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## Tourism flows and the demand for regional and city theatres in Austria

Dr Marta Zieba

### Synopsis

This research investigates the impact of tourism flows on demand for large regional and city theatres in Austria over the period of 39 years from 1972 to 2011. A theatre demand model for both residents and tourists is applied. The effect of tourism flows on theatre attendance is estimated along with other variables such as ticket price, income, quality and theatre-specific effects. The significant and positive role of tourism is found to be particularly important for attendance at opera, operetta and musicals as opposed to attendance at drama performances. The analysis also reveals that in particular foreign, non-German tourists have a positive impact on theatre demand in Austria.

### Introduction and Background

The examination of the effect of tourism on demand for Austrian theatres is an interesting case study. Austrian theatres belong to the largest theatre group in the world. In some cases with over 700

seats, they are run as three-branch concerns with a variety of performing arts forms at their disposal. Vienna has been at the centre of Austrian theatre life for centuries. It is the owner of four federal theatres: Viennese Staatsoper, Volksoper, Burgtheater and Akademietheater which combined attracted 1.3 million visitors in 2010. However, Austrian theatres received relatively little attention in the economic literature on the performing arts in contrast to Germany (Zieba, 2009) or other countries (Laamanen, 2013; Withers, 1980; Gapinski, 1984, 1986, 1988). Theatre attendance also did not decline in Austria as it happened in Germany. The total number of visitors decreased only slightly from 3.9 million in season 1969 to 3.7 million visitors in 2010. On the other hand, from Figure 1, the total number of tourist arrivals in Austria doubled from over 15 million in 1972 to about 33 million in 2010. The total number of overnight counts also increased over time from 102 million in 1972 to 126 million in 2010. Figure 1 also reveals that foreign tourism flows have increased considerably over time. Therefore, in this research we investigate if tourists can positively contribute to theatre attendance in the region or city they visit.

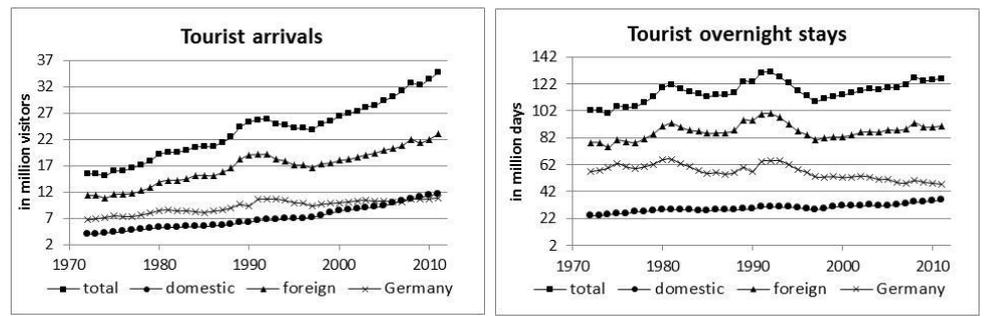


Figure 1: Tourist arrivals and tourist overnight stays by type of the trip in Austria

## AUTHOR



Dr. Marta Zieba  
Department of  
Economics,  
Kemmy Business  
School, University  
of Limerick,  
E:marta.zieba@ul.ie

## Issues and Questions Considered

An important feature of tourism consumption is that a large proportion of tourist expenditure is devoted to the consumption of non-traded goods and services which are not exportable in the traditional sense (Dritsakis, 2012). The performing arts can be classified in this category of services as artistic output does not occur until someone experiences it. The cultural experience can be influenced by many factors such as atmosphere of the place, quality of the performance but also tastes and skills of artistic interpretation.

According to McKercher (2002), there has been relatively little research that could identify the impact of tourism on the consumption of cultural activities. In general, we can find two hypotheses that explain cultural participation of tourists. According to a 'traditional' theory, tourists, once away from home, will consume other goods and services. Tourist experience can be seen as a form of escape from the constraints of the individual's everyday world and the need for the compression of worthwhile time. It has been indeed demonstrated that tourists would visit art museums when they travel abroad (McIntyre 2007; Borowiecki and Castiglione, 2014). Another theory says that tourists carry over their everyday life experiences to the tourism arena which results in a similar pattern of cultural consumption as at home and while on trip (Stylianou-Lambert, 2011). This so-called 'spillover' hypothesis states that individual preferences of tourists may be important factors in explaining their cultural participation.

This research draws on both theories and examines the impact of tourism flows on theatre demand in Austria. Theatre attendance per capita at various performances is assumed to be influenced by standard demand factors such as theatre ticket price, price of substitutes and income. Moreover, as quality is important, it is approximated using two variables: the number of artists and the standard of décor and costumes. The number of seats on offer is another determinant of demand that controls for capacity constraints in a theatre. The main variable of interest is the tourist intensity rate which is defined as the number of tourist arrivals per resident, and alternatively as the number of overnight counts per resident. Both tourism flows variables are disentangled by the origin of tourists.

## Methodology

A unique panel data set on 20 large theatres in Austria over 39-yearly theatre seasons from 1972 until 2011 was obtained from the annual report Theaterstatistik which has been published each year by the German Stage Association. The detailed data on tourism flows are taken

from the data bank STATcube available at Statistical Office in Austria.

We estimate a single double-log demand function using FGLS estimator that controls for a serial correlation of order one which is common to all panels. Besides the variables explaining theatre attendance, we include a time trend and 19 individual theatre dummies which control for unobservable theatre-specific characteristics. Moreover, three theatre market specifications are formulated to measure tourism flows, population and income. This is achieved by applying the spatial weight matrix approach and using detailed data on the NUTS3 or regional level. We also ran a series of alternate models to examine the robustness of our primary model specification.

## Outcomes and Findings

The results provide robust estimates of ticket price and income elasticities of theatre demand. Whereas theatre demand is found to be inelastic with respect to ticket price, the estimated income elasticity is around one for all performances but above one for opera, operetta and musicals, supporting the hypothesis that opera performances are luxury good. Furthermore, the results demonstrate that quality variables and capacity constraints have a significant and positive impact on theatre demand in Austria.

The total elasticity of attendance in response to tourism indicates that increasing the number of arrivals by two tourists per resident in the relevant theatre market would generate an increase in theatre demand by 581–680 thousand visitors per year. Furthermore, the analysis reveals that foreign, in particular non-German tourists have a significant and positive impact on theatre attendance, whereas domestic tourists do not contribute significantly to higher attendance numbers at Austrian theatres. The results also indicate that the effect of tourism on theatre attendance is much greater when only attendance at opera, operetta and musicals for the theatres in question is considered. This would suggest that tourists tend to consume highbrow arts performances and that their cultural tastes are also important. Consequently, these results are consistent with findings of other empirical studies which confirm that cultural tourists are better educated with relatively higher incomes.

The empirical findings support both traditional and spillover hypotheses, and they indicate that tourism is positive and important determinant of demand for Austrian theatres. The findings of this study inform policymakers that given the growing role of international tourism, theatre and tourist managers in Austria could aim at promoting Austrian theatres among tourists, in particular among the visitors from abroad.

**A full copy of the paper can be obtained at:**

<https://link.springer.com/article/10.1007/s10824-015-9250-9>  
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Author:

Dr. Marta Zieba  
Department of Economics,  
Kemmy Business School,  
University of Limerick,  
E: [marta.zieba@ul.ie](mailto:marta.zieba@ul.ie)

**For further information and comments, please contact:**

Dr. Sheila Killian  
Assistant Dean, Research  
Kemmy Business School  
University of Limerick, Ireland  
T: +353 61 202237  
E: [sheila.killian@ul.ie](mailto:sheila.killian@ul.ie)

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