

ORIGINAL ARTICLE



Competitive balance in the English Premier League

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ABSTRACT

The paper explores competitive balance in the top tier of English league football during the era of the Premier League. This era is compared with both the preceding twenty-five year period and also with the era before World War I. Using several statistical measures, the analysis shows that the current high levels of competitive imbalance are not new phenomena. An explanation is proffered in terms of unequal resources between clubs which are inherent to the 'longue durée' of professional league football in England.

KEYWORDS

Competitive balance;
English football (soccer);
statistical measures of
concentration

Introduction

This paper focuses on the issue of competitive balance in the English Premier League since its inception in 1992 through an examination of top-four finishes. It combines descriptive statistics with a conjunctural analysis of the factors that underpin patterns of competitive balance. These levels of competitive balance since 1992 are subsequently compared with the preceding twenty-five year period between 1967 and 1992 as well as the first twenty-five years of top tier English football before the First World War. The purpose of these comparisons is to better situate the current era contextually within an appropriate historical perspective and to help generate a more general and nuanced sociological explanation of the levels of competitive imbalance in the Premier League era.

Competitive balance: academic debates

There has been considerable debate amongst social scientists about the issue of competitive balance in the English Premier League. Broadly two approaches can be identified. The first involves longitudinal econometric modelling of finishing position at the end of each season or of overall points accrued. Much of this literature is based on US sports economics and is both very specialised and quite arcane to most European researchers into sport. The second involves the use of descriptive statistics which are sedimented within broader sociological and historical factors and which are generally

far more accessible to most European sports social scientists. The current analysis sits centrally within this second tradition.

The econometric approach is premised upon various styles of quantitative statistical modelling. Feddersen and Maennig (2008) examined top tier English football in a comparison with other European football leagues and also with US Major Leagues between 1969 and 2004. They concluded that ‘the English Premier League manifests a significantly higher competitive balance than other European leagues’ (p. 7). Lee and Fort (2012) undertook a time series regression analysis of top tier English football between 1888 and 2007. They identified four statistical breakpoints: the last of which was in 1995. This they suggest was based upon three factors: changes in the format of the Premier League, growing revenue equality and the Bosman Ruling in 1995 (p. 267). No evidence is presented for these three claims. Indeed, the article simply refers to the ‘sharing of historical knowledge’ (p. 278) by their colleague Szymanski. It would be most surprising if the Bosman Ruling in 1995 caused a breakpoint simultaneously in the same year as its putative effects would have taken place progressively over subsequent years. Nonetheless, Lee and Fort concluded that ‘competitive balance in the English Premier League has declined at a record rate in the last decade (i.e. 1997-2007)’ (p. 281).

Kent et al. (2013) also concluded that competitive balance in the English Premier League worsened between 1992 and 2008. They suggest that this was due to changes in the back-pass rule which they claim worsened competitive balance. Quite why is left totally opaque. Martinez and Willner (2017) more recently used six different measures of competitive balance to examine the relationship between competitive balance and attendances between 1888 and 2015. They concluded that the Premier League era had the least balance over this period. However, their explanation is perfunctory in terms of any historical factors or context. Indeed, it simply amounts to a couple of sentences.

Various other authors have used descriptive statistics to examine competitive balance in the Premier League. Szymanski (2001) identified ‘the absence of any significant trend in dominance over time, measured by the number of teams accounting for the top positions over different time periods’ (p. 74) in terms of top 3, top 5 and top 10 finishes between 1978 and 1998. He concluded that competitive balance overall was ‘relatively stable’ (p. 75). Michie and Oughton (2004) also examined five-club concentration ratios between 1947 and 2004. They found that this had been ‘roughly constant up to 1987’ but there had been a ‘significant increase since’ (p. 22).

Goossens (2006) examined top 3 finishes between 1963 and 2005 and concluded that there had been ‘a moderate linear rise in imbalance’ (p. 105). König (2009), on the other hand, identified ‘no clear trends’ in terms of competitive balance between 1945 and 2008. Curran et al. (2009) constructed a top 4 index which measured the percentage share of top 4 positions between 1948 and 2008. They concluded that ‘all the data suggests that comparative balance is decreasing’ (p. 1744). This they put down to the impact of the Premier League in 1992 and the growth of the Champions League.

Naghshbandi et al. (2011) only examined one season (2009-2010) in their comparison of six countries and therefore provide no insights into trends over time.

Dousti *et al.* (2012) examined top 5 finishes between 2001 and 2012 in the English Premier League following the methodology adopted earlier by Szymanski and by Michie and Oughton. Neither of their two measures show any significant trend in competitive balance over that period.

There has been a wide range of time frames examined by all these various authors. These have been combined with a wide range of measures and a diverse set of conclusions. None, however, have analysed the Premier League throughout its twenty-five years since 1992 as is done in the present analysis and this in itself is novel.

Clearly there has been a wide range of measurement tools utilised by a variety of authors within the tradition of descriptive statistics to capture the degree of competitive balance. Each of these measures has strengths and weaknesses which revolve around the attempt to encapsulate a complex phenomenon within one summary measure. In this respect the debate about summary measures of competitive balance reproduces earlier debates about general statistical measures of association (see Blalock, 1960; Costner, 1965 and Penn and Berridge, 2010) and also debates about how to measure social mobility (see Yule, 1912; Glass, 1954; Boudon, 1973 and Penn, 1984). In the end there is no 'Holy Grail' in the field of summary measures: there is no one measure that is either the correct or even the most appropriate measure in every circumstance. Each summary measure focuses on a different feature of the problem. In this paper we utilise two different measures of competitive balance that are designed to tease out different aspects of the phenomena.

The present paper examines evidence on top four finishes in the Premier League since 1992 across a series of five year periods. The central research question is how competitive the Premier League has been and whether such competitiveness has declined between 1992 and 2017. These results are then compared with two other twenty-five year eras. The first is the preceding quarter of a century between 1967 and 1992 and the other examines the period from 1890 to 1915.

Competitive balance: wider debates

There has also been considerable disquiet from within the contemporary football industry itself over the last fifteen years about the increasing dominance of top tier (Premier League) English football by a small number of clubs. In 2004 *Sports Nexus* published a widely cited report which suggested that the English Premier League exhibited increasing 'competitive imbalance' (see Campbell, 2004a). The report showed that the 'Big Five' clubs had increased their share of overall Premiership revenues from 26.8 percent in 1993 to 47.5 percent in 2003. William Gaillard – communications' chief at UEFA at the time – stated that 'competitive imbalance is quite pronounced in England' (see Campbell, 2004b). BBC pundit, Mark Lawrenson, voiced his own concerns at the same time: 'the Premiership is predictable because the top clubs have more money and a monopoly over top players' (Campbell, 2004b). Even Victor Chandler, the betting tycoon, complained in 2005 that 'I'm disillusioned with football. You know before the start of the Premier League that only three teams out of twenty can possibly win it. There is no fun in that!' (Sale, 2005).

Dave Whelan, former owner of Wigan Athletic, made his views clear in a typically forthright interview with the *Sunday Express* (see Holden, 2008): 'we know that next year one of the top four teams will win the league and the other three will be in the top four again. That is not competitive'. He also pointed out forcefully that the 'Big Four' quadropoly was sustained by their enormous revenues earned in the Champions' League. In the same year Kevin Keegan claimed that the Premier League was 'in danger of becoming one of the most boring leagues in the world' (Fifield, 2008).

These points were restated in *The Times* by Dickinson and in the *Daily Mail* by Walker (2011) utilising persistent tropes about the increasingly uneven playing field between clubs in the Premier League and the growing lack of competitiveness. Martin Samuel (Samuel, 2012a, 2012b) subsequently bemoaned the 'lack of competition' in the Premier League whilst Tony Barrett (2012) quoted David Moyes – the then Everton manager – as saying 'it has been really hard for clubs outside the top four or five to win anything'. In 2014 Barrett reported in *The Times* that 'the same two or three clubs' have a 'monopoly of success' in the Premier League. Smith (2016) more recently argued that the Premier League's 'first two decades were dominated by successive duopolies (Manchester United and Arsenal, then Manchester United and Chelsea)' and that 'while the game itself dazzles, the top flight has become an increasingly closed shop'.

The view that the top tier of English football has come to be dominated by a small number of clubs has been probed in a succession of annual reports from the consultancy firm Deloitte Touche (formerly Touche Ross) since the early 1990s (see Appendix A). In 1993 Touche Ross pointed out the enormous differences in turnover between clubs in the newly formed Premier League. Manchester United had a turnover of £20.1m whilst Notts County had a turnover of only £2.8m. In 1995 Deloitte argued that the 'rich were getting richer and the poor were getting poorer'. This was part of a virtuous circle for the most successful clubs; 'If a club is financially successful then it can afford to buy better players which allows it to do better on the field ... the opposite is true for clubs which are not financially strong' (p. 16). However, 'financial strength' could also be based upon a rich owner, willing to invest substantial sums in a club. The funds supplied by Jack Walker at Blackburn Rovers permitted the construction of a brand new, 30,000 all-seater stadium at Ewood Park; the services of a top manager (Kenny Dalglish, former manager of Liverpool) and the signing of a range of top players, including Alan Shearer (see Penn, 2002).¹ In this respect, Walker was the harbinger of greater investment in the decade after 2000 when billionaires Roman Abramovich at Chelsea (see Barlow, 2014) and Sheikh Mansour at Manchester City² drove both clubs into the elite of English teams and secured a succession of Premier League titles.

As Boon put it in 1996 'Broadly speaking, the most successful teams in the Premier League are also likely to be the most financially successful and vice versa. This can be attributed to additional Cup matches, higher attendances and greater television coverage which lead to increased sponsorship income and sales of club merchandise'. This analysis was underpinned by the oligopolistic structure of the Premier League between 1991 and 1996. In every season Manchester United were by far the strongest

Table 1. Relationship between Expenditure on Wages and Premier League Position: 1994–2016.

Season	Correlation
1993/4-1997/8	0.47
2000/1	0.55
2003/4	0.65
2006/7	0.65
2008/9	0.60
2012/13	0.65
2013/14	0.67
2015/16	0.54

Sources: Deloitte Reports (see [Appendix A](#)).

club in terms of its turnover. Arsenal, Tottenham Hotspur, Liverpool and Newcastle United were also financially the most successful. The ratio in revenues between the most successful Premier League club (Manchester United) and the least was in the order of 9 to 1 throughout these years. As Deloitte concluded in 1997 ‘Success breeds success and in the Premier League operating profitability and League position are highly correlated’ (p. 23).

The correlation³ between expenditure on wages of players and finishing position in the Premier League has been very high throughout the era of the Premier League ([Table 1](#)). It has also fluctuated considerably around this high overall correlation but there is no discernible secular trend overall towards greater competitive imbalance. Indeed, there has been no evidence produced in this media-based ‘moral panic’ that such a relationship is new to top tier English football. Rather, a mythical ‘golden age’ of previous competitive football is simply assumed.

In this paper we present two measures of concentration in English top tier football (see [Appendix B](#) for the formulae used). The first involves a single index of concentration which measures the degree to which the same four teams occupy the top four positions over a five-year period. The minimum number of clubs finishing in the top four over a five-year period would be four: in other words the same clubs occupy the top four positions in the league in all five seasons. Our index in this situation would take a value of 1. The maximum number of clubs that could finish in the top-four positions over five seasons would be twenty: in this case no club finished in the top-four finishing positions more than once in five seasons. Our index would take a value of 0 in this situation. The second measure assesses the degree to which clubs either cluster around the arithmetic mean of points gained in a season or are widely dispersed in terms of results.

Theoretical approach: structural continuity and conjunctural change

The analysis presented in this paper was underpinned by a set of theoretical and conceptual points of departure. These suggested that social change is both an empirical process and that it often occurs over relatively long periods of time. It was influenced by the templates set out by the Annales School⁴ of structural history. In this approach, a distinction is made between ‘events’, which comprise immediate phenomena of interest for traditional forms of historical analysis, and both ‘structures’ and ‘conjunctures’. ‘Structures’ represent longstanding features of societies that often exist

for lengthy periods of over a century in duration. Examples include the separate household structure in Western Europe since the late Middle Ages and factory production as an emblematic mode of economic organisation since the early nineteenth century. 'Conjunctures' are shorter periods of time and correspond closely to 'eras' in everyday discourse: they are periods of relative stability in social forms but are set within deeper longer-term sedimented structures (the '*longue durée*' in the terminology of the Annales School). Both structures and conjunctures are distinct from the immediate daily flux of events and point to much longer periods of continuity and change.

Based upon this model, we have taken the years from 1890 to 2017 as one 'structural' entity: the period of professional competitive league football in England. During this period, English football clubs were organized as privately-owned capitalist enterprises (see Mason, 1980 and Tischler, 1981) with a small number of large shareholders who, as Directors of these clubs, controlled their finances. This social class basis to the ownership of professional football in England was reinforced physically within the internal spatial organisation of the stadia themselves, where separate areas of seating and facilities within the stands catered for the owners' match-day needs. Our analyses explore the extent to which there have been significant changes in competitive balance between top-tier clubs in England during this period. We also examine subdivisions within this overall '*longue durée*' of English top tier league football. These comprise conjunctures which represent significant discontinuities within the overall trajectory of football historically. This style of analysis was pioneered in the area of the sociology of sport by Penn (2013) in his comparison of the national origins of footballers, managers and owners in English and Italian football between 1930 and 2010.

As has been shown, there has been considerable debate amongst pundits, journalists and academics in recent years over the increasing tendency that the top four positions in the Premier League are taken by the same teams year after year. This is of considerable importance for the competitive performance of such clubs, as finishing in one of the top four positions currently guarantees entry into the lucrative Champions' League⁵. However, is this really the case? Few of the protagonists provide systematic data on finishing positions in the top tier of English football over the '*longue durée*'. The aim of this paper is to examine finishing positions in the top tier of English football since the inception of the Premier League in 1992 and to compare this era both with the preceding twenty five years and also with the era between 1890 and 1915.

Conjuncture A: the era of the Premier League (1992–2017)

The Premier League was created in 1992 and its development has been heavily influenced by the increasing significance of satellite television payments to clubs. The initial deal between the Premier League and the television companies for the 1992/3 season brought in £40 million (Ernst & Young, 2017) whilst the deal for 2001 to 2004 generated £1.2 billion. The latest contract between Sky TV, BT and the Premier League will bring in £5.14 billion between 2016 and 2019. The international television deal has brought in a further £1.1 billion per season since 2016.

The revenues of the Premier League had risen from £170 million in 1991/92 to £3.6 billion by the 2015/16 season. Indeed, on average each Premier League club generated more income in 2015/16 than the entire First Division in 1991/92.

The era of the Premier League has witnessed a major transformation of stadia. These are now required by law to be all-seater but despite this constraint overall attendances in the Premier League have risen from 9.8 million in the 1992/3 season to 13.9 million in 2015/16 (Andersen, 2016). The average attendance in the 1992/93 season was 21,125 but by the 2013/14 season this had risen by 74 percent to 36,691 (Ernst & Young, 2015). Average stadium utilisation in 1992/93 stood at 69.6 percent but by 2015/16 it stood at 95 percent.

This conjuncture has also witnessed an acceleration in the globalisation of English football. By 2010, 51.8 percent of players in the Premier League were from outside the British Isles, as were 35 percent of managers (coaches) and 11 club owners compared to 1992 when only around 20 percent of players were from overseas (see Penn, 2013).

The conjuncture covering the duration of the Premier League has been characterised as an era of emerging post-modernism within football (see Penn, 2008 and Paramio, Buraimo, and Campos, 2008). The traditional features of the game have been progressively dismantled in an era of increasing globalisation. This has been associated with an ever-growing impact of television on the game, particularly satellite pay-to-view programming. Games no longer involve the ritual of a 3pm kick-off on a Saturday. Matches now take place over a wide range of differing starting times which are dictated largely by satellite television and the scheduling of various European-wide competitions (see Penn, 2004). The game has ceased to be primarily working class in terms of spectators (see Bale, 2000). The price of tickets has grown enormously in the current period (see Conn, 2014), partly as a consequence of the imposition of all-seater stadia (Penn, 2005) after the Report by Taylor (1990) into the Hillsborough disaster.

These developments have paralleled a simultaneous branding of clubs and supporters. The incorporation of supporters into clubs' brands is more than simply economic. Contemporary Premier League football stadia have been radically transformed into multi-functional sites where playing football is one activity amongst many (see Penn & Kiddy, 2009). Indeed they provide venues for major rites of passage, including weddings, baptisms, funerals and bar-mitzvahs (see Penn, 2008). These matters of 'life and death' involve the symbolic and emotional bonding of clubs with their supporters which transcends the purely material.

Table 2 presents the patterns of top four finishes in the English Premier League since 1992. For each of the five year periods since 1992 twenty clubs could potentially have occupied the top four finishes. This would signify complete competitive balance and a concentration ratio of zero (see Appendix B). Conversely, the same four clubs could have occupied these top four finishes in each of the five seasons and the concentration ratio would have been 1. The results in Table 2 reveal that the pattern of top four finishers was highly concentrated. Indeed, Manchester United finished in the top four of the Premier League in 22 of the 25 seasons. Arsenal finished in the top four 21 times and Liverpool 14 times. Overall only fourteen clubs have secured a top four finish during this quarter of a century. In the next section these patterns will be compared with the preceding twenty-five year period.

Table 2. The Premier League Era (1992–2017).

Period	1992/3– 1996/7	1997/8– 2001/2	2002/3– 2006/7	2007/8– 2011/2	2012/3– 2016/7
Number of seasons	5	5	5	5	5
Most successful team	Man Utd 5	Arsenal 5	Arsenal 5	Arsenal 5	Man City 5
2nd most successful team	Blackburn 3	Man Utd 5	Chelsea 5	Man Utd 5	Arsenal 4
3rd	Liverpool 3	Liverpool 4	Man Utd 5	Chelsea 4	Chelsea 4
4th	Newcastle 3	Leeds 3	Liverpool 3	Liverpool 2	Liverpool 2
5th	Arsenal 2	Chelsea 2	Everton 1	Man City 2	Man Utd 2
6th	Aston Villa 2	Newcastle 1	Newcastle 1	Spurs 2	Spurs 2
7th	Norwich 1				Leicester 1
8th	Nottm Forest 1				
Total no. of teams in top four	8	6	6	6	7
Concentration index	0.75	0.88	0.88	0.88	0.82

The era of the Premier League since 1992 has clearly witnessed a relatively high level of competitive imbalance (see Table 2). Lee and Fort (2012) claimed to have demonstrated that ‘competitive balance has declined at a record rate for the last decade’ (p. 281). However, this is only shown for the period between 2001 and 2007 in their Table 4 and Figure 2. Their own analysis ended in 2007 and it is clear from Table 2 of our analysis (which covers a much longer period) that competitive balance has remained more or less constant since the mid-1990s. Indeed, in the final five years examined competitive balance actually increased in the Premier League.

Conjuncture B: the emergence of modern football (1967–1992)

The quarter of a century prior to the inauguration of the English Premier League witnessed the emergence of modern football. Two critical events determined this conjuncture. The first was the abolition of the maximum wage in 1961. This led to a dramatic explosion of wages which was exacerbated by declining attendances throughout the period. Overall attendances in the First Division fell from 28.2 million in the 1971/72 season to 16.5 million by 1985/86 (Taylor, 2008, 264). To some extent this was masked by the increasing commercialisation of the game. Shirt sponsorship increasingly became the norm and television revenues began to creep up. By the 1978/79 season First Division clubs each received £25,000 per season from the television deal with the BBC and ITV (Taylor, 2008, 268). The second major development was the abolition of the traditional retain-and-transfer system in 1963. This produced an acceleration in the transfer fees paid by the larger clubs for players. In 1962 Denis Law was transferred from Torino to Manchester United for £115,000 but by 1979 the record transfer had risen to over £1 million when Trevor Francis moved from Birmingham City to Nottingham Forest. By 1992 Paul Gascoigne’s record transfer fee from Tottenham Hotspur to Lazio brought in £5.5 million.

This period also saw the increasing influx of players from overseas into the First Division. 73.2 percent of players in the First Division in 1970/71 were English and only 1.2 percent were from outside the British Isles (see Penn, 2013). By 1992, almost 20 percent of players were from overseas: a process facilitated by the U.K.’s entry into the European Common Market in 1973.

Table 3. The Emergence of Modern Football (1967–2017).

Period	1967/8– 1971/2	1972/3– 1976/7	1977/8– 1981/2	1982/3– 1986/7	1987/8– 1991/2
Number of seasons	5	5	5	5	5
Most successful team	Leeds 5	Liverpool 5	Liverpool 4	Liverpool 5	Arsenal 4
2nd most successful team	Liverpool 3	Ipswich 4	Ipswich 3	Man Utd 4	Liverpool 4
3rd	Arsenal 2	Derby 3	Arsenal 2	Everton 3	Leeds 2
4th	Derby 2	Leeds 2	Everton 2	Spurs 3	Man Utd 2
5th	Everton 2	Arsenal 1	Man Utd 2	Arsenal 1	Nottm Forest 2
6th	Man City 2	Aston Villa 1	Nottm Forest 2	Nottm Forest 1	Aston Villa 1
7th	Chelsea 1	Everton 1	WBA 2	Southampton 1	Crystal Palace 1
8th	Man Utd 1	Man City 1	Aston Villa 1	Watford 1	Everton 1
9th	Spurs 1	Man Utd 1	Man City 1	West Ham 1	Norwich 1
10th	Wolves 1	QPR 1	Spurs 1		Sheff Wed 1
11th					Spurs 1
Total no. of teams in top four	10	10	10	9	11
Concentration index	0.63	0.63	0.63	0.69	0.56

The conjuncture between 1967 and 1992 displayed two other central features. The first was the growth of football-related violence ('hooliganism'). This culminated in the Heysel disaster in 1985 and the banning of English teams from all European competitions for five years. The other element in this conjuncture was the dominance of European competitions by English clubs in the twenty years prior to Heysel.

The quarter of a century preceding the inception of the Premier League between 1967 and 1992 also witnessed considerable competitive imbalance (see Table 3). However, it was somewhat more competitive than the era since 1992. Overall, 21 different teams achieved a top-four finish. The era also showed marked stability: there was no strong evidence of increasing competitive imbalance. Overall, Liverpool was by far the most dominant club with 21 top-four finishes. Arsenal had 10 top-four finishes and Leeds United and Manchester United had 9.

Conjuncture C: the classical era (1890–1915)

The final conjuncture examined in this analysis covers the classic period from the inception of organised competitive English professional league football in 1888 until the cessation of football in 1915 as a result of the increasing severity of the First World War. In this era professional league football was concentrated in the industrial heartlands of English manufacturing industry in the North and the Midlands. During this period the game gained enormously in popularity and the classic, iconic stadia were built to accommodate burgeoning crowds. Previous analysts like Mason (1980), Vamplew (1988) and, to a lesser extent, Taylor (2005, 2008) have categorised this conjuncture as the classic period of English league football.

It is clear from Table 4 that certain clubs were dominant in this era. The 1890s witnessed the dominance of three teams in the top four places in the First Division of the English league. These were Aston Villa, Everton and Sunderland. This was the result of a range of factors, most notably the differences in resources between English league clubs at this time. Preston famously lost the key members of its 'Invincibles' team in 1890 to clubs with much stronger finances, including Everton, Aston Villa and Sunderland (see Mason, 1980). These same three clubs along with Newcastle United –

Table 4. 1890–1915: The Classic Era.

Period	1890/1– 1894/5	1895/6– 1899/1900	1900/1– 1904/5	1905/6– 1909/10	1910/1– 1914/5
Number of seasons	5	5	5	5	5
Most successful team	Aston Villa	4 Aston Villa	4 Everton	3 Newcastle	5 Aston Villa
2nd most successful team	Preston	4 Everton	3 Newcastle	3 Aston Villa	2 Blackburn
3rd	Sunderland	4 Sheff Utd	3 Sunderland	3 Blackburn	2 Everton
4th	Everton	3 Derby	2 Aston Villa	2 Everton	2 Man Utd
5th	Blackburn	1 Sunderland	2 Man City	2 Liverpool	2 Oldham
6th	Bolton	1 Wolves	2 Wednesday	2 Bristol City	1 Sunderland
7th	Derby	1 Bolton	1 Blackburn	1 Man City	1 Bolton
8th	Notts County	1 Burnley	1 Liverpool	1 Man Utd	1 Burnley
9th	Wolves	1 Liverpool	1 Nottm Forest	1 Preston	1 Middlesbrough
10th		Preston	1 Notts County	1 Sheff Utd	1 Newcastle
11th			Sheff Utd	1 Sunderland	1 Wednesday
12th				Wednesday	1
Total no. of teams in top four	9	10	11	12	11
Concentration index	0.69	0.63	0.56	0.50	0.56

the team of the first decade of the twentieth century (see Hutchinson, 1997) – dominated the league during the next decade as well. Overall, Everton secured 14 top-four finishes, Aston Villa 13, Sunderland 12 and Newcastle United 9 between 1890 and 1915. Nonetheless, 22 different clubs featured in the top four during the period. All but Bristol City were from the original Northern and Midlands heartlands of the league at that time.

Why was there a relatively high level of competitive imbalance in the old First Division in its early years and why did it fall towards the beginning of the First World War? There was a series of inter-related factors at work. The first involved the large differences in revenues between clubs that emerged very soon after the inception of the Football League in 1888 (see Mason, 1980, chapter 3 and Vamplew, 1988, chapter 8). Preston North End – who won the first two championships (see Metcalf, 2013) – found it increasingly difficult to compete with teams from the larger conurbations (see Mason, 1980, 46 and Sanders, 2009, 145). The same applied to Bolton Wanderers (see Marland, 2011), Blackburn Rovers (see Jackman, 2009), Burnley (see Lee & Whalley, 2002) and Accrington. These clubs from the medium-sized Lancashire mill towns could only attract large gates intermittently. These generally featured games against either their nearest rivals geographically or one of the leading teams in the First Division at the time of the match (see Jackman, 2009, Marland, 2011 and Ross and Smailes, 1993) or at Christmas and the New Year.⁶ The bulk of revenues at this time came from gate receipts (see Vamplew, 1988, 83), although Preston infamously received illegal financial support via their General Manager, Major Sudell, who was imprisoned for embezzlement in 1895.

A major factor exacerbating these economic differences between England's top tier clubs was the creation of the transfer system in 1893. This enabled the economically more powerful clubs to buy players from their smaller rivals. However, it was even more effective in funding the continued flow of professional players from Scotland. There had been a longstanding connection between the top English clubs and Scotland dating back to the early 1880s (see Sanders, 2009). Blackburn Rovers, Darwen

and Preston North End employed large numbers of Scottish players covertly as professionals at this time (see Francis, 1925). Indeed, by 1910, 19.3% of English Football League players were Scots (Vamplew, 1988). Clubs like Newcastle United (see Hutchinson, 1997), Sunderland, Liverpool and Everton continued to recruit large numbers of Scots both before and after the First World War (Lanfranchi & Taylor, 2001 and Penn, 2013).

This migratory pattern reflected the strength of Scottish football in the period before 1914. Scotland was the home of tactical innovation in the last quarter of the nineteenth century (see Sanders, 2009). The Scottish 'passing game' proved superior to the more traditional 'dribbling' style prevalent amongst the earliest English teams. Indeed, between 1872 and 1887, Scotland won 10 of the annual international fixtures with England. The transfer system enabled the more affluent English clubs to outbid their smaller rivals in the market for Scottish imports.

The dominance of the larger financially powerful English clubs led to a counter reaction. In 1901, after almost a decade of attempts, the English Football League brought in a maximum wage for all players in an attempt to level the competitive field between clubs. In many ways this was successful⁷ and the dominance of the traditional large clubs like Aston Villa, Everton and Sunderland was somewhat curtailed. Between 1900 and 1915 significantly more teams finished in the top 4 (see Table 4) and the index of concentration fell to its lowest level in the entire period. Vamplew (1988), in his seminal economic history of British sport prior to World War 1, also provided strong corroborative evidence that there was increasing competitive balance in the English First Division in the first two decades of the twentieth century prior to 1915 (see his Tables 9.12 and 9.13).

A significant factor in this process of equalisation was the increasing popularity of football itself. Most clubs developed large stadia during the period between 1900 and 1910.⁸ Indeed most profits earned by First Division clubs were used to finance ground improvements at this time (see Vamplew, 1988, 86). This enabled the teams from smaller localities to compete financially on a more even footing with the clubs from the larger conurbations as they were able to match their revenues from gate receipts as a result of the equalization of attendances in the top tier (see Figure 1). Blackburn Rovers, for instance, opened their new stadium at Ewood Park in 1907 (see Sutcliffe and Hargreaves, 1928) and used the revenues from the increased attendances at their

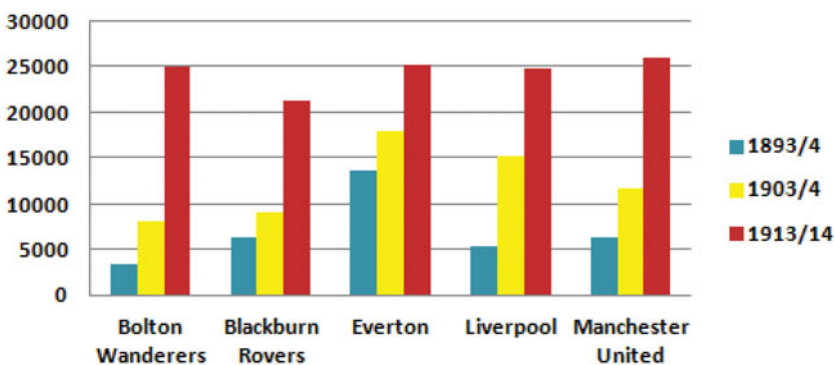


Figure 1. Average attendances 1893/4–1913/14.

First Division home fixtures to break the British transfer record three times⁹ between 1911 and 1914 (see Jackman, 2009). This expenditure resulted in two Division 1 titles (in 1912 and 1914). The expansion of the capacity at Ewood Park was funded originally by the club's Chairman, textile magnet Lawrence Cotton. Average attendances rose from 6725 in 1900 to 22,295 in 1914 (Tubner, 1992) and overall capacity from 12,000 in 1900 to 48,000 by 1914 (Jackman, 2009). Bolton Wanderers – a club that has never won the top tier title – also re-built their stadium at Burnden Park during the early years of the twentieth century. On 11 November 1913, 53,747 spectators attended their home game with Blackburn Rovers. It is clear from Figure 1 that average attendances in the top tier in Lancashire became more equal in the period before the First World War.

It is apparent from Table 5¹⁰ that in each of the three periods of twenty five years scrutinised the number of teams winning the title has been limited. In the pre-World War 1 era, Aston Villa and Sunderland won the First Division title on 11 occasions and overall only 9 teams were victorious. In the quarter of a century prior to the inception of the Premier League, Liverpool won the title on 11 occasions and 8 teams won the title during that era. Only 6 teams have ever won the Premier League with Manchester United winning 13 times. The contemporary era has been dominated by a small number of clubs in terms of winning the title but this is not dramatically different to the previous twenty-five year era or to the pre- First World War era. These patterns closely mirror the results for top four finishes: dominance by a few clubs is the norm but that dominance has been accentuated in the last twenty-five years.

A similar pattern is evident in terms of success in the Champions League (previously the European Cup). In the era of the Premier League English clubs have won the Champions League four times and a further five teams have been beaten finalists. In the era between 1967 and 1992, English clubs were successful on eight occasions and two others were beaten finalists. Overall there is little evidence of increasing success amongst English clubs in the elite competition in European football. Rather the two eras look remarkably similar.

Competitive balance: an alternative measure

Our second measure of competitive balance involves the use of coefficients of variation (see Appendix B). These calibrate the extent to which teams cluster closely around the mean number of points in a season. The higher the coefficient, the greater the dispersion of points gained in a season around the average (arithmetic mean) number of points

Table 5. English Top Tier Champions 1890-2017 (3 Eras).

1890-1915	N	1967-1992	N	1992-2017	N
Aston Villa	6	Liverpool	11	Man Utd	13
Sunderland	5	Arsenal	3	Chelsea	5
Newcastle Utd	3	Leeds Utd	3	Arsenal	3
Blackburn Rovers	2	Everton	3	Man City	2
Everton	2	Derby County	2	Blackburn Rovers	1
Liverpool	2	Man City	1	Leicester City	1
Man Utd	2	Nottingham Forest	1		
The Wednesday	2	Aston Villa	1		
Sheffield Utd	1				

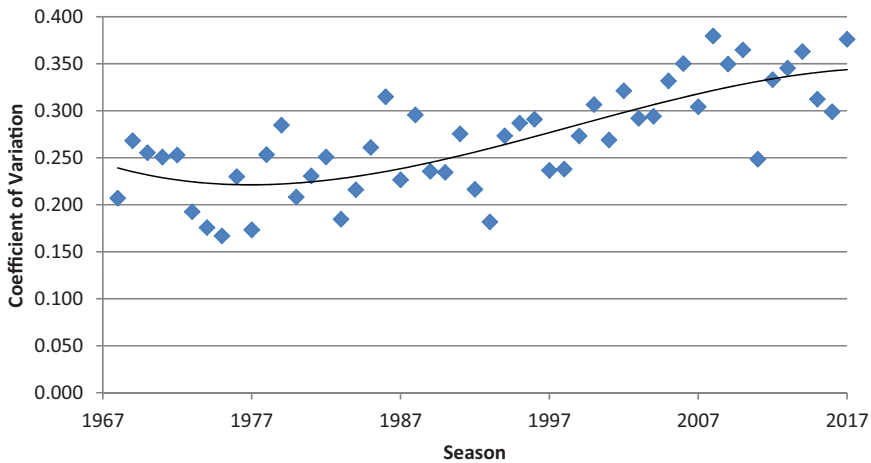


Figure 2. Coefficients of variation, 1967–2017.

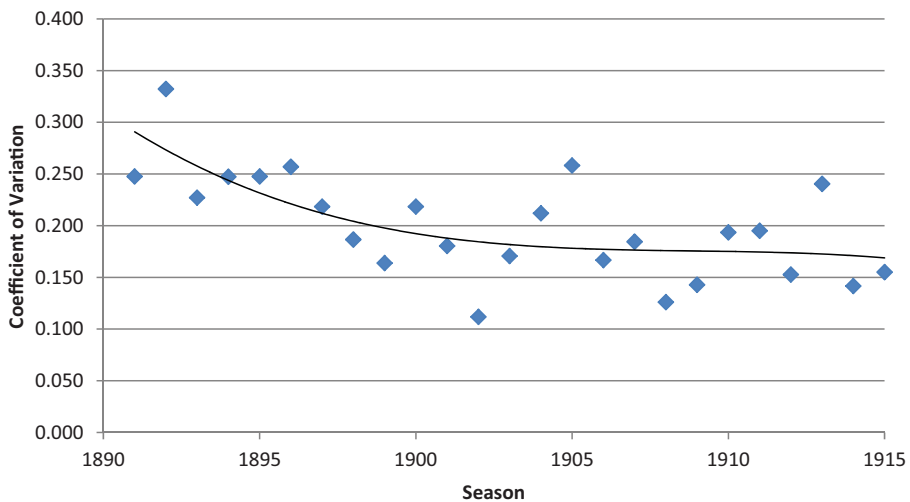


Figure 3. Coefficients of variation during the Classic Era.

scored in that season. Another way of expressing this would be to visualise a relatively high coefficient as indicating a greater elongation (or spread) between points accrued by teams in a season. Conversely, a lower coefficient indicates a high degree of compression of teams around the average number of points scored in a season.

From the 1982–1983 season onwards, a team in the top tier of English football has been awarded three points for a win and one point for a draw, and the mean number of points accrued has varied between seasons. Prior to this the metric was two points for a win, one point for a draw and zero points for a defeat and the average number of points was always the same. The value of the coefficient of variation is independent of the unit of measurement (the number of points accrued by a team in the top tier of English football), and is therefore dimensionless. This means that the various graphs shown in this analysis can be directly compared for trends in competitive balance over time.

It is clear from [Figure 2](#) that the coefficients of variation have increased in size between 1967 and 2017. Coefficients were relatively low in the 1970s but have risen during the period after 2000.¹¹ This indicates that overall the top tier of English football has become less competitively balanced. It is also evident from [Figure 3](#) that coefficients of variation were markedly lower prior to World War I. Indeed, the overall trend was for these coefficients to fall consistently between 1890 and 1915. Competitive balance, therefore, increased during this era.

Conclusions

The various measures that have been deployed in this analysis of the contours of top-tier league position in English football provide considerable support for the notion, popular amongst both pundits and social scientists, that competitive imbalance has been increasing in the English Premier League over recent years. However, the analyses have also shown that this dominance of top-tier English football is not a new situation. There has always been considerable dominance of English football by a relatively small number of clubs. However, there has been a long-term historical shift in the particular clubs that have been dominant in England over time. In the era before the First World War, Aston Villa, Everton, Newcastle United and Sunderland were the dominant clubs. By the 1970s and 1980s, Liverpool and Manchester United dominated. In the last decade or so, Arsenal, Manchester United, Chelsea and Liverpool have repeatedly occupied the top four positions in the Premier League.

Why might this be so? There is a clear need to reconfigure explanations couched in terms of the putative effects of the Premier League, Sky Television or the UEFA Champions League. These can only be contingent factors and there is a pressing need to develop an overall explanation in terms of those factors that have exacerbated the inbuilt tendency for dominance by a relatively small number of clubs. These include general sociological tendencies for dominance by the few as posited by elite theorists such as Michels (1968), Pareto (1991) and Mosca (2012). There is also a pervasive tendency to oligopolistic outcomes in competitive capitalist markets as outlined by economists like Hilferding (2007). However, we can also point to the specific features of English football over the last century or so. Certain clubs have managed to dominate at specific times as a result of particular managers having been able to create winning dynasties for a succession of seasons in the fashion of Aston Villa and Newcastle United prior to the First World War, Manchester United in the 1950s and 1960s, Liverpool in the 1970s and 1980s and Manchester United since the early 1990s. A successful club is critical for the recruitment of the best players in the transfer market and also in attracting the best young talent at youth level.

In the early years of English league football, differences in resources between clubs soon became apparent. Clubs from the larger conurbations generated consistently larger revenues than their counterparts in the smaller industrial towns. This was primarily the result of the larger crowds that they could attract to their home games. This enabled them to entice the best players to their clubs away from their smaller rivals. The introduction of the maximum wage in 1901 and the transfer system eight years earlier helped to stem these increasing inequalities between clubs. This

coincided with a massive wave of new stadia construction which enabled all the clubs in the top tier to compete on a more level playing field.

These conjunctural changes to English football between 1890 and 1915 produced the era of more competitive football during the inter-war years. This continued more or less intact until the abolition of the maximum wage in 1961. Since that time, competitive balance has reversed and become increasingly restricted. English top-tier football has re-entered an era of extreme competitive imbalance. The specific factors that have accelerated this development are varied but they all combine to exacerbate and intensify inherent inequalities in resources between clubs. This has been recognised by UEFA in terms of their Champions' League competition and it remains an open question as to whether the Financial Fair Play restrictions that they have introduced will affect that competition. It is even more uncertain as to whether it will impact upon the competitive imbalance between clubs within the English Premier League but the results in this paper suggest that an era of relative competitive balance in the foreseeable future is highly unlikely.

Notes

1. Blackburn never quite lived up to the scale of Walker's ambitions. Even in their Premier League Championship season in 1994/5 attendances only averaged 25,277. Fans also proved surprisingly reluctant to attend subsequent Champions' League fixtures (see Jackman, 2009).
2. Deloitte estimated Abramovich's expenditure at Chelsea to be around £900m and Mansour's at Manchester City at around £835m (Deloitte, 2013, 64).
3. The measure used by Deloitte is the Spearman rank order correlation 'rho'. This is a nonparametric measure of statistical dependence between two variables. It assesses how well the relationship between two variables can be described using a monotonic function. If there are no repeated data values, a perfect Spearman correlation of ± 1 occurs when each of the variables is a perfect monotone function of the other.
4. See Braudel (1949), Duby (1973) and Le Goff (1990).
5. From 1992 until 1997, only one English team entered the Champions' League. In the 1997/8 and 1998/9 seasons, two teams entered and after 1999 three teams were eligible until the 2002/3 season. Since then, four teams have entered the Champions' League. The 2017-2018 season witnessed five teams in the Champions League for the first time. Manchester United qualified additionally on the basis of winning the Europa League in May 2017.
6. Christmas and New Year fixtures often coincided with games against geographically proximate teams.
7. T. Sydney – a director of Wolverhampton Wanderers – argued that competitive balance was the result of the imposition of the maximum wage which “had worked well because clubs were of a much more equal playing strength” (cited in Vamplew, 1988, 136).
8. Taylor (2008, 72) reported that ‘58 leading professional clubs in England ... moved to new grounds between 1889 and 1910’. Korr (1986, 15) outlined in detail West Ham United's huge investment in their new Boleyn Ground between 1911 and 1913.
9. In 1911 the club purchased Jock Simpson from Falkirk for £1800, in 1913 they bought Danny Shea from West Ham United for £2000 and in 1914 they paid £2500 for Percy Dawes from Heart of Midlothian.
10. Sources: Pead, 1986; Ross & Smailes, 1993; Endlar, 2007; Jackman, 2009 and Marland, 2011.
11. In the two figures a best line of fit has been superimposed. Both lines are cubic polynomials which represent the smoothest fit.

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Appendix B: Statistical measures of competitive balance

1. Index of concentration

For a given five-year period P , this index is calculated using the following formula:

$$CI_P = (20 - \text{number of teams finishing in top four positions in period } P) / 16$$

($P = 1890/1-1894/5, 1985/6-1899/1900, \dots, 1910/1-1914/5, 1967/8-1971/2, 1972/3-1976/7, \dots, 2012/3-2016/7$).

This formula can be generalised to handle any number of seasons. A more general formula to compute the index can be expressed as a function of the number of seasons under scrutiny ($NSEASONS$) and the number of teams finishing in the top four positions in those seasons

(*NTEAMSTOPFOUR*):

$$\{(4 \times NSEASONS) - NTEAMSTOPFOUR\} / \{4 \times (NSEASONS - 1)\}$$

The resulting index is therefore comparable to indices based on fewer (or, indeed, more) seasons. When *NSEASONS* equals five, this general formula simplifies to the initial formula presented for a whole five year period.

This index has been calculated for each five-year period. The indices for the three conjunctures 1992–2017, 1967–1992 and 1890–1915 are presented in the last row of [Tables 2–4](#) respectively.

2. Coefficient of variation

For a given season *S*, the number of teams in the top tier of English football is denoted by N_S ($S = 1890/1, 1891/2, \dots, 1914/15, 1967/8, 1968/9, \dots, 2016/7$). The actual number of points scored by the team finishing in *t*-th position in the top tier in season *S* is expressed as x_{St} ($t = 1, 2, \dots, N_S$). The arithmetic mean (or expected) number of points accrued by teams in the top tier in season *S* can be calculated as follows:

$$E_S[X] = (x_{S1} + x_{S2} + \dots + x_{SN_S}) / N_S$$

The variance in the number of points accrued by teams in the top tier in season *S* can be computed in the following way:

$$\text{Var}_S[X] = E_S[X^2] - \{E_S[X]\}^2$$

The standard deviation, $SD_S[X]$, of the number of points accrued by teams in the top tier in season *S* is the square root of the variance, $\text{Var}_S[X]$.

The coefficient of variation (CV) for season *S* is therefore calculated using the following formula:

$$CV_S = SD_S[X] / E_S[X]$$

The CVs for the two adjacent conjunctures 1967–1992 and 1992–2017 are plotted on the same axes in [Figure 2](#). The CVs for the conjuncture 1890–1915 are plotted in [Figure 3](#). The curvilinear trends over time are superimposed on [Figures 2 and 3](#). In each case, the trend is represented by a cubic polynomial of the form $b_0 + b_1t + b_2t^2 + b_3t^3$.