

Residents' perception and economic impact of bullfighting: the case of Feria del Toro (Olivenza, Spain)

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ABSTRACT: Despite being a controversial spectacle, bullfighting is a cultural event with relevant touristic and economic impacts. Consequently, local support for bullfighting may be influenced by perceptions of the economic returns generated as a result of hosting this spectacle, which are mostly derived by the attraction of tourists. This paper characterises bullfight tourism, computes the economic impact of a bullfight fair, and examines the extent to which perceived economic impacts affect local support for bullfighting. As a case study, we investigate the bullfighting fair in Olivenza (Spain). After conducting a survey to nearly 700 people during the development of the fair, expenditure results of residents and visitors are primarily used to estimate the total economic impact of the event through an input-output model. An ordered probit regression and a logit model are next estimated to evaluate whether residents' support for the fair is connected with the perceived economic impact. The findings reveal that local support, specially from those attending the fair, is influenced by perceptions of positive impacts.

Keywords: tourism, bullfight, economic impact, Spain

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1. Introduction

Bullfighting is a controversial activity that takes place in a number of countries around the world. In several countries its popularity is increasing (it is booming in South Asia, according to Chio, 2018), while in others it struggles to survive or is in danger of disappearing (see the total or partial bans in Catalonia and Ecuador). As a cultural event bullfighting can have a significant economic impact that involves from the primary sector, to which bulls, cattle ranches and work in the countryside belong, to the tertiary sector through the activities of entrepreneurs, bullfighters, plaza staff, and others. Some studies have examined the economic impact of this type of events (Medina, 2016). The main claim for such an effect is the expenditure of visitors and tourists attending them.

Likewise there is a vast amount of literature analysing the economic impact of other cultural events from the point of view of tourism, especially in the case of major events such as blockbuster exhibits, art festivals, European Cultural Capital Events, or World Expos (Lamberti et al., 2011; Richards and Wilson, 2004; Skinner, 2006; SQW, 2006). However, few studies focus on the economic impact of minor events on local communities, which as Saayman and Rossouw (2011) have suggested is mainly due to the lack of data allowing the quantitative simulation of policy impacts at a regional level (Baptista Alves et al., 2010; Bracalente et al., 2011; Çela, A. et al. 2007). To our knowledge, there have been no studies analysing bullfights as a singular cultural event with a touristic and economic impact from a regional point of view.

These events are particularly important for the economy of the place hosting them. Agha and Taks (2015) found that minor events have a higher potential for positive economic impact (net profit) than major events owing to the fewer resources required by the former. Hosting minor local events makes a significant contribution to local economies because they attract visitors to the destinations and moreover induce spending within the local community while generating employment. In addition, another characteristic of community-based events is that they require relatively limited expenditure from local administration and town councils (Veltri, et al., 2009) and little investment as they generally use infrastructures that already exist and on average require fewer skills in compared to larger events. In this way tourism and the holding of local events can help the economic recovery of small rural communities.

According to Kotler et al. (2006), event-based tourism is a vital component of programmes to attract tourists to local communities which will consequently contribute to economic diversification and profitability by creating employment, improving basic services, and increasing the economic balance between urban and rural populations (Byrd et al., 2009).

Local support for major festivals has also been studied in academic articles (Bull and Lovell, 2007; Jackson, 2008), including the analysis on the impact of the quality of life of local people (Yolal et al., 2016). Given the controversial debate on *corridas*, our hypothesis is whether the local support they receive is somehow affected not only by the image which the city may have but also by the perceived economic impact of the event.

The aim of our work is manifold and is innovative in all its objectives. Firstly we describe bullfighting and its controversial nature even in Spain together with its economic and touristic dimension. Secondly we describe the economic impact of a bullfighting festival and the expenditure patterns of tourists attending bullfights. Thirdly we assess local support for

the event, and the fact that it is essentially devoted to bullfighting by considering the perceived advantages and disadvantages according to residents.

We have considered the 2018 edition of the *Feria del Toro* in Olivenza, Spain. Our results reveal a major cultural industry with considerable albeit not overwhelming support. This event attracts tourists with significant purchasing power or at least those willing to pay more than the average tourist in the country. Finally, we have found that insofar as the event generates more benefits than costs to the town, residents are not only satisfied with the festival but also agree that it should be devoted to bullfights if the effect is positive.

The following sections describe the bullfight (sections 2 and 3), introduce the case study (section 4), and estimate the economic impact of a bullfighting festival (section 5), assess local support (section 6), and summarise our main findings (section 7).

2. Bullfighting: a controversial activity

Bullfight is not merely a local Spanish phenomenon. Human beings have exploited the fierceness of bulls to develop bullfighting shows in extremely diverse ways. Cohen (2014) cites current examples of bullfighting shows in Turkey, the Persian Gulf, Bosnia, Kenya, Bangladesh, South Korea, Japan and China, while Chio (2018) adds Laos and Vietnam to the list.¹ In these contests bulls fight against other bulls. However, the best known bullfight is probably a contest in which a human (usually a man) fights against a bull. Some bullfights involving humans take place without the sacrifice of the animal in the arena, including bull-baiting in Tamil Nadu in India, the *corralejás* in some American countries, or the *corridos* following Portuguese rules which take place in Portugal and also in other places such as the USA or Pemba Island in Tanzania. The deadlier version of the *corrida* takes place in Spain, the south of France and Latin American countries with a Spanish tradition (Mexico, Colombia, Ecuador, Peru, and Venezuela).

The first recorded public spectacle with bulls in Spain dates back to the year 1088 in the town of Avila during the celebration of a wedding of the nobility. Bullfights were organised to commemorate coronations, royal weddings, or weddings of the nobility, and also to celebrate religious festivals.² “Games with bulls” evolved in many different ways in the Iberian Peninsula. The modern *corrida* originated in the 18th century and according to Yates (2009) is a symbolic representation of the domination of the human intelligence over wild nature, of the city over the countryside. In fact bullfighting became a cultural industry in the 18th and 19th centuries when *corridos* began to be held outside traditional *fiestas*; large arenas were built in urban areas to accommodate growing crowds of people willing to pay to see *corridos*. It became an international cultural industry in the 20th century when the most famous Spanish *toreros* travelled to the Americas to take part in *corridos* and American countries begin to produce their own stars. The top *torero* of 2019, Andrés Roca Rey, is

¹ Cohen (2014) also adds to the list of animal-versus-animal contests those taking place between cocks, camels, water buffalos, horses, or dogs, among others. At the end of the 19th century fights between bulls and other animals (lions, tigers and even elephants) were also of some importance in Spain.

² For a full description of the origins of bullfighting see Guillaume-Alonso (1994) and López-Martínez (2002). Marvin (1988) provides a good anthropological description of *corridos*, while Shapland (2013) investigates the roots of games with bulls in ancient Crete and the connection with current *corridos*.

Peruvian, while the manager of the world's most important arena (Las Ventas, in Madrid), Simon Casas, is French.

Corridos have always been controversial. Many visitors are horrified by the blood and consider the spectacle to be cruel. Others on the contrary see bullfighting as an aesthetic experience, a rite, and a sacrifice which is part of the cultural roots of a nation. However, this debate also takes place in the countries where bullfights are held. The main argument of anti-bullfighting advocates is that unnecessary pain is caused to the animal in the name of amusement. Animal welfare must be above the right to artistic freedom and the free exercising of certain professions (De Lora, 2011). They also claim that the fight between the bullfighter and the bull is unequal since its expected result is always the death of the bull; bullfighters are sometimes injured although fatalities are rare. Bullfighting is more popular with men and nowadays has less support among young people (María, 2006, Miranda-de la Lama et al., 2013, María et al., 2017). It has even been claimed that attending these events can have a psychological impact on the personal development of children and may lead to violent behaviour (United Nations Committee on the Rights of the Child, 2018).

Lovers of bullfighting, the so-called *aficionados*, consider it to be an art equivalent to that of other artistic manifestations (De Haro et al., 2015). Despite the recent political dispute, it still has strong institutional support.³ *Aficionados* consider it a national tradition, and the national parliament proclaimed a national law protecting bullfighting as part of the cultural heritage (Carrillo Donaire, 2015). María et al. (2017) even accept that it is a part of national identity (Johnson & Leatherman, 2005, Santos & Trillo-Santamaría, 2017). Enthusiasts of *corridos* deny any negative effect on children's behaviour by stressing the lack of scientific arguments on the statement and presenting academic work with exactly the opposite results (Sanjuan et al. 2017, Guillén-Corchado, 2017, TFL, 2018,) or any link to higher crime rates in local areas where bullfighting is popular (Capucha et al., 2018). Other arguments in favour of maintaining *corridos* include the protection of the breed of fighting bulls which otherwise would disappear. It is also claimed that the extensive livestock farming that these fighting bulls require preserves sustainable ecosystems (Lomillos et al., 2012, 2013). The economic component of the industry as a whole is also considered to be a major argument in favour of bullfighting as it generates a substantial impact with minimum subsidies (Medina, 2015).

In order to assess the interest in bullfighting in Spain we examined the figures of the Survey of Cultural Habits and Practices drawn up by the Spanish Ministry of Culture and Sports for 2018-2019. Respondents rated their interest in bullfighting on a scale of 0 to 10. Some 65.3% declared their interest as being between 0 and 2, a figure that reaches 71.5% if we add all those who showed an interest lower than 5; 13.3% declared an interest of between 5 and 6; and the remaining 15.2% raised that interest to between 7 and 10. There are more men than women interested in bullfighting and interest is also higher among those aged over 45, especially among those over 65. Given the lower educational level of older generations, it is not surprising that there is greater interest from that part of the population with less education or among the retired. Interest in bullfighting is higher in towns of less than 50 thousand inhabitants. As far as attendance at events is concerned, 8% said they had attended one. These figures are higher among men and interestingly among very young men

³ Since its conception the Spanish Ministry of Culture has awarded its Medal of Fine Arts to bullfighters together with other artists. A popular legislative initiative led to the declaration of Law 18/2013 of 12 December, according to which bullfighting is a protected cultural asset, prioritising its preservation as part of the intangible heritage and establishing a foundation by which the right of minorities to preserve cultural identity is legally protected (Carrillo Donaire, 2015).

(11% for those aged 15 to 19). Those who least attend bullfights are those with lower purchasing power, students, and the retired, together with the inhabitants of large cities.

The satisfaction of those attending bullfights was mostly high (7.8 on average on a scale of 0-10) and in general most spectators paid for their tickets. 13.4% of the population saw bullfights on TV, mostly in regions with public TV channels broadcasting festivals such as Extremadura. Among the reasons given for not having attended bullfights, the most common is lack of interest (61%) or ignorance ("I find it difficult to understand", 8% or "little information is available", 1%). The lack of interest increases in the younger generations, reaching 70% of respondents aged between 15 and 19 compared with 64% of those aged between 35 and 44 and 50% among those aged 65 or over. The same trend, albeit much more pronounced, can be observed regarding ignorance of the event.

3. The economic and tourist dimension of bullfighting

In this study we understand that *corridas* are cultural events. Following Grappi and Montanari (2011, p. 1.129), a cultural event is "the celebration of a specific theme to which the public is invited for a limited period of time. This celebration may be held annually or less frequently and includes single events". The relationship between cultural events and tourism is not new, and the economic impact generated is beyond all doubt. Some studies mention the positive influence of cultural events on tourism (see for instance Van Loon et al., 2014; Di Lascio et al., 2011, and more recently the meta-analysis of Yan et al., 2019), while others analyse the effect of tourism on such events (Borowiecki & Castiglione, 2014; Zieba, 2016).

Bullfights as an event have an economic impact which has been recognised in several academic studies in China (Chio, 2018), Turkey (Kiliçarslan and Kocabulut, 2017), and Japan (Ishikawa, 2009). As far as Spain is concerned, Ollero-Fernández & Gallurt-Povedano (2015) describe the connection between bullfighting and tourism and define 'taurism' by describing the cultural event of the *corrida* as a tourist product with a wide spectrum of parallel linked activities: accommodation, the restaurant industry, visiting bullfighting museums, the gastronomic tasting of products derived from the fighting bull, and even visits to farms where fighting bulls are bred.

From a macro-perspective, several studies have analysed the overall impact of bullfighting in Spain. According to Gutiérrez-López (2013) and Medina (2016), in 2013 a total of 15,673 bullfights were organised in Spain with some 5.5 million tickets sold and about 25 million spectators,⁴ which are well above the figures for many scenic arts such as the theatre, opera or classical music. They estimate a total contribution to the national economy of € 1.6 billion and some 200.000 jobs. To date there have been no academic studies on the estimated economic impact of a specific bullfighting festival using collected information and with local input-output tables, as our research aims to do.

From the point of view of tourism bullfighting is a symbol of Spain: "Tourists consider bullfights virtually synonymous with Spain and flock to these events as a source of exotic entertainment (...) bullfighting is even more closely associated with Spanish national

⁴ Not all bullfights take place in closed arenas; many take place in public spaces including streets and in the country. In fact a large variety of spectacles exist involving bulls with *corridas* being the more sophisticated version.

identity than baseball is to that of the United States” (Brandes, 2009, 780). Waller and Lea (1998) analyse the role of authenticity in tourist motivation and use Spain as a case study. They mention that the first factor relevant to the authenticity of a tourist experience is culture, which implies direct contact with the historic buildings, local language, and traditional events, and comment that “a visit to Spain should involve some element of sunshine, bullfights, excitable locals, and so forth” (Waller and Lea, 1998, p. 125).⁵ Tourists may see Spanish local traditions as existential or simply as leisure experiences, which will depend not only on the authenticity of the tourist attraction but also on the type of experiences that the tourist aims to achieve (Urry, 1990, Mantecón and Huete, 2007, Yi et al., 2017). In the same way, there is an important link between local identities and the marketing of historic events. Vidal González (2008) cites Palmer (1999) and argues that tourism can provide “the means by which local people can be identified (...) marketing of historic events can reinforce the locus identity, fostering legacy tourism and sometimes creating a nationalistic heritage tourism” (Vidal González (2008, p. 807).

The influence of tourism in general on residents has been widely investigated (see for instance Hall and Page, 2009 from the perspective of quality of life and Vargas-Sánchez et al., 2011 for a review of residents' attitudes to tourism). Biagi et al. (2019) analyse the impact of tourism on the residents' urban quality of life using both capabilities and functioning approaches, and hypothesise that the attitude of the local population to tourists depends on how tourism affects their quality of life. The presence of tourists may affect both the quantity and the quality of the services which the residents can enjoy (for a review see Nunkoo et al., 2013).

As for the support of residents for *corridas*, we examine the sociological literature on social identity. According to Tajfel (1981), social identity is “the part of an individual's self-concept that derives from his knowledge of his belonging to a social group (or groups) together with the value and emotional meaning attributed to him” (Tajfel, 1981, p 255). This subjective perception of identification implies cognitive, affective and evaluative dimensions of identity. The cognitive dimension refers to self-classification as being a member of a group, i.e. an individual is categorised as an *aficionado*. The affective dimension implies emotional attachment, in other words the development of feelings of care, love and concern for the members of the group. Finally, the evaluative dimension is associated with the connotations of value when comparing people in the group with people outside the group, and provides a positive assessment for various reasons (moral, ecological, or even economic).

In this study we wonder whether evaluation deriving from the economic impact of the tourist event influences the perception of residents that it is essentially based on bullfighting. In this manner several variables come into play: local identity, economic impact, and quality of life. We hypothesise that the higher the expected economic impact of the event the higher the support will be, and the more the locals complain about the presence of tourists the less they will support the event.

⁵ Ramos et al. (2017) also refer to the connection between bullfights and national and local identity in Portugal and the relevant role that this connection may have on tourism. De Haro de San Mateo (2018) demonstrates the role of promotion by showing that one of the first broadcasts of Spanish TV was a *corrida*. Other broadcasts took place from tourist locations as a way of promoting local areas (Benidorm, Marbella or Sant Feliu de Guíxols).

4. Case study: *La Feria del Toro* in Olivenza, Spain

Olivenza is a rural Spanish town with an aging population of 11,963 inhabitants which had declined for the fifth consecutive year in 2019. Located in the province of Badajoz in the southern region of Extremadura near the Portuguese border, Olivenza had an average disposable income per household of 15,050 € in 2017 which was below both the regional (16,934 €) and national averages (21,834 €) according to figures from the Spanish tax authorities. The region is lagging behind the rest of the country: 44.3% of its inhabitants are at risk of social exclusion⁶ and the unemployment rate is dramatically high: 22.8% in Olivenza and 23.7% in Extremadura as a whole, with mostly young people and women being affected.

We have studied the bullfighting fair in Olivenza: *La Feria del Toro*. This event lasts three days and takes place every year in the first weekend of March. The town has a deep-rooted bullfighting tradition: the current arena was built in 1868 and there are farms which breed fighting bulls nearby, some of which are nationally renowned. In 1991 the new managers of the bullring promoted a new festival which ended with the first top-class event on the bullfighting agenda. The best bullfighters and most famous breeds of bull aim to attend this festival and it is the first major event on the bullfighting calendar. It was declared a Festival of Regional Tourist Interest in 2013 and is frequented by visitors from nearby towns and also tourists.

Our field work was carried out in 2018. That year the fair consisted of five *corridos*, one on Friday and two each on Saturday and on Sunday. Together with the *corridos* there is an associated agenda of activities mainly based on the fighting bull but also including music and other artistic performances.

In order to characterise the economic impact of the fair, we conducted a survey of about 700 people, 322 residents and 391 visitors.⁷ We then summarised the results of the survey referring to visitors.⁸ According to the answers received, 73% of the visitors live in other towns in the province of Badajoz and 13% come from the rest of Extremadura, while the remainder come from the rest of Spain (7%), the neighbouring Portuguese province of Alentejo (4%), and the rest of Portugal and other countries (3%). Almost all (99%) of the visitors surveyed said that Olivenza was their main destination and 14% declared that they had spent the night away from home to attend the festival; most of these visitors (70%) stayed at least two nights with the average stay being 2.3 nights. More than half (56%) said they had come to the fair to attend the *corridos* while the remainder intended to enjoy the atmosphere of the festival. The further the visitors had travelled the higher the bullfighting motivation for the trip. Both types of visitors strongly agreed with the statement that the holding of bullfights is an essential part of the festival, with only slightly higher approval by bullfighting enthusiasts.

To assess their satisfaction with the *Feria del Toro* visitors were asked to rate the festival in general and various aspects from 0 (very dissatisfied) to 10 (very satisfied). The overall assessment of the event was very satisfactory, with an average score of 8.5 and 48% of

⁶ In Extremadura 400,000 people live on just 700 € a month according to the 9th AROPE 2019 Annual Report.

⁷ The survey was carried out between Friday 2nd and Sunday 4th March 2018. The questionnaires were addressed to people aged 18 or over by means of personal surveys. Appendix A1 describes the main characteristics of the survey.

⁸ A full description can be found in Turismo y Tauromaquia (2019).

visitors rating it as "excellent" (9 or 10). This good rating was found for all types of visitor origin and reasons for the visit, although bullfighting enthusiasts gave a slightly higher score. The best valued aspect was security followed by the bullfighting festival in itself and entertainment. The delays, the toilet access, and the prices had a rather lower assessment and ease of parking was the issue with the lowest satisfaction although its score exceeded 6.

On average visitors attended just one *corrida* although the figures differ markedly according to the reason for the visit: those who declared themselves to be bullfighting enthusiasts attended an average of 1.6 bullfights compared with 0.15 in the case of those who came to enjoy the atmosphere. For a quarter of the respondents, it was their first visit to the Olivenza festival and half of the visitors declared that they would return to the festival and 32% would very likely do so, with the loyalty rates being higher among the *aficionados*.

About two-thirds of the residents surveyed said they did not attend any corridas, while those who did attended an average of 1.6 during the festival. Among the youngest respondents and those with the lowest level of education, only 16% attended the *corridas*; this figure doubles both for older age groups and those with a higher level of education to reach almost two thirds of the residents aged over 45 years and with university studies.

5. The economic and tourist impact of the fair

Visitors were surveyed regarding their expenditure at the festival. Table 1 summarises the average expenditure on several items. The total estimated cost of the average visitor to the *Feria del Toro* was 216 €. The highest expenditure was on food and drink (60 € per person) followed by spending on bullfighting celebrations (55 €). Visitors from the remainder of the province incurred average expenses of 126 € per person compared with 184 € in the case of visitors from the remainder of Extremadura and 713 € from other areas of Spain and Portugal. The average daily expenditure of those who stayed overnight is 310 € per person, more than double the average at a national level.⁹ Residents were also asked about their expenditure at the fair.¹⁰ The total expenditure was 78 € per resident.

If we take into consideration the reason for visiting the festival, as expected bullfighting enthusiasts have a higher expenditure (312 €) compared with those who come to enjoy the atmosphere (87 €), which is largely explained by the diverse geographical origin of enthusiasts. The educational level of respondents affects the levels of income and purchasing power of respondents: individuals with basic studies declare an average expenditure of 122 €, which rises to 413 € for those with university studies. We have distinguished between the expenditure in Olivenza (or on overnight accommodation nearby) and the expenditure since the trip to the town began. Of the total expenditure, 77% (€ 167) was generated at the destination while the remaining 23% (€ 49) was spent in transit.

⁹ According to the 2018 Tourism Expenditure Survey carried out by the Spanish National Statistical Institute, the average daily expenditure per person was 146 €.

¹⁰ They were explicitly requested to report only the expenditure at the *Feria del Toro*.

Table 1. Average expenditure during the *Feria del Toro* (in €)

	Visitors' Expenditure			Locals' Expenditure
	Local	Transit	Total	
Food and Drink	48	12	60	34
<i>Corridas</i>	55		55	20
Shopping	37	9	47	23
Transport	4	21	25	
Accommodation	20	4	24	
Other	2	2	4	
Leisure	1	1	2	1
Total	167	49	216	78

In addition to the expenditure of residents and visitors, in order to estimate the total economic impact of the fair we considered the main characteristics of the latter: direct and indirect.

Direct impact

The managers of the *corridas* reported a total budget of 756.000 €, about half being devoted to pay performers and some 25% to pay for the bulls. The town council reported a total expenditure of 108.000 €. ¹¹ The most important items were the erecting of a tent for multiple spaces and meetings and holding various cultural activities. It also hosted a trade fair with various stands and restaurants.

In order to estimate attendance at the festival we collected information from three different sources, which gave three different figures:

- Local and traffic police recorded some 40,000 visitors during the three days of the festival. According to the results of the survey, on average each visitor spent 1.61 days at the festival, which implies 24,813 people visiting the town for the event.
- The organizers of the *corridas* reported 17,600 spectators at all bullfights. About two thirds of the residents did not attend any *corridas* and those who did attend gave an average of 1.6 times. According to the 2017 census, the town had 11,977 inhabitants, of which 80% are 18 or older. These figures imply that 3,087 people attended the festival and occupied 5,023 seats. The remainder of those attending (12,577) were visitors. Considering an average of 0.97 *corridas* per visitor, the total number of visitors to the festival was 12,906.
- Finally, we surveyed hotels and other accommodation establishments, which reported a total of 2,494 visitors (3,647 overnight stays), of which two thirds were staying for the festival. This implies that the tourists lodging in Olivenza and the surrounding area added a total of 1,661 people. This figure is purported to be 14% of the total visitors to the *Feria del Toro*, and consequently this provides an estimate of the total number of visitors to the fair of 11,864 people.

Following a conservative approach, we have preferred to focus our estimates on those figures based on real data from overnight stays and those attending the bullfighting festivities. We have therefore chosen to take the average of the two lower figures which

¹¹ This figure does not include the 70,000 € subsidy to the firm organising the *corridas* in order to avoid double accounting.

gives the number of people attending the *Feria del Toro* as 12,386 people, i.e. more than the population of Olivenza.

Considering the expenditure patterns shown in Table 1 and the estimation of attendance, we have calculated the overall expenditure generated by the festival. In order to follow a conservative approach, we have only considered a fraction of the local expenditure, which is that of those who attended at least one *corrida*. In this manner we avoid counting local expenditure which could occur anyway in the town or somewhere else that weekend. Similarly, in the total amount we have not considered the total expenditure in *corridas* as it was previously considered as income received by the company organising the event. According to our calculations, residents contribute 8% of the total expenditure while the remainder corresponds to visitors. Despite only accounting for 14% of the total visitors, tourists from the rest of Spain, Portugal, and other countries accounted for 43% of the spending, with the rest (49%) corresponding to visitors from the remainder of the province of Badajoz and the rest of Extremadura. This is due to the fact that the average expenditure of a visitor from the rest of the region is 135 € while the average expenditure of a tourist is over 700 €.

All these spending estimates, together with the income of the company and the total expenditure of the town council, resulted in a total direct impact of 3,037,139 €.

Table 2. Distribution of the spending of visitors and locals at the *Feria del Toro*

	Visitors' Expenditure			Locals' Expenditure		Total
	Local	Transit	Total	Residents aged over 18	Residents attending <i>corridas</i>	
Food and Drink	594,509	148,627	743,137	325,367	104,963	848,100
<i>Corridas</i>	681,209		681,209	191,392	61,743	
Shopping	458,268	111,471	569,739	220,101	71,005	640,743
Transport	49,542	260,098	309,640			309,640
Accommodation	247,712	49,542	297,255			297,255
Other	24,771	24,771	49,542			49,542
Leisure	12,386	12,386	24,771	9,570	3,087	27,858
Total	2,068,397	606,895	2,675,292	746,431	240,799	2,173,139

Indirect impact

In order to estimate the further impact on the economy deriving from the direct flow of money, we have applied an input-output model. Given that the latest available version of an input-output table (IOT) for Extremadura corresponds to 1990, we have updated it to 2014 by using the cross-entropy method proposed by Robinson et al. (2001). For this reason, we will from now on refer to the table as IOTEXT-14. This update has been made referring to the year 2014, the last year for which official statistics provide definitive regional figures. We believe this methodological development deserves to be highlighted since it allows a greater reliability of the indirect impact estimates.

The IOTEXT-14 includes a total of 32 accounts in which detailed information is provided on the productive activities carried out as part of the economy of Extremadura in 2014. The complete list of accounts and their structure are presented in Appendix A2. In a nutshell, IOTEXT-14 includes 19 branches of activity partially based on the breakdown into sections of the National Classification of Economic Activities. In addition to the productive activities, the IOTEXT-14 includes two accounts referring to the primary factors, labour and capital; two to the private sector (households and companies); five to the public administrations owing to the specific breakdown of a series of indirect taxes; one to capital operations; and three to the external sectors: the rest of Spain, the rest of the European Union consisting of its first 12 member countries, and the rest of the world.

We have allocated the budget devoted to *corridas* to branch 19 (other services and social activities; personal services) which includes bullfighting shows. Subsequently we have broken down every type of expenditure and linked it to the corresponding economic activity in the input-output table.

In addition to its indirect impact on Extremadura, the Olivenza festival has an economic impact on the rest of Spain. To estimate this impact, Leontief's input-output model has been applied to the Spanish IOT of 2010 (IOTSP10) of the National Institute of Statistics (INE), which is the latest symmetric table available for the country's economy. The first impact is that which occurs in transit on the way to the fair (see second column Table 2). Transit expenses are mainly those of transport services (43%) and accommodation and food and drink (33%). Finally we have calculated the indirect impact on the rest of Spain of the expenses generated in Extremadura. We have used the figures of the direct income of the bullfighting festival, the subsidy from the town council, and the expenditures made by visitors and those considered locals. In all cases the expenses outside Extremadura are grouped according to the product classification included in the IOTSP10.

Considering all calculations, we found a total impact of the *Feria del Toro* of 5.3 million euros (see Table 3). The highest figure corresponds to the indirect impact, which is substantially more important in the rest of Spain than in Extremadura. The region of Extremadura benefits mainly from the direct impact of the festival and, above all from the expenditure generated by visitors. The economic impact is more important in Extremadura (2.8 million €), although a significant proportion is generated in the rest of Spain (2.5 million €). This result is not surprising given the characteristics of the regional economy with low dragging effects and with few sectors acting as mainstays of the local economy.

Table 3. Direct, Indirect and Total economic impacts of the *Feria del Toro* (in thousands of euros).

	Expenditure in Extremadura				Total Impact Expenditure in Extremadura (5)=(1)+(4)	Transit Expenditure			Total
	<i>Direct Impact on Extremadura (1)</i>	<i>Indirect Impact on Extremadura (2)</i>	<i>Indirect Impact on the rest of Spain (3)</i>	<i>Indirect Impact on Spain (4)=(2)+(3)</i>		<i>Direct Impact on transit (6)</i>	<i>Indirect impact rest of Spain (7)</i>	<i>Total Impact Expenditure in Transit (8)=(6)+(7)</i>	TOTAL IMPACT (9)=(5)+(8)
Bullfighting festival	756	59	503	562	1,318				1,318
Town council expenditure	108	27	85	111	219				219
Visitors	1,387	291	737	1,028	2,415	607	486	1,093	3,508
Residents	179	36	94	129	308				308
Total Impact	2,430	412	1,418	1,830	4,261	607	486	1,093	5,353

6. Support of the residents for the *Feria del Toro*. Importance of the economic dimension

Despite large cash flows that are not retained in the local economy, the total impact is substantial. For three days the town doubles in size, attracts the attention of the specialised media at a national level,¹² and receives a large flow of external funding. We have described above how the great majority of residents do not attend *corridas*. We now examine the support of residents for the bullfighting festival and how it is linked to their perception of the economic impact.¹³

In order to assess the support of residents for the bullfighting festival, respondents were asked a list of questions. Two parallel questions referred to overall satisfaction with the festival:

- *"How do you assess the Olivenza festival?"*
- *"To what extent do you agree with the following statement <<The Olivenza festival is a good opportunity for the city that generates wealth for the population as a whole>>".*

On average the score of satisfaction of residents with the fair was close to excellent. On a 0-10 scale the average was 8.7; 60% rated it as excellent (9-10), 35% as outstanding (7-8), 4.5% as satisfactory (5-6), and only 0.5% rated it as a failure (4-0). The assessment is higher among older people although for all cohorts the rating is higher than 8. Men and women value it equally and those with less education are more satisfied. The results for the agreement with seeing the fair as an opportunity for the town were rather close to the former, with a slightly higher mean (8.9).

Among the aspects of the festival, security was the most highly valued followed by entertainment, the cultural offer, food and drink, and the bullfighting festival in itself, all of them were rated at above 8. The aspects with room for improvement were parking, the prices, and access to toilets. This assessment is very similar to that reported by visitors. The latter have a vision similar to that of the locals (8.5 points on average) and arrange the different dimensions in a very similar way. However, visitors rate the bullfighting higher, which is to be expected since for many it is the main reason for their visit.

In addition, residents were asked about the pros and cons of the festival. They were given the possibility of selecting up to three options from a list of advantages, and up to five options from a list of disadvantages:

- *Which are in your opinion the main advantages of the Olivenza bullfighting festival? A) Tourist promotion of Olivenza nationwide; B) High level of occupancy of hotels - restaurants - bars - etc. of the locality; C) Creation of jobs (even if temporary)*
- *Which are in your opinion the main drawbacks of the celebration of the bull fair for Olivenza? A) Overcrowding; B) Increase in prices of products and services; C) Excess noise; D) Dirtiness; E) Traffic and parking.*

¹² Turismo y Tauromaquia (2019) gives an estimation of the media impact of a total of 323 thousand euros, most of which is obtained at a national level.

¹³ In order to achieve the representativeness of the sample, post-stratification was developed and weighting factors were calculated for four age and gender ranges, thus contributing to lessen the weight of the group with most representation in the survey, i.e. people aged between 45 and 65.

In order to evaluate the economic impact with regard to the residents' satisfaction with the fair, we estimate an ordered probit regression in which support depends on the number of positive (advantages) and negative (drawbacks) aspects mentioned by the respondent together with some demographic controls including age, gender and level of education.¹⁴ We hypothesize that the higher the number of positive (negative) items identified by those surveyed the higher (lower) the satisfaction with the *Feria del Toro*. We test these hypothesis considering two alternative questions: satisfaction with the festival and agreement with the festival being a good opportunity for Olivenza.

Respondents are asked to indicate their satisfaction or agreement on a scale of 0-10. Such dependent variables have more than two categories, and these values are naturally ordered and modelled assuming that the observed ordinal variable Y is a function of a continuous latent variable Y^* which is not observed. Y^* has various threshold points: for every low Y^* the support/agreement is poor; for $Y^* > \alpha_1$, the support/agreement increases; for $Y^* > \alpha_2$ it improves further, and so on until the last category. Given the limited sample size and the large dispersion at lower values, we have grouped all results with a value equal to or below 6, which account for a mere 5.6% of the weighted sample.

This specification assumes that the relationship between all pairs of groups is the same (parallel regression assumption) and a single set of coefficients can be estimated. We test this hypothesis by running the likelihood-ratio test of proportionality of odds, which cannot reject the null hypothesis of equality of coefficients (p-val=0.132); this result is confirmed by the Brant test (p-val=0.203).

Table 4 shows the estimates of the model. In all ordered probit regressions, older age groups are significantly associated with higher satisfaction with the fair, while gender and household size are not and higher education displays a significant negative parameter. Interest variables are introduced sequentially: advantages (column 2), disadvantages (3), and both (4). We see that the perceived advantages of the festival are not significantly associated with higher satisfaction. On the contrary, the higher the number of listed disadvantages, the lower the overall satisfaction with the *Feria del Toro*. Column 5 includes the interaction of the key variables with a dummy variable indicating whether residents attended a bullfight. Any of these parameters is significantly different from zero, which does not support the hypothesis that being more involved in the fair encourages a more optimistic or pessimistic view of the advantages or disadvantages of the festival.

Columns 6 to 8 provide a robustness analysis by considering a logit model. The dependent variable becomes 1 if the respondent is satisfied with the fair with reported values equal to or higher than 6, 7 and 8, respectively. It can be seen that listing advantages is positively associated with higher satisfaction, which is actually higher for those attending the fair (column 6). The latter are in fact not valuing negatively the disadvantages, which we interpret as being a sign of the success of the event: higher congestion is a price to pay for enjoying the event. These results are also obtained when considering the alternative variable, agreement with the fair being an opportunity for the town. In this case we merely report the probit results in appendix A4 as the likelihood-ratio and Brant tests rejected the hypothesis of the equality of coefficients.

We finally assess the support for the bullfighting character of the *Feria del Toro*. We asked residents for a personal assessment of the holding of *corridas* during the fair: *To what extent do you agree with the following statement: "Corridas are essential for the celebration of the Olivenza festival"*. Respondents indicate their agreement, on a 0-10 scale. We follow the

¹⁴ Appendix A3 gives the descriptive statistics of the endogenous and control variables of all models.

previous strategy to analyse these outcomes. Table 5 reports the basic results.¹⁵ In contrast to the previous findings in the ordered probit, no significant association with the advantages and disadvantages was found. Only a marginal association is found for disadvantages in column 5, a result that is also found in the logit estimates (columns 6 and 7). When looking at the logit estimates we realize that attendance at bullfights is in fact associated with the assessment. For those not attending *corridas*, it is assumed that their bullfighting essence is in fact linked to the advantages and disadvantages associated with the event; these aspects are counterbalanced for bullfighting enthusiasts. These results support the hypothesis that residents not only assess the advantages and disadvantages of the festival reported, but also its character and essence. For those who are not aficionados, the event is more justified if it has many advantages and few disadvantages.

Table 4. Residents' satisfaction with the Feria del Toro

	Ordered Probit estimates				Probit estimates			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	0.0177*** (0.00554)	0.0175*** (0.00551)	0.0178*** (0.00542)	0.0176*** (0.00539)	0.0149*** (0.00562)	0.00930 (0.0176)	0.0360*** (0.0130)	0.0214** (0.00836)
Gender	0.0140 (0.129)	0.0101 (0.129)	0.0236 (0.129)	0.0199 (0.128)	0.105 (0.135)	0.579 (0.374)	0.000802 (0.287)	0.0770 (0.195)
Household members	0.0399 (0.0611)	0.0386 (0.0618)	0.0199 (0.0627)	0.0190 (0.0634)	0.00760 (0.0625)	-0.173 (0.159)	0.104 (0.123)	0.162 (0.102)
Secondary Education	-0.183 (0.171)	-0.181 (0.171)	-0.145 (0.172)	-0.143 (0.172)	-0.213 (0.174)	0.443 (0.562)	0.232 (0.400)	-0.323 (0.260)
Non compulsory Sec Education	-0.206 (0.180)	-0.202 (0.180)	-0.0918 (0.180)	-0.0896 (0.180)	-0.282 (0.193)	0.0879 (0.690)	0.0131 (0.443)	-0.333 (0.298)
Higher Education	-0.465** (0.222)	-0.477** (0.218)	-0.374* (0.220)	-0.386* (0.216)	-0.450** (0.212)	-0.360 (0.583)	0.119 (0.449)	-0.240 (0.318)
Listed Advantages		0.000640 (0.000783)		0.000572 (0.000788)	0.00128 (0.000958)	0.00580** (0.00240)	0.00718*** (0.00160)	0.00240** (0.00116)
Listed Adv x BF Attendance					-0.000946 (0.00141)	0.0365*** (0.00682)	-1.45e-06 (0.00315)	0.00168 (0.00209)
Listed Disadvantages			-0.00247** (0.00100)	-0.00244** (0.00101)	-0.00384*** (0.00132)	0.00384*** (0.00253)	-0.00526** (0.00285)	-0.00518* (0.00167)
Listed Disadv x BF Attendance					0.000392 (0.00141)	-0.00266 (0.00197)	0.0104*** (0.00378)	0.00535** (0.00248)
BF Attendance					0.545 (0.470)	-2.646** (1.300)	0.493 (0.830)	0.212 (0.568)
Pseudo R2	0.0156	0.0166	0.0234	0.0241	0.0410	0.313	0.292	0.157
Log Likelihood	-446.0	-445.6	-442.5	-442.2	-434.5	-24.89	-47.95	-113.0
Chi 2	30.20	30.74	34.19	34.37	52.20	377.4	40.86	41.55
p-val Chi 2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: N=319. The endogenous variable is Satisfaction with the festival. In the probit estimates the dependent variable becomes 1 if the respondent is satisfied with the festival with reported values equal to or higher than 6 (column 6), 7 (column 7), and 8 (column 8) respectively. The omitted categories for education are Primary School and Male Gender. Standard errors [robust for the ordered probit] are in brackets. *** p<0.01, ** p<0.05, * p<0.1. Results are obtained by using the sample weights.

¹⁵ Detailed results are reported in Appendix A5. Again older age groups are positively associated with the agreement and education (not robustly) having negative parameters.

Table 5. Residents' agreement with the bullfights being an essential part of the *Feria del Toro*

	Ordered Probit estimates				Probit estimates			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Listed Advantages		0.000872 (0.000766)		0.000850 (0.000766)	0.00107 (0.000932)	0.00129 (0.00160)	0.00270** (0.00135)	0.00346*** (0.00123)
Listed Adv x Attendance BF					0.000483 (0.00139)	-0.0378*** (0.00513)	-0.00737* (0.00424)	-0.00179 (0.00255)
Listed Disadvantages			-0.00162 (0.00107)	-0.00160 (0.00108)	-0.00227* (0.00137)	-0.00494** (0.00195)	-0.00434** (0.00191)	-0.00286 (0.00177)
Listed Disadv x Attendance BF					-0.000312 (0.00176)	0.000178 (0.00185)	0.00752** (0.00321)	0.00344 (0.00250)
BF Attendance					0.0933 (0.437)	12.04*** (1.292)	1.856 (1.217)	1.061 (0.773)
Individual controls	YES	YES	YES	YES	YES	YES	YES	YES
Pseudo R2	0.0403	0.0419	0.0434	0.0449	0.0472	0.269	0.231	0.194
Log Likelihood	-428.2	-427.5	-426.8	-426.1	-425.1	-51.27	-73.54	-110.7
Chi 2	44.85	45.49	45.94	46.88	47.52	489.7	24.65	47.19
p-val Chi 2	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000

Note: N=322. The endogenous variable reports whether respondents strongly agree with the festival being an opportunity for the town. In the probit estimates the dependent variable becomes 1 if the respondent is satisfied with the fair with reported values equal to or higher than 6 (column 6), 7 (column 7), and 8 (column 8) respectively. Individual controls are reported in table 4. Standard errors [robust for the ordered probit] are in brackets. *** p<0.01, ** p<0.05, * p<0.1. Results are obtained by using the sample weights.

7. Conclusions

Bullfighting is a controversial cultural activity as a result of the participation of animals which in most cases die during the event. In those countries in which bullfights are held there is a heated confrontation between those who defend traditions and popular culture and those who defend animal rights. Apart from this controversy, the cultural nature of bullfighting and its importance as an international cultural industry is beyond all doubt. As a cultural event, bullfighting has tourist connotations and also an important economic impact.

From the point of view of tourism, bullfighting is one of the selected products that contribute towards the designing of a strategy of tourism differentiation as the activity only exists in a small number of countries in the world. In the same vein, many tourists coming to Spain intend to attend a *corrida* because it is a symbol of the country. From an economic point of view, bullfighting events generate activity flows which have direct and indirect impacts on the territory where they are held. In the case of Spain, the economic figures generated by bullfighting in its most diverse forms (closed arenas and public spaces such as streets or the country) are beyond all doubt, with a million spectators every year. Even so, to date no scientific research has analysed the quantitative economic effects of a specific event.

This paper has analysed the *Feria del Toro* of Olivenza (the first relevant bullfighting event of the Spanish bullfighting season). Its total economic impact has been estimated at 5.3 million euros, of which 3 million euros refer to a direct impact (on the regional or national

economy) and 2.3 million euros to an indirect impact (also on the regional or national economy).

These absolute figures are particularly remarkable if they are related to the unique characteristics of the event. Firstly, the event is celebrated for only three days a year. Secondly, the number of people attending the event exceeds the total population of the municipality where it is held (more than 12,000 visitors by conservative estimates). And thirdly, the average expenditure per tourist per day during the event (€ 310) more than doubles the average expenditure of the average tourist visiting Spain. Consequently, the celebration of such a specific event for a few specific days generates an economic impact high enough to conclude that the celebration of bullfights as cultural and tourist events is clearly sustainable from an economic point of view.

In addition to the economic perspective, from a social point of view the *Feria del Toro* also has a significant impact. Although a large percentage of the population living in the municipality does not attend the bullfights, the satisfaction with this cultural event was close to excellent (60% gave a score of 9 or 10 on a scale of 0-10). Support for the bullfighting character of the festival is positively associated with the perceived advantages of the event and negatively associated with its disadvantages.

A list of implications in terms of management can be inferred from our results. In the first place, from an economic point of view policymakers have no reason to stop supporting the celebration of this *Feria del Toro* owing to its proven effects on the local, regional and national economy. Although there may be problems of mass tourism during the event (mainly parking difficulties, excessive noise, and the generation of refuse), the positive economic impacts far outweigh these problems. The return of public investment to the celebration of this bullfighting event is more than guaranteed. Consequently it is reasonable to continue with the promotion and consolidation of the festival on both national and international tourism markets because of its proven economic efficiency.

Secondly, the remarkable tourist dimension of this cultural event transcends the local area. The festival generates economic benefits not only at a local level but also at a regional and national level. This implies that it should be considered an event of regional interest, which can justify the providing of funds from the regional government to promote it. In addition, further promotion in the form of declaring it of National Tourist Interest could even strengthen its promotion among Portuguese aficionados (taking advantage of the location of the town near the border with Portugal) and even among those of other nationalities, provided that appropriate promotional campaigns can be designed.

Thirdly and finally, the high level of support from the local population and the creation of jobs both prior to and during the fair justifies public action. The intersection between human activity and natural resources has not been fully exploited so far in Extremadura. The conservation of the extensive livestock farming within which the bull breed is born, reared, and bred are factors which in addition to the economic viability proved by this research make the *Feria del Toro* a fully sustainable tourist product. This factor and the promotion and marketing campaigns of this tourist event, based on its sustainability and its specific geographical location as a differentiating element, are emerging as medium- and long-term success factors.

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Supplementary material to the article “Bullfighting’s tourism, economic impact and local support”

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Appendix A1. Survey description

The survey was carried out by random selection of interviewees during the days 2, 3 and 4 of March 2018, in the following points of interest of the Feria del Toro: immediations of the bullring; City Hall Tent; Bars and cafeterias; Downtown (Paseo Grande and Paseo Chico).

The surveys were conducted in the places indicated above from 4:00 pm on March 2, and between 11:00 and 20:00 on March 3 and 4.

Sampling: Simple randomization among the local assistants to the Fair. Probing approximate to the profile of the local assistant to the Fair.

Type of survey: Personal on-site interview assisted with tablet with 3G connection. Data collection through Google Docs document. Survey team: Badavox, S.L.

Survey of residents

Universe: Olivenza's residents who attended the XXVIII Edition of the Feria del Toro, held in the municipality of Olivenza between the 1st and 4th of March 2018.

Sample size: 322 surveys. Confidence level: 95% Sample error: For a confidence level of 95%, and for the worst case ($p = q = 0.50$) the maximum sampling error is $\pm 5.5\%$.

Survey of non-residents

Universe: Visitors (non-residents of Olivenza) to the XXVIII Edition of the Bull Fair, held in the municipality of Olivenza between the 1st and 4th of March 2018.

Sample size: 391 surveys. Confidence level: 95% Sample error: For a confidence level of 95%, and for the worst case ($p = q = 0.50$) the maximum sampling error is $\pm 4.9\%$.

Appendix A2. List of accounts in the IOTEXT-14.

1. Productive sectors	1. Agriculture, cattle and fishing
	2. Energy and distribution of water
	3. Food, beverages and tobacco industries
	4. Textiles, leather and clothing
	5. Wood, cork and paper
	6. Chemicals
	7. Non-metallic industries
	8. Metallurgy
	9. Manufacturing industries
	10. Construction
	11. Wholesale and retail trade
	12. Hotels and restaurants
	13. Transport
	14. Financial intermediation
	15. Other business activities
	16. Public administration
	17. Education
	18. Health and social work
	19. Other community, social and personal service activities
	20. Labor
2. Primary factors	21. Capital
	22. Public sector
	23. Net taxes on production
3. Government	24. Value-added tax
	25. Net taxes on imports from the Rest of the European Union of 12 member states (EU-12)
	26. Net taxes on imports from the Rest of the world (RW)
	27. Households
4. Private sector	28. Corporations
5. Gross capital formation	29. Savings/Investment
	30. Rest of Spain (RS).
6. Foreign Sectors	31. Rest of the European Union of 12 member states (EU-12).
	32. Rest of the world (RW).

Source: Own elaboration.

Appendix A3. Descriptive Statistics

Variable	Sample Size	Mean (%)	Std, Dev	Min	Max
Satisfaction with the fair [0-10]	319	8,70	1,28	3	10
Satisfaction equal or above 6	319	97,5%	15,7%	0	1
Satisfaction equal or above 7	319	94,7%	22,5%	0	1
Satisfaction equal or above 9	319	85,0%	35,8%	0	1
Agree with the fair being an opportunity for the town [0-10]	319	8,86	1,65	0	10
Agreement equal or above 6	319	94,7%	22,4%	0	1
Agreement equal or above 7	319	94,7%	22,4%	0	1
Agreement equal or above 8	319	87,3%	33,4%	0	1
Agree with corridas being essential for the fair [0-10]	322	8,84	1,29	6	10
Agreement equal or above 6	322	94,4%	23,0%	0	1
Agreement equal or above 7	322	91,0%	28,7%	0	1
Agreement equal or above 8	322	84,8%	36,0%	0	1
Bullfight attendance	322	32,1%	46,7%	0	1
Advantages derived from the fair					
Touristic promotion of the town	322	77,7%	41,7%	0	1
High occupancy in hotels	322	74,7%	43,5%	0	1
Job creation	322	75,0%	43,4%	0	1
Number of listed advantages	322	2,27	0,87	0	3
Disadvantages derived from the fair					
Massification	322	13,7%	34,4%	0	100
Increase in prices	322	50,2%	50,1%	0	100
Excess of noise	322	16,1%	36,8%	0	100
Dirtyness	322	2,0%	14,1%	0	100
Traffic and parking problems	322	2,1%	14,5%	0	100
Number of listed disadvantages	322	0,85	0,68	0	300
Demographics					
Age	322	46,0	16,5	18	84
Gender (Woman=1)	322	50,6%	50,1%	0	1
Household size	322	3,0	1,1	1	8
Education (default category basic studies)					
Compulsory Secondary Education	322	29,4%	45,6%	0	1
Non Compulsory Secondary Education	322	21,8%	41,4%	0	1
Higher Education	322	11,2%	31,6%	0	1

Note: Results obtained using the sample weights.

Appendix A4. Robustness check. Agreement with the fair being an opportunity for the town

	Probit estimates		
	(1)	(2)	(3)
Age	-0.0153 (0.0126)	0.0363*** (0.0131)	-0.00134 (0.00697)
Gender	0.512* (0.284)	-0.0146 (0.285)	0.363* (0.199)
Household members	-0.271 (0.169)	0.115 (0.121)	-0.178* (0.105)
Secondary Education	-0.182 (0.427)	0.252 (0.401)	-0.220 (0.272)
Non compulsory Sec Education	-0.00636 (0.538)	0.0218 (0.446)	0.0198 (0.326)
Higher Education	-1.180*** (0.440)	0.117 (0.451)	-0.473 (0.326)
Listed Advantages	0.00572*** (0.00196)	0.00719*** (0.00162)	0.00482*** (0.00124)
Listed Adv x Attendance BF	0.0115** (0.00527)	6.15e-05 (0.00315)	0.00394* (0.00238)
Listed Disadvantages	-0.00380* (0.00211)	-0.00531* (0.00283)	-0.00434*** (0.00168)
Listed Disadv x Attendance BF	-0.100*** (0.00670)	0.0105*** (0.00378)	-0.00281 (0.00282)
BF Attendance	22.69*** (2.099)	0.451 (0.821)	0.696 (0.583)
Pseudo R2	0.363	0.291	0.178
Log Likelihood	-38.77	-48.14	-94.41
Chi 2	2601	40.97	39.67
p-val Chi 2	0.000	0.000	0.000

Note: N=319. Endogenous variable reports if respondents strongly agree with the fair being an opportunity for the town. Omitted category for education is Primary School and Male for Gender. Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Results obtained using the sample weights.

Appendix A5. Residents' agreement with the bullfights being essential for the Feria del Toro

	Ordered Probit estimates					Probit estimates		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	0.0244*** (0.00507)	0.0241*** (0.00500)	0.0245*** (0.00502)	0.0242*** (0.00495)	0.0233*** (0.00514)	0.0182 (0.0118)	0.0301*** (0.00956)	0.0308*** (0.00775)
Gender	0.0608 (0.133)	0.0528 (0.132)	0.0660 (0.133)	0.0582 (0.132)	0.0870 (0.138)	0.374 (0.255)	0.0703 (0.219)	-0.00769 (0.194)
Household members	0.0506 (0.0639)	0.0489 (0.0633)	0.0374 (0.0636)	0.0360 (0.0631)	0.0353 (0.0639)	-0.167 (0.147)	0.0110 (0.116)	0.0755 (0.0938)
Secondary Education	-0.265 (0.163)	-0.259 (0.162)	-0.248 (0.162)	-0.243 (0.161)	-0.269 (0.166)	0.482 (0.437)	0.0549 (0.325)	-0.347 (0.249)
Non compulsory Sec Education	-0.374** (0.186)	-0.371** (0.184)	-0.302 (0.186)	-0.301 (0.185)	-0.368* (0.197)	-0.435 (0.410)	-0.414 (0.351)	-0.490* (0.288)
Higher Education	-0.362 (0.245)	-0.381 (0.240)	-0.309 (0.242)	-0.329 (0.236)	-0.348 (0.231)	-0.290 (0.418)	-0.429 (0.347)	-0.306 (0.307)
Listed Advantages		0.000872 (0.000766)		0.000850 (0.000766)	0.00107 (0.000932)	0.00129 (0.00160)	0.00270** (0.00135)	0.00346*** (0.00123)
Listed Adv x Attendance BF					0.000483 (0.00139)	-0.0378*** (0.00513)	-0.00737* (0.00424)	-0.00179 (0.00255)
Listed Disadvantages			-0.00162 (0.00107)	-0.00160 (0.00108)	-0.00227* (0.00137)	-0.00494** (0.00195)	-0.00434** (0.00191)	-0.00286 (0.00177)
Listed Disadv x Attendance BF					-0.000312 (0.00176)	0.000178 (0.00185)	0.00752** (0.00321)	0.00344 (0.00250)
BF Attendance					0.0933 (0.437)	12.04*** (1.292)	1.856 (1.217)	1.061 (0.773)
Pseudo R2	0.0403	0.0419	0.0434	0.0449	0.0472	0.269	0.231	0.194
Log Likelihood	-428.2	-427.5	-426.8	-426.1	-425.1	-51.27	-73.54	-110.7
Chi 2	44.85	45.49	45.94	46.88	47.52	489.7	24.65	47.19
p-val Chi 2	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000

Note: N=322. Endogenous variable reports if respondents strongly agree with the fair being an opportunity for the town. Omitted category for education is Primary School and Male for Gender. Standard errors [robust for the ordered probit] in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Results obtained using the sample weights.

