

BENCHMARKING SPORTS SPONSORSHIP EFFICIENCY

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Aim of abstract/paper - research question

The contribution of the present research is 1) to examine relative efficiency of sports sponsorships, identifying drivers of sponsorship (in)efficiency, and, 2) to present and illustrate Data Envelopment Analysis (DEA) as a method for benchmarking sponsorship efficiency.

Theoretical background

The investments required to become an official sponsor of a sports property increased significantly over the last years. As a result, the effectiveness and efficiency of sports sponsorship is increasingly questioned, particularly in difficult economic conditions. Still, many companies fail to evaluate their sponsorships properly and currently benchmarking sponsorships is a bridge too far in business practice.

In previous academic research, the issue of sponsorship effectiveness has been addressed by examining differences in output variables (awareness, attitude, purchase intent and share prices of the sponsor) over time and between groups (i.e. Nufer & Bühler, 2010). In addition, scholars investigated the effect of one or more antecedents (for example perceived fit and involvement of the target audience) on one or more output variables (i.e. Olson, 2010). Thus, previous research suggests several factors that contribute to higher sponsorship outcomes but the relative efficiency of different sponsorship projects taking into account differences in sponsorship budgets has not yet been investigated. The current research aims to fill this gap.

Research design

Efficiency pertains to a level of performance where the lowest possible amount of inputs are used to create the greatest possible amount of outputs. To measure relative efficiency three approaches prevail: index numbers, Stochastic Frontier Analysis (SFA) and Data Envelopment Analysis (DEA). In this study we show how Data Envelopment Analysis (DEA) can be applied to investigate the relative efficiency of sponsorships. DEA is a non-parametric method involving linear programming to construct an efficiency frontier over a dataset projects. The efficiency frontier is marked by the best performing cases. For each project, input and output variable weights are assigned such that the combined input-output ratio is maximized. This results in an efficiency score for all projects in the sample. (Coelli, Rao, O'Donnell, & Battese, 2005)

We apply DEA on a sample of Dutch sponsorships to evaluate the relative efficiency in terms of effect-to-budget ratio. We selected estimated yearly spendings per sponsorship as input variable for the DEA analysis. These data come from the Sponsor50 a yearly ranking of the largest Dutch sponsors. In addition, we include three output variables; sponsorship familiarity, attitude towards the sponsorship and perceived fit. These outputs involve both cognitive (familiarity) and affective outcomes of sponsorship (attitude and fit). To collect the output data a short, online survey has been designed and distributed among a representative online panel of Dutch consumers older than 16 years (response rate of 69.4%; 1906 respondents). The output scores per sponsorship are based on a minimum of 172 and a maximum of 200 respondents.

In total we collected input and output data on 72 sponsorships involving sponsors from different industries. DEA allows each inefficient sponsorship to be benchmarked against comparable efficient sponsorships in the sample; projects with similar input and/or output levels. In this sense, sponsorship heterogeneity is accounted for.

After performing DEA, a second step involves investigating which sponsorship characteristics affect sponsorship efficiency. For this purpose, we use the obtained DEA scores as a dependent variable in a Tobit regression model. As independent variables we include sponsorship clutter, sponsorship duration and sports popularity.

Results and discussion

The application of DEA in this study reveals that 12.5% of the investigated sponsorships are efficient. A further inspection of the results reveals that efficiency can be achieved at any budget level. Efficient sponsorships involve expensive properties outperforming other projects on output, as well as sponsorships with small budgets performing relatively well (compared to projects with similar outputs but higher budgets. Sponsorship managers of inefficient projects, may use DEA (in particular characteristics of their efficient peers) to investigate how efficiency can be improved.

Our Tobit analysis suggests that sponsorship clutter negatively affects sponsorship efficiency, while sponsorship duration has a positive effect. These results are in line with previous studies finding a negative effect of sponsorship clutter (Cornwell, Relyea, Irwin, & Maignan, 2000) and a positive effect of sponsorship duration on consumer processing of sponsorship (McAlister, Kelly, Humphreys, & Cornwell, 2012). For sponsorship managers, this implies that contract duration and the number of other sponsors are important selection criteria. Likewise, we recommend managers of sports properties to consider these factors in designing sponsorship packages.

We do not find a significant effect of sports popularity on sponsorship efficiency. As an explanation, positive exposure and attention effects of popular sports may be offset by the higher budgets required; as sponsors realize the potential benefit of a popular sports category in terms of media exposure and involvement of the target group, agreements become more expensive and possibly less efficient.

References

- Coelli, T. J., Rao, D. S. P., O'Donnell, C. j., & Battese, G. E. (2005). *An Introduction to Efficiency and Productivity Analysis* (2 ed.): Springer Science+Business Media Inc.
- Cornwell, T. B., Relyea, G. E., Irwin, R. I., & Maignan, I. (2000). Understanding long-term effects of sports sponsorship: role of experience, involvement, enthusiasm and clutter. *International Journal of Sports Marketing & Sponsorship*, 2(2), 127-143.
- Cornwell, T. B., Weeks, C.S., & Roy, D. (2005). Sponsorship-linked marketing: opening the black box. *Journal of Advertising* 34(2), 21-42.
- McAlister, A. R., Kelly, S. J., Humphreys, M. S., & Cornwell, T. B. (2012). Change in a sponsorship alliance and the communication implications of spontaneous recovery. *Journal of Advertising*, 41(1), 5-16.
- Nufer, G., & Bühler, A. W. (2010). How effective is the sponsorship of global sports events? A comparison of the FIFA World Cups in 2006 and 1998. *International Journal of Sports Marketing & Sponsorship*, 11(4), 303-319.
- Olson, E. L. (2010). Does sponsorship work in the same way in different sponsorship contexts? *European Journal of Marketing*, 44(1/2), 180-199.