Staring into the abyss? The state of UK rugby's Super League

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**Introduction**

Principally, professional team sports are heavily linked to the concepts of uncertainty of outcome, competitive balance and profit and utility maximisation, and there is extensive literature relating to professional team sports in this context (e.g. Buraimo, Frick and Hickfang and Simmons, 2015; Fort, 2015; Kesenne, 2015; Leach and Szymanski, 2015; Sloane, 2015; Vrooman, 2015). Professional sports league are primarily structured in such ways to drive fan engagement and to make the sport an attractive 'product' for consumers. However, the way in which certain leagues are structured ultimately has implications for the relative success or failure of individual clubs competing within the league. According to Thomas (1997) the sporting firm can be viewed as the 'league' which produces 'joint' products to insure matches are played between teams in a season-long competition. The problem here is that whilst individual club objectives may be assumed by their ability to win matches and therefore finish higher in the league than their rivals, there is also a vested interest for the ongoing success of the league competition (see El-Hodiri and Quirk, 1971).

For the organising body the fundamental purpose of the league is to be attractive, with balanced competition and an uncertainty of outcome of its matches. Therefore, it appears relevant for governing bodies to organise and control the league in order to meet its objectives. Economic literature accepts that sport leagues require a greater level of collaboration and co-operation between its member clubs (rival firms) than most other sectors of business (Borland and McDonald, 2003; Neale, 1964). As Hogan, Massey, Massey (2013) indicate, it is only by acting collectively that a league and its member clubs can complete a full roster of games resulting in end of season titles through competition that it is attractive to fans, sponsors and broadcasters.

Literature on professional team sports is primarily associated with the importance of uncertainty of outcome, the maintaining of competitive balance or the largely theoretical research on salary caps (see for example Kessene, 2000; Quirk and Fort, 1992; Szymanski, 2003). Moreover, much of this research focuses on American team sports and English professional football with little research work being undertaken on so-termed 'minority' sports such as rugby league. However, such sports exist and have the ability to generate significant financial value through broadcasting and commercial rights packages, have an impact on their supporters and are embedded within the communities in which they exist. Failure of these clubs, in a financial or sporting sense, can have a significant impact on the club, the league and its associated stakeholders.

Twenty years since its formation, there appear to be significant problems with the rugby Super League in the UK as outlined by Howarth and Robinson (2008) and O'Keefe (1999). Promotion and relegation were introduced, dropped, and subsequently re-introduced; the competition has fluctuated between having 12 and 14 clubs; and a licensing system has been introduced and modified. The 2015 structure saw a return to 12 clubs and a new competition framework. Following the conclusion of the regular league season, the 24 participating clubs (12 from the Super League and 12 from the Championship) compete in a play-off series where they are split into three leagues of 8 based upon their league position. Funding for
clubs was to be delivered via a tiered system (in both leagues) in an effort to prevent financial difficulties resulting from relegation.

Some of these structural changes were brought about, in part, by off-field issues and financial struggles at individual clubs including a high profile double administration for Bradford Bulls, one of the successful (in terms of sporting performance) rugby league clubs. Other clubs are not immune to the issues faced at Bradford, indeed the vast majority of Super League clubs have faced financial problems in recent years with Neil Hudgell (Chairman of Hull Kingston Rovers) being very critical of the governing body of the sport;

“The governing body continue to invest widely in the expansionist model whilst at the same time seemingly turning a blind eye to the financial instability of many of its elite clubs, mine included” (Neil Hudgell, April 2012).

Consequently, the primary aim of this paper is to analyse the current state of the UK Super League and its member clubs and to understand whether the responses made by the governing body, have set the conditions to provide a more attractive product, and if they have not, to identify a means by which the league and its clubs can remain attractive thereby fulfilling the conceptual requirements of a league association. The remainder of this paper is structured as follows. The paper first considers the theoretical context of professional team sports before considering the literature available on the Super League itself. Following this, the paper discusses the methods applied and the findings before concluding the key challenges that the sport faces and highlights recommendations for how the sport can become more attractive and sustainable.

**The Economic Theory of Professional Sports Leagues**

According to received theory, the perfect game is a symbiotic contest between equally matched opponents. The practical economic problem is that professional sports leagues form imperfectly competitive natural cartels where games are played between teams with asymmetric market power (Vrooman, 2015). This notion implies that dominant teams may only be as strong as their weakest opponent. Comparisons between the economic environment of professional team sports and that of more traditional commercial businesses have been well documented by sports economists (e.g. Dobson and Goddard, 2011; Leach and Szymanski, 2015). Professional team sports are intrinsically different from other businesses, in which a firm is likely to prosper if it can eliminate competition and establish a position as a monopoly supplier (Dobson and Goddard, 2011). In sport, however, it does not pay for one team to establish such a position due to the joint nature of 'production' in sports.

Principally, professional team sports are heavily linked to the concepts of uncertainty of outcome, competitive balance and profit and utility maximisation (e.g. Buraimo, Frick and Hickfang and Simmons, 2015; Fort, 2015; Kesenne, 2015; Leach and Szymanski, 2015; Sloane, 2015; Vrooman, 2015). The theoretical literature on the determinants of the degree of competitive inequality in sports leagues was developed by US sports economists, with North American team sports primarily in mind. Naturally, the development of this literature has led to comparisons between the North American and European model (see Hoehn and Szymanski,
The European model is and will remain unique, but there appears to be convergence on certain features. In both Europe and the United States, sports leagues are joint ventures that can be viewed as a single entity. Clubs are separately owned with discretion to set prices, market the games, and adopt strategies to compete with other clubs. There are, however, several key differences between the two models, all of which ultimately impinge on factors such as revenue generation and ability to compete. Firstly, the American sports model operates a draft system where the best performing rookie is assigned to the worst performing team. Furthermore, American sports leagues operate under salary caps, share television revenue equally and compete exclusively in domestically structured leagues (aside from a handful of Canadian franchises) (Andreff and Staudohar, 2000). In place of promotion and relegation, evident throughout the European model, changes in American leagues come from adding new franchises and relocating franchises to another city.

Precisely why such differences have arisen in the two continents has never been fully explained (Sloane, 2015). However, Szymanski and Zimbalist (2005) contrast the development of baseball and soccer, with the latter spreading throughout the world, first under the influence of British expatriates and then by local elites, whereas baseball was much more inward looking and concerned with commercial development. Previous literature has argued that profit maximisation is the prime objective of North American leagues and team owners, so profitability is the main factor influencing decisions concerning the award of franchises and relocation (Dobson and Goddard, 2011). Contrastingly, other authors have suggested that the European sports model is more closely related to utility or 'win' maximisation (see Sloane, 1971; Kesenne, 2000; Garcia-del-Barro and Szymanski, 2006).

**The Super League**

In the 1990's a picture of run-down grounds, poor facilities and financial depression compounded the growing lack of interest in rugby league. Many clubs had spiralling wages bills and income had remained static. This, coupled with a growing reliance on the governing body to pull in sponsorship and money from television deals meant that by the end of the 1992-93 season, only fourteen clubs had experienced greater average crowds than in the previous year and seventeen out of thirty-two clubs were technically insolvent (O'Keeffe, 1999). Rugby league was in disarray, and in response to the problems came the invention of the Super League in 1995. The Super League is stated on its official website as the top-level professional rugby league competition in Europe. The Super League currently has fourteen teams: thirteen from England and one from France. The Super League began in 1996, replacing the RFL Championship and switched from a winter to a summer season. The rationale behind the switch to the summer season can be pinpointed to two main reasons. Firstly, the influence of the league's main broadcaster (BSkyB) and, secondly, the weather. BSkyB was, in 1996, receiving a large number of subscriptions for Premier League football in the UK and it did not want to broadcast rugby league during the same time frames. Rather, it wanted something for people to subscribe to after the football season had finished. In relation to the second main rationale, it was also envisaged that a move to a summer season, and more clement weather conditions, would be attractive to spectators. The current format of
the Super League season consists of each team playing 27 games between February and September; 13 home games and 13 away games and a Magic Weekend game held at a neutral venue. At the end of the season, the top 8 teams enter a play-off system leading to a Grand Final which determines the champions of the league.

The Super League began as a closed league (i.e. the scrapping of promotion and relegation) featuring 12 teams (the top 10 teams from the original Rugby Football League Championship and one team from London and one team from Paris). There was a switch from a traditional winter season to a summer season, the introduction of new rules (e.g. video referees) and a proposed Britain/Australian World Club Challenge competition at the end of each season. This was primarily due to the fact that Rupert Murdoch owned both BSkyB and the Australian rugby league franchise and wanted to showcase the two as attractive sporting products to drive pay-tv subscriptions. The roots of the Super League were to be the principles of American team sports, namely a closed league system, a more equal distribution of revenue, salary caps and franchise based clubs. There has been a substantial amount of academic debate regarding the potential benefits and respective pitfalls of an open versus a closed league system that often brings about comparisons between the North American and European model of professional team sports (see for example, see Hoehn and Szymanski, 1999; Andreff and Staudohar, 2000; Sloane, 2006; Szymanski, 2003). The American model has earned praise for the financial stability it brings to its clubs and the increased uncertainty of outcome it provides for its leagues yet the European model has continued with the principle of promotion and relegation in its leagues and a more open format of competition. The majority of literature surrounding this area predominantly focuses on the four major sports in the American model (American football, baseball, basketball and hockey) and football (e.g. Sloane, 1971; Kesenne, 2000; Garcia-del-Barro and Szymanski, 2006; Szymanski and Zimbalist, 2005).

When the Super League was formed, it can be argued that the plan was to take elements from both models of professional team sports. Essentially, Rugby League was attempting to replicate the English Premier League in football whilst maintaining American team sport principles of salary caps and no promotion or relegation (up until the 2014 season). Rugby League is, in global terms, a minority sport but has clearly been modernised in recent times through the advent of pay TV and other global processes (see Rowe, 1997). Indeed Rugby League in England has transformed since the emergence of BSkyB as the Super League broadcaster in 1995 and is under heavy pressure to grow, despite a recent £90million broadcasting deal to support the elite Super League. Rather like association football, and the advent of the FA Premier League (football), traditional sources of finance in the sport were lacking and facilities needed upgrading, notwithstanding the fact that the game needed more widespread promotion. Key aspects of the deal to create the Super League in 1995 centred on a move for the game from a winter to summer sport, that a Super League, similar to the EPL should be established and that clubs should be expanded to markets outside traditional catchment areas (i.e. outside the M62 corridor). Finally some clubs were to merge to become ‘Super Clubs’. All but the final aspect has been implemented with the growth of the game finding limited success.
The predicted outcomes of the Super League included, among other things, greater uncertainty of outcome, increased attendances, greater revenues for clubs, and higher profits, which would ultimately lead to the transformation of rugby league from a northern minority sport into a national/international sport on the model of professional football. However, it can be argued that the 1990s revolution in English professional team sports made football’s Premier League strong financially but has not had the same effect across the rest of football or in other professional team sports. Football now has a larger share of both the total spectator audience (live+TV) and of the total resources available to all professional team sports. It is possible that rugby league, in taking both elements of open and closed leagues, got it wrong in the first instance. For instance, different leagues could require different business models. The competitive nature of the business models applied to professional team sports in the UK in the 1990s, which saw the application of similar models across certain sports, has arguably led to a further fragmentation of the sports industry and the competitive balance swing towards the most high profile sport entity (elite club football) over other more niche products (e.g. rugby and cricket). The benefits to football have come at the detriment to other professional team sports and it was argued back in the early 2000s (O’Keeffe, 1999) that rugby league, rugby union, cricket and some parts of the Football League face serious financial threats over the next decade. It appears that some of these threats still remain today, particularly for rugby league, given some of the context above.

The Super League and Broadcasting Deals

The initial sale of broadcasting rights for the Super League was to BSkyB in 1995 who paid £87m over 5 years. Initially, the Super League was made up of 12 teams (the top 10 teams from the old RFL Championship First Division plus one team from London and one team from Paris). The RFL decided that teams in the Super League would each be given £900,000 a year, significantly more than those in the two lower divisions. This is in keeping with the European model of professional team sports in the sense that distributions of revenue from revenue from broadcasting are shared between a number of divisions, although not evenly. In the American model, revenue is distributed solely within one league which again underlines how rugby league was attempting to merge elements of both models with the formation of the Super League. As previously stated, the principle behind selling to the broadcasting rights to BSkyB was to mirror the approach taken in English football who in 1992 re-named their top division the Premier League and negotiated a £304m deal for the exclusive live coverage of games with the same provider (Cashmore, 1996).

However, unlike English football and the Premier League, rugby league and the Super League have failed to grow and expand the game both on and off the field. EPL domestic broadcasting rights contracts will have generated around £3.4 billion over the three seasons from 2013/14 (an increase of around 60% on the previous cycle) whilst overseas broadcast rights covering over 200 countries will have generated £2.2 billion during the same period (an increase of over 50% on the previous cycle) (Deloitte, 2014). At the time of writing (2015), the next round of broadcasting rights is due to be finalised from the 2016/17 season onwards and commentators are again suggesting that we could see an increase in the value yet again due to the commercial power of the league and the emergence of new players in the
market in recent years such as BT Sport. In contrast, the latest broadcasting deal for the Super League, once again with BSkyB, is worth around £200m over five years from the start of the 2017 season. This means there is a ratio difference between these two elite leagues in their respective sports of 17:1 in favour of the EPL in football.

It must be noted here that football is a far more popular sport in the UK than rugby league but considering the formation of the Super League attempted to mirror the EPL, it is clear that the sport has not progressed as well as it set out to do in 1995. The latest broadcast deal does provide a £73m increase on the previous deal but there are also concerns about the deal from owners of Super League clubs. Wigan chairman Ian Lenagan has been critical of the thinking process behind the new deal and Salford owner Marwan Koukash voted against the deal stating that "you do not commit to a single broadcaster for a period of eight years at a time when there are other players in the field" (BBC Sport, 2014). The deal has also been labelled to be purely for "short-term gain" and people within the game are concerned that "nobody looked ahead" when agreeing the deal. There is a further issue which is directly related to the revenue streams in professional team and that is an overreliance on broadcasting income. Large broadcasting deals are undoubtedly beneficial but they do come attached with wealth warnings particularly in the minority sports where public exposure is so critical to sustaining the professional game. Having a broadcasting deal exclusively with Pay-Tv broadcasters instantly prevents the game from being available to a substantial proportion of the populations. This, in turn, could have a subsequent knock-on effect on matchday attendances and commercial spending from fans. Rugby league itself has suffered from this at the beginning of the Super League when the broadcasting deal meant that live rugby league was no longer shown on the BBC's Grandstand program on a Saturday afternoon. As a result, viewing figures fell sharply from around 1.3m to around 250,000. Declining attendances and participation have been a reoccurring theme in rugby league (see O'Keeffe, 1999) such factors should cause concern for the directors of the RFL and the Super League. It is interesting to note that at the time of writing (2015), the sports other code, rugby union, are discussing the possibility of selling their rights package for the RBS 6 Nations tournament (currently available on free-to-air television) to a Pay-Tv company from 2017. With specific reference to team sports in the UK, football has the largest share of both the total spectator audience (live and television) and of the total resources available to all professional team sports. It was stated back at the turn of the millennium that rugby league, rugby union and cricket faced serious financial threats over the course of the following decade and it is arguable that the same threat is still very much applicable at the present time.

The 'New' Environment for Rugby League

The 'new' environment in rugby league (see figure 1) outlines how the landscape has changed since the 1990's. Rugby league has grown its revenue stream, but continues to be hindered by spiralling expenses and debt levels. The Super League and RFL seem relatively inactive but it is clear that many clubs will need to reinvent their business models, whether in a period of economic uncertainty or not.

<Figure 1 about here>
Like many professional team sports, Rugby League and the Super League in particular find that financial discipline is an essential element to successfully grow the game both on and off the pitch. It is a measure which, among other things, seeks to manage a salary cap, determine licences and extend the reach of the league into competitions which support the Super League system. Like many professional sports leagues the Super League looks to America as a model of how to manage and govern yet almost 20 years since the advent of the Super League clubs have been troubled off the pitch, most recently Bradford Bulls (twice), Salford and the London Broncos. In light of the discussion put forward in the literature review and the problems that the game appears to be facing, is it perhaps a pertinent time to assess how rugby league is performing both and on and off the field of play.

Methodology

Data for this research was obtained by dissecting the annual accounts of 10 clubs between 2006 and 2012. Financial data was not available for four clubs (Salford, Warrington, Widnes and Catalan). The reasons behind these omissions were that the accounts for Salford, Warrington and Widnes had not been filed and, where partial accounts had been filed, they contained minimal financial information. In the case of Catalan, accounts were unavailable due to the club being registered outside of the UK. Partial data was available for Bradford (2006-2010 in respect of the time period for financial information (2006-2012)).

Analysis was performed using recognised industry techniques (see Wilson, Plumley and Ramchandani, 2013). Financial results were analysed in relation to the five key areas of financial performance – all relevant to professional sports clubs and investment. These were; growth, profitability, ROCE (Return on Capital Employed), liquidity and defensive positioning. The first three indicators relate to an organisation’s ability to generate profit and return for its owners and also to maintain a sustainable future. The latter relate to an organisation’s ability to meet its liabilities as they fall due and also how certain organisations are financed and how much capital is made up of debt finance. Alternative models for analysing performance in professional team sports have been excluded on the basis of accessibility to data, particularly in relation to the financial statements of rugby league clubs. Chadwick (2009) outlined that performance measurement in sport has to include both the financial and the non-financial and it is important that this paper considered non-financial factors as well when analysing the current state of the game. It is this holistic approach to data collection and analysis that is the key benefit from a methodological perspective and it also provides a further robustness to the succeeding results and discussion.

To that end, the Active People Survey was used to determine levels of participation and match day attendance data obtained to determine the level of stadium utilisation. As a performance indicator, attendance reflects demand for professional rugby league in the marketplace, and has the advantage of being objective and consistent. Ticket sales driven by this demand provide the main source of income for clubs, which remains a significant income stream, despite the increasing scale of successive television rights deals.
It is acknowledged that there may be methodological concerns regarding the collection of attendance data (due largely to the inclusion by some clubs of non-attending season tickets in routine attendance figures). However, there is at least sufficient data in the public domain to enable comparisons to be made between clubs and over time. This paper considers attendance data available through the Rugby League Project site. Average attendance data was considered for all clubs since the inception of the Super League to track trends over time. A separate piece of analysis was also conducted to present the impact of the 'Magic Weekend' and Grand Final attendance on the sport.

Additionally, analysing the Active People Survey (APS) allows us to track participation rates in the sport, which has links to the future of the game, not only in relation new players, but also the emergence of the next generation of fans that will drive attendance demand. APS data was considered since the formation of APS 1 in 2005/2006 and covers all eight iterations of the survey inclusive of the 2013/2014 report. APS data in this paper is presented on both a national and regional level to consider the assumption that rugby league has traditionally been a sport that has gained more attention in the northern heartlands of the UK. This three tiered approach to data collection and analysis allows us to present a holistic picture of the performance of rugby league and Super League clubs both on and off the pitch.

**Results**

**Considering Financial Health**

The headline findings from the dataset indicate a financial disparity amongst rugby league clubs which has increased during the last 6 years that were analysed. When the averages are considered, the figures appear relatively stable. The total average debt for the 10 clubs for 2006-2012 was around £4.7m whilst the average revenue for the 7 clubs where figures were available stood at £4.5m. However, these averages are somewhat inflated by certain clubs, particularly the revenue figures. The more successful clubs, on the pitch, in recent years, namely Leeds Rhinos, Wigan Warriors, St. Helens and, to a lesser extent, Huddersfield Giants have all seen increases in revenue during the time period analysed with Leeds Rhinos and St. Helens having average revenues of £10.5m and £9.4m respectively. Furthermore, these clubs own their own stadium or, in Wigan’s case, share a stadium with a football club. Consequently, the value of their fixed assets is higher and they have better liquidity.

However, in stark contrast there are some clubs where debt substantially exceeds revenues. The one franchise club based in London (London Broncos), for example, had an average turnover of £1.8m exceeded by an average debt of £7.2m. Moreover, this debt appears to be increasing with the most recent set of accounts showing debt levels of £13.3m against revenue of £1.6m. It is a similar story at clubs such as Hull FC, Hull KR and Castleford Tigers who all have problems with debt and not enough value in their assets to cover the debt compared to other rugby league clubs. The figures in this study suggest a paradox between the more established clubs that own their own stadium and can use such a stadium to generate secondary income and the smaller clubs who have fewer assets and may not own their own stadium. There is a clear problem with debt in rugby league and although this is true for a
number of professional team sports, there is a clear disparity amongst clubs having the financial capability to manage and eradicate the debt.

<Table 1 about here>

The problem with debt in rugby league clubs is further highlighted in table 1. This table shows the debt ratio figures (taken from the balance sheet) in percentage terms for all clubs across all years studied. All clubs, with the exception of Leeds and Warrington, recorded worryingly high debt ratios, with some clubs posting figures of over 100% in certain years. The ratio figures returned by London Broncos are indicative of the discussion above. The club has large levels of debt compared to their respective revenue figures and are currently operating under an unsustainable business model. The contrast between the larger more established Super League clubs and the lesser clubs is further exposed in figure 2. This figure charts the average revenue and average debt across all clubs and also highlights the revenue and debt figures for Leeds and London, clubs at opposite ends of the financial spectrum. Two clear patterns are evident in figure 2. First, the revenue figures for Leeds are above average, indicating the relevant on-field success of the club leading to higher revenues. In contrast, London's inability to attract fans to their matches coupled with poorer on-field performance means that their revenue trend figures are substantially below average. Secondly, the debt levels at Leeds appear to be decreasing when compared to the rest of the league whereas the debt levels at London have considerably increased in recent years.

<Figure 2 about here>

Given the problems that Super League have had with securing lucrative broadcasting deals for their clubs and the fact that the commercial and spectator appeal of the sport remains an issue (as outlined in the extant literature), the importance of match day attendances in driving club revenues is more important in rugby league than in other team sports in the UK, particularly those that have a bigger commercial profile such as football and rugby union. In light of this, the attendances of Super League clubs merits further discussion in line with the aim of the paper.

The importance of attendances to drive revenues of Super League clubs

There has been significant attention placed on attendances in professional team sport, including that in the Super League and particularly since its inception (e.g. O’Keeffe, 1999), as a result of the move to a summer season. As previously stated, the switch in playing season was thought to be justified by a predicted increase in crowd sizes overall, as spectators took advantage of more clement weather. Simultaneously, demand was predicted to rise as a result of higher playing standards, due in part to better ground conditions. Figure 3 shows the average home ground attendance for the league as a whole between 1996 and 2014. Magic Weekend and Grand Final fixtures are played at neutral venues, and data for these are considered separately at a later point in the paper.

<Figure 3 about here>
From a starting point of just over 6,500 spectators per game in 1996, average attendance rose steadily to a peak of just under 10,000 in 2007. Since then, the average home attendance at Super League match has fallen slowly but equally steadily, to just over 8,500 in 2014. As Table 2 demonstrates, overall attendances are significantly higher than in 1996 (p = 0.05). This overall figure hides significant variations between clubs however, illustrated by the contrasting fortunes of three of the league's original teams; Bradford Bulls, Leeds Rhinos and London Broncos.

Over the first eight Super League seasons, Bradford Bulls were the best supported club, on five occasions, averaging over 10,300 spectators per home game in 1996, rising to 15,284 in 2003. This was a period of consistent success for the Bulls, as they won four super League titles and finished third three times. Thereafter however, attendances fell consistently year on year, with the exception of 2007 and 2011. From 2009 onwards, the club finished in the bottom half of the Super League table, culminating in relegation from the league in 2014, and this is reflected in an average home attendance for that season of less than 7,000 spectators. This was coupled by the financial problems that Bradford was also facing at the time. The financial data that was available for the club for the purpose of this paper showed that the average revenue for Bradford for the years 2006-2010 was £4.75m. However, during that time the club failed to generate a profit of over £226,000. Problems with debt and non-payment to creditors meant that the club have been in administration two times in the last two years (BBC Sport, 2014) and the club must now look to build a more sustainable business model moving forward if they are to return to the Super League.

Near neighbours Leeds Rhinos, by contrast, have been one of the most consistently well-supported clubs in Super League, achieving the highest average home attendance on twelve occasions. Indeed, attendances more than doubled between 1996 (8,581) and the peak year of 2007 (17,416 - coincidentally, the league's highest ever figure). While average crowd sizes have since fallen to around 14,500, this is still significantly above the league average, and represents 65% of the available capacity at Leeds' Headingley ground. Unsurprisingly, Leeds Rhinos have also been one of the most successful clubs in recent years with an average league finishing position of 3.4 during the last nine seasons.

One of the objectives of Super League was to expand the spatial extent of the league beyond its traditional heartland in the North of England. To that end, the London Broncos were included as an expansion club from the first year, along with the short-lived Paris St. Germain. Initially, attendances compared favourably with the league average, averaging 5,699 in the first year and 5,125 in 1997. London's attendances only averaged more than 5,000 for one season (2010) after this point however. Further, in the 17 subsequent seasons, London Broncos had the lowest average attendance in Super League 13 times. Their final season in the league (2014) brought the lowest ever average attendance of any club in Super League's history (1,294). London and Bradford are now playing in the second tier Championship competition, having been relegated from Super League at the end of the 2014 season.
The overall attendance picture is one of steady growth up to 2007, followed by a period of relative stagnation. While attendances are significantly higher than the original Super League season, there has been little if any sustained growth since 2003, when average attendances breached the 8,000 barrier for the first time. As the three examples cited above show, there is considerable variation between clubs, with poor attendances affecting even traditionally well-supported teams like Bradford Bulls. Clubs who are able to grow and sustain their regular fanbase are therefore in a much better position to benefit from the primary matchday revenue stream of ticket sales, along with the secondary streams of merchandise and refreshment which are associated with live attendance at professional sports events.

One of the principles of Super League is the use of innovative marketing techniques to promote the game. Foremost among these is the concept of the play-off system to decide the overall championship title. In addition, since 2007, one round of matches has been played at a neutral venue each season, to provide a showcase for the sport known as the Magic Weekend. These one-off events generate attendances on a much larger scale than conventional home fixtures, as demonstrated by Figure 4.

Grand Final attendances have risen over time since 1998, up to a peak in 2006 for the game between St Helens and Hull. The final typically uses over 90% of the stadium's capacity, with an average attendance over 17 seasons of 68,889. The Magic Weekend operates under a different premise, with fixtures replicating local derby games at the neutral venue to encourage ticket sales. Supporters are invited to watch more than one game on the day that they attend, but there is no official data recording crowd figures for individual fixtures, as this would be impractical. Nevertheless, crowd sizes have averaged 30,487 since 2007, with three of the highest figures being recorded over the last three seasons.

It is interesting to note that the Magic Weekend has used several venues over the course of its history, with Cardiff's Millenium Stadium and Edinburgh's Murrayfield sharing hosting duties up to 2011. Over this period the capacity utilisation rate was just over 40%. Since 2012 however, the fixtures have been played at Manchester's Etihad Stadium, which has a smaller capacity (46,708) than the other two stadia, though with slightly higher attendances this has generated a much higher utilisation rate of just under 70% on average.

This serves to demonstrate that demand for professional Rugby League is occasionally sufficient to sustain large crowds comparable in size to Premier League football. However, while Figure 4 demonstrates that these innovations appear to have been embedded in the Super League cycle, this must be viewed in the context of declining attendances at regular season home games. Super League clubs must place more emphasis on sustaining core attendances consistently throughout the season rather than relying on one-off showcase events to drive revenues. It is also equally pertinent to stress that the Magic Weekend, whilst well-attended, needs to be set-up very carefully to ensure that clubs do not miss out on their traditional attendance revenues.
One final problem that compounds the disappointing picture for Super League clubs and rugby league more generally at the present time is the expressed demand for the game, measured by the participation rates. To that end, the paper uses data from Sport England's Active People Survey to review the current levels of participation in the game. The standard measures of demand in the Active People Survey are weekly and 4-weekly participation. Figure 5 presents the data for Rugby League since 2006.

<br><br><Figure 5 about here>  

It is immediately apparent that since the peak of APS 2, the overall trend for Rugby League participation is downwards. Two points are of particular note. First, according to the survey results, the number of people playing Rugby League once a week in 2013/14 is less than half the total in the first iteration of the survey. Second, the overall number of people playing Rugby League at least once in a four week period is lower than the weekly participation figure for the first year of the survey (2005/6). There has therefore been a significant fall in the participation rate for Rugby League.

Taken at face value, the data are of particular concern to a sport which continuously seeks to expand its player base in order to maintain its viability. Indeed, one of the aims behind establishing a team in London was to promote the game to potential participants in the capital. Figure 6 shows 4-weekly participation in Rugby League by region, demonstrating that the national trends in demand are reflected at regional level. Even in the Rugby League heartlands of Yorkshire and North West England, participation has fallen since 2007/08, to the extent that regional participation data are not available for the latest iteration of the survey.

<br><br><Figure 6 about here>  

Admittedly, a decrease in participation since 2007/08 is something that has affected a number of team sports. In relation to similar niche sports in the UK (e.g. rugby union and cricket), rugby league has experienced similar decreases in terms of the absolute population figures who take part in any sport. Cricket has seen a decrease of 74,100 people in terms of any participation in the sport between 2008-2012 whilst rugby union and rugby league have seen decreases of 49,000 and 49,200, in absolute terms, respectively. However, in relative terms the reduction in participation presents a fundamental problem for rugby league. The number of people participating is only around a third of the total participation in rugby union and a fourth of the total participation in cricket. It is this small participation base that presents a significant issue for the sport's governing body.

It is possible that one of the potential external factors that has contributed to the decrease in participation in team sports since 2008 may have been the UK recession which occurred around a similar time. The recession had an impact on leisure time and the costs associated with leisure time. Subsequently, there has been a shift, in recent years, towards participation in individual, more informal, low cost sporting activities such as running and cycling rather than communal team sports, although it must also be noted that sports participation on the whole in the UK has declined slightly since 2008.
Is the RFL doing enough?

The problems outlined in this paper, in relation to poor financial management and declining attendances and participation levels is not a problem that it is exclusive to rugby league. Most team sports, at some stage, felt the effects of the recession and have had to strategically re-align in order to sustain and grow. The problem for rugby league is that most team sports have managed to ride out the recession and have remained relatively intact. They have done this in part by undertaking aggressive strategies that have developed modified versions of their own game (for example, T20 cricket, rugby sevens, rush hockey and 'back to netball'). In short, other sports have 'adapted their offer'. Rugby league, by contrast, has struggled to develop their game to make it a more attractive proposition to fans and there is widespread concern that the change in league structure (commencing in the 2015/2016 season) will be too late. Essentially, the league appears to need more revolutionary change not a structural alteration, particularly given that it is already behind its nearest competitors in terms of baseline participation and attendance figures.

The main issue, however, is buried within economics and the simple equation of supply and demand. Rugby league is a northern sport that has failed to grow out of its heartland - a place where the recession also had significantly more impact than other parts of the country. The sport does not currently have the financial resources of its more illustrious counterparts of rugby union and football. It does, however, generate significant broadcasting money, which it could distribute differently to improve competition in the league. For example, the league could consider unequal distribution of television revenue whereby the club finishing bottom receives a larger share of the revenue than the club finishing top. This would provide smaller clubs generating lower revenues, therefore finishing lower down the league, with more opportunity to spend money on better playing talent, thus improving its competitiveness on the field of play, its attractiveness to supporters and a higher degree of uncertainty of outcome in the matches that it contests.

The salary cap remains a problem, as the sport struggles to attract and maintain better players, meaning that the fans ultimately have a less attractive product to consume. The RFL must adapt and find new ways to grow the sport through participation initiatives that are aimed at developing the next generation of players and fans, allowing the game to remain sustainable in the future. An increase in the salary cap linked to the change in revenue distribution will lead to higher playing budgets and therefore better playing talent in the league. This in turn will make the game more attractive as a product to broadcasters and spectators who will pay more to consume the league.

Finally, the RFL need to be more strategic in their approach to growing participation and they can achieve this by incentivising clubs financially to improve their community schemes and outreach activity. There is the requirement of the league and its governing body to maintain a sustained level of competition amongst its member clubs in line with the theoretical determinants of what makes an attractive sports league considering the 'joint' production nature of professional team sports (see Borland and McDonald, 2003; Dobson and Goddard, 2011; El-Hodiri and Quirk, 1971; Hogan et al., 2013; Neale, 1964).
Whilst the 'joint' production nature of professional team sports is of prime importance, there is a need for the member clubs individually to support the governing body to achieve its objectives and that they begin to operate in a more prudent financial manner. Of equal importance, is the need for clubs to be more autonomous with facility use, thus increasing the opportunity for secondary spend and additional revenue. Presently, a number of super league clubs play their matches in stadiums owned by professional football clubs and, as such, these clubs may be missing the opportunity of a potentially lucrative revenue stream whilst also losing further financial ground on some of their competitors in the league.

Concluding Comment

This paper has provided a valuable contribution to the study of league production away from American team sports and football. Rugby league takes its origins from both the European and American models of professional team sports and this study therefore provides a timely and significant contribution to the evaluation of professional sports leagues and clubs. This paper also contributes to extant literature that has documented the issues in professional team sports in the UK in recent years such as football (e.g. Buraimo, Simmons and Szymanski, 2006; Wilson, Plumley and Ramchandani, 2013), cricket (e.g. Shibli and Wilkinson-Riddle, 1997) and rugby union (e.g. Hogan et al., 2013; O'Brien and Slack, 1999, 2003) and the findings in this paper are consistent with the findings of these authors.

The paper indicates that there remains a problem with the attractiveness of the Super League which is a product of poor financial management at club level and reluctance by the RFL to undertake radical structural change. The study focused on three specific measures of performance that included financial indicators, match-day attendances and participation to provide a holistic overview of the current state of play at rugby league clubs. Individually, each indicator paints an austere picture. For example, in general terms, revenues are not high enough to generate sufficient growth within the game. Coupled with this is the fact that attendances, across all clubs, are stagnating, with the exception of one-off major events (e.g. 'Magic Weekend', Grand Final). However, an increased attendance at these one-off events is on its own not enough to drive attendances. Furthermore, lower attendance figures do not encourage a growth in financial health given that attendance figures are the main source of income generation for the majority of clubs. The vicious circle is completed by the fact that expressed demand for the game, measured by participation figures, is low and has been on a declining trend for the last ten years.

In summary, with reference to rugby league, the paper concludes that the Super League is still coming up short in relation to its objectives outlined in the early part of this paper. The creation of the Super League in 1996, formed using some of the principles present in the American team sports model, was supposed to herald a new era for rugby league. However, by not adopting one model or the other in its entirety has meant that the league and its member clubs have suffered. Instead of having a prosperous, growing and profitable league, the picture is instead one of financial insecurity for a majority of clubs, stagnating attendances and declining participation. The league needs to rid itself of structural ambiguity and adopt the American model of professional team sport more firmly.
However, it would be unfair to suggest that issues with financial performance are exclusive to rugby league clubs and comparisons with other professional team sports will be evident. Indeed, other leagues do experience similar problems. However, such comparisons to sports such as football are less relevant given that attendance figures and participation levels in that sport are the highest they have ever been. Additionally, the money associated with professional football in line with broadcasting deals and club income streams is a level far above rugby league clubs at the present time. The Super League set itself a series of objectives when it was formed in 1995. The results in this paper demonstrate that despite twenty years of history and a number of structural changes, in general terms, the clubs competing in the Super League are failing to generate profits, expand the supporter base or grow commercial revenues with a better national and international profile. Participation in the sport is at an all-time low and the game has not grown beyond its heartlands. This all points to a bleak future and that, in line with the objectives that the Super League set itself in 1995, rugby league needs to produce a sustainable business model and if it does not its clubs, and in the turn the sport, will die.
References


