## ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPACTS OF THE ALLTECH FEI WORLD EQUESTRIAN GAMES 2014 IN NORMANDY

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#### Synopsis:

The paper deals with methodological problems of valuation of sporting events. The World Equestrian Games is the case study. Main results are presented.

#### Abstract:

#### INTRODUCTION

From August 23rd till September 7th 2014, Normandy welcomed the 7th edition of the World Equestrian Games. This time, the event registered a record number of participating nations, 64 countries being represented. Thanks to a collaborative research program associating IFCE (grouping French National Studs), INRA (National Institute for Agronomic Research), and the CDES (Centre for Law and Economics of Sport), an assessment of the economic, social and environmental impacts had been done. This event combines several characteristics, on one hand it took place on several venues (four in the city of Caen, and five in other places of Normandy), on the other hand horses are competing in various equestrian disciplines (eight official disciplines and two non-official competitions). The aim of the research is to build decision making tools in relation with the hosting of mega-sporting events, and considering the three dimensions of the event that seems to us as complementary (economic, social and environmental).

## THEORITICAL BACKGROUND

Numerous researches were dedicated at measuring the impact of sporting events, in particular on the economic aspect. We can quote, among so many authors, the works of Noll and Zimbalist (1997), but it is only in the recent past that literature became plentiful on the subject: Matheson and Baade (2006), Porter and Fletcher (2008), Kasimati and Dawson (2009), Kurscheidt (2009), Barget and Ferrand (2010), Barget and Gouguet (2007, 2008 and 2010), Kesenne (2005, 2012), Taks (2013), Preuss (2006, 2015). The decision-makers want to make sure of the legitimacy of their decision to welcome mega

sports events, and they try to do so by ordering economic impact studies. Very few studies take into account the social value of sport, we can quote among them the papers of Kavetsos and Szymanski (2008) on the effects on well-being of international sports events. As for the environmental part, we can refer to the works of Chappelet (2008). Researches of Barget and Gouguet (2010) open the way on a three-dimensional approach of the impact of sporting events. It is a necessity to deal with these three types of effects, since the hosting of a sporting event could be hardly justified by the economic impact alone.

## METHODOLOGY

The study that is presented here is one among the few including a measure of the economic, social and environmental impacts of an event of this scale. These three approaches are complementary to analyze the effects of the World Equestrian Games.

As regards the economic impact, the appropriate territory for the analysis has first to be identified, and we estimated the economic impact at two different levels: the urban area (Caen La Mer), and the region (Normandy). The first step was to quantify the inflow and outflow of money inside and from these territories. The second step was to analyze how this money generated additional revenues (resulting from several rounds of spending) through the Wilson multiplier, so that the global economic impact could be calculated. The Wilson's multipliers are combining an approach through the economic base theory, and through the Keynesian model. It is then possible to take into account specificities in the behavior of economic agents involved during the first round of spending.

The measure of social benefits articulates on one hand a qualitative analysis, and on the other hand a quantitative approach. In the first place, the welfare economics allows the researcher to give a monetary value to these social and intangible benefits. The global value of the event is the sum of the use value for spectators (corresponding to the ticket price and to the consumer surplus) and of the non-use value for taxpayers (calculated by implementing the contingent valuation method). In the second place, the motives of the willingness to pay are scrutinized in a qualitative perspective.

Finally, the short term environmental impact is estimated through the calculation of several indicators of a qualitative as well as a quantitative nature. The measurement unit was adapted to each type of environmental consumptions and emissions. The analysis is especially centered on the organizers decisions that had been made to limit the environmental damages and negative impacts. These three methods are complementary because we can have simultaneously a measure of the change in economic activity, in wellbeing, and in the environmental field.

Data collection is mainly based on interviews of experts before and after the event (qualitative survey), but also on 1,946 questionnaires that had been administered to various stakeholders during the event (spectators, participants, exhibitors, employees...). Additionally, 358 questionnaires had been completed during face to face interviews and on phone by local residents that did not attend the event.

# RESULTS

The World Equestrian Games FEI Alltech<sup>™</sup> 2014 in Normandy generated an

economic impact of 102 M€, to be compared with the operating budget of the event was €82m (including €40m of public money). Therefore this is one of the rare mega-events with an economic impact higher than the organizing budget. Fans represent more than 50% of the total (€56m) with a multiplier coefficient close from 2, while its value is generally between 1.3 and 1.8. This higher value can be explained by the territory specialization in tourism that makes it possible to keep a big part of accommodation and catering expenditures inside the region.

When it comes to social utility, the global wellbeing is estimated at  $\leq$ 44.5m, nearly three quarters benefiting to spectators who attended the event, and the remaining to inhabitants who consider that the Games have a value for society even if they did not consumed it. In the framework of a cost-benefit analysis, this amount of social benefits can be compared to public money spent for the event which amounted to  $\leq$ 39m. The difference between benefits and costs is positive but quiet low (about  $\leq$ 5m), so that the amount of public money spent can be considered as being legitimate, but close from the maximum the community would afford. This confirm the results of the qualitative analysis which has shown that more than 50% of Normandy inhabitants considered that the public support to the equestrian games was at the right level.

The environmental impact is not insignificant because the event generated among other 100 million tons of CO2 in relation with transportation, 500 tons of fertilizer, and about 300 tons of waste. The organizers tried to minimize the environmental damages by implemented several programs such as sorting of waste for all kind of stakeholders, the use of eco-cups in the village, awareness of environmental protection...). According to the results, the World Equestrian Games can contribute to the establishment of new standards in the hosting of mega-events because: the economic impact is substantial, the social utility is at the right level in comparison with the level of public investment, the environmental impact is limited in relation with compensatory measures taken before the event.

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