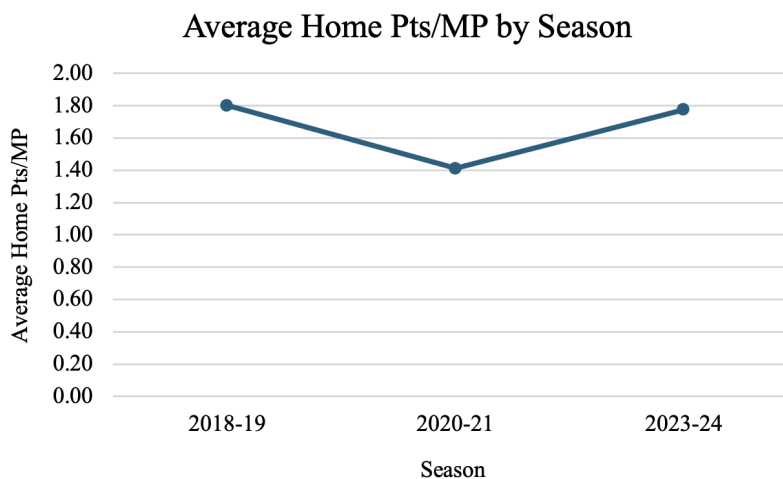


Post-Pandemic Play: Evaluating Home Advantage in the Premier League after COVID-19

Home field advantage has long shaped match strategy, performance expectations, and betting models in professional soccer. The COVID-19 pandemic disrupted this advantage when matches were played without fans. This analysis examines whether home field advantage in the Premier League changed post COVID or temporarily weakened and then rebounded. Before coaches or analysts rely on home field advantage in decision-making, they need to know if it still exists after COVID.

Premier League data was sourced from FBref.com and organized in the *PL Analysis* workbook. The final cleaned dataset is under *Analysis 2 (CP7)*, where one row represents one team observed in a given season: 2018-19 (pre COVID), 2020-21 (COVID), and 2023-24 (post COVID). With 20 teams per season, the final table includes 60 rows.

I compared average home points per match (Pts/MP) across seasons to measure changes in home field advantage. I then used a linear regression adding average attendance to test whether reduced crowd presence explains the COVID season decline. During the COVID season, Premier League teams earned 0.39 fewer home Pts/MP than pre COVID. That equals 7.41 lost points or two to three wins over a full 19-match home season. This is large enough to affect standings, qualification, and relegation risk.



Home advantage weakened sharply during COVID and recovered by the 2023–24 season as fans returned to stadiums.

Note: This figure reflects only the 14 Premier League teams that competed in all three seasons.

Coaches and analysts should continue to value home matches as a competitive advantage, but adjust expectations when crowd support is limited by treating attendance as a key model input.

Risks & Limits: The COVID impact was not uniform across teams. Weaker clubs were generally less affected. Teams should monitor their own historical sensitivity to crowd presence rather than rely on league averages.

Next Steps: Re-run the regression model using performance gap (home GD - away GD) to confirm that the attendance result is not driven by Pts/MP alone.