

GAME UNCERTAINTY AND ITS IMPACT ON STADIUM ATTENDANCE AND TV VIEWING IN PROFESSIONAL FOOTBALL

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Introduction and theoretical background

Since Rottenberg (1956) it is argued that sports competitions need to be tight to be attractive for spectators. However, the literature does not find much support for this uncertainty of outcome hypothesis (UOH). Specifically, match level attendance studies seldom find that more tickets are sold when the two teams have fairly equal chances to win. Moreover, some recent studies have found empirical evidence that stadium attendance rises as the certainty of a home team win rises (Coates, Humphreys & Zhou, 2012) or the certainty of an away team win rises. The latter is explained with spectators preferring to see a high-quality "big" team with a strong brand, such as Bayern Munich (Pawlowski & Anders, 2012) or derive more utility by the chance to see an upset (Coates, Humphreys & Zhou, 2012).

Such findings challenge the presumption that fans understand "suspense of a game" in the same way as sport economists measure game uncertainty. Indeed, Pawlowski and Budzinski (2013) recently introduced a stated preference approach to measure "perceived" competitive balance (PCB) by the fans and could detect that PCB differs from "objectively" (statistically) measureable competitive balance (OCB). Moreover, their three-country study reveals that a significant heterogeneity between football fans exists with regard to their evaluation of CB, i.e. fans differ in their perceptions of balance within the same league. Obviously, PCB reflects an individually weighted evaluation of OCB (in a league or a game) and therefore appears to be much more suitable to test the importance of CB as a possible driver of spectator demand and TV viewing.

While the previous study by Pawlowski and Budzinski (2013) is focused on PCB within a league, this study is focused on PCB of a single game and its importance for stadium attendance and TV viewing.

Methodology, Research Design and Data Analysis

To examine the PCB and its impact on stadium attendance and TV viewing, an online survey was conducted among Facebook fans of a team in the German Bundesliga (VfB Stuttgart). In contrast to previous research on football fans' perception of CB (Pawlowski & Budzinski,

2013, Königstorfer, Groeppel-Klein & Kunkel, 2010), the survey questions are focused on a single game. This appears promising for detecting whether individual differences in the perceived degree of CB directly influence the fans' intention to either go to the stadium or watch the match on TV. The link for the study was only available between 7th and 11th of November until the kick-off of the game VfB Stuttgart against Hannover 96. The final (quality corrected) data base contains n=908 observations.

The impact of PCB on the fans' intention to go to the stadium or watch the match on TV is estimated with a multinomial logistic regression model with robust standard errors. The dependent variable takes three possible values associated with the survey respondent's stated intention "to neither watch the game on TV nor in the stadium", "to watch the game on TV" or "to watch the game in the stadium". The fan's PCB, the variable of interest, is measured on a scale of 0-10 (0=not at all suspenseful...10=very suspenseful) with the question: "How suspenseful do you think the upcoming game (VfB Stuttgart – Hannover 96) will be?" Furthermore, the analysis controls for covariates such as fan involvement (e.g. importance of the club; interest in the Bundesliga), socio-demographics (e.g. gender, age, and marital status) and opportunity costs (e.g. travel distance).

Results and Discussion

Overall, around 6% of respondents (excluding season ticket holders) mentioned their intention to watch the game live in the stadium while another 62% of respondents mentioned their intention to watch the game live on TV.

The results of the multinomial logistic regression model indicate that a higher degree of PCB has a significant positive impact on the intention to watch the game live on TV while there is no significant impact on the intention to watch the game in the stadium. These findings are robust to different specifications and are accompanied by expected effects of the covariates: for instance, highly involved respondents are more probable to watch the game live either in the stadium or on TV, males and singles are more likely to watch the match live on TV and the travel distance has a significant negative impact on the intention to watch the game in the stadium.

Further surveys with the same research design will take place in the upcoming months. Results are expected to be available for a comparison at the end of August.

References

- Coates, D., Humphreys, B., Zhou, L. (2012). Outcome uncertainty, reference-dependent preferences and live game attendance. University of Alberta Working Paper No. 2012-07
- Koenigstorfer, J., Groeppel-Klein, A., & Kunkel, T. (2010). The attractiveness of national and international football leagues: Perspectives of fans of "star clubs" and "underdogs". *European Sport Management Quarterly*, 10, 127-163. doi:10.1080/16184740903563406

- Pawlowski, T., & Anders, C. (2012). Stadium attendance in German professional football – The (un)importance of uncertainty of outcome reconsidered. *Applied Economics Letters*, 19, 1553-1556.
- Pawlowski, T. & Budzinski, O. (2013). The (monetary) value of competitive balance for sport consumers - A stated preference approach to European professional football. *International Journal of Sport Finance* (in press).
- Rottenberg, S. (1956). The baseball player's labour market. *Journal of Political Economy*, 64(3), 242-258.