#### Helena Nemec Rudež

## **Focal Points in Recent Tourism Price Research**

#### **Abstract**

The article aims to provide a comprehensive overview of recent academic studies on pricing in tourism and to deepen the understanding of the recently prevailing research streams on this topic. This article reviews research articles on tourism pricing published in journals in the Scopus database between 2017 and early 2023. An analysis of the selected literature identifies three research streams on pricing: research on price determinants, price development and customers' price decisions. In terms of methodology, empirical studies predominate, and in terms of period, the distribution over the years shows a stable and consistent level of research activity. The article is essential for further research in the field by presenting a synthesis of recent academic work.

Keywords: pricing research, tourism industry, price determinants, price development, customer price decisions

### 1. Introduction

Research on pricing in tourism lags destination and marketing research, which have been intensively researched. This is nothing new; as Rao (1984) noted 40 years ago, pricing research in marketing is modest. Later, De Toni et al. (2017, p. 120) state that pricing is under-researched, as "it represents, according to estimates, less than 2% of the papers on leading journals in the field". Pricing research is differently covered across industries. Kienzler and Kowalkowski (2017) examined 515 articles from 1995 to 2016 regarding pricing strategy research. They found that the pricing of services is explored in 25% of the articles, while a mere 10% encompass the pricing of goods and services. Research by Gerpott and Berends (2022) shows that only 4% of online pricing studies focus on the hospitality industry, while the transport industry constitutes 8% of the studies. Thus, price research still occupies a relatively modest place in research and has significant potential for further expansion. However, Ali et al. (2019) study shows that pricing coverage in the International Journal of Contemporary Hospitality Management increased between 1989 and early 2018. Altinay and Tahery (2019) found that pricing strategy is one of the emerging themes in current research on the sharing economy in high-profile hospitality and tourism journals in 2017 and 2018.

As pricing is critical to market communication and business success in the face of increasing competition in the tourism industry, it is essential to know the current state of pricing research in tourism. This article aims to provide an overview of recent academic studies dealing with pricing in tourism to gain a deeper understanding of the current research field of pricing by identifying the prevailing research streams.

There are few studies reviewing pricing in tourism research. Han and Bai's (2022) study provided a systematic review of pricing research in hospitality and tourism and marketing literature between 2010 and 2019 using the visualization of similarities method to construct bibliometric network maps to identify significant research themes. There have also been specific research reviews on tourism pricing. The study by Hu et al. (2019) systematically summarises the research on the impact of online reviews on room prices using a meta-analytical method highlighting online-based pricing, while Sainaghi (2021) reviews the methodological characteristics

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and identifies convergent and divergent findings of previous studies on the price determinants in peer-to-peer accommodation platforms.

The article attempts to answer the following question: "What current research streams are there in tourism pricing research, considering the perspectives of both the supply and demand side?" Businesses face challenges when dealing with costs, competition, and purchasing power, significantly shaping pricing and its dynamics. At the same time, customers' choices are influenced by myriad factors that together determine their pricing preferences.

This study focuses on the transactional perspective of pricing. Indeed, it is essential to note that pricing and fair prices in tourism also include considerations for employees, suppliers, local communities, and other stakeholders that depend on tourism (Napierala & Pawlitz, 2023). Although this broader perspective is essential, it is beyond the scope of this study.

# 2. Methodology

The methodology follows this article's aim to review and summarise the existing literature on price research to identify recent research streams rather than concluding individual studies. The study does not cover studies on price elasticity and revenue management. Solid review studies on tourism demand elasticities and demand forecasts address this topic (e.g. Song & Li, 2008; Song et al., 2019). By narrowing the scope of the study, we can take a closer look at the research streams in this area and gain an understanding of price research in the context of tourism. Articles from the database Scopus were examined to ensure a representative sample for the systematic literature review. Leaning on the method proposed by Carrera-Rivera, Larrinaga et al. (2022) and Carrera-Rivera, Ochoa-Agurto et al. (2022), the present review involved several steps using computer database searches.

Articles published between 2017 and early 2023 were included in the review to focus on the most recent research. Specific keywords such as "price" or "pricing" in combination with the keyword "tourism" in English were used to identify relevant articles within the Scopus database. This selection process took place on 9 April 2023. The article search was extended to high-ranking tourism journals in the database Scopus with the keywords "price" or "pricing" but without the keyword "tourism" as they were in tourism journals. After that, the articles included in the first phase were reviewed based on the information in the title and abstract, followed by a more detailed examination of the article's content. The researcher made the final decision to include articles in the review. Next, the analysis and article comparison helped to identify research streams within the pricing research field. This classification process enabled a comprehensive understanding of the different aspects of the topic under study. The study is limited to scientific research articles, excluding research in books and book chapters.

## 3. Findings

Although tourism pricing research is less researched than its counterparts, a closer look reveals that it has attracted attention in recent years. Three research streams have been identified. The first stream involves the study of price determinants. A total of fifty-three relevant articles were identified. Within this group, only two studies (Hu et al., 2019; Sainaghi, 2021) adopt a comprehensive review approach. In contrast, the remaining studies take an empirical approach, with almost all being predominantly quantitative; the study by Ahmadi and Ghasemi (2022) stands out as it uses a mixed methodology that includes both qualitative and quantitative methods. The second stream focuses on pricing development and price setting, focusing on the supply side, including forty-two studies. In terms of the type of study, similarly to the first stream of research, empirical quantitative studies dominate, accounting for thirty-seven of the studies. In addition, two empirical studies

(Raucci et al., 2020; Wu et al., 2017) use a mixed methods approach that includes quantitative and qualitative elements. The overall understanding of this research stream is enriched by a review study by Gerpott and Berends (2022) and two theoretical studies that use a game-theoretical approach (Godinho et al., 2018; He et al., 2019). The third stream of research focuses on demand-side decision-making. There are twentyone studies selected in this area, and most of these studies (twenty out of twenty-one) take an empirical, quantitative approach, while research done by Saayman et al. (2020) takes a mixed approach, including both quantitative and qualitative analyses.

As the number of studies in the field of tourism pricing is more significant than expected, the researcher faced the challenge of carefully selecting relevant articles for this study. Furthermore, the distinction between the three identified research streams was not always clear. Hence, the researcher had to use her judgment in deciding whether to assign a particular study to a specific stream.

#### 3.1. Research on price determinants

The first research stream focuses on price determinant studies, primarily on accommodation, particularly within the Mediterranean region. As a prominent global destination, the Mediterranean region receives considerable attention in understanding the factors influencing pricing decisions. The research stream also includes other European destinations, followed by destinations in the Americas and Asia, showing a broader exploration of price determinants across various tourism regions. As accommodation is the most analysed tourism product, less attention was paid to other tourism products. Studies examined price determinants for the cruise product, with studies by Niavis and Tsiotas (2018) and Espinet-Rius et al. (2018) shedding light on price determinants in this sector. The price determinants of alpine ski resorts in Norway have been explored by Malasevska (2018), while Shakina and Cabras (2022) have focused on investigating price determinants of beer in pubs.

The price determinants researched are diverse. When studying accommodation, the determinants analysed range from accommodation characteristics and services (e.g. type of accommodation, star ratings, rooms and their size, pool, outdoor sports) to amenities (such as parking, Wi-Fi) (e.g. Arzaghi et al. 2023; Mitsis, 2023; Fearne, 2022; Somphong et al., 2022) and host attributes when examining sharing economy accommodation. Wang and Nicolau (2017) examined 25 Airbnb price determinants classified into five categories (host characteristics, site and property attributes, amenities and services, rental rules, and online reviews) to understand how they relate to the price. Host characteristics, such as superhot status, number of listings, response time, professional status, and host effort, are often used as price exploratory variables in research (e.g. Fearne, 2022; Tong & Gunter, 2022; Chen & Xie, 2017; Voltes-Dorta & Inchausti-Sintes, 2021). Barnes and Kirshner (2021) found that trustworthiness and facial attractiveness can increase Airbnb accommodation prices. Hotel price determinants are divided into internal and external attributes (Soler, Gemar, & Guzman-Parra, 2019).

Online-related attributes of tourism products have gained importance in pricing research, and online reputation and customer reviews are essential variables for price in tourism (Fearne, 2022; Papastathopoulos et al., 2021; Chen & Xie, 2017; Hu et al., 2019; Wang et al., 2019). In addition to reviews, the number of photos is analysed as a determinant of Airbnb listings (Tong & Gunter, 2022). The influence of best price clauses of online travel agents on hotel pricing has also been studied (Hunold et al., 2018). The gap between the supply and demand side regarding the impact of hotel star ratings and customer ratings on online hotel prices adds to the richness of online price research (Razavi & Israeli, 2019).

Sainaghi (2021), focussing on the price determinants of the sharing economy, has produced an essential overview of the studies in the period 2016 to early 2020 on the price determinants (and revenue management) of peer-to-peer accommodation platforms and identified six blocks of variables: the listing variables, host characteristics, location, guest review, destination characteristics and external comparison (the latter in the case of a multi-destination study). Falk et al. (2019) divided Airbnb's price determinants into subjective and objective determinants. They found that the role of price determinants varies by location (rural and urban) and between low and high-price Airbnb accommodations. The effects of several locational factors on Airbnb prices were later investigated by (Chica-Olmo et al., 2020).

Research has uncovered a price dependency between sharing economy accommodation and traditional accommodation, as demonstrated by the works of Önder et al. (2019) and Dogru et al. (2019). Comparative price research plays a role in understanding price differences. Research compares price determinants between high-priced hotels on the one hand and mid- and low-priced hotels on the other, highlighting the contrasting effects (Wang et al., 2019). The study of price determinants also extends to hotel discounts in opaque distribution channels, with hotel class, mode of operation, market structure and online reputation identified as determinants of discounts (Yang et al., 2019).

As many studies are conducted on coastal sites, studies on beach locations (Somphong et al., 2022), local special events (Sainaghi et al., 2021), sea view (Latinopoulus, 2018; Mendoza-Gonzales, 2018), proximity to the beach (Mendoza-Gonzales, 2018) or beach features (Boto-Garcia & Leoni, 2023) have received research attention. Location is also emphasised in other contexts (e.g. Fearne, 2022; Somphong et al., 2022; Pawlitz & Napierala, 2017; Cro & Martins, 2017) with the attribute of geographically close competition (Arzaghi et al., 2023; Bilbao-Terol et al., 2017; Wang & Rasouli, 2022; Chen & Xie, 2017), alpine ski resorts (Malasevska, 2018) and complementary local products such as on-site entertainment options or distance to them (Mitsis, 2023; Latinopoulus, 2018).

Competition-driven prices because of geographical proximity are an essential issue addressed in pricing research. More Airbnb accommodations competing in closer proximity harm prices, but this decreases as product differentiation increases (Voltes-Dorta & Inchausti-Sintes, 2021). The influence of location on price is considered in sustainability research, where the impact of streetscape features such as greenery, enclosure and walkability are studied as determinants of accommodation price (Wang & Rasouli, 2022). Regarding sustainability, Soler, Gemar et al. (2019) found that positioning a hotel as environmentally conscious does not affect prices. However, the results of the study for Algavre may be destination dependent.

Regarding competition, several close substitutes are regarded as significant competitors in determining prices, and the presence of substitutes shapes pricing decisions. It is worth noting that a company's exit from the market often results in reduced competition, leading to higher prices. Fageda et al. (2017) have shown that the bankruptcy of the airline Spainair led to a drop in prices on routes where its services were replaced by low-cost airlines. This relationship between market structure, competition and pricing is essential in pricing research.

Given the flexibility offered by online platforms, researchers are exploring their function as price-determining factors. Cancellation terms (Tong & Unter, 2022), flexible cancellation policies and instant booking (Benítez-Aurioles, 2018) impact price. The dimension of time is studied in two ways. One is the dimension of seasonal influence (Lévi et al., 2022) or booking date (Arzaghi et al., 2023; Solano-Sánchez et al., 2023; Sánchez-Lozano et al., 2021; Boto-García, 2022a). The study by Mitra (2020a) found no significant price differences due to the weekend effect and concluded that the weekend effect could be essentially location specific. Furthermore, Gričar and Bojnec (2019) used a vector autoregressive model to demonstrate the importance of overnight stays by foreign tourists regarding their price behaviour. The second dimension is the time of booking or the booking horizon (Solano-Sánchez et al., 2023; Guizzardi et al., 2022; Sánchez-Lozano et al., 2021).

Government-regulated barriers to entry into the market have also been a subject of study. The impact of a moratorium on hotel construction in Barcelona in 2015, which aimed to control tourism but resulted in higher hotel prices despite increased tourism, has been examined (Bel et al., 2022). In addition, Ahmadi, and Ghasemi (2022) have studied the influence of energy savings and government intervention on hotel pricing. The impact of removing Price Parity Clauses for online platforms in France on hotel prices has attracted research attention (Mantovani et al., 2021). These studies highlight the role of government regulations and policies in shaping pricing dynamics in the tourism industry.

Several determinants in pricing research have received comparatively less attention, but shed light on some aspects that contribute to a deeper understanding of pricing complexity, including factors such as English language skills (Sidali et al., 2019), the impact of the minimum wage on restaurant prices (Repetti & Roe, 2018), tourist socio-demographics, the size of the community and the trip purpose impacting Airbnb prices (Boto-García, 2022a), belief-based characteristics influencing hotel prices (Papastathopoulos et al., 2021), the country's crime index influencing the hostel prices (Cro & Martins, 2017) and the impact of time trends on Airbnb prices (Sainaghi et al., 2021).

Data collection for research on price determinants often relies on using online reservation systems to collect price information. Most commonly the Airbnb database is used for the price and exploratory variables (e.g. Fearne, 2022; Tong & Gunter, 2022; Benítez-Aurioles, 2018; Boto-Garcia & Leoni, 2023; Boto-García, 2022a) as well as the database Booking.com (e.g. Arzaghi et al., 2023; Solano-Sánchez et al., 2023; Sánchez-Lozano et al., 2021). Various online travel agents (Pawlitz & Napierala, 2017) and Tripadvisor (Soler, Gemar, & Guzman-Parra, 2019; Gordan et al., 2023) are also employed to collect data. This is probably due to the easily accessible, easy-to-use, and comprehensive information. Price data from other sources, like tourism accommodation brochures, are likewise used (Bilbao-Terol et al., 2017). For cruise liners, cruise company brochures, websites and catalogues published online are used to collect price data and price-determining factors (Espinet-Rius et al., 2018; Niavis & Tsiotas, 2018). Other data sources were also employed to contain exploratory variables, such as geographical information system (GIS) (Bilbao-Terol et al., 2017, Gordan et al., 2023), Google Street View for accommodation streetscape characteristics (Wang & Rasouli, 2022), farmers' associations for variables on farm accommodation (Sidali et al., 2019), household surveys for variables on consumers (Boto-García, 2022a). So, we see that the data for the price and its determinants are mainly collected online, probably because of the easier way of collection. Thus, there is a lack of data collection that focuses on the prices of walk-in customers, which might account for a larger share of tourists in some accommodations and areas. From a broader perspective, the price determinants in the business-to-business (B2B) market are also overlooked, as Han and Bai (2022) have already found that price research in tourism focuses on the business-to-customer (B2C) market.

Regarding methodology used to identify price determinants in tourism, hedonic price research is widely used in the period 2017 - early 2023. The hedonic analysis explains variations in prices of composite products (like tourism products usually are) as a function of the combined product attributes (Latinopoulus, 2018). Early research on hedonic pricing research by Rosen (1974) was later followed by a broader application of hedonic pricing in tourism, as shown by Latinopoulus (2018) and Soler, Gemar et al. (2019). In addition to hedonic analysis, there is some research comparing the ubiquitous application of hedonic pricing research with the alternative method of artificial neural networks, which shows some strengths in pricing research (Solano-Sánchez et al., 2023), complementing hedonic pricing research with clustering method, which allows to classify pricing decisions (Espinet-Rius et al., 2021), quantile regression (Falk et al., 2019), hedonic pricing models with quantile regression (Wang & Nicolau, 2017; Wang et al., 2019), advanced machine learning regression models (Razavi & Israeli, 2019), structural equation method (Toader et al., 2022), multivariate adaptive regression splines (Mitra, 2020a). An artificial intelligence-based framework is already being used in pricing research to predict the prices of Airbnb listings (Ghosh et al., 2023). Gričar and Bojnec (2019) have used a vector autoregressive model to demonstrate the importance of foreign tourists' overnight stays on pricing behaviour.

#### 3.2 Research on price development

An overview shows that the studies dealing with the development and design of pricing are very diverse and focus on different pricing approaches. While different pricing approaches are used, the research done by Vives and Jacob (2021) shows that hotels located in the same destination and belonging to the same hotel chain follow similar pricing strategies.

A closer look at some tourism industries shows tour operators and online travel agencies that service level, sales commission per unit, service cost and service compensation per unit impact pricing strategies (Long & Shi, 2017). Despite the significant role that the costs play as a price driver, it is surprising how little research focuses on this aspect, probably due to more complex data collection. The study by Raucci et al. (2020) examined the use of activity-based pricing for medium and small Italian restaurants to design cost-plus prices, highlighting the importance of the cost information provided by the activity-based costing approach.

The widespread use of dynamic pricing in tourism research is based on its ability to generate revenue by adjusting prices to different factors. However, it is not ubiquitously researched across the entire tourism industry. Dynamic pricing is mainly explored in tourism for hotel pricing. Guizzardi et al. (2017) analysed the price development for business customers in the hotel industry, highlighting that the volatility of hotel prices is greater than the volatility in the financial market. Melis and Piga (2017) found a heterogeneous attitude towards the dynamic online pricing of hotels and that uniform pricing is more widespread across 3-star or less-star hotels, while dynamic pricing is more widespread in higher-quality hotels. Ampountolas et al. (2021) also observe a heterogeneous use of dynamic pricing. While traditional pricing techniques or the opaque mechanism are more common in small hotel chains, dynamic pricing is more common in large hotels. In recent years, active pricing strategies have been extensively explored from different angles. For example, Abrate et al. (2019) investigated the relationship between dynamic pricing and revenue management, and Mitra (2020b) examined the asymmetric connection between tourist arrivals and dynamic pricing. Additionally, modelling the volatility index of average daily hotel room prices has emerged, aiding in the development of strategic price positioning (Koh et al., 2017). Furthermore, Mohammed et al. (2019) demonstrated that demand and pricing of neighbouring hotels and hotel-specific attributes are relevant for dynamic price dispersion.

As the sharing economy became an essential consideration in pricing research, probably due to easy data gathering, it has attracted attention in dynamic pricing research. The difference between professional and nonprofessional Airbnb hosts is analysed with dynamic pricing in the sharing economy intertwined with the online reservation system. In contrast, both types of hosts change the price throughout the seasons; professional hosts have a dynamic practice and change the price more frequently because they know the market better and have more experience, thus having higher market power (Casamatta et al., 2022). The study conducted by Gibbs et al. (2018) compared dynamic pricing between Airbnb hosts and hotels and found limited use of active pricing strategies by hosts; moreover, the study identified various reasons contributing to the heterogeneity in dynamic pricing among hosts. Price changes are examined in the context of differences between attribute-based and traditional room pricing in influencing consumer responses to hotel price changes (Gao et al., 2021).

As dynamic pricing is widely used in the tourism industry, the cultural heritage sector, an essential part of tourism demand in many destinations, is also addressed, and optimal dynamic pricing and conservation policy for cultural heritage site operators are modelled (Chenavaz et al., 2022). Moreover, macroeconomic elements are considered in the dynamic pricing research field. Nagengast et al. (2021) conducted a study investigating how prices respond to fluctuations in exchange rates within three distinct forms of dynamic pricing: clearance sales, seasonality of demand and advance-purchase discounts.

The discriminatory pricing strategy is often used in tourism pricing research due to its frequent use and connection to dynamic pricing. This strategy has been analysed for theme park visitors (Wang, Fan et al., 2021), and dual pricing of theme parks has been considered in research by Ko and Park (2019). The hidden price discrimination associated with price bundling is explained by Álvarez-Albelo et al. (2020), and additionally, third-degree price discrimination used by cruise companies is studied by Namin et al. (2020). Khandeparkar et al. (2020) examined the impact of a dual pricing system in India on the perception of price unfairness among the price-disadvantaged segment of international tourists.

Some research on price dynamics was conducted on price dispersion across different distribution channels. Cross-channel differences in last-minute travel discounts between online travel agencies and mobile lastminute online travel agencies have been found based on online reputation, complimentary services provided, and the type of rooms offered (Yang & Leung, 2018). Following Bigne et al. (2021), the dispersion of hotel prices across different distribution channels can be observed in the booking. Pan et al. (2022) have shown the impact of promotional pricing on restaurant choice from the perspective of first-time and repeat customers. Research on hotel discounts also included price discrimination through opaque distribution channels using discounting practices (Yang et al., 2019).

Other pricing strategies have received less attention. Premium pricing is discussed more concerning willingness to pay but less from the aspect of pricing strategy. Indeed, the premium pricing strategy research is linked to reputation or awards; Sipic (2017) found that the Blue Flag certificate leads to premium prices for marinas and hotels whose beaches have been awarded the eco-certificate. The pricing strategy based on low prices is investigated for the hotel industry concerning market orientation and hotel business performance (Sampaio et al., 2021). Bitsch et al. (2020) explored a pay-what-you-want pricing strategy in the context of wine tourism. The use of specific odd ending numbers for online tourism products intended to communicate information about price to customers has been found to vary across cultures (Jeong & Crompton, 2017). Regarding pricing strategies for cultural tourism products, Neuts (2020) examined implementing mixed pricing strategies within museums. Wu et al. (2017) conducted pricing research on cultural heritage sites, including ancient villages and towns.

After the impact of the Covid-19 pandemic on tourism in 2020, there was a rapid investigation into price responses in this context. Boto-García (2022b) studied the price response to the Covid-19 pandemic low demand among Airbnb hosts, Guizzardi et al. (2022) found that hotels adopted price discounting strategies during the pandemic and Luo et al. (2021) studied the impact of price strategies for tourism market recovery in China.

The relationship between price development and competition in the tourism industry is complex, as evidenced by Kim et al. (2018) that the reduction of hotel prices in response to competition depends on hotel size, hotel age, and chain affiliation, while Zhao et al. (2020) highlighted the asymmetry of price responses to hotel competition influenced by differences in customers' willingness to pay. Kurata and Ohe (2020) expanded price competition studies to include the role of social closeness for hot springs accommodation in Japan, while Mhlanga (2020) discovered that higher hotel prices during the high season attract new Airbnb providers, disrupting hotels' pricing power.

As competition is related to market structures, Gerpott and Berends (2022) have pointed out that pricing research generally overlooks economic factors such as market structures regarding competitive pricing. Specifically, in an oligopolistic market structure where large suppliers dominate, some pieces of research examine competitors' actions and reactions when making pricing decisions. Alegre and Sard (2017) investigated the impact of the presence or absence of a clear market leader on prices in the oligopolistic tour operator market. Game theory is employed in studying pricing decisions and strategies related to green or non-green products among tour operators (He et al., 2019) and determining equilibrium prices for hotels while considering competitor reactions (Godinho et al., 2018).

Comparative research on destination pricing has examined the integration of hospitality pricing in various countries, such as Montenegro and Slovenia (Gričar et al., 2022). In addition, studies have compared hotel room prices between popular destinations in the US and elsewhere (Mathur, 2019) and examined hospitality

prices in Slovenia relative to prices in the Eurozone (Gričar & Bojnec, 2018). To further enhance our understanding of destination pricing, research has found spatial price differentiation in tourist attraction tickets in China (Wang, Wu et al., 2021). These studies reveal the competitive landscape in destination pricing and contribute to further research.

#### 3.3. Research on customer price decisions

The review shows that prospect theory is often used in research in connection with customer decisions on prices in tourism. According to prospect theory, most people decide when evaluating advantages and disadvantages based on their reference point. They are more sensitive to losses than gains (Kahneman & Tversky, 1979 in Song & Jiang, 2019). Prospect theory is often studied for accommodation. Lim and Ok (2022) analysed how the percentage discount or accessible resort fee influences a promotion's perceived attractiveness and hotel customers' booking intentions. In contrast, unbundling the price of Airbnb accommodation causes the additional fees to be perceived as a loss according to prospect theory and thus harm demand decisions; however, for accommodation in the lower price segment, additional fees may signal higher quality (Dogru et al., 2021). Cumulative prospect theory combines Bayes' rule to study how potential tourists with different risk preferences and choices adjust their perceived reference prices and purchase intentions regarding gains or losses through informative and image advertising (Song & Jiang, 2019).

In addition to prospect theory, the study by Ming-Fong et al. (2019) conducted three experiments to understand how consumers' relative and referent thinking influence consumer behaviour and willingness to pay in online accommodation auctions, making significant theoretical and practical contributions to the field of consumer decisions in tourism. Furthermore, concerning discounts, the study by Park and Jang (2018) investigates the influence of discount rates on potential travellers' counterfactual thinking, further contributing to our understanding of consumer decision-making in tourism. Moreover, the impact of price representation using pricing around a rounded number on consumer choice preferences was also studied (Kim, Cui et al., 2020). The insights gained from these various studies hold valuable implications for developing pricing approaches in the tourism industry.

The distinction between internal and external reference prices in the tourism context has been investigated, considering the influence of reference prices on tourism consumer decision-making. Choi and Mattila (2018) discovered that consumers tend to rely more on the external reference price derived from the external environment when evaluating the actual price in the lodging industry. Further, Choi et al. (2019) investigated the effects of internal and external reference prices on powerful and powerless consumers in the lodging industry. They found that reference prices have different effects depending on consumers' sense of power. In addition to the studies highlighted, it is essential to mention the research conducted by Kim, Franklin et al. (2020) that analysed the impact of price dispersion (the variation of product price between different channels) on consumers' hotel choices.

The willingness to pay a premium price has received more attention than other pricing aspects in decisionmaking. Nieto-García et al. (2017) analysed the effect of external information (electronic word of mouth) and internal data (internal reference price) on consumers' willingness to pay for accommodation. The exploration of premium prices extends to specific domains within the tourism industry. Huang (2021) provided insights into the psychological mechanism underlying why people are willing to pay more for online travel experiences that include augmented reality. Similarly, researchers have explored consumers' willingness to pay a premium price for dining at Michelin-starred restaurants (Liu et al., 2022; Kiatkawsin & Han, 2019). Studies have highlighted the differences in willingness to pay for hotel accommodations across different destinations and seasons (Soler, Gemar, & Guzman-Parra, 2019). The impacts of co-created values in the sharing economy (Zhang et al., 2018) and the perception of fantasy associated with luxury cruises (Ioana-Daniela et al., 2018) have been found to impact consumers' willingness to pay a premium price.

Furthermore, the influence of altruism on the price evaluation of craft items among foreign tourists in South Africa has been investigated (Saayman et al., 2020). The study of premium price is extended to questions of sustainability. Consumers are willing to pay a premium price to stay in environmentally friendly hotels if they perceive positively the hotel's commitment to environmental protection (González-Rodríguez et al., 2020). Regarding sustainability, the willingness to pay an additional price to offset CO2 emissions is studied for ski passes (Haugom et al., 2021). Moreover, abnormal consumer behaviour related to Veblen goods in tourism, where consumers are willing to pay higher prices due to conspicuous behaviour, has received research attention (Park & Nicolau, 2018). This phenomenon adds to the growing body of research examining the complexities of consumer behaviour within tourism.

Market segmentation studies are essential for tailoring pricing strategies to address more homogeneous consumer decisions. In this regard, Masiero et al. (2020) conducted a market segmentation study of online hotel booking. They identified four distinct consumer segments (loss avoiders, strategic gamblers, moderately strategic consumers, and opportunistic cost minimizers) that exhibit different preferences regarding non-refundable and free cancellation rates. Regarding consumer heterogeneity research, demand decisions to purchase a more expensive tourism product depend on culture, functional vs. hedonistic consumption of the product, and the composition of the travel group (Jeong et al., 2019).

Research on consumer decision pricing in the tourism industry has thus made an essential contribution by examining various aspects of customer price decisions and uncovering the complexity of decision-making.

#### 4. Conclusion

This article provides insight into pricing research in tourism in recent years, identifying three key streams of research that illustrate the diversity of study areas and show the nature of research in tourism pricing. The first stream on price determinants reveals a complex interplay of determinants that influence pricing in tourism. The second stream focuses on the strategic and tactical aspects of pricing, specifically from a tourism supply perspective. It provides an understanding of pricing decisions in the highly competitive tourism market. The third stream focuses on the impact of consumer behaviour and preferences on pricing decisions and enhances our understanding of the multi-faceted nature of consumer decision research.

All three research streams tend strongly towards quantitative empirical studies, while mixed empirical, review and theoretical studies are rare. The present research lacks theoretical studies, although empirical studies rely on theoretical foundations. This can be seen as a lack of diversity of research approaches in this field, which limits the holistic understanding of this matter. In terms of time, the distribution shows 15 studies in 2017, 19 in 2018, 23 in 2019, 15 in 2020, 20 in 2021, 18 in 2022 and a modest six studies in 2023, considering that the dataset ends in early April 2023. Despite fluctuations in the number of studies from year to year, the overall distribution over time indicates a stable and consistent level of research activity in this area.

Research on price determinants shows significant diversity, including many price determinants. Quantitative empirical methodology is primarily used. Hedonic pricing research is a commonly used approach, as highlighted by Sainaghi (2019) in his review of price determinants in peer-to-peer accommodation platforms. However, various alternative methods are also employed. When collecting data, researchers primarily rely on online booking systems, especially platforms like Airbnb and Booking. This trend shows rapid development in research on online pricing due to its ease of use. It is consistent with the literature review conducted by Gerpott and Berends (2022), which indicates that online pricing has been an essential point in pricing research across various sectors, with a prevalence rate of approximately 71.8% from 2015 to 2022. Like Kienzler and Kowalkowski (2017), who highlighted the prevailing trends in general marketing pricing research, the present study shows that tourism pricing research focuses on the business-to-customer (B2C) market, while research focusing on business-to-business (B2B) market or a combination of both is neglected in tourism pricing research. In this regard, Kienzler and Kowalkowski (2017) highlight challenges related to data access and sample size as examples of research limitations for business-to-business (B2B) market studies.

Most of the research on the pricing decisions of tourism suppliers is concerned with pricing strategies, with comparatively little attention paid to tactical aspects of pricing, such as discounts and promotional prices. This agrees with Altinay and Taheri (2019), who state that pricing strategies are one of the emerging themes in hospitality and tourism publications. Among the pricing strategies, dynamic pricing, price discrimination and premium pricing have received more attention than others. Thus, the scope of pricing strategy research seems somewhat limited in its focus. There is a significant focus on the accommodation sector, including the sharing economy. Studies on pricing strategy are related to price discrimination and variation across distribution channels. The widespread use of the Internet has led to sophisticated pricing strategies in the tourism industry. The rapid adjustment of prices made possible by these strategies is related to fierce competition. However, Melis and Piga (2017) emphasise that the propensity of dynamic pricing in hotels is not as widespread as is often assumed in the literature. An essential feature of pricing research is also concerned with analysing oligopolistic markets and using game theory to uncover competition issues. In the field of pricing strategies, new changes are implemented quickly, so we can see that the impact of the Covid-19 pandemic on pricing strategies was implemented quite soon in research.

Research has been conducted on customer behaviour and pricing decisions, focusing on three key areas: prospect theory, reference price, and customer willingness to pay. Among the last ones, premium pricing gained significant attention. These are critical areas in pricing research for understanding customer preferences. Indeed, there has been a growing awareness of the significance of additional charges and premium prices in research compared to promotional prices and discounts.

The article makes a theoretical contribution by synthesising the research on pricing in tourism in recent years. A comprehensive overview of the current state of knowledge in this field is provided by reviewing and summarising several studies. In their extensive analysis of hospitality and tourism pricing research in selected leading journals for the period from 2010 to 2019, Han and Bai (2022) identified four main research themes (with some evolution between the first phase from 2010 to 2014 and the second phase from 2015 to 2019): a) pricing strategy and revenue management, b) lodging price with hedonic pricing models, c) sharing economy and its impacts, and d) electronic word of mouth (eWOM) and willingness to pay. Apart from revenue management, which is not covered in our current analysis but is of great importance in the context of research on tourism pricing, price determinants, and price development and demand are identified in the present article as research streams. This study also frequently analysed the sharing economy and the accommodation sector due to their connection with readily available online information. Although the present study uses a different database and timeframe (which partially overlaps), the research streams identified in the present article correspond to some extent to the research themes of Han and Bai's (2022) study, highlighting the ongoing emphasis on these research streams across the periods studied, demonstrating their continued relevance and stability in the field.

There are areas on which research should focus more and which pave the way for future research. Pricing research for niche tourism markets and pricing in the business-to-business (B2B) market have not received the attention they deserve, and qualitative research methods remain underexplored and offer the potential for further research progress. The need to understand specific areas of pricing in the tourism industry is of greater importance today than in the past. This is due to the far-reaching changes that have redefined markets for tourism resources such as labour and energy, as well as economic uncertainties that shed new light on the understanding of tourism pricing.

#### References

- Abrate, G., Nicolau, J.L., & Viglia, G. (2019). The impact of dynamic price variability on revenue maximization. *Tourism Management*, 74, 224-233. https://doi.org/10.1016/j.tourman.2019.03.013
- Ahmadi, S.A., & Ghasemi, P. (2022). Pricing strategies for online hotel searching: A fuzzy inference system procedure. *Kybernetes*, 52(11), 4913-4936. https://doi.org/10.1108/K-03-2022-0427
- Alegre, J., & Sard, M. (2017). Price strategies by German and British tour operators in Mallorca. *Journal of Hospitality and Tourism Management*, 33, 93-102. https://doi.org/10.1016/j.jhtm.2017.09.012
- Ali, F., Park, E., Kwon, J., & Chae, B. (2019). 30 years of contemporary hospitality management: Uncovering the bibliometrics and topical trends. *International Journal of Contemporary Hospitality Management*, *31*(7), 2641-2665. https://doi.org/10.1108/IJCHM-10-2018-0832
- Altinay, L. & Taheri, B. (2019). Emerging themes and theories in the sharing economy: A critical note for hospitality and tourism. *International Journal of Contemporary Hospitality Management, 31*(1), 180-193. https://doi.org/10.1108/IJCHM-02-2018-0171
- Álvarez-Albelo, C.D., Hernández-Martín, R. & Padrón-Fumero, N. (2020). The effects on tourism of airfare subsidies for residents: The key role of packaging strategies. *Journal of Air Transport Management, 84*, Article 101772. https://doi.org/10.1016/j.jairtraman.2020.101772
- Ampountolas, A., Shaw, G., & James, S. (2021). Examining the relationships between market indicators and hotel pricing approaches. *Tourism Economics*, *27*(8), 1591-1614. https://doi.org/10.1177/1354816620925225
- Arzaghi, M., Genc, I. H., & Naik, S. (2023). Clustering and hotel room prices in Dubai. *Tourism Economics*, *29*(1), 116-136. https://doi.org/10.1177/13548166211040931
- Barnes, S.J., & Kirshner, S.N. (2021). Understanding the impact of host facial characteristics on Airbnb pricing: Integrating facial image analytics into tourism research. *Tourism Management, 83*, Article 104235. https://doi.org/10.1016/j.tourman.2020.104235
- Bel, G., Joseph, S., & Mazaira-Font, F.A. (2022). The effects of moratoriums on hotel building: An anti-tourism measure, or rather protection for local incumbents? *Applied Economics Letters*, *29*(14), 1319-1324. https://doi.org/10.1080/13504851.2021.1927958
- Benítez-Aurioles, B. (2018). Why are flexible booking policies priced negatively? *Tourism Management, 67*, 312-325. https://doi.org/10.1016/j.tourman.2018.02.008
- Bigne, E., Nicolau, J.L., & William, E. (2021). Advance booking across channels: The effects on dynamic pricing. *Tourism Management*, 86, Article 104341. https://doi.org/10.1016/j.tourman.2021.104341
- Bilbao-Terol, C., Cañal-Fernández, V., Valdés, L., & Del Valle, E. (2017). Rural tourism accommodation prices by land use-based hedonic approach: First results from the case study of the self-catering cottages in Asturias. *Sustainability* (*Switzerland*), *9*(10), Article 1688. https://doi.org/10.3390/su9101688
- Bitsch, L., Hanf, J.H., & Rüdiger, J. (2020). An innovative price-setting approach: A pay-what-you-want experiment. *British Food Journal*, 122(8), 2481-2496. https://doi.org/10.1108/BFJ-07-2019-0504
- Boto-García, D. (2022a). Multiway clustering in tourism research. *Current Issues in Tourism, 25*(3), 363-378. https://doi.org/10.1080/13683500.2021.1965552
- Boto-García, D. (2022b). Heterogeneous price adjustments among Airbnb hosts amid COVID-19: Evidence from Barcelona. *International Journal of Hospitality Management, 102*, Article 103169. https://doi.org/10.1016/j.ijhm.2022.103169
- Boto-García, D., & Leoni, V. (2023). The economic value of coastal amenities: Evidence from beach capitalization effects in peer-to-peer markets. *Environmental and Resource Economics*, 84(2), 529-557. https://doi.org/10.1007/s10640-022-00735-5
- Carrera-Rivera, A., Larrinaga, F., & Lasa, G. (2022). Context-awareness for the design of Smart-product service systems: Literature review. *Computers in Industry, 142*, Article 103730. https://doi.org/10.1016/j.compind.2022.103730
- Carrera-Rivera, A., Ochoa-Agurto, W., Larrinaga, F., & Lasa, G. (2022). How-to conduct a systematic literature review: A quick guide for computer science research. *MethodsX*, 9, Article 101895. https://doi.org/10.1016/j.mex.2022.101895



- Casamatta, G., Giannoni, S., Brunstein, D., & Jouve, J. (2022). Host type and pricing on Airbnb: Seasonality and perceived market power. *Tourism Management*, 88, Article 104433. https://doi.org/10.1016/j.tourman.2021.104433
- Chen, Y., & Xie, K.L. (2017). Consumer valuation of Airbnb listings: A hedonic pricing approach. *International Journal of Contemporary Hospitality Management*, 29(9), 2405-2424. https://doi.org/10.1108/IJCHM-10-2016-0606
- Chenavaz, R.Y., Leocata, M., Ogonowska, M., & Torre, D. (2022). Sustainable tourism. *Journal of Economic Dynamics and Control, 143*, Article 104483. https://doi.org/10.1016/j.jedc.2022.104483
- Chica-Olmo, J., González-Morales, J.G., & Zafra-Gómez, J.L. (2020). Effects of location on Airbnb apartment pricing in Málaga. *Tourism Management*, 77, Article 103981. https://doi.org/10.1016/j.tourman.2019.103981
- Choi, C., & Mattila, A.S. (2018). The effects of internal and external reference prices on travelers' price evaluations. *Journal of Travel Research*, *57*(8), 1068-1077. https://doi.org/10.1177/0047287517735910
- Choi, C., Choi, S., & Mattila, A.S. (2019). The role of reference prices in the lodging industry: The moderating effect of an individual's psychological state. *Journal of Travel and Tourism Marketing*, *36*(4), 511-520. https://doi.org/10.1080/10548408.2019.1583626
- Cró, S., & Martins, A.M. (2017). The importance of security for hostel price premiums: European empirical evidence. *Tourism Management, 60*, Article 159165. https://doi.org/10.1016/j.tourman.2016.11.021
- De Toni, D., Milan, G.S., Saciloto, E.B., & Larentis, F. (2017). Pricing strategies and levels and their impact on corporate profitability. *Revista de Administração (São Paulo)*, *52*, 120-133. https://doi.org/10.1016/j.rausp.2016.12.004
- Dogru, T., Majid, K., Laroche, M., Mody, M., & Suess, C. (2021). Communicating quality while evoking loss How consumers assess extra charges in the Airbnb marketplace. *Tourism Management*, 87, Article 104376. https://doi.org/10.1016/j.tourman.2021.104376
- Dogru, T., Mody, M., & Suess, C. (2019). Adding evidence to the debate: Quantifying Airbnb's disruptive impact on ten key hotel markets. *Tourism Management*, 72, 27-38. https://doi.org/10.1016/j.tourman.2018.11.008
- Espinet-Rius, J.M., Fluvià-Font, M., Rigall-Torrent, R., & Oliveras-Corominas, A. (2018). Cruise tourism: A hedonic pricing approach. *European Journal of Management and Business Economics*, *27*(1), 101-122. https://doi.org/10.1108/ejmbe-11-2017-0053
- Espinet-Rius, J.M., Gassiot-Melian, A., & Rigall-I-Torrent, R. (2021). Price determinants and classification of tactical pricing decisions in the cruise industry. *Maritime Policy and Management, 48*(2), 239-258. https://doi.org/10.1080/03088839.2020.1843723
- Fageda, X., Jiménez, J.L., Perdiguero, J., & Marrero, K. (2017). Does market exit of a network airline affect airline prices and frequencies on tourist routes? *Tourism Management*, 61, 465-471. https://doi.org/10.1016/j.tourman.2017.03.016
- Falk, M., Larpin, B., & Scaglione, M. (2019). The role of specific attributes in determining prices of Airbnb listings in rural and urban locations. *International Journal of Hospitality Management, 83*, 132-140. https://doi.org/10.1016/j.ijhm.2019.04.023
- Fearne, R. (2022). An analysis of the distribution and price determinants of Airbnb rentals in Malta. *International Journal of Housing Markets and Analysis*, 15(1), 231-246. https://doi.org/10.1108/IJHMA-12-2020-0147
- Gao, Y.L., Guillet, B.D., & Wang, P. (2021). Effect of price change alert on perceptions of hotel attribute-based room pricing (ABP) versus traditional room pricing (TRP). *International Journal of Hospitality Management, 92*, Article 102725. https://doi.org/10.1016/j.ijhm.2020.102725
- Gerpott, T.J., & Berends, J. (2022). Competitive pricing on online markets: A literature review. *Journal of Revenue and Pricing Management*, 21(6), 596-622. https://doi.org/10.1057/s41272-022-00390-x
- Ghosh, I., Jana, R.K., & Abedin, M.Z. (2023). An ensemble machine learning framework for Airbnb rental price modelling without using amenity-driven features. *International Journal of Contemporary Hospitality Management, 35*(10, 3592-3611. https://doi.org/10.1108/IJCHM-05-2022-0562
- Gibbs, C., Guttentag, D., Gretzel, U., Yao, L., & Morton, J. (2018). Use of dynamic pricing strategies by Airbnb hosts. International Journal of Contemporary Hospitality Management, 30(1), 2-20. https://doi.org/10.1108/IJCHM-09-2016-0540



- Godinho, P., Phillips, P., & Moutinho, L. (2018), Hotel location when competitors may react: A game-theoretic gravitational model. Tourism Management, 69, 384-396. https://doi.org/10.1016/j.tourman.2018.06.014
- González-Rodríguez, M.R., Díaz-Fernández, M.C., & Font, X. (2020). Factors influencing willingness of customers of environmentally friendly hotels to pay a price premium. International Journal of Contemporary Hospitality Management, 32(1), 60-80. https://doi.org/10.1108/IJCHM-02-2019-0147
- Gordan, M., Pet, E., Popescu, G., Brad, I., Milin, A.I., Adamov, T.C., . . . lancu, T. (2023). Factors influencing the accommodation prices of Romanian rural tourism. Sustainability (Switzerland), 15(1), Article 191. https://doi.org/10.3390/su15010191
- Gričar, S., & Bojnec, S. (2018). Tourism price causalities: Case of an Adriatic country. International Journal of Tourism Research, 20(1), 82-87. https://doi.org/10.1002/jtr.216
- Gričar, S., & Bojnec, Š. (2019). Prices of short-stay accommodation: Time series of a eurozone country. International Journal of Contemporary Hospitality Management, 31(12), 4500-4519. https://doi.org/10.1108/IJCHM-01-2019-0091
- Gričar, S., Bojnec, Š., Karadžić, V., & Backović, T. (2022). Tourism price normalities in two Adriatic east coast 'euro' countries. Economic Research - Ekonomska Istrazivanja, 35(1), 4865-4883. https://doi.org/10.1080/1331677X.2021.2019078
- Guizzardi, A., Angelini, G., & Pons, F.M.E. (2020). Does advance booking matter in hedonic pricing? A new multivariate approach. International Journal of Tourism Research, 22(3), 277-288. https://doi.org/10.1002/jtr.2331
- Guizzardi, A., Ballestra, L.V., & D'Innocenzo, E. (2022). Hotel dynamic pricing, stochastic demand and covid-19. Annals of Tourism Research, 97, Article 103495, https://doi.org/10.1016/i.annals.2022.103495
- Guizzardi, A., Pons, F.M.E., & Ranieri, E. (2017). Advance booking and hotel price variability online: Any opportunity for business customers? International Journal of Hospitality Management, 64, 85-93. https://doi.org/10.1016/j.ijhm.2017.05.002
- Han, W., & Bai, B. (2022). Pricing research in hospitality and tourism and marketing literature: A systematic review and research agenda. International Journal of Contemporary Hospitality Management, 34(5), 1717-1738. https://doi.org/https://doi.org/10.1108/IJCHM-08-2021-0963
- Haugom, E., Malasevska, I., Alnes, P.K., & Mydland, Ø. (2021). Willingness to pay for "green skiing". Journal of Hospitality and Tourism Management, 47, 252-255. https://doi.org/10.1016/j.jhtm.2021.03.010
- He, Y., He, P., Xu, F., & Shi, C. (2019). Sustainable tourism modeling: Pricing decisions and evolutionarily stable strategies for competitive tour operators. Tourism Economics, 25(5), 779-799, https://doi.org/10.1177/1354816618806729
- Hu, X., Yang, Y., & Park, S. (2019). A meta-regression on the effect of online ratings on hotel room rates. International Journal of Contemporary Hospitality Management, 31(12), 4438-4461. https://doi.org/10.1108/IJCHM-10-2018-0835
- Huang, T-L. (2021). Restorative experiences and online tourists' willingness to pay a price premium in an augmented reality environment. Journal of Retailing and Consumer Services, 58, Article 102256. https://doi.org/10.1016/j.jretconser.2020.102256
- Hunold, M., Kesler, R., Laitenberger, U., Schlütter, F. (2018) Evaluation of best price clauses in online hotel bookings. International Journal of Industrial Organization, 61, 542-571. https://doi.org/10.1016/j.ijindorg.2018.03.008
- Ioana-Daniela, S., Lee, K., Kim, I., Kang, S., & Hyun, S.S. (2018). Attitude toward luxury cruise, fantasy, and willingness to pay a price premium. Asia Pacific Journal of Tourism Research, 23(4), 325-343. https://doi.org/10.1080/10941665.2018.1433699
- Jeong, J.Y., & Crompton, J.L. (2017). The use of odd-ending numbers in the pricing of five tourism services in three different cultures. Tourism Management, 62, 135-146. https://doi.org/10.1016/j.tourman.2017.04.002
- Jeong, J.Y., Crompton, J.L., & Hyun, S.S. (2019). What makes you select a higher price option? Price-quality heuristics, cultures, and travel group compositions. International Journal of Tourism Research, 21(1), 1-10. https://doi.org/10.1002/jtr.2236
- Khandeparkar, K., Maheshwari, B., & Motiani, M. (2020). Why should I pay more? Testing the impact of contextual cues on perception of price unfairness for the price-disadvantaged segment in dual pricing. Tourism Management, 78, Article 104075. https://doi.org/10.1016/j.tourman.2020.104075



- Kiatkawsin, K., & Han, H. (2019). What drives customers' willingness to pay price premiums for luxury gastronomic experiences at Michelin-starred restaurants? *International Journal of Hospitality Management, 82*, 209-219. https://doi.org/10.1016/j.ijhm.2019.04.024
- Kienzler, M., & Kowalkowski, C. (2017). Pricing strategy: A review of 22 years of marketing research. *Journal of Business Research*, 78, 101-110. https://doi.org/10.1016/j.jbusres.2017.05.005
- Kim, J., Cui, Y.G., Choi, C., Lee, S.J., & Marshall, R. (2020). The influence of preciseness of price information on the travel option choice. *Tourism Management*, 79, Article 104012. https://doi.org/10.1016/j.tourman.2019.104012
- Kim, J., Franklin, D., Phillips, M., & Hwang, E. (2020). Online travel agency price presentation: Examining the influence of price dispersion on travelers' hotel preference. *Journal of Travel Research*, *59*(4), 704-721. https://doi.org/10.1177/0047287519857159
- Kim, M., Lee, S.K., & Roehl, W.S. (2018). Competitive price interactions and strategic responses in the lodging market. *Tourism Management, 68*, 210-219. https://doi.org/10.1016/j.tourman.2018.03.013
- Ko, Y.D., & Park, K. (2019). Theme park revenue management with a dual admission policy. *Asia Pacific Journal of Tourism Research*, 24(9), 865-881. https://doi.org/10.1080/10941665.2019.1635502
- Koh, Y., Defranco, A., & Back, K. (2017). Modeling average daily rate (ADR) volatility index and room price positioning matrix. *Tourism Economics*, 23(7), 1476-1483. https://doi.org/10.1177/1354816617702051
- Kurata, S., & Ohe, Y. (2020). Competitive structure of accommodations in a traditional Japanese hot springs tourism area. Sustainability (Switzerland), 12(7), Article 3062. https://doi.org/10.3390/su12073062
- Latinopoulos, D. (2018). Using a spatial hedonic analysis to evaluate the effect of sea view on hotel prices. *Tourism Management*, 65, 87-99. https://doi.org/10.1016/j.tourman.2017.09.019
- Lévi, L., Nowak, J.J., Petit, S., & Hammadou, H. (2022). Industrial legacy and hotel pricing: An application of spatial hedonic pricing analysis in Nord-Pas-de-Calais, France. *Tourism Economics*, *28*(4), 870-898. https://doi.org/10.1177/1354816620977003
- Lim, S.E., & Ok, C. (2022). A percentage-off discount versus free surcharge: The impact of promotion type on hotel consumers' responses. *Tourism Management*, *91*, Article 104504. https://doi.org/10.1016/j.tourman.2022.104504
- Liu, C., Kuo, T.M., Wang, Y., Shen, Y., Chen, S., & Hong, J. (2022). Perceived luxurious values and pay a price premium for Michelin-starred restaurants: A sequential mediation model with self-expansion and customer gratitude. International Journal of Hospitality Management, 103, Article 103185. https://doi.org/10.1016/j.ijhm.2022.103185
- Long, Y., & Shi, P. (2017). Pricing strategies of tour operator and online travel agency based on cooperation to achieve O2O model. *Tourism Management*, 62, 302-311. https://doi.org/10.1016/j.tourman.2017.05.002
- Luo, Y., Li, Y., Wang, G., & Ye, Q. (2021). Agent-based modeling and simulation of tourism market recovery strategy after Covid-19 in Yunnan, China. *Sustainability (Switzerland)*, 13(21), Article 11750. https://doi.org/10.3390/su132111750
- Malasevska, I. (2018). A hedonic price analysis of ski lift tickets in Norway. *Scandinavian Journal of Hospitality and Tourism*, 18(2), 132-148. https://doi.org/10.1080/15022250.2017.1322531
- Mantovani, A., Piga, C.A., & Reggiani, C. (2021). Online platform price parity clauses: Evidence from the EU Booking.com case. *European Economic Review, 131*, Article 103625. https://doi.org/10.1016/j.euroecorev.2020.103625
- Masiero, L., Viglia, G., & Nieto-Garcia, M. (2020). Strategic consumer behavior in online hotel booking. *Annals of Tourism Research*, 83, Article 102947. https://doi.org/10.1016/j.annals.2020.102947
- Mathur, S. (2019). Hotel pricing at popular US tourist destinations. *Tourism Recreation Research*, 44(2), 247-256. https://doi.org/10.1080/02508281.2019.1566047
- Melis, G., & Piga, C.A. (2017). Are all online hotel prices created dynamic? An empirical assessment. *International Journal of Hospitality Management, 67*, 163-173. https://doi.org/10.1016/j.ijhm.2019.102406
- Mendoza-González, G., Martínez, M.L., Guevara, R., Pérez-Maqueo, O., Garza-Lagler, M.C., & Howard, A. (2018). Towards a sustainable sun, sea, and sand tourism: The value of ocean view and proximity to the coast. *Sustainability* (*Switzerland*), 10(4), Article 1012. https://doi.org/10.3390/su10041012



- Mhlanga, O. (2020). Airbnb and hotels: Friends, enemies or frenemies? *International Journal of Culture, Tourism, and Hospitality Research*, 15(2), 202-217. https://doi.org/10.1108/IJCTHR-02-2020-0051
- Ming-Fong Yu, S., Rong-Da Liang, A., & Lin, C. (2019). The effects of relative and referent thinking on tourism product design. *Tourism Management*, 73, 157-171. https://doi.org/10.1016/j.tourman.2019.02.001
- Mitra, S.K. (2020a). Estimating the duration of different seasons and their impact on hotel room prices. *International Journal of Hospitality Management, 90*, Article 102604. https://doi.org/10.1016/j.ijhm.2020.102604
- Mitra, S.K. (2020b). An analysis of asymmetry in dynamic pricing of hospitality industry. *International Journal of Hospitality Management*, 89, Article 102406. https://doi.org/10.1016/j.ijhm.2019.102406
- Mitsis, P. (2023). Selecting independent variables in the hedonic analysis of hotel rooms. *Journal of Vacation Marketing*. Advance online publication. https://doi.org/10.1177/13567667231152939
- Mohammed, I., Guillet, B.D., & Law, R. (2019). Modeling dynamic price dispersion of hotel rooms in a spatially agglomerated tourism city for weekend and midweek stays. *Tourism Economics*, 25(8), 1245-1264. https://doi.org/10.1177/1354816619826829
- Nagengast, A.J., Bursian, D., & Menz, J. (2021). Dynamic pricing and exchange rate pass-through: Evidence from transaction-level data. *European Economic Review, 133*, Article 103662. https://doi.org/10.1016/j.euroecorev.2021.103662
- Namin, A., Gauri, D.K., & Kwortnik, R.J. (2020). Improving revenue performance with third-degree price discrimination in the cruise industry. *International Journal of Hospitality Management, 89*, Article 102597. https://doi.org/10.1016/j.ijhm.2020.102597
- Napierala, T., & Pawlitz, A. (2023). Fair pricing in tourism: From profitability towards sustainability. In A.M. Morrison & D. Buhalis (Eds.), Routledge handbook of trends and issues in tourism sustainability, planning and development, management, and technology (pp. 92-102). Routledge.
- Neuts, B. (2020). Mixed pricing strategies in museums: Examining the potential of voluntary contributions for capturing consumer surplus. *Tourism Economics*, 26(1), 115-136. https://doi.org/10.1177/1354816619828223
- Niavis, S., & Tsiotas, D. (2018). Decomposing the price of the cruise product into tourism and transport attributes: Evidence from the Mediterranean market. *Tourism Management*, 67, 98-110. https://doi.org/10.1016/j.tourman.2018.01.004
- Nieto-García, M., Muñoz-Gallego, P.A., & González-Benito, Ó. (2017). Tourists' willingness to pay for an accommodation: The effect of eWOM and internal reference price. *International Journal of Hospitality Management, 62,* 67-77. https://doi.org/10.1016/j.ijhm.2016.12.006
- Önder, I., Weismayer, C., & Gunter, U. (2019). Spatial price dependencies between the traditional accommodation sector and the sharing economy. *Tourism Economics*, 25(8), 1150-1166. https://doi.org/10.1177/1354816618805860
- Pan, H., Liu, Z., & Ha, H. (2022). Perceived price and trustworthiness of online reviews: Different levels of promotion and customer type. *International Journal of Contemporary Hospitality Management*, *34*(10), 3834-3854. https://doi.org/10.1108/IJCHM-12-2021-1524
- Papastathopoulos, A., Koritos, C., & Mertzanis, C. (2021). Effects of faith-based attributes on hotel prices: The case of halal services. *International Journal of Contemporary Hospitality Management, 33*(8), 2839-2861. https://doi.org/10.1108/IJCHM-01-2021-0044
- Park, J., & Jang, S. (2018). Did I get the best discount? Counterfactual thinking of tourism products. *Journal of Travel Research*, *57*(1), 17-30. https://doi.org/10.1177/0047287516680775
- Park, S., & Nicolau, J.L. (2018). If you, tourist, behave irrationally, I'll find you! *Tourism Management, 69*, 434-439. https://doi.org/10.1016/j.tourman.2018.06.017
- Pawlitz, A., & Napierala, T. (2017). The determinants of hotel room rates: An analysis of the hotel industry in Warsaw, Poland. *International Journal of Contemporary Hospitality Management*, *29*(1), 571-588. https://doi.org/10.1108/IJCHM-12-2015-0694 b
- Rao, V.R. (1984). Pricing research in marketing: The state of the art. *Journal of Business, 7*(1), S39-S60. https://www.jstor.org/stable/2352922



- Raucci, D., Lepore, D., & Sabatiello, R. (2020). Activity-based pricing in small and medium-sized restaurants. Evidence from the Italian context. *International Journal of Culture, Tourism, and Hospitality Research, 14*(4), 565-577. https://doi.org/10.1108/IJCTHR-02-2020-0046
- Razavi, R., & Israeli, A.A. (2019). Determinants of online hotel room prices: Comparing supply-side and demand-side decisions. *International Journal of Contemporary Hospitality Management*, *31*(5), 2149-2168. https://doi.org/10.1108/IJCHM-09-2018-0707
- Repetti, T., & Roe, S. (2018). Minimum wage change effects on restaurant pricing and employment. *International Journal of Contemporary Hospitality Management*, 30(3), 1545-1562. https://doi.org/10.1108/IJCHM-03-2016-0130
- Rosen, S. (1974). Hedonic prices and implicit markets: Product differentiation in pure competition. *Journal of Political Economy*, 82(1), 34-55. https://www.jstor.org/stable/1830899
- Saayman, A., Li, S., Scholtz, M., & Fourie, A. (2020). Altruism, price judgement by tourists and livelihoods of informal crafts traders. *Journal of Sustainable Tourism*, 28(12), 1988-2007. https://doi.org/10.1080/09669582.2020.1781872
- Sainaghi, R. (2021). Determinants of price and revenue for peer-to-peer hosts. The state of the art. *International Journal of Contemporary Hospitality Management*, 33(2), 557-586. https://doi.org/10.1108/IJCHM-08-2020-0884
- Sainaghi, R., Abrate, G., & Mauri, A. (2021). Price and RevPAR determinants of Airbnb listings: Convergent and divergent evidence. *International Journal of Hospitality Management, 92*, Article 102709. https://doi.org/10.1016/j.ijhm.2020.102709
- Sampaio, C.A.F., Rodrigues, R.G., & Hernández-Mogollón, J.M. (2021). Price strategy, market orientation, and business performance in the hotel industry. *Journal of Global Information Management*, *29*(1), 85-102. https://doi.org/10.4018/JGIM.2021010105
- Sánchez-Lozano, G., Pereira, L.N., & Chávez-Miranda, E. (2021). Big data hedonic pricing: Econometric insights into room rates' determinants by hotel category. *Tourism Management, 85*, Article 104308. https://doi.org/10.1016/j.tourman.2021.104308
- Shakina, E., & Cabras, I. (2022). How do beer prices vary across different pubs? An empirical study. *International Journal of Contemporary Hospitality Management*, 34(5), 1984-2003. https://doi.org/10.1108/IJCHM-08-2021-0981
- Sidali, K.L., Spitaler, A., & Schamel, G. (2019). Agritourism: A hedonic approach of quality tourism indicators in South Tyrol. Sustainability (Switzerland), 11(13), Article 3747. https://doi.org/10.3390/su11133747
- Sipic, T. (2017). Eco-labelling of marine recreation services: The case of Blue Flag price premium in Croatia. *Journal of Ecotourism*, 16(1), 1-23. https://doi.org/10.1080/14724049.2016.1194848
- Solano-Sánchez, M.Á., Núñez-Tabales, J.M., & Caridad-y-López-del-Río, L. (2023). Tourist accommodation pricing through peer-to-peer platform: Evidence from Seville (Spain). *Economic Research Ekonomska Istrazivanja*, *36*(1), 3458-3477. https://doi.org/10.1080/1331677X.2022.2108478
- Soler, I.P., Gemar, G., & Guzman-Parra, V.F. (2019). A comparison of destinations' impacts on hotel rates. *International Journal of Hospitality Management*, 77, 226-237. https://doi.org/10.1016/j.ijhm.2018.07.002
- Soler, I.P., Gemar, G., Correia, M.B., & Serra, F. (2019). Algarve hotel price determinants: A hedonic pricing model. *Tourism Management*, 70, 311-321. https://doi.org/10.1016/j.tourman.2018.08.028
- Somphong, C., Udo, K., Ritphring, S., & Shirakawa, H. (2022). An estimate of the value of the beachfront with respect to the hotel room rates in Thailand. *Ocean and Coastal Management, 226*, Article 106272. https://doi.org/10.1016/j.ocecoaman.2022.106272
- Song, H., & Jiang, Y. (2019). Dynamic pricing decisions by potential tourists under uncertainty: The effects of tourism advertising. *Tourism Economics*, 25(2), 213-234. https://doi.org/10.1177/1354816618797250
- Song, H., & Li, G. (2008). Tourism demand modelling and forecasting A review of recent research. *Tourism Management,* 29(2), 203-220. https://doi.org/10.1016/j.tourman.2007.07.016
- Song, H., Qiu, R.T., & Park, J. (2019). A review of research on tourism demand forecasting: Launching the Annals of Tourism Research Curated Collection on tourism demand forecasting. *Annals of Tourism Research*, 75, 338-362. https://doi.org/10.1016/j.annals.2018.12.001

- Toader, V., Negruşa, A.L., Bode, O.R., & Rus, R.V. (2022). Analysis of price determinants in the case of Airbnb listings. *Economic Research-Ekonomska Istrazivanja*, 35(1), 2493-2509. https://doi.org/10.1080/1331677X.2021.1962380
- Tong, B., & Gunter, U. (2022). Hedonic pricing and the sharing economy: How profile characteristics affect Airbnb accommodation prices in Barcelona, Madrid, and Seville. *Current Issues in Tourism*, 25(20), 3309-3328. https://doi.org/10.1080/13683500.2020.1718619
- Vives, A., & Jacob, M. (2021). Dynamic pricing in different Spanish resort hotels. *Tourism Economics*, 27(2), 398-411. https://doi.org/10.1177/1354816619870652
- Voltes-Dorta, A., & Inchausti-Sintes, F. (2021). The spatial and quality dimensions of Airbnb markets. *Tourism Economics*, 27(4), 688-702. https://doi.org/10.1177/1354816619898075
- Wang, D. & Nicolau, J.L. (2017) Price determinants of sharing economy based accommodation rental: A study of listings from 33 cities on Airbnb.com. *International Journal of Hospitality Management*, 62, 120-131. https://doi.org/10.1016/j.ijhm.2016.12.007
- Wang, R., & Rasouli, S. (2022). Contribution of streetscape features to the hedonic pricing model using geographically weighted regression: Evidence from Amsterdam. *Tourism Management*, *91*, Article 104523. https://doi.org/10.1016/j.tourman.2022.104523
- Wang, T., Wu, P., Ge, Q., & Ning, Z. (2021). Ticket prices and revenue levels of tourist attractions in China: Spatial differentiation between prefectural units. *Tourism Management*, 83, Article 104214. https://doi.org/10.1016/j.tourman.2020.104214
- Wang, X., Fan, Z., & Li, H. (2021). Investigating the discriminatory pricing strategy of theme parks considering visitor's perceptions. *Asia Pacific Journal of Tourism Research*, 26(1), 1-14. https://doi.org/10.1080/10941665.2020.1801783
- Wang, X., Sun, J. & Wen, H. (2019). Tourism seasonality, online user rating and hotel price: A quantitative approach based on the hedonic price model. *International Journal of Hospitality Management, 79*, 140-147. https://doi.org/10.1016/j.ijhm.2019.01.007
- Wu, W., Zhang, L., & Qiu, F. (2017). Determinants of tourism ticket pricing for ancient villages and towns: Case studies from Jiangsu, Zhejiang, Shanghai and Anhui provinces. *Tourism Management, 58*, 270-275. https://doi.org/10.1016/j.tourman.2016.03.011
- Yang, Y., & Leung, X. Y. (2018). A better last-minute hotel deal via app? Cross-channel price disparities between HotelTonight and OTAs. *Tourism Management*, 68, 198-209. https://doi.org/10.1016/j.tourman.2018.03.016
- Yang, Y., Jiang, L., & Schwartz, Z. (2019). Who's hiding? Room rate discounts in opaque distribution channels. *International Journal of Hospitality Management, 80,* 113-122. https://doi.org/10.1016/j.ijhm.2019.02.001
- Zhang, T.C., Jahromi, M.F., & Kizildag, M. (2018). Value co-creation in a sharing economy: The end of price wars? *International Journal of Hospitality Management, 71*, 51-58. https://doi.org/10.1016/j.ijhm.2017.11.010
- Zhao, Z., Chen, M., Su, C.J., & Tian, L. (2020). Asymmetric price responses to hotel competition caused by heterogeneous customers' willingness to pay. *International Journal of Hospitality Management, 90*, Article 102409. https://doi.org/10.1016/j.ijhm.2019.102409

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