

## Determinants of cultural and popular celebration attendance: the case study of Seville Spring *Fiestas*

María Luisa Palma · Luis Palma ·  
Luis Fernando Aguado

Received: 23 December 2010 / Accepted: 23 April 2012 / Published online: 8 June 2012  
© Springer Science+Business Media New York 2012

**Abstract** The Spring *Fiestas* in Seville (Spain) (SFS) are the most important cultural events in the city each year. The present paper pursues two aims. The first is to characterize the SFS as a new prototype of a complex cultural good that expresses the link between the people and the place in which they live based on material and immaterial cultural heritage represented through popular celebrations. The second goal is to conduct an empirical analysis of the determinants that shape attendance intensity by estimating a zero-truncated count data model using a unique dataset of attendees at the SFS in 2009. Findings indicate that attendance is strongly associated with variables reflecting knowledge, institutional links, past experiences, and the perceived external benefits generated by the existence of the SFS. The article contributes to the literature by exploring participation in popular celebrations, a field of inquiry that to date is extremely limited in cultural economics.

**Keywords** Cultural goods · Spring Fiestas in Seville ·  
Cultural participation models · Count data models

**JEL Classification** Z11 · C25

---

M. L. Palma (✉) · L. Palma  
Department of Economics and Economic History, Faculty of Economics, University of Seville,  
Ramón y Cajal 1, 41018 Seville, Spain  
e-mail: mpalma@us.es

L. Palma  
e-mail: lpalma@us.es

L. F. Aguado  
Department of Economics, Pontificia Universidad Javeriana, Cali, Colombia  
e-mail: lfaguado@javerianacali.edu.co

## 1 Introduction

Fairs, *fiestas*, and festivals are special events with a strong cultural component that can play a significant role in community life and economic development. Such events have grown in number, popularity, and diversity in recent years (Gursoy et al. 2004; NEA 2010). Diverse benefits are generated by such celebrations, ranging from the purely economic, arising from the additional income and employment, to their contribution vis-à-vis reinforcing identity and favouring greater social cohesion (Chew 1998). In other words, their link to a specific area means that they can be perceived as tourist attractions that revitalize local traditions, positively impacting living standards as well as the image of the city or region.

Fairs and *fiestas* can be considered as events similar to a cultural festival, since they are held on a regular basis and evidence a high cultural value. Yet, they do not involve any specific programme comprising an offer of culture in itself which differs from year to year, but merely express a cultural and artistic manifestation, based on acquired habits reflecting the sign of identity of a particular group and which, due to their very nature, are unique whenever they are held.

From this standpoint, cultural fairs and *fiestas* offer an interesting field of research since they merge material and immaterial aspects. Perhaps, one of the best examples in this sense is the Spring *Fiestas* in Seville (Spain) (henceforth SFS), which received a total of 697,708 visitors from outside the city in 2009 (Palma et al. 2010).

The main goal of the current paper is to analyse the SFS as a cultural good that combines material and immaterial features, as well as determinants of participation intensity therein. The SFS may be described as a complex cultural good encompassing two elements which define it: the compound nature thereof and the widespread social involvement. In particular, this good comprises two events: Holy Week, which is religious, and another which is non-religious, the April Fair, both of which take place in spring.<sup>1</sup> Each event is unique, displaying distinctive features and settings, although both share a common denominator: a high proportion of immaterial cultural values. In the two celebrations or events there are institutional links in terms of participation which emerge as key elements in cultural identity, and which are maintained from generation to generation and favour social interaction. The main hypothesis to be tested in the present study is that given the social and cultural dimension of the good analysed, and therefore its nature, the key determinants explaining participation intensity therein are more closely related to variables associated with preferences, based on the accumulation of cultural capital, than to socio-economic variables.

Most cultural economics research on the subject has focused on economic impact studies (Seaman 2003; Herrero et al. 2004; Devesa 2006; Perles-Ribes 2006; González-Neira and Ramírez-Picón 2008) and on economic evaluation studies of

---

<sup>1</sup> The name SFS first appeared at the end of the nineteenth and beginning of the twentieth century when the Seville City Hall began to publish posters on which the two events were featured as a single unit inviting people to participate in both. The oldest of the celebrations is Holy Week, which dates back to the sixteenth century, specifically to 1521. The April Fair began in 1847, originally as a commercial agricultural fair, similar to those held in other parts of Spain.

cultural festivals using contingent valuation (Snowball 2005; Herrero et al. 2011a, b) as well as choice experiments (Snowball and Willis 2006). Recently a new line of research has developed exploring festivals from the standpoint of demand (Devesa et al. 2009). Works from the area of tourism studies have also emerged dealing with attendees' motivation at cultural events (Crompton and McKay 1997). Given the enormous wealth of nuances the two celebrations may involve, research into the SFS has been conducted from several perspectives. They have been explored from a number of standpoints including anthropology, sociology, politics, history, art, music, literature, etc.,<sup>2</sup> although analysis thereof from an economic viewpoint has been less frequent, with the exception of economic impact studies (Castillo and López 2000; CES and Cámara de Comercio de Sevilla 2008; Palma et al. 2010), or the work carried out by Lazzeretti (2008, 2011) concerning cultural districts using Holy Week and the April Fair as examples. To the best of our knowledge, this is the first study to examine from an economic perspective a cultural expression of a compound nature, which merges tangible and intangible elements, as is found in the SFS and to specifically analyse the factors determining attendance intensity.

Given the lack of previous literature concerning participation studies of events this nature, the method adopted to analyse participation intensity is based on two approaches. Firstly, we draw on the work carried out by Borgonovi (2004) and Ateca-Amestoy (2008) into the performing arts and theatre, respectively, in which the variables measuring specific individual cultural capital (specific education in the arts) have a greater impact on participation intensity than cultural capital as a whole (years in education) and socio-economic factors such as income. Secondly, given the importance of participation and social interaction in the SFS, we also draw on the work of Daneshvary et al. (1993) for the Las Vegas Rodeo, in which the main explanatory variable for attendance intensity is social interaction rather than any socio-economic factors.

This paper contributes to the literature in at least two ways. First, from the methodological point of view, this article analyses from a cultural economics perspective, a new prototype of a complex cultural good which merges elements that are linked to material and immaterial heritage, performing arts, visual arts, and traditional creative industries, making it difficult to compare to other cultural goods. Secondly, the paper empirically explores the different determinants of participation intensity, number of days that visitors attended the SFS, drawing on a unique dataset obtained from a survey carried out amongst SFS attendees during the spring of 2009. In this respect, it contributes to empirical literature addressing participation in popular celebrations.

The paper is organized as follows. Section 2 briefly describes the Spring *Fiestas* as a cultural good within the area of cultural economics from a theoretical perspective. Section 3 sets out the previous literature to analyse the SFS attendance. Section 4 contains both the econometric model and a description of the data variables used. In Sect. 5, the results of the various estimates are presented. The final section offers the main conclusions to emerge from the study.

---

<sup>2</sup> Much has been written about Holy Week, adopting varying approaches. Moreno (1999, 2001) and Fernández de Paz (2006) from an anthropological perspective are particularly interesting.

## 2 The Spring *Fiestas* from the standpoint of Cultural Economics

### 2.1 The Spring *Fiestas* of Seville as a cultural good

As previously stated, two different and contrasting cultural events are included under the name Spring *Fiestas* in Seville (SFS). SFS share common features, making it possible to merge them under a single name. These features include the following:

1. SFS are held cyclically and regularly. They take place during the same season each year, giving rise to their name, spring, when the climate in the city encourages street life and when citizens gather together, thereby favouring greater social interaction and cohesion. SFS are characterized by their limited and stable duration, 2 weeks, corresponding to the celebration of the events. They also evidence a high degree of repetition and organization under the responsibility of the city council, features that make the SFS to a certain extent comparable to the definition of a festival found in the literature (Rolfe 1992; Devesa 2006; Herrero and Devesa 2007) although, unlike festivals, the SFS have no cultural programme which differs each year.

2. These events are meaningful cultural expressions of the city's social and tourist life and entail a high degree of social involvement. This involvement is favoured by institutional links that reflect each individual's membership of certain social groups. These links are membership of the city's brotherhoods in Holy Week<sup>3</sup> and membership or ownership of the different types of marquees at the April Fair.<sup>4</sup> Moreover, they emerge as key factors in cultural identity, encouraging greater social interaction and cohesion amongst individuals.

The SFS share a clear underlying cultural component since the events convey symbolic messages to all those who participate therein, involve an element of creativity, and generate forms of value that cannot be expressed solely monetary terms.<sup>5</sup> SFS can be considered as a cultural capital good/endowment of the city Throsby (1999). Even though SFS evidence accumulated tangible capital (sculptures, historic buildings, etc.), the distinctive feature of the SFS compared to other cultural events is that they represent an example of a cultural prototype of intangible or immaterial heritage (music, literature, traditions, values, etc.) in that they are a

<sup>3</sup> Entomologically *hermandad* is Germanic (blood brother). In Andalusia, a distinction is made between brotherhoods, which can be made up of associations of the faithful set-up to perform certain acts of piety or charity, and brotherhoods called *cofradías* which are set up to increase public worship. There are currently 59 *cofradías* (henceforth brotherhoods as it is a more general term) participating in the Holy Week processions.

<sup>4</sup> According to information provided by the Spring *Fiestas* Office of the Town Hall (*La Delegación de Fiestas Mayores del Ayuntamiento de Sevilla*), in 2008, there were 1,047 marquees, 27 of which were family run with a sole owner, 499 family run with shared ownership, 311 belonging to different private entities, 190 private members clubs (*peñas*), one municipal, six local neighbourhood marquees, and 13 local services marquees.

<sup>5</sup> SFS as cultural goods generate external benefits such as their aesthetic value or spiritual value, more so in the case of the Holy Week celebration than the April Fair, their social value, serving as a link and reaffirming the feeling of identity associated with Seville and its cultural life, their historic value, the symbolic value mentioned previously, and finally their authenticity value.

cultural manifestation which has deep roots in the city and which merges traditions handed down over the years with new forms of artistic expression that reflect the evolution of society and which also represent the signs of identity thereof and in which culture is consumed, created, and reproduced.

Table 1 shows the compared common characteristics of the two events that make up the SFS and that are included in the sphere of cultural economics.

Both events offer examples of features linked to the performing arts held in an open public space. Holy Week is represented in the city’s streets which become one enormous stage on which the Passion of Christ is played out by brotherhoods along the *official route*, the historical centre of the city where the principal monuments such as the Cathedral, the Giralda, and the town hall building are located. The April Fair is held in a specifically designated public space, akin to a fairground which is a fenced-off enclosure, where a temporary mini-city of marquees is constructed and where people often attired in traditional dress (*flamenco* costumes) and sing and dance to the tune of traditional flamenco (*sevillanas*) in different styles, both inside

**Table 1** The Spring *Fiestas* of Seville

Areas of cultural economics	Holy Week	April Fair
Performing Arts	The city is one huge stage where the Passion of Christ is played out through <i>pasos</i> (floats with statues representing episodes in the story of Easter) of each brotherhood. The performance ( <i>pasos</i> ) is accompanied by music (processional marches*) and <i>saetas</i> (flamenco style laments that are sung without musical accompaniment) depending on the different brotherhoods	Dancing, playing, and singing to a specific type of music ( <i>sevillanas</i> ) with traditional dress (flamenco dresses, <i>trajes de corto</i> —riding style dress for men) inside and outside the marquees
Heritage: Material and Immaterial**	Material heritage: churches, the cathedral, emblematic buildings: the Giralda, the Town Hall, plus immaterial heritage, traditions preserved by brotherhoods	Mostly immaterial heritage. A temporary mini-city is constructed each year based on customs representing the city. Time and space at the April Fair (the Fair’s main illuminated entrance gate)***
Visual Arts	Sculpture (imagery), crafts (goldsmiths, waxing, embroidery, carpentry, gilding, etc.), Holy Week poster design	Handicrafts (flamenco dress, shawls, shoes, flowers, etc.). Men’s riding outfits, hats, horse, and carriage decoration. Advertising poster design and the main entrance gate
Traditional Creative Industries	Books, press, CD music, TV and radio broadcasts, DVDs, photography, poster reproduction, cinema	

Characteristics as a cultural good

\* A musical style used to accompany the processions during Holy Week and which is played by a band made up of wind and percussion instruments, the structure of which resembles an orchestra, and in which the main instrument is the clarinet

\*\* This is based on UNESCO’s concept of immaterial heritage (2009)

\*\*\* UNESCO candidate for declaration as Cultural Immaterial Heritage

and outside the marquees. Both events thus also highlight the city's immaterial heritage and are a means of reaffirming the city's identity.

The two cultural events involve traditional creative industries. There is literature related to each event, CDs of Holy Week music, *processional marches* and *saetas*, CDs of *sevillanas*, DVDs recorded specifically for the SFS of a particular year, etc., and widely reflected elsewhere.

As a result, the SFS cannot be included in one specific area of cultural economics in the broad definition of the cultural sector. The events combine characteristics associated with various types of cultural goods, both material and immaterial heritage, visual arts, performing arts, as well as diverse traditional creative industries. This means that the enormous complexity involved in the events makes analysis thereof extremely complicated in economic terms and hard to compare to other goods.

SFS can also be analysed from an individual cultural consumption good standpoint. From this perspective, of particular interest are other characteristics attributed to cultural goods which may be applied to the SFS and which explain consumption thereof, following Throsby (2006, p. 7): (1) their character as experience goods (Nelson 1970) and (2) the process of taste cultivation as key to understanding consumption decisions (McCain 1979). This process of taste formation might be the result of accumulated cultural capital (Becker 1965; Stigler and Becker 1977; Becker and Murphy 1988; Ateca-Amestoy 2009; Lévy-Garboua and Montmarquette 1996). In prior festival demand studies, specifically cinema festivals (Devesa et al. 2009), variables dealing with consumption of the actual festival itself in previous editions and usual film consumption are those which most impact film consumption, a fact that points to the concept of addiction to culture or cultural capital.

In the case of SFS, individual preferences may prove sensitive to the consumption of a society or social group which includes an individual. This is referred to as social cultural capital by Prieto-Rodríguez and Fernández-Blanco (2009), resulting from the intergenerational and traditional components of events that have involved continued exposure since childhood. Consumption of SFS as a cultural good, and in particular intensity of SFS attendance, may be shaped by the existence of accumulated cultural capital resulting from family antecedents (institutional links), general education, past experiences through learning by consuming, or rational addiction.

The SFS also evidence certain features of public goods in the non-rival and non-excludable sense, in that admission to and participation in the events is free. Only when watching Holy Week on the *official route*, from which the event can only be viewed by paying an admission fee, or when visiting private marquees at the April Fair, entrance to which requires membership of the marquee or an invitation, do SFS display the properties of club goods (Buchanan 1965) by allowing exclusion.

## 2.2 Characteristics of SFS participation

Studying participation in the SFS refers to active participation, following O'Hagan (1996), whose intensity analysis thereof may be shaped by what is a key factor for

the individual, namely the existence of institutional links: membership of one of the Holy Week brotherhoods and the right to enter the marquees at the April Fair (as marquee owners or members). As a result, both cases involve active participation which entails not only watching the event as a spectator but also actually taking part in the processions as a nazarene, religious image bearer, penitent, brass-band musician, co-ordinator, etc., or through the typical singing (*flamenco*) and traditional dancing (*sevillanas*) which takes place mainly inside the marquees at the April Fair.

Although the above-mentioned participation links are acquired through family tradition and handed down from generation to generation, they may also be seen as the right to join a club that entails a selection process and a maintenance cost in financial terms. These links also contribute to creating certain likes or preferences towards these events, which may lead to greater intensity in terms of attendance, in the sense that these links tend to have been forged since childhood.

Contrasting this active participation, there is also a passive participation as a mere spectator, which in the case of Holy Week involves watching the event from the city streets or even on the *official route*. In the case of the April Fair, if visitors do not own a marquee or are not invited to one, passive participation only amounts to visiting the fairground to sightsee and enjoy the aesthetic value, savouring the atmosphere of the city (the fair's illuminated entrance, the colourful atmosphere, the horse rides, music, dancing, singing, etc.).

### 3 Review of the literature analysing cultural and popular celebration attendance

Exploring determinants of arts attendance has been a key area of research in cultural economics since the latter emerged as a sub-discipline of economics (Baumol and Bowen 1966; McCarthy et al. 2001). Empirical studies have explored variables that range from prices to different motivation for attending. Analysis has focused particularly on areas such as the theatre (Ateca-Amestoy 2008; Swanson et al. 2008), music (Prieto-Rodríguez and Fernández-Blanco 2000; Montoro-Pons and Cuadrado-García 2011), cinema (Collins et al. 2009), reading (Fernández-Blanco and Prieto-Rodríguez 2009), and cinema festivals (Devesa et al. 2009).

More than demand functions, most empirical studies estimate participation equations for the various cultural activities (Gray 2003; Borgonovi 2004). Said equations embrace a wide range of variables. On the one hand, there are those reflecting individuals' 'environment' such as age, education levels, and skills that impact the relative efficiency with which 'arts appreciation' is created (Michael and Becker 1973, p. 382), and the so-called mixed factors identified by Seaman (2005, p. 7) such as sex, race, and sexual orientation that measure the effect of various socio-economic antecedents. On the other hand, studies also explore intertemporal variables that reflect the effect of past experiences, and interpersonal variables that assess dependency on the choices made by others, based on taste formation models (Stigler and Becker 1977; Lévy-Garboua and Montmarquette 1996). Other studies

focus on leisure time cost (Withers 1980; Zieba 2009) and provision of human capital (Ateca-Amestoy 2008) as key factors explaining attendance intensity.

To our knowledge, there are no previous studies exploring demand for popular festivals. Literature exploring popular *fiestas* has focused on their impact on the area: creation of employment, ability to attract tourists, and impact on the image of the cities and on economic evaluation studies of cultural festivals (Snowball 2005, 2008; Snowball and Willis 2006; Herrero et al. 2011a, b). However, there are no previous instances which analyse participation in goods of this nature which can provide us with a reference point. Of the studies analysed, the one that comes closest to exploring an event of similar characteristics is the work conducted by Daneshvary et al. (1993), who investigate the determinants of attendance intensity at the Las Vegas Professional Rodeo, where the variables reflecting social interaction with friends and relatives prove particularly significant.

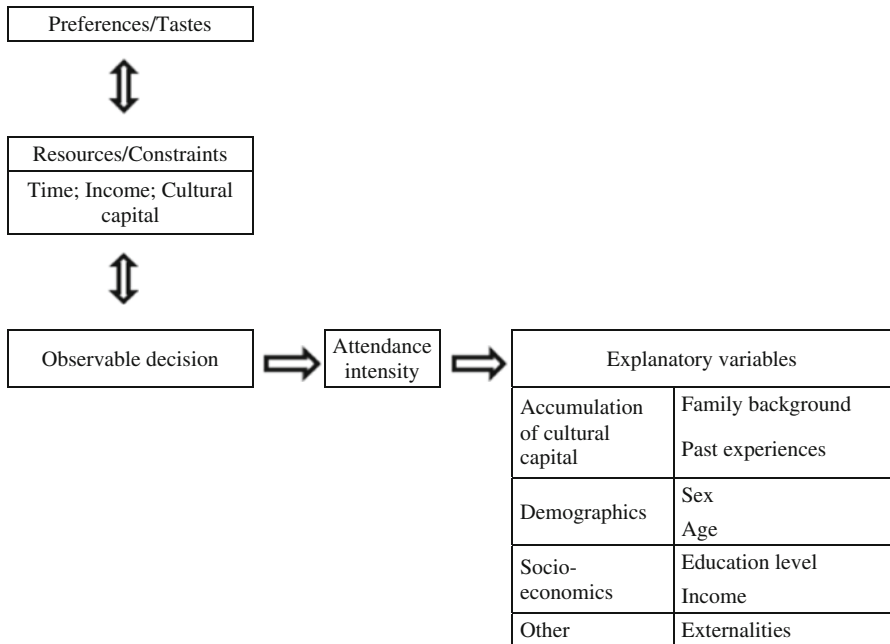
Given their particular nature, popular *fiestas* pose a challenge when modelling determinants of participation intensity and indeed challenge ‘the conventional assumptions of homogeneous goods and services, completed learning of tastes, independence of choice among individuals and so forth’ (Lévy-Garboua and Montmarquette 2003, p. 201). For the SFS, there are several particularly noteworthy features that, beyond the symbolic content, explain the choice of variables that account for participation intensity therein: (2) they are time intensive in consumption; (2) they may be defined as a leisure good (Becker 1965; Gronau 1977; Aguiar and Hurst 2006); (3) they are consumed out of the home, such that they require a decision to make an initial investment based on previous knowledge of the good and social interaction. In this respect, the formation of tastes plays a key role (preferences); (4) they generate externalities on the area, referred to in the empirical literature as supply effects (Seaman 2003, pp. 224–225).

These characteristics place at the centre of participation in popular *fiestas* the effect of variables reflecting the population’s link with its area resulting from the material and immaterial cultural heritage and the social interaction this entails. These traits are reflected in the following Fig. 1.

The present research specifically follows Daneshvary et al. (1993) with regard to the importance attached to the cultural identity surrounding the event, a rodeo, in this particular instance through Western heritage and the social interaction involved in the *fiesta* through the socializing process with family and friends, which in the case of popular *fiestas* may prove to be key variables explaining attendance intensity. From the methodological standpoint, within the framework of cultural economics, we characterize a complex cultural good similar to the area of popular *fiestas*, the SFS, our analysis focusing particular attention on the importance of individual variables which point to the link with popular *fiestas* and which may provide a reference for subsequent empirical studies of a similar nature. Finally, in line with the 2009 UNESCO Framework for Cultural Statistics, the importance of popular *fiestas* and immaterial cultural heritage beyond their contribution to employment and ability to attract tourists is reflected.

In empirical terms, the study uses a count data model, specifically a zero-truncated Poisson model used by Brida et al. (2011), to analyse the Rovereto Contemporary Art Museum.





**Fig. 1** Participation at the SFS

## 4 Data collection, description of variables, and empirical model

### 4.1 Data collection

Official surveys of this topic are absent. Consequently, data for this article come from a survey designed and conducted by the research/team authors in spring 2009. The dataset was collected through a convenience sample by a face-to-face interview with people aged 15 and over. The main goal of the survey was to gather information concerning key variables that might explain attendance intensity, such as institutional links with SFS, consumption of other cultural goods, perception of the contribution made by the SFS to the city, in addition to demographic and socio-economic variables such as gender, age, education levels, and income.<sup>6</sup> The surveys distinguished between attendees only in terms of their place of residence, locals (residents in Seville and the metropolitan area), and non-locals (visitors who lived outside Seville and its metropolitan area, including foreigners).<sup>7</sup>

The total sample size is 594, of whom 310 correspond to Holy Week attendees and 284 to the April Fair; 314 are local attendees and 280 non-locals attendees. We

<sup>6</sup> Given the characteristics of the SFS, demographic variables such as race were not considered as they were not felt to be relevant.

<sup>7</sup> The appendix lists the main questions that were used in the survey to estimate the models. The full questionnaires and dataset are available to researchers upon request from the authors.

obtained a sample size following Levy and Lameshow's (1991)<sup>8</sup> procedure, a maximum sampling error of 5 % being accepted. Information was gathered during two periods: the first between 5 and 12 April, 2009, corresponding to Holy Week, and the second between April 27 and May 3, the period during which the *April Fair* is held. Further, in order to gain a representative profile and reflect different degrees of attendance at each event, interviews were conducted at different strategic locations where the events were held. In the case of Holy Week, interviews were conducted at the exit of the brotherhoods of the various churches where they were located, at the *official route*, and in the streets on the most important days: Palm Sunday, Holy Thursday and Friday as well as the early hours of Friday morning, the *Madrugá*. For the April Fair, interviews were conducted at various locations depending on the public or private nature of the marquees at the enclosed area of the Fair over the days on which the Fair was held.

#### 4.2 Description of variables

To achieve one of the work's objectives, namely to analyse the variables that explain attendance intensity at the SFS, a participation function is estimated to take into consideration the count nature of the dependent variable ( $y_i$ ) that measures the number of times (days) that individuals attended each event.<sup>9</sup> The independent variables are grouped in six vectors: (1) preferences ( $pref_i$ ), (2) formation of taste ( $fpref_i$ ), (3) consumption of other cultural products ( $cuc_i$ ), (4) demographic ( $dem_i$ ), (5) socio-economic ( $soc_i$ ), and (6) other variables ( $ov_i$ ):

$$y_i = f(pref_i, fpref_i, cuc_i, dem_i, soc_i, ov_i). \quad (1)$$

These vectors of explanatory variables are detailed in Table 2.

Given the nature of the SFS, certain key elements are highlighted in the conditioning factors vis-à-vis the decision regarding attendance intensity at the events. According to the taste formation models, '*arts appreciation*' deriving from participation in the SFS is 'produced' by individuals through their own production function which involves the acquisition of market goods, time devoted to consumption, and subjects' investment in developing and refining their tastes, reflected in the accumulation of cultural capital. Specifically, the latter may be accumulated in a number of ways, ranging from family antecedents, general education as well as specific education in the arts, to past experiences through learning by consuming or rational addiction.

Thus, the *pref* and *fpref* blocks include variables that impact the accumulation of cultural capital through consumption or previous knowledge (*pref*) of the cultural good and the institutional links facilitating it (*inslink*). These variables are related to what Blaug (2003) calls 'experienced consumers'. By including *achildren* as an

<sup>8</sup> The sample was drawn up following a proportional stratified design in terms of origin (local and non-local) and event (Holy Week and April Fair) based on information from the Census Bureau for the estimation of local residents and from the city of Seville Yearly Statistics to obtain data of non-local visitors. In this latter source, we found information about the number of visitors to Seville in 2008 during the same period as the SFS took place.

<sup>9</sup> This number of days includes the day that an individual is interviewed.

**Table 2** Definition of variables

Variable	Type	Description	Expected effect
<b>Dependent variable</b>			
$y_i$	<i>N</i>	Number of days that an individual attended each event	
<b>Explanatory variables</b>			
Preferences ( $pref_i$ )			
$pref$	<i>B</i>	<i>For local visitors.</i> Is attending Holy Week or April Fair the main reason for your stay in Seville? <i>For non-local visitors.</i> What is the main reason for your visit to Seville, Holy Week or the April Fair: 0=No; 1=Yes	+
$inslink$	<i>B</i>	Belongs to a brotherhood and takes part in the processions, and/or owns a marquee at the April Fair: 0=No, 1=Yes	+
Cultivation of taste ( $fpref_i$ )			
$achildren$	<i>B</i>	Do you attend each event with children? 0= No; 1= Yes	+
Consumption of other cultural goods ( $cuc_i$ )			
$cuc$	<i>B</i>	Do you attend or visit other places of cultural interest during Holy Week or the April Fair?: 0= No; 1=Yes	+
Demographics ( $dem_i$ )			
$sex$	<i>B</i>	0= women; 1= men	?
$age$	<i>O</i>	Age categories 1=<19; 2=20–29; 3=30–49; 4>50 (dichotomized in final analysis)	±
$local$	<i>B</i>	0= non-local (resident from outside Seville and the metropolitan area); 1= local (resident in Seville and metropolitan area)	?
Socio-economics ( $soc_i$ )			
$edu$	<i>O</i>	Educational categories: 1= primary education and without education; 2= secondary school; 3= university studies (bachelor, master, PhD) (dichotomized in final analysis)	±
$income$	<i>O</i>	Monthly family income categories: 1= <2,000; 2= 2,001–4,000; 3= >4,001 (dichotomized in final analysis)	±
Other variables ( $ov_i$ )			
$ecodev$	<i>B</i>	Do you think Holy Week and the April Fair contribute to the economic development of the city of Seville? 0=No; 1=Yes.	+
$nLocal*Income$		Interactions nlocal-income (interactions non-local and income)	?
$week$	<i>B</i>	0= April Fair; 1= Holy Week	?

*N* count variable, *B* binary variable, *O* ordered variable, +; -; ? The variable has a positive, negative and an ambiguous effect on attendance intensity at the SFS

explanatory variable, we seek to ascertain whether exposure during childhood as part of an early socialization process with these events proves significant in accounting for SFS attendance. Participation in Holy Week and the April Fair is indeed a social activity, closely linked to relations of kinship and friendship (family, friends, neighbours, colleagues, etc.). The *cuc* variable provides information concerning whether participation in the SFS complements or replaces consumption of other cultural products available in the city.

Demographic variables such as *sex*, *age*, or *local* prove significant when explaining SFS attendance. With the *sex* and *local* variables, the aim is to determine whether men and local visitors, respectively, participate more in SFS. The age categories are included in the model to consider various opportunity costs of participation throughout the life cycle such as joining the labour market, childbearing, care and ill health, and lower mobility that imply a non-linear relation between attendance and age (Borgonovi 2004).

As regards socio-economic variables, education and income are included. Findings in the empirical literature show that participation increases as general education and income levels rise (Borgonovi 2004; Ateca-Amestoy 2008). A higher general education is linked to the ability to understand the symbolic message of cultural goods, and high levels of income are related to economic advantage and being able to bear the financial cost involved in taking part. Nevertheless, the SFS are popular celebrations that are deeply rooted in the local population and are well known on an international scale, such that in principle they do not require much general human capital if they are to be interpreted. However, active participation does require institutional links such as belonging to a brotherhood and ownership of a marquee, and the additional financial outlay which both entail. Moreover, because income may have different effects for locals and non-locals, in order to gain further insights into its effects on attendance intensity, an interaction between non-local and income variables is also included. This interaction term will reflect the differential effect of income for non-local visitors with respect to local visitors. In addition, estimation includes the variable *ecodev*, reflecting attendees' perception of the benefits linked to the existence of the SFS Seaman (2003). Finally, we include a dummy variable, *week*, to show the difference in passive participation between Holy Week and the April Fair, given the strong restrictions on access which the marquees imply for the Fair.<sup>10</sup>

The descriptive statistics are contained in Table 3. The results show that, on average, people attended the SFS for 3.3 days, 67 % of all attendees stating that they stay in Seville or visit Seville exclusively to attend the SFS. Only 9.6 % of participants are formally linked to a brotherhood and/or own a marquee; 17 % attended with children under the age of 15, with 46 % taking advantage of the SFS days to attend other cultural events or goods (*Cathedral*, *Alcázar*, *Archivo General de Indias*, *Museo de Bellas Artes*, *Tablaos Flamencos*, among others); 48 % of total attendees are men. Likewise, 52 % of attendees are in the first income category (< 2000€), 9 % of attendees declaring an income above 4000€ per month. The highest percentage of attendees (39 %) are in the second age category (20–29 years old), followed by the third category (30–49 years old), and the category of over 50-year-old, with 29 and 25 %, respectively. As regards educational level, the percentage increase with educational level is higher. Finally, 53 % of attendees are locals and 91 % of attendees consider that SFS contribute to the economic development of the city.

<sup>10</sup> A mean difference *t*-test reveals that the difference between Holy Week and April Fair attendance intensity ( $t = 3.7182$ ) is significant ( $p < 0.01$ ).

**Table 3** Descriptive statistics

Variable	Mean/Percentage	Standard Deviation
$y_i$	3.272	1.902
<i>pref</i>	0.668	0.471
<i>inslink</i>	0.096	0.295
<i>achildren (I=Yes)</i>	0.167	0.373
<i>cuc (I=Yes)</i>	0.461	0.499
<i>sex (I=men)</i>	0.480	0.5
<i>age1 (*)</i>	0.064	0.245
<i>age2</i>	0.391	0.488
<i>age3</i>	0.293	0.455
<i>age4</i>	0.253	0.435
<i>Local (I=local)</i>	0.529	0.5
<i>edu1</i>	0.177	0.382
<i>edu2</i>	0.311	0.463
<i>edu3 (*)</i>	0.512	0.5
<i>income1 (*)</i>	0.517	0.5
<i>income2</i>	0.389	0.488
<i>income3</i>	0.094	0.292
<i>ecodev (I=Yes)</i>	0.907	0.290
<i>nlocal_inc ~ 1(*)</i>	0.219	0.414
<i>nlocal_inc ~ 2</i>	0.197	0.398
<i>nlocal_inc ~ 3</i>	0.056	0.229
<i>week</i>	0.522	0.5

\* Reference category

### 4.3 Empirical model

The dependent variable ( $y_i$ ) is a non-negative integer or count, and  $x_i$  is a set of regressors defined above. We estimate the following individual participation equation:

$$y_i = f(\text{pref}_i, \text{inslink}_i, \text{achildren}_i, \text{cuc}_i, \text{sex}_i, \text{income}_i, \text{age}_i, \text{edu}_i, \text{local}_i, \text{nlocal}_i, \text{nlocal\_inc} \sim 1, \text{nlocal\_inc} \sim 2, \text{nlocal\_inc} \sim 3, \text{ecodev}_i, \text{week}_i). \tag{2}$$

The Poisson distribution and the Poisson model are widely used in count data analysis (Greene 2007). If  $y_i$  has a Poisson distribution, its density is given by:

$$\Pr(Y = y_i | x_i) = \frac{e^{-\lambda_i} \lambda_i^{y_i}}{y_i!}, \quad y_i = 0, 1, 2, \dots \tag{3}$$

The most common formulation for  $\lambda_i$  is the loglinear model:

$$\ln \lambda_i = x_i' \beta \tag{4}$$

and the expected number of events per period is given by:

$$E[y_i | x_i] = Var = [y_i | x_i] = \lambda_i = e^{x_i' \beta} \tag{5}$$

$$\frac{\partial E[y_i|x_i]}{\partial x_i} = \lambda_i \beta. \quad (6)$$

Some properties of the Poisson regression model make it too restrictive for count data (Cameron and Trivedi 2005). In particular, two are highlighted which are important for the model estimated: equidispersion, which reflects equality of the variance and the mean, and truncation, which reflects the fact that data are observed only over part of the range of response variable. When equidispersion is not satisfied, there is said to be overdispersion, in which case it is preferable to use negative binomial distribution and the negative binomial regression model, whose density is given by:

$$\Pr(Y = y|\lambda, \alpha) = \frac{\Gamma(\alpha^{-1} + y_i)}{\Gamma(\alpha^{-1})\Gamma(y_i + 1)} \left( \frac{\alpha^{-1}}{\alpha^{-1} + \lambda_i} \right)^{\alpha^{-1}} \left( \frac{\lambda_i}{\lambda_i + \alpha^{-1}} \right)^{y_i} \quad (7)$$

where  $\Gamma(\cdot)$  is the integral of the gamma function and  $\alpha$  is the overdispersion parameter. If  $\alpha = 0$ , there is no overdispersion. Cameron and Trivedi (2009, p. 575) propose tests for overdispersion. Moreover, the dataset used only included individuals who participated in SFS at least 1 day given that the surveys are carried out in places where SFS took place, meaning that the data are zero-truncated or left-truncated. In the zero-truncated Poisson case, density is given by:

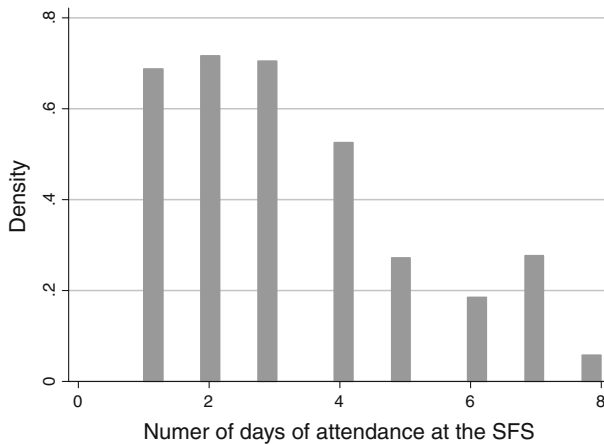
$$\Pr(y_i|x_i) = \frac{e^{-\lambda_i} \lambda_i^{y_i}}{y_i!(1 - e^{-\lambda_i})'} \quad y_i = 1, 2, \dots \quad (8)$$

Regression models for counts have been widely used to analyse participation intensity as well as consumption of various cultural goods including rodeo attendance (Daneshvary et al. 1993), theatre attendance (Ateca-Amestoy 2008), cinema festival attendance (Devesa et al. 2009), museum attendance (Brida et al. 2011), books read (Fernández-Blanco and Prieto-Rodríguez 2009), and tourism literature to determine choice of the length of a trip (Nicolau-Gonzálbez and Mas-Ruíz 2006).

## 5 Results

Figure 2 shows that the number of days that individuals attended the SFS follows the distribution of a zero-truncated count model.

The estimation results are shown in Graph 4. Particularly when working with truncated data, overdispersion may be a sign of misspecification (Cameron and Trivedi 2005, p. 670). The result of the overdispersion test ( $\alpha = -0.03$ ,  $p < 0.051$ ) points to the presence of a low and relatively non-significant level of underdispersion in the zero-truncated Poisson regression model (Table 4). Nevertheless, we estimated a zero-truncated negative binomial model, the overdispersion parameter not proving significant ( $\chi^2 = 0.77$ ,  $df = 1$ ,  $p < 0.190$ ). The two estimated models offer similar results with regard to signs and significance of the variables. However, the Wald  $\chi^2_{17}$  statistic shows a better fit of the zero-truncated Poisson model compared to the zero-truncated negative binomial model.



**Fig. 2** Histogram showing attendance intensity at the SFS

The results shown in Table 4 provide evidence to support that attendance intensity at SFS is strongly associated with variables reflecting knowledge, past experiences, traditional links, and intergenerational transfer in consumption of SFS, such as *pref*, *inslink*, and *achildren*. In the case of cultural goods such as SFS, this process is related with individual experiences since childhood and the social interaction that consumption involves. Regarding consumption of other cultural goods, the *cuc* variable shows a positive sign such that complementary consumption of other cultural products positively impacts the number of days that individuals attend, although it is not a significant variable. This behaviour is linked to preferences for SFS and the time-intensive nature thereof.

As regards demographic variables, gender (*sex*) is not significant when accounting for frequency of attendance, as we noticed no differences by gender. This can reflect the early socialization process with the SFS as well as the family and social context of the city. By contrast, *age* does prove a significant explanatory variable.<sup>11</sup> It may be considered that the older a person is the lower the attendance will be, younger people attending more days than older people. In relation to the different age categories, people over 50 attend more days than people in the second category (age 30–49 years). It should be remembered that this is a time-intensive cultural good and that the opportunity cost is lower in young people and people near retirement or directly in retired persons.

In general terms, we find no significant influence of socio-economic variables. In particular, the education variable (*edu*) does not prove significant.<sup>12</sup> This finding may be associated with the intrinsic characteristics of this good being more closely linked to immaterial heritage and therefore to popular culture. For their part, income categories are positive, the coefficients increasing as income grows, although they

<sup>11</sup> We have run a Wald test for the overall significance of the three age variables, results showing that age is statistically significant at the level of 0.05 ( $p < 0.01$ ,  $\chi^2(3) = 10.34$ ).

<sup>12</sup> According to a Wald test for the overall significance of the two educational variables, results show that education is not statistically significant ( $p > \chi^2 = 0.99$ ,  $\chi^2(2) = 0.02$ ).

**Table 4** Determinants of attendance intensity at the SFS

Variable	Zero-truncated Poisson regression		Zero-truncated negative binomial regression	
	Coefficient	Robust SE	Coefficient	Robust SE
<i>cons</i>	0.846***	0.144	0.835***	0.146
<i>pref</i>	0.243***	0.07	0.245***	0.07
<i>inslink</i>	0.258***	0.067	0.261***	0.067
<i>achildren (I=Yes)</i>	0.124*	0.067	0.127*	0.068
<i>cuc (I=Yes)</i>	0.082	0.059	0.084	0.06
<i>sex (I=men)</i>	0.021	0.051	0.02	0.052
<i>income2</i>	0.037	0.072	0.038	0.073
<i>income3</i>	0.095	0.115	0.094	0.116
<i>age2</i>	-0.243**	0.084	-0.244**	0.085
<i>age3</i>	-0.305***	0.088	-0.307***	0.089
<i>age4</i>	-0.279***	0.089	-0.280***	0.09
<i>edu1</i>	-0.017	0.08	-0.018	0.081
<i>edu2</i>	-0.001	0.062	-0.001	0.062
<i>nlocal_inco~1</i>	-0.240***	0.089	-0.243***	0.09
<i>nlocal_inco~2</i>	-0.415***	0.086	-0.421***	0.087
<i>nlocal_inco~3</i>	-0.199	0.146	-0.199	0.148
<i>ecodev (I=Yes)</i>	0.266**	0.109	0.272**	0.11
<i>week</i>	0.235***	0.054	0.237***	0.054
<i>N</i>	594		594	
<i>Tests for overdispersion</i>	-0.030*			
	(0.015)			
<i>Likelihood-ratio test of alpha</i>			0.77 Prob>=χ <sup>2</sup> =	0.190
<i>Wald χ<sup>2</sup><sub>17</sub></i>	189.27		194.43	
<i>Pseudo R<sup>2</sup></i>	0.063		0.053	

\*  $p < 0.10$ , \*\* $p < 0.05$ , \*\*\*  $p < 0.01$

do not prove significant. This explains the fact that participation intensity (number of days) does not depend on socio-economic variables but on variables related to accumulation of cultural capital.

As pointed out earlier, the link to income has been related to being local or non-local because, although it is not significant, its impact might be different for non-locals. The results of interaction between the non-local variable and income variable show that non-locals attend fewer days than locals within the same level of income. Specifically, a non-local attendee in the first income category (<€2,000) attends 24 % fewer days than a local attendee. For the second income category (€2,001–€4,000), non-local visitors attend 41 % fewer days. If we compare the income effect amongst non-locals, results show that those attending more days have a higher income (-0.10 more days), and a lower income (-0.24). In fact the behaviour of non-locals that belong to the highest income category is indistinguishable from that of locals.



The *ecodev* variable is, however, significantly and positively related to attendance at SFS, such that attendees have a positive view of the contribution the SFS makes to local pride, the image of the city, and the economic benefits it provides. Finally, Holy Week attendance is 23.5 % higher than April Fair attendance. This result is reflected in the *week* variable.

The results obtained with the proposed model are in line with the nature of the cultural products analysed and reflect the fact that participation intensity in the consumption of a local product such as the SFS goes hand in hand with an environment in which local traditions are maintained and renewed. By participating, individuals are reasserting their cultural identity, whilst at the same time fostering social cohesion and interaction to a certain degree. Attendance intensity at SFS can thus be explained fundamentally by variables associated with preferences shown towards these events and the perception that SFS contribute to economic development (*ecodev*), concurring with the conclusions to emerge from the study by Daneshvary et al. (1993).

## 6 Conclusions

The main goal of this paper is to analyse the Spring *Fiestas* in Seville (Spain) as a cultural good that combines material and immaterial features linked to heritage, and to explore determinants of attendance intensity. The empirical literature in cultural economics exploring this kind of good is to date rather scarce and has focused on economic impact studies highlighting the contribution to employment and as a tourist attraction as a means of justifying the involvement of local councils and other authorities in the funding of such events.

This paper contributes to the literature in various ways. First, from a cultural economics perspective, the SFS are characterized as a new prototype of a complex cultural good which represents the link between the population and the place in which they live, based on material and immaterial cultural heritage. In addition, in conceptual terms, the arts appreciation which individuals experience through participation in the SFS constitutes a time-intensive leisure good ‘produced’ within the framework of its own production function, the arguments for which are consumption of the good itself, time devoted to consumption, and the investment required to develop and ‘refine’ own accumulated tastes in cultural capital.

The second contribution is an empirical analysis of the factors that explain attendance intensity at the SFS. To achieve this, data were collected via a survey conducted amongst 594 attendees at the SFS and a zero-truncated Poisson regression model was estimated, as it provided a better fit. Findings indicate that attendance intensity at SFS is determined by variables linked to knowledge, institutional links, and past experiences with the SFS, represented in the model by preferences, institutional links, and attendance with children, as well as through the perceived benefits linked to the existence of the SFS (*ecodev*). This series of variables shows the link between attendees and the city’s heritage represented through its popular celebrations. Contrary to what tends to emerge in participation intensity studies exploring other cultural goods, traditional socio-economic

variables such as general education or income do not prove significant in our research.

Finally, this article contributes to the empirical literature on participation in cultural goods by providing a fresh empirical approach to popular celebrations, thus far the subject of little attention in the field of cultural economics. The methods adopted may be readily applied to similar cases in other cities and also may be improved through the inclusion of new variables linked to motivation and the individual and social benefits which attendance implies. In this vein, in line with the 2009 UNESCO Framework for Cultural Statistics (UNESCO 2009), renewed interest in participation studies in this area underpins the importance of popular celebrations and immaterial cultural heritage beyond a mere contribution to employment and as a tourist attraction.

**Acknowledgments** We would like to thank Juan Prieto-Rodriguez, Victoria Ateca-Amestoy, Angel Sanz-Lara and Cristina Borra, and two anonymous referees for their helpful comments. This paper also benefited from comments received at the 1st Workshop on Cultural Economics and Management and the 16th Cultural Economics International Conference. All errors are the sole responsibility of the authors.

## Appendix

See Table 5.

**Table 5** Survey: Spring *Fiestas* of Seville Attendance

A. Participation	Identification		Do you live in: 1.__ Seville or the metropolitan area; 2.__ outside Seville and the metropolitan area or abroad?
	Motivation	Locals	Is attending Holy Week or the April Fair the main reason for your stay in Seville? Holy Week; April Fair; Other
		Non-locals	What is the main reason for your visit to Seville? Holy Week; April Fair; Other
	Frequency	All	How many days did you attend the SFS [April Fair or Holy Week] Do you attend the SFS [April Fair or Holy Week] with children?: Y/N Do you visit other places of cultural interest during Holy Week or the April Fair?: Y/N
Institutional links		All	Do you belong to a brotherhood and take part in the processions [e.g. as a <i>Nazarene</i> ]: Y/N Do you own a marquee at the April Fair? Y/N
B. Demographics		All	Sex, Age
C. Socio-economics			Education, income
D. Benefits		All	Do you think the SFS [Holy Week, April Fair] contribute to the economic development of the city of Seville? Y/N

Y/N Yes, no

## References

- Aguiar, M., & Hurst, E. (2006). Measuring trends in leisure: the allocation of time over five decades. Working Papers 06-2, Federal Reserve Bank of Boston.
- Ateca-Amestoy, V. (2008). Determining heterogeneous behavior for theater attendance. *Journal of Cultural Economics*, 32(2), 127–151.
- Ateca-Amestoy, V. (2009). El capital humano como determinante del consumo cultural. *Estudios de Economía Aplicada*, 27(1), 87–110.
- Baumol, W., & Bowen, W. (1966). *Performing arts. The economic dilemma*. Cambridge, MA: Twentieth Century Fund.
- Becker, G. (1965). A theory of the allocation of time. *Economic Journal*, 75(September), 493–517.
- Becker, G., & Murphy, K. (1988). A theory of rational addiction. *Journal of Political Economy*, 96(4), 675–700.
- Blaug, M. (2003). Welfare economics. In R. Towse (Ed.), *A handbook of cultural economics* (pp. 476–481). Cheltenham: Edward Elgar.
- Borgonovi, F. (2004). Performing arts: An economic approach. *Applied Economics*, 36, 1871–1885.
- Brida, J. G., Meleddu, M., & Pulina, M. (2011). Factors influencing the intention to revisit a cultural attraction: The case of study of the Museum of Modern and Contemporary Art in Rovereto. *Journal of Cultural Heritage*,. doi:10.1016/j.culher.2011.08.003.
- Buchanan, J. (1965). An economic theory of clubs. *Económica*, 32, 1–14.
- Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: Methods and applications*. New York: Cambridge University Press.
- Cameron, A., & Trivedi, P. K. (2009). *Microeconometrics using Stata*. Texas: Stata Press Publication.
- Castillo, J. I., & López, L. (2000). *Arte sacro en Sevilla*. Sevilla: Ayuntamiento de Sevilla.
- CES, & Cámara de Comercio de Sevilla. (2008). *El impacto de la celebración de la Semana Santa sobre la ciudad de Sevilla, Sevilla 2008*. Sevilla: Cámara de Comercio.
- Chew, M. S. Y. (1998). Culture, circles and commercials: Publicity, common knowledge and social coordination. *Rationality and Society*, 10, 47–75.
- Collins, A., Fernández-Blanco, V., & Prieto-Rodríguez, J. (2009). Characteristics of buyers and renters of cultural goods: the case of movies. *Applied Economics*, 41, 195–210.
- Crompton, J. L., & McKay, S. L. (1997). Motives of visitors attending festivals events. *Annals of Tourism Research*, 24(2), 425–439.
- Daneshvary, N., Schwer, R., & Rickman, D. (1993). Determinants of demand for professional rodeo attendance. *Journal of Cultural Economics*, 17(2), 77–92.
- Devesa, M. (2006). *El impacto económico de los festivales culturales*. Madrid: Datautor.
- Devesa, M., Herrero, L. C., & Sanz, J. A. (2009). Análisis económico de la demanda de un festival cultural. *Estudios de Economía Aplicada*, 27(1), 137–158.
- Fernández de Paz, E. (2006). *Artes y artesanías de la Semana Santa Andaluza*. Ediciones Tartesos: La Semana Santa como patrimonio cultural de Andalucía. Sevilla.
- Fernández-Blanco, V., & Prieto-Rodríguez, J. (2009). Análisis de los hábitos de lectura como una decisión económica. *Estudios de Economía Aplicada*, 27(1), 87–110.
- González-Neira, A., & Ramírez-Picón, J. (2008). *Impacto económico del XI festival de flamenco de Jerez*. Cádiz: Fundación Provincial de Cultura Diputación de Cádiz.
- Gray, C. (2003). Participation. In R. Towse (Ed.), *A handbook of cultural economics* (pp. 356–365). Cheltenham: Edward Elgar.
- Greene, W. H. (2007). *Econometric analysis*. New Jersey: Prentice-Hall International.
- Gronau, R. (1977). Leisure, home production and work—the theory of the allocation of time revisited. *Journal of Political Economy*, 85(6), 1099–1123.
- Gursoy, D., Kim, K., & Uysal, M. (2004). Perceived impacts and special events by organizers: an extension and validation. *Tourism Management*, 25, 171–181.
- Herrero, L. C., & Devesa, M. (2007). El fenómeno de los festivales culturales en España. *Cuadernos de Economía de la Cultura*, 7(8), 7–26.
- Herrero, L. C., Sanz, J. A., Bedate, A., & Del Barrio, M. J. (2011a). Who pays more for a cultural festival, tourists or locals? A certainty analysis of a contingent valuation application. *International Journal of Tourism Research*,. doi:10.1002/jtr.1860.
- Herrero, L. C., Sanz, J. A., Bedate, A., Devesa, M., & Del Barrio, M. J. (2004). *Turismo cultural e impacto económico de Salamanca 2002*. Thomson Civitas: Ciudad Europea de la Cultura. Madrid.

- Herrero, L. C., Sanz, J. A., & Devesa, M. (2011b). Measuring the economic value and social viability of a cultural festival as a tourism prototype. *Tourism Economics*, 17(3), 639–653.
- Lazzeretti, L. (2008). The cultural districtualization model. In P. Cooke & L. Lazzeretti (Eds.), *Creative cities, cultural clusters and local development* (pp. 93–120). Cheltenham: Edward Elgar.
- Lazzeretti, L. (2011). Culture as a source for growth and change: some evidences from cultural clusters in Andalusia. In B. Asheim, R. Boschma, P. Cooke, R. Martín, D. Schwartz, & F. Todtling (Eds.), *Handbook of regional innovation and growth* (pp. 350–362). Cheltenham: Edward Elgar.
- Levy, P., & Lameshow, S. (1991). *Sampling of populations: Methods and applications*. New York: Wiley Interscience.
- Lévy-Garboua, L., & Montmarquette, C. (1996). A microeconomic study of theatre demand. *Journal of Cultural Economics*, 20(1), 25–50.
- Lévy-Garboua, L., & Montmarquette, C. (2003). Demand. In R. Towse (Ed.), *A handbook of cultural economics* (pp. 201–213). Cheltenham: Edward Elgar.
- McCain, R. (1979). Reflection on cultivation of taste. *Journal of Cultural Economics*, 3(1), 30–52.
- McCarthy, K., Ondaatje, E., & Zakaras, L. (2001). *Guide to the literature on participation in the Arts. DRU-2308-WRDF*. Santa Monica: Rand Corporation.
- Michael, R., & Becker, G. (1973). On the new theory of consumer behavior. *Swedish Journal of Economics*, 75, 378–396.
- Montoro-Pons, J., & Cuadrado-García, M. (2011). Live and prerecorded popular music consumption. *Journal of Cultural Economics*, 35(1), 19–48.
- Moreno, I. (1999). *Las hermandades andaluzas: una aproximación desde la Antropología*. Sevilla: Universidad de Sevilla.
- Moreno, I. (2001). *La Semana Santa de Sevilla. Conformación, mixtificación y significaciones*. Sevilla: Biblioteca de temas sevillanos.
- NEA (2010). *Life from your neighborhood. A national study of outdoor festivals. Research report No. 51*, Washington: National Endowment for the Arts (NEA).
- Nelson, P. (1970). Information and consumer behavior. *The Journal of Political Economy*, 78(2), 311–329.
- Nicolau-González, J. L., & Mas-Ruiz, F. J. (2006). Elección de la duración del viaje vacacional: una aproximación con modelos de recuento. *Revista Europea de Dirección de Economía y Empresa*, 15(2), 99–116.
- O'Hagan, J. (1996). Access to and participation in the arts: The case of those with low income/educational attainment. *Journal of Cultural Economics*, 20(4), 260–282.
- Palma, L., Aguado, L. F., García, A., Martín, J. L., Palma, M. L., Ridaou, M. L., et al. (2010). *Perfil de los asistentes e impacto de las Fiestas de Primavera de Sevilla en 2009*. Ayuntamiento de Sevilla: Informe de Investigación.
- Perles-Ribes, J. F. (2006). Análisis del impacto económico de eventos: una aplicación a las fiestas populares de proyección turística. *Cuadernos de Turismo*, 17, 147–166.
- Prieto-Rodríguez, J., & Fernández-Blanco, V. (2000). Are popular and classical music listeners the same people? *Journal of Cultural Economics*, 24(2), 147–164.
- Prieto-Rodríguez, J., & Fernández-Blanco, V. (2009). Análisis de los hábitos de lectura como una decisión económica. *Estudios de Economía Aplicada*, 27(1), 113–138.
- Rolfe, H. (1992). *Arts festivals in the U.K.*. London: Policy Studies Institute.
- Seaman, B. (2003). The economic impact of the arts. In R. Towse (Ed.), *A handbook of cultural economics* (pp. 224–231). Cheltenham: Edward Elgar.
- Seaman, B. (2005). *Attendance and public participation in the performing arts. A review of the empirical literature*. Non Profit Studies Program Working Paper05-03. Andrew Young School of Policy Studies, Georgia State University.
- Snowball, J. D. (2005). Arts for masses? Justification for the public support of the arts in developing countries—two arts festivals in South Africa. *Journal of Cultural Economics*, 29(2), 107–125.
- Snowball, J. D. (2008). *Measuring the value of culture. Methods and examples in cultural economics*. Leipzig: Springer.
- Snowball, J. D., & Willis, K. G. (2006). Building cultural capital: transforming the South Africa National Arts Festival. *South Africa Journal of Economics*, 74(1), 20–33.
- Stigler, G., & Becker, G. (1977). De gustibus non est disputandum. *American Economic Review*, 67(2), 76–90.
- Swanson, S., Davis, J., & Zhao, Y. (2008). Art for arts' sake? An examination of motives for arts performance attendance. *Nonprofit and Voluntary Sector Quarterly*, 37, 300–323.

- Throsby, D. (1999). Cultural capital. *Journal of Cultural Economics*, 23(1), 3–12.
- Throsby, D. (2006). Introduction and overview. In V. Ginsburgh & D. Throsby (Eds.), *Handbook of the economics of art and culture* (pp. 3–22). Amsterdam: North Holland.
- UNESCO (2009). *2009 UNESCO framework for cultural statistics*. Montreal (Canada): UNESCO institute for statistics. <http://unesdoc.unesco.org/images/0018/001840/184082e.pdf>. Accessed 30 November 2011.
- Withers, G. (1980). Unbalanced growth and the demand for performing arts: An econometric analysis. *Southern Economic Journal*, 46(3), 735–742.
- Zieba, M. (2009). Full-income and price elasticities of demand for German public theatre. *Journal of Cultural Economics*, 33(2), 85–108.