Is the League of Ireland Under-supported?

Evidence from a European Perspective*

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Abstract

This study uses data from 48 European top flight soccer leagues over 16 recent seasons to examine, inter alia, the impact of competitive balance and league quality on attendance. The empirical approach permits an investigation of whether the League of Ireland fares less well than it should in terms of attendance. We find no persuasive evidence that the League of Ireland is under-supported.

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INTRODUCTION

The less fashionable soccer leagues of Europe endure a continual struggle to survive when operating in the shadow of more prestigious neighbours. The League of Ireland provides an example of one such league. The annual revenues generated by the 20 teams in the league's top two tiers was estimated to be about £10 million in the 2014 season.[1] In contrast, the neighbouring English Premier League generated £3.3 billion in revenues in the 2013/14 season, while over the same period in the second tier in England turnover was about £0.5 billion.[2]

Advocates for the League of Ireland continually express irritation at the extent to which Irish soccer fans shirk from supporting domestic clubs in favour of mostly English ones. A VisitBritain Survey conducted in 2011 found that out of 767,000 tourist trips to Britain that included attending a football match, the largest single group, comprising about one-fifth of the total, was from Ireland. A further reflection of Irish support for an English Premiership club was provided by a friendly fixture in 2014 when top Dublin club Shamrock Rovers hosted a Liverpool reserve side. The game attracted 42,000 spectators, most of whom were Irish-based Liverpool supporters.[3] The attendance was about 27 times the League of Ireland Premier Division average for the 2014 season.

A number of reforms have been introduced in recent years to stimulate spectator interest in the domestic game, the most significant of which was the introduction of summer soccer in 2003. The Football Association of Ireland (FAI) commissioned a White Paper in 2005, subsequently known as the Genesis Report, to outline a future strategic direction for the game in Ireland. It endorsed the proposed merger of the FAI and the league, and suggested the creation of a 10 team elite division with a similar number of teams competing in a second

tier. Although the anticipated merger occurred in 2007, the suggested league re-structuring never materialized.

The average annual attendance figure for the League of Ireland Premier division over the last 16 years has been about 1,750.   A key theme that runs through the arguments of those defending the domestic league is that it under-performs in terms of attendance, and its quality justifies higher spectator numbers.   This was the implicit view of the Genesis Report, which suggested a minimum average attendance of 3,120 for the Premier Division as a feasible objective by 2010. This was never achieved and the league has rarely achieved 50% of this target in the five seasons since.

Two research questions that emerge from the foregoing is whether the League of Ireland is under-supported relative to comparable leagues and whether the type of attendance targets suggested in the Genesis Report were actually feasible or even sensible. These two research questions are interrogated using data from 48 European leagues over a protracted period of time and situating the Irish performance within this broader continental context.

The structure of the paper is now outlined. The next section describes the data used and outlines the empirical methodology. This is followed by a subsequent section describing the results. A final one offers some concluding remarks.

DATA & EMPIRICAL METHODOLOGY

The data comprise a panel of 48 countries affiliated to the Union of European Football Associations (UEFA) and span a 16-year period from 2000 to 2015.[4] The analysis exploits data averaged over this period with the country providing the unit of observation. The key dependent variable is the log attendance in a country's top tier averaged over the number of years for which these data are available over this period. Four explanatory variables are included to capture: market size (country population); economic activity (the unemployment rate); the league's competitive balance (computed using the Herfindahl index[5]); and the quality of the league (based on UEFA's league coefficient). The full set of variables are described and summarized in table 1.

TABLE 1 ABOUT HERE

The regression model is expressed as follows:

$$Ln(ATTEND)_i = \gamma_0 + \gamma_1 UR_i + \gamma_2 ln(POP)_i + \gamma_3 HICB_i + \gamma_4 COEF_i + \xi_i \qquad [1]$$

where i=1,……48 and ξ_i is an error term.

The model is estimated using the OLS technique, so estimation is effectively conducted using a between-estimator.[6] The expression in equation [1] assumes that competitive balance (and quality) influence attendance. Thus, we ignore issues on the direction of causality between attendance and competitive balance, as the evidence on this remains ambiguous.[7] However, we take the view that the estimation of [1] provides a useful framework within which our key research questions relating to the League of Ireland can be investigated.

EMPIRICAL RESULTS

Table 2 reports the OLS estimates for specification [1]. The equation fits the data exceptionally well as evidenced by the high adjusted-R-squared. In addition, the regression model is also found to be free of heteroscedasticity. The point estimates are generally well determined and consistent with prior intuition. A country's population is found to exert a positive effect on average attendance, while the unemployment rate impacts it negatively.[8] The estimated effect for the Herfindahl index confirms an inverse relationship between competitive balance and attendance. The estimate suggests that a one point improvement in competitive balance is associated with an increase in average attendance of 8.1%, *ceteris paribus*. The playing standard of the league, as proxied by the UEFA league coefficient, also exhibits a positive effect with a one point rise yielding a 15.4% increase in average attendance*.*

TABLE 2 ABOUT HERE

The kurtosis (and normality) diagnostic tests reveal evidence of outliers, and this is confirmed by the box plot of the regression equation's residuals (see Figure 1). The two residuals that feature as outliers in this figure are the Scottish Premiership League (a positive residual) and the Welsh Premier League (a negative residual). In order to address this issue we include an impulse dummy for each of these two observations, which nets out (or excludes) their empirical contribution to the analysis. In addition, we also include an impulse dummy for the League of Ireland to inform our primary research question. The magnitude of the impulse dummy coefficient provides an estimate of the prediction error for the observation in question. The corresponding t-ratio is the studentized residual with a significant t-ratio indicating the observation as an outlier.

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The inclusion of the impulse dummies for the Scottish and Welsh observations resolves the normality problem but does not materially alter the reported estimates for the set of included covariates. The studentized residuals in both these cases are found to be statistically significant. In particular, the residual for the Scottish Premier League (SPL), which is about 3.4 standard errors above the regression 'line', suggests support for the SPL is well above what would be expected given the country's population, economic conditions, and the quality and competitiveness of the league.[9] The reverse is the case for the Welsh Premier League. In particular, its average attendance is about 82% lower than predicted using the covariate realisations for Wales.

The second column of table 2 also includes an impulse dummy for the League of Ireland and the t-ratio suggests that the league is only about half a standard error below the regression 'line'. Therefore, although the negative sign suggests that attendances should be slightly higher than the actual, the magnitude of the gap is not found to be statistically different from zero. Therefore, the average attendance in the League of Ireland over the last 16 years is broadly consistent with what would be anticipated given the values of the included characteristics. Thus, there is no persuasive evidence to suggest that the league is under-performing in terms of attendance.

As noted earlier, the Genesis Report set a minimal average attendance target of 3,120, which was viewed as achievable within a short period of time. We now explore the feasibility of this objective. In so doing, we hold population and the unemployment rate constant and focus down on the two variables that the putative re-structuring plans and policy initiatives of league administrators could potentially influence – competitive balance and league quality. Specification [1] can be used to express the total change in log attendance as follows:

$$\text{dln(ATTEND)} = \frac{\partial \text{ln(ATTEND)}}{\partial \text{COEF}} \text{dCOEF} + \frac{\partial \text{ln(ATTEND)}}{\partial \text{HICB}} \text{dHICB} \qquad [2]$$

Using the relevant OLS coefficients from column one of table 2, the empirical estimates for the partial derivatives are given by:

$$\frac{\partial \text{ln(ATTEND)}}{\partial \text{COEF}} = 0.1544 \text{ and } \frac{\partial \text{ln(ATTEND)}}{\partial \text{HICB}} = -8.1444$$

The change in the log attendance envisaged by the Genesis Report was approximately 0.5740, which represents just under a doubling of attendance relative to the league's 16 year average. What changes in the UEFA coefficient and the league's competitive balance are required to achieve this target? In answering this question we allow both of these factors to perform a roughly comparable and concurrent roles in meeting the specified target. In order to meet the stated objective, the League of Ireland's UEFA coefficient would have to increase by 2.135 points, while the degree of competitive imbalance in the league, as measured by the Herfindahl index, would have to fall by 0.03 points.

The foregoing requirements represent an extremely ambitious scenario. The League of Ireland's average UEFA rank over these 16 years was a lowly 38th. The increase would require the league to improve its ranking by 15 places to 23rd. Over the period covered by our data, the league has never been ranked higher than 33rd. The average Herfindahl index value for the league over this period was 1.117. The improvement in competitive balance required to meet the target suggests an index value of just under 1.09, a level rarely achieved by the league over the last 16 seasons.[10] Therefore, it is not obvious that the ambitious attendance target contained within the Genesis Report was either feasible or sensible.

CONCLUDING COMMENTS AND REMARKS

There is general agreement that the League of Ireland operates in a very challenging and difficult market environment. In addition to the direct competition from the Premier Leagues of England and Scotland, it also faces domestic competition for spectators from other popular team sports within the country, primarily professional rugby and the Gaelic Athletic Association (GAA) amateur codes of hurling and football. Advocates of the League of Ireland may puzzle as to why it fails to attract better support, but a lack of competitive balance and its poor quality are two implicated culprits. We find no persuasive empirical evidence that the League of Ireland is under-supported. The levels appear appropriate given both its quality and its competitiveness.

Ten years after the Genesis Report, the more recently published Conroy Report now provides a template to delineate a new way forward for the League of Ireland. It proposes (again), *inter alia*, a ten team league for the 2017 season with a split for a final series of matches involving teams in the top six positions. Fortunately, in contrast to its progenitor, the latest contribution to the debate resisted any temptation to specify attendance targets. For sure, the proposed reduction in the number of teams within the league is likely to improve competitive balance. This may eventuate in a greater concentration of the league's playing talent among a smaller number of clubs. This may also enhance average fixture quality and the overall standard of play in the league.[11] The current study suggests that ameliorating competitive balance may be one mechanism through which attendance levels are enhanced. However, improvements in competitive balance are likely to yield only very modest increases in attendance.

The empirical analysis reported here suggests that long-suffering League of Ireland supporters should perhaps spare a thought for their even more beleaguered Welsh counterparts. Since its inception in 1992, the football league in Wales has faced a perennial struggle to attract spectators. The average attendance in the top tier in the Principality in the three most recent seasons was 311. The average attendance for the second tier of the League of Ireland over the same period was about 50% higher.[12] Our estimates suggests that the Welsh Premier League punches well below its weight in terms of attendance and should be securing average figures that are at least twice (if not more than) their existing levels. However, the league is caught uncomfortably between the popularity of rugby, on the one hand, and a pair of Welsh soccer clubs, on the other, that not only currently compete in the top two tiers in England but are located within a geographical area where nine of the Welsh league's 12 teams are based.[13] League of Ireland supporters should at least be grateful for the small mercy provided by the Irish Sea and the friction it introduces in inhibiting even greater flows of Irish football fans to England.

ENDNOTES

1. This is based on calculations provided in the Conroy Report (2015).

2. See Deloitte (2014) for more details.

3. League of Ireland supporters appear to reserve much of their odium for the Irish fans of English Premiership clubs. The attendance at this particular fixture prompted a fairly heated debate on a nationally televised programme with former League of Ireland player and club manager Dermot Keely using a pejorative term to describe the 42,000 Irish-based Liverpool supporters.

4. The 48 leagues that feature in this analysis include all UEFA affiliated countries with the exception of Andorra, the Faroe Islands, Gibraltar, Lichtenstein, Malta and San Marino. In addition, the panel for the 48 countries is strongly rather than perfectly balanced. This is due to missing attendance data for some of the included countries. However, attendance data for the full 16 years are available for the majority of countries featured in the analysis.

5. See Owen (2014) for a description and discussion of the Herfindahl index.

6. We also attempted to exploit a country-specific fixed effects estimator. However, the absence of adequate variation within countries for measures relating to league quality and competitive balance prevented a meaningful use of this estimator in the current context.

7. For instance, Hall, Syzmanski and Zimbalist (2002), using data from English soccer, report evidence that causality runs from revenues to performance. The findings of Brandes and Franck (2007), using time series data for a number of European leagues, suggest that causality may run from attendance to competitive balance for certain leagues. However, the authors are circumspect in the conclusions offered on this issue.

8. We experimented with using real log per capita GDP instead of the unemployment rate but the estimated effect, though positive, was less well determined than the unemployment rate registering only a prob-value of 0.16.

9. The above average SPL estimate is heavily driven, for many of the years that feature in the analysis, by the popularity of the 'old firm' contests involving Glasgow's historical rivals Rangers and Celtic.

10. It is acknowledged that the estimates used here reflect averages over 48 leagues. It may well be the case they over-estimate the responses in absolute terms for the specific case of Ireland perhaps rendering the target an even greater challenge to achieve.

11. Reilly (2015), in a study focusing on match-level demand in the League of Ireland, found strong evidence of fixture quality being a key determinant of spectator demand.

12. See Jena and Reilly (2015) for attendance figures for the League of Ireland second tier.

13. For example, football clubs like Colwyn Bay, Merthyr Town, Newport County and Wrexham also compete in different tiers of the English league. In addition, English Premiership clubs based in Liverpool and Manchester draw sizeable support from the North

Wales area, and excellent transportation networks allow many Welsh fans the opportunity to support Premiership teams in even more geographically distant parts of England.

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Table 1: Variable Description & Summary Statistics

| Variable	Variable Description	Mean
ln(ATTEND)	The average log attendance in the country's top league.	8.1356 (1.2976)
ln(POP)	The average log of the population of the country.	15.7874 (1.3644)
UR	The average unemployment rate in the country.	10.1355 (6.0656)
COEF	The average UEFA coefficient for the country's league.	4.3235 (3.9679)
HICB	The average Hirfindahl index for the country's league.	1.1244 (0.0467)

Notes: The data are country averages over 16 years and the sample size is 48; standard deviations are reported in parentheses.

Table 2: The Determinants of Average Attendance in European Leagues

Variables	OLS Estimates	OLS Estimates
Constant	12.1743*** (3.5195)	12.3349*** (3.5195)
UR	−0.0229* (0.0123)	−0.0249* (0.0099)
Ln(POP)	0.2967*** (0.0819)	0.3179*** (0.0648)
HICB	−8.1444*** (2.3310)	−8.4852*** (1.4000)
COEF	0.1544*** (0.0286)	0.1358*** (0.0230)
Impulse Dummies:		
SCOTTISH PREMIER LEAGUE	†	1.3707*** (0.4801)
WELSH PREMIER LEAGUE	†	−1.6981*** (0.4125)
LEAGUE of IRELAND PREMIER DIVISION	†	−0.2077 (0.4106)
Adjusted-R^2	0.8469	0.9047
Standard Error of Regression	0.5078	0.4005
N	48	48
Diagnostic Tests:	**Prob-values**	**Prob-values**
Heteroscedasticity	0.2368	0.2642
Skewness	0.3635	0.5012
Kurtosis	0.0114	0.5113
Normality	0.0369	0.6318

Notes: *** ,** and * denote statistical significance at the 0.01, 0.05 and 0.10 level using two-tailed tests; † denotes not included in estimation.

Figure 1: The Boxplot of OLS Residuals
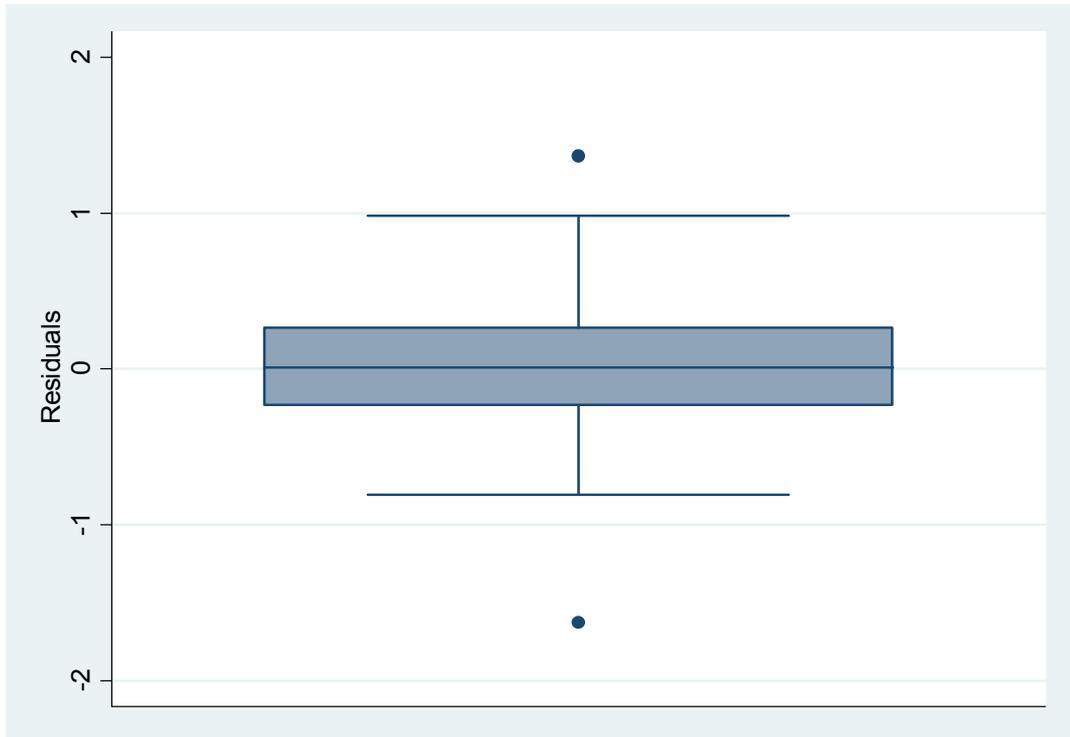
Notes: The OLS residuals are from the estimated equation reported in column one of table 2.