

Article

The Determinants of Tourist Expenditure Per Capita in Thailand: Potential Implications for Sustainable Tourism

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Abstract: Tourism authorities in Thailand have consistently pursued profit-seeking mass tourism, resulting in the detriment of the natural resources in major tourist destinations. In response, sustainable tourism projects centered on preserving the environment have been established but neglect the financial needs of tour operators. The objective of this study was to investigate the determinants of tourist expenditure per capita in Thailand using a dataset consisting of 31 countries from 2010 to 2017. The analysis was based on an autoregressive distributed lag model (ARDL) and used a panel estimated generalized least square (ELGS). Generating such knowledge is essential for tourist authorities to develop profitable and sustainable tourism projects in tourist destinations whose natural resources have been affected by profit-seeking tourism. The tourism expenditure per capita is positively affected by word of mouth, income, and the rising prices in other major tourist destinations in Asia. However, it was negatively affected by relative levels of price and corruption. Sustainable tourism projects can be used to develop activities that will help distinguish Thailand from other tourism destinations in Asia. However, in implementing these sustainable tourism initiatives, the mark-up should be minimized to keep tourist prices in Thailand competitive.



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Keywords: tourism demand; tourism expenditure per capita; sustainable tourism; tourist price

1. Introduction

Tourism demand consists of a bundle of complementary goods and services produced and consumed at the same place and time [1]. There is a plethora of literature using different variables to measure tourism demand, including tourist arrivals and tourist expenditure. In the literature, the most widely used aggregate measure of tourist demand is international tourist arrivals [1]. However, focusing on tourist arrivals may motivate the implementation of policies that promote profit-seeking mass tourism, leading to a lack of involvement of the local community in tourism development [2], an increase in carbon dioxide emissions [3], and an unsustainable use of resources [4]. Such is the case in Thailand, where the tourism authorities have consistently pushed for promotional programs to encourage tourism growth through mass tourism [5]. Although the tourism sector in Thailand is linked to lower carbon dioxide emissions [6], the profit-seeking mass tourism has resulted in the deterioration and closure of several tourist destinations in Thailand (i.e., Maya Bay).

Policy recommendations to address these issues have a substantial environmental component. Koçak, Ulucak and Ulucak [3], for example, offered policy suggestions centered around changing environmental legislation, while Khan, et al. [7] recommended the inclusion of environmentally friendly technologies into Asian tourism. More specifically, in Thailand, sustainable tourism initiatives heavily focus on environmental preservation [8]. However, they do not address the financial needs of the local economy. Dłuzewska and Rodzoś [9] mentioned that the local community hardly perceives the benefits of sustainable development schemes because they do not associate such policies with improvements in their social wellbeing. Consequentially, tourist operators would opt to develop the local economy and not include environmental measures unless there is a monetary incentive [10].

Furthermore, rising claims state that sustainable tourism initiatives should maximize economic benefits from tourist activities as a central component of their policies [11]. Several sustainable tourism projects have failed because applying such a scheme was unaffordable for many small and medium-sized enterprises (SMEs) [12]. Therefore, policy-makers must put the economic needs of the local population at the center of their policies to develop sustainable tourism practices [13].

To help increase revenue in tourism, researchers have focused on investigating the willingness to pay for sustainable-development-friendly tourists. These studies have focused on researching whether pro-sustainable tourists have a higher willingness to pay for sustainable tourism practices [14] and whether targeting these tourists would help make pro-environmental market segments economically viable [15]. The studies find it challenging to identify tourists willing to pay more for pro-sustainable tourism services based on their socio-demographics [16]. Instead, the willingness to pay depends on the tourist's sustainable intelligence and knowledge [14]. However, these findings are localized and are difficult to incorporate at the country level in national policies. Therefore, it is still vital to complement the results of localized studies on willingness to pay and spending with an investigation on what factors motivate higher overall tourist spending as well as spending on different categories such as accommodation and shopping. Understanding how demand shifters affect per capita tourist expenditure and its components would be helpful for policymakers. They could use this knowledge to develop nationwide policies that shift focus from mass tourism to sustainable initiatives that attract high spending tourists who display a greater value on consuming tourism services.

Considering this discussion, we propose that tourism receipts per capita are a valuable measure of tourism demand in destinations that have suffered from overcrowding. Raising tourism receipts is inversely related to carbon dioxide emissions [6] and increasing tourist operator's revenue. It is in this part where we wish to contribute to the current body of literature. To the best of our knowledge, not much research has shed light on the factors that may increase the average foreign tourist spending per tourist visiting Thailand. Furthermore, the studies investigating tourist demand using expenditure [1] do not focus on its sub-components. Moreover, tourism demand studies generally emphasize forecasting tourist demand [17–19] and studying the effects of individual determinants on tourism demand, including government quality [20–23], weather patterns [24], etc. Our study differs from others in that we investigate the effects of factors that affect tourist expenditure under a sustainable tourism context. Furthermore, we also analyze factors that affect tourist expenditure on subsectors of the tourism sector, including spending on accommodation and shopping. For this purpose, this research aimed to build a tourism demand model that will help evaluate the main factors that determine expenditure per capita in tourism and industries closely related to tourism.

2. Literature Review

Thailand has been among the best places to visit globally. Before the SAR-CoV-2 pandemic, the Thai government launched a tourist policy that centers on expanding the number of tourists visiting the kingdom. The policy had a target to increase international tourist arrivals by 4 to 5% a year. Tourist arrivals into Thailand from 2016 to 2019 showed an increasing trend of tourist arrivals from 32.53 to 39.79 million people, or around a 22% increase, and the supply of accommodation increasing from 676,167 rooms to 763,803 rooms, or around a 13% increase [25].

The tourist spending has increased as well. However, the percentage increase in tourist receipts is far lower than that of tourist arrivals. From 2015 to 2017, revenue from foreign tourists increased by 12%, but in 2018, the tourism receipts only increased by 10% [26]. As a result, the push for attracting tourists through mass tourism has not yielded the desired proportional increase in tourism revenue. According to the Ministry of Tourism and Sports [26], foreign tourists have also reduced their spending on shopping from 2015

to 2019. This trend was also similar to accommodation spending because tourists tend to spend the most considerable portion of their budget on accommodation fees.

In addition to not yielding a proportional increase in tourism revenue, the massive increase in tourist arrivals has led to the environmental degradation of many tourist attractions in Thailand, for example, Maya beach, Samaesarn Island, Virgin Island, etc. As a result, it is crucial to refocus the tourism development policies from mass tourism to an approach based on sustainable development.

The second national tourism development plan from 2017 to 2021 emphasizes enhancing Thailand's tourism industry's overall quality and capabilities and supporting sustainable growth that leverages the great value of Thainess. Environmental sustainability is an issue that is included in this plan. However, the progression of the second national tourism development plan, which consists of 14 criteria from 2019 to 2020, found that all requirements were not successful as the determined target. For example, income from creative and culture tourism is set to expand 10% annually, but it decreased by 46.54% in 2018. Furthermore, the target of five sustainable tourism communities was not achieved [27]. Therefore, the implementation of sustainable tourism practices in Thailand has been slow.

Sustainable tourism implementation in Thailand has been done at the policy level by the government sector. For example, the Ministry of Tourism and Sports authorized many committees to work on sustainable tourism. The framework to collaborate with the local community was established, intending to be a member of the world sustainable tourism organization [28]. However, to push sustainable tourism success, understanding the targeted tourist behavior is needed. That is to say, sustainable tourism is linked with the high-income tourist groups because they tend to engage with and willing to pay for sustainable tourism [29–31]. Investment in infrastructures such as accommodation, accessibility, and local communication can be used to persuade potential tourists to visit travel destinations [32,33], especially the high-income tourists [34].

Based on our discussion, it is evident that the mass tourism policies put forward in Thailand will not help attract high-quality tourists that will have high expenditures. Consequently, it will be difficult for sustainable tourism initiatives to be successful. The SARs-CoV-2 pandemic further exacerbates this problem since the number of foreign tourists visiting Thailand reduced by 99.8% compared to figures in 2019. Therefore, in reshaping Thai tourism, it is vital to develop national tourist policies geared towards attracting high-spending tourists to generate enough revenue for sustainable tourism initiatives.

3. Methodology

3.1. Modeling Tourism Demand Using Average Tourism Spending

Based on the theory, tourism demand is affected by the income in the origin country, prices in the tourist destination, and a set of demand shifters [35]. Based on Tang [36] and Song, Witt and Li [18], we can model tourism demand using the following equation:

$$TD_{it} = \alpha Y_{it}^{\beta_1} P_{it}^{\beta_2} P_{sit}^{\beta_3} e^{\delta_i X_{it} + \epsilon_{it}} \quad (1)$$

where TD_{it} refers to tourism demand from country i in year t . Y_{it} is the GDP per capita of the origin country in year t . P_{it} and P_{sit} represent the tourist prices of Thailand relative to prices in the country of origin of the tourist and the prices of tourism in alternative countries, respectively. X_{it} are the shifters of tourism demand.

Due to the composite nature of tourist demand, several variables are used as proxies to represent tourism demand, including tourist arrivals and tourism receipts [37,38]. Researchers often use tourist arrivals to investigate the effects of the quality of government institutions on tourism demand [39] and forecast the volume of tourism [19]. In turn, several studies use total expenditure or receipts to evaluate the effects of policies on tourism demand [1].

An issue using total tourist expenditure is that changes in total spending in tourism are brought about by variations in tourist arrivals and their average spending. Using this measure will have both effects included in it. Consequently, it will not help to investigate

the factors that will motivate a foreign tourist to spend more on tourism-related activities. For such reasons, tourist expenditure per capita we included as a measure of tourist demand in Equation (1). Substituting TD_{it} with tourist expenditure per capita (TE_{it}) in Equation (1) and transforming all variables into their natural logarithmic forms, we obtain the following equation:

$$\ln TE_{it} = \sigma + \beta_1 \ln Y_{it} + \beta_2 \ln Pi_{it} + \beta_3 \ln Ps_{it} + \delta_i X_{it} + \epsilon_{it} \quad (2)$$

Based on Song, Li, Witt and Fei [1], Pi_{it} was obtained by adjusting the prices in both countries with the corresponding exchange rate index using Equation (3):

$$Pi_{it} = \frac{CPI_{THt}/EX_{THt}}{CPI_{it}/EX_{it}} \quad (3)$$

where CPI_{THt} is the consumer price index (2010 = 100) in Thailand in year t , and CPI_{it} is the consumer price index (2010 = 100) of the origin country i in that same year. EX_{THt} and EX_{it} represent the real broad effective exchange rate for Thailand and the i origin country.

Like Pi_{it} , Ps_{it} was measured by adjusting a weighted price index of a group of “substitute” tourist destinations with the real broad effective exchange rate [40]. The process used to measure Ps_{it} is shown in Equation (4):

$$Ps_{it} = \sum_{j=1}^k \frac{CPI_{jt}}{EX_{jt}} w_{ijt} \quad (4)$$

The countries included in the calculation of the Ps_{it} are from the ASEAN and Northeast Asian regions. Countries within the ASEAN region are geographically close and, in some aspects, culturally similar to Thailand. In turn, the countries located in the North-eastern area of Asia are major competitive tourist destinations on the continent. A common assertion in the literature is that alternative tourist countries are “substitutes” for Thai tourism. However, several findings show that these countries could be complements or exhibit no relationship [1,18]. Taking this into consideration, we built three different price indices for Ps_{it} . The first index, Ps_{ASE} , represents the price levels from competing destinations in Southeast Asia (Indonesia, Malaysia, and the Philippines). Ps_{NE} is the weighted price index of tourist destinations in Northeast Asia (China, Hong Kong, Japan, and Singapore). Singapore was included in Ps_{NE} because of its similarity to the Northeastern countries in terms of economy and tourism. Ps_{ALL} is an aggregation of all the countries in both regions.

The indicators of government quality, including corruption, are essential factors that affect tourism demand. The effects of corruption on tourism are underpinned by the “Sanding of the wheel” hypothesis [41], which states that cases of bribery delay tourism transactions and may affect the tourists’ decision to spend during their visit to a holiday destination [42]. Demir and Gozgor [43] mentioned that relative corruption plays a factor that influences a visitor’s decision to visit a tourist destination. For this reason, we added into Equation (2) two variables that measure the relative corruption between Thailand (COR_{THt}) and the tourist’s country of origin (COR_{it}).

Following Demir and Gozgor [43], we build the relative measures of corruption based on the differences in the control of corruption in the world rankings of Thailand and tourists’ countries of origin. After subtracting the corruption rankings of Thailand from the ranking of the country of origin, we built two dummy variables ($C1$ and $C2$) representing relative corruption based on the magnitude of the measured differences. The variable, $C1$, helps identify the countries with a slightly higher ranking in control of corruption in year t . $C1$ is equal to zero if the corruption distance between Thailand and the origin country is less than zero ranking points ($COR_{THt} - COR_{it} \leq 0$), and $C1$ is equal to one if the difference in corruption did not exceed 30 ranking points ($0 < COR_{THt} - COR_{it} \leq 30$). The second dummy variable ($C2$) groups the countries with the highest control of corruption relative to Thailand. $C2$ is equal to one if the difference in corruption is higher than 30 ranking

points ($COR_{THt} - COR_{it} > 30$); otherwise, $C2$ equals 0. Adding $C1$ and $C2$ into Equation (2), we obtain the following:

$$LnTE_{it} = \sigma + \beta_1 LnY_{it} + \beta_2 LnPi_{it} + \beta_3 LnPS_{it} + \delta_1 C1_{it} + \delta_2 C2_{it} + \epsilon_{it} \quad (5)$$

Following Song, Li, Witt and Fei [1], we modified Equation (5) into an autoregressive distributed lag model (ARDL) to capture the dynamic nature of demand (Equation (6)).

$$LnTE_{it} = \sigma + \sum_{j=1}^k \theta_j LnTE_{it-j} + \sum_{j=0}^k \gamma_j LnY_{it-j} + \sum_{j=0}^k \rho_j LnPi_{it-j} + \sum_{j=0}^k \varphi_j LnPS_{it-j} + \delta_1 C1_{it} + \delta_2 C2_{it} + \epsilon_{it} \quad (6)$$

In Equation (6), k is the number of lags included in the model and has a maximum of two lags. Based on Song, Gartner and Tasci's [40] general-to-specific approach, we first estimated the tourism demand models in Equation (6) and then eliminated the lags of the insignificant independent variables. We proceeded to select the lag length based on the AIC scores. However, if the coefficient at times t and $t-1$ were found to be significant, Wald tests were performed on the addition of these coefficients to find the overall elasticities of the determinants of tourism demand. Generalized least squares estimators were used to avoid problems related to heteroscedasticity.

In addition to affecting total tourist expenditure per capita, it is also of interest to study how demand shifters impact the subcomponents of tourism, including average spending in accommodations and shopping. For example, several "green hotel" initiatives push for sustainable practices in the accommodations. Since 2013 Thailand has launched the Green Hotel certificate. Furthermore, government officials are trying to expand sales of locally made products through sustainable community initiatives. The local products from One Tambon One Product (OTOP) have been promoted and served on the plane through the "From Local Fly to Sky" campaign. This campaign helps local entrepreneurs grow three times in their sales volume [44].

For this reason, we further analyzed the impacts of demand shifters on the sub-components of tourism expenditure per capita by substituting the dependent variable in Equation (6) with the average spending of tourists in accommodations (Equation (7)) and shopping (Equation (8)). Following Corgel, et al. [45], we decide to add average room rates of hotel rooms in Thailand as a factor that affects demand for hotel accommodations since it is an essential factor that determines tourist spending on accommodations.

$$LnAC_{it} = \sigma + \sum_{j=1}^k \theta_j LnAC_{it-j} + \sum_{j=0}^k \gamma_j LnY_{it-j} + \sum_{j=0}^k \rho_j LnH_{it-j} + \sum_{j=0}^k \rho_j LnPi_{it-j} + \sum_{j=0}^k \varphi_j LnPS_{it-j} + \delta_1 C1_{it} + \delta_2 C2_{it} \quad (7)$$

$$LnSH_{it} = \sigma + \sum_{j=1}^k \theta_j LnSH_{it-j} + \sum_{j=0}^k \gamma_j LnY_{it-j} + \sum_{j=0}^k \rho_j LnPi_{it-j} + \sum_{j=0}^k \varphi_j LnPS_{it-j} + \delta_1 C1_{it} + \delta_2 C2_{it} + \epsilon_{it} \quad (8)$$

3.2. Data

The entire data set covers 31 countries and ranges from 2010 to 2017. The total expenditure per capita of international tourists (TD), spending per capita of international tourists on accommodations (AC), and spending per capita of international tourists on shopping (SH) from 31 countries to Thailand was gathered from the Ministry of Tourism and Sports of Thailand. The total number of international tourist arrivals to competitive countries (Indonesia, Malaysia, Philippines, China, Hong Kong, Japan, and Singapore), the consumer price index (CPI), and the GDP per capita (Y) were extracted from the World Bank Open Data website. The real broad effective exchange rate (EX) was obtained from the Federal Reserve Bank of Saint Louis's FRED Economic Data database. The rankings of the control of corruption for the 31 countries (COR_{it}) and Thailand (COR_{THt}) were gathered from the World Governance Indicators database.

All raw data were used to measure variables including Pi , PS_{ALL} , PS_{ASE} , and PS_{NE} as described in Section 3.1. The descriptive statistics of all the data used in this study are

shown in Table A1. Furthermore, the correlation matrix of all the independent variables is shown in Tables A2–A4.

4. Results and Discussion

Table 1 shows the effects of the determinants of tourism expenditure per capita. Income has a positive impact on tourism spending. These findings follow economic theory, where an increase in receipts and good word of mouth (as seen in the positive value of the lagged dependent variable) leads to a rise in average expenditure. However, the magnitude of the effects of income is lower than those reported in Hong Tsui [46], Song, Witt and Li [18], and Tang [39]. The impacts of the determinants vary depending on the variable used to represent tourism demand [1]. García-Villaverde, et al. [47], for example, found that the income of tourists was an essential determinant of tourist arrivals but not of tourism expenditure. Therefore, the impacts of income on tourism expenditure may be significant but are not necessarily large.

Table 1. Determinants of total expenditure per capita.

Variables	Total Expenditure Per Capita		
C	3.791 *** (0.530)	5.792 *** (0.526)	3.088 *** (0.688)
TE_{t-1}	0.700 *** (0.129)	0.703 *** (0.104)	0.713 *** (0.132)
Y_i	0.419 *** (0.045)	0.223 *** (0.058)	0.504 *** (0.035)
P_i	−0.050 (0.049)	−0.054 * (0.032)	−0.041 (0.044)
Ps_{ALL}	0.346 ** (0.135)	-	-
Ps_{ASE}	-	0.475 *** (0.070)	-
Ps_{NE}	-	-	0.243 ** (0.101)
C1	−0.018 *** (0.005)	−0.010 ** (0.004)	−0.019 *** (0.005)
C2	−0.0477 *** (0.011)	−0.041 *** (0.009)	−0.047 *** (0.010)
R ²	0.996	0.996	0.996
Adj.R ²	0.995	0.996	0.995
AIC	−3.911	−3.950	−3.906

***, **, * indicates significance at 1%, 5%, and 10% level of confidence, respectively. Figures inside the parenthesis are Standard Errors. AIC denotes the Aikake Information Criterion test value. Estimates reported are based on a Panel EGLS regression model and Wald tests using international tourist expenditure per capita as a dependent variable.

The coefficients of the relative tourist price levels are negative but were significant ($p < 0.1$) in only one of the three regressions (column 2). These results are similar to other studies in that the relative tourist prices impact tourism demand [18,19,47,48]. Turning to the effects of prices in alternative tourist destinations, we find that the coefficients were statistically significant across all three regressions and considerably more substantial than the impact of the relative tourist prices on tourism expenditure. The growth of budget airlines in the ASEAN region would indicate that the tourism demand to Thailand would increase because an increase in traveling routes would enable travelers to visit multiple countries within the area [49]. However, since tourists have limited traveling funds, they might allocate a smaller proportion of their budget or spend less time in countries with

higher living costs. Consequentially, tourists will likely distribute a lower portion of their spending in Thailand when the relative prices in alternative tourist destinations fall.

The impacts of the prices in tourist destinations in the ASEAN countries are slightly more significant than the effects of the prices from the Northeast Asian countries. Several tourist attractions, weather patterns, and cultural elements in Thailand are similar to those observed in neighboring ASEAN countries. Thus, a drop in the prices of ASEAN countries may incentivize tourists to allocate a more significant portion of their expenditure in those countries. Song, Li, Witt and Fei [1] mentioned that there was a lower degree of substitutability when tourists had unique tourist attractions. Tourists may view tourist attractions in Hong Kong, Japan, and China as very different from those offered in Thailand. Consequentially, the impacts of the cross-prices between Thailand and Northeast Asian countries could be considerably lower than those observed between Thailand and neighboring ASEAN countries. If the results hold, then creating tourism experiences that would help Thailand differentiate its tourism would help change the perception that the tourist attraction across the ASEAN countries is similar. The expansion of sustainable tourism would help make the experience of tourists in Thailand more unique.

Relative corruption has a negative and significant impact on tourism expenditure (Table 1). The coefficient for C2 was over four times the value of the coefficient for C1. Therefore, the perception of corruption does influence the average expenditure per visitor, and the effect is more significant as the difference in corruption between the origin country and Thailand increases. These findings correspond to studies that find that corruption reduces tourism arrivals [23,43].

To determine whether the determinants of tourism demand hold when disaggregating the expenditure into different tourism-related activities, we estimated the tourism expenditure demand model (Equation (6)) using accommodation and shopping per capita spending as dependent variables. The results in Table 2 show that income and word of mouth are essential in determining what to spend on accommodations and shopping. These findings suggest that recommendations on shopping activities of tourists in the past motivate tourists to pay more. Moreover, tourists are also sensitive to past recommendations on expenditure on accommodations, which follows Lei, et al. [50], where past experiences in a hotel accommodation did have an impact on the amount of future spending in said hotel.

The findings in Table 2 also show that relative prices are significant when investigating the determinants of shopping and accommodation spending. Furthermore, spending on accommodations was significantly affected by the average daily room rates. The impact of the average daily room rates had an effect that was larger than the relative tourist prices. These findings suggest that an increase in the room rates would lead to a fall in spending on hotel services, either through a fall in days spent at the accommodation or choosing low-cost budget hotels. Based on these findings, we can draw substantial implications for hotels incorporating green initiatives in their management. An increase in the room rates resulting from environmental practices would result in a fall in revenue for the hotel. Rahman, et al. [51] mentioned that an increase in consumers' willingness to pay a premium for green hotel services does not necessarily change actual purchase behavior. Guests might not perceive the benefits of green efforts from "environmentally friendly" hotels [52] and instead might see these practices as an inconvenience [53]. Therefore, visitors will be reluctant to pay the extra premium for environmentally friendly practices. The hotels would then need to establish environmental practices that would help keep their nightly rates competitive.

Table 2 shows that the coefficient for $P_{s_{ASE}}$ is positive and significant for accommodation spending, but negatively impacts shopping spending. However, the estimation of the demand model using $P_{s_{NE}}$ in the model yields a negative and significant coefficient for both types of spending. This indicates that the results for $P_{s_{ALL}}$ and $P_{s_{NE}}$ contrast those shown in Table 1. Total tourist expenditure comprises different expenses, including accommodation spending, shopping, local transportation, etc. The determinants of demand might affect disaggregated tourist expenses differently because they occur at other points in time. For

example, tourists will book their accommodations before they arrive in Thailand, making it easier for tourists to compare accommodation prices in different countries since they are available online. In contrast, the consumption of goods and the use of local transportation do not take place until the tourist arrives at the destination. Thus, there is a possibility that tourist prices from alternative destinations may exhibit a relationship that depends on the type of expense under investigation.

Table 2. Determinants of tourist expenditure on accommodation and shopping.

Variables	Accommodation Expenses			Shopping Expenses		
C	−0.283 (1.077)	3.299 *** (1.042)	1.683 *** (0.380)	4.486 *** (0.217)	3.115 *** (0.380)	5.276 *** (0.244)
AC_{t-1}	0.689 *** (0.103)	0.539 *** (0.079)	0.701 *** (0.095)	-	-	-
SH_{t-1}	-	-	-	0.928 *** (0.029)	0.890 *** (0.037)	0.935 *** (0.029)
Y_i	0.821 *** (0.073)	0.315 *** (0.092)	0.812 *** (0.031)	0.605 *** (0.021)	0.753 *** (0.016)	0.525 *** (0.015)
P_i	−0.095 ** (0.045)	−0.082 ** (0.039)	−0.194 *** (0.025)	−0.129 *** (0.020)	−0.237 *** (0.021)	−0.108 *** (0.016)
H_{rate}	−0.129 *** (0.041)	−0.639 *** (0.039)	−0.022 *** (0.007)	-	-	-
Ps_{ALL}	−0.099 ** (0.046)	-	-	−0.649 *** (0.057)	-	-
Ps_{ASE}	-	1.477 *** (0.144)	-	-	−0.633 *** (0.071)	-
Ps_{NE}	-	-	−0.435 *** (0.020)	-	-	−0.631 *** (0.050)
$C1$	−0.018 (0.015)	−0.016 (0.012)	−0.014 (0.016)	−0.021 *** (0.006)	−0.014 (0.011)	−0.023 *** (0.004)
$C2$	−0.047 ** (0.024)	−0.048 *** (0.018)	−0.035 (0.027)	−0.029 ** (0.013)	−0.026 ** (0.012)	−0.028 ** (0.013)
R^2	0.994	0.995	0.998	0.997	0.996	0.997
Adj. R^2	0.992	0.993	0.997	0.996	0.995	0.996
AIC	−3.666	−3.774	−3.807	−3.334	−3.253	−3.360

***, ** indicates significance at 1% and 5% level of confidence, respectively. Figures inside the parenthesis are Standard Errors. AIC denotes the Aikake Information Criterion test value. Estimates reported in columns 1, 2, and 3 are based on a Panel EGLS regression model and Wald tests using international tourist per capita spending on accommodations as a dependent variable. The estimates reported in columns 4, 5, and 6 are based on a Panel EGLS regression model and Wald tests using international tourist per capita spending on shopping as a dependent variable.

Results in Table 2 also show that there are slight differences in how the variables affect each category of spending. In Table 2, we can see that Ps_{ALL} and Ps_{NE} exhibit effects on shopping that are similar to those observed on accommodation expenses. However, the relative prices in competing tourist destinations on shopping spending are more substantial than those noted for accommodation. In turn, the impacts of Ps_{ASE} on accommodation spending were positive, whereas the effects on shopping were negative. We can explain the difference if we assume that tourists visiting Thailand will also travel to other Asian countries. In planning their trip, tourists will search for the room rates and accommodation fees online and use it to allocate a portion of their budget to pay for accommodations in each country they visit. Living costs, including accommodations, in Northeast Asia are relatively more expensive than countries in the ASEAN region. Since tourists will know the payment for accommodations ahead of time, tourists might allocate a smaller

portion of their spending in accommodations in ASEAN countries in anticipation of higher spending in Northeast Asian countries. Consequently, countries within the ASEAN region will heavily compete for the limited portion of the expenditure. In turn, shopping takes place at the moment the tourists arrive at their destination. If tourists perceive that the countries they will visit are relatively more expensive than Thailand, they will save on daily expenses to have enough funds for the following country.

The coefficient for P_{SNE} in the shopping spending model is more negative than that observed for the accommodation spending model. It is crucial to mention that tourists visit tourist destinations for a specific purpose [54]. For example, tourists visit Hong Kong for the shopping experience and spend more than half of their traveling budget on purchasing goods [55]. In contrast, tourist spending in Thailand is spread throughout the different kinds of experiences. The share of shopping expenditure in Thailand accounts for 24% of tourism receipts [56]. Tourists might allocate a more significant portion of their budget in Northeast Asia countries to realize their shopping activities and decide to spend less on purchases in Thailand. Consequentially, a rise in the prices in shopping-centric tourist destinations would lead tourists to reduce their purchases of goods in Thailand.

Finally, the effects of P_{SALL} on shopping and accommodation spending were negative, whereas the coefficient of P_{SALL} on per capita spending of tourists was positive. As shown in our findings, alternative tourist destinations may have different kinds of price relationships with Thailand. Such links could be lost when tourist prices from many tourist competitors are aggregated. Thus, special care should be given in selecting alternative tourist destinations in the composition of PS .

Table 2 shows that $C1$ and $C2$ have an adverse and significant effect on tourist shopping spending. Since shopping takes place in situ, then the impacts of relative corruption might be more exacerbated. In turn, the coefficients for $C1$ were not significant when considering the effects of relative corruption on spending in accommodations, but the coefficient for $C2$ was significant and negative (column 1 and 2). These results indicate that corruption is detrimental to accommodation receipts unless the relative corruption between Thailand and the country of origin is significant. These findings are similar to Kubickova, et al. [57], where low levels of corruption did not affect the revenue per room and the occupancy rate but contrast their conclusions in that when the corruption levels are significant, the relationship is positive. Aside from being used as tourism demand variables, the average daily rate, occupancy rate, and revenue per room are often used to measure hotel performance [58,59]. Corruption may enhance the performance of hotels since it might make operations and investments run more smoothly [60] following the “Greasing of the wheels” hypothesis. However, it does not imply that foreign tourists will decide to spend more on accommodations when relative corruption is higher. Since the performance variables do not distinguish between domestic and international travelers [45], domestic tourists will still decide to book hotels within the country regardless of the corruption levels. However, a foreign tourist who chooses to visit a relatively more corrupt destination than their country of origin may decide to stay fewer days, thus spending less per visit.

The impacts of $C2$ on accommodation expenses are similar to those reported in Table 1. In contrast, the magnitude of the effects of $C2$ on expenditure on shopping activities is smaller than the estimates shown in Table 1. These findings suggest that the factors affecting tourism spending may vary depending on the type of tourist expense under investigation. Tourists book hotel accommodations days or months before traveling to a tourist destination [61–63]. It is very likely that a visitor’s preconceptions will govern their spending on accommodations. As we previously mentioned, relative corruption may motivate tourists to shorten their trips to destinations that are relatively more corrupt than their country of origin. Consequentially, relative corruption could have a considerable impact on spending on accommodations similar to total tourist spending. However, shopping expenditure takes place during the tourist’s visit. Thus, the effect of relative corruption may be considerably lower.

5. Conclusions

Governments' focuses on expanding the tourism sector through profit-seeking mass tourism is linked to the degradation of environmental resources in tourist destinations. Policymakers respond by developing sustainable tourism policies that are environmentally centric but do not address tourist operators' revenue. In this area, we posit that studying the determinants of tourist expenditure per capita will help understand the factors to prioritize when developing sustainable tourism initiatives that will be profitable for tourist operators. Although we employed a conventional approach to studying tourism demand, the study provides valuable suggestions for policymakers and tourist operators under a sustainable tourism context.

Elevated relative tourist prices are detrimental to all kinds of tourist expenditure. In turn, the dynamics of prices from alternative tourist destinations vary according to the type of tourism expense under investigation. Alternative tourist destinations in Southeast and Northeast Asia compete with Thailand for total expenditure per capita. Moreover, a competitive relationship between Thailand and other destinations in Southeast Asia is found when examining accommodation expenses. However, when analyzing the effects of tourist prices in Northeast Asian destinations on tourist spending on accommodations and shopping in Thailand, the relationship was complementary.

Based on our findings, Southeast Asian countries are significant competitors of the Thai tourism industry. Thus, policymakers must include tourist prices in Southeast Asian countries to develop tourism policies in Thailand. Furthermore, to reduce the level of substitutability between tourist destinations, the creation of tourist attractions and experiences that distinguish Thailand from other nations must be prioritized. For such purpose, policymakers should survey the tourism industries developed in neighboring Southeast Asian countries and use this as a point of reference to create new sustainable tourism projects. However, the mark-up in tourist services caused by implementing sustainable tourism practices should be kept at a minimum so that tourist prices in Thailand remain competitive. Tourist operators should also consider developing techniques or technologies that will make sustainable tourism practices less costly than conventional ones. Doing so will help the operators provide services at low costs enabling them to reduce their prices.

Relative corruption exhibited considerable negative impacts on all types of tourist spending under investigation. Moreover, the magnitude of the effect was higher as the relative corruption between the countries grew. It is worth noting that countries with low levels of corruption are also high-income countries. Therefore, corruption interrupts the flow of high-spending tourists to Thailand. Consequentially, the Thai government needs to tackle corruption to help increase the flow of tourists from high-income countries. Furthermore, the tourism authorities of Thailand should concentrate their efforts on promoting tourism in high-income countries that have corruption levels that lower or slightly higher than the levels exhibited in Thailand. A major setback is that countries with the highest incomes per capita are usually ranked very high in control of corruption. Therefore, a different marketing approach is needed to offset the effects of corruption. Tourist authorities should develop marketing strategies to convince tourists that Thailand is a safe destination.

Moreover, partnerships between tourism authorities and operators could build and promote tourist activities that tourists in rich countries highly demand. These activities could include health tourism, ecotourism, agro-tourism, historical tourism, cultural and traditional tourism, sports tourism, adventure tourism, etc., which are activities that use sustainable tourism practices. It is also vital that the services provided by tourist operators and government institutions (i.e., immigration, tourist police, etc.) be optimized to create a positive experience for tourists and good word of mouth. Furthermore, the marketing strategies could include using social media to accentuate word of mouth's positive effects on tourism spending.

We study the factors that affect expenditure in the subcategories of tourism, including tourist spending on accommodation and shopping. However, we could not inspect the factors that affect spending on other tourism categories because of data availability. Further

study on how tourist expenditure in these specific tourist activities, including adventure tourism and heritage, could help provide more insights into gearing national policies towards sustainable tourism. Our study could also complement future research investigating the negative externalities of tourist activities (i.e., energy consumption, green gas emissions, solid waste production, etc.) on the environment. In addition to our research findings, such research could also help prioritize the types of tourism activities included in national tourism development plans to enhance sustainable tourism development.

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Appendix A

Table A1. Descriptive statistics of data.

Data	Definition	Mean	Max	Min	Std. Dev.	Obs
TE	Total expenditure per capita of international tourists in Thai Baht	54,594.68	98,819.14	19,587.14	15,702.56	248
AC	Total expenditure per capita of international tourists on accommodation in Thai Baht	17,073.81	28,158.72	5811.99	5272.90	248
SH	Total expenditure per capita of international tourists on shopping in Thai Baht	11,901.25	27,541.18	5454.33	3514.28	248
Y	Real GDP per capita of the foreign country in Thai Baht	1,188,233.00	3,187,864.00	42,647.19	703,784.30	248
P_i	Tourist prices of Thailand relative to prices in the country of origin of the tourist	96.70	122.40	51.82	12.38	248
$P_{s_{ALL}}$	The weighted price index of a group of substitute tourist destinations in Southeast Asia and Northeast Asia with the real broad effective exchange rate	107.52	117.05	100.00	5.11	248
$P_{s_{ASE}}$	The weighted price index of a group of substitute tourist destinations in Southeast Asia with the real broad effective exchange rate	117.22	139.03	100.00	13.36	248
$P_{s_{NE}}$	The weighted price index of a group of substitute tourist destinations in Northeast Asia with the real broad effective exchange rate.	103.99	109.24	100.00	2.49	248
$C1$	Dummy variable identifying countries which have relatively similar corruption levels to Thailand	0.22	1.00	0.00	0.41	248

Table A1. Cont.

Data	Definition	Mean	Max	Min	Std. Dev.	Obs
C2	Dummy variable identifying countries whose corruption levels are vastly lower relative to Thailand	0.67	1.00	0.00	0.47	248
H_{rate}	Average room rates in Thailand in Thai Baht	1139.42	1458.40	1035.142	152.22	248

Table A2. Correlation Matrix for independent variables used in the study.

	Y	P_i	Ps_{ALL}	C1	C2	H_{rate}
Y	1.000					
P_i	0.317	1.000				
Ps_{ALL}	0.110	−0.261	1.000			
C1	−0.511	−0.242	0.082	1.000		
C2	0.802	0.355	−0.002	−0.744	1.000	
H_{rate}	0.099	−0.212	0.815	0.063	−0.025	1.000

Table A3. Correlation Matrix for independent variables used in the study.

	Y	P_i	Ps_{ASE}	C1	C2	H_{rate}
Y	1.000					
P_i	0.317	1.000				
Ps_{ASE}	0.119	−0.274	1.000			
C1	−0.511	−0.242	0.089	1.000		
C2	0.802	0.355	−0.004	−0.744	1.000	
H_{rate}	0.099	−0.212	0.827	0.063	−0.025	1.000

Table A4. Correlation Matrix for independent variables used in the study.

	Y	P_i	Ps_{NE}	C1	C2	H_{rate}
Y	1.000					
P_i	0.317	1.000				
Ps_{NE}	0.078	−0.202	1.000			
C1	−0.511	−0.242	0.059	1.000		
C2	0.802	0.355	0.000	−0.744	1.000	
H_{rate}	0.099	−0.212	0.699	0.063	−0.025	1.000

References

1. Song, H.Y.; Li, G.; Witt, S.F.; Fei, B.G. Tourism demand modelling and forecasting: How should demand be measured? *Tour. Econ.* **2010**, *16*, 63–81. [\[CrossRef\]](#)
2. Andriotis, K. Tourism Planning and Development in Crete: Recent Tourism Policies and their Efficacy. *J. Sustain. Tour.* **2001**, *9*, 298–316. [\[CrossRef\]](#)
3. Koçak, E.; Ulucak, R.; Ulucak, Z.Ş. The impact of tourism developments on CO2 emissions: An advanced panel data estimation. *Tour. Manag. Perspect.* **2020**, *33*. [\[CrossRef\]](#)
4. Welford, R.; Ytterhus, B.; Eligh, J. Tourism and sustainable development: An analysis of policy and guidelines for managing provision and consumption. *Sustain. Dev.* **1999**, *7*, 165–177. [\[CrossRef\]](#)
5. Chancharat, S. Thai Tourism and Economic Development: The Current State of Research. *Kasetsart J. Soc. Sci.* **2011**, *32*, 12.
6. Azam, M.; Mahmudul Alam, M.; Haroon Hafeez, M. Effect of tourism on environmental pollution: Further evidence from Malaysia, Singapore and Thailand. *J. Clean Prod.* **2018**, *190*, 330–338. [\[CrossRef\]](#)

7. Khan, M.T.I.; Yaseen, M.R.; Ali, Q. Nexus between financial development, tourism, renewable energy, and greenhouse gas emission in high-income countries: A continent-wise analysis. *Energy Econ.* **2019**, *83*, 293–310. [CrossRef]
8. Ministry of Tourism and Sports. *Ministry of Tourism and Sports: The Second National Tourism Development Plan (2017–2021)*; Office of Permanent Secretary Ministry of Tourism and Sports Thailand: Bangkok, Thailand, 2017.
9. Dlużewska, A.; Rodzoś, J. Sustainable tourism supranational policies and the wellbeing—Gaps and challenges from the hosts' and the guests' perspective. *Monit. Public Opin. Econ. Soc. Chang.* **2018**, *147*. [CrossRef]
10. Curtin, S.; Busby, G. Sustainable destination development: The tour operator perspective. *Int. J. Tour. Res.* **1999**, *1*, 135–147. [CrossRef]
11. Nepal, R.; Al Irsyad, M.I.; Nepal, S.K. Tourist arrivals, energy consumption and pollutant emissions in a developing economy—implications for sustainable tourism. *Tour. Manag.* **2019**, *72*, 145–154. [CrossRef]
12. Gkoumas, A. Evaluating a standard for sustainable tourism through the lenses of local industry. *Heliyon* **2019**, *5*, e02707. [CrossRef]
13. Zhang, S.; Chan, C.S. Nature-based tourism development in Hong Kong: Importance–Performance perceptions of local residents and tourists. *Tour. Manag. Perspect.* **2016**, *20*. [CrossRef]
14. Pulido-Fernández, J.I.; López-Sánchez, Y. Are Tourists Really Willing to Pay More for Sustainable Destinations? *Sustainability* **2016**, *8*, 1240. [CrossRef]
15. Dolnicar, S.; Leisch, F. Selective marketing for environmentally sustainable tourism. *Tour. Manag.* **2008**, *29*, 672–680. [CrossRef]
16. Moeller, T.; Dolnicar, S.; Leisch, F. The sustainability–profitability trade-off in tourism: Can it be overcome? *J. Sustain. Tour.* **2011**, *19*, 155–169. [CrossRef]
17. Song, H.Y.; Qiu, R.T.R.; Park, J. A review of research on tourism demand forecasting. *Ann. Tour. Res.* **2019**, *75*, 338–362. [CrossRef]
18. Song, H.; Witt, S.F.; Li, G. Modelling and Forecasting the Demand for Thai Tourism. *Tour. Econ.* **2003**, *9*, 363–387. [CrossRef]
19. Song, H.; Li, G. Tourism demand modelling and forecasting—A review of Recent research. *Tour. Manag.* **2008**, *29*, 203–220. [CrossRef]
20. Yap, G.; Saha, S. Do Political Instability, Terrorism, and Corruption Have Deterring Effects on Tourism Development Even in the Presence of Unesco Heritage? A Cross-Country Panel Estimate. *Tour. Anal.* **2013**, *18*, 587–599. [CrossRef]
21. Saha, S.; Yap, G. The Moderation Effects of Political Instability and Terrorism on Tourism Development: A Cross-Country Panel Analysis. *J. Travel Res.* **2014**, *53*, 509–521. [CrossRef]
22. Saha, S.; Yap, G. Corruption and Tourism: An Empirical Investigation in a Non-linear Framework. *Int. J. Tour. Res.* **2015**, *17*, 272–281. [CrossRef]
23. Saha, S.; Su, J.J.; Campbell, N. Does Political and Economic Freedom Matter for Inbound Tourism? A Cross-National Panel Data Estimation. *J. Travel Res.* **2017**, *56*, 221–234. [CrossRef]
24. Ridderstaat, J.; Oduber, M.; Croes, R.; Nijkamp, P.; Martens, P. Impacts of seasonal patterns of climate on recurrent fluctuations in tourism demand: Evidence from Aruba. *Tour. Manag.* **2014**, *41*, 245–256. [CrossRef]
25. Ministry of Tourism and Sports Thailand Tourism 2020. Available online: https://www.mots.go.th/more_news_new.php?cid=625 (accessed on 10 May 2021).
26. Ministry of Tourism and Sports Thailand Tourism 2019. Available online: https://www.mots.go.th/more_news_new.php?cid=585 (accessed on 10 May 2021).
27. NSCR. *National Tourism Planning Strategy. National Tourism Strategy, Thailand*; Office of the National Economic and Social Development Council: Bangkok, Thailand, 2021.
28. Ministry of Tourism and Sports. *Final Report of Sustainable Tourism Project*; Office of Permanent Secretary Ministry of Tourism and Sports Thailand: Bangkok, Thailand, 2019.
29. López-Sánchez, Y.; Pulido-Fernández, J.I. Factors influencing the willingness to pay for sustainable tourism: A case of mass tourism destinations. *Int. J. Sustain. Dev. World Ecol.* **2017**, *24*, 262–275. [CrossRef]
30. Huete-Alcocer, N.; López-Ruiz, V.R.; Grigorescu, A. Measurement of Satisfaction in Sustainable Tourism: A Cultural Heritage Site in Spain. *Sustainability* **2019**, *11*, 6774. [CrossRef]
31. Durán-Román, J.L.; Cárdenas-García, P.J.; Pulido-Fernández, J.I. Tourists' willingness to pay to improve sustainability and experience at destination. *J. Destin. Mark. Manag.* **2021**, *19*. [CrossRef]
32. Yan, L.; Gao, B.W.; Zhang, M. A mathematical model for tourism potential assessment. *Tour. Manag.* **2017**, *63*, 355–365. [CrossRef]
33. World Tourism Organization. *A Practical Guide to Tourism Destination Management*; World Tourism Organization: Madrid, Spain, 2007.
34. Sastre, R.P.; Phakdee-Auksorn, P. Examining Tourists' Push and Pull Travel Motivations and Behavioral Intentions: The Case of British Outbound Tourists to Phuket, Thailand. *J. Qual. Assur. Hosp. Tour.* **2017**, *18*, 437–464. [CrossRef]
35. Dogru, T.; Sirakaya-Turk, E.; Crouch, G.I. Remodeling international tourism demand: Old theory and new evidence. *Tour. Manag.* **2017**, *60*, 47–55. [CrossRef]
36. Tang, J.J. Evaluation of the Forecast Models of Chinese Tourists to Thailand Based on Search Engine Attention: A Case Study of Baidu. *Wirel. Pers. Commun.* **2018**, *102*, 3825–3833. [CrossRef]
37. Cheng, K.M. Tourism demand in Hong Kong: Income, prices, and visa restrictions. *Curr. Issues Tour.* **2012**, *15*, 167–181. [CrossRef]
38. Stauvermann, P.J.; Kumar, R.R. Productivity growth and income in the tourism sector: Role of tourism demand and human capital investment. *Tour. Manag.* **2017**, *61*, 426–433. [CrossRef]

39. Tang, C.F. The impacts of governance and institutions on inbound tourism demand: Evidence from a dynamic panel data study. *Asia Pac. J. Tour. Res.* **2018**, *23*, 1000–1007. [\[CrossRef\]](#)
40. Song, H.Y.; Gartner, W.C.; Tasci, A.D.A. Visa restrictions and their adverse economic and marketing implications—Evidence from China. *Tour. Manag.* **2012**, *33*, 397–412. [\[CrossRef\]](#)
41. Lv, Z.; Xu, T. A panel data quantile regression analysis of the impact of corruption on tourism. *Curr. Issues Tour.* **2017**, *20*, 603–616. [\[CrossRef\]](#)
42. Poprawe, M. A panel data analysis of the effect of corruption on tourism. *Appl. Econ.* **2015**, *47*, 2399–2412. [\[CrossRef\]](#)
43. Demir, E.; Gozgor, G. What about relative corruption? The impact of the relative corruption on the inbound tourism to Turkey. *Int. J. Tour. Res.* **2017**, *19*, 358–366. [\[CrossRef\]](#)
44. Vorasun, B. Success of One Tambon product (OTOP) to Thai International Airline since 2016. *Soc. Sci. Asia* **2017**, *3*, 59–64.
45. Corgel, J.; Lane, J.; Walls, A. How currency exchange rates affect the demand for U.S. hotel rooms. *Int. J. Hosp. Manag.* **2013**, *35*, 78–88. [\[CrossRef\]](#)
46. Tsui, K.W.H. Does a low-cost carrier lead the domestic tourism demand and growth of New Zealand? *Tour. Manag.* **2017**, *60*, 390–403. [\[CrossRef\]](#)
47. García-Villaverde, P.M.; Elche, D.; Martínez-Pérez, Á.; Ruiz-Ortega, M.J. Determinants of radical innovation in clustered firms of the hospitality and tourism industry. *Int. J. Hosp. Manag.* **2017**, *61*, 45–58. [\[CrossRef\]](#)
48. Martins, L.F.; Gan, Y.; Ferreira-Lopes, A. An empirical analysis of the influence of macroeconomic determinants on World tourism demand. *Tour. Manag.* **2017**, *61*, 248–260. [\[CrossRef\]](#)
49. Alvarez-Diaz, M.; Gonzalez-Gomez, M.; Otero-Giraldez, M.S. Low cost airlines and international tourism demand. The case of Porto's airport in the northwest of the Iberian Peninsula. *J. Air Transp. Manag.* **2019**, *79*. [\[CrossRef\]](#)
50. Lei, S.I.; Nicolau, J.L.; Xiao, Q.; Wang, D. The effectiveness of tryvertising in hotels. *Int. J. Hosp. Manag.* **2020**, *85*. [\[CrossRef\]](#)
51. Rahman, I.; Chen, H.; Reynolds, D. Evidence of green signaling in green hotels. *Int. J. Hosp. Manag.* **2020**, *85*. [\[CrossRef\]](#)
52. Gil-Soto, E.; Armas-Cruz, Y.; Morini-Marrero, S.; Ramos-Henriquez, J.M. Hotel guests' perceptions of environmental friendly practices in social media. *Int. J. Hosp. Manag.* **2019**, *78*, 59–67. [\[CrossRef\]](#)
53. Kim, E.; Chiang, L.L.; Tang, L. Investigating wellness tourists' motivation, engagement, and loyalty: In search of the missing link. *J. Travel Tour. Mark.* **2017**, *34*, 867–879. [\[CrossRef\]](#)
54. Au, N.; Law, R. Categorical classification of tourism dining. *Ann. Tour. Res.* **2002**, *29*, 819–833. [\[CrossRef\]](#)
55. Au, N.; Law, R. The Application of Rough Sets to Sightseeing Expenditures. *J. Travel Res.* **2000**, *39*, 70–77. [\[CrossRef\]](#)
56. Ministry of Tourism and Sports. *Thailand Tourism Statistics Report 2017*; Ministry of Tourism and Sport: Bangkok, Thailand, 2019.
57. Kubickova, M.; Kirimhan, D.; Li, H. The impact of crises on hotel rooms' demand in developing economies: The case of terrorist attacks of 9/11 and the global financial crisis of 2008. *J. Hosp. Tour. Manag.* **2019**, *38*, 27–38. [\[CrossRef\]](#)
58. Dogru, T.; Mody, M.; Line, N.; Suess, C.; Hanks, L.; Bonn, M. Investigating the whole picture: Comparing the effects of Airbnb supply and hotel supply on hotel performance across the United States. *Tour. Manag.* **2020**, *79*. [\[CrossRef\]](#)
59. Xie, K.L.; Kwok, L. The effects of Airbnb's price positioning on hotel performance. *Int. J. Hosp. Manag.* **2017**, *67*, 174–184. [\[CrossRef\]](#)
60. Kubickova, M.; Li, H. Tourism Competitiveness, Government and Tourism Area Life Cycle (TALC) Model: The Evaluation of Costa Rica, Guatemala and Honduras. *Int. J. Tour. Res.* **2017**, *19*, 223–234. [\[CrossRef\]](#)
61. Chen, C.; Schwartz, Z. Room Rate Patterns and Customers' Propensity To Book a Hotel Room. *J. Hosp. Tour. Res.* **2008**, *32*, 287–306. [\[CrossRef\]](#)
62. Chen, C.C.; Schwartz, Z. On revenue management and last minute booking dynamics. *Int. J. Contemp. Hosp. Manag.* **2013**, *25*, 7–22. [\[CrossRef\]](#)
63. Chen, M.; Chen, Z.-L. Uncertain about your travel plan? Lock it and decide later: Dynamic pricing with a fare-lock option. *Transp. Res. Part E Logist. Transp. Rev.* **2019**, *125*, 1–26. [\[CrossRef\]](#)