

LOS is a critical factor in the financial success of the tourism industry. Evidence has shown that increases in LOS are associated with higher levels of tourism expenditure; this means that LOS has an effect on tourism-generated income. For instance, when duration of stay at a hotel (or other types of accommodations) rises, the fixed costs of the hotel drop relative to revenue while employment rates increase, meaning that hotels are able to increase their profits.

In recent years, the tourism industry has faced a global decline in LOS—travelers now prefer to travel more but stay for shorter periods of time. The increased prominence of business trips and the emergence of low-cost airlines have exacerbated the trend of short-term stays. These shifts in the industry have resulted in a considerable decline in tourism revenue; despite an increased number of incoming tourists, tourism-generated income has diminished, largely due to reductions in LOS.

Given the importance of the duration of visits for the industry, it is crucial to determine the factors that influence LOS. A comprehensive understanding of its determinants would provide planners and managers with the proper tools to design effective marketing strategies and lure in visitors who show a greater predisposition to prolonged stays. The determinant factors of LOS are integral to efficient planning for the sustainable development of tourist destinations. The significance of LOS has recently become a central focus in tourism economics research. The steady growth of publications on this topic began in 2008.

-Although we can trace studies on the general concept of LOS to the 1970s, there was little research on tourism-related LOS before 2006 (Rodríguez et al.,2018). The number of publications in this area has steadily increased since 2008, and scholars have identified various factors that influence duration of stay in a destination. We can categorize these variables into three main groups: tourist profile, trip characteristics, and destination attributes. Previous studies have been varied in terms of their scope (i.e., specific destinations and tourist traits). For instance, regarding the different geographical regions, we can find articles evaluating LOS in various destinations, such as Latin America (Barros et al., 2008), Spain (Aguilar,2017). In respect to the tourist segment researchers focus on low-cost tourism (Martínez,2008), golf tourism (Aguilar,2017).

It is important to note that, since the survey was carried out in an airport departure terminal, all interviewees reported their LOS, so censored data was not included in the analysis (i.e., censoring occurs when we have some information about individual survival time, but we do not know the survival time exactly). Moreover, due to the sensitive socio-cultural distance and political distance investigation involved in the questionnaire items, and following recommendations from Podsakoff, MacKenzie, & Lee (2003), respondents were assured that their involvement would be voluntary and anonymous, and there are no correct or wrong answers, so that they would express their personal views as honestly despite the potential bias brought about by the interviewer-participant interaction.

-The advantages of survival analysis

The time-varying LOS variable has some characteristics that are difficult to deal with using conventional statistical methods. One of the main challenges is that LOS has a non-negative nature—time can be any number equal to or greater than zero. This characteristic of time-varying variables was introduced by Kiefer (1988) as an “inherent aging process” and echoed in subsequent works. Kiefer defined it as “the dependent variable under consideration which should be assigned positive values.” This feature of LOS forces the use of a model in which the systematic component must yield fitted values that are strictly

positive. Linear regression approaches, such as ordinary least square (OLS) and its derivations, can yield negative fitted values, particularly for subjects with short survival times. In summary, linear regression approaches are unable to deal with this feature of the LOS variable.

Additionally, the LOS variable is not normally distributed, meaning that OLS, which is based on the assumption of normality, is inadequate for a LOS study because the normality of errors is dramatically changed by the presence of extreme values and skewness. There are some remedial actions that can be taken to transform non-normal data into normal data, but no methods are reliably sufficient. One of the most common of these methods is to employ a transformation (i.e., change the distribution by applying a mathematical operation to each observation/data value). However, this normalization process has been criticized by several scholars, as the transformed LOS has little meaning for decision-making processes (Greene, 2000). The issue can instead be handled by conducting a survival analysis, which offers a variety of outcomes.

Furthermore, we are not interested in estimating binomial or multinomial distributions because LOS is continuous and may lie anywhere between 1 and 31 nights. Several scholars have tried to tackle these features of time-varying variables through various methodological approaches. For example, binary logit models (logistic regression analysis with a dichotomous function) have been used by several researchers to analyze the relationship between an independent variable and a time-varying variable. Alegre & Pou (2006), based on the McFadden's (1974) discrete choice random utility model, employed binary logit to model the LOS of tourists in the Balearic Islands, Spain. They considered LOS a binary variable and coded it as 0 if shorter than seven days and 1 if seven days or longer. Of course, this process ignores exact information on trip length, meaning the research loses precision and relevance. When the LOS is distributed evenly, however, researchers may have no obvious cut-off point, leading to the arbitrary partition of the LOS.

As already mentioned, additional concerns arise when using survival analysis from left or right data censoring issues. However, censoring does not occur at all in our data, as the survey was carried out in airport departure with all interviewees directly reporting their LOS. In short, when LOS is used as a dependent variable, certain aspects can cause problems for data analysis using traditional statistical models—survival analysis is a solution to those problems.

-Trips taken to Iran for business reason generally lasted shorter than others. Tourists visiting friends and relative(VFR) tend to stay roughly 10.2% longer than leisure tourists. On the other hand, religious and cultural tourists are expected to stay longer than leisure tourists.

-The findings of this study imply that tourism marketers and policymakers in Iran must develop efficient marketing strategies to increase LOS and attract those market segments more likely to stay longer, as they are particularly profitable.