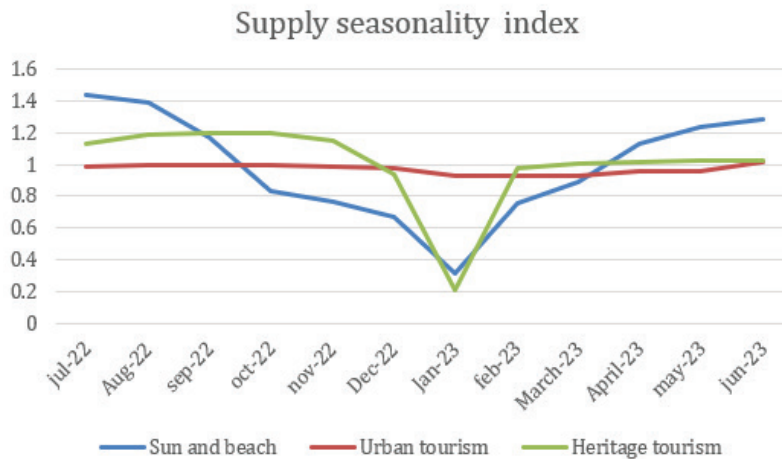
Source: Own elaboration based on Spanish Statistics Office (INE) data.

According to the graph, the destination type that shows less variability (i.e., seasonality) over time is urban tourism, with its seasonality index varying from 0.93 to 1.01. The reason is not only more stable demand. As we have defined our index based on the supply of rooms, a substantial share of hotels in big cities belongs to groups that can financially afford to be open the whole year. In contrast, sun and beach destinations have a higher presence of independent hotels that financially rely more on their own revenue stream over time, so closing in the period of less demand may be a sensible decision. Comparing sun and beach destinations with heritage tourism destinations, the latter shows less volatility, although the value of January 2023 is the lowest in the graph. Considering the period Febraury to June 2023, the supply seasonality index varies from 0.94 to 1.18, whereas the sun and beach destinations values range from 0.31 to 1.43.

Table 4 summarizes the main descriptive statistics for the dependent variable, Average Daily Rate (ADR), and the independent variables: length of stay, foreign tourism as a percentage of total demand, and supply index seasonality. The average daily rate for the entire sample of observations, 106 tourist spots considering January 2021 to June 2023, is €83.71. The maximum value, €290.43, corresponds to Marbella, a sun and beach destination on the coast of Malaga that has become popular among wealthy families and celebrities and becoming a spot that offers luxury services to wealthy tourists worldwide. The average length of stay is 2.759 days, although seasonality influences the length of the stay. For example, if we consider a sun and beach destination such as Lloret de Mar on the coast of Catalonia, the length of stay changes from 3.42 days to 5.44 days, depending

on the month of the year. In contrast, a heritage tourism destination such as Salamanca has a much more stable length of stay throughout the year of 1.48 days to 1.94 days. Not surprisingly, the most prolonged stay corresponds to the Canary Islands, the farthest destination for European citizens. They are European islands but located in the west of Africa. Pajara, Yaiza, Mogan, and Tias, all located in the Canary Islands, have lengths of stay above 7.5 days.

Foreign tourism represents 35.8% of the total tourism demand on average, but it can be close to 97% depending on the destination. All the tourist spots with foreign tourism above 90% correspond to towns in the Canary or Balearic Islands. On the contrary, the smallest percentage of international tourism corresponds to tourist spots in the mountains or villages in areas with low population density, usually far away from sun and beach destinations.

Regarding the Supply Index Seasonality, the average value is 0.9483, and the maximum value corresponds to the city of Palma, the biggest city on Mallorca Island. The data shows that most seasonality values above 1.5 are sun and beach destinations in the Canary or Balearic Islands. Table 5 shows the average value for each variable according to the destination type. Heritage tourism destinations have the shortest average stay, the lowest average value for ADR, and the smallest percentages of foreign tourism compared to other destination types. In contrast, sun and beach destinations at the Balearic and Canary islands record the highest values for all the mentioned variables.

Table 4: **Descriptive statistics**

Variable	Num. observations	Min	Max	Mean	Std deviation
Average Daily Rate (ADR)	1636	€35.75	€290.43	€83.71	€31,68673045
Length of stay (days)	1636	1.27	9.08	2.7591	1.659656511
Foreign tourism	1636	0.1178	0.96469	0.358	0.24444900
Supply Index Seasonality	1636	0.0240	2.02221	0.9483	0.31870839

Source: Own elaboration based on Spanish Statistics Office (INE) data.

Table 5: **Average values according to the destination type**

Variable	Balearic and Canary Islands	Sun and beach destination (without Islands)	Urban tourism	Heritage tourism
Average Daily Rate (ADR)	€107.01	€96.54	€98.45	€78.37
Length of stay (days)	5.98	3.19	2.33	1.86
Foreign tourism	74.76%	44.98%	48.96%	32.21%
Supply Index Seasonality	0.9793	0.953	0.9587	0.949

Source: Own elaboration based on Spanish Statistics Office (INE) data.

2.2. Methodology

We propose the following model to test the influence of external factors on the Average Daily Rate (ADR).

$$ADR_{it} = \beta_0 + \beta_1 length\ of\ stay_{it} + \beta_2\ Foreign\ tourism_{it} + \beta_4 Supply\ Seasonality\ Index_{it} + \varepsilon_{it} \qquad (2)$$

The regression model is run twice according to two destination types: urban tourism (cities with a population above 350,000) and heritage tourism (towns with sites recognized in the UNESCO World Heritage List).

We run a similar regression for sun and beach destinations, including spots in the Iberian Peninsula and sun and beach destinations in the Balearic and Canary Islands. To capture the specific characteristics of tourism in the islands, we use a dummy variable (Islands) with value 1 if the tourist spot is in the Balearic or Canary Islands.

$$ADR_{it} = \beta_0 + \beta_1 length\ of\ stay_{it} + \beta_2\ Foreign\ tourism_{it} + \beta_4 Supply\ Seasonality\ Index_{it} + \beta_4\ Islands_{it} + \varepsilon_{it} \qquad (3)$$

Running the regression model for each destination type allows not only to confirm the relevance of external factors but also to concrete how each of the three external factors influences hotel prices differently depending on the destination type. The differences observed in the β associated with each external factor measure how much ADR changes when that external factor changes. In that sense, if the β associated with seasonality differs for sun and beach and urban tourism, that difference will confirm that external factors influence ADR but with different strengths depending on the destination type, and this allows us to test our central hypothesis. Previous academic literature has suggested that some destination types may be more efficient in terms of higher profitability (Becerra et al., 2013; Sellers-Rubio & Casado-Díaz, 2018). To test this hypothesis implies confirming that the associated with each destination type is different. These values show the expected difference in ADR when controlled by all other external factors. They encapsulate a particular destination type's characteristics not measured by the external factors considered in the model impact ADR.

3. RESULTS AND DISCUSSION

3.1. Results

Table 6 presents the results for the regression models using OLS, showing the corresponding values for the intercept and the coefficient associated with each independent variable, the adjusted and the F statistics corresponding to the ANOVA analysis.

Table 6: **The regression model results by destination type with Average Daily Revenue (ADR) as the independent variable**

	Heritage Tourism	Urban Tourism	Sun and beach destinations
Intercept	-10.142 (0.055)*	40.986 (0.000)**	30.022 (0.000)**
Length of stay	27.177 (0.000)**	-14.091 (0.000)**	-0.848 (0.377)
Foreign tourism	83.785 (0.000)**	165.054 (0.000)**	86.428 (0.000)**
Supply Index Seasonality	11.609 (0.000)**	9.887 (0.020)*	31.832 (0.000)**
Dummy variable for Islands			-13.594 (0.000)**
Number of observations	323	181	541
R^2 Adjusted	0.709	0.740	0.354
ANOVA analysis F value	262.653 (0.000)**	171.970 (0.000)**	78.543 (0.000)**

Source: Own elaboration based on Spanish Statistics Office (INE) data.
* 5% significance level

** 1% significance level

The results of the regression model confirm that external factors are relevant explanatory variables to understand Average Daily Rates (ADR) (Aisa & Goaied, 2016; Sellers-Rubio & Casado-Díaz, 2018). The model presents a high R^2 adjusted value for heritage and urban tourism destinations, with values over 0.70 in both cases. The predictive capacity of the model for sun and beach destinations is lower, with an R^2 adjusted value of 0.35. A possible explanation is that the sun and beach destination model includes islands and coast areas in the Iberian Peninsula that may be quite different. The coast destinations are not homogenous: Costa Brava is close to the French border while Costa del Sol requires, in most cases, travelling by airplane. The higher heterogeneity among sun and beach destinations requires the addition of more variables to increase the model's predictive capacity.

3.2. Discussion

Previous academic literature has consistently found that different areas show differences in profitability and prices (Menicucci,2018; Moro et al.,2018; O'Neill et al.,2023), a result confirmed by our results. The intercept associated with each destination type suggests that when controlled by our included external factors, urban tourism's average ADR exceeds nearly €11 the ADR for sun and beach destinations and is almost €50 higher than the ADR for the heritage destinations. The higher ADR for urban destinations over other options confirms previous results for the United States but now also applies to one of the leading European tourist destinations, Spain (O'Neill & Mattila, 2006). Regarding the influence of the three external factors, seasonality and share of international tourism over total demand are statistically significant for the three destination types. The three destination types show quite different values, confirming the central hypothesis of this research: the destination type impacts the influence of various external factors on ADR.

Length of stay is associated with higher hotel prices. This could be because it correlates with higher willingness to pay or income (Sellers-Rubio & Casado-Díaz, 2018) or that the length of stay is longer when hotels offer more quality. Quality is associated with higher prices (Barros & Machado, 2010). However, this hypothesis is only confirmed for heritage tourism destinations, as the coefficient associated with length of stay for sun and beach destinations is not statistically significant. International tourism over total demand is a relevant external factor as, in many cases, international tourists have a higher daily expenditure and longer stay (Sellers-Rubio & Casado-Díaz, 2018). Our results confirm that foreign tourism has a relevant influence on ADR: if the share of international tourists over total demand increases by 1%, the ADR increases more than €80 for urban tourism and heritage tourism, but the influence foreign tourism has on ADR for sun and beach destination is remarkably near twice the previous value at at €165 per each additional 1% of the increased share of international tourism.

It has been established that seasonality is a key characteristic of many tourism destinations, influencing ADR values but also becoming relevant when deciding a hotel size as measured by the number of rooms (Pan, 2007). It even influences the financial structure of the hotel balance sheets (Sikveland et al., 2022). The analysis of the three destination types further establishes the relevance of seasonality. A higher seasonality is associated with higher ADR for the three destination types. However, this influence is much stronger for sun and beach destinations, not an unexpected result. Sun and beach destinations have higher seasonality values, the strong demand in the peak periods causes a higher ADR, and the difference between prices for the peak periods and low demand periods is much more significant than in any other destination type (Pan,2007). Some sun and beach destinations in Spain correspond to islands, the Balearic and Canary Islands. The dummy variable for islands shows a negative value, implying that being an island reduces ADR close to €14 compared to sun and beach destinations on the Iberian Peninsula. This result confirms the competitive disadvantage associated with islands (Jackman et al., 2011), and that an island's success as a tourism destination relies on adequate transport infrastructure (Khadaroo & Seetanah, 2007).

A better understanding of how external factors influence ADR according to each destination type has relevant managerial implications for hotel managers and public and private institutions managing destinations. The hotel price, measured by ADR, at heritage tourism destinations increases when the length of stay improves but mainly when foreign tourism increases. For not-so-overcrowded destinations, a 1% increase in foreign tourism over total demand increases ADR by close to €84, suggesting that marketing efforts at the individual hotel level but also at the destination level to promote the heritage value of the destination among foreign customers may increase profitability. From the managerial perspective, this research also emphasizes that destination types, when controlled by other variables, show ADR differences, with higher values for urban destinations. In many cases, urban destinations attract higher foreign demand. Urban markets in which there are relevant entry barriers may be particularly attractive for international hotel groups willing to pay for the acquisition of independent hotels. This process may change the market structure in a relevant way.

The fact that small islands, for sun and beach destinations, show a competitive disadvantage compared with other sun and beach destinations explains why endowing islands where tourism is relevant with adequate infrastructure may promote economic growth and may reduce income inequality among tourism destinations.

It is relevant to introduce the debate on the role of sustainability. Our results also suggest that all destination types benefit from foreign tourism. Still, more foreign tourism than local tourism also has implications regarding the environmental effects of travelling by airplane or ship. Foreign demand may generate a trade-off between economic growth, higher profitability for the hotel industry and more employment with the potential negative externalities associated withforeign tourism's environmental impact.

The results in terms of the suggested hypotheses are summarized in Table 7. The empirical analysis confirms that the influence of foreign tourism demand or seasonality differs depending on the destination type.

Table 7. Hypotheses summary

Hypothesis	Accepted or rejected	Comment
H1. The destination type is relevant in terms of the Average Daily Rate (ADR)	Accepted	The regression performed for different destinations shows different intercept values, and the dependent variables' influence also shows different values according to the destination type.
H1a. The destination type with higher ADR, ceteris paribus, is sun and beach destinations. H1b. The second destination type with a higher ADR is, ceteris paribus, urban tourism, particularly big cities oriented towards international tourism demand.	Rejected	Although the average ADR is higher for sun and beach destinations, urban tourism has a higher intercept; therefore, when controlled for the different variables, it is the destination type with higher prices.

Hypothesis	Accepted or rejected	Comment
H2. The length of stay is associated with a higher Average Daily Rate (ADR).	Rejected	The empirical data do not give a clear answer to this hypothesis. Length of stay is not significant for sun and beach destinations. It shows a positive sign, as expected, for heritage tourism destinations but a negative sign for urban destinations.
H3. Sun and beach tourism destinations show a higher difference between ADR between peak and low demand seasons.	Accepted	Seasonality has been measured through the Supply Seasonality Index, which is a significant variable, at a 1% level, for the three destination types analyzed . The higher β coefficient corresponds to sun and beach destinations, 31.832
H4a. The influence of foreign tourism shows the highest value for sun and beach destinations. H4b. The influence of foreign tourism shows the lowest value for heritage tourism.	Rejected H4a Accepted H4b	Foreign tourism is a significant variable in the three destination types analyzed. The corresponding β shows the highest value for urban tourism; cities such as Barcelona or Madrid benefit from foreign tourism in terms of ADR much more than cities where foreign tourism is less relevant. The lowest value for β corresponds to the heritage tourism regression.

Source: Own elaboration.

CONCLUSIONS AND FUTURE RESEARCH

Average Daily Rate (ADR) can be a driver of hotel profitability, particularly when the economy grows above the average (O'Neill & Mattila, 2006; O'Neill et al., 2023). Consequentially, hotel managers, investors, and those responsible for public policies regarding destination management are interested in a better understanding of how different internal and external factors influence the ADR. Internal factors have been the focus of a relevant body of previous research (Bresciani et al., 2015; Tochaiwat and Likitanupak, 2017; Moro et al.,2018; Murimi et al.,2021), with less having been published in terms of the role of external factors (Gan & Hernández, 2013; Sellers-Rubio & Casado-Diaz, 2018). However, most studies analyzing external factors use empirical data for a particular market without comparing different destination types.

This research has been the first attempt to assess if external factors, particularly the length of stay, foreign demand, or seasonality, influences ADR with different magnitudes depending on the destination type. Analyzing data for 106 tourist spots defined by the Spanish Statistics Office (INE), our regression analysis model confirms that foreign tourism and seasonality influence the ADR with varying strength depending on the destination type. Seasonality is particularly relevant for sun and beach destinations, and foreign demand is particularly relevant for urban tourism, followed by sun and beach destinations. In contrast to other destinations, only heritage tourism's ADR is increasing with duration of average stay, suggesting the particular importance for these heritage sites to promote longer stays.

One limitation of this research is that ADR may not translate into higher profitability, which is more directly measured by return on investment, either ROA or ROE. It could be that a destination with a higher ADR must also pay more to rent properties run as hotels or make a higher real estate investment. Operational costs, including wages, may be different according to the destination type.A second limitation is related to the geographical scope. Although it covers 106 tourist spots, all of them are located in Spain. Other countries such as France, Italy, and Greece, have a variety of tourist destinations. Future research, expanding to more countries and spots in the analysis, would help to confirm the results of this paper. A third limitation refers to the period analyzed. Considering 2021 to 2023 has allowed for the inclusion of two complete years, but the data of 2021 was still influenced by the COVID-19 pandemic and a strong recovery from the negative 2020 indicators. The differing strength of the ADR recovery across destination types may affect the results, and future work that includesg more prolonged periods of time might be relevant in confirming our results. Finally, other destination types, such as those related to more sustainable tourism, have not been analyzed in this paper, although they are becoming more and more relevant.

This paper is a first attempt to shed light on how a destination type may influence how external factors influence hotel prices. For all destination types, foreign demand strongly influences ADR, but this is particularly relevant for urban tourism destinations. Our results suggest that heritage tourism destinations may benefit from policies aiming to enlarge the average stay length. Lastly, regarding sun and beach destinations, the results confirm the outsized importance of seasonality as an explanatory variable for their price differences.

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ANNEX

Annex 1. **List of the tourist spots by destination type.**

Tourist spot	Sun and beach destination	Canary Islands	Balearic Islands	Urban tourism	Atlantic coast	Cultural heritage
Vitoria-Gasteiz	0	0	0	0	0	0
Albacete	0	0	0	0	0	0
Alacant/Alicante	1	0	0	0	0	0
Benidorm	1	0	0	0	0	0
Dénia	1	0	0	0	0	0
Elx/Elche	0	0	0	0	0	0
Torrevieja	1	0	0	0	0	0
Almería	1	0	0	0	0	0
Mojácar	0	0	0	0	0	0
Níjar	1	0	0	0	0	0
Roquetas de Mar	1	0	0	0	0	0
Ávila	0	0	0	0	0	1
Badajoz	0	0	0	0	0	0
Mérida	0	0	0	0	0	1
Calvià	0	0	1	0	0	0
Capdepera	0	0	1	0	0	0
Palma	1	0	1	1	0	0
Sant Llorenç des Cardass	0	0	1	0	0	0
Barcelona	0	0	0	1	0	0
Sitges	1	0	0	0	0	0
Burgos	0	0	0	0	0	1
Cáceres	0	0	0	0	0	1
Plasencia	0	0	0	0	0	0
Trujillo	0	0	0	0	0	0
Algeciras	1	0	0	0	0	0
Arcos de la Frontera	0	0	0	0	0	0
Cádiz	1	0	0	0	1	0
Jerez de la Frontera	0	0	0	0	0	0
Puerto de Santa María, E	1	0	0	0	0	0
Tarifa	1	0	0	0	1	0
Castelló de la Plana	0	0	0	0	0	0
Peníscola/Peñíscola	1	0	0	0	0	0
Ciudad Real	0	0	0	0	0	0
Córdoba	0	0	0	1	0	1
Coruña, A	0	0	0	0	1	0
Santiago de Compostela	0	0	0	0	0	1
Cuenca	0	0	0	0	0	1
Lloret de Mar	1	0	0	0	0	0
Granada	0	0	0	0	0	1
Sigüenza	0	0	0	0	0	0
Donostia/San Sebastián	0	0	0	0	1	0
Benasque	0	0	0	0	0	0
Jaca	0	0	0	0	0	0
Sallent de Gállego	0	0	0	0	0	0

Tourist spot	Sun and beach destination	Canary Islands	Balearic Islands	Urban tourism	Atlantic coast	Cultural heritage
Cazorla	0	0	0	0	0	0
León	0	0	0	0	0	0
Ponferrada	0	0	0	0	0	0
Naut Aran	0	0	0	0	0	0
Lleida	0	0	0	0	0	0
Vielha e Mijaran	0	0	0	0	0	0
Logroño	0	0	0	0	0	0
Lugo	0	0	0	0	0	0
Ribadeo	0	0	0	0	1	0
Viveiro	0	0	0	0	1	0
Madrid	0	0	0	1	0	1
Antequera	0	0	0	0	0	0
Benalmádena	0	0	0	1	0	0
Estepona	1	0	0	0	0	0
Fuengirola	1	0	0	0	0	0
Málaga	1	0	0	1	0	0
Marbella	1	0	0	0	0	0
Nerja	1	0	0	0	0	0
Ronda	0	0	0	0	0	0
Torremolinos	1	0	0	0	0	0
Cartagena	1	0	0	0	0	0
Murcia	0	0	0	1	0	0
Pamplona/Iruña	0	0	0	0	0	0
Ourense	0	0	0	0	0	0
Cangas de Onís	0	0	0	0	0	0
Gijón	0	0	0	0	1	0
Llanes	0	0	0	0	1	0
Oviedo	0	0	0	0	0	0
Villaviciosa	0	0	0	0	0	0
Palencia	0	0	0	0	0	0
Mogán	0	1	0	0	0	0
Pájara	0	1	0	0	0	0
Palmas de Gran Canaria,	0	1	0	1	1	0
San Bartolomé de Tirajan	0	1	0	0	0	0
Teguise	0	1	0	0	1	0
Tías	0	1	0	0	0	0
Yaiza	0	1	0	0	0	0
Grove, O	0	0	0	0	1	0
Sanxenxo	0	0	0	0	1	0
Vigo	0	0	0	0	1	0
Salamanca	0	0	0	0	0	1
Adeje	0	1	0	0	0	0
Arona	0	1	0	0	0	0
Puerto de la Cruz	0	1	0	0	1	0
Santa Cruz de Tenerife	0	1	0	0	1	0
Santander	0	0	0	0	1	0

Tourist spot	Sun and beach destination	Canary Islands	Balearic Islands	Urban tourism	Atlantic coast	Cultural heritage
Segovia	0	0	0	0	0	1
Sevilla	0	0	0	1	0	0
Soria	0	0	0	0	0	0
Cambrils	1	0	0	0	0	0
Tarragona	1	0	0	0	0	1
Salou	1	0	0	0	0	0
Albarracín	0	0	0	0	0	0
Teruel	0	0	0	0	0	1
Toledo	0	0	0	0	0	1
Gandia	1	0	0	0	0	0
València	1	0	0	1	0	1
Valladolid	0	0	0	0	0	0
Bilbao	0	0	0	0	0	0
Benavente	0	0	0	0	0	0
Zamora	0	0	0	0	0	0
Zaragoza	0	0	0	1	0	0

Source: Own elaboration based on Spanish Statistics Office (INE) data.