

GAME OUTCOME UNCERTAINTY AND THE DEMAND FOR INTERNATIONAL TEAM SPORTS

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Synopsis:

Although sports organizers are keen to avoid monopolies so as to trigger consumer demand through outcome uncertainty, empirical evidence on the importance of outcome uncertainty for spectator demand is mixed. Research is also scarce on its impact for national teams in friendly games, tournament qualification games, or major international soccer tournaments. To assess this, we analyze all the German national team's games between August 1993 and July 2014 using TV ratings as a proxy for consumer demand. Overall, our results show a clear correlation between game outcome uncertainty and higher TV ratings. In particular, the closeness of game outcomes positively affects the demand for both friendly and qualification games, while tournament games like FIFA World Cup games remain unaffected by outcome uncertainty.

Abstract:

One of the most important questions in the extensive literature on sports demand is whether such demand is affected by uncertain game outcomes (Borland and Macdonald, 2003; Szymanski, 2003). This issue has been investigated in myriad contexts and sports disciplines since Rottenberg (1956), in his seminal paper on the labor market for baseball players, argued that "uncertainty of outcome is necessary if the consumer is to be willing to pay admission to the game" (p. 246). The resulting "uncertainty of outcome hypothesis" (UOH) implies that, in contrast to other product markets, in sports, a monopolistic situation does not benefit the providers (league organizers). In another seminal paper, Neale (1964) used the 1936 World Heavyweight Championship to exemplify a transnational sporting event in which outcome uncertainty was extremely high, showing that Joe Louis had to fight Max Schmeling to maximize his profits despite a lower probability of winning compared to a match against an inferior opponent.

Subsequent empirical studies have tested the UOH primarily in national team

sports contests such as those in the U.S. pro sports leagues (MLB, NFL, or NHL; Jones and Ferguson, 1988; Lee and Fort, 2008; Paul and Weinbach, 2007; Mills and Fort, 2014) and in several predominantly European soccer competitions (e.g., Forrest et al., 2005; Benz et al., 2009; Buraimo and Simmons, 2009; Scelles et al., 2013). However, despite a substantial and continuously growing body of research on a variety of sporting competitions worldwide, the role uncertain game outcomes may (or may not) play in spectator decision-making remains ambiguous (Borland and Macdonald, 2003; Szymanski, 2003).

Particularly scarce are empirical studies exploring the role of short-term individual game outcome uncertainty in the demand for international team sports, a surprising void given that the top international team sport events (e.g., ICC Cricket World Cup, IRB Rugby World Cup, FIFA World Cup, and UEFA European Championship) frequently rate among the most watched television broadcasts worldwide (see e.g., FIFA, 2014). As far as we know, only two studies have explored outcome uncertainty in an international team sport context and these with contradictory results. Whereas Feddersen and Rott (2011) find that outcome uncertainty, unusually proxied by the actual importance of a certain game, plays a role in the TV demand for international games, Nüesch and Franck (2009) suggest that outcome uncertainty is not relevant for predicting TV ratings.

In this paper, therefore, we re-explore the role of outcome uncertainty in the demand for international team sports by assessing the TV demand for international games played by the Germany national soccer team, internationally also known as 'Die Mannschaft'. In doing so, we do not only contribute to the rich and continuously growing economic literature probing the still ambiguous role of game uncertainty in sports spectator decision-making but also offer useful insights for policy-makers concerned with optimal sporting contest design and the acquisition or distribution of media rights. In particular, by using TV ratings as our proxy for consumer demand rather than, e.g., stadium attendance figures, we are able to avoid several significant methodological limitations present in extant studies on outcome uncertainty's role in national team sports competitions (see e.g., Forrest et al., 2005; Dobson and Goddard, 2011).

Using a rich dataset with detailed information on all 295 international game broadcasts featuring the Germany national soccer (DFB) team between August 1993 and July 2014, we evaluate the potential influence of outcome uncertainty on TV demand using ordinary least squares (OLS) with White (1980) standard errors robust to heteroscedasticity.

Overall, we find robust support for the assumption that spectators do generally care about game outcome uncertainty, proxied by the absolute difference between the teams according to the FIFA World Ranking. In particular, we find that the demand for both friendly and qualification games is positively affected by the closeness of the game outcomes as measured by team quality, while tournament games like FIFA World Cup games are unaffected by outcome uncertainty. Although this phenomenon might be explained by the inherently high outcome uncertainty in a quadrennial competition in which each single

game counts, sport administrators aiming to target demand may be well advised to take into account the potential attractiveness of non-tournament games by scheduling friendly games with opponents of similar caliber.

In closing, implications for policy-makers at FIFA and UEFA, the latter having recently introduced the UEFA Week of Football and UEFA Nations League, are discussed, together with a series of specific recommendations and suggestions for future research.

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