

# Who Pays More for a Cultural Festival, Tourists or Locals? A Certainty Analysis of a Contingent Valuation Application

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## ABSTRACT

**Cultural festivals are one of the most common representations of diversification strategies in tourist demand in cities boasting abundant historical heritage. The goal of this work is to estimate the economic value allocated by tourists and local residents to a classical music festival in the emblematic city of Santiago de Compostela (Spain). The contingent valuation method is used to ascertain whether there are any significant differences between the value declared and to study the sensitivity of the findings in a range of socio-economic variables. Finally, the problems of hypothetical bias are explored, as are the possible implications for management of pricing policies. Copyright © 2011 John Wiley & Sons, Ltd.**

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## INTRODUCTION

Cities housing major historical-artistic heritage are seeking to enhance their cultural image by organizing numerous complementary activities so as to broaden the scope of their appeal to tourists, thereby avoiding

over-concentration on heritage tourism, which has less economic impact and may entail significant costs in over-crowding (Riganti and Nijkamp, 2008). One of the most common complementary activities is cultural festivals, one of today's most dynamic and interesting phenomena in the cultural and tourist arena.

Generally speaking, a cultural festival may be defined as the organization of a specific event within the cultural domain, and which denotes a significant contribution in terms of originality or innovation in its field, and entails a certain level of organization, coupled with a minimum duration, and certain stability as well as frequency over time in the organization thereof (Frey, 1994; Getz, 2008). Festivals share a common trait, namely, intense production and a cultural experience, resulting from a condensed programme, which is planned with a specific purpose in mind (McKercher *et al.*, 2006). The festival's goals may include the presentation of new and innovative work, the creation of exchange forums among professionals and, of course, public entertainment, as well as an enhanced cultural image of the festival venue (Rolfe, 1992). Festivals are therefore a complex cultural phenomenon and not merely an accumulation of cultural manifestations exhibited therein but rather a cultural good in themselves, a cultural manifestation in their own right, and a cultural process in which culture is consumed, reproduced and created.

The value of a cultural festival may be approached from a variety of standpoints (Devesa, 2006) since for the artists directly involved, it constitutes the production of a cultural good in itself, whereas for those attending, it may provide a range of use values (aesthetic enjoyment, entertainment, cognitive

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value, etc.), as well as existence value related to its symbolic repercussion (Throsby, 2003). Finally, for policy-makers, organizing a cultural festival is framed within the provision of a public good, which may have an economic impact as well as certain intangible effects in the medium term on the area in which it is held (Herrero *et al.*, 2006).

From this standpoint, festivals, more than any other cultural phenomenon, come closest to fulfilling the function, which culture provides in contemporary society as they are able to accomplish the threefold goal of attracting intense expenditure, forging a new urban image and acting as a driving force behind cultural creativity and social cohesion. This is why we are currently witnessing a spectacular growth in the number of cultural shows and performances organized in both an urban as well as rural setting to the extent that nearly all major cities now boast at least one festival devoted to some kind of artistic expression. This has led to a *festivalization* of cities (Prentice and Andersen, 2003; Quinn, 2006), perceived as a process involving the creation of cultural experiences aimed both at potential tourists, drawn by the culture, as well as at local residents, for whom these festivals offer an alternative urban leisure facility and an opportunity to identify with the city (Richards, 2007). In this sense, organizing cultural festivals also appeals strongly to the political powers as such festivals enhance citizens' sense of belonging in addition to endorsing the action of politicians.

To determine what lies behind this substantial increase in cultural festivals in recent times, we may argue reasons of demand and supply. With regard to demand, the central argument points to a higher standard of living in terms of income and education which, given the positive correlation between these variables (Seaman, 2006), has stimulated cultural consumption. Yet, at the same time, there has been a shift in tourist practices, creating what may be termed more omnivorous behaviour, which leads individuals to merge leisure time and holidays with cultural consumption (Barbieri and Mahoney, 2010). Many cultural festivals are thus held in summer or during holiday periods, thereby becoming important tourist attractions and satisfying individuals' desire for both leisure and cultural consumption (Yeoman *et al.*, 2004).

From the perspective of supply, two main arguments seem apparent. First, cultural festivals are usually less costly to stage than other regular season activities and also favour a concentration in demand,<sup>1</sup> making them more economically viable and avoiding or postponing the problem of *costs disease*, so characteristic of the performing and musical arts.<sup>2</sup> Second, and perhaps more important, the growth of such festivals is linked to the use of culture as a tool for local and regional economic development strategies, as well as urban regeneration policies (Lim, 1993). From this standpoint, cultural festivals are perceived as a means of attracting revenue and expenditure linked to cultural tourism, and as a factor contributing to the transformation of the local productive fabric and the improvement of the city's image (Richards and Wilson, 2004). It is interesting to highlight in this respect how many institutions charged with the restoration and maintenance of historical heritage have geared their restoration work towards activities related to promoting culture and sponsoring various cultural events.<sup>3</sup> This is due to the gradual decline in the amount of restoration work still to be carried out after 20 years of economic growth. Yet, it also provides a means of legitimizing their activities to society.

From the analytical standpoint, festivals are a multifaceted cultural phenomenon reflecting an active cultural process and are endowed with their own identity and institutional structure (Frey, 1994). Moreover, festivals offer a threefold analytical dimension since they are, at the same time, a live show, to some

<sup>1</sup>This temporal and spatial concentration of cultural festivals allows greater specialization and, thus, a more innovative and ground-breaking programme than is otherwise available during the regular season. This accounts for such renowned festivals as Salzburg or Edinburgh as well as other more recent ones.

<sup>2</sup>The problem derives from the delay between the inevitable increase in costs and productivity gains inherent in activities of this nature, which may be deemed constant, since the work of the artists constitutes a goal in itself. Costs can have a 'choking' effect, often leading to the need to resort to public funding (see Baumol and Bowen, 1966).

<sup>3</sup>This has at least proved to be the case in many developed countries and particularly in Spain, which has benefited from political decentralization and where the responsibility for cultural affairs has mainly fallen to local and regional authorities. See Herrero and Devesa (2007).

extent, unique and unrepeatable, which tends to be staged at venues of historical interest,<sup>4</sup> at times yielding reproducible products such as CDs, books or videos, linked to the cultural industry. All of these factors have merged to create growing interest among researchers, yielding abundant scientific literature in the field of the economics of festivals (Devesa, 2006) and festival tourism as a whole (Picard and Robinson, 2006) as well as the tourism of events (Getz, 2008). Work in this area has, however, tended to focus on studies dealing with economic impact (Brännäs and Nordström, 2006; Herrero *et al.*, 2006; Rollins and Delawerre, 2007), motivation analysis and tourist segmentation (Crompton and McKay, 1997; Lee *et al.*, 2004), demand studies (Devesa *et al.*, 2009) as well as the policy and cultural management implications of festivals (Clark and Hoas, 2007; Andersson and Getz, 2009). Little research has thus far explored the economic valuation of a cultural festival from the standpoint of the attendees, seen as an estimation of the intensity of the individual preferences of those consuming it, although the festival is initially conceived as a free public good.

This provides the focus of our research, applied to the case of a classical musical festival, the *Festival de Músicas Contemplativas – the Contemplative Music Festival (CMF)*, held in the city of Santiago de Compostela, Spain. The festival is staged in an emblematic city renowned not only for the importance of its historical heritage but also for its spiritual relevance as the destination of the most prominent religious movement in the Middle Ages and currently a leading cultural itinerary, pilgrimage on the *Camino de Santiago*, declared Europe's First Cultural Itinerary by the Council of Europe in 1987 and a World Heritage Site by UNESCO in 2003. The CMF aims to organize a season of well-known music to boost the city's cultural image, thereby contributing to diversifying the available culture and increasing tourist flow to the city.

<sup>4</sup>The appeal of many of the summer festivals lies precisely in the fact that they are staged buildings or historical ensembles of major artistic interest. Examples include the Granada Music Festival, held in the grounds of the *Alhambra*, or the Avignon Festival, held at the *Palais des Papes* and in the historical part of the town.

As a result, the research principally seeks to provide an economic valuation of this festival by estimating attendees' willingness to pay (WTP), by using the contingent valuation method, one of the most appropriate tools for valuing non-market public goods, as is the case in hand. We also aim to determine whether there are any appreciable differences between the valuations declared by tourists and local residents (Fairweather and Swaffield, 2002) and to assess the sensitivity of these findings to the subjects' various socio-economic and behavioural characteristics. The findings to emerge from the research may prove useful in gaining an insight into tourist demand and may provide guidelines for management issues such as pricing policy, capturing sponsorship or project evaluation. Finally, as an innovation, we explore hypothetical bias problems in contingent valuation exercises and correction thereof through a certainty analysis of stated preferences.

Based on these premises, the work is structured in five parts. After the introduction, sections 2 and 3 respectively outline the methodological approach used through the contingent valuation method and its specific application to the case in hand. Section 4 offers the main findings to emerge from the economic valuation of the festival among tourists and local residents, in addition to a sensitivity analysis of subjects' various socio-economic and behavioural variables. A discussion of the main findings also is provided, together with a certainty analysis of tourists' and locals' stated preferences. Finally, section 5 deals with the most relevant conclusions to emerge from the research.

## METHODOLOGY: THE CONTINGENT VALUATION METHOD

Non-market goods are basically those not traded in an organized market, where the purchase and sale of articles reflect consumer preferences and where a competitive price is fixed. The lack of any such market, either because it does not exist or because the good is provided free of charge as is the case for numerous public goods, makes valuation difficult. However, an understanding of the economic valuation of such a good may

provide an insight into real individual consumer preferences or offer certain guidelines to aid social decision making and act as a reference when having to choose among different alternatives when resources are limited.

As a result, since no market prices exist to determine the value of the goods in hand, estimating such a value is obtained from a calculation of the WTP, which represents the amount of money a consumer would be prepared to pay to enhance the welfare of the good or prevent the loss thereof. To obtain this theoretical value, based on the utility function, which reflects each person's degree of welfare and their preferences and bearing in mind individual budgetary restrictions, an individual's indirect utility function is obtained ( $V$ ), which depends on the price of the private goods they consume ( $p$ ), their level of income ( $y$ ) and the quantity or quality of the cultural good studied ( $z$ ):

$$V = V(p, y, z)$$

Let us assume that an individual is offered the possibility of changing a reference level  $z^0$ , to  $z^1$ , with  $z^1 > z^0$  and that the individual sees it as an improvement, in other words,  $V(p, y, z^1) \geq V(p, y, z^0)$ . Using the compensating variation of welfare measure (Hanemann and Kanninen, 1999), the maximum WTP to change from  $z^0$  to  $z^1$  would be an amount  $D$  reflected by

$$V(p, y - D, z^1) = V(p, y, z^0)$$

The main methods used thus far to obtain WTP are as follows: hedonic prices, travel costs, conjoint analysis and contingent valuation. The latter is one of the most frequently applied in public good valuation due to its flexibility and easy adaptation to various case studies (Mitchell and Carson, 1989).

Contingent valuation specifically consists of creating a hypothetical market and persuading individuals to take part therein, thereby obtaining WTP in monetary terms through a survey (Carson, 1999). In this questionnaire, the market created must provide a realistic and credible scenario and provide specific information concerning the case study and situation to be valued, enabling respondents

to gain a clear understanding so that their responses are as exact as possible. The format of the valuation question may vary greatly. In the present research, we opted to use the double-bounded dichotomous choice format,<sup>5</sup> subsequently posing an open question requesting individuals' maximum WTP. Including an open question is designed to identify individuals who display a null valuation and ask them why they are not willing to pay, thereby ascertaining whether they are really zeros or protest responses, in other words, whether they are willing to participate in the proposed market (Sanz and Herrero, 2006).

Generally speaking, the contingent valuation method for some time has been the target of much criticism, particularly with regard to problems of insensitivity when dealing with type and size of goods, temporal instability of valuations or even biases within the valuation method itself (Kahneman and Knetsch, 1992; Diamond and Hausman, 1994). By contrast, other authors have constructively defended the method (Hanemann, 1985; Carson, 1999), seeking to overcome its shortcomings and positing improvements in the procedures so as to obtain more robust and comparable results.

Contrasting opinions also are to be found in the area of cultural goods valuation. There are those who, for the moment, view these applications as a lesser evil for expressing individual preferences in monetary terms, whereas others are concerned because they feel that these approaches can never hope to reflect the cultural value of art works and other such goods since the concept is multi-dimensional and cannot be expressed in monetary terms (Throsby, 2003). Bearing in mind this criticism, we are forced to recognize the enormous predicament facing current contingent valuation exercises in the field of public goods valuation and particularly cultural heritage goods taken, moreover, as a tourism prototype. The efficiency of the approach and the usefulness of the outcomes depend, to a large extent, on

<sup>5</sup>This format uses two related questions, where the amount offered in the second question depends on the response to the first question. One example would be as follows: Would you be willing to pay  $x$  euros for ...? If the answer is yes, would you be willing to pay  $2x$  euros for ...? If the answer is no, would you be willing to pay  $x/2$  euros for ...?

procedural rigour. Nevertheless, they are able to offer consistent classifications of individual and social preferences if, e.g. funding is based on voluntary contributions for the provision of a public good or on the concept of bids similar to the idea of market prices. From this standpoint, the contingent valuation method may prove an extremely useful tool for public administration entrusted with the care of cultural heritage since the findings to emerge may provide a coherent guideline to establish criteria for funding or for appraising regulatory action.

The contingent valuation method has thus been used to estimate benefit in a wide variety of areas such as enhanced air and water quality, recreational and tourist use of natural spaces, environmental protection and endangered species, improvements in education, drinking water supplies, and so on. Since the 1990s, this method has been applied on an increasingly wide scale, its use having become particularly important to value cultural and tourist goods and services, given the enormous similarities and parallels between environmental economics, a field in which this approach has traditionally been used, and valuation of cultural resources and tourist attractions. The volume of publications to have emerged from the use of the contingent valuation method has given rise to the creation of major inventories (Navrud and Ready, 2002; Noonan, 2003). The first applications of the contingent valuation method in the field of cultural goods date back to the early 1980s (Throsby and Withers, 1983). The method was first applied on a wide scale in the 1990s, particularly in the area of historical buildings and ensembles (Cuccia and Signorello, 2002; Carson *et al.*, 2002; Báez *et al.*, 2009), archaeological sites (Maddison and Mourato, 2002; Boxall *et al.*, 2002) and above all, museums (Bravi *et al.* 2002; Sanz *et al.*, 2003; Bedate *et al.*, 2009). In the field of tourism economics, numerous exercises have been conducted valuing natural resources used for tourism purposes (Lee and Han, 2002; Gios *et al.*, 2006) and estimating the impact of various tourist activities (Lindberg and Johnson, 1997; Lee *et al.*, 2009) or the demand for tourism (Cuccia and Cellini, 2007; Riddington *et al.*, 2010). As can be seen, the method has been applied to numerous cultural fields related to the area of tangible historical

heritage goods, yet to few temporary cultural goods such as a music festival, the subject of our study.<sup>6</sup>

Although aware of the limitations of the contingent valuation method, research in this matter has proved extremely productive and has given rise to many methodological works and empirical applications. Progress in these studies has mainly addressed assaying various estimation approaches or enhancements in tools for gathering information but, above, has sought means to limit or avert possible biases inherent in the method. One such problem, which emerges on numerous occasions, is so-called *hypothetical bias*, defined as possible error resulting from the failure to present subjects with a real situation, therefore tending to overestimate valuations (Schulze *et al.*, 1981). There are many reasons for the discrepancy between stated value and real value (Berrens *et al.*, 2002; Murphy *et al.*, 2005). This may on occasions be due to *free-rider* behaviour or the personal satisfaction gained from contributing to the object being studied. However, at other times, respondents fail to enter the market, lack sufficient experience, respond before making their choice, are uncertain about their answers, or simply do want to take the time to respond. In this sense, dichotomous formats are more vulnerable than other question models since the tendency to answer in the affirmative is greater, eventually leading to hypothetical bias and subsequent over-evaluation of estimations.

In recent years, many researchers have sought to develop calibration functions and correction methods aimed at restricting or doing away with discrepancies between real and contingent values. As a result, over the last 10 years, abundant scientific literature on the topic has emerged,<sup>7</sup> positing a range of solutions, without any unanimously accepted conclusion having been reached to date. In our study, we develop an *ex post* solution, in

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<sup>6</sup>Similar studies include Morrison and West (1986) on the valuation of subsidies for performing arts and Thompson *et al.* (2002) on household expenditure in the arts in general. Snowball (2005) and Snowball and Willis (2006) study specifically valuation of cultural festivals in South Africa.

<sup>7</sup>Good reviews of this topic may be found in Berrens *et al.* (2002); Samnaliev *et al.* (2006) and in the meta-analyses of hypothetical bias conducted by List and Gallet (2001) and Murphy *et al.* (2005).

other words, once the contingent valuation exercise has been completed, consisting of posing a follow-up question aimed at reflecting the degree of certainty with which subjects state their valuation. This approach has been used by Champ and Bishop (2001), Poe *et al.* (2002) and particularly by Bedate *et al.* (2009) for the case of cultural goods. Certainty scales usually range from 1 to 10, although the hurdle, which has yet to be overcome, is ascertaining the optimum cut-off point in the grading since our aim is to determine which respondents express the greatest certainty in their answers. Processing hypothetical bias then involves recoding or removing statements, which fail to provide sufficient assurance of credibility applying the certainty scale and following the criteria of the researcher. The first option allows us to maintain all subjects willing to accept the valuation exercise, while sequentially penalizing low certainty responses. By contrast, the second option, which may entail a loss in sample size, offers greater reliability by successively eliminating respondents who did not give honest answers or were not sure of their response. This is the option we decided to take in the empirical exercise in our study.

## APPLICATION OF THE METHODOLOGY TO A CASE STUDY

### Case study

The case study in our research deals with the Santiago de Compostela CMF, to which the contingent valuation method has been applied to calculate an economic valuation thereof by estimating the WTP declared by the concert attendees. The festival is sponsored by the Santiago de Compostela Consortium, a body involving various areas of public administration (municipal, regional and national) devoted to the conservation of historical heritage but which is engaged in broadening the scope of its activities to include the promotion of culture as well as various performances. The festival is relatively young as it is currently only in its sixth edition, despite which, it is already gaining a place among the most reputed classic music festivals in Spain because of its quality. It is always held during Holy Week. The 2007 edition, our case study in this work, comprised eight

concerts, held in the different churches and venues shown in Table 1. It is therefore a cultural good with a tourist objective, which is basically a live music show but which also merges historical heritage due to the artistic importance of the sites at which it takes place.<sup>8</sup>

From the standpoint of economic analysis, the CMF may well be considered a *public good* as it is provided free of charge. Despite the festival's huge popularity, most of the concerts do not suffer from problems of overcrowding. It also is an *experience good*, as it cannot be valued *a priori* but only through direct consumption thereof, also offering certain intangible characteristics such as the aesthetic pleasure, the symbolic value or the usefulness of enjoyment. In these cases, information signals (advertising, reputation, criticism, etc.) play a central role in determining consumption. Likewise, and as with other cultural goods, individual variables of human capital and accumulated experience of cultural consumption prove crucial (Ateca, 2009 and Devesa *et al.*, 2009). Finally, the CMF as a consumer product, which forms part of the cultural attractions in the city of Santiago, also might be perceived as a capital asset for the city itself, perceived as an intangible investment in the city's cultural image and also because of its multiplying effect in terms of economic impact.

However, the goal of our research is specifically an economic valuation of the CMF, not as a calculation of the cost of organizing and producing the festival but rather as an estimation of the intensity of individual preferences when consuming it, although it is offered free by the sponsoring institution. As pointed out in the previous section, the contingent valuation method thus proves one of the most appropriate techniques for estimating the value of public goods of this kind,<sup>9</sup> as it involves the creation of a circumstantial market in which consumers are encouraged to make valuation bids in line with their preferences and budget restrictions. The ultimate goal is to estimate

<sup>8</sup>Vid. [www.consortio-santiago.org](http://www.consortio-santiago.org).

<sup>9</sup>We ruled out the possibility of using the travel cost method as it requires considering trips made for a single purpose, in other words, linked only to the CMF. This would prove highly restricting, particularly in cities like Santiago de Compostela, which have such a strong tourist appeal.

Table 1. Santiago de Compostela Contemplative Music Festival. 2007 Edition. Concert Programme

Concert number	Performers	Venue
1	Gabrieli Consort and Players	Church of San Martin Pinarío
2	Ikhwan Al-Hadra	Church of the Universidad
3	Real Filharmonia de Galicia Quartet	Church of the Orfas
4	La Grande Chapelle	Church of the Ánimas
5	Organum Ensemble	Church of San Fiz De Solovio
6	Ex Cathedra Consort and Continuo	Church of the Mercedarias
7	Choir and Studio for Spiritual Music Melódi	Church of the Third Order of San Francisco
8	Hesperion XXI	Church of San Agustín

individual demand curve and the value of consumer surplus, in this case, the intrinsic valuation of the good being analysed (Mitchell and Carson, 1989). This is where distinguishing between WTP declared by tourists and that of local residents to typify differences proves to be of interest.

In our research, we specifically posed the hypothetical situation of commercializing the festival by establishing admission tickets for the concerts in addition to a season ticket valid for all the concerts. The vehicle of payment to estimate the value of the whole festival would be the amounts, which spectators stated they were willing to pay to purchase the season ticket. Initial bids were offered to interviewees through a closed question and were different in each case, having been allocated randomly so as to avoid any possibility of anchoring bias in the estimations. The amounts proposed in the first question were based on a previous comparison of season ticket costs at the main music festivals in Spain, particular consideration being given to festivals of a religious nature. The initial bids were 15, 30, 45, 60, 80, 120 and 250 euros. Depending on the first response given by the interviewee, the second closed question is subsequently posed, amounts immediately below being offered if a negative answer is initially given or immediately above if the answer is affirmative. The aim of this bidding game is to find the best fit for the individual's valuation, although all those interviewed are posed a final open question in which they are asked to express their maximum WTP. To deal with the problem of hypothetical bias referred to in the methodology concerning an understanding of individuals' true WTP, a certainty question was posed

wherein respondents were asked to confirm their WTP on a scale of a 1 to 10.<sup>10</sup>

### Sampling procedures and data collection

The method used was for respondents themselves to fill in the surveys, which had previously been handed out at each of the eight concerts in the festival at the beginning of the event by four research grant holders. The surveys were collected at the end of each concert by the same collaborators. The scope of the survey covered the whole of the festival, as the number of surveys handed out matched the capacity at each of the venues where the festival was held. A total of 2650 questionnaires were thus handed out, corresponding to all of those attending the festival. To prevent multiple responses from those present at several performances during the festival, an initial question was included, asking whether they had attended a previous concert. If this proved to be the case, the person was not asked to fill in the survey or was removed from the sample. This meant that each of the responses was different and that, as a result, each reflects a valuation of the festival as a whole.

Table 2 shows the main characterization variables used in this study, which merge individuals' socio-economic traits, behaviour with regard to cultural consumption and reasons for attending the CMF. Survey responses were filtered to remove valuations

<sup>10</sup>The actual question posed was as follows: 'The monetary valuations that you have given above are part of a hypothetical situation. If the payment of a season ticket or entry ticket were to be undertaken effectively, please tell us, on a scale from 1 to 10, with what degree of certainty would you confirm your monetary participation?'

Table 2. Variables used in the empirical application

Variable	Values
Sex	0 = Male 1 = Female
Age	Numerical variable
Study	0 = Non-university 1 = University
Income	1 = No income 2 = Below 600 €/month 3 = 601 €–1200 €/month 4 = 1201 €–1800 €/month 5 = 1801 €–2400 €/month 6 = 2401 €–3000 €/month 7 = over 3000 €/month
Number of CMF concerts	Numerical variable
Fidelity CMF (attended 2006)	0 = No 1 = Yes
Love of classical music	From 1 (little interest) to 5 (great interest)
Number of classical music concerts (*)	Numerical variable
Number of classical music CD/DVDs (*)	Numerical variable
Number of music season tickets (*)	Numerical variable
Travel with the specific intention	0 = No 1 = Yes
Travelling for tourism	0 = No 1 = Yes

\*Variables measured in annual frequency.

from minors, outliers and so-called protest zeros. The latter are interviewees who respond with a null WTP due to a rejection of the valuation exercise and are consequently excluded from the contingent market. In this case, the filter consisted of a question addressing the reason for the null response.<sup>11</sup> We only retained as part of the study those interviewees who expressed a zero WTP, saying they would like to contribute at another point in time, or who felt they were already involved in funding a cultural good through the taxes they paid. We were thus left with a total of 825 valid surveys, the operative sample for the contingent valuation exercise eventually coming down to 738. These figures, taken in relation to the total capacity of the festival, 2650, obtained by adding up the capacity of the various venues, provide a sampling error of  $\pm 2.83\%$  with a 95% confidence level.

<sup>11</sup>Specific responses motivating exclusion from the market were the following: (i) *those who are interested in such matters should pay*; (ii) *I do not believe in that type of payment mechanism*; and (iii) *I am not interested in buying a season ticket*.

## Respondent profile

Based on the validity of the survey, we may state that of all those who attended the CMF, 57.8% are residents of the city of itself, whereas 42.2% are from elsewhere. Foreign tourists account for 8.8% of the total, with just over half of national tourists coming from the same region, Galicia. We may thus interpret the CMF as a cultural good basically consumed by citizens of Santiago de Compostela, although the element of tourist demand is fairly considerable, thereby ensuring that the festival fulfils its mission of bolstering the city's cultural image and broadening its range of tourist attractions. Another issue altogether is determining to what extent the CMF is able to impact part of the tourist flow, as only 23.8% of the tourists surveyed cited the festival as the main reason for their visit to Santiago, the rest seeing it as a complementary attraction to their overall trip. Yet, despite this, the figures for the number of tourists visiting for just one reason are by no means to be overlooked.

Table 3 provides a descriptive analysis of the variables used in the empirical application. This leads us to conclude that the socio-economic characterization of the two groups, tourists and local residents, is very similar. They are middle-aged adults of both sexes (mean age 41.5) and well educated (80% holding a university degree, 23% holding a master or PhD), with a medium level of income, which proved slightly higher among the tourists. A keen interest in classical music was a common trait and was reflected in related systematic cultural consumption, such as through the purchase of CD/DVDs, attending classical music concerts and the use of season tickets or for seasons of music. As expected, local attendees evidenced a higher degree of fidelity to the CMF from previous years and attended more of the festival concerts. In sum, save for these differences, the two samples are very similar and respond to a 'cultural lifestyle', highly characteristic of consumer and cultural tourism patterns (Seaman, 2006).

## RESULTS

### Willingness to pay: general results

To calculate consumer WTP with regard to the CMF, we applied non-parametric estimation methods since they avoid the rigidity of assuming specific functional forms when accounting for consumer behaviour (Sanz *et al.*, 2003; Bedate *et al.*, 2009). Specifically, we applied the An and Ayala non-parametric algorithm (1996), which involves using an iterative process until a convergent and optimal solution for the survival function is found.<sup>12</sup> This application requires a prior calculation of the number of individuals located in each valuation interval, dependent on the various initial second bids. This figure is represented by  $n_{j,i}$  and can be seen in Table 4, specified for the group representing the tourists and the other comprising attendees from Santiago de Compostela. The results obtained after applying the algorithm are shown in Table 5. The first column is the value of the lower extreme of the intervals in which respondents' WTP is situated. Subsequently, for each of the

two groups attending the festival (tourists and locals), we specify, first, the value of the empirical survival function resulting from the application of the algorithm; second, the value of the probability of each of the interval extremes; and finally, a column reflecting an approximation of the WTP.

From the microeconomic standpoint, the survival function may be likened to Hicks' compensated demand curve, in other words the link between changes in consumption and changes in prices for a constant utility. However, provided the income effect is negligible,<sup>13</sup> we may assume that the compensated demand curve and the normal or Marshall demand curve are practically the same (Willig, 1976), such that calculating consumer surplus as an area falling between the axes of said curve faithfully reflects the value given by festival spectators. The demand curves obtained for each of the two groups of spectators are shown in Figure 1, the consumer surplus value reaching €49.03 in the case of tourists and €43.65 for local residents of Santiago (see also Table 5). These data reflect the mean WTP of those attending the festival, considering a complete market, in other words, including those who express a zero WTP even when they are consumers, either because they feel that they already pay through taxes or because they opt to consume simply because it is free. This is therefore a cautious estimate yet still proves a relevant and appreciable figure if compared with the market price of other cultural goods of a similar nature. However, what does appear to be clear is that there is an appreciable gap of over five-euro difference between the declared valuations for the CMF in favour of the tourists compared with the value declared by the locals of Santiago.

### Demand segmentation analysis

In an attempt to find a reason to account for this, we conduct a segmentation analysis of these valuations in relation to a set of characterization variables. It can be seen from Table 6 that in all the criteria for typifying demand, except for

<sup>12</sup>Estimations are carried out using Matlab. The program may be found in Sanz (2004).

<sup>13</sup>As may be assumed in the case study, given the small part which the price of the festival ticket represents in terms of the total amount spent on culture by tourists or local residents.

Table 3. Descriptive analysis of the characterization variables

Variable	Tourists		Locals	
	Mean	Standard deviation	Mean	Standard deviation
Sex	0.5748	0.4952	0.5661	0.4962
Age	41.5038	12.6375	41.5625	12.3179
Study	0.7813	0.4141	0.8248	0.3806
Income	4.0576	1.6357	3.8144	1.5808
Number of CMF concerts	2.0435	1.4261	2.9491	1.6405
Fidelity CMF (attended 2006)	0.1024	0.3037	0.3240	0.4686
Love of classical music	3.9132	1.0238	4.0259	0.9914
Number of classical music concerts	7.3193	10.8803	11.0891	14.5178
Number of classical music CD/DVDs	7.3653	15.2853	8.5876	15.0259
Number of music season tickets	1.5202	13.4797	0.3378	0.9099
Travel with the specific intention	0.2378	0.4265		
Travelling for tourism	0.5175	0.5006		

Table 4. Summary of data on spectators (tourists and locals)

Bid	n <sub>j,1</sub>	n <sub>j,2</sub>	n <sub>j,3</sub>	n <sub>j,4</sub>	n <sub>j,5</sub>	n <sub>j,6</sub>	n <sub>j,7</sub>	n <sub>j,8</sub>	n <sub>j,9</sub>	n <sub>j,10</sub>	n <sub>j,11</sub>
a. Tourists											
0	9	3	12	18	14	22	27	27	0	0	0
8	—	13	0	0	0	0	0	0	0	0	0
15	—	—	24	0	0	0	0	0	0	0	0
30	—	—	—	20	0	0	0	0	0	0	12
45	—	—	—	—	15	0	0	0	0	0	10
60	—	—	—	—	—	19	0	0	0	0	7
80	—	—	—	—	—	—	21	0	0	0	1
120	—	—	—	—	—	—	—	6	0	0	2
180	—	—	—	—	—	—	—	—	15	0	2
250	—	—	—	—	—	—	—	—	—	1	0
320	—	—	—	—	—	—	—	—	—	—	0
b. Locals											
0	10	13	24	20	33	33	36	48	0	0	0
8	—	11	0	0	0	0	0	0	0	0	0
15	—	—	42	0	0	0	0	0	0	0	0
30	—	—	—	25	0	0	0	0	0	0	13
45	—	—	—	—	20	0	0	0	0	0	11
60	—	—	—	—	—	25	0	0	0	0	10
80	—	—	—	—	—	—	27	0	0	0	7
120	—	—	—	—	—	—	—	13	0	0	4
180	—	—	—	—	—	—	—	—	11	0	1
250	—	—	—	—	—	—	—	—	—	1	0
320	—	—	—	—	—	—	—	—	—	—	0

certain age bands (youngsters and older people) and those without a university background, the valuations allocated by tourists are higher than those declared by locals. This is a general finding not pinpointed in any specific valuation but which indicates that, in general terms, tourists

designate a higher economic value to the CMF. This is probably due to the more offhand way in which tourists consider expenses incurred during a holiday when compared with a domestic expense incurred by local residents. Nevertheless, it also is true that, generally

Table 5. Distribution of spectator willingness to pay for *the Contemplative Music Festival*

Bid	Tourists			Locals		
	S(x)	f(x)	WTP	S(x)	f(x)	WTP
0	1.0000	0.0818	0.95	1.0000	0.0962	0.85
8	0.9182	0.1179	2.87	0.9038	0.1055	3.73
15	0.8003	0.1914	4.40	0.7983	0.2489	3.78
30	0.6089	0.1468	4.56	0.5494	0.1261	4.35
45	0.4621	0.1013	7.57	0.4233	0.0966	6.66
60	0.3608	0.1262	9.60	0.3266	0.1109	9.19
80	0.2346	0.1200	3.83	0.2157	0.1149	6.63
120	0.1146	0.0319	13.96	0.1008	0.0552	7.51
180	0.0827	0.0775	1.29	0.0455	0.0417	0.95
250	0.0052	0.0052	0.00	0.0038	0.0038	0.00
320	0.0000	0.0000	—	0.0000	0.0000	—
			<b>49.03</b>			<b>43.65</b>

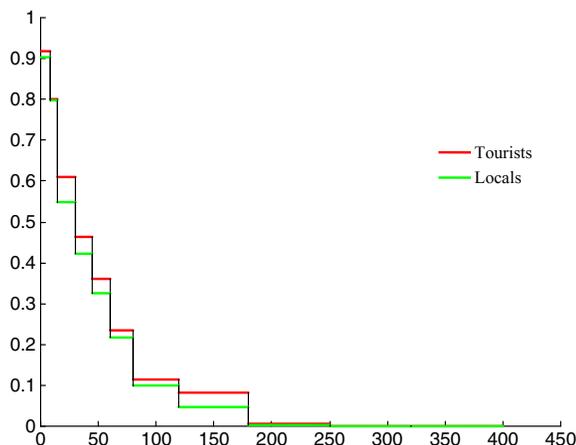


Figure 1. Willingness to pay survival function for tourists and locals.

speaking, tourists tend to enjoy higher levels of income and purchase season tickets for a season of music more frequently, possibly leading to a higher valuation. Whatever the case, the findings may be of significant interest to cultural managers since organizing this kind of festival may prove a key factor in attracting spending.

However, an analysis of the WTP trend compared with the various criteria for characterizing demand proves more interesting. Examining first the variables related to socio-demographic factors, it would seem that women, elderly people, subjects with a higher level of income and those with a university

education<sup>14</sup> pay relatively more. Among tourists, a higher value also is allocated by those who are visiting mainly to attend the festival, highlighting the importance of those tourists visiting for a single reason who, we may recall, account for 23.8% of all visitors.

Second, a common pattern does emerge between tourists and locals with regard to behavioural variables in the sense that a WTP a higher amount is declared by those who had attended previous editions of the festival as well as those attending a greater number of concerts during the edition analysed, underpinning the importance of fidelity to a specific cultural product. A WTP more also is expressed by those who confessed a deep love of classical music and those who confessed to being deeply satisfied with the concert they had heard, reflecting both the spectators' degree of sensitivity and preferences as well as the accumulated culture of their previous musical background. A higher valuation also was expressed by spectators who have a tendency to purchase this kind of product and by those who attach a great deal of importance to the CMF as one of Santiago de Compostela's tourist attractions. This is linked to the level of previous consumption experiences and to the importance attached to the value of culture, as determinants of cultural consumption.

<sup>14</sup> Among locals, men pay slightly more as do those without a university education. This is due to a higher mean age and, thus, to local spectators having fewer academic qualifications.

Table 6. Willingness-to-pay results. Socio-economic and behavioural segmentation of demand

Variable	Value	Tourists		Locals	
		WTP	n	WTP	n
Sex	Male	47.56	125	43.21	187
	Female	50.79	169	42.99	244
Age	Young	43.77	30	46.96	29
	Middle-aged	47.61	194	39.36	315
	Elderly	62.60	38	66.11	56
Academic qualifications	Non-university	43.13	63	48.89	75
	University	49.71	225	42.61	353
Income	No income	43.18	21	31.98	38
	Below 1800 €	36.84	85	32.32	133
	Over 1800 €	53.18	172	50.02	233
Resident in Santiago	No	49.03	300		
	Yes			43.65	438
Travel with the specific intention (CMF)	No	46.43	218		
	Yes	57.05	68		
Consumption CMF (no. concerts $\geq$ 4)	No	46.51	224	37.33	287
	Yes	67.94	29	65.20	106
Consumption CMF (no. concerts $\geq$ 3)	No	47.51	183	38.08	178
	Yes	52.76	70	49.89	215
Fidelity CMF (attended 2006)	No	47.64	263	41.02	290
	Yes	50.82	30	49.22	139
Addiction (Interest music classic $\geq$ 4)	No	42.04	99	24.03	134
	Yes	49.85	189	52.05	291
Addiction (interest music classic = 5)	No	40.21	183	33.55	247
	Yes	59.29	105	56.88	178
Experience (other season ticket)	No	39.92	166	36.00	234
	Yes	71.32	57	58.88	62
Satisfaction concert today = 5	No	46.66	89	41.37	158
	Yes	56.50	134	47.46	170
Importance CMF = 5	No	41.47	113	36.60	198
	Yes	58.24	105	54.30	151

All of these findings underscore the peculiar nature of the demand for cultural goods and in particular for the performing arts, a fact evidenced in other studies (Seaman, 2006). We refer to the addictive nature of cultural consumption, the determinant value of accumulated experiences related to the use thereof, as well as fidelity to a specific hobby or taste. These are variables, which point, not so much to the intensity of cultural consumption but simply to a constant involvement in this market (Ateca, 2009). This is an important conclusion for cultural and tourist managers since the search for and creation of new cultural products and a fresh array of alternatives should not be approached in a generalist manner but should seek to respond to a specific segment of demand, as highlighted in this case study.

### Market segmentation analysis

Finally, with regard to one particular implication for cultural management, we broach the hypothesis that the institution decides to specifically market the cultural project, through the sale of individual concert tickets and season tickets. In this case, an estimation of the value allocated by a particular segment of those attending, namely, those who declared a positive WTP in all cases, should be carried out. It is no longer a question of the complete market, as we have excluded those expressing a null WTP, either because they are unable to make a contribution at that particular time, although they are willing to accept the market, or because they consider that their WTP is reflected through the taxes they pay. It should

be pointed out that the number of spectators making a positive bid was 86% in the case of tourists and 83% for local residents<sup>15</sup> (see Table 7). We refer to this group as 'consumers of club goods'<sup>16</sup> since these people are willing to cover a part of the cost of providing this public good by purchasing a ticket for the festival. The mean price for the season ticket expressed by this consumer club is €54.96 in the case of tourists, and €50.73 for the residents, barely six units above the price estimated for the complete market.

Nevertheless, there is the suspicion that a section of those interviewed may easily engage in hypothetical bias during the valuation exercise since it is not difficult to give a positive answer when questioned about making contributions of a cultural nature, particularly when there is no actual commitment to pay.<sup>17</sup> As previously mentioned in the methodology and application to the case study section, we decided to include a certainty question in the survey so as to measure on a scale of 1 to 10 the degree of certainty with which subjects confirmed their payments. To ascertain whether hypothetical bias was present, sub-samples were created based on the original data, grouping together all respondents who stated a certainty greater than or equal to one, two and so on. Should there have been no hypothetical bias, WTP estimations for each of these sub-samples would likely have been very similar. However, in our case, there seems to be no doubt since the groups were increasingly smaller as the levels of certainty increased, both for tourists and local residents.

Indeed, Table 8 and Figure 2 show spectators' valuation pattern for the complete market (positive and null WTP) for the various degrees of certainty, excluding at each consecutive level

of certainty consumers who are gradually more unsure.<sup>18</sup> In this case, we maintain the hypothesis that those declaring a null WTP are interviewees who are absolutely certain of their zero valuation, whereas those expressing a positive WTP are not always quite so sure (Champ and Bishop, 2001). It is thus understandable that mean WTPs should gradually decrease as the certainty scale rises. Using this premise, we again note how tourists express a higher valuation of the CMF than do citizens of Santiago, although the trend does seem to be more robust among the latter. Indeed, local residents of Santiago evidence a more or less constant bid of around €45 up to a certainty level of 8, whereas among tourists, the valuation starts to drop after level 6.

What is the situation with regard to club good consumers? Table 9 and Figure 3 show the WTP estimations in terms of certainty for this section of spectators, in other words, those who are willing to pay a positive amount for the festival in all cases. WTP in absolute terms is greater than for the complete market, as we already knew. Here, the important issue is to examine the evolution of the WTP on the certainty scale, as tourists lower their bids after level 6, whereas local consumers increase their valuation as the level of certainty rises. Put differently, residents of Santiago display an ever-increasing value of the festival, the higher the degree of certainty with which they confirm the amount they would pay. This is an important finding and evidences the esteem in which local consumers hold this cultural product and the need they feel to maintain it since they are willing to make a substantial contribution to ensure its continuity. Tourists display a significant and consistent WTP, although one which is not so intense at higher certainty levels.

The usefulness of these findings may prove evident when considering commercialising the festival. Should this be the case, and given that it is not feasible to discriminate between tourists and locals when establishing prices, the WTP declared by those who would definitely purchase the season ticket were it

<sup>15</sup>Figures which are notably higher than those in other contingent valuation studies carried out for historical and cultural heritage goods. See Sanz *et al.* (2003); Báez *et al.* (2009) and Bedate *et al.* (2009).

<sup>16</sup>Club goods may be defined as those which satisfy the needs of a group of users at a specific moment, implying shared costs. These are exclusive but non-rival goods, at least until they reach a certain level of congestion in consumption (Buchanan, 1965)

<sup>17</sup>Treatment of hypothetical bias in contingent valuation exercises is one of the most innovative lines of research. Yet to date it has scarcely been applied to the field of culture. See Bedate *et al.* (2009)

<sup>18</sup>This approach is referred to as correction of hypothetical bias through exclusion, as interviewees who were not sincere or not sure of their response are gradually removed, and only the responses of those offering greater credibility are taken into consideration.

Table 7. Willingness-to-pay results. Market segmentation

Results	Tourists			Locals		
	WTP	<i>n</i>	%	WTP	<i>n</i>	%
<b>Complete market</b> - WTP mean	49.03	300	100	43.65	438	100
<b>Club good</b> - WTP > 0	54.96	258	86	50.73	363	83

Table 8. Estimations of willingness to pay in terms of certainty levels for the complete market (positive and null willingness to pay)

Certainty	Tourists		Locals	
	WTP	<i>n</i>	WTP	<i>n</i>
1 or more	48.40	261	42.34	386
2 or more	49.14	248	42.96	375
3 or more	49.50	245	43.97	363
4 or more	50.23	227	44.86	341
5 or more	50.65	217	44.14	318
6 or more	52.07	180	45.63	266
7 or more	49.26	161	44.69	222
8 or more	44.40	133	44.02	183
9 or more	40.94	107	37.71	143
10	35.59	97	33.09	128

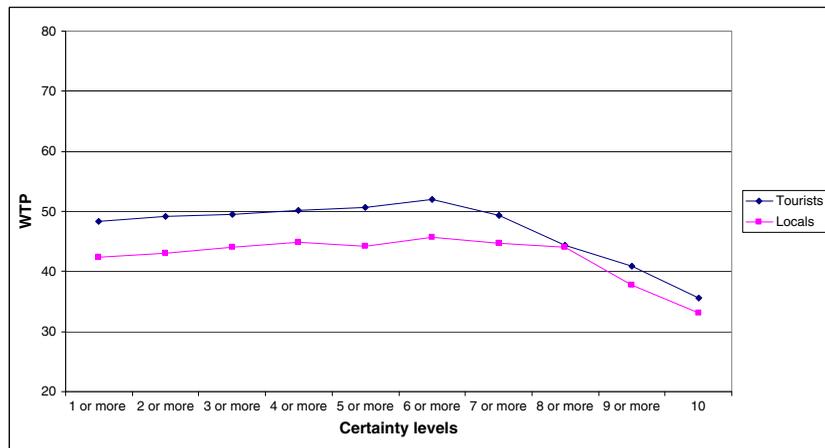


Figure 2. Valuation patterns in terms of certainty levels for the complete market (positive or null willingness to pay).

marketed might be taken as an approximation. For example, this would be the group of consumers who display a positive WTP and a certainty level equal to or above 7, in which case the cost of the season ticket would be around €60 (Table 9), an extremely reasonable

amount for a cultural programme consisting of eight high-quality concerts. Assuming the financial advantage of acquiring the season ticket to be 50% compared with the normal price, a ticket for a single concert might be put on sale at a cost of €15. Should the

Table 9. Willingness to pay estimations in terms of certainty levels for the ‘club good’ segment (positive willingness to pay)

Certainty	Tourists		Locals	
	WTP	<i>n</i>	WTP	<i>n</i>
1 or more	54.93	222	50.28	312
2 or more	56.15	209	51.23	301
3 or more	56.64	206	52.80	289
4 or more	58.09	188	54.42	267
5 or more	59.00	178	54.42	244
6 or more	62.31	142	59.32	193
7 or more	60.31	123	62.33	149
8 or more	57.44	95	68.36	110
9 or more	57.72	69	69.99	70
10	52.38	59	68.54	55

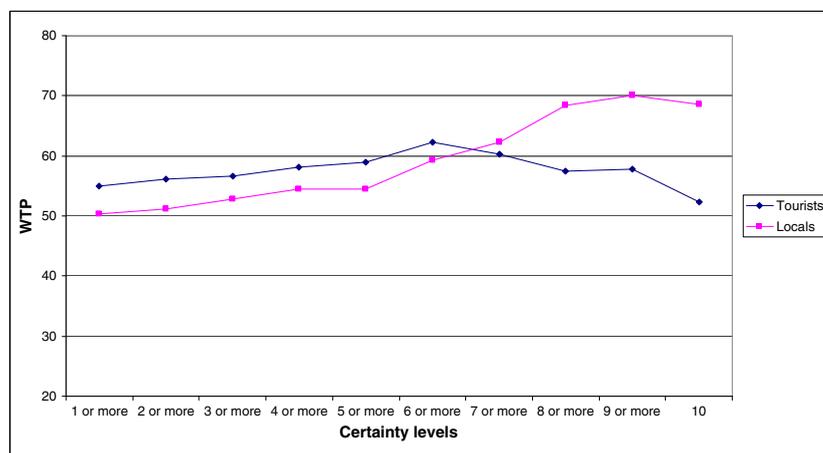


Figure 3. Valuation patterns in terms of certainty levels for the ‘club good’ segment (positive willingness to pay).

organizers use these findings as a basis for establishing a pricing mechanism, they would obviously need to consider that the market for season ticket holders would be cut to around 37% of the capacity. This might provide an initial approach towards calculating revenue in an analysis of the financial viability of the project.

### CONCLUSIONS

Cities boasting a rich historical heritage are increasingly seeking to expand the range of cultural attractions they offer by branching out into the field of cultural entertainment and festivals so as to enhance the image of the area and appeal to a wider cross section of

tourists, beyond those who are merely interested in sightseeing. This is the context in which we have framed our research, a classical music festival, provided in the shape of a free public good, which forms part of the cultural activities available in the emblematic city of Santiago de Compostela. The fact that this cultural good is provided free of charge does not mean it is not valued by the public, hence our efforts to estimate festival spectators’ WTP, drawing a distinction between tourists and locals to ascertain whether there are any appreciable differences and why these might arise. In this sense, the findings evidence that tourists always display a significantly higher WTP than locals, although an analysis of the valuation patterns in terms of certainty levels

when confirming payment reveals more solid patterns in the case of local residents compared with a more relaxed response in the case of tourists. This may be due to residents of Santiago feeling a greater appreciation for what is closer to home and valuing a specific cultural product highly compared with tourists who, although evidencing a notable WTP, tend to approach the issue in a more off-hand manner as, for them, it represents just another holiday expense. Nevertheless, the general findings of the valuation are appreciable and consistent and approach market values for this kind of cultural product. Moreover, WTP segmentation analysis of various demand characteristics underlines the particular nature of cultural consumption, highlighting its addictive nature and the determining role of related consumption experiences and accumulated interest.

The findings to emerge from the research prove interesting, first, in that they confirm the success of this cultural attraction perceived as a tourist prototype since a significant proportion of spectators are tourists (42%), of whom, a quarter come expressly out of an interest in the festival and evidence a higher than average WTP. This might prove to be a factor in attracting a large amount of spending and, in turn, provide one argument for managers in possible fund-raising initiatives. The findings also are beneficial for institutions, who need to gain an insight into the kind of demand, which exists for these cultural goods and other related tourist interest. More specifically, the findings to emerge from the WTP estimations may prove useful in providing a more accurate appraisal of the social benefit, which citizens attach to the cultural festival, perceived as a local public good. In this case, the findings may be included in a possible cost-benefit analysis for a cultural project, evidently as an estimation of part of the benefits. A certainty analysis of the valuations will enable evaluators to assume greater or lesser risks in overall estimations and, therefore, provide a more suitable justification for the provision of said cultural good. Finally, as we have evidenced, the findings also may prove useful towards positing pricing mechanisms to control admission to the festival as a whole in terms of commercializing the product. Again, the certainty analysis and segmentation study conducted will allow those programming

the festival to justify a differentiated pricing and season ticket system for admission to the festival.

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