Deriving a Relative Price Index for Inclusion in International Tourism Demand Estimation Models
Revisited
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Journal of Travel Research 1987 25: 40
DOI: 10.1177/004728758702500311

The online version of this article can be found at:
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>> Version of Record - Jan 1, 1987
What is This?
Previously used weighting systems for price indexes which are based on market shares of destination countries for a given origin have tended to specify weights derived from a given year as applicable throughout the model estimation period. Thus Joseph and Jud (1974) used 1960 market shares as weights in a model estimated using data covering the period 1958-68. We suggest using a weighting system that takes into account changes over time in the relative importance of competing destinations. For example, the weights in any given year may be calculated from the average market shares of destination countries over the previous three years.

REFERENCES

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We appreciate the constructive comments offered in the comment by Stephen F. Witt and Christine A. Martin. They make a number of perceptive points which are likely to be valuable to those concerned with developing a price index for inclusion in demand estimation models.

It was not our intention in the original paper to give the impression that adjusting relative price indices to incorporate the competitiveness of alternative tourist destination countries was a new concept in demand estimation models. As Witt and Martin point out, the notion of introducing such a composite price index has been applied widely in the travel and tourism field. Indeed, our original article cited several studies addressing international tourism demand which specified a tourist price index variable in the form of destination country price relative to origin country price.

However, once the price indices of tourist-generating countries have been adjusted to account for changes in exchange rates, the question then becomes how the price index should be weighted. A review of the literature of demand estimation models indicates that the dominant approach is to weight depending on market share or total number of tourists received, reflecting the relative importance of alternative destinations from each tourist-generating country as indicated by the relative sizes of tourist flows. As a result, such an approach is quantitative and more objective in its application.

The approach which we suggested in the original paper differed from this conventional approach in that weighting was based not on market share but on judgmental evaluation of the competition powers of the countries of interest, compared to the receiving country. Thus, the generated index was based on ranking judgmentally the relative competitiveness of alternative tourist destination countries to Turkey.

In the original article, we stated explicitly that “this weighted index does not consider the ‘inter-competitiveness’ between the tourist-generating countries.” We believe that the inherent nature of our approach prevented this. A judgmental approach attempting both to weight price indices for tourist-generating countries with one destination and to evaluate intercompetitiveness between the tourist generating countries requires more experience and confidence in one’s judgment than we felt we possessed. We believed it was unrealistic for us to try to quantify subjectively the nature and the extent of the competitiveness of each generating country against every other alternative generating country. In the original paper the index implied consideration of substitution only between tourism to Turkey and domestic tourism. The underlying assumption here is that tourism is sensitive to social and economic conditions. A destination undergoing political unrest or social upheavals, and/or with economic or social problems, is not likely to be attractive to tourists no matter how inexpensive its prices with respect to alternative destinations.

The level of development of a country may be a determining influence upon the types of tourism substitution likely to occur and thus upon the approaches likely to be most useful in generating a weighted relative price index. International tourism flows to a destination may result from the originating country’s higher per capita income level, thus giving its residents a greater propensity to travel. Residents of countries with a lower per capita income are likely to have a lower propensity to travel internationally. This suggests that in these latter countries people may substitute domestic tourism for foreign tourism.

Although the major weakness of the judgmentally derived composite index lies in its failure to consider changes over time in the relative competing power of alternative destinations, it reflects the most recent socioeconomic conditions of the receiving country under consideration which is more likely to affect the substitution.

We believe that in cases where highly complex, unquantifiable variables and factors may be at work or where quantifiable measures of demand for tourism are highly sensitive to fluctuations in the economy, such an approach may prove to be useful. Its usefulness depends on the degree to which the subjectively derived weights for tourist-generating countries are “reasonable” and “justifiable” and how well they represent the pooled opinions of qualified experts in the field.

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Tourism and Latin American Development, Austin, TX: University of Texas Press, pp. 25-42.