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Determinant Factors Influencing Hotel Room Price in Vangvieng, Lao PDR: An Application of Hedonic Price Model.

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ABSTRACT

This study aims to examine how hotel room attributes, hotel services, and environment (located close to river) influence hotel room prices. The Econometric estimation using the semi-logarithmic form for the Econometric equation was applied. Data on hotel attributes, services, and environment were gathered from the “Agoda.com” website. The findings suggest that the room attributes include: room size, air conditioning, and balcony, can influence room prices. In addition, hotel services include: providing breakfast, spas and massage, allowing for pets and smoking also affect the room rates. Hotel environment such as locating close to a river also significantly increase Tourists’ willingness to pay. Hotels can strive benefits of understanding customers’ needs and expectation and provide services, products according to their needs.

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1. Introduction

Tourism industry is one of the fastest growing industries with the average growth of about 4 percent per year (UNWTO, 2023). In 2022, there were 960 million international tourists (also known as overnight visitors) worldwide, a 110 percent increase from 457.5 million in 2021. Based on both domestic and international travel, preliminary estimates of the tourism direct gross domestic product (TDGDP) for 2023 indicate that it will reach USD 3.3 trillion, or 3 percent of the world GDP (UNWTO, 2023). It has been acknowledged by the governments both developed and developing countries that tourism industry brings several benefits to their economy such as; job creation, income generation, skills and technology improvement, source of foreign currency just to mention a few. It becomes visible as a large major growing segment in the global economy which plays a vital role in supporting a country’s trade performance. Therefore, a lot of national governments have sought to develop their competitiveness with respect to the global tourism market (Faulkner, Oppermann & Fredline, 1999).

The steadily growth in tourism industry during the last fifty years has put significant challenges for service providers. This situation evokes the tourism related business to adopt different strategies to improve tourist satisfaction and add value for the products and services. Price is the key element in business, it significantly affects revenue and customer satisfaction as well as the competitiveness in the market place. It is also accompanied by the service/product quality that will lower the level of satisfaction if the product/service doesn’t meet their expectations. Due to increasing in competition in hotels and tourism service pricing strategies adopted by business are significant. Therefore, the study of key factors determining pricing of hotels is needed.

Lao PDR is located in the center of Indochina with total area of 236,800 square kilometers. The total population is about 6.8 million and is the only country bordering all the other GMS countries. Lao tourism is the main source for foreign currency and has gained attention from the government for more than a decade. In 2023, the number of international tourists to Laos is 3.088 million people which increased from 1.088 million people from 2022. The

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revenue received from tourism in 2023 is USD 1.046 million has increased from USD 264 million in 2022 (MOICT, 2023).

Vangvieng district is located in the northern area of Vientiane province which is surrounded by mountains, rivers and has more than 20 caves that attract tourists from both domestic and international. As per natural beauty of the city it attracts both domestic and international visitors come traveled to the city. Activities related to tourism in Vangvieng include rock climbing, hiking, kayaking, water surfing, zip line, and other activities. The city's businesses and local communities benefit greatly from tourism. According to Sorsamphan et al., (2013), tourism raises the standard of living in the area and generates more job opportunities across a variety of industries. Infrastructure has been consolidated, and empty space has been turned into new sources of income.

Since the express railway was built and opened in December 2021, the city has seen a steady rise in the number of visitors. As per the district governor's report, Vangvieng accurately received approximately 10,000 visitors every week. Currently there are 20 hotels, 11 bungalows, 12 resorts, 107 guesthouses, with a total of 2,867 rooms provided (VTO, 2018). Because of the growing number of visitors, Vangvieng's hotels and lodging are extremely competitive. However, there are numerous factors that can impact room prices, including room size, amenities offered, location, services, and hotel environments. If these factors are not recognized by the business, it may miss out on opportunities to enhance the value of the hotel rooms it offers.

Numerous studies have identified determinants of room prices; however, it is rare to see studies that focus on low-income countries with highly attractive tourism destinations, such as Vangvieng in Lao PDR. This research would illustrate the key determinants of pricing in low-income countries. Therefore, this study investigates the determinant factors of hotel room prices in Vangvieng, Laos. The findings can inform hotel owners about the variables that influence hotel room rates. Additionally, this research can benefit those working in the tourism and hospitality industries by providing insights into the key factors that affect hotel room rates. Furthermore, the results of this study may be significant for relevant agencies, businesses, and policymakers in designing hotel packages for potential customers.

2. Literature Review

The concept of the hedonic model draws upon the seminal works of Lancaster (1996) and Rosen (1974). This model serves as a valuable tool for understanding the intricate dynamics of pricing within diverse marketplaces (Herath & Maier, 2010). Moreover, it delves into the intricate interplay between pricing and product attributes, as well as external factors associated with the product.

2.1 Room characteristics

These characteristics not only contribute to the perceived value of a product but also encompass environmental elements that exert influence, often termed as hidden prices, shaping the functionality of the model (Salihu & Yusof, 2017). Navigating the complexities of travelers' decision-making processes regarding hotel selection necessitates a nuanced understanding of the factors at play. Hotel operators must make informed decisions regarding both the construction and pricing strategies of their establishments. Identifying the specific hotel characteristics that sway guests' decisions and discerning which features hold significant importance to them are critical components in optimizing decision-making processes (Andersson, 2010; Soler & Gemar 2016).

A multitude of scholarly inquiries have been undertaken to explore the factors influencing guesthouse and hotel pricing. Carvell & Herrin (1990) were trailblazers in utilizing the hedonic price model to scrutinize pricing dynamics within the hospitality sector, with a specific emphasis on guesthouses and hotels (Carvell & Herrin, 1990). Their research illuminated the significant impact of a hotel's type and location on room rates (Portolan, 2013). Since then, numerous researchers have embraced the hedonic price model to delve deeper into the diverse factors affecting hotel room prices (Aguiló, Alegre & Sard, 2003; Thrane, 2007). In this study, the application of the hedonic model is employed to examine guesthouse and hotel pricing in Lao PDR.

Hedonic pricing models, based on ideas from Lancaster (1966) and Rosen (1974), are important tools for understanding how prices work in different markets. These models look at how price relates to the things a product has, as well as outside factors connected to the product. They're based on the idea of supply and demand. Things that make a product valuable and factors in the environment that affect it, known as a hidden price, help shape how these models work. Understanding the diverse factors that influence guests' selection of a hotel is complex, yet crucial for hoteliers to make informed decisions regarding hotel development and pricing strategies. Identifying the hotel attributes that shape guests' choices and recognizing which features are deemed significant by guests aids in optimizing decision-making processes. Numerous studies within the tourism and hospitality literature have delved into the pivotal attributes that impact guests' hotel preferences.

During the early stages of its application within the hospitality sector, Carvell & Herrin (1990) pioneered the utilization of this model to analyze pricing dynamics, specifically in guesthouses and hotels. They found that the type of hotel and where it is located are big factors in how much a room costs. After that, lots of other researchers have used the hedonic price model to study what influences hotel room prices

Pricing for hotels is significantly affected by the particular characteristic of room size. Due to their additional area as well as possibly better facilities, larger rooms with a greater amount of space usually cost higher than smaller rooms. Size is an attribute frequently utilized by hotels to classify rooms: standard or economy rooms are a smaller and more affordable size, while suites or deluxe rooms are larger and more expensive. The size of a room may determine how a visitor is feeling about them all. According to Anousinh & Xaysongkham (2018) mentioned that deluxe room, room size and bed king gets influenced to pricing of hotel and guesthouse room rates in Luang Prabang. In addition, Khounpon (2019), Chuti (2010), Patrick (2020) and Kongkoon & Warakorn (2019) discovered that room size similarly influenced on condominium prices in Bangkok and it moreover effected to pricing the average daily rate (ADR) in Samui and Phuket Islands in Thailand. Furthermore, unit area and fully equipped rooms have a positive considerable impact on the average price of condominiums in the Hua Hin area of Thailand (Sakulvatana, P., 2021). However, the number of beds did not significant effect on the average price, but positively significant affect to starting price and Nguyen, H. M., et.al. (2020) utilized apartment area and bed room to evaluating apartment price: a case of Ho Chi Minh City, Vietnam. Room size influencing factors such as comfort, convenience, and luxury. Hotels are able to accommodate a range of customer preferences and financial constraints by intentionally utilizing room size as a pricing differentiation feature. In the end, hotel prices are significantly affected by the size of the rooms, which reflects the different caliber of services and accommodations offered to visitors.

2.2 Hotel Services

Several studies using hedonic pricing models show that physical characteristics, amenities, service quality, and policies all have an impact on hotel room prices. Physical characteristics such as the number of buildings and room size show the magnitude and luxury of a hotel, which often commands higher prices due to increased operational expenses and the perceived upmarket experience provided to guests (Sakulvatana, 2021; Nadia et al., 2021). High star ratings, spas, and swimming pools, air conditioning, and presence of a balcony all attribute to the attractiveness resulting in premium costs for the luxury and exclusivity they offer (Tochaiwat & Likitanupak, 2019; Khounpon, 2019; Roman & Martín, 2016; Nadia et al., 2021; Xaysongkham & Anousinh, 2018). Enhanced security measures also play an important role, justifying higher rates with the extra protection they provide to guests (Khounpon, 2019; Xaysongkham & Anousinh, 2018; Roman & Martín, 2016).

Pricing methods are also influenced by rules such as free cancellation options, which add value by providing flexibility and minimizing booking reluctance among

prospective visitors (Khounpon, 2019; Masiero et al., 2015; Xaysongkham & Anousinh, 2018). Exclusive access to hotel clubs and private amenities drives up pricing, catering to a clientele that craves seclusion and exclusivity (Khounpon, 2019; Masiero et al., 2015; Roman & Martín, 2016; Xaysongkham & Anousinh, 2018). Furthermore, the quality of service, particularly the friendliness and professionalism of the staff, has a direct effect on hotel rates (Roman & Martín, 2016). Superior service increases guest happiness and loyalty, enabling hotels to charge higher charges. The quality of food and beverage options also effects pricing, as outstanding dining experiences can significantly improve the whole guest experience, justifying higher accommodation rates.

2.3 Hotel Environment

The research conducted by Song & Li (2008) emphasizes the crucial influence of location on shaping tourist demand and preferences, particularly focusing on accessibility and closeness to attractions. Foundational insights into the hedonic pricing model are provided by Rosen (1974) and Palmquist (1982), offering a framework for evaluating the economic worth of specific hotel attributes and environmental amenities. Chen & Rothschild (2010) found that the primary consideration for hotel selection is often its location, further underlining the pivotal role of this factor. Moreover, investigations by Blanke & Chiesura (2009) and Li & Guo (2018) illustrate the positive impact of environmental factors like scenic views and proximity to natural attractions on property values and hotel pricing. Espinet et al. (2003) suggest that the star rating of hotels, particularly four-star establishments, also influences pricing decisions. Gibbons and Machin (2005) along with Anas, Arnott, & Small (1998) shed light on how transportation infrastructure and urban spatial structure shape the distribution and accessibility of hotels and guesthouses, thereby impacting pricing dynamics. Lastly, studies on accommodation pricing by Lee & Jan (2018) and Pan, Xiang, & Law (2013) offer insights into market dynamics and consumer preferences, stressing the importance of location-based factors in determining hotel and guesthouse prices in Vangvieng.

Overall, these factors are interrelated, with each contributing to a hotel's price plan. Hotels deliberately position themselves to attract varied market segments and justify premium pricing with improved infrastructure, service quality, and special features. Thus, this study applies the reviewed factors combined with available data.

3. Methodology

This current research applies an Econometric estimation to assess the effect of determinants of the hotel price. The estimation uses the semi-logarithmic form for the Econometric equation. The natural logarithm of the hotel

price is regarded as the dependent variable. The model is structured in the following manner:

$$\ln(\text{price}) = \beta_0 + \beta_1 \ln(\text{size}) + \beta_2 \text{Air} + \beta_3 \text{Balcony} + \beta_4 \text{Kitchen} + \beta_5 \text{Breakfast} + \beta_6 \text{Spa\&Massage} + \beta_7 \text{Animal} + \beta_8 \text{Smoking} + \beta_9 \text{River near} + u.$$

The independent variables include room characteristics, hotel characteristics, and environmental situation. The

room characteristics include room size (size), air conditioner (Air), installed balcony (Balcony), and available kitchen (Kitchen). The hotel characteristics contain the services of breakfast (Breakfast) and spa (Spa & Massage), and the allows of pets (Animal) and smoking (Smoking). Finally, the environment of the hotel is located near the Song River. The definition and measurement of variables are shown in Table 1.

Table 1: Variable Definition and Measurement

Variable	Definition	Measurement
<u>Dependent variable</u>		
Price	Daily price	USD
<u>Independent variables</u>		
<u>Room</u>		
Size	Room size	Square meter
Air	Air conditioner	1 = Yes, 0 = No
Balcony	Balcony	1 = Yes, 0 = No
Kitchen	Kitchen	1 = Yes, 0 = No
<u>Hotel</u>		
Breakfast	Breakfast service	1 = Yes, 0 = No
Spa & Massage	Spa & Massage service	1 = Yes, 0 = No
Animal	Animal allows	1 = Yes, 0 = No
Smoking	Smoking allows	1 = Yes, 0 = No
<u>Environment</u>		
River near	Close to Song River	1 = Yes, 0 = No

The dependent variable is measured in the logarithmic form of a numerical variable; therefore, the Econometric equation is estimated by the Ordinary Least Square. The model is a simple technique to estimate a linear effect of independent variables on the dependent variable. The potential issues that occur in this technique include multicollinearity and Heteroskedasticity; thus, we construct the correlation matrix to assess the multicollinearity and Heteroskedasticity White test to test

for the Heteroskedasticity. The Heteroskedasticity Robust standard error is used when the issue occur in the equation estimation.

According to the literature review, a Hypothesis of the effect of determinants on hotel price is shown in Table 2. In general, every variable is expected to influence the hotel price positively.

Table 2: Hypothesis

Variable	Hypothesis	Source
<u>Room</u>		
Size	Positive	Xaysongkham, & Anousinh, (2018), Khounpon, (2019), Thamrongrisook (2010), Kongkoon, & Warakorn, (2019).
Air	Positive	Sakkulvatana, (2021)
Balcony	Positive	Khounpon, (2019).
Kitchen	Positive	
<u>Hotel</u>		
Breakfast	Positive	Khounpon, (2019).Tochaiwat & Likitanupak, (2019), Roman & Martin, (2016).
Spa & Massage	Positive	Khongkoon, (2019)
Animal	Positive	
Smoking	Positive	
<u>Environment</u>		
Close to River	Positive	Khounpon, (2019). Xaysongkham, & Anousinh, (2018). Huang, & Yin, (2015). Hamilton, (2007).

Source: Author's summary

As in Table 4, the independent variables are tested on their correlations. Overall, there is no strong correlation

among the variables. The highest correlation value is -0.279, (between Smoking and Air). Therefore, the issue of Multicollinearity does not appear.

Table 4: Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Ln(size)	1.000								
(2) Air	0.091	1.000							
(3) Balcony	0.030	0.196	1.000						
(4) Breakfast	0.197	-0.103	-0.185	1.000					
(5) Spa Massage	0.165	-0.061	0.220	-0.099	1.000				
(6) Kitchen	0.192	-0.116	0.089	0.160	0.148	1.000			
(7) Animal	-0.098	-0.234	-0.241	-0.042	0.048	0.122	1.000		
(8) Smoking	-0.108	-0.279	-0.225	0.132	-0.045	-0.003	0.086	1.000	
(9) River near	0.155	0.151	0.107	-0.131	0.053	0.132	0.210	-0.188	1.000

Source: Author's Calculation

4. Result and discussion

The result from the Econometric estimation is shown in Table 5. The table includes 4 columns of estimations which illustrate the equation with separately on the room's characteristics in Column (1), only the hotel's characteristics in Column (2), only the environment in Column (3), and all variables in Column (4). In general, almost every variable shows an expected sign and is

statistically significant; however, the variable of Animal indicates an unexpected sign. The R-square value shown a goodness of fit of 0.296 in Column (1), 0.112 in Column (2), 0.107 in Column (3), and 0.414 in Column (4). The jointly significant test of every estimation is statistically significant at least 5 percent as shown in the F-test. To control for covariates, the result in Column (4) is used for interpretation.

Table 5: Linear regression

Ln(price)	(1)	(2)	(3)	(4)
<u>Room</u>				
Ln(size)	0.936*** (6.52)			0.797*** (5.98)
Air	0.103 (1.12)			0.195* (1.66)
Balcony	0.210*** (2.73)			0.190** (2.42)
Kitchen	0.281** (2.31)			0.119 (1.24)
<u>Hotel</u>				
Breakfast		0.156* (1.76)		0.123* (1.68)
Spa & Massage		0.200** (2.05)		0.086 (1.26)
Animal		-0.201** (-2.52)		-0.135** (-2.03)
Smoking		0.198* (1.87)		0.423*** (4.32)
<u>Environment</u>				
Close to River			0.413*** (4.35)	0.348*** (4.39)
Constant	0.312 (0.68)	3.415*** (38.82)	3.540*** (84.56)	0.414 (1.02)
R-squared	0.296	0.112	0.107	0.420
F-test	23.22	4.71	18.95	16.14
Observation	196	193	197	192

Source: Author's Calculation

For room characteristics, room size has positive effect on the price and is statistically significant at 1 percent. The variable $\ln(\text{size})$ shows a coefficient of 0.797; thus, if the room size increases by 1 percent, the price would increase by 0.797 percent. This means that a bigger room is more expensive. Secondly, the variable Air has a positive sign with magnitude of 0.195 and is statistically significant at 10 percent. This shows that if the room has an installed air conditioner, the price will increase by 44.7 percent. Vangvieng district is in the central province with seemingly high-temperature degrees, thus the air conditioner is essential. The balcony is also important in improving the price of rooms. The variable of Balcony has a coefficient of 0.190 and is statistically significant at 5 percent. A room with a balcony allows guests to enjoy private outdoor space, thus it has a higher price of 44.5 percent. Another characteristic of the room is the kitchen. It has a positive effect on the room's price; however, it is only statistically significant in Column (1) but not in Column (4). Nevertheless, the effect of kitchen seems to have a high economic impact with a coefficient of 0.119 or increasing in price by 41.6 percent.

For hotel's characteristics, breakfast is one of the most important services that contribute to higher room's prices. It is statistically significant at 10 percent and has a coefficient of 0.123 which means 41.6 percent increase in price. Next, Spa & Massage service is seen as a special treatment, especially in East Asia countries; However, it is only statistically significant in Column (2) but lost its significance in Column (4). The potential reason is that there are several Massage shops available in Vangvieng district, therefore the providing of Spa & Massage services might not be relevant for improving room prices. Interestingly, the providing service on allowing animals to the hotel shows a negative sign and is statistically significant at 5 percent. This result could be explained by the quality of the room, for instance, the room that allows pets and animals might be hard for cleaning and become cheaper compared to other room types. Additionally, rooms that allow guests to smoke promote price extensively. The variable of Smoking illustrates a coefficient of 0.423 and is statistically significant at 1 percent. This means that the room price increases by 56.2 percent if guests can smoke.

Finally, Song River is the main attraction for tourism in the Vangvieng district; for example, for Kayaking, Camping, and dining views thus, it is vital for price improvement. The variable of Close to River has a large magnitude of 0.348 and is statistically significant at 1 percent. This shows that rooms in the hotel located next to Song River increases hotel room price by 52.1 percent.

The results of the study show that there is a significant correlation between hotel pricing and room size in the Vangvieng area of Vientiane province. The purpose of this study is to confirm whether the results are consistent with the research conducted by [Anousinh & Xaysongkham \(2018\)](#) on the hedonic pricing of hotel and guesthouse room rates in Luang Prabang, and whether they are consistent with the research conducted by [Khounpon \(2019\)](#) on an analysis of determinants on rooms price for guesthouse and hotel in Vangvieng city. Furthermore, [Chuti \(2010\)](#) examine the impact of rapid transit system on the cost of condominiums in Bangkok. Furthermore, the outcome is consistent with the research findings of [Kongkoon, T., & Warankorn, L. \(2019\)](#). Studies on hotel pricing using hedonic priced and alternative hotel pricing technology: hedonic price model for pricing beach resort revenue in Thailand. The same beneficial size has an impact on all of previous studies. Besides room size other hotel attributes include providing air conditioner in the room and availability of balcony can add value to hotel's room, this also confirms Sakkulvatana's study. This study offers insights into not only the hotel features that can increase room rates, such as air conditioning, balcony accessibility, and room size, but also those that don't, like a kitchen.

The positive coefficients for hotel services such as breakfast availability and spa services, which are associated with higher room rates, are in line with the findings of [\(Khounpon, 2019\)](#), [Tochaiwat & Likitanupak \(2019\)](#) and [\(Roman & Martín, 2016\)](#), indicating that hotels can add premium prices by offering these desirable amenities. However, the literature review reveals a lack of discussion regarding the impacts of allowing animals and permitting smoking on room pricing. Furthermore, the result reveals that the hotel location, in this case, close to the river associate with hotel room price. This is consistent with [Khounpon \(2019\)](#), [Anousinh & Xaysongkham\(2018\)](#), [Huang & Yin \(2015\)](#), and [Hamilton \(2007\)](#). This means the travelers are willing to pay more for accommodation near to a river. This study provides novel knowledge to the literature on hedonic pricing model on how room characteristics, hotel services, and location close to river affect room price. Specifically, the hotel service items (allowing pets, and smoking) add premium to hotel room price.

This study suggests that the industry can increase price by adding particular features to hotel room, in addition, hotel services such as spas and massage, air conditioner, and balcony could affect the room price. Finally, the hotel location that close to river significantly improve travelers' intention to pay. Therefore, the investors can consider these factors to add value and increase customer satisfaction.

5. Conclusion

This study has examined key factors associated with room price for hotel in Vangvieng district. Room attributes, hotel services, and location of a hotel importantly affect hotel room price. The findings indicate that hotel attributes room size, air-con, balcony add premium to hotel price. In addition, services provided by a hotel such as breakfast, spas and massage, allowing animals, and smoking are also significant for visitors' willingness to pay. The hotel location factor is one that can't be ignored as it an essential attribute adding value to hotel price.

A few limitations along with this study that need to be highlighted, which this study utilized data from the Agoda.com website that key variables are taken from there. This limits the number of attributes for analysis. Future studies may take into consideration other variables that can affect the room price and data can be collected from other sources. In addition, this study uses only quantitative data for analysis that may not cover qualitative aspects of the area, visitors' interviews may be applied to provide insight analysis of the situation especially in the case of Vangvieng.

Based on the positive and statistically significant factors identified in the hedonic price model in Vangvieng, this study can draw policy recommendations as below:

1. Given that room size has a positive impact on room prices, policymakers could incentivize or utilize the space of hotel. This could attract more tourists willing to pay higher prices for spacious accommodations.

2. As air conditioning is a significant factor affecting room prices. Good climate control like air conditioner could enhance the overall quality of accommodations and attract visitors seeking comfort during their stay.

3. Balconies are shown to have a positive impact on room prices. Encouraging the inclusion of balconies in accommodations or promoting properties with this feature could help increase their attractiveness to tourists and potentially justify higher room rates.

4. The provision of breakfast is a significant factor influencing room prices. Policymakers could work with accommodations in Vangvieng to ensure that breakfast options are offered to guests, potentially increasing the perceived value of the accommodations and attracting more visitors.

5. Proximity to the river is a statistically significant factor affecting room prices. Policies that promote development near the riverfront or enhance access to river views could help increase the desirability of accommodations in Vangvieng and justify higher pricing.

By implementing these policy recommendations based on the hedonic price model findings, stakeholders in Vangvieng's tourism industry can potentially enhance the quality of accommodations, attract more visitors, and optimize pricing strategies to maximize revenue.

References

- Aguiló, E., Alegre, J., & Sard, M. (2003). Examining the market structure of the German and UK tour operating industries through an analysis of package holiday prices. *Tourism Economics*, 9(3), 255-278.
- Anas, A., Arnott, R., & Small, K. A. (1998). Urban spatial structure. *Journal of economic literature*, 36(3), 1426-1464.
- Andersson, D. E. (2010). Hotel attributes and hedonic prices: an analysis of internet-based transactions in Singapore's market for hotel rooms. *The Annals of Regional Science*, 44, 229-240.
- Anousinh, S. & Xaysongkham, C. (2018). *The Hedonic Pricing of Hotel and Guesthouse Room Rates in Luang Prabang*. National University of Laos.
- Blanke, J., & Chiesura, A. (2009). Application of the hedonic pricing method to estimate the economic value of urban green spaces: A review and some new results. *Landscape and Urban Planning*, 91(3), 183-198.
- Carvell, S. A., & Herrin, W. E. (1990). Pricing in the hospitality industry: An implicit markets approach. *Hospitality Review*, 8(2), 3.
- Chen, C. F., & Rothschild, R. (2010). An application of hedonic pricing analysis to the case of hotel rooms in Taipei. *Tourism Economics*, 16(3), 685-694.
- Espinete, J. M., Saez, M., Coenders, G., & Fluvia, M. (2003). Effect on prices of the attributes of holiday hotels: a hedonic prices approach. *Tourism Economics*, 9(2), 165-177.
- Faulkner, B., Oppermann, M. & Fredline, E. (1999). Destination Competitiveness: An Exploratory Examination of South Australia's Core Attractions. *Journal of Vacation Marketing*, 5(2), 125-39.
- Hamilton, J. M. (2007). Coastal landscape and the hedonic price of accommodation. *Ecological economics*, 62(3-4), 594-602.
- Herath, S., & Maier, G. (2010). The hedonic price method in real estate and housing market research: a review of the literature.
- Huang, H., & Yin, L. (2015). Creating sustainable urban built environments: an application of hedonic house price models in Wuhan, China. *Journal of Housing and the Built Environment*, 30, 219-235.

- Khounpon, P. (2019). An Analysis of determinants on rooms Price for Guesthouse and Hotel in Vangvieng District, Vientiane Province. Master thesis, National University of Laos.
- Kongkoon, T., & Warakorn, L. (2019). An Alternative Hotel Pricing Technology: Hedonic Price Model for Pricing Beach Resort Revenue in Thailand. *International Journal of Building, Urban, Interior and Landscape Technology*, Vol.14, 37-49.
- Lee, T. H., & Jan, F. H. (2018). A study of Airbnb's pricing strategy: Evidence from highly competitive markets. *International Journal of Hospitality Management*, 75, 121-131
- Li, M., & Guo, Y. (2018). The influence of environmental factors on house prices: Using spatial econometric models. *Journal of Cleaner Production*, 172, 2247-2259.
- Masiero, L., Yoonjung Heo, C., & Pan, B. (2015). Determining guests' willingness to pay for hotel room attributes with a discrete choice model. *International Journal of Hospitality Management*, 49, 117-124. <https://doi.org/10.1016/j.ijhm.2015.06.001>
- Nadia, E.-N., Beatrice, C.-D., & Atour, T. (2021). The Determinants of Hotel Room Rates in Beirut : A Hedonic Pricing Model. *International Journal of Trade, Economics and Finance*, 12(2). <https://doi.org/10.18178/ijtef.2021.12.2.690>.
- Nguyen, H. M., Phan, H. Q., Tran, T. Van, & Tran, T. K. V. (2020). The Hedonic Method in Evaluating Apartment Price : A Case of Ho Chi Minh City , Vietnam. *Journal of Asian Finance, Economics and Business*, 7(6), 517-524. <https://doi.org/10.13106/jafeb.2020.vol7.no6.517>.
- Portolan, A. (2013). Impact of the attributes of private tourist accommodation facilities onto prices: A hedonic price approach. *European Journal of Tourism Research*, 6(1), 74-82.
- Roman, C., & Martín, J. C. (2016). Hotel attributes : Asymmetries in guest payments and gains - A stated preference approach. *Tourism Management*, 52, 488-497. <https://doi.org/10.1016/j.tourman.2015.08.001>
- Rosen, S. (1974). Hedonic prices and implicit markets: product differentiation in pure competition. *Journal of political economy*, 82(1), 34-55.
- Sakulvatana, P. (2021). A hedonic pricing model of condominiums in Hua hin area, Thailand [Chulalongkorn University]. <https://digital.car.chula.ac.th/chulaetd/7647>.
- Salihu, J. A., & Yusof, R. M. (2017). A critical review of hedonic price model on rental and house prices in housing market. *International Journal in Management & Social Science*, 5(4), 195-201.
- Soler, I. P., & Gémar, G. (2016). The impact of family business strategies on hotel room prices. *European Journal of Family Business*, 6(1), 54-61.
- Song, H., & Li, G. (2008). Tourism demand modelling and forecasting—A review of recent research. *Tourism management*, 29(2), 203-220.
- Sorsamphan, B., Yongvanit, S., & Apichatvullop, Y., (2015). Cultural Landscape of the Urban Community of Vangvieng in the Context of Tourism. *The Journal of Lao Studies*, 4(1), 87-99.
- Thamrongrisook, C. (2010). The Influence of Rapid Transit Systems on Condominium Prices in Bangkok. Master thesis, KTH Architecture and the Built Environment.
- Thrane, C. (2007). Examining the determinants of room rates for hotels in capital cities: The Oslo experience. *Journal of revenue and Pricing Management*, 5, 315-323.