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Long-Haul Tourist Preferences for Stopover Destination Visits

Long-haul tourist preferences for stopover destination visits

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Abstract

International long-haul travel represents a distinct market segment with great potential. Yet, empirical studies on the stopover destination visits are limited. The current research is based on a web survey conducted among residents in the US, the UK, and Australia, which are three of the world's top spenders and long-haul travel source markets. In this work, we examine tourist intentions to trade leisure time at a long-haul destination for a visit to a stopover destination. In particular, tourist preferences are analyzed as a function of traveler price sensitivity toward long-haul destinations, personality, activity engagement, motivation, travel profile and demographic characteristics. Results provide insights into the under-researched topic of stopover tourism and guide aviation mega-cities toward an enhanced understanding of the potential demand.

Introduction

The International Air Transport Association (IATA) categorizes travel according to the flight time between the origin and the final destination, and defines short-haul travels as flights with duration of less than 5 hours (IATA, 2012). From a geographical perspective, the US Travel Association (2017) defines long-haul travels as those that take place between countries located in separate geographical regions (i.e., between the US and Europe), whereas Airbus (2017) considers routes over 2,000 nautical miles as long-haul markets. Although only one quarter of all international travel is long haul (US Travel Association, 2017), a positive trend in the global tourism industry is observed. Long-haul routes experience a growth in the number of seats offered by a third since 2010 (Airbus, 2017). The entry of low-cost carriers to long-haul markets contributes to this phenomenon (Rodríguez and O'Connell, 2018). Although this trend represents a great opportunity for the development of city destinations, it also signifies a tough competition among cities located in the same geographical regions. Airbus (2015) found that over 90% of the long-haul traffic in 2014 was generated to/from/via 47 cities and forecasted that this number would nearly double in the next 20 years.

The growing number of aviation mega-cities also creates opportunities for the tourism industry. To transit successfully from hubs into destinations, aviation mega-cities not only need a favorable geographical location but also appropriate infrastructure, solid investment, and strategic plans (Lohmann, Albers, Koch, and Pavlovich, 2009). In particular, complex network systems are developed by governments for interlocking airlines with attraction, local public transportation, and accommodation sectors. Interestingly, some stopover destinations have been developing further as gateway destinations to a wide network of destinations. For example, Singapore is a usual stopover for flights between Oceania and Asia (Low and Heng, 1997), and Hong Kong is perceived as the gateway to China (Lew and McKercher, 2002).

Recent hubs are Dubai, which operates mainly between the European and the Australian markets, and Iceland, a convenient stopover destination in the route between Europe and North America. Iceland has developed into a gateway to the northern landscape due to a strategic stopover policy after the 2008 financial crisis (Lund, Loftsdóttir, and Leonard, 2017).

The role of stopover visits in local development has been long recognized by governments and industry stakeholders in several destinations. Visa-free transit is becoming increasingly popular in aviation hub cities as a way to attract stopover tourists. For example, visa-free transit in China allows tourists to stopover for 72 hours to 144 hours within designated areas (Travel China Guide, 2018). The 96-hour free transit visa grants international tourists a stopover in Doha (Qatar Airways, 2018), and the no-visa transfer in Korea permits eligible tourists to stay in Seoul for 72 hours (Hi Korea, 2018). Airlines also work with local tourism practitioners and authorities in creating stopover packages and attracting stopover tourists (Țigu and Stoenescu, 2017). For instance, Singapore Airlines cooperates with Changi Airport Group and Singapore Tourism Board to establish the Singapore Stopover Holiday, which provides easy access to hotels, restaurants, and complimentary rides to stopover tourists. Emirates and Etihad Airways offer similar stopover packages for stopover tourists in Dubai and Abu Dhabi, respectively.

Understanding the potential tourism demand is a key element that stopover destinations should focus on if they want to maintain their attractiveness in a growing but increasingly competitive market. However, stopover destinations receive limited attention from the academia (Pike and Kotsi, 2016). To this end, the present study aims to enhance the understanding of long-haul tourist preferences for overnight stopover destination visits by examining tourist intentions to trade leisure time at a long-haul destination for a visit to a stopover destination. In particular, this study intends to address the following research

questions: *What makes travelers consider a first-time visit to a stopover destination? What characterizes stopover repeat visitors? What can be done to increase the probability of considering a repeat stopover destination?* Thus, we conduct an empirical research on survey data collected from residents in the US, the UK, and Australia – three of the world's top spenders and long-haul travel source markets (US Travel Association, 2017). In particular, tourist preferences for stopover destination visits are analyzed as a function of traveler price sensitivity toward long-haul destinations, personality, activity engagement, motivation, travel profile and demographic characteristics.

Literature review

Multi-destination travel and stopover visit

To investigate related issues on stopover destination, the multi-destination travel pattern in long-haul travel must be discussed. That is, numerous tourists leave home to visit multiple tourist destinations instead of going to a single destination (see Yang, Fik, and Zhang, 2017 for review). In particular, Lue, Crompton, and Fesenmaier (1993) described 30% to 50% of all trips as multi-destinational. This notion can be explained by the high utility that travelers derive by combining the characteristics of the different destinations during a multi-destination visit (Tussyadiah, Kono, and Morisugi, 2006). Especially in the case of long-haul travel, as distance decay factor applies, multi-destination visit is more likely to occur due to the opportunity costs of travel and time (Yang et al., 2017).

In this context, the main/primary and secondary destination visits can be distinguished. Secondary destinations are defined as "either an interesting or necessary place to visit on the way to a primary destination" (McKercher and Wang, 2004 pp. 172). Main and secondary tourism should be considered as two discrete markets (McKercher, 2001), because they are associated with different planning processes, motivations to visit, and activity consumption. Visits to a secondary destination require a multi-destination itinerary, which can be described by its spatial patterns. In this context, Lue, Crompton, and Fesenmaier (1993) described five patterns, namely, single, en route, base camp, regional tour, and trip chaining. Oppermann (1995) further elaborated these qualifications by distinguishing two single and five multiple destination patterns. He categorized stopover visits by the length of stay within the entire multi-destination trip, with less than 5% of all nights spent in the stopover destination.

However, what constitutes a stopover has not been defined clearly. Beaver (2005) described the notion through IATA and other official guidelines, that is, a stopover is a deliberate stop

that is prearranged with the airline carrier. It occurs when the next flight is not scheduled on the date of arrival, and the available connecting flights within the 24-hour period from the arrival time are not selected by the traveler. A specified length of a break of more than 24 hours between the origin and final destination is the most widely accepted definition of stopover, whereas a less than 24-hour break is considered a layover or transit (Pike, Kotsi, and Tossan, 2018). Tourists taking connecting flights to a destination can either have a layover, which includes waiting at the airport or less than a day-long trip to the destination, or a stopover, which involves a longer stay in comparison with a layover. Previous studies define stopover stay length as one to four nights, in accordance with average night stays at main stopover destinations (Pike et al., 2018). Clearly, stopover destinations emerged due to the network of flight connections. In relation to this, airlines have a tremendous role in shaping people's perceptions toward tourism destinations. The hub and spoke structure not only helps airlines optimize their operation but also provide an opportunity for destinations to develop. Goldsberry and Scavette (2018) investigated the importance of geographic location to becoming natural hubs for stopover visits. The success of these destinations depends on their position within international flight routes coupled with the right marketing and policies implemented. Ultimately, stopover visits can be considered a special case of secondary destination visits characterized by an en route stop to the main destination and associated with flight connections.

Determinants of stopover visit intention

Despite the relevance of stopover, research on the factors that attract and influence travelers to consider a stopover destination remains limited. Pike and Kotsi (2016) investigated the preference of Australian tourists on selecting a stopover destination in long-haul travel, and found that "interesting/different culture" is the most important attribute theme, followed by "comfortable flight," "great food," "easy to get around," "entertainment and nightlife," and

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16 other salient attribute themes. Preference heterogeneity is also noted between tourists from France and Australia. Although "interesting culture" is at the first place for both samples, Australian tourists give higher importance to enjoyment and comfort, whereas French tourists favor enlightenment ("lots to see and do" and "attractive city") (Pike et al., 2018). Tang, Weaver, and Lawton (2017) examined tourist perceptions on activities and services provided by the Singapore Airlines and the Changi Airport, and found different influence levels of activity/service on long-haul tourists who opt for Singapore as a stopover destination. The accessibility and quality of the secondary destination – besides the choice of a primary tourist destination – are also important factors for tourists (King and Choi, 1997; Tang and Weaver, 2013). Similarly, Ritchie and Crouch (2010) argued that the attractiveness of primary tourist destinations has a significant influence on the choice of stopover destination.

Several research gaps can be identified following this literature review. Although significant behavioral heterogeneity exists between main and stopover tourists, the general profile of tourists who typically consider stopover destinations has yet to be clarified. Moreover, the factors that influence the preference for stopover tourism remain underdeveloped. Insights into these research gaps will provide relevant information for the promotion of transit hubs as stopover destinations. Due to the limited research available on tourist preferences for stopover visits, the formulation of the following potential determinants (summarized in Table 1) also borrows from the general stream of literature on travel profile related to multi-destination travel and destination choice.

<center>– TABLE 1 ABOUT HERE –</center>

Price sensitivity. Price is one of the most discussed factors in the choice literature. Observations regarding the influence of an individual's price sensitivity on the demand of a product are also recognized and discussed. In the tourism context, Nicolau (2011) described a

disparity on price sensitivity between tourists with and without cultural interests. Masiero and Nicolau (2012) discussed price sensitivity to tourism activities and the influential role of age and motivation. From an economic perspective, travelers with higher price sensitivity attach higher utility to a price decrease than the travelers with lower price sensitivity. Alternatively speaking, a consumption increase without change in the total cost (i.e. decreased unit price) would be more attractive to price sensitive travelers than their counterpart. As such, we expect that travelers' price sensitivity influences their willingness to consider a stopover.

Personality. Numerous studies are conducted on the relationship between the personality of the tourists and their behavior in selecting a destination. Cohen (1972) and Plog (1974) pioneered this strand of study with their psychographic typology and travel personality, respectively. Both concepts focus on one theme: the demand of novelty and familiarity. Later studies also found a tight bond between travelers' personality and travel behavior by applying personality tests, such as Novelty Seeking Scale (Lee and Crompton, 1992) and Sensation Seeking Scale (e.g., Eachus, 2004; Lepp and Gibson, 2008). In addition, variety-seeking behavior is found to influence destination choice (Niininen, Szivas, and Riley, 2004). Therefore, we expect personality to affect travelers' intention to consider a stopover.

Activity engagement. Various activities and services have different levels of influence on long-haul tourists choosing a stopover destination (Tang et al., 2017). Stopover visits occur in urban destinations, where local heritage and culture play an important role in destination competitiveness (Paskaleva-Shapira, 2007). On the basis of an online survey that primarily targets Australian long-haul travelers who had stopover experience in Singapore, Tang et al. (2017) differentiate 22 activities and services according to their influence on tourists' intention of considering the stopover. In particular, location-specific activities/services such as "Singapore Girl service style," "visiting a special themed exhibition or display in the terminal," and "visiting Butterfly Garden" are perceived to significantly attract tourists to

select Singapore as a stopover destination. Therefore, we assume that travelers who place high importance on activity engagement, especially in cultural attractions, are more willing to consider a stopover.

Demographics. Age and family status of travelers influence travel decisions. Vigolo (2017) reviewed the literature on the travel behavior of senior travelers and reported the anxiety that older tourists experience about long haul travel due to flight duration and health risks, among others. The literature on air travel with smaller children is rather scarce, despite the influence that children pose on travel planning (Small and Harris, 2014; Schänzel and Yeoman, 2015). Thornton et al. (1997) explained that the influence of children on travel arrangement decreases as their age increases. In particular, Small and Harris (2014) looked at the issue of handling crying babies on flights, including long-haul journeys, as debates emerged from dissatisfied passengers. Therefore, we investigate the effect of demographic variables such as age and family with small children on the intention to consider a stopover.

Origin-destination. McKercher and Wong (2004) argued that the demographic profiles of tourists are highly related to the main/secondary-destination visitation. Tourists from various origins may also perceive a destination differently within their multi-destination itineraries (Lew and McKercher, 2002) and behave according to different perceptions (McKercher, 2001). For instance, in the study of tourists in the Albury-Wodonga area of Australia, main-destination visitors are found to take short visits that maximize the time spent at the destination, whereas through (stopover) visitors set the area as part of the touring trip (McKercher, 2001). Therefore, we explore the relation between origin-destination pairs associated with tourists' recent long-haul travel and their willingness to consider a stopover.

Frequent flyer membership. Loyalty point accumulation programs also stimulate travelers to make stopovers for additional benefits (Long et al., 2006). Carlsson et al. (2006) analyzed the

switching costs that travelers face in airline selection and found frequent flyer programs as highly influential. These programs enhance customer loyalty by offering points with each flight taken with the company and its alliance. The longer the flight the traveler takes, the more points can be cumulated, which can be used for upgrades and free flights eventually. Therefore, we expect a relationship between intention to consider a stopover and membership to frequent flyer programs.

Motivation. Motivations are widely investigated in destination choice studies (Hsu, Tsai, and Wu, 2009). Pike and Kotsi (2016) and Pike et al. (2018) used Repertory Test to derive salient attributes that attract tourists to stopover destinations. They identified 20 and 21 attributes for French and Australian tourists, respectively. In particular, tourists are significantly attracted to a stopover destination if it offers attractions that are deemed desirable to visit, activities in which to engage, or products to purchase. Therefore, we explore the influence of motivations on the willingness to consider a repeat stopover visit.

Familiarity with the main destination and length of stay. The travel patterns of tourists have a significant influence on their behavior throughout the journey. In New Zealand, Oppermann (1996) examined different behaviors exhibited by tourists with varying lengths of stay. Tourists who repeat their visitation to the main destination are likely to deviate from the common path and visit less known attractions (McKercher and Wong 2004). Therefore, we expect travel characteristics, such as length of stay and familiarity with the main destination, to affect the preference for stopover tourism.

Familiarity with the stopover destination. This also plays a role in the decision to actually spend part of the holiday at a stopover destination (Pike and Kotsi, 2016). The relationship between the above-mentioned determinants and stopover preference may change depending on whether or not tourists visit the stopover destination for the first time. McKercher and

Wong (2004) identified differences in activity engagement and preferences within the first/repeat visit and main/secondary destination context. Although not explicitly discussed, the interrelationship among these categories is evident. Therefore, we expect a differentiated effect of the stopover determinants for first-time and repeat stopover visits.

Methods

Sampling

The analysis of stopover intentions is part of a large study investigating the destination choice of long-haul leisure travels (Masiero and Qiu, 2018). The survey population included residents in three English-speaking countries, namely, Australia, the UK, and the US, who had at least one long-haul trip in the past five years. A professional company was appointed to administer the survey electronically to a random sample of the survey population. A pilot study with 150 respondents was first conducted to test the validity of the questionnaire and obtain preliminary information about travelers' preferences. The data for the main study were collected during the first months of 2017 and comprise 1,417 respondents from Australia (n = 480), the UK (n = 465), and the US (n = 472).

Instrument

The survey was structured into three parts. Prior to the collection of respondents' preference on stopover destinations, information on their past travel experience was collected. Respondents were asked to describe their most recent typical travel in detail, defined as the most recent travel that reflects the typical manner by which they experience long-haul travel in terms of combination of attractions sought at the destinations. The survey used the information collected on the most recent typical travel to customize a stated choice experiment on long-haul destination. The second part of the survey comprised ten stated choice tasks investigating respondents' preference for hypothetical destinations concerning a long-haul travel of the same duration of their most recent typical trip. The hypothetical alternatives were described by a set of attributes related to the quality of attractions and services as well as the required budget. At the end of the stated choice experiment, respondents were asked about their willingness (i.e., no, uncertain, or yes) to trade two days

of their long-haul travel for a two-day visit to a stopover destination with no change to the total budget. The respondents who expressed interest (i.e., yes or uncertain responses) for either a first-time or repeat visit to a stopover destination were asked further about the importance of specific statements in driving them to select a stopover destination. The five attributes, related to safety, accessibility, attractions, comfort, and shopping opportunities, were selected based on previous literature (Pike and Kotsi, 2016; Pike et al., 2018) and valued according to a four-point importance scale (from "very unimportant" to "very important"). The third part of the survey mainly aimed at profiling respondents' travel engagement and attitude through two sets of questions related to activity at the destination and travel personality. The importance of activities related to 14 attractions was measured using a four-point scale (from "very unimportant" to "very important"). Travel personalities were measured using the Brief Sensation Seeking Scale (Hoyle et al., 2002), which is conveniently defined by eight statements. For each statement, respondents were asked to reveal their level of agreement using a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). At the end of this part, additional information was collected about the travel profile (i.e. mode of travel, frequent flyer membership) as well as the socio-demographic profile of the respondents.

Statistical models

The empirical application aims to identify the influential factors of travelers' stopover preference. According to the data introduced in Table 2, we consider two decisions: 1) to visit a stopover destination for the first time (*Model 1*, $y_{i(1)}$); and 2) to repeat a visit to a stopover destination (*Model 2*, $y_{i(2)}$). To accommodate the ordered nature of the two variables, we specify the ordered logit model as follows:

$$y^*_{i,(1,2)} = \alpha + \sum_k \beta_k x_{ik} + \varepsilon_i, \tag{1}$$

where y_i^* is a latent variable associated with respondent i and represents the intention of undertaking a stopover; α is the constant term; β_k is the coefficient associated with the independent variable x_{ik}; ε_i is the error term assumed to follow the Extreme value distribution. The three outcomes of the observed dependent variable (y_i), namely, "no," "uncertain," and "yes," are conveniently coded in numerical order (0, 1, and 2, respectively) and are related to the unobserved dependent variable (y_i^*) as follows:

$$
\begin{aligned}
y_{i,(1,2)} &= 0 \quad \text{if } y_{i,(1,2)}^* \leq \mu_0, \\
y_{i,(1,2)} &= 1 \quad \text{if } \mu_0 < y_{i,(1,2)}^* \leq \mu_1, \\
y_{i,(1,2)} &= 2 \quad \text{if } y_{i,(1,2)}^* > \mu_1,
\end{aligned}
\tag{2}
$$

where μ_0 and μ_1 are the threshold parameters. Note that in Equation (2), any monotonic transformation of y_i^* and the threshold parameters (μ_0 and μ_1) yield the same response y_i. Therefore, in the estimation process, only two out of the three parameters (the constant term in Equation (1), α, and the two threshold parameters in Equation (2), μ_0 and μ_1) are identifiable. Considering that different approaches lead to the same model performance, we follow Greene (2003, p. 276) and normalize the lower threshold parameter (μ_0) to zero. Therefore, the threshold parameter μ_1 and the constant terms are estimated by the model, along with the coefficients associated with the independent variables included in the specification.

To assess the impact of stopover motivations on the intention to repeat a visit to a stopover destination, we also estimated a binary logit model (*Model 3*, $y_{i(3)}$) by focusing only on respondents who would consider, though at different extents (i.e., "yes" or "uncertain" responses), such stopovers. This restriction of the sample was necessary as the stopover motivations were collected only from respondents who expressed interest to visit a stopover

destination. The binary logit model follows the same specification as in Eq. (1) and

$$y_{i,(3)} = 1 \text{ if } y^*_{i,(3)} > 0.$$

In line with the determinants formulated in the previous section, the selection of independent variables includes price sensitivity, travel personality, activity engagement, demographics (i.e., age, travelers with small kids), familiarity with the main destination (intention to repeat visit), frequent flyer membership, origin–destination and length of stay of the most recent long-haul trip, and stopover motivations (for *Model 3* only).

Price sensitivity is derived from the analysis of data related to the stated choice experiment by estimating a random parameter logit model. Specifying the random parameters allows the model to capture the unobserved taste heterogeneity among individuals in the sample, subject to a specific density function. In the current application, we assume that the random parameters follow a normal distribution $N(\delta_k, \sigma_k)$. Hence, δ_{price} and σ_{price} represent the mean and standard deviation of the random parameter associated with price, respectively. Individual-specific parameters are then derived from individual choice probabilities using the Bayes rule (Hensher and Greene, 2003). The individual-specific parameter associated with the price attribute reflects the price sensitivity of the respondents toward long-haul travel. The independent variables associated with travel personality and activity engagement are derived from data reduction techniques performed on the corresponding items.

The coefficients estimated from logit models are expressed in log-odds, and their interpretation is not straightforward (Greene, 2003). As such, their interpretation differs from the coefficients of an OLS linear regression, which express the change in the dependent variable given a one-unit increase in the independent variables. A similar expression can be obtained for the logit models by computing the marginal effects, defined, respectively, for the ordered and binary logit model, as follows:

$$ME_j(x) = \frac{\partial \text{ Prob}[y = j \mid x]}{\partial x} = \left[\Phi(\mu_{j-1} - \boldsymbol{\beta'x}) - \Phi(\mu_j - \boldsymbol{\beta'x})\right]\boldsymbol{\beta}. \tag{3}$$

$$ME(x) = \frac{\partial \text{ Prob}[y \mid x]}{\partial x} = \Phi(\boldsymbol{\beta'x})\boldsymbol{\beta}. \tag{4}$$

where, $\Phi(.)$ is the cumulative distribution function of the logistic distribution. Hence, the marginal effect indicates the change in the probability of observing a specific category in the dependent variable given a one-unit increase in the independent variables. For binary independent variables, the computation of the marginal effects refers to a difference of probabilities, derived, respectively, for the ordered and binary logit model, as follows:

$$ME_j(D) = \left[\Phi(\mu_{j-1} - \boldsymbol{\beta'\overline{x}} + \gamma) - \Phi(\mu_j - \boldsymbol{\beta'\overline{x}} + \gamma)\right] - \left[\Phi(\mu_{j-1} - \boldsymbol{\beta'\overline{x}}) - \Phi(\mu_j - \boldsymbol{\beta'\overline{x}})\right]. \tag{5}$$

$$ME(D) = \Phi(\boldsymbol{\beta'\overline{x}} + \gamma) - \Phi(\boldsymbol{\beta'\overline{x}}). \tag{6}$$

where, γ is the coefficient associated with the binary variable (D), and the remaining variables (x) are set at their mean values. The sum of the changes across all the categories in the dependent variable is equal to zero, that is, an increase in the probability of a specific category is completely offset by the change in the probability associated with the remaining categories. In this context, the marginal effects associated with the "yes" response category are reported in the following analysis in support of the parameter estimates. The marginal effects provide a meaningful interpretation of the model results (Greene and Hensher, 2010), along with a clear indication of the effect size.

The performance of the models is assessed through several statistics, including Nagelkerke R^2, Chi-square test, and Brier score. The Nagelkerke R^2 (bounded between zero and one) and the Chi-square test examine the improvement of the full model against the intercept-only model in terms of likelihoods. In particular, while the Chi-square test assesses the statistical improvement of the full model (over the intercept-only model), the Nagelkerke R^2 measures the improvement of the full model from zero (full model performs as well as the intercept-only model) to 1 (perfect fit). The Brier score, which is often used to measure the model's

accuracy of probabilistic predictions, compares the predicted probabilities with the actual outcomes and calculates the mean squared difference between the two values. Therefore, lower values of Brier score indicate better predictive abilities of the model. The performance of the binary logit model is further assessed through the area under the ROC curve (AUC). The ROC curve measures the goodness-of-fit of the model and the AUC, which is computed using trapezoidal rule, provides a summary measure of the predictive power of the model. A model with no fit would have a AUC of 0.5 whereas a model with perfect fit would have a AUC of 1. Therefore, larger values of AUC indicate better overall model performance in terms of classifying the cases correctly.

The estimation of the models was performed with the software package NLOGIT 6 (Econometric Software, Inc.).

Results

Sample description and data preparation

The key descriptive statistics of the sample are listed in Table 2. The sample shows a well-balanced composition of age and gender. A large portion (58%) of the sample typically travels with family, and almost a quarter (23%) of the sample is composed of young families (i.e., adults under 40 years old with kids). Independent travel is, by far, the most popular (64%) method of travel. The majority (80%) of the sample would definitely consider a repeat visit to a long-haul destination, whereas nearly half (45%) are members of frequent flyer programs. On average, the respondents visited 4.5 countries in their leisure long-haul travels, although half of the sample did not visit over two countries.

Regarding the information on respondents' most recent typical travel, which reflects their typical way of enjoying a long-haul trip, the median length of stay for the most recent typical travel is 14 days, with 71.5% of the sample spending 10 nights or more at the destination. On average, respondents have a budget of US$ 283 per person per night. In terms of destinations, countries in Northern America received the highest number of visits from the Australian (24%) and the UK (39%) markets, whereas Western Europe is a sub-region that attracted the biggest share of the US market (20%). Countries located in the top five sub-region destinations count for a considerable share (79%) of the UK market, whereas a relatively higher degree of heterogeneity is registered by the same indicator for the Australian (73%) and the US (68%) markets.

– TABLE 2 ABOUT HERE –

In terms of the stated preference on stopover destinations, as reported in Table 3, 74% of the respondents would consider spending a first-time visit at a stopover destination, but the

number decreases to 62% for a repeat visit. However, the portion of the sample that is uncertain about considering a stopover is greater for a repeat visit (23%) than a first-time visit (17%). These figures provide an insight into the potential market shares for stopover tourism and represent the focus of the current empirical application. Indeed, the aim of the study is to investigate the general intention of long-haul leisure tourists to visit stopover destinations. Hence, the identification of specific stopover destinations was not provided in the survey. Instead, we explore the relationship between the propensity to visit stopover destinations and origin-destination pairs associated with the recent long-haul travel. Regarding the stopover motivations, *safety of the destination* and *efficiency of public transportation* were rated as the most important motivations, with mean values of 3.7 and 3.5, respectively. *Sightseeing* ($M =$ 3.3) and *opportunity to break from the long flight* ($M = 3.1$) were also rated as important factors, whereas *shopping* opportunity ($M = 2.7$) received a relatively lower importance.

– TABLE 3 ABOUT HERE –

The importance of activity engagement and travel personality of the respondents are collected with multiple items and data dimension reduction techniques are applied on these two constructs. Table 4 presents the descriptive statistics and the results of the factor analysis performed to reduce the dimension of the data associated with activity engagement. The extraction of the factors relied on the principal axis factoring method. Four factors were extracted by following Kaiser's rule (i.e., eigenvalue > 1) and using the oblique promax rotation to allow correlation among factors. The factor loadings reveal a good relationship ($\geq$ 0.35) among each item and the related factor and provide a sound interpretation of the four factors: "entertainment," "nature," "culture," and "sport." The item "performing arts centers and sport complexes" meaningfully loads on both "entertainment" and "sport" factors. The correlation among factors ranges from weak (0.32, between "entertainment" and "nature") to moderate (0.62, between "entertainment" and "sport"). The four factors explain about 66% of

the total variance and exhibit a good level of internal consistency (Cronbach's alpha > 0.6). Factor scores were estimated using the Bartlett method and retained for further data analysis.

– TABLE 4 ABOUT HERE –

A factor analysis was performed to reduce the dimension of the personality items by using the Kaiser's rule (i.e., eigenvalue > 1) and the principal axis factoring method. As reported in Table 5, the results indicate that all eight items load significantly (factor loadings > 0.6) into a single factor. A confirmatory factor analysis further confirmed the scale's ability to capture the personality construct (confirmatory factor index > 0.95). Therefore, high values of the factor scores (estimated using the Bartlett method) are associated with sensation-seeking travelers.

– TABLE 5 ABOUT HERE –

To obtain travelers' price sensitivity, a random parameter logit model was estimated (for details, see Masiero and Qiu, 2018). In particular, the coefficient associated with the price attribute registered a mean value equals -0.009 (p-value < 0.001) and a standard deviation of 0.012 (p-value < 0.001). Therefore, the negative weight that individuals attach to price (i.e., price sensitivity) is characterized by significant heterogeneity. The individual-specific price sensitivity is thus derived, and its influence on the intention to visit a stopover destination is further tested in the following statistical models.

Model estimates

To address the research questions of the study, the estimated models analyze tourist preferences and characteristics for first time (*Model 1*) and repeated stopover (*Model 2*) visits. Therefore, the results shed some light on the potential demand for stopover

destinations, with a focus on the analysis of repeat stopover visit exclusively among travelers who would consider such stopovers (*Model 3*).

According to the review of the literature, the independent variables under consideration refer to price sensitivity, travel personality, activity engagement, demographics (i.e., age, travelers with small kids), familiarity with the main destination (intention to repeat visit), frequent flyer membership, origin–destination and length of stay of the most recent long-haul trip, and stopover motivations (for *Model 3* only). Regarding the geographical locations of the most recent typical destination, the analysis focused on three origin-destination pairs, namely Australia – Northern Europe, United Kingdom – Australia and New Zealand, and United States – Northern Europe. The selection of the three origin-destination pairs was based on several factors, including the likelihood for a stopover market, the relevance of the market share, and the statistical significance of the model estimates.

The discussion of the results not only takes into consideration the statistical significance but also the practical significance (Khalilzadeh and Tasci, 2017) by focusing on the magnitude of the marginal effects. In particular, coefficients with a p-value less than 0.05 are considered statistically significant and are discussed in terms of their marginal effects. The 95% confidence interval for the marginal effect of each independent variable is also reported in the tables of model results as an indication of the range of values that are most compatible with the data (Greenland, 2019; Amrhein, Trafimow & Greenland, 2019; Amrhein, Greenland & McShane, 2019).

To ensure that the correlation among the independent variables does not affect the model estimates, collinearity diagnostics were performed. Specifically, the variance inflation factor (VIF) ranges from 1.02 to 1.85 (for variables in *Model 1* and *Model 2*) and from 1.04 to 1.93 (for variables in *Model 3*). Considering that the VIF values are well below the most

conservative threshold (VIF = 3) proposed by Hair, Black, Babin and Anderson (2010), we concluded that collinearity does not represent an issue and no further treatment was deemed necessary.

Model 1

The results of the ordered logit model for the intention to visit a stopover destination for the first time are reported in Table 6. As presented in the lower panel of Table 6, significant improvement is achieved by the adopted model in comparing with the baseline model in terms of goodness-of-fit (lower Log-likelihood) and model predictability (lower Brier Score). A significant effect is registered for the variable associated with individual price sensitivity. In particular, the higher the price sensitivity, the higher the probability to consider a first-time stopover destination will be. The marginal effect indicates that an individual with a price sensitivity twice the average is 5.1% more likely to consider a first-time stopover destination. Travel personality is also a significant influential factor, with sensation-seeking individuals exhibiting a higher propensity to consider a first-time stopover destination. Travelers with a general preference for activities related to culture (sport) are more (less) likely to consider breaking a long flight with a first-time visit to a stopover destination. Although the geographical location of the most recent typical travel does not significantly affect the willingness to consider a first-time visit to a stopover destination, the probability to visit a stopover destination for the first time increases by 5.3% for travels of 10 or more nights of duration. Moreover, individuals with frequent-flyer memberships are associated with a 10.7% higher probability to undertake a first-time visit to a stopover destination in comparison with those who do not have such a membership. Neither age nor traveling with small kids is detected as an influential variable in the decision of visiting a stopover destination for the first time. In addition, no evidence supports the relationship between the willingness to

consider a repeat visit to a long-haul destination and the willingness to visit a stopover destination for the first time.

– TABLE 6 ABOUT HERE –

Model 2

The results of the model for the intention to revisit a stopover destination are presented in Table 7. The adopted model outperforms the baseline model in both goodness-of-fit (lower Log-likelihood) and model predictability (lower Brier Score). Interestingly, in contrast with the previous model, price sensitivity does not exert a significant effect on the propensity to revisit a stopover destination. Similar to the previous model for the propensity to visit a stopover destination for the first time, a significant and positive influence is registered for travel personality. Aside from the positive effect associated with the importance of activities related to cultural and natural attractions, travelers who seek entertainment activities show a significant and considerably greater propensity to consider a repeat visit to a stopover destination. Travelers spending 10 or more nights on their long-haul travel have a 7.5% increased probability to consider a revisit to a stopover destination. For this type of decision, travelers seem influenced by the route of their travel. In fact, an increase in the probability to revisit a stopover destination is registered for specific routes tourists experienced for their most recent typical travel, such as the US to North Europe (14.2%) and the UK to Australia and New Zealand (12.2%). Furthermore, travelers who would consider repeating a visit to a main long-haul destination show a considerably high probability (20.7%) to repeat a visit to a stopover destination. A positive effect is also registered for age and for the presence of small kids in the travel party. In particular, a traveler who is 10 years older than the average is expected to show a 2.5% increase in the probability to revisit a stopover destination, whereas the probability increases by 7.7% if the traveler is under 40 and traveling with kids.

– TABLE 7 ABOUT HERE –

Model 3

To provide further insights into the repeat visit market of stopover destinations, a binary logit model was estimated on a sub-sample of 1,192 respondents who would consider such an option, although at varying extents (i.e., "uncertain" and "yes"). Aside from the focus on the potential market for the revisit segment, this sample refinement also allows the introduction of the stopover motivations into the model specification. The lower panel of Table 8 presents the general model fit. In comparison with the baseline model, the adopted model significantly improves the model's goodness-of-fit by achieving a lower Log-likelihood. The model predictability is also significantly enhanced as revealed by a lower Brier Score and an acceptable AUC of 0.77 (Hosmer & Lemeshow 2000). As reported in the upper panel of Table 8, the model results show a negative and significant effect for the motivation "attractions that I would like to visit." Thus, travelers who place importance on sightseeing have a higher probability (12.3% per one-point increase in the motivation score) to fall in the "uncertain" group. By contrast, a one-point increase in motivations related to shopping ("products that I would like to purchase,") and relaxation ("chance to break from the long flight") are associated with an increase in the propensity to consider a repeat stopover destination by 3.4% and 7.9%, respectively, over uncertain travelers. No statistical evidence is registered for the stopover motivations related to safety and transportation. In line with the findings of the previous model, no significant effect is observed for the variable associated with individual price sensitivity. Instead, age and presence of small kids in the travel party do not play a significant effect in discriminating between travelers willing to revisit a stopover destination and those uncertain. Personality trait is significant and positive as well as travelers' interest in engaging in activities that are related to entertainment and culture. Regarding the selected routes of the recent typical travel, Australian residents who recently

traveled to North Europe are more likely to consider the repeat stopover (13.5%) over uncertain travelers. The results further indicate the positive effect of frequent flyer membership and confirm the notable importance of repeat intention of travelers at the main destination level. In particular, travelers who would revisit a long-haul destination are considerably more likely (22.9%) to consider a repeat visit to a stopover destination.

– TABLE 8 ABOUT HERE –

Discussion and conclusions

In this paper, we investigated the intention of long-haul leisure travelers to visit a stopover destination. A substantial sample size representing three important source markets for long-haul travel provided the data for the analysis. In this context, we differentiated between first-time and repeated visits of a destination as a stopover and modeled the probability of visiting through several independent variables. The decision of undertaking a first-time or repeat visit to a stopover destination was modeled using an ordered logit model. A deeper investigation of the preferences for repeated stopover visits was further conducted through the estimation of a binary logit model on a selected subsample.

Destination choice and travel behavior are important issues in the tourism literature. Recent studies in this field provided insights into the topic by considering the relevance of visiting multiple destinations within a trip, especially in long-haul travel. However, research related to long-haul destination choice is rather scarce. This study contributes to an under-researched area of stopover destination selection in the context of long-haul travel. The estimated models provide empirical evidence of the preferences of long-haul tourists and the factors that influence their decision. In addition, marginal effects are derived to quantify the importance of the variables in explaining travelers' stopover preference. The findings allow for an enhanced understanding of the travel profile of a potential market for stopover tourism.

The analysis of tourist preferences for long-haul destination revealed a consistent heterogeneity in price sensitivity. Hence, we further investigated its role in influencing stopover intentions. In particular, price sensitivity, personality, and activity engagement are all relevant factors in explaining travelers' stopover intentions. However, a main differentiated pattern emerged with respect to the repeat visiting intention of travelers. First-time and repeat visitations are associated with different characteristics in destination choice

and visiting patterns – and the same applies for stopover breaks. The relationship between psychographics and behavioral intentions is also significant in the stopover context. Sensation seekers are more likely to engage in an additional stop and visit within their holiday.

Numerous similarities can be observed between our findings and the results of previous studies on secondary destination visits. Stopover destinations are a special case of secondary visits, whereas distinguishing factors are derived by their dependence on air travel. Stopover visits can provide a break within a long flight and reduce the cost of airfare as well as increase both the mileage points for loyalty card holders and the number of arrivals to the destination of the aviation hub. These characteristics validate the findings that price sensitivity, frequent flyer membership, trip duration, and sensation seeking play an important role in stopover visit intention.

Several managerial implications can be derived from the results, which provide beneficial information for destination management organizations (DMOs), airport hubs, and airline companies. Findings indicate that the probability of considering a stopover is generally higher with a frequent-flyer membership. Indeed, when customers apply for these memberships, they are considering flying often enough to enjoy the additional benefits gained from these loyalty programs. As members of these programs, customers hold an account that contains their personal data and travel history with the airline and its alliance. This information could be utilized by the airline carrier for tailor-made marketing, especially when customers use their account to browse for the next flight booking. DMOs can strengthen their partnership with airline carriers to create convenient connections and mileage opportunities for stopover visits of their target segment, and hotels can cooperate in designing packages that are suitable for short stopover visits. Managerial implications can be divided further between first-time and repeated stopover trips.

First-time stopover visit

Price sensitivity is a distinctive factor for first-time visitors. Thus, DMOs should leverage on the opportunity cost of visiting a new stopover destination to attract first-time visitors. The price gain that is frequently attributed to a flight ticket with a stopover could be enhanced further with package deals. Expectedly, the willingness to consider a first-time stopover increases for sensation seekers, which implies their interest for an additional and new experience. Furthermore, travelers who are interested to visit cultural attractions (usually the most characteristic category of attractions in urban destinations) as well as those who stayed over 10 days at the main destination are more likely to consider a first-time visit to a stopover destination. Ad-hoc promotions, such as pop-up images of cultural attractions of selected stopover destinations, could be included in the booking process of a main destination.

Repeat stopover visit

There is a market for repeated stopover visits, which is based on the chance of breaking a long journey. In fact, two segments were identified in this group: older tourists and parents below 40 years old traveling with kids. The comfort of the flight could be a reason for both demographic groups in opting for repeated stopover. An extensive flight and layover can be very tiring for young children and consequently to their parents. Hence, a stopover could help make the journey to the main destination more pleasant. The fact that this segment is significantly more likely to consider a repeated stopover suggests that families with children are less interested in visiting an additional destination en route, and would rather concentrate on having a rest. In line with Thornton et al. (1997), families with small children demonstrate different travel behavior, by allocating their time budget according to children's needs and having restricted spatial consumption around the vicinity of the accommodation. In line with Schänzel and Yeoman (2015), family travel is predicted to grow in the future, and the

different requirements of younger travelers need to be addressed through targeted marketing initiatives. As previously reported by Vigolo (2017), older tourists might also consider health issues and fear from longer flights in opting for a stopover. Similar to families with young children, their motivation of taking a longer break is relaxation rather than exploring the destination. This market is characterized by tourists with a higher disposable time and higher likelihood to repeat the main long-haul destination visit. Moreover, they are more interested in activities that are related to entertainment in general, and shopping during the stopover is an important motivation for this segment. However, sensation seeking was also reportedly high for this group. Bello and Etzel (1985) suggested that destinations should continually adjust their offerings to attract repeated novelty seekers. Attractions related to entertainment are likely to innovate in this respect. DMOs should target repeat tourists by promoting top events and shopping occasions in target markets abroad. Furthermore, images of comfortable hotel rooms, favorable shopping opportunities, and entertainment possibilities can be incorporated into airline advertisements. Similarly, convenient packaging, which concentrates less on attractions and more on comfort of the trip, retail shopping offers and ticketing arrangements for events, could help attract repeat stopover visitors.

The estimated models further allowed for a deeper investigation of preferences of tourists who are uncertain of taking a repeated stopover visit. Results reveal that uncertain travelers are less likely to be sensation seekers, are more interested in attraction visits during stopovers, and are less likely to repeat a main destination in comparison with travelers who would certainly revisit a stopover destination. Images of attractions that they might have missed during the first-time visit can pull them toward a repeat stopover visit, and packages with free or discounted admissions to less visited places and experiences could trigger their motivation for a stopover.

Furthermore, to facilitate the short destination visit, stopover packages could be manifested in similar form as free destination cards, including discounts for transfers, hotel rooms, admission tickets, sightseeing tours, destination-specific experiences, shopping, and dining opportunities. These stopover destination cards – or eventually apps – could work as a platform for bookings that would save travelers time and money. Moreover, they could be used to monitor the tourist consumption at the destination and provide valuable information for the airlines and the DMOs. Satisfying all segments, cards could offer a selection of hotel rooms in different locations, such as family friendly hotels nearby the airport for repeaters, centrally located hotels for first timers, and eventually hotels in vicinity of less-visited attractions to attract uncertain repeaters.

The findings demonstrate a specific pattern for the Australian market. Non-stop flights between Europe and Australia were nonexistent up to March 2018, when the London-Perth direct flight offered by Qantas first landed. Still, tourists might continue to perceive the over 17-hour journey as excessively prolonged. If a layover is necessary, then a stopover is more likely to occur. This notion was confirmed by the higher willingness to repeat a stopover destination registered by Australians who have recently traveled to Europe. In line with the findings of Pike et al. (2018), the comfort of the flight, entertainment at the destination, and cultural attractions are considered important by Australian travelers who are considering stopover visits. Accordingly, stopover destinations en route to Europe should target the Australian market, because they are more likely to be convinced to leave the airport while in transit.

Finally, in targeting long-haul markets, the DMOs of stopover destinations and related airline carriers should consider joint advertisements with typical main tourist destinations. All parties could profit from bundled multi-destination campaigns. The benefits for stopover destinations and airline carriers have been discussed previously. However, the opportunity for

the main destination is undervalued. When a traveler is uncertain on whether or not to visit a main destination, the possibility of a low airfare and inclusion of a stopover visit might increase the interest in booking the trip. As the result showed a higher likelihood of a stopover visit when tourists express the intention to revisit main destinations, the added stopover campaign might even help finalize a booking to a repeated destination.

Limitations and recommendations for future research

This study presents some limitations, which could be addressed in future works. First, this research is limited to three source markets. Future research could thus target other important source markets, such as Asian countries, and explore if tourists express similar preferences there. Similarly, the determinants of stopover intentions should be investigated further in future studies to reinforce the current findings. Second, this study is limited to long-haul leisure travelers. Whether business travelers would consider a leisure element in their trip with an extension to a stopover visit has yet to be investigated. Third, future studies can investigate whether stopover visits are more likely to happen in the beginning, as a gateway destination, or at the end of the trip, as an egress destination. This phenomenon may be specific to destinations or type of visit. This information could be used in air ticket pricing. Fourth, additional specific motivation variables, which are related to various segments and destinations, can be investigated for a deeper analysis of the motivational aspects of stopover visits. For example, travelers' concerns regarding religious requirements, food, or language barriers will probably affect the choice of stopover destination. The stopover destination as a pull motivation itself plays an important role in the decision process. Therefore, specific destination-origin pairs could be further researched. Finally, looking at the supply side, the current airport and DMO strategies can be analyzed and compared, in order to define the best practices in attracting stopover visitors.

References

Amrhein, V., Greenland S., and McShane, B. (2019). Scientists rise up against statistical significance. *Nature*, 567, 305-307.

Amrhein, V., Trafimow, D., & Greenland, S. (2019). Inferential statistics as descriptive statistics: there is no replication crisis if we don't expect replication. *The American Statistician*, 73(sup1), 262-270.

Airbus. 2015. Flying by numbers: Global Market Forecast for 2015-2034. Retrieved from http://espas.eu/orbis/document/flying-numbers-global-market-forecast-2015-2034, on Feb. 2, 2018.

Airbus. 2017. Growing horizons 2017/2036: Global Market Forecast. Retrieved from http://www.airbus.com/content/dam/corporate-topics/publications/backgrounders/Airbus_ Global_Market_Forecast_2017-2036_Growing_Horizons_full_book.pdf, on Feb. 2, 2018.

Beaver, A. 2005. *A dictionary of travel and tourism terminology*. CABI.

Bello, D. C., and M. J. Etzel. 1985. "The role of novelty in the pleasure travel experience." *Journal of Travel Research* 24(1): 20-26.

Carlsson, F., and A. Löfgren. 2006. "Airline choice, switching costs and frequent flyer programmes." *Applied Economics* 38(13): 1469-1475.

Cohen, E. 1972. "Toward a sociology of international tourism." *Social Research 39*(1): 164-182.

Eachus, P. 2004. "Using the brief Sensation Seeking Scale (BSSS) to predict holiday preferences." *Personality and Individual Differences 36*(1): 141-153.

Goldsberry, L., and A.R. Scavette. 2018. "Exploiting a Natural Hub: Turning a Stopover into a Destination." *Transportation Research Record*, 0361198118758983.

Greene, W. H. 2003. *Econometric analysis*. Pearson Education.

Greene, W. H., and Hensher, D. A. 2010. *Modeling ordered choices: A primer*. Cambridge University Press.

Greenland, S. (2019). Valid P-values behave exactly as they should: Some misleading criticisms of P-values and their resolution with S-values. *The American Statistician*, 73(sup1), 106-114.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. 2010. *Multivariate data analysis: International version*. New Jersey, Pearson.

Hensher, D. A., and W.H. Greene. 2003. "The mixed logit model: the state of practice." *Transportation 30*(2): 133-176.

Hi Korea. 2018. No-visa Entry for Foreign Transfer Passengers. Retrieved from http://english.visitkorea.or.kr/enu/AKR/FU_EN_15.jsp?cid=1808796 on May 9, 2018.

Hosmer, D. W. and S. Lemeshow. 2000. *Applied logistic regression*. New York: Wiley.

Hoyle, R. H., M. T., Stephenson, P., Palmgreen, E. P., Lorch, and R. L. Donohew. 2002. "Reliability and validity of a brief measure of sensation seeking." *Personality and individual differences 32*(3): 401-414.

Hsu, T. K., Y. F. Tsai, and H. H. Wu. 2009. "The preference analysis for tourist choice of destination: A case study of Taiwan." *Tourism management* 30(2): 288-297.

IATA. 2012. 2012 IATA Global Passenger Survey Highlights. Retrieved from

   https://www.iata.org/publications/Documents/2012-iata-global-passenger-survey-

   highlights.pdf on May 9, 2018.

Lee, T. H., and J. Crompton. 1992. "Measuring novelty seeking in tourism." *Annals of*

   Tourism Research 19(4): 732-751.

Lepp, A., and H. Gibson. 2008. "Sensation seeking and tourism: Tourists role, perception of

   risk and destination choice." *Tourism Management 29*(4): 740-750.

Lew, A. A., and B. McKercher. 2002. "Trip destinations, gateways and itineraries: The

   example of Hong Kong." *Tourism Management* 23: 609-621.

Lohmann, G., S. Albers, B. Koch, and K. Pavlovich. 2009. "From hub to tourist destination–

   An explorative study of Singapore and Dubai's aviation-based transformation." *Journal*

   of Air Transport Management 15(5): 205-211.

Long, M. M., C., McMellon, S. D. Clark, and L. G., Schiffman. 2006. "Building relationships

   with business and leisure flyers." *Services Marketing Quarterly 28*(1): 1-17.

Low, L., and T. M. Heng. 1997. "Singapore: development of gateway tourism." In: Go, F. M.

   and Jenkins, C. L. (eds.), *Tourism and Economic Development in Asia and Australasia*.

   Cassell, London.

Lue, C. C., J. L., Crompton, and D. R., Fesenmaier. 1993. "Conceptualization of multi-

   destination pleasure trips." *Annals of Tourism Research 20*(2): 289-301.

Lund, K. A., K., Loftsdóttir, and M., Leonard. 2017. "More than a stopover: Analysing the

   postcolonial image of Iceland as a gateway destination." *Tourist Studies 17*(2): 144-163.

King, B. E., and H. J., Choi. 1997. "The attributes and potential of secondary Australian destinations through the eyes of Korean travel industry executives." *Journal of Vacation Marketing 3*(4): 314-326.

Maitland, R., and B. W. Ritchie. 2009. "City tourism: National capital perspectives." Cabi.

Masiero, L. and J. L., Nicolau. 2012. "Price sensitivity to tourism activities: Looking for determinant factors." *Tourism Economics 18*(4): 675–689.

Masiero, L., and R.T., Qiu. 2018. Modeling reference experience in destination choice. *Annals of Tourism Research*, 72, 58-74.

McKercher, B. 2001. "A comparison of main-destination visitors and through travelers at a dual-purpose destination." *Journal of Travel Research 39*(4): 433-441.

McKercher, B., and D. Y. Wong. 2004. "Understanding tourism behavior: Examining the combined effects of prior visitation history and destination status." *Journal of Travel Research 43*(2): 171-179.

Nicolau, J. L. 2011. "Differentiated price loss aversion in destination choice: The effect of tourists' cultural interst." *Tourism Management 32*: 1186-1195.

Niininen, O., E., Szivas, and M. Riley. 2004. "Destination loyalty and repeat behaviour: An application of optimum stimulation measurement." *International Journal of Tourism Research* 6(6): 439-447.

Oppermann, M. 1995. "A model of travel itineraries." *Journal of Travel Research 33*(4): 57-61.

Oppermann, M. 1996. "Visitation of tourism attractions and tourist expenditure patterns." *Asia Pacific Journal of Tourism Research 1*(1): 61-68.

Paskaleva-Shapira, K. A. 2007. "New paradigms in city tourism management: Redefining destination promotion." *Journal of Travel Research* 46(1): 108-114.

Pike, S. and F. Kotsi. 2016. "Stopover destination image - Using the Repertory Test to identify salient attributes." *Tourism Management Perspectives 18*: 68-73.

Pike, S., F. Kotsi, and V., Tossan. 2018. "Stopover destination image: A comparison of salient attributes elicited from French and Australian travellers." *Journal of Destination Marketing & Management*.

Plog, S. C. 1974. "Why destination areas rise and fall in popularity." *Cornell Hotel and Restaurant Administration Quarterly 14*(4): 55-58.

Qatar Airways. 2018. Qatar Transit Visa. Retrieved from https://www.qatarairways.com/en-hk/visa-qatar-transit.html on May 9, 2018.

Ritchie, J. R., and G. I., Crouch. 2010. "A model of destination competitiveness/sustainability: Brazilian perspectives." *Revista de Administração Pública 44*(5): 1049-1066.

Rodríguez, A. M., and J. F., O'Connell. 2018. "Can low-cost long-haul carriers replace Charter airlines in the long-haul market? A European perspective." *Tourism Economics* 24(1): 64-78.

Schänzel, H. A., and I., Yeoman. 2015. "Trends in family tourism." *Journal of Tourism Futures 1*(2): 141-147.

Small, J., and C., Harris. 2014. "Crying babies on planes: Aeromobility and parenting." *Annals of Tourism Research 48*: 27-41.

Tang, C., and D., Weaver. 2013. "The quasi-destination as an innovative component fo the tourism system: Evidence from Singapore." In *International Conference on Tourism Transport and Logistic*. Paris, France.

Tang, C., D., Weaver and L., Lawton. 2017. "Can stopovers be induced to revisit transit hubs as stayovers? A new perspective on the relationship between air transportation and tourism." *Journal of Air Transport Management*, *62*: 54-64.

Thornton, P. R., G., Shaw, and A. M. Williams. 1997. "Tourist group holiday decision-making and behaviour: the influence of children." *Tourism Management 18*(5): 287-298.

Țigu, G., and C. Stoenescu. 2017. "Stopover tourism – connecting airlines, airports and tourism organizations." *Knowledge Horizons – Economics*, *9*(2): 54-58.

Travel China Guide. 2018. 72-Hour Visa-Free Transit in China. Retrieved from https://www.travelchinaguide.com/embassy/visa/free-72hour/ on May 9, 2018.

Tussyadiah, I. P., T., Kono, and H., Morisugi. 2006. "A model of multidestination travel: implications for marketing strategies." *Journal of Travel Research 44*(4): 407-417.

US Travel Association. 2017. Fact Sheet: Global Travel Trends (2016). Retrieved from https://www.ustravel.org/system/files/media_root/document/Research_Fact-Sheet_Global-Travel-Trends.pdf on May 9, 2018.

Vigolo, V., 2017. "Older Tourists' Travel Planning Behavior." In *Older Tourist Behavior and Marketing Tools* (pp. 63-84). Springer, Cham.

Yang, Y., T. J., Fik, and H. L., Zhang. 2017. "Designing a tourism spillover index based on multidestination travel: A two-stage distance-based modeling approach." *Journal of Travel Research*, 56(3): 317-333.

Tables

Table 1. Summary of proposed stopover determinants

Proposed determinant	Literature context	Reference
Price sensitivity	Choice of tourism activities	Nicolau (2011) Masiero and Nicolau (2012)
Travel personality	Destination choice	Lee and Crompton (1992) Eachus (2004) Lepp and Gibson (2008) Niininen, Szivas, and Riley (2004)
Activity engagement	Stopover destination	Tang et al. (2017)
Demographics	Long haul flight	Vigolo (2017) Schänzel and Yeoman (2015) Small and Harris (2014)
Origin-destination	Multi-destination travel and itinerary	McKercher (2001) Lew and McKercher (2002) McKercher and Wong (2004)
Frequent flyer membership	Stopover destination	Long et al. (2006)
	Airline choice	Carlsson et al. (2006)
Motivation	Stopover destination	Pike and Kotsi (2016) Pike et al. (2018)
Familiarity with the main destination and length of stay	Multi-destination travel and itinerary	McKercher and Wong (2004) Oppermann (1996)
Familiarity with the stopover destination	Stopover destination	Pike and Kotsi (2016)
	Multi-destination travel and itinerary	McKercher and Wong (2004)

Table 2. Traveler profile

	Mean	Median	Std. dev.	Min	Max
Number of countries visited	4.5	2.0	5.5	1	51
Age	41.4	37	14.9	19	87
Gender (female)	57.6%				
Travel with family	57.7%				
Adults under 40 with kids	23.2%				
Travel type					
Independent	64.0%				
Customized Package tour	13.0%				
Package tour	23.0%				
Frequent flyer membership	45.1%				
Main destination repeat intention					
Yes	79.9%				
Uncertain	12.0%				
No	8.1%				
Most recent typical travel					
Length of stay (nights)	16.6	14	16.1	3	180
Budget per person per night (US$)	282.6	217	212.8	50	1771
Length of stay (10 or more nights)	71.5%				
Top five destinations for the Australian market					
Northern America	23.8%				
Northern Europe	17.5%				
Eastern Asia	13.5%				
Southeastern Asia	10.4%				
Western Europe	7.9%				
Top five destinations for the UK market					
Northern America	39.1%				
Australia and New Zealand	12.7%				
Caribbean	12.3%				
Southeastern Asia	8.8%				
Southern Asia	6.0%				
Top five destinations for the US market					
Western Europe	19.7%				
Northern Europe	16.1%				
Southern Europe	14.4%				
Eastern Asia	10.0%				
Southeastern Asia	7.8%				

Table 3. Stopover intentions

	Mean	Median	Std. dev.
Willingness to consider a stopover			
First-time destination			
Yes	74%		
Uncertain	17%		
No	9%		
Repeat destination			
Yes	62%		
Uncertain	23%		
No	15%		
Stopover motivation			
Safe destination	3.7	4	0.6
Quick and reliable public transportation	3.5	4	0.6
Attractions that I would like to visit	3.3	3	0.7
Chance to break from the long flight	3.1	3	0.8
Products that I would like to purchase	2.7	3	0.9

Table 4. Activity engagement – Factor analysis

Factor	Mean	Std. dev.	Factor loadings 1	2	3	4
Entertainment						
Shopping center	2.7	0.95	0.91			
Casinos and cinemas	2.2	0.98	0.70			
Theme parks and amusement parks	2.4	0.99	0.59			
Performing arts centers and sports complexes	2.4	0.93	0.47			0.35
Concerts and theater	2.5	0.84	0.35			
Nature						
Seascape, coasts, and islands	3.2	0.84		0.91		
Beach	3.0	0.92		0.56		
Landscape, parks, and mountains	3.2	0.83		0.53		
Flora and fauna	2.8	0.86		0.44		
Culture						
Historical/archaeological sites, museums	3.1	0.86			0.90	
Architecture and industrial sites	2.7	0.86			0.54	
City sight-seeing	3.1	0.84			0.37	
Sport						
Various types of sports	2.2	0.95				0.76
Hiking	2.3	0.96				0.70
Correlations						
Entertainment						
Nature			0.32			
Culture			0.40	0.44		
Sport			0.62	0.39	0.49	
Eigen-value			5.25	1.75	1.24	1.03
% Variance explained			34.25	9.50	5.86	4.14
Cronbach's alpha			0.84	0.75	0.68	0.75

Note: KMO = 0.866; Bartlett's test = 7670.1 ($p < 0.001$); total variance explained = 66.2%.

Table 5. Personality – Factor analysis

Component	Mean	Std. dev.	Loading
I sometimes like to do things that a little frightening	3.3	1.15	0.787
I like to have new and exciting experiences and sensations even if they are a little frightening, unconventional, or illegal	3.0	1.34	0.785
I prefer friends who are excitingly unpredictable	3.1	1.18	0.772
I like "wild" uninhibited parties	2.8	1.34	0.756
I would like to try parachute jumping	2.9	1.47	0.651
I would like to take off on a trip with no pre-planned or definite routes or timetable	3.3	1.23	0.637
I like to explore a strange city or section of town by myself, even if it means getting lost	3.6	1.18	0.562
I get very restless if I have to stay around home for any length of time	3.5	1.11	0.542
Cronbach's alpha			0.88

Note: KMO = 0.911; Bartlett's test = 4802.2 (p < 0.001); total variance explained = 54.2%.

Table 6. First-time stopover destination (Ordered logit model)

	Coeff.	(Std. err.)	p-value	$ME_{y=Yes}$	ME 95% C.I.[a]	
Constant	1.385	(0.265)	0.000			
Price sensitivity	-14.471	(7.170)	0.044	-5.1%[b]	-10.1%	-0.1%
Personality (sensation seeking)	0.261	(0.073)	0.000	4.8%	2.2%	7.5%
Activity engagement						
Entertainment attractions	0.105	(0.069)	0.126	2.0%	-0.5%	4.5%
Nature attractions	0.107	(0.060)	0.073	2.0%	-0.2%	4.2%
Culture attractions	0.257	(0.065)	0.000	4.8%	2.4%	7.1%
Sport attractions	-0.151	(0.075)	0.045	-2.8%	-5.5%	-0.1%
Demographics						
Age	0.007	(0.005)	0.140	0.1%	0.0%	0.3%
Adults under 40 with kids	0.094	(0.158)	0.555	1.7%	-3.9%	7.3%
Origin-Destination (recent travel)						
Australia – North Europe	0.053	(0.276)	0.849	1.0%	-8.9%	10.8%
UK – Australia / New Zealand	0.386	(0.314)	0.219	6.5%	-2.8%	15.9%
USA – North Europe	0.375	(0.322)	0.244	6.4%	-3.3%	16.1%
Frequent flyer membership	0.588	(0.133)	0.000	10.7%	6.1%	15.4%
Length of stay (10 or more nights)	0.275	(0.135)	0.041	5.3%	0.1%	10.4%
Familiarity with main destination	0.212	(0.146)	0.147	4.1%	-1.6%	9.7%
Threshold parameter (μ_1)	1.373	(0.084)	0.000			
Log-likelihood (intercept)	-1056.77					
Log-likelihood (full model)	-1006.39					
Chi square (p-value)	100.7 (0.000)					
Brier Score (intercept)	0.0810					
Brier Score (full model)	0.0784					
Nagelkerke R^2	0.0886					

Note: [a] Standard errors computed using the delta method. [b] $ME_{y=Yes}$ for a one-mean increase.

Table 7. Repeat stopover destination (Ordered logit model)

	Coeff.	(Std. err.)	p-value	ME$_{y=Yes}$	ME 95% C.I.[a]	
Constant	0.314	(0.234)	0.179			
Price sensitivity	0.927	(6.418)	0.885	0.4%[b]	-5.2%	6.0%
Personality (sensation seeking)	0.222	(0.065)	0.001	5.1%	2.2%	8.1%
Activity engagement						
Entertainment attractions	0.253	(0.061)	0.000	5.9%	3.1%	8.6%
Nature attractions	0.115	(0.054)	0.034	2.7%	0.2%	5.1%
Culture attractions	0.127	(0.058)	0.028	2.9%	0.3%	5.6%
Sport attractions	-0.003	(0.067)	0.965	-0.1%	-3.1%	3.0%
Demographics						
Age	0.011	(0.004)	0.010	0.2%	0.1%	0.4%
Adults under 40 with kids	0.342	(0.146)	0.019	7.7%	1.5%	14.0%
Origin-destination (recent travel)						
Australia – North Europe	0.463	(0.264)	0.079	10.0%	-0.3%	20.4%
UK – Australia / New Zealand	0.575	(0.284)	0.043	12.2%	1.7%	22.7%
US – North Europe	0.683	(0.288)	0.018	14.2%	4.0%	24.4%
Frequent flyer membership	0.208	(0.117)	0.074	4.8%	-0.4%	10.1%
Length of stay (10 or more nights)	0.319	(0.122)	0.009	7.5%	1.8%	13.2%
Familiarity with main destination	0.860	(0.128)	0.000	20.7%	14.7%	26.8%
Threshold parameter (μ_1)	1.363	(0.070)	0.000			
Log-likelihood (intercept)	-1311.47					
Log-likelihood (full model)	-1225.51					
Chi square (p-value)	171.9 (0.000)					
Brier Score (intercept)	0.1297					
Brier Score (full model)	0.1273					
Nagelkerke R^2	0.1355					

Note: [a] Standard errors computed using the delta method. [b] ME$_{y=Yes}$ for a one-mean increase.

Table 8. Repeat stopover destination (Binary logit model: *Uncertain vs. Yes*)

	Coeff.	(Std. err.)	p-value	$ME_{y=Yes}$	*ME 95% C.I.[a]*	
Constant	0.964	(0.699)	0.168			
Price sensitivity	6.433	(8.511)	0.450	1.9%[b]	*-3.1%*	*7.0%*
Personality (sensation seeking)	0.193	(0.088)	0.028	3.1%	0.3%	5.8%
Activity engagement						
Entertainment attractions	0.242	(0.091)	0.008	3.8%	1.0%	6.7%
Nature attractions	0.141	(0.072)	0.051	2.2%	0.0%	4.5%
Culture attractions	0.175	(0.078)	0.026	2.8%	0.3%	5.2%
Sport attractions	0.022	(0.090)	0.809	0.3%	-2.4%	3.1%
Demographics						
Age	-0.005	(0.006)	0.414	-0.1%	-0.2%	0.1%
Adults under 40 with kids	0.261	(0.197)	0.186	4.1%	-1.8%	10.0%
Origin-destination (recent travel)						
Australia – North Europe	0.997	(0.375)	0.008	13.5%	5.5%	21.4%
UK – Australia / New Zealand	0.557	(0.365)	0.127	8.1%	-1.2%	17.4%
US – North Europe	0.607	(0.352)	0.084	8.8%	-0.1%	17.7%
Frequent flyer membership	0.345	(0.153)	0.024	5.5%	0.8%	10.2%
Length of stay (10 or more nights)	0.231	(0.163)	0.155	3.7%	-1.5%	9.0%
Familiarity with main destination	1.248	(0.174)	0.000	22.9%	16.3%	29.5%
Motivation						
Attractions that I would like to visit	-0.775	(0.127)	0.000	-12.3%	-16.2%	-8.4%
Products that I would like to purchase	0.216	(0.105)	0.040	3.4%	0.2%	6.7%
Chance to break from the long flight	0.494	(0.106)	0.000	7.9%	4.6%	11.1%
Safe destination	0.015	(0.151)	0.923	0.2%	-4.5%	4.9%
Quick and reliable public transport	-0.194	(0.135)	0.151	-3.1%	-7.3%	1.1%
Log-likelihood (intercept)	-699.35					
Log-likelihood (full model)	-579.13					
Chi square (p-value)	240.4 (0.000)					
Brier Score (intercept)	0.1990					
Brier Score (full model)	0.1598					
Nagelkerke R^2	0.2645					
AUC	0.7736					

Note: [a] Standard errors computed using the delta method. [b] $ME_{y=Yes}$ for a one-mean increase.