What are the effects of Covid- 19 on professional football?

**An analysis of the influences of “ghost games” on home advantage and football viewership on tv**

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Contents

[1 Introduction 1](#_Toc534899587)

[1.1 Problem Indication 1](#_Toc534899588)

[1.2 Problem Statement 3](#_Toc534899592)

[1.3 Research Questions 4](#_Toc534899593)

[1.4 Research Approach 6](#_Toc534899598)

[1.5 Academic Relevance 6](#_Toc534899599)

[1.6 Managerial Relevance 6](#_Toc534899600)

[1.7 Structure of Thesis 10](#_Toc534899609)

[2 Theory 11](#_Toc534899614)

[3 Method 11](#_Toc534899614)

[4 Analysis and Findings 11](#_Toc534899614)

[5 Conclusions and Recommendations 11](#_Toc534899614)

[5.1 Conclusions 10](#_Toc534899610)

[5.2 Recommendations 10](#_Toc534899611)

[5.3 Future Research 10](#_Toc534899612)

[6 Bibliography 11](#_Toc534899614)

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# Introduction

## Problem Indication

Global social distancing measures following the Covid-19 pandemic introduced the phenomenon “Ghost Matches” in the football world. So called “Ghost Matches” are football matches without any spectators attending. Without the fans attendance the matches seemed mere training games, which gives rise to the question what sort of influences this could have on the the outcome of matches. (Agnew, G. A., & Carron, A. V. (1994) indicated that home advantage increased significantly with the density of the crowd. This is confirmed by (…) as they demonstrated how crowd support significantly influences match outcome in Sports.

Due to its popularity, an abundant base of research on football and each of its aspects currently exists. The same holds for the possible advantage of the team playing at home, with several papers trying to disentangle the dynamics at play that could lead to home advantage. (e.g.

Boyko, R. H., Boyko, A. R., & Boyko, M. G. (2007); Pollard & Polla[rd, 2005](https://shapeamerica.tandfonline.com/doi/full/10.1080/02640410601038576?scroll=top&needAccess=true)). Does the crowd raise home team performance, or is the performance of away teams significantly lower in hostile environments. Additionally, (Neville and Holder, 1999; Bokyo 2007) find that crowds could influence referee decisions subconsciously in favor of the home team. (Endrich, M., & Gesche, T.

,2020) quantify this in their paper where they find that away teams on average receive 0.3 cards less and home teams 0.5 cards more per match when there are no spectators.

The batch of matches without fans provides an excellent occasion to delve deeper in the impact of crowds on football matches since there is an abundance in new data for matches played without crowds. Comparing the scores and detailed statistics of matches played across Europe pre and post covid may serve as a baseline model for the effect of crowds on home team advantage.

Questions such as: is home advantage still present in games without a crowd and whether referee behaviour is different without fans will aid in grasping the effect of home supporters on the outcome of football matches.

## Research Questions

The aim of this research translates into the following research questions:

* + 1. What is the effect of the exclusion of home supporters on home advantage?
    2. To what extent is referee behaviour shaped by the home crowd?
    3. What are the implications of “ghost games” on advertising reach for companies

## Research Approach

Providing legitimate answers to the aforementioned research questions requires a combination of theoretical and empirical analysis. Firstly, by analyzing the current and historical literature it is possible to obtain information on influential moderators in the relationship between crowd attendance and team performance. These moderators will then be included into the final dataset to improve robustness of emperical outcomes. The data on football matches allows for both a country level analysis and an aggregate analysis across countries. Data on football matches for the 11 main football leagues is available starting from the year 2000 until the latest season 2020/2021. The dataset is automatically updated weekly to provide the most recent data. These datasets are then combined with data from Fivethirtyeight to incorporate expected goals and team strength moderation into the analysis. Furthermore, broadcasting data for English and Dutch broadcasters is fetched from … to analyze patterns in viewership of football matches. After data collection and construction of the final datasets. … regression and anova will be performed in order to draw valid conclusions from the data.

## Academic Relevance

## Managerial Relevance

## Structure of Thesis

In this paper I will adhere to a 5 chapter structure to format the research. This first chapter serves as a background chapter for the rest of the thesis in which I outline the concept to be researched. Furthermore, I provide reasoning why the research is relevant from both an academic and a managerial point of view. In the second chapter I construct the theoretical framework that will represent the basis of the empirical analysis in the later sections . In chapter 3, having laid out the theoretical framework, I thoroughly describe the method of analysis required to attain the desired results to allow for insight into the research technique deployed. In the fourth chapter I summarize the analysis and findings of the research in order to answer the empirical questions. Finally, in the fifth chapter, I generate conclusions and recommendations based on the findings of the study. Additionally, I discuss the limitations of this study and provide a guideline for possible future research in this area.