BROADCASTING AND SPORT: VALUE DRIVERS OF TV RIGHT DEALS IN EUROPEAN FOOTBALL

Thomas Hoehn and Zafeira Kastrinaki

Imperial College Business School
South Kensington Campus
London SW7 2AZ

Emails: t.hoehn@imperial.ac.u z.kastrinaki@imperial.ac.uk

Abstract

This paper investigates the ever closer symbiotic relationship of media and sport in an analysis of broadcasting right deals in sport. We focus mainly on deals related to national and international football competitions which make up nearly half of the value of all TV rights deals which we estimate to be worth ca €10 billion per annum across Europe. We construct an empirical model of TV rights and find that the key driver of deal values remains the number of eyeballs in each country but increasingly, in the multi-platform environment competing for audience with a willingness to pay for attractive content, it is quality factors such as talent, top clubs and competitive leagues that influence TV sport right deal values and the allocation of revenues among the major stakeholders. Furthermore, the drivers of choice of broadcaster (public or private) and broadcasting format (licence fee, advertising revenues or pay TV subscriptions) and the regulatory constraints sport governing bodies face play an important role.

Keywords

L82 - Entertainment; Media, L83 - Sports; Gambling; Recreation; Tourism, O34 - Intellectual Property Rights; L4 - Antitrust Issues and Policies,

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1 Introduction

The symbiosis of media and sport is a defining characteristic of global sporting events as well as national and international championships in popular sports.[1] Following a well mapped out schedule of fixtures participants compete against each in the sporting sense but they do not necessarily compete against each in a business sense. They have a joint interest in a carefully planned fixture list that matches teams and individual athletes and creates attractive sporting contests with an uncertain outcome. Tapping into viewers' interests for competitive races, matches and games, broadcasters are keen to capture this essentially ephemeral media product which has the advantage of not having to be commissioned in the same way as other TV programs. The relationship of the broadcaster with the producer is different for televised sport than other genres (apart from news or live music events) where broadcasters go out to commission programmes either from within their organisation or from independent producer and face an uncertain likelihood of success with viewers and audiences. As a bonus, there are highlights and other delayed rights that can be exploited over time.

As argued by Dietl (2009) sporting events and sports leagues act as multi-sided platforms coordinating markets for players, merchandisers, sponsors, and media rights. Media rights are of key importance in televised sport as they offer the only significant means by which sport can be made to respond to the demand of broadcasters, but just as importantly, they are a also the chief means through which broadcasters compete with each other for valuable content.

The choice of broadcaster and broadcasting format is a major commercial decision, particularly in today's world of multi-channel TV. Several policy issues have been raised in the past that impact the outcome of media rights negotiations and the contractual freedom of governing bodies. Questions have been raised over the appropriate identity and ownership of the broadcaster of televised sport. Should televised sport be part of the remit of public service broadcasters? Does the source of finance (license fees, advertising and subscriptions revenues) matter? Other public policy issues have

[1] See, for example, Chapters 10 and 11 of the Handbook of the Economics of Sport (2006), and Hoehn/Lancefield (2003),

concerned the nature of competition for sport rights and whether clubs that make up a league can sell media rights collectively or must sell them individually. Downstream from the sale of sports media rights, competition authorities have expressed concerns that these rights become concentrated in the hands of a dominant media company. Much ink has been spilt addressing the questions and often created very heated debates.[2]

In this paper we argue that after a period of technological innovation and rapid growth of televised sport in Europe the questions over the appropriate identity and ownership of the broadcaster and the source of finance and end-user payment method are now largely settled. Sport governing bodies tend to be free to contract with a broadcaster of their choice, yet are subject to some major restrictions. The media rights sales process is governed by rules imposed by competition authorities and they restrict the contractual freedom of governing bodies and sport leagues. Within this regulatory context and given the generally accepted freedom to chose, the migration of televised sport to pay TV has proceeded apace and has generated huge value for sport and its major stakeholders. Most major domestic club competitions are now part of a substantial package of televised sport shown on pay TV channels. The same is not true, however, for major sporting events which involve national teams. These still tend to be broadcast free-to-air. The most important international club competition in European football, the UEFA Champions League, remains a hybrid being shown on both free-to-air and pay TV channels due to a regulatory deal struck by UEFA with the European Commission which in light recent interventions by competition authorities affecting the sale of TV rights may need revisiting.

This paper constructs an empirical model of TV rights and identifies their determinants by estimating it using data from club and national teams' competitions over the period 2003-2012. Results suggest the importance of size of potential audience, pay TV as well as quality factors in determining rights fees.

This paper is organised as follows. Section 2 discusses the commercial importance of televised sports. Section 3 examines the choice of broadcasting partner and

[2] For a summary see Hoehn/Lancefield (2003). See also Gratton and Solberg (2007) for a discussion of these issues.

broadcasting format. Section 4 presents a conceptual framework for analysing driving forces of TV football rights. Section 5 then constructs and estimates an empirical model of TV rights and describes dataset. Section 6 estimates the total revenue earned from the sale of TV sports rights in Europe and discusses the unequal distribution of TV revenues across clubs. Finally, Section 7 examines the current regulatory environment influencing the organisation of the sale of broadcasting rights while Section 8 concludes

2 The commercial importance of televised sport

Broadcasters heavily depend on rights for live sporting events to fill their schedule and attract viewers. Unlike other entertainment genres such as soap operas, comedy and drama series there is no need to specially commission and produce programmes. The fixture list is typically a given. The drama is built into the sporting format that relies on uncertainty of outcome. The top sports regularly generate stars and stories that capture audience imagination. In addition, fan loyalty drives consumer interests. Production costs are relatively low (except for certain equipment based sports such as motor sports). The major costs are the rights to broadcast sporting events and these rights together with the commercial and regulatory environment in which they are negotiated are at the heart of this paper.

Among the most significant and most sought after rights are those for major international and global sporting events and the top level championships of major sports such as US football and soccer (European football). These major events generate huge audiences with the final games and opening/closing ceremonies polling several100 million viewers. The most watched recent TV sport has been the 2008 Olympic opening ceremony with a reach of 984m followed by the closing ceremony with 778m. [3] Overall the Bejing 2008 Olympics attracted 4.7 billion viewers.[4] The 2010 FIFA World Cup reached a live global audience of over 600 million for the Final game between Spain and Netherlands.[5] Other major events that attracted over 100 million viewers in 2008 were the

[3] http://www.timesonline.co.uk/tol/sport/olympics/article6256063.ece accessed 29 June 2009.
[4] Ibid.
[5] http://www.fifa.com/worldcup/archive/southafrica2010/organisation/media/newsid=1473143/index.html accessed 6 February 2012.

Euro 2008 final (287m), the UEFA Champions League Final (209m), the Superbowl (152m) and the Brazilian F1 Grand Prix[6]. With a nail biting finish it drew the record TV viewing figures for that sport in the UK (13.1m)[7].

Clearly, in the EU football is by far the most heavily broadcast sport with other sports usually coming a distant second. However, there is a great range of sports broadcasts which varies from country to country. Hoehn and Lancefield (2003) illustrated the attractiveness of different types of sports programmes as measured by their frequency of occurrence in the Top 50 sports programmes in 2000. This showed that in Austria skiing came out top ahead of football with 32 televised events. In Belgium (Flanders) cycling had 14 televised events in the top 50, in Denmark handball had 16, in Finland ski jumping came second (11) with motor sports first (19), in Germany motor sports was second after football (15), while in Hungary boxing had 10 televised events in the top 50.

The attractiveness of televised sport manifests itself in the fees media companies pay for the right to offer their viewers a live broadcast of a championship event, a race series or a regular schedule of live matches over a championship season on their free-to-air or pay TV channels. The explosion of media rights fees over the last decade has been well documented and is staggering, reaching an increase (in nominal prices) of over 900% for the FIFA World Cup over the last 20 years and almost 1000% for the English Premier League live rights since its inception in 1992 .

TABLES 1 AND 2 ABOUT HERE

As illustrated in Table 1, the UEFA Champions League experienced a growth in UK right fees of 468% since 1996, and the rights to broadcast the Olympic Games via the members of the European Broadcasting Union (EBU) almost 400%. These growth rates are not restricted to Europe. In the US, the leading TV sport is the National Football

[6] Ibid.
[7] http://www.sports.in.msn.com accessed 25 July 2009

League (NFL) worth $3.7bn in annual TV rights fees in 2010.[8] This compares with $911m in 1990-93, a growth of 310% (in nominal prices) over 16 years. Interestingly enough, as shown by Hoehn and Lancefield (2003), similar levels of rights fees at around $5bn per annum, were paid for major sports between the US and the top 5 European TV market in 2002 (Table 2). The same was true at the level of the respective top-rated sports American Football in the US (NFL contract only) and European club football in Europe (domestic and European soccer championships). Both earned around 45% of all rights fees.[9]

This picture of equivalent media right values in the US and the Big 5 European countries does not seem to have changed much since 2002. If we take the 2010 value of the NFL rights contract ($3.735bn) and compare it to its value in 2002 ($2.2bn) we observe an increase of 68%. The equivalent comparison of the value of the football TV rights for the three main football events (domestic league championship, UEFA Champions League and Euro) in the Big 5 in Europe in 2009 versus 2002 shows an almost identical increase of 69% with the domestic rights deals taking the lion's share of fees in each country.[10]

TABLE 3 ABOUT HERE

The share of revenue that the sale of broadcasting and media rights make up highlights the importance of televised sport. In the case of UEFA, for example, the share of broadcasting rights revenues in total income for the period 2009/2010 was 78%[11]. For the English Cricket Board the average share over the period 2004-2008 was 61%.[12] Other global sport organizations earn more than 50% from the sale of TV rights such as

[8] These rights are split between different broadcasters with contracts of varying duration. The shortest contract with DirecTV lasts from 2002-2006 and the longest with ESPN until 2013.
[9] For 2002 the picture was not consistent across Europe: club football earned the lowest share of fees in Germany at 31%, compared with 54% and 72% for the UK and Spain respectively. The low share in Germany is partly due to the collapse of the major rights holder, Kirch. In 1998, the share of club football rights was much higher at 42%.
[10] This reduces to an increase of 50% if we exclude the rights to the Euro2008 Championships
[11] UEFA Financial Report 2009/10, pp 7-8.
[12] See Deloitte (2009a).

the IOC, where 53% of all revenues related to the Olympic Games in the period 2001-2004 (Chappelet ,2006, ch.22). For other sports that do not have the same media exposure this share is lower.[13]

[13] See Deloitte (2009) which estimates the share of TV revenues for the Rugby Football Union at 20-22%.

3 Allocation of broadcasting rights between broadcasters across sports

Having established the importance of televised sport and the commercial value this generates to sport governing bodies, we now turn to the analysis of the choice of broadcaster (private or public) and broadcasting format (free or pay). The picture that emerges is one of a broad spread of rights across private and public, free-to-air (FTA) and Pay TV broadcasters. Table 4 demonstrates the importance of Pay TV when it comes to the sale of live rights to domestic football. There are only few examples of countries where FTA broadcasters managed to retain significant rights to live games of the top domestic leagues. In Spain, Mediapro has obtained the FTA rights for 38 live games per season and Canal Plus has pay TV rights to another 38 live games with the rest being shown on ppv by three broadcasters on a non-exclusive basis. Similarly, in Austria the public service broadcaster ORF shows one Sunday live game in parallel with the pay TV operator Sky Austria.b

TABLE 4 ABOUT HERE

In some cases rights to broadcast highlights are included in the live TV rights package, in other countries these are negotiated separately. Extended highlights are very important in Germany, for example, where the two public service FTA broadcasters ARD, ZDF and the private FTA broadcaster DSF have negotiated rights to show extended highlights of Bundesliga games on Saturday evenings and Sundays. Similarly, in the Netherlands RTL (private) shows extended highlights of up to 20 min of games involving the top clubs. FTA broadcasters have held on to the rights to the major national team championships such as the World Cup and the European Championships. The same with the Olympics which remain the prerogative of public service broadcasters across the five countries through the joint purchasing of rights from the European Broadcasting Union (EBU). Of the other major sports only Golf has migrated to Pay TV. Tennis has also seen a major shift but retains some FTA broadcasting rights in major events through the Listed Events legislation (see section 4.3 below). The UEFA Champions League is a hybrid when it comes to the sale of broadcasting rights. As per the agreement between

UEFA and the European Commission from 2003[14], UEFA sells the right for one live game of choice to be broadcast free-to-air each week (in Netherlands and Belgium two games per week) with the remainder being sold typically to a pay TV broadcaster.

4 Deal values: the case of football in Europe

The next step of our analysis is an examination of the sport right deals and their main value drivers. We choose the case of football in Europe as this attracts the highest interest among sports. In order to identify the main value drivers we first need to understand the structure of broadcasting rights market namely the demand and supply. We then proceed by discussing the determinants of broadcasting rights.

4.1 The demand for sporting rights

If we assume that broadcasters aim to maximise profit then in deciding whether to bid or not for football rights involves a comparison of the expected profits from broadcasting the relevant football events with the expected profits from broadcasting an alternative program , i.e., documentaries, movies, etc. Let's assume that R_m is the revenue from broadcasting ordinary programs (i.e., sales of advertising and/or viewer subscriptions) and C_m is the cost of broadcasting those programs. Revenue from broadcasting football games is R_f which are also derived from sales of advertising and/or viewer subscriptions and relevant cost is C_f which consists of the sum of the rights fee and program production costs. The broadcaster will bid for TV rights if

$$(R_f - C_f) - (R_m - C_m) \geq \theta \qquad (1)$$

Where θ is a broadcaster specific factor capturing the premium each broadcaster requires to gain in order to carry a football event as opposed to an ordinary program. Football events exhibit certain unique characterisitcs that are related to the uncertain outcome. The literature (Alavy et al., 2010; Forrest et al., 2005) shows that excessive imbalance in a game diminishes viewership, i.e., people tend to switch channels if the score in a game becomes predictable or highly uneven. At a championship level,

[14] Commission Decision of 23 July 2003, OJ 2003 L 291/25.

championship uncertainty defined as the likelihood that one or a small number of teams dominate the championship within a single season or between seasons, may also affect viewership (Humphreys, 2002; Schmidt and Berri, 2001). A more uncertain championship may increase audience demand[15] which in turn increase the broadcasters' willingness of pay. Broadcaster may have different reservation price for different football events and thus require different premiums for different events, i.e., World Cup versus Euro tournaments.

Furthermore, we assume that viewers' preferences are such that other types of broadcasts (movies, documentaries, etc) are not likely to be close substitutes for main football events. Broadcast channels have been increasing mainly due to changes in technology and policy which makes it possible to assume that there is no broadcasting capacity constraints. Harbord et al (1999) show that when transmission capacity increases, the value of ordinary programs falls as more are shown in competition with each other, and thus the value of the limited amount of sports programming available is driven up. Thus, we can assume, for the purpose of this study, that $(\mathrm{Rm} - \mathrm{Cm})$ for a marginal ordinary program tends to zero and a profit maximising broadcaster considers only absolute net profits generated by showing a particular football event. Thus, a broadcaster bids for football TV rights if and only if:

$$(\mathrm{Rf} - \mathrm{Cf}) - \theta \geq 0 \qquad (2)$$

Total revenues from rights fees are determined by different factors such as size of potential audience, character of the broadcaster - advertiser supported TV channel, pay TV, or "public" TV- quality of the event. In a seminal paper Steiner (1952) analysed programming decisions among broadcasters and showed that the demand for TV rights

[15]Fans value uncertainty of outcome which further means that additional economic value is generated from turnarounds if the participating teams are competitively balanced. Leagues recognise that and create restriction on rights markets and players labour market such as salary caps, player draft, transfer fees, collective selling of media rights, in order to maintain fair and balanced competition.

depends on the total size of potential audience. This can also be applied to football TV rights; as the size of the audience grows, broadcasters' revenues, either from advertising or subscriptions, increase too without any increase in the cost of production. Other things equal, both the number of events broadcast and total rights fees are greater in large nations than in smaller ones.

Revenues for advertising based broadcasters are determined by the size of the audience and its distribution across demographic groups. As the most valuable viewers to advertisers are young adults, football matches are very popular televised events among advertisers. Existing literature shows that ordinary programs are not good substitutes for most popular sports, including football, for a big number of viewers. This further may mean that advertising on these ordinary programs also is not a good substitute for advertising on sports programs. For this reason, broadcasts of a football match may be expected to generate more advertising revenue than a marginal ordinary program and that further means that broadcaster's willingness to pay for those rights increases.

On the other hand, there are broadcasters that are based both on advertising and subscriptions as revenue sources. For such broadcasters to be able to survive, some viewers must be willing to pay to watch the football event rather than watch for free some other programming. As subscription prices increase the total number of viewers decreases and hence the advertising revenue of the corresponding program. That further means that a pay TV broadcaster would be willing to pay more than a free commercial broadcaster for football rights if the added revenue from the subscriptions more than offset the revenue loss of advertising[16]. Consequently, we can say that different types of broadcasters have different revenue sources and this affects their willingness to pay for televised football.

As regards quality of a televised event, we hypothesise that demand of audience is increasing with the quality or effort of the individual teams or the whole tournament; better clubs makes more attractive matches. This is turn means that broadcasters' revenue will is an increasing function of the quality of the televised game or tournaments and so is

[16] See Noll (2007) for a detailed discussion

the their willingness to pay for correspondent TV rights. Consequently, broadcasters revenue can be written as:

$$Rm(\ size\ of\ potential\ audience, broadcaster\ type, event\ quality)$$

Unlike other entertainment genres such as soap operas, comedy and drama series there is no need to specially commission and produce programmes. The fixture list is typically a given. The drama is built into the sporting format that relies on uncertainty of outcome. The top sports regularly generate stars and stories that capture audience imagination. In addition, fan loyalty drives consumer interests. Production costs are relatively low (except for certain equipment based sports such as motor sports). The major costs are the rights to broadcast football and we claim that these rights are affected by broadcasters' competition. Sales of broadcasting rights for football typically occur in one or another form of auction as shown Section 4.3. This in turn means that the more intense the competition among broadcaster is the higher the winning bid would be and thus the higher the cost of broadcast.

Finally, there is a debate on whether the intervention of the European Broadcasting Union which acts as a "cartel" in the purchase of football rights in Europe distorts competition and affects TV rights value (see, Harbord et al., 1999). EBU negotiates the acquisition of broadcasting rights for international sport events on behalf of its members. All members of the EBU are eligible to participate in the joint acquisition of television rights of football of pan European interest which further implies that broadcasting cost is affected by whether a broadcaster is an EBU member or not. Hence :

$$Cm(broadcasters\ competition, bought\ via\ EBU)$$

We need to note here that when broadcasting capacity is scarce relative to the number of broadcasts or programs available, all broadcasts become potential substitutes

for the broadcaster, i.e., all are alternative sources of revenue generation. If that is the case the terms under which alternative programming can be purchased will affect broadcasters' willingness to pay for football rights. However, in the absence of any capacity constraints broadcasters valuations for the rights football will be determined by the asking price of such event. In this paper we are going to assume that broadcaster valuations in football rights auctions are independent of the prices obtained or expected for any other types of programming (see also Harbord et al. 1999 for a formal justification).

4.2 The supply of sporting rights

The number of teams in the league as well as the number of games to be played by teams is determined by leagues. This further means that leagues determine the maximum quantity of TV rights that can be sold. Although the number of broadcasters is growing, the supply has been roughly the same for decades.

We assume that leagues behave as a profit-maximising firm. Some authors may claim that sports organizations pursue other complex motives other than profit maximisation such as winning games (Sloane, 1971). However, we believe that in recent years especially after broadcasting boom and the conversion of many teams to join stock companies, teams and leagues do not behave differently from commercial companies (see also Hoehn and Szymanski, 1999). Thus teams and leagues seek to maximise profits from broadcasting rights which in turn means that the willingness to supply rights is determined by the cost of the rights and the market power of the seller. The most importance issue in the supply of sporting rights is the allocation of the power to sell television rights, whether these are sold by individual teams or centrally by a league. This is important because both the perceived cost of the supply of TV rights and the market power depend on who is the seller[17].

In most European countries TV rights are sold centrally. Leagues in setting an asking price take into consideration effects of television on attendance.

[17] See Noll (2007) for a detailed discussion

4.3 The determinants of TV rights – The bidding game

In previous sections we analysed the demand and supply of football rights. However, observed prices of TV football rights are the result of some form of auction. The seller, a league, offers TV rights collectively at a price that is equal to its reservation price. On the other hand, the buyers, broadcasters, bid for these rights and these bids are determined by their "willingness to pay". Given the maximum willingness to pay for rights by broadcasters, price determination can then be viewed as single seller and many buyers bargaining problem. Broadcasters and a league bargain over the division of the profits which results from downstream broadcasts to viewers. This division will be determined by a number of forces such as potential buyers, information conditions etc. Although this is not the focus of this paper we can infer that when there are very few potential buyers it is the buyers that retain more of the profits accrued to the broadcasts. When there are many buyers who compete over TV rights we would expect any selling procedure to result in seller doing better.

We assume that bidders do not collude but instead they compete for acquiring TV football rights. The seller has a single unit of the good and his reservation price is equal to his valuation and is denoted by V_s. Bidders have different valuations or willingness to pay, V_b^i for $i = 1,2,3 \dots k$ bidders. In any selling procedure TV rights would be awarded to the buyer i who offers the maximum offer as long as this is higher than seller's reservation price. Thus,

$$maxV_b^i \geq V_s$$

Consequently, TV rights value is determined by bidders' willingness to pay which is turn is a function of their expected net profits. Hence:

$$TV\ rights\ value\ (TVRV) \equiv maxV_b^i \equiv (\mathrm{R_i} - \mathrm{C_i}) - \theta_\mathrm{i}$$

Drawing on the analysis in previous Section we can then infer that:

$$TVRV \equiv f[\, size\ of\ potential\ audience, broadcaster\ type, event\ quality, ebu, broadcasters\ competition, \theta_i(champions\ league, domestic\ club\ competition, euro, world\ cup)]$$

We allow θ_i differing among different football events, champion's league, domestic club competition, euro, world cup, because broadcasters would require different premium for different football event.

5. An empirical model of TV rights

Our objective is to gain some insight in to the driving forces of TV football rights. As indicated in the previous section some of the factors affecting TV rights are latent variables and also much of the required data to estimate a fully specified model is not available in the public domain.

For example, if we go into more detail and evaluate the TV right deals for European domestic football leagues we find a complex picture. Table 5 summarizes some of the recent and current rights deals for domestic top tier league football across the top 5 European markets.

TABLE 5 ABOUT HERE

Where rights were sold separately to Pay TV and Free-to-Air broadcasters these are shown. The analysis of fees paid for live rights to the top domestic leagues shows how big the game has become in the UK and Italy but also that France is a top TV rights market for football. The surprise is Germany where live football rights are and have been traditionally less valuable. There is a strong public service FTA tradition and, as shown above, there are extended highlights on offer, starting early in the evening with the Sportschau on Saturday evening, and the Aktuelle Sportsstudio later that evening. There have been attempts by the governing body, DFL, to make Pay TV the central broadcasting format but the most recent 6 year deal with Sirius (part of the Kirch group of companies) was challenged by the German competition authority (Bundeskartellamt) in late 2008 and this forced the DFL to auction the rights to a consortium of FTA and Pay TV broadcasters.[18]

Furthermore, rights sold to FTA and Pay TV are not easily comparable as Pay TV usually gets live and highlights whereas FTA pays mainly for highlights and in some cases for live matches.

[18] Decision Bundeskartellamt of 24.07.08.

The approach that we thus take is probabilistic rather than deterministic, incorporating hypotheses upon what factors are likely to affect the value of TV rights. The empirical approach taken in this study is to estimate a random effect model:

$$Ln(Y_{ij}) = \beta_o + \beta_1 x_{ij} + v_i + \varepsilon_{ij} \qquad (1)$$

Where i=1,...N countries and j=1,...n football events, and vi captures unobserved effects.

Errors in this model are assumed to be normally and conditionally independently[19] distributed in the population with zero mean and common variance. TV rights are observed repeatedly from the same countries (i.e., world cup 2006, 2010, 2014 in the UK) so it is unreasonable to assume independence of the model errors as in a regression model. The behaviour of a country, i.e. the UK when bidding for the world cup 2014 is unlikely to be completely independent from its behaviour when bidding for World Cup 2010. It is much more plausible to assume that there is data dependency (errors within a country are correlated). Consequently, we introduce into the model country-specific effects that will account for the data dependency. We prefer to consider the country differences as unobserved, random disturbances drawn from the normal distribution with mean 0 and variance σ^2_v. This has the advantage of using fewer degrees of freedom, and that country differences are considered random rather than fixed and estimable.

Because club competitions and national teams' competitions represent different markets we estimate two different empirical models. The difference between these two types of competition lies partly on regulation and on competition design.

5.1 Data description

We collect data for European club competitions and national team competitions to create two sub samples. The European club competition sample consists of European

[19] conditional independence here means conditional on the random country specific effects *v*

domestic football leagues competitions over the period 2007 - 2012 and UEFA champions' league competitions from 2003 to 2011 for 15 European countries (number of observations is 226). National team competition sample consists of Euro championship of 2008 and World Cup 2006, 2010, 2014 for 15 European countries (number of observations 60)[20].

FIGURES 1, 2 & 3 ABOUT HERE

The correlation for national team competitions is not perfect but close enough. The more viewers the more a broadcaster can justify higher fees. We note that for Euro2008 the UK paid noticeably less with the TV rights deal only being struck in November 2007 once it had become clear that English national team failed to qualify.

As regards UEFA 2006-09 champions league right fees, there are three countries that pay significantly more (UK, Spain and Italy) on a per TVHH basis than the rest. Not surprisingly it is these three countries that have had most success in this competition and have between them one almost all the Champions League finals in recent years. New three year rights deals to broadcast the UEFA Champions League have been agreed with broadcasters across the EU in 2009. Broadly speaking, for the top five markets where we have obtained information, the structure of these latest deals are similar if not identical to the agreements they are replacing. [21] The exception is the UK where the commercial free-to-air broadcaster ITV and BSkyB, the pay TV broadcaster, now pay a significant premium for the broadcast of a competition that the English Clubs have come to dominate.

[20] The World Cup governed by FIFA is an international football competition of senior men's national teams (affiliated to FIFA) and is held every four years since 1930. A qualification phase takes place over the preceding three years to determine which teams qualify for the tournament at the end of which 32 teams are selected. The European football championship or Euro governed by UEFA is the main football competition of the men's national football teams and is held every four years since 1960 in the even numbered year between World Cup tournaments. There is also a qualification phase prior to entering the tournament. UEFA also organizes Champions League competition which is an annual international club football competition since 1955 for the top football clubs in Europe. There are sporting and other criteria that a team must meet in order to enter the tournament.

[21] Source: SportBusiness Intelligence

TABLES 6 ABOUT HERE

Table 6 shows the right fees for the 2006-09 UEFA Champions league broadcasting right deals across 15 countries (Scandinavian countries are shown as one regional deal covering four countries). Although the FTA broadcasters only buy the rights to one or max two games per week they pay on average the same amount as the pay TV broadcaster for all the remaining matches. In the Netherlands and Belgium FTA broadcasters have priority choice for UEFA CL matches on both days, and the value of the FTA rights are a multiple of the pay TV deal.

Table 7 presents a description of the explanatory variables and their measures as suggested in Section 4.3. The influence of EBU on TV rights is only relevant for the national teams' competition since EBU bids only for sports events of a pan-European interest. As regards the influence of broadcaster type on TV rights value we need to note here that national teams' competition, Euro and World Cup, are included in the listed events in most EU countries to be broadcasted by FTA TV. However, it is possible that FTA sublicenses some matches to pay TV. In order to assess the role of pay TV we include a dummy variable in the empirical model of national teams' competition which indicates whether FTA broadcasters sublicense TV rights or not. In the case of club competitions both FTA and Pay TV bid for TV rights which make the examination of influence of broadcaster type on TV rights value more straightforward.

TABLE 7 ABOUT HERE

As regards club competition we need to note here that the quality of talent in domestic league championships varies across Europe. There is a big gap between the Big 5 and the rest. Within the Big 5 it is Spain and the UK that attract the greatest number of top quality players. This manifests itself in better performances in the international clubs competitions such as the UEFA Champions League. The clubs from the Big 5 tend to

have more teams competing in the first stage group matches, and then see many of their teams go through to the second stage. In the last two years this has become extreme with all four of the EPL teams qualifying for the second round of the UEFA CL. For this reason we incorporate a dummy variable of big five countries into the empirical model.

In addition to the explanatory variables presented in Table 7 we incorporate time dummies into the empirical models in an attempt to capture the influence of timing differences on TV rights value, i.e., economic downturn in most EU countries during the last years. However, such timing effects do not seem to exert any significance influence on TV rights value.

5.2 Estimates

We can test the strength of the eyeball hypothesis as a key driver of TV rights for major televised football events by way of a simple regression analysis. TV household numbers represent the potential number of eyeballs that can be reached and are therefore a good primary indicator of the willingness-to-pay for FTA rights. The number of matches are another variable that we would be expect to have an influence. Further factors that need to be considered as value drivers are the national team effect. Countries whose national teams are unlikely to qualify for the World Cup can be expected to have a lower interest than those where the national team is one of the top team with a realistic chance to fight for the title. In other respects the World Cup is a homogenous good as the matches are the same for each country. This is in contrast with domestic league championships where the quality of talent varies across Europe. There is a big gap between the Big 5 and the rest. Within the Big 5 it is Spain and the UK that attract the greatest number of top quality players. This manifests itself in better performances in the international clubs competitions such as the UEFA Champions League. The clubs from the Big 5 tend to have more teams competing in the first stage group matches, and then see many of their teams go through to the second stage. In the last two years this has become extreme with all four of the EPL teams qualifying for the second round of the UEFA CL.

TABLE 8 ABOUT HERE

Table 8a and 8b shows the results of a random regression model for the two sub samples, national teams' competition and club competition.

As Table 8a shows, pay TV and size of potential audience exerts a positive and statistically significant influence on TV rights value for national teams competition, i.e., when a FTA broadcaster sublicenses some matches to pay TV it is willing to pay 30% more for this deal. World cup competition seems to be more expensive, by 56%, than Euro championship. Furthermore, countries whose national teams are unlikely to qualify for the World Cup or Euro can be expected to have a lower interest than those where the national team is one of the top team with a realistic chance to fight for the title. So when a team is qualified for World Cup or Euro that increases right fees by 63%.

Finally, Broadcasters' competition, EBU and hosting an event seem not to have any influence on rights fees for national teams' competition.

As regards club competition, Table 8b shows that Pay TV has a positive and statistically significant influence on TV rights; it increases rights fee by 44% in small countries and by more than 200% in the top 5 countries. However, Pay TV has a negative influence in champions' league TV deals but that holds only for small countries. For the top 5 markets pay TV results in an increase of rights fee by 4%. Potential audience size exerts a significant and positive influence on TV rights as expected. Deals for championship league seem not to exert a systemic difference from those for domestic league championship. Furthermore, broadcasters' competition and quality factors do not have any significant influence on TV rights value. Quality factors however are partly captured by the big five dummy as these countries attract the greatest number of top quality players and offer a high performance matches.

6 Distribution of media rights revenues

The sale of sport media rights in Europe can be estimated to have generated ca € 10bn in 2008. Table 3 above calculated just over € 4bn in media right revenues from football alone for the big 5 European countries in 2008. For all EU countries (inlc Norway and Switzerland) this figure may be grossed up to a figure between € 4.5bn and € 5bn based on reasonable estimates of the value of the Euro2008 championships (ca € 150m) , the UEFA CL (ca € 130m) and domestic league rights (ca € 300m).[22] Assuming the same ratio for the value of football media rights compared to that all sports that we found in Table 2 holds for all countries, this supports the € 10bn estimate.

How are these monies distributed? In the first instance the monies flow to the national football associations, league organizations, their rights agencies and individual clubs where they sell the rights individually. After that it gets complicated and this is not the place to analyse in detail the distribution of media rights revenues. Nevertheless, it seems worth asking the question whether in the context of the huge media right deals for the major European football leagues the distribution of media right revenues among clubs has a disadvantageous effect on major clubs from smaller countries that do not generate large media revenues. For example, our estimate of the top tier domestic football league rights for the medium and smaller European countries such as Netherlands, Belgium, Portugal, Austria and Switzerland is in aggregate about € 145m pa compared to € 60m to € 70m for the national team competitions such as the World Cup and Euro2008. This is a much smaller multiple than the 6 to 8 multiple that we find in the big 5 countries (e.g. € 2936m v €401m for the UEFA CL).

TABLE 9 ABOUT HERE

At the level of individual football clubs this leads to dramatic inequalities in media rights revenue distribution and affects their ability to pay for playing talent. While

[22] Author's estimates based on available information for 10 European countries. In other words the value of the domestic leagues are assumed to be lower outside the big 5 European countries and do not trade at a premium of several 100%.

FC Barcelona generates ca € 120m in media rights revenue alone and Juventus similarly generated over € 100m in 2007/08 and 2008/09[23], clubs such as FC Basel, Austria Vienna etc can count on less than 5% of these sums at best. With limited purchasing power for talent it is no surprise that big clubs from small countries no longer have a major role to play in the top European competitions. A well know statistic demonstrates this: while before 1996 more than half or even three quarters of clubs made it to the of the UEFA Champions League in more recent years 7 out of 8 clubs came from the big 4.

FIGURE 4 ABOUT HERE

The reason for this development can be found in the development of the regulatory framework for football in Europe, in particular the Bosman ruling.[24] The Bosman ruling opened up the way to the development of hugely successful club competitions in European football. The regulatory framework governing the sale of their media rights has allowed these sports to migrate to Pay TV where, in the case of the top tier national league competitions, they have become hugely valuable. They make up the majority of TV rights revenues in the Big 5 EU countries (as we have seen in Table 3) and finance the recruitment of top talent on a global scale. The big clubs from smaller countries have not benefited in the same way from these commercial and regulatory trends and are in fact today at a major disadvantage in the market for talent, and consequently sporting success in the major European football club competitions tends to elude them. The following section reviews the regulatory framework and government interventions in more details given their importance in shaping the negations between sport and broadcasters.

[23] Source TV Sports Market 2008.
[24] For a summary of Bosman and its impact on European sport see Kesenne (2006)

7. Public policy interventions affecting TV right deals

There are numerous public policy interventions that affect sport and its commercial relationship with broadcasting. While the principle of listed events and collective selling of sport rights had been the focus of attention for much of the 1990's with interventions at both the national and European community level, the early part of this decade has seen a convergence of rules governing the behavior of sport governing bodies, clubs and league organizations. In particular, the European Commission and various national competition authorities have shaped the regulatory framework under which media rights deals are negotiated. Their decisions have covered the collective selling of sports media rights and the mergers of media companies active in the broadcasting of sport events. In addition, national governments have implemented the Television Without Frontiers Directive with respect to the reservation of certain listed events to broadcasters that reach more than 90% of the population.

7.1 Collective selling of sports rights

Three leading Commission decisions under Art 81/82 (renumbered now Art 101/102 of the TFEU) concerning the collective selling of sports rights have helped to shape the principles summarized above and illustrate the Commission position. They are:

- The UEFA Champions League decision from 2003[25]
- The German Bundesliga decision from 2005[26]
- The English Premier League decision from 2006[27]

According to Torben Toft (2006), the leading precedent is the UEFA Champions League decision from July 2003 in which the Commission first accepted joint selling of football rights and laid out the principles for a pro-competitive rights structure and sales

[25] Commission decision of 23 July 2003, Case 37398 *Joint selling of the commercial rights of the UEFA Champions League*, OJ 2003 L 291/25

[26] Commission decision of 19 January 2005, Case 37214 Joint selling of the media rights to the German Bundesliga, OJ 2005 L 134/46

[27] IP/06/356: Competition: Commission makes commitments from FA Premier League legally binding, 22 March 2006.

procedure which include open and transparent tender procedures, limited duration of contracts (3 years), limited scope (unbundling) and fall back of unsold rights. [28]

A close reading of these three leading cases suggests beyond the set of common principles some important case-specific differences. This is partly due to the different circumstances that exist in the respective member states with the UK, for example, having a relatively mature Pay TV market compared to Germany. This argument has been used to justify the no-single buyer rule in the UK under which the English Premier League is committed to restrict the maximum number of packages of live games for broadcast in the UK that a single buyer can purchase to 5 out of a total of 6 packages. No such rule applies in Germany. In Germany, however, the DFL made a commitment to substantially unbundle its media rights according on distribution platform lines and other criteria. This is in contrast to the EPL where the packages being auctioned where platform neutral.[29] The most serious restrictions operates at the level of the UEFA Champions League where the right to choose a FTA live broadcast on at least one match day works against pay TV broadcasters and arguably affects the value that these rights would otherwise fetch. It is not obvious why such a restriction would apply to the live games of the UEFA Champions League but not the German Bundesliga or the EPL.

7.2 Media mergers[30]

The Commission and NCAs have also imposed or accepted commitments when considering mergers of media companies that hold media rights and operate pay TV channels offering premium sports content. Important decisions have dealt with pay TV mergers in France, Italy and Spain.

In Italy, the proposed merger between Stream and Telepiu (decision of 13 May 2002, Italy) raised concerns over the creation of a near monopoly, as the two companies were the only providers of pay-TV in Italy. Notwithstanding the approval of the

[28] See also Presentation by Philip Kienapfel (DG Competition) on 29 March 2007 in Brussels, "Bottlenecks in Digital Broadcasting – The use of EC competition law to enforce access to sport media rights".
[29] See also comments made by Kienapfel and Hammond in 28 above.
[30] This section draws on Hoehn, Rab and Saggers (2009) analysing the national merger remedies practice in the information and communications sectors of the six major European antitrust jurisdictions.

transaction by the Italian competition authority subject to conditions the merger was later abandoned and the operation was restructured and notified to the European Commission as *Newscorp/ Telepiu* (COMP/ M. 2876). Also known as the *SkyItalia* merger case it led to the creation of a new Sky branded DTH pay TV operator in Italy. One of the major commitments Newscorp made to get clearance from the European Commission was in respect of ongoing exclusive contracts where it agreed to waive exclusivity and other protection rights for non-DTH transmission for football and other sport events. This commitment enabled operators competing on other means of transmission (for example, cable, Internet and UMTS) to have direct and immediate access to premium sport contents. In addition, Newscorp agreed to a limitation of the duration of future exclusive contracts for DTH transmission with football teams to two years.

The French competition authority cleared the 2006 merger of two satellite broadcasting and television service providers in France TPS and Canal Sat subject to a record 59 commitments (*TPS/Canal Sat (decision of 30 August 2006, France).* The majority of these commitments are aimed at enabling the acquisition of broadcast rights, programmes and channels by non-satellite operators.

In Spain, the merger in late 2006 between Audiovisual Sport (AVS) and the biggest player in the Spanish pay-TV market, Sogecable SA, raised concerns over the foreclosure of the Spanish pay-TV market *(decision of 26 February 2007, Spain)*. To ensure access by rival pay-TV operators to football broadcasting rights owned by AVS the transaction was only approved subject to the commitment (amongst others) that AVS guarantee third party access to football content on fair, transparent and non-discriminatory terms.[31]

7.3 Listed events

Access to the broadcasting of sporting events in the EU has also been achieved through public policy measures other than competition and merger policy. The European listed events legislation was a response to the concern that top sporting events, such as

[31] *Sogecable SA/ Audiovisual Sport (AVS),* decision of 26 February 2007 (Spain) [e-Competitions, no 20847].

the World Cup and Olympics would migrate to pay-TV and hence would become inaccessible to the majority of the population (Gratton and Solberg, 2007). Listed events were first introduced into the 1990 UK Broadcasting Act, followed by specific changes in the 1996 Broadcasting Act (DCMS, 2002).[32] This national legislation was incorporated into the revised EU-wide 1997 Television Without Frontiers Directive (TWDF), which also set out the basic level of TV regulation across all programme genres, relating to programme standards and origination to safeguard certain public interest objectives, such as pluralism, cultural and linguistic diversity, the right of reply, consumer protection and protection of minors.

The rationale of the TVWF directive is that certain events have some national resonance, something that unites the respective nation. The specific objectives which drive the legislation include: public good, national pride (a wide group of people enjoying competition); access (non-exclusionary effects are reduced by mandating distribution); equity (to avoid only rich people watching top sporting events). It is yet another policy intervention, similar to the ones found in the merger commitments in Spain and Italy, designed to influence the distribution of sports broadcasting but in a rather crude manner. It arguably distorts the sports bidding market, and potentially depresses the value of sports rights by allocating rights to different broadcasters (Cowie and Williams, 1996). Ultimately, it is an empirical question whether the consumer benefits of universal coverage and potentially increased downstream competition among FTA broadcasters are higher than the costs from lower rights fee and income to the sporting bodies and hence less investment in the game, which potentially affects match quality. If the demand for sport broadcasting is relatively inelastic, then the costs of falling rights fees would have little effect on investment and quality. Listing events would then be one way to prevent the 'siphoning' of programming revenues without adverse overall negative effect on consumer welfare.

[32] The US had anti-siphoning rules for years until they were overturned by the courts in 1977 in Home Box Office v. FCC. The courts found that the FCC had not properly justified these rules leaving it open for the FCC to draw up revised rules that met this criticism. See Hoehn and Lancefield (2003).

7.4 Other regulatory antitrust interventions

In the UK, the investigation by Ofcom into the pay TV sector led to far reaching must-offer obligations on BSkyB for core premium sport content. The terms of supply of the channels carrying such core premium content would be subject to a retail minus pricing rule. BSkyB vehemently rejected these proposals which are subject to appeal. [33] The proposed measures seem to be drastic and echo remedial measures found only in decisions by the European Commission in application of Article 82, and only then in exceptional circumstances involving super- dominant companies.[34]

[33] Response by BSkyB to Ofcom's Consultation Document Pay TV second consultation: access to premium content' of 30 September 2008.

[34] See Microsoft Decision of 23 March 2004 upheld by the Court of First Instance in its ruling of 17 September 2007.

8. Conclusions

Broadcasting and sport in Europe operate a €10 billion symbiotic relationship, almost 50% of which is due to football's top competitions. This symbiosis is the result of a complex set of interactions between sport governing bodies, league and event organisations, clubs, agencies on the one hand and private and public service broadcasters on the other. Our analysis of the commercial relationships between broadcasters and sport has covered a number of deals in 15 European countries with the main emphasis on the Big 5 countries and on club and national teams competitions. The regulatory framework has covered legislative development across the EU and leading decisions of the European Commission and national competition authorities.

One major result of our analysis of football right deals in the big five European countries is that the allocation of media rights is spread across private and public broadcasters with private pay TV generally capturing the rights to the live games to the top tier national league competitions and the major golf tournaments, while sharing the media rights to the UEFA CL and the major tennis events with FTA broadcasters. The public and private broadcasters tend to cover major global sporting events such as the Olympics or the FIFA World Cup (as well as other sporting events that seek to achieve maximum viewership exposure).

An empirical model of TV rights is constructed and estimated using two sub samples, club and national teams' competition. Results suggest that important determinants for both types of competition are the size of potential viewers and pay TV. As regards club competition, pay TV affects rights fees much more in top 5 countries than it does in smaller countries. TV rights deals of championship league seem not to differentiate from those of domestic championships deals. On the other hand, TV rights value of national teams competitions are affected not only by pay TV and size of potential audience but also by quality factors.

Another important finding relates to the strong growth in media rights revenues for the top tier domestic football competitions in the Big 5 countries and the growing inequalities between large football clubs from smaller countries and the top tier clubs who earn a big slice of media rights from national as well as international competitions

such as the UEFA Champions League and can afford to hire the best talent. This situation is due to a number of commercial and regulatory developments that have happened over the last few years but were to an extent foreseeable. Hoehn andSzymanski (1999) argued that the current parallel system of national and international club competitions was unstable and would need to give way to a European Superleague. They envisaged an extended league system covering 60 clubs grouped in four regional conferences similar to the US model of major league sports.

The regulatory framework has played its role in that right deals for domestic league football have almost fully migrated to Pay TV whereas the UEFA CL has not. The five big leagues now form in effect a European Football Conference that play top club football, employ the top talent, and each year send their top teams into the UEFA CL which act as a set of year long play-offs to crown the European Club Champion. The UEFA CL makes some concessions to being a Europe-wide club competition that is open to clubs from smaller countries but in reality the competition only comes alive in the later stages when it is the top clubs from the top leagues who have the largest share of places and greatest chances of qualifying for the final stages. In other words we do have de facto an European Superleague system but one that largely excludes large clubs from small countries. The four or five top leagues acts as successful platforms benefiting from economies of scale, network effects and cross-platform effects which leagues from smaller countries cannot match. The platform effects have been magnified by Pay TV which taps into the willingness to pay of viewers for a well defined fixture list of races, matches and games with an uncertain outcome. The quality of the competition as measured by talent on show clearly affects the willingness to pay not only domestically but also internationally. The top domestic football leagues in Europe are significant exporters, particularly the English, Spanish and Italian leagues. Broadcasters (typically Pay TV) in smaller countries may pay as much for the live rights to the English Premier League as the domestic league (eg Switzerland and Austria). This simple statistics says it all.

Table 1 Selected major sports rights deals over time (in millions, nominal prices)

Event									Increase (%)
Summer Olympics (Europe)	(per event)	$94.5 m1992	$247 m 1996	$350m 2000	$394m 2004	$443m 2008			369%
Football World Cup (global)	(per event)	$240m 1990, 1994, 1998	$2360m 2002, 2006	$2.5bn 2010					942%
NFL (US)	per annum	$911m 1990-1993	$1097m 1994-1997	$2200m 1998-2005	$3735m 2006-2010				310%
English Premier League (UK)	(per annum)	£60m 1992-1997	£170m 1997-2001	£370m 2001-2004	£341m 2004-2007	£654m 2007-2009	£620m 2010-2011	£661m 2010-2012	1000%
UEFA Champions League (UK)	(per annum)	£25m 1996-1999	£63m 1999-2003	£83m 2003-2006	£86m 2006-9	£142m 2009-2012			468%

Source: Hoehn/Lancefield (2003) and updated authors calculations

Table 2 Sports Rights Fees in the US and Europe, 2002 ($m, nominal prices)

	US	Top 5 EU	Germany	UK	France	Italy	Spain
Rights fees of major sports	4,931	5159	1617	1479	721	913	429
Football/soccer fees	2,200	2,390	436	794	455	395	310
football&soccer in % of total	45%	46%	31%	54%	63%	43%	72%

Source: Hoehn/Lancefield (2003)

Table 3 TV Right Deals Big 5 EU countries for 2008 and 2009 (millions, nominal prices)

Country	Euro 2008	UEFA CL (2009)	Domestic League (2009)	Import EPL (2009)	Import La Liga (2009)	Import Serie A (2009)	Import Bundes liga (2009)	Total value (2009)
UK	62	142	620	na	17	0.25	0.33	780
Italy	115	98	763	6.5	3.3	na	0.67	871
France	104	56	602	7.3	4.9	7.5	1	679
Germany	115	84	377	4.8	1.17	1.3	na	468
Spain	70	86	475	3.9	na	3	na	568
Total	**466**	**466**	**2,837**	**22,5**	**26,4**	**12,05**	**2**	**3305**

Source: TV Sports Markets (2008, 2011)

Table 4 Allocation of sport media rights between and Public/Private and FTA/Pay TV broadcasters in 5 EU countries

	Football							Olympics			Other				
Country	Live Top tier domestic league	H'lights Top tier domestic league	World Cup 2010, 2014	Euro 2008 Champion ships	Domestic Cup	UEFA Champions League	national team matches	Summer Games 2008	Winter Games 2010	Summer Games 2012	Tennis	Motor sport	Cycling	Rugby	Golf
France	Private Pay	Private FTA	Private FTA	Private FTA	Public FTA	Private FTA/ Pay	Private FTA	Public FTA	Public FTA	Public FTA	Public FTA Private Pay	Private FTA	Public FTA	Private Public FTA	Private Pay
Germany	Private Pay	Public FTA	Public FTA	Public FTA	Public FTA	Private FTA/ Pay	Public FTA	Public FTA	Public FTA	Public FTA	Public FTA Private Pay	Private FTA Rivate Pay	Public private FTA	na	Private Pay
Italy	Private Pay	Private FTA	Public FTA	Public FTA	Public FTA	Public FTA Private Pay	Public FTA	Public FTA	Public FTA	Public FTA	na	Public FTA Private Pay	Public FTA	Private Pay	Private Pay
Spain	Private Pay	Private Pay	na	Private Pay	Private FTA	Private FTA/ Pay	Public FTA	Public FTA	Public FTA	Public FTA	Public FTA Private Pay	Private FTA	Public FTA	na	Private Pay
UK	Private Pay	Private FTA	Public Private FTA	Public Private FTA	Private FTA	Private FTA/ Pay	Public Private FTA	Public FTA	Public FTA	Public FTA	Public FTA Private Pay	Public FTA	Private Public FTA	Private Pay	Public FTA Private Pay

Source: own compilation from TV Sports Markets 2008

Table 5 Recent domestic football rights deals in top 5 European markets

		2007-08	2008-09	2009-10	2010-11	2011-12
		French Ligue 1				
Average TV rights fee per annum	**Pay**	€600m (live + highlights)	€567m (live + highlights)	€567m (live + highlights)	€567m (live + highlights)	€567m (live + highlights)
	Free	€24.5m (highlights)	€35m (highlights)	€35m (highlights)	€35m (highlights)	€35m (highlights)
No. of live games	**Pay**	380 (114 pay-TV, 266 PPV)	380 (76 pay-TV, 304 PPV)	380 (76 pay-TV, 304 PPV)	380 (76 pay-TV, 304 PPV)	380 (76 pay-TV, 304 PPV)
	Free	0	0	0	0	0
		German Bundesliga				
Average TV rights fee per annum	**Pay**	€220m (live)	€220m (live)	€250m (live)	€250m (live)	€250m
	Free	€125m (live + highlights)	€125m (live + highlights)	€127m (live + highlights)	€127m (live + highlights)	€127m (live + highlights)
No. of live games	**Pay**	306 (all pay-tv)	306 (all pay-tv)	306 (all pay-tv)	306 (all pay-tv)	306 (all pay-tv)
	Free	2	2	2	2	2
		Italian Serie A				
Average TV rights fee per annum	**Pay**	€757m (live + highlights)	€754m (live + highlights)	€763m (live + highlights)	€828m (live + highlights)	€820m (live + highlights)
	Free					
No. of live games	**Pay**	380 (on both pay-tv and ppv)	380 (on both pay-tv and ppv)	380 (on both pay-tv and ppv)	380 (on both pay-tv and ppv)	380 (on both pay-tv and ppv)
	Free	0	0	0	0	0
		Spanish Liga				
Average TV rights fee per annum	**Pay**	€265m (live + highlights)	€265m (live + highlights)	€325m (live + highlights)	€325m (live + highlights)	€325m (live + highlights)
	Free	€150m (live + highlights)	€150m (live + highlights)	€150m (live + highlights)	€150m (live + highlights)	€150m (live + highlights)
No. of live games	**Pay**	342 (38 pay-tv, 304 ppv)	342 (38 pay-tv, 304 ppv)	342 (152 pay-tv, 190 ppv)	342 (152 pay-tv, 190 ppv)	342 (152 pay-tv, 190 ppv)
	Free	38	38	38	38	38
		English Premier League				
Average TV rights fee per annum	**Pay**	£596.8m (live + highlights)	£596.8m (live + highlights)	£563.1m (live + highlights)	£603.3m (live + highlights)	£603.3m (live + highlights)
	Free	£57.2m (highlights)	£57.2m (highlights)	£57.2m (highlights)	£57.7m (highlights)	£57.7m (highlights)
No. of live games	**Pay**	138	138	138	138	138
	Free	0	0	0	0	0

Source: Sport Business Intelligence.

Note: Deals for live German Bundesliga rights also include live rights for the second-tier division 2.Bundesliga. In Italy, all matches are available live through pay-TV subscription packages whilst ppv is effectively an option for those consumers who do not wish to buy the full football package

Figure 1 World Cup 2014 TV right fees in relation to TVHHs

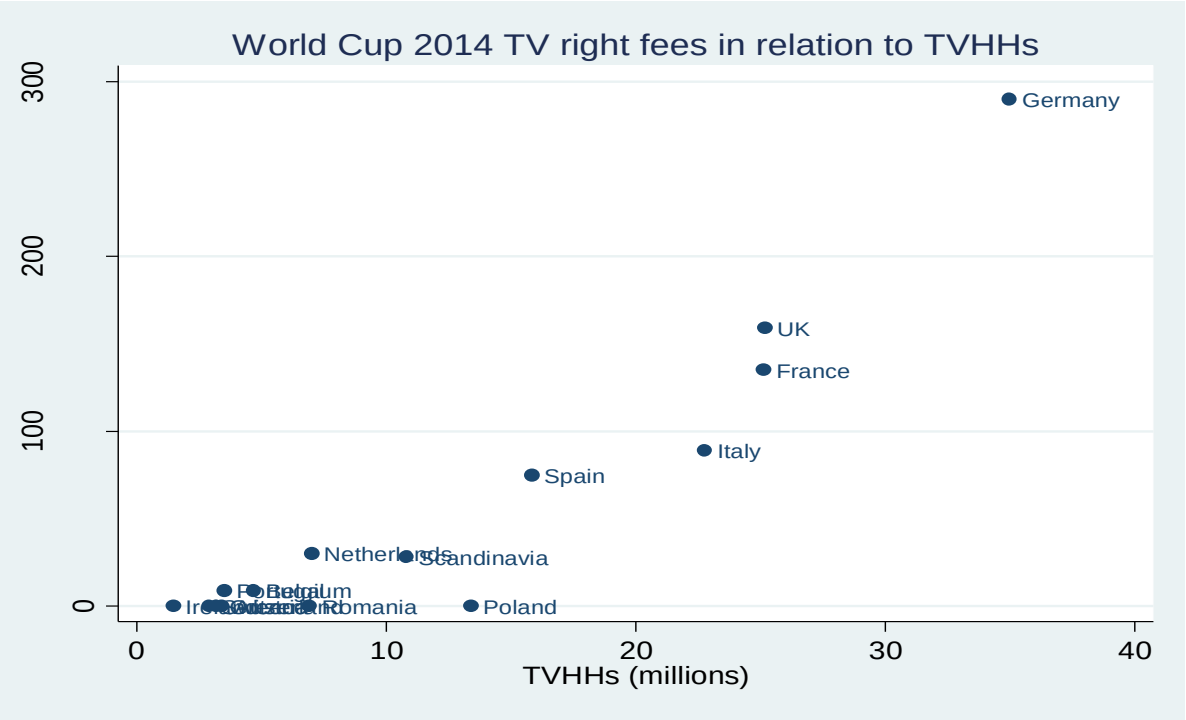


Figure 2 Euro 2008 TV rights fees in relation to TVHHs

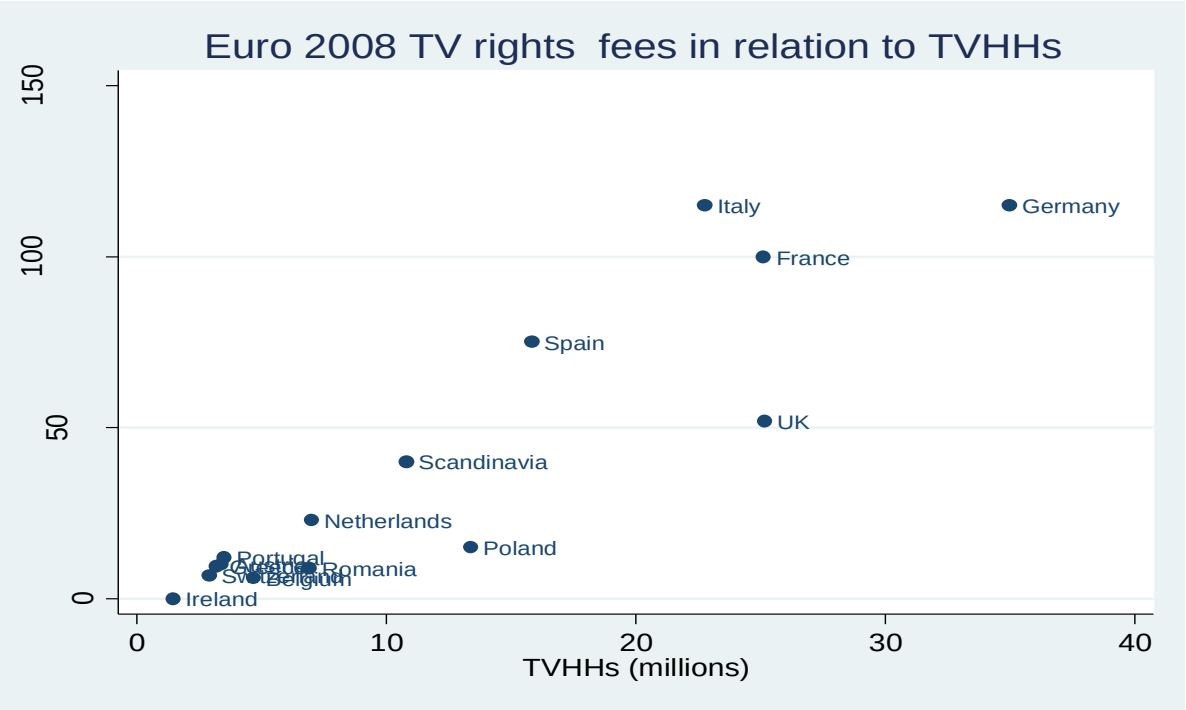


Figure 3 UEFA Champions League rights fees 2006-2009 in relation to TVHH

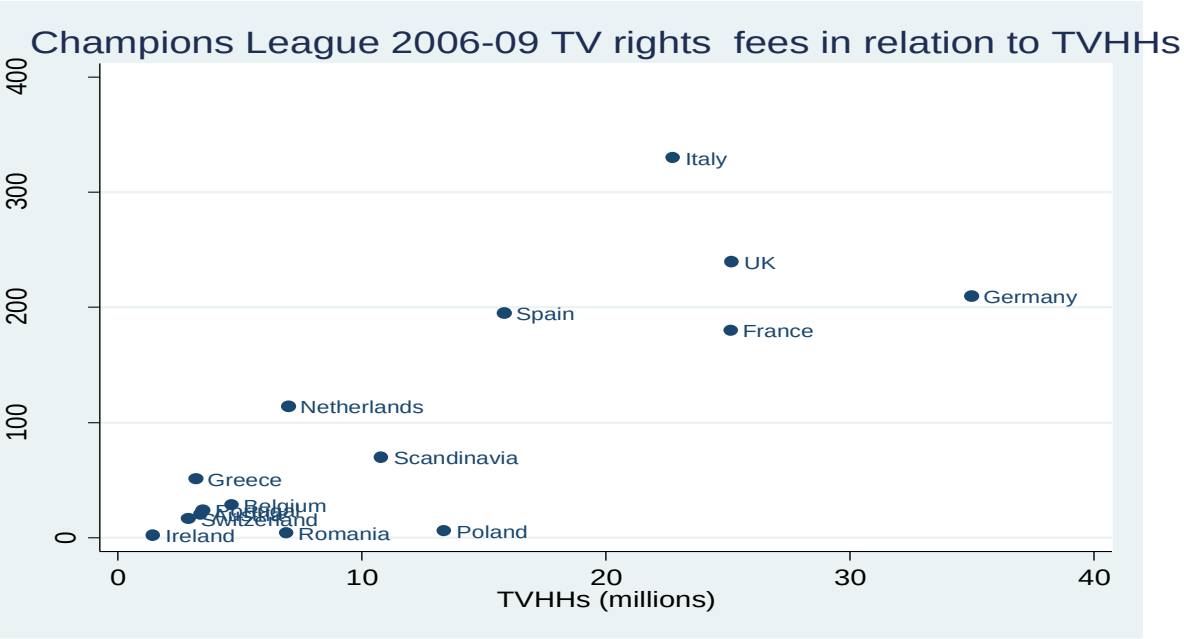


Table 6 UEFA Champions League deals 2006-09 by country

Country	FTA right fees	FTA days	pay tv right fees	Total right fees
Germany	27.5	1	42.5	70
UK	53.2	1	49.8	103
France	30	1	30	60
Italy	50	1	53	103
Spain	25	1	40	85
Netherlands	30	2	7.5	37.5
Belgium	9	2	0.5	10
Portugal	na	1	na	8
Austria	6.5	1	0.4	6.9
Greece	9.1	1	7.9	17
Switzerland	na	2	na	5.5
Scandinavia	na	0	na	23.3

Source: own compilation from TV Sports Markets 2008

Table 7: Description and measurement of explanatory variables

Explanatory Variables	Description	Measures
TVHH	Potential audience size	Number of TV housholds
Previous finalist	Event quality	Dummy variable takes value one if national team/club was in finals previously
Football event (World Cup vs Euro) for national teams competition	Football event (θ)	World Cup dummy that takes value one if World Cup competition and zero if Euro
Football event (champions league vs domestic league) for club competition	Football event (θ)	Champions league dummy that takes value one if champions league competition and zero if domestic league
Broadcasters competition	Competition intensity at the bidding stage	Dummy variable that takes value one if intense competition (more than 3) and zero otherwise
Ebu	Whether a broadcaster buys TV rights from the EBU	Dummy variable that takes value one if a broadcaster buys TV rights from the EBU and zero otherwise
Sublicensing (role of pay TV at the national teams competitions only)	Whether FTA broadcasters sublicense acquired TV rights	Dummy variable that takes value one if sublicensing and zero otherwise
Broadcaster type (club competition only)	FTA versus Pay TV	Dummy variable that takes value one if Pay TV and zero otherwise
Home effect	Hosting a football event	Dummy variable that takes value one if a country hosts a football event and zero otherwise
Big five (club competition only)	Whether there is a significant difference between top 5 and the rest (mainly due to quality reasons)	Dummy variable that takes value one if a country belongs to the top 5 markets and zero otherwise

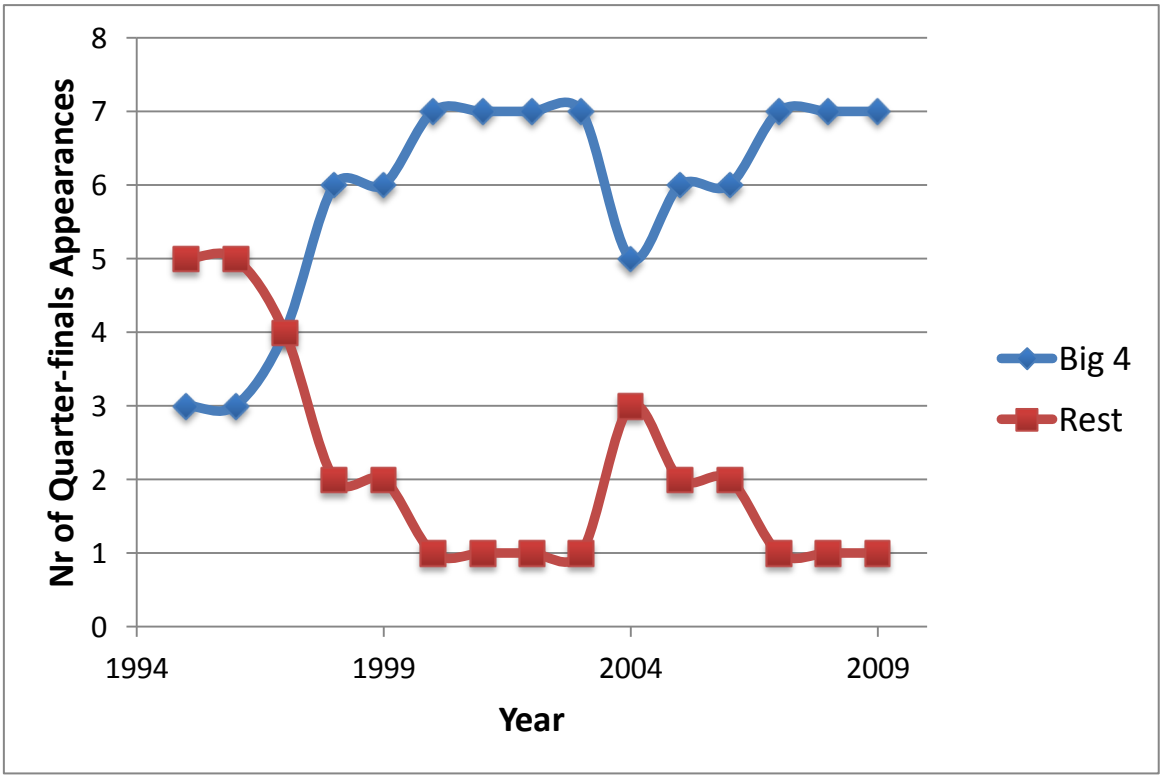
Table 8 Estimates of the empirical model for club and national teams competition

8a) National teams competition		
Independent variable	ln (tv rights)	
Dependent variables	**Coef.**	**P>z**
Sublicensing to pay TV	0.30	0.100 *
tvhh	0.08	0.000***
World cup dummy	0.56	0.002***
Broadcasters competition	0.05	0.773
Qualified dummy	0.63	0.004 ***
Ebu	-0.33	0.191
Home effect	-0.13	0.607
constant	1.45	0.000***
Log likelihood	-16	
Number of obs	60	

8b) Club competition		
Independent variable	ln (tv rights)	
Dependent variables	**Coef.**	**P>z**
Pay TV dummy (domestic)	0.44	0.099 *
Pay TV dummy (champions league)	-1.43	0.000***
tvhh	0.06	0.000***
Champions league dummy	-0.07	0.723
Broadcasters competition	0.31	0.458
Previous finalists	0.28	0.193
Pay TV champions League X big five	1.47	0.000***
Pay TV domestic X big five	2.16	0.000***
constant	1.43	0.001***
Log likelihood	-312	
Number of obs	226	

Note: * significant at 10%; ** significant at 5%; *** significant at 1%

Figure 4 QF places UEFA Champions League: large versus small countries



Source: Authors calculation

Table 9 Football Club Revenues (£mill)

1	Real Madrid	£289.6m
2	Manchester United	£257.1m
3	Barcelona	£244.4m
4	Bayern Munich	£233.8m
5	Chelsea	£212.9m
6	Arsenal	£209.3m
7	Liverpool	£167m
8	AC Milan	£165.8m
9	AS Roma	£138.9m
10	Inter Milan	£136.9m

Source: Deloitte: 2007/8

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