

# How Fans May Improve Competitive Balance- An Empirical Analysis of the German Bundesliga<sup>‡</sup>

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## Abstract

There is an on-going debate about the optimal degree of team solidarity in the German Professional soccer league. Support for a high degree of team solidarity has been coming from the theory of competitive balance and its prediction that fans would otherwise lose interest in sports due to diminished uncertainty of outcome. However, empirical observations show that core assumptions of this theory may not hold in the case of the German Bundesliga. Based on aggregate seasonal gate-attendance and different measures of competitive balance, this paper presents results using vector error correction models and Granger causality tests. Whereas the role of competitive balance for fan attendance remains unclear, we find a robust positive effect of fan attendance on competitive balance. Possible explanations of this effect, in particular its channel and lag structure are exposed in greater detail.

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