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THE DEMAND FOR INTERNATIONAL FOOTBALL TELECASTS IN THE UNITED STATES

Georgios Nalbantis and Tim Pawlowski

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The Demand for International Football Telecasts in the United States

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Executive Summary

Since the nomination of the USA as hosts of the 1994 FIFA World Cup and particularly in the past decade, the country's attachment to football (soccer), and the US football market, has progressed significantly. Despite this, however, little is known about the country's relevant market. Football-related studies have predominantly focused on demand in European countries, while studies from North America have mainly focused on demand for the 'Big Four' Major Leagues, National Football League (NFL), National Basketball Association (NBA), Major League Baseball (MLB) and National Hockey League (NHL). This is rather surprising considering that even though football holds a relatively small market share in the US sports broadcast market compared to the 'Big Four', it is a rapidly evolving product, with great prospects. This project is the first to provide a comprehensive overview of US consumer demand for (overseas) televised football.

In general, demand for televised football is a relatively under-researched topic. The findings of the comparatively few studies suggest that many of the factors influencing attendance demand apply also for TV demand. Such factors are related to the uncertainty of outcome hypothesis (UOH) and include (amongst others) quality aspects of the contestants as well as competition and scheduling issues. Yet, however, a detailed review of previous research reveals several shortcomings, which this project intends to address. The shortcomings relate to issues such as the measurement of demand, the lack of consensus with regard to the impact of key determinants (e.g. UOH), the lack of direct applicability of survey study findings and the absence of research focusing on transnational demand.

Accounting for transnational demand, this project is focused on the US consumers' demand for the English Premier, Spanish La Liga, Italian Serie A, German Bundesliga, French Ligue 1 and the UEFA Champions League, which represent the most popular and marketable football competitions worldwide, and have recently sealed lucrative media rights contracts in many large markets, including the USA. The study also takes account of North American Major League Soccer (MLS) in order to provide a more comprehensive overview of the country's football market and to allow for direct comparisons with the aforementioned European competitions.

Employing a unique and innovative research design during the data gathering process, the project relies on survey data gathered in two waves, at the end of the 2014–2015 season (mid-May) and at the beginning of the 2015–2016 season (beginning of September). The sample was recruited from a US-wide representative online panel and consists of football-interested US respondents 18 years old or older. A comparison of the sample characteristics with US-based football surveys and US Census data reveals similar patterns. Therefore, we argue that our findings are both representative of US residents in general and football-interested US residents in particular. Furthermore, this suggests that the football-interest is rather equally distributed amongst US residents.

To proxy (overseas) football demand in the USA, the analysis relies on four different measures. Two of those measure league-level demand, that is the reported viewership per week/matchday and willingness-to-pay (WTP) statements about pay-TV league subscription packages. The other two measures focus on game-level demand, that is reported intention to consume (ITC) prior to a selection of European football games and WTP to attend a European football game staged in the USA. To capture demand, determinants the surveys also include measures for various items previously found to influence demand and factors which have been so far overlooked in the literature, amongst others the perceived level of long-term competitive balance (CB) and socio-demographic characteristics.

Based on US consumers' statements, descriptive statistics reveal that the perceived relative performance of leagues and competitions follows the subsequent preference pattern: Premier League > UEFA Champions League > MLS > La Liga > Bundesliga > Serie A > Ligue 1. This pattern is fairly similar to actual US viewing behaviour based on secondary data such as TV audience figures. For analysing the factors associated with between-competition and between-individuals differences in the past, present and future consumption of European and MLS football telecasts,

we employ different regression models, using the aforementioned proxies for demand as dependent variables.

The econometric models reveal that the perceived level of CB within a whole league or competition (long-term CB), perceived quality of play, and the perceived level of championship (un)certainty (mid-term CB), matter for US consumers. Furthermore, US consumers seem to have preferences similar to European consumers when watching European football telecasts: they do not value game uncertainty (short term). Furthermore, interest in the leagues, supporter status and the accessibility of the leagues are all positively associated with (overseas) football viewership. Moreover, socio-demographics play an important role. US viewers of (overseas) football are more likely to be Hispanophone, non-whites, relatively affluent, male, young, with a comparatively low educational background, and people who live within the boundaries of an MLS city.

These findings offer valuable insights for US broadcasters, European league organizers and managers to adjust existing strategies and/or develop new strategies in conquering the US football market. In this regard, (1) it seems advisable to generate a USP by not only focusing on what other football leagues cannot or do not offer but also emphasising the unique features of the sport in comparison to other sports; (2) the participation of clubs in pre-season tours in the USA could be important in the generation of a regular/devoted viewership; (3) ensuring a certain level of long-term CB within the different leagues and competitions is pertinent; (4) talent investments and a boost in the quality of play may generally enhance the viewership of leagues; (5) league organisers should ensure that selected broadcast partners have a generally high audience reach; (6) promotion of the league's coverage should be done in a timely manner and may possibly be more effective through advertisement in radio or television, than in print media; (7) targeting Hispanophone consumers may increase revenues indirectly, via higher viewership, rather than directly, via high pay-tv subscription fees; (8) further orientation towards high-income consumers seems advisable; (9) networks may reduce the average age of their total viewership by acquiring football broadcasting rights, and current rights holders should further develop their online portfolios. Leagues and clubs may try to foster the net-savvy young US audience with dedicated North American versions of their official websites; (10) the incorporation of US national symbols in marketing strategies or de-emphasising the national identity of their products seems advisable for overseas leagues and club managers.

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CHAPTER 1

Introduction

Abstract This book deals with the US demand for European football telecasts. To do so, Chapter 1 provides some introductory remarks and illustrates the pioneering character of this research. It briefly discusses the shortcomings of current empirical findings and clarifies the study's focus.

Keywords Project description · Research question · Research rationale

Notwithstanding the significance of media rights revenues in sports in general and football (soccer) in particular, surprisingly little is known about the factors associated with demand for sports on television. There has been pioneering work in a few studies, and five major shortcomings can be identified. *First*, the majority of papers utilise TV ratings to capture demand, which inevitably overlooks audiences in particular environments where many people frequently watch football games, in bars and other public places as well as via online streaming in the household. *Second*, the existing studies based on survey data often focus on imprecise demand proxies such as 'interest' in football broadcasts. *Third*, there is a lack of consensus regarding the impact of several factors associated with TV demand. On the one hand, factors such as socio-demographics are often omitted from demand models due to a lack of either available data (studies based on TV ratings) or research interest (studies based on survey data). On the other hand, the measurement of factors often varies across the

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studies making comparisons of results very difficult. *Fourth*, related to the aforementioned issue, the relevance of uncertainty of outcome, a core factor, to league management, has not yet been fully explored. While the relevance of game uncertainty has been frequently tested, other dimensions such as inter-seasonal and championship uncertainty have either been neglected or are rarely explored in the empirical analysis of TV demand. *Fifth*, although international media rights constitute a continually growing income stream, no research has evaluated the determinants of demand for foreign league telecasts and it may be that overseas consumers experience and consume football products differently from local football enthusiasts.

This project uses survey data to analyse US demand for European football telecasts and tries to overcome the aforementioned shortcomings by employing a novel empirical design which considers the type (tape-delayed or live viewing) and the setting of consumption (at home or in a public place). The focus is on TV demand for national cup and league games in the English Premier League, Spanish La Liga, Italian Serie A, German Bundesliga, French Ligue 1 and UEFA Champions League. The analysis takes account of North American Major League Soccer (MLS) in order to provide a more comprehensive overview of the country's football market and to allow for direct comparisons with the defined European competitions.

The report is organised into six chapters. Following these introductory remarks (Chapter 1), Chapter 2 provides all necessary background information with regard to the US broadcast market (in general), as well as the football broadcast market (in particular). The state of research is discussed in detail in Chapter 3. The data are presented, with information about the sampling procedure, the survey method and implementation, the quality corrections employed, the sample's characteristics and its representativeness (Chapter 4). The main part of this report (Chapter 5) offers a detailed overview of the respondent evaluations with regard to several issues concerning the leagues and competitions, discussing the central findings of our league- and game-level demand models. The last chapter is the synopsis of the report and offers discussion about the central findings and their managerial implications, as well as avenues for further research (Chapter 6).

CHAPTER 2

The Football Broadcast Market in the USA

Abstract Ever since the 1994 World Cup, the football broadcast market in the US has progressed significantly. Chapter 2 contains information about the US broadcasting market in general and the US football broadcast market in particular. It gives an insight into the country's market idiosyncrasies, showing that the US broadcast market is highly dynamic, very competitive and dominated by the pay-tv industry. Based on secondary data (i.e. TV audience sizes) this chapter further provides information with regard to the demand for televised sports in the US. It is shown, that even though football holds a relatively small market share in the country's sports broadcast market, it is a rapidly evolving product, with great prospects.

Keywords Television market · Pay-tv · Sports networks

Information about both the broadcast market (in general) and the football broadcast market (in particular) in the USA is essential in order to gain insight into the country's market idiosyncrasies.[1] The following chapter provides an overview of the broadcast landscape (Section 2.1), the domestic football broadcast market (Section 2.2) and its relevance (Section 2.3).

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2.1 Overview of the Broadcast Landscape

In the USA (see Fig. 2.1), programming is distributed to US households via: (a) terrestrial broadcast, 'over-the-air' (OTA), (b) unencrypted satellite, 'free-to-air' (FTA), (c) direct broadcast satellite (DBS), (d) cable television (CATV), and (e) Internet protocol television (IPTV)/TELCO. In the latter three alternatives, US households need to pay a subscription fee in order to gain access to the multichannel television bundle of their choice. The multichannel operators differ considerably in their number of subscribers and in their availability across the states or even counties, with CATV and IPTV operators being available locally, whereas DBS operators are accessible nationwide.

The multichannel operators offer services to 86 % of the available TV households. CATV holds 52 %, DBS 35 % and IPTV/TELCO about 13 % of the total pay-tv market (approx. 100 million subscribers) (Nielsen 2015).

The offered bundles vary across the operators and the programming included in them is subject to constant modifications. This is because the inclusion (or not) of particular programming (e.g. ESPN2) is part of negotiations between multichannel operators (e.g. Comcast) and programming producers/broadcast networks (e.g. ESPN Inc.). These negotiations commonly involve an affiliation fee, an amount of money paid monthly per subscriber from distributors to programming producers. In this regard, and according to SNL Kagan (research firm), the estimated average monthly per-subscriber affiliation fee paid by multichannel operators is about $6.64 for ESPN, $0.98 for FOX Sports 1 and $0.30 for the NBC Sports Network (NBCSN) (Wall Street Journal 2015).

On average, US households receive about 189 TV channels, and they consistently tune in to an average of 17 channels (Nielsen 2014a). The average American spends about 5 hours and 15 minutes daily watching TV (Nielsen 2015). According to Moffett Nathanson Research (research firm), the median age of a US broadcast or cable television viewer is about 44 years, and audiences for the major broadcast networks (NBC, CBS, ABC, FOX and The CW) have a median age of about 54 years (Washington Post 2014). The median age of US sports networks viewers is about 48 years, with beIN Sports having one of the youngest audiences (about 40 years).[2]

The broadcast landscape is inevitably affected by the fact that there are four time zones in the contiguous, and two time zones beyond the contiguous, USA.[3] The Eastern Standard Time Zone is generally used as

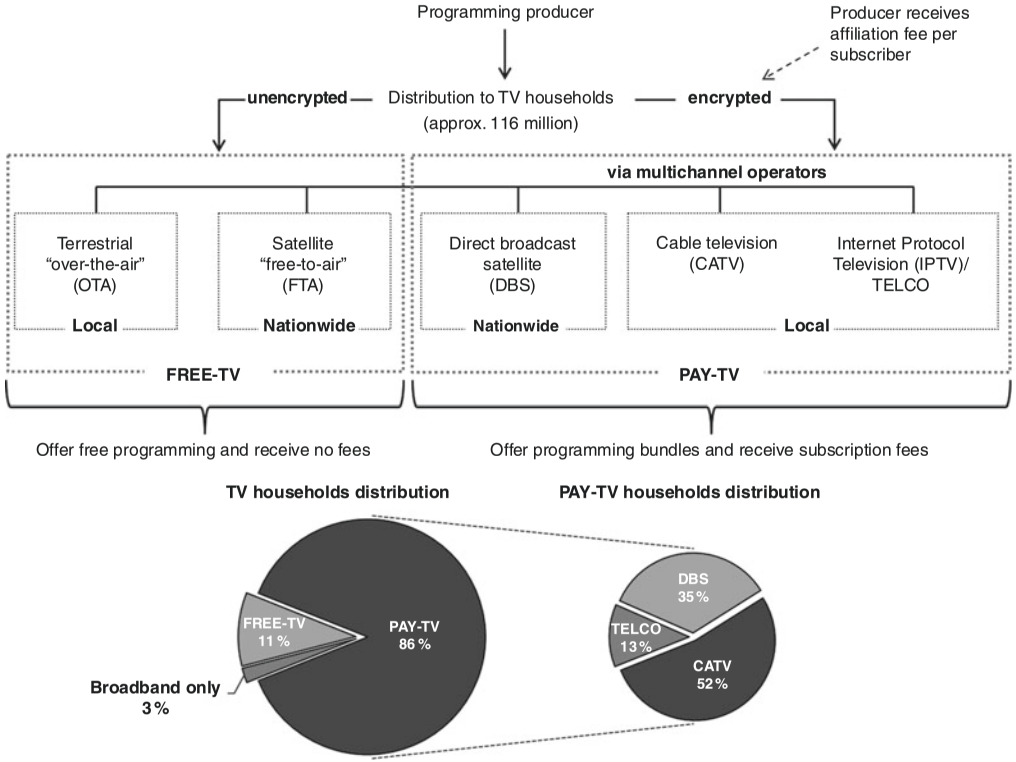

Fig. 2.1 The US broadcast market *Notes*: As of TV season 2015. Statistics retrieved from Nielsen (2015)

a *de facto* official time for the USA. Typically, prime time programming in the Eastern and Pacific time zones begins at 8.00 p.m. (7.00 p.m. on Sundays) and ends at 11.00 p.m., and for Central and Mountain time zones begins at 7.00 p.m. (6.00 p.m. on Sundays) and ends at 10.00 p.m. The 9.00 p.m. (Eastern and Pacific) and the 8.00 p.m. (Central and Mountain) time periods have the highest homes-using-television (HUT) level (Newcomb 2014).[4] Broadcast networks and channels generally operate at least two feeds. The 'eastern feed' is aired simultaneously in the Eastern and Central Time regions, and the 'western feed' in the Pacific Time region is 3 hours delayed. This ensures that programmes are aired at exactly the same time regardless of local time variations. The feed received by each subscriber (regardless of residence, West or East Coast) depends on the channel programming, with some cable channels offering just one feed across all time zones. Sports events are typically broadcast simultaneously nationwide, and as such their broadcast time varies across the different time zone regions.

2.2 Overview of the Football Broadcast Market

Table 2.1 provides an overview of the domestic, international and European football competitions currently available in the US market.[5] It becomes apparent that US consumers nowadays have access to a large variety of European and international football competitions/leagues, with their quantity varying by network. For instance, NBC Universal Networks primarily focus their football programming on the English Premier League, whereas other networks (e.g. FOX and EPSN) offer a greater variety of competitions/leagues. An interesting aspect is that some competitions are broadcast by more than one network (e.g. MLS and UEFA Champions League) and that networks such as Univision and GOL TV choose to focus predominately on football competitions which arguably attract a large share of the Hispanophone audience.

In 2015, there were over 9,000 hours of live football programming in the USA, with about two-thirds of it being broadcast in Spanish (Nielsen 2016a). Fig. 2.2 shows the share of live football programming duration across the networks, with BeIN Media and FOX Networks dedicating the most time to football broadcasts than the other networks.

In general, the majority of overseas football telecasts is broadcast via DBS, CATV, and IPTV/TELCO, and are therefore exclusively available to pay-tv subscribers, although some games from the Premier League (usually

Table 2.1 List of football competitions provided by US TV networks

FOX networks	*ESPN networks*	*Univision networks*
Bundesliga (GER)	College Soccer (USA)	CONCACAF Champions League (INT)
CONCACAF Champions League (INT)	Copa del Rey Final (ESP)	CONCACAF Gold Cup (INT)
CONCACAF Gold Cup (INT)	Copa MX (MEX)	Copa America (INT)
Copa Libertadores (BRA)	Coupe de France (FRA)	Copa MX (MEX)
Copa Sudamericana (INT)	DFB Pokal (GER)	Eredivisie (NED)
DFL Supercup (GER)	FIFA Men's World Cup (INT)[2]	FIFA Men's World Cup (INT)[2]
FA Cup (ENG)	Major Arena Soccer League (USA)	Liga MX (MEX)
FIFA Men's World Cup (INT)[1]	MLS (USA)[3]	MLS (USA)[3]
FIFA Women's World Cup (INT)	MLS Cup (USA)	MLS Cup (USA)
MLS (USA)[3]	NASL (USA)	Primeira Liga (POR)
National Women's Soccer League (USA)	NCAA Women's Soccer (USA)	
NCAA Women's Soccer (USA)	Supercopa de España (ESP)	
Scottish Championship (SCT)	UEFA Champions League (EUR)[4]	
Scottish Premier League (SCT)	UEFA Euro (EUR)	
UEFA Champions League (EUR)[4]	US Open Cup (USA)	
UEFA Euro (EUR)	USL Pro (USA)	
UEFA Europa League (EUR)		

(*continued*)

Table 2.1 (continued)

GOL TV	*BeIN Media Networks*	*NBC Universal Networks*
Bundesliga (GER)[5]	Copa del Rey (ESP)	FIFA Men's World Cup (INT)[1]
Campeonato Brasileirão (BRA)	Football League (ENG)	FIFA Women's World Cup (INT)
Campeonato Paulista A1 (BRA)	La Liga (ESP)	Premier League (ENG)
Primeira Liga (POR)	Ligue 1 (FRA)	
Taça de Portugal (POR)	Serie A (ITA)	
Uruguay Primera Division (URU)		

Notes: As of 2015 and 2016 seasons. [1]Acquired the rights for 2018 onwards; [2]Rights holder for the 2014 tournament together with ABC Networks; [3]FOX/ESPN (Univision) have the English (Spanish)-language rights; [4]FOX (ESPN) has the English (Spanish)-language rights; [5]Rights holder until 2015. Broadcasts only a selection of games for 2015–2016 season. *Abbreviations*: *BRA* Brasil; *CONCACAF* Confederation of North, Central American and Caribbean Association Football; *DFB* German Football Association; *DFL* German Football League; *ENG* England; *ESP* Spain; *EUR* European competition; *FA* The Football Association; *FIFA* Fédération Internationale de Football Association; *FRA* France; *GER* Germany; *INT* International competition; *ITA* Italy; *MEX* Mexico; *MLS* Major League Soccer; *MX* Mexico; *NASL* North American Soccer League; *NCAA* National Collegiate Athletic Association; *NED* the Netherlands; *POR* Portugal; *SCT* Scotland; *UEFA* Union of European Football Association; *URU* Uruguay; *US* United States; *USA* United States of America; *USL* United Soccer League

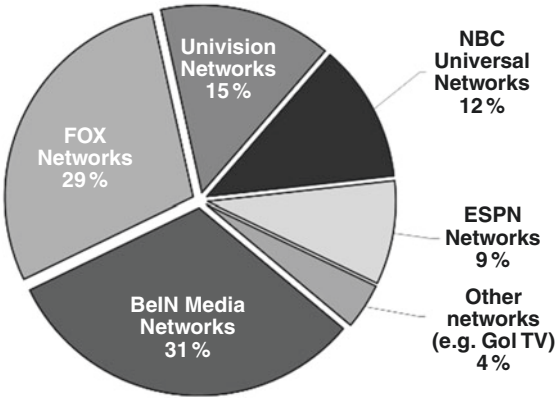

Fig. 2.2 Share of live football programming duration across the networks *Notes*: As of TV season 2015. Nielsen (2016a)

at least one per week) are accessible via FTA/OTA, therefore reaching a broader audience and achieving higher ratings than the other leagues.[6]

The US pay-tv market is more competitive than the European one (Noll 2007).[7] The US television landscape is a very market-oriented and highly dynamic system, with sports content producers' shares of subscribers varying considerably over the years and even months. For instance, GOL TV – (former) holder of the Bundesliga rights for season 2014–2015 – was only available to a limited number of TV providers nationwide and in the recent years lost its access to major multichannel operators, such as Comcast which serves almost 25 % of the total pay-tv market in the USA. In the 2014–2015 season of the TOP 5 football leagues[8]; the Premier League was available to almost 100 million homes, La Liga, Ligue 1 and Serie A were accessible to 17 million[9] and Bundesliga to just 13 million homes. The accessibility of the leagues in the 2015–2016 season was relatively similar, with the exception of the Bundesliga, which signed a new deal with FOX and is currently available to almost 85 million US viewers, with FOX Sports 1 and FOX Sports 2 being the league's main broadcasting platforms (Bundesliga 2015). Table 2.2 displays the coverage estimates of select US channels/networks which broadcast football games.

An interesting aspect of the US football broadcast market is the fact that the vast majority of football games are also broadcast online via live streaming on the dedicated web sites of the respective networks, and via

Table 2.2 Coverage estimates (in million) of US channels broadcasting football

	# of homes		*# of homes*
BeIN Media Networks		**GOL TV**	
beIN Sports	16.945	*GOL TV*	13.000
FOX Networks		**NBC Universal Networks**	
FOX	112.811	*CNBC*	93.623
FOX Deportes	21.831	*NBC*	112.811
FOX Sports 1	84.836	*NBCSN*	81.578
FOX Sports 2	45.393	*NBC Universo*	39.326
FX	95.033	*Telemundo*	62.424
ESPN Networks		**Univision Networks**	
ESPN	94.396	*UniMás*	53.544
ESPN Deportes	13.000	*Univision*	63.580
ESPN2	94.379	*Univision Deportes*	39.686

Notes: As of February 2015. Nielsen coverage estimates of US cable channels also include satellite and telco providers (ZAP2IT 2015). GOL TV coverage estimates are for 2013, as no more recent estimates are available (Hispanic TV Summit 2013)

third-party streaming service providers. Several broadcast networks also choose to offer some games *only* online.[10]

Finally, a further particularity of the country's market is the popularity of time-shifted/tape-delayed broadcasts, with recent estimates showing that about 21 % of sports event viewing in the USA does not happen in real time (TiVo Research 2014).[11] The live broadcast of the Bundesliga game between FC Bayern Munich and FC Augsburg (12 September 2015; EST: 9.30 a.m.) attracted 40,000 US viewers, for example, while the game's tape-delayed broadcast one day later (13 September 2015; EST: 4.00 p.m.) attracted 926,000 viewers (Die Welt 2015).

2.3 The Relevance of the Football Market

Since the nomination of the USA as hosts of the 1994 FIFA World Cup, the country's attachment to football, and the US football market, has progressed significantly.

Since the early 2000s, the average MLS attendance has grown almost 60 % (13,611 in 2000, 21,619 in 2015) with 161 sell-outs in season 2015, which is an all-time high for the league (MLS Press Box 2016). A similar

development can be seen in the US market for football broadcasts. Whereas in 2010, 11 networks aired over 2,613 football telecasts, with the estimated total television advertising spend for football events programming being about $265 million, by the end of 2013, 21 networks (91 % gain over 2010) aired approximately 3,891 football telecasts (49 % gain over 2010), with football-related television advertising amounting to $378 million (43 % gain over 2010) (Nielsen 2014b).

Despite this remarkable development, however, the football TV audience in the USA is relatively low compared to that of Major Leagues in other sports. The flagship of all professional sports in the USA, the National Football League (NFL), averaged more than 20 million viewers per regular season game in the 2015 season (NFL Communications 2015). The Major League Baseball (MLB) and the National Basketball Association (NBA) regular season games averaged approximately 2,000,000 and 1,800,000 viewers respectively (SBD 2015a; SMW 2015). The National Hockey League's (NHL) game telecasts averaged about 349,000 viewers (SBD 2015b).

The popularity of these Major Leagues is also demonstrated in their annual media revenues, with the NFL generating $6.6 billion, the MLB $1.6 billion, NBA $930 million ($2.6 billion for season 2016 onwards), and the NHL generating about $633 million annually (Vrooman 2016). MLS, in comparison, receives 'only' about $90 million annually for its broadcasting rights at the moment. This is, however a remarkable 300 % increase compared to the previous deal.

A look at the top 30 designated market areas (DMAs) in the USA (Table 2.3) reveals that the MLS currently has the lowest presence among the clubs, and consequently the lowest audience market share amongst all Major Leagues.[12] Nevertheless, the planned expansion of the league in the coming years, from 20 to 24 clubs – adding Atlanta, Los Angeles, Minnesota and (possibly) Miami (MLS Press Box 2016) – will certainly enhance the presence of football in large TV household areas, and consequently its viewing audience, closing the gap with the other Major Leagues. MLS viewing numbers are currently steadily increasing. In 2015, viewing figures per game on ESPN, Univision and FOX Sports averaged 249,000 (4 % gain over 2014), 224,000 (3 % gain over 2014) and 197,000 viewers per game, respectively (SBD 2015c). For the same season, the total gross viewership amounted to 30 million (50 % gain over 2013), which is an all-time high for the league (Forbes 2015a).

Even though MLS has enjoyed a remarkable growth lately, it constitutes only a fraction of the overall football market. The demand for

Table 2.3 Presence of MLS clubs in the top 30 US-designated market areas (TV households in millions)

Rank	*DMA*	*TVHH*	*MLS*	*NFL*	*MLB*	*NBA*	*NHL*	*TOTAL*
1	*New York*	7.368	2	2	2	2	3	11
2	*Los Angeles*	5.490	1(2)	0	2	2	2	7
3	*Chicago*	3.475	1	1	2	1	1	6
4	*Philadelphia*	2.918	1	1	1	1	1	5
5	*Dallas-Ft. Worth*	2.646	1	1	1	1	1	5
6	*San Francisco- Oakland-San Jose*	2.485	1	2	2	1	1	7
8	*Washington, DC (Hagrstwn)*	2.444	1	1	1	1	1	5
7	*Boston (Manchester)*	2.411	1	1	1	1	1	5
9	*Atlanta*	2.386	0(1)	1	1	1	0	3
10	*Houston*	2.374	1	1	1	1	0	4
13	*Tampa-St. Pete (Sarasota)*	1.860	0	1	1	0	1	3
11	*Phoenix (Prescott)*	1.849	0	1	1	1	1	4
12	*Detroit*	1.828	0	1	1	1	1	4
14	*Seattle-Tacoma*	1.766	1	1	1	0	0	3
15	*Minneapolis-St. Paul*	1.723	0(1)	1	1	1	1	4
16	*Miami-Ft. Lauderdale*	1.660	0(1)	1	1	1	1	4
17	*Denver*	1.576	0	1	1	1	1	4
19	*Cleveland-Akron (Canton)*	1.493	0	1	1	1	0	3
18	*Orlando-Daytona Beach-Melbrn*	1.490	1	0	0	1	0	2

20	*Sacramento-Stkton-Modesto*	1.350	0	0	0	1	0	1
21	*St. Louis*	1.217	0	1	1	0	1	3
24	*Charlotte*	1.169	0	1	0	1	0	2
22	*Pittsburgh*	1.155	0	1	1	0	1	3
23	*Portland, Oregon*	1.136	1	0	0	1	0	2
25	*Raleigh-Durham (Fayetvlle)*	1.131	0	0	0	0	1	1
26	*Baltimore*	1.100	0	1	1	0	0	2
27	*Indianapolis*	1.073	0	1	0	1	0	2
28	*San Diego*	1.055	0	1	1	0	0	2
29	*Nashville*	0.990	0	1	0	0	1	2
30	*Hartford & New Haven*	0.945	0	0	0	0	0	0
	Total	**61.563**	**13(17)**	**26**	**26**	**23**	**21**	**109**
	% of US based clubs		**76.5 %(81.0 %)**	**81.3 %**	**89.7 %**	**79.3 %**	**91.3 %**	**83.9 %**
	% of all clubs		**65.0 %(70.8 %)**	**81.3 %**	**86.7 %**	**76.7 %**	**70.0 %**	**76.8 %**

Notes: As of January 2016. MLS clubs/figures after the planned expansion of the league are in parenthesis. TVHH estimates are provided by Nielsen (2016b). Major League club presence in DMAs (except for MLS) is provided by Vrooman (2016). *Abbreviations*: *DMA* Designated Market Area; *MLB* Major League Baseball; *MLS* Major League Soccer; *NBA* National Basketball Association; *NFL* National Football League; *NHL* National Hockey League; *TVHH* Television households; *US* United States of America

televised football in the USA is primarily driven by international (overseas) events, including the FIFA World Cup, the CONCACAF Gold Cup, the Mexican Liga MX, and by the top European football leagues. In this regard, it is indicative that the Premier League has reported season-on-season television audience growth in the USA of 114 %, since the 2013–2014 season (Premier League 2014). After the recently signed deal (August 2015) with NBC Universal, the Premier League receives about $166 million annually (100 % gain compared to the previous deal).

In the first matchdays of the 2015–2016 season, Premier League games averaged about 563,000 US live viewers, a 19 % gain over the prior season (MailOnline 2015). In the same period, Spanish La Liga games on beIN Sports averaged about 150,000 live viewers, Bundesliga games on FOX Sports averaged about 42,000 live viewers (WorldSoccerTalk 2015), and Serie A and Ligue 1 games averaged well below 40,000 live viewers. In contrast to these lower numbers, UEFA Champions League games on FOX Sports 1 averaged about 355,000 live viewers last season (2014–2015), a 40 % gain over the previous season (FOX Sports Press Pass 2015).[13]

In summary, even though football still holds a comparably small market share in the US sports broadcast market, it is a rapidly evolving sport in the USA, with great prospects.

Key Facts 1

1. The US broadcast market is highly dynamic and dominated by the pay-tv industry.
2. US consumers have access to a great variety of football competitions, with live online streaming and tape-delayed/time-shifting viewing options being particularly popular.
3. Among the European football leagues, the Premier League and the Bundesliga currently have (2015–2016 season) the highest audience reach.
4. Among the examined football leagues and competitions, the most popular, in terms of viewership, are the English Premier League, UEFA Champions League and MLS.
5. Even though football holds a relatively small market share in the US sports broadcast market compared to other Major Leagues, it is a rapidly evolving sport in the USA, with great prospects.

Notes

1. An in-depth review of the history of sports broadcasting in the USA is provided by Howoritz (1974). A discussion about the football broadcasting market in Europe and the sports broadcasting market in the USA with a focus on sports rights is provided by Cave and Crandall (2001), Solberg (2006), Gratton and Solberg (2007) and Noll (2007).
2. Estimates as of TV season 2014. Median ages were retrieved from cbssportsnetwork.com; BeIN Sports median age was retrieved from adsalesbeinsports.tv; FOX Sports median age was retrieved from sportsbusinessdaily.com.
3. Contiguous USA: the *Eastern Time Zone* (EST) (UTC:-5 hours) covers roughly the states on the Atlantic coast and the eastern two-thirds of the Ohio Valley; *Central Time Zone* (CST) (UTC: -6 hours) covers roughly the Gulf Coast, Mississippi Valley, and Great Plains; *Mountain Time Zone* (MST) (UTC: -7 hours) covers roughly the states that include the Rocky Mountains; *Pacific Time Zone* (PST) (UTC: -8 hours) covers roughly the states on the Pacific coast, Nevada, as well as the Idaho panhandle (i.e. North Idaho). Non-contiguous USA: *Alaska Standard Time Zone* (AKST) (UTC: -9 hours) covers most of the state of Alaska; *Hawaii Standard Time Zone* (HST) (UTC: -10 hours) covers Hawaii and most of the Aleutian Islands. UTC stands for Universal Time Coordinated.
4. Note that the prime time differences between the time zones are caused by the fact that US network broadcasters tend not to adjust their schedules for Central and Mountain Time zones. These time zone regions receive either the eastern or western feed and therefore their prime time programming is shifted by an hour.
5. RAI International (Italy's public broadcaster targeting expatriates in the USA) also offers a selection of Serie A games weekly. Similarly, TV5 Monde USA (French broadcaster) offered Ligue 1 games in season 2014–2015, although not for the subsequent season (2015–2016).
6. Recently, and due to the relatively low TV ratings of the Bundesliga in the 2015–2016 season, the FOX Network decided to broadcast eight games of the league's second round in its OTA/FTA network, with an audience reach of about 113 million TV households, in an attempt to boost TV audience ratings.
7. For theoretical considerations about the impact of a competitive environment on the policies of free and pay-tv channels see Noll (2007).
8. Please note that from this point onward we define as 'TOP 5 leagues' the English Premier League, the German Bundesliga, the Spanish La Liga, the Italian Serie A and the French Ligue 1. These leagues are frequently also referred to as the 'Big-5' (e.g. Besson et al. 2010).
9. As already indicated, the US broadcast market is highly dynamic. For instance, Nielsen coverage estimates for January 2016 indicate that beIN

Sports is currently accessible to 25.35 million US households (B&C 2016) – an increase of almost 50 % in the network availability within 1 year.

10. This is particularly the case for Ligue 1 games. Usually one or two games are broadcast on TV, whereas the other games are available only via live streaming on beIN Sports web-TV platforms. Several Bundesliga games were also notably available live free of charge in the 2015–2016 season via FOX Soccer's YouTube channel.
11. Time-shifting is defined as viewing of a program a certain period after the official airing.
12. DMA (Designated Market Area) regions are the geographic areas in the USA in which local television viewing is measured by Nielsen. In total, there are 210 DMA regions.
13. The US broadcast rights for the UEFA Champions League for 2016–2018 are worth around $75 million (Forbes 2015b). There are no reliable figures publicly available for the other European leagues.

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CHAPTER 3

State of Research

Abstract Despite the increasing importance of media rights, only a few papers have previously dealt with TV demand in sports. Chapter 3 offers an overview of previous empirical findings by discussing the determinants of TV demand, i.e. standard economic aspects, quality aspects, the uncertainty of outcome, opportunity costs and other aspects.

Keywords Sports demand · Demand determinants · Empirical evidence

This chapter provides an extended overview of previous findings of the demand for televised sporting events (Section 3.1). It then summarises and discusses the five major shortcomings identified in the existing studies (Section 3.2).

3.1 Demand for Televised Sports Events

Nowadays media right revenues constitute the most lucrative source of income in professional football leagues. Despite this, there are relatively few football-related research studies about TV demand[1] compared with the rich literature regarding demand for in-stadium attendance, and this can be mainly attributed to data availability issues.

TV demand-related studies using secondary data sources have concentrated either on TV ratings (e.g. Berkowitz et al. 2011), TV shares

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(e.g. Di Domizio 2013), minute-by-minute ratings (e.g. Alavy et al. 2010), audience sizes (e.g. Buraimo and Simmons 2015) or pay-per-view purchases (e.g. Tainsky et al. 2013), with a limited series of studies that have implemented surveys focusing on media consumption.[2] Gantz and Werner (1995), for instance, asked about interest in watching televised sports and exposure to televised sports coverage. Nesbit and King (2010), focusing on MLB and the NFL, asked respondents to state whether they watched at least one game on television over the past 12 months and how many games they watched over the past week. Bennett et al. (2007), dealing with the demand for cricket telecasts, also asked about previous consumption of games (highlights, partial and live viewing on TV and other media). They also gathered information about the respondents' intentions to consume (ITC), using multiple-response items, nominal response categories and Likert scales. In contrast to such imprecise demand proxies, based on undefined future ITC, Pawlowski et al. (2016), focusing on Bundesliga telecasts, introduced an arguably 'binding' scenario by asking fans about their viewing intentions just a few days prior to the games of interest.

As will be discussed in more detail, many studies which looked at the determinants of TV demand in sports tested factors similar to those frequently explored in the context of in-stadium attendance. These factors can be classified into five different categories, economic aspects (Section 3.1.1), quality aspects (Section 3.1.2), the uncertainty of outcome (Section 3.1.3), opportunity costs (Section 3.1.4) and other aspects (Section 3.1.5).

3.1.1 Economic Aspects

So far, few studies have focused on the impact of *standard* economic aspects, such as market size, income, employment status or price, on the demand for televised sports events, since an analysis at this level of detail is not usually feasible.

Market size: Market size is defined as the *population* of the geographical area under consideration. In general, a large market size is translated into a greater number of potential viewers and therefore into a higher demand for telecasts. Indeed, several studies attested the positive effect of market size on TV demand (e.g. Kanazawa and Funk 2001; Yang and Kumareswaran 2009; Di Domizio 2013; Grimshaw et al. 2013; Biner 2014; Pérez et al. 2015; Caruso et al. 2016), while a relatively small number of papers pointed

towards a non-significant effect (e.g. Dietl et al. 2009; Tainsky 2010; Watanabe 2015). In general, however, *population* is a rather imprecise proxy for market size when multiple teams are present in the same region. Therefore, García and Rodríguez (2002, 2009) introduced the idea of using weights (such as the number of season ticket holders) to further proxy for the popularity of teams/sports in a specific region. So far, however, this approach was never used before in the context of TV demand. Rather, studies focusing on TV demand frequently use *in-stadium attendance* to proxy for the home team's market size. In this regard, some paper found in-stadium attendance to positively correlate with TV audience figures (e.g. Kuypers 1996; Buraimo 2008; Buraimo and Simmons 2009; Dang et al. 2015). In contrast, several scholars analysing ticket demand showed that live TV broadcasts and in-stadium attendance are substitutes (at least for some consumers) (e.g. Baimbridge et al. 1995). Whether or not stadium demand and TV demand substitute or complement (as suggested by McEvoy and Morse 2007) each other is, however, not relevant for the scope of this research which focuses on the overseas demand.

Income: Scholars dealing with the effect of income on TV audiences typically use the (regional/national) *gross domestic product* (GDP) (e.g. Meier and Leinwather 2013) or *household incomes* (e.g. Tainsky et al. 2014c). Findings suggest that the impact of income is inconclusive, which seems to align with fact that there can be no clear *a priori* expectations about its impact since some sporting events can be classified as normal (or even luxury) goods (positive impact) and other as inferior goods (negative impact).[3] Yang and Kumareswaran (2009), looking at New Zealand rugby telecasts, and Tainsky et al. (2014c) for NFL playoffs, found income to exert a positive effect on viewer demand, however, other papers suggested that the effect of income was either negative (Carney and Fenn 2004; Tainsky 2010; Mongeon and Winfree 2012; Tainsky et al. 2014a) or not statistically associated with TV demand (Meier and Leinwather 2013; Watanabe 2015). A possible explanation for the negative relationship between income and TV demand is that the costs associated with TV viewing compared to stadium attendance are smaller (Tainsky 2010). From findings based on survey data, Nesbit and King (2010) showed that affluent fans are more likely to have watched at least one NFL or MLB game live on TV over the past 12 months, however, income was not found to be statistically associated with the number of games watched over the past week.

Employment status: Theoretically, since the opportunity costs for *unemployed* individuals are lower, they are more likely to view sports telecasts. Moreover, Borland and McDonald (2003) noted that consumption of sporting events may constitute a social outlet for unemployed individuals. Schreyer and Torgler (2016) and Pérez et al. (2015), using data about audience size, found a positive though weakly significant impact of unemployment on the demand for F1 racing broadcasts and Spanish football telecasts, respectively. Berkowitz et al. (2011) failed to confirm this relationship for NASCAR broadcasts based on TV ratings and audience sizes, however, while current unemployment status was not found to be related to any audience measures, lagged unemployment status was found to reduce audience sizes.

Price: So far, only three studies have explored the impact of price on TV. All of those looked at pay-per-view purchases for competitions in the Ultimate Fight Championship (Tainsky et al. 2013; Watanabe 2012, 2015). According to standard economic theory, it is expected that an increase in the price of a telecast would decrease the demand for it, however, two studies (Tainsky et al. 2013; Watanabe 2012) found the price to be positively correlated with demand. These rather surprising results might, however, be caused by misspecifications of the models. For instance, Watanabe's (2012) model did not include a trend variable to capture the steadily increasing popularity of the sport. Indeed, Tainsky et al. (2013) observed multicollinearity when including both price and a trend variable in the statistical models. In a more elaborate model, Watanabe (2015) did not find the price to be statistically significant at all.

3.1.2 Quality Aspects

In contrast to the dearth of empirical evidence with regard to economic determinants, several studies have explored the impact of different quality aspects. The tested quality aspects can be classified as the performance of the contestants, their status, the quality of talent and the quality of the competition. Obviously, expectations about the impact of quality would have a positive association with TV demand, that is, consumers are expected to shift demand from lower quality to higher quality sporting events. Moreover, since sports competitions are typically broadcasted (inter-) nationally, there is (in contrast to stadium attendance) no extra burden for away team fans and neutral spectators to watch the games live. As such, it can be presumed that the quality features of both contestants (i.e. of both home and away team) are pertinent in the generation of greater audiences.

Performance of the contestants: In contrast to Salaga and Tainsky (2015), who noted that consumer preference for *scoring* is not as important as thought, several empirical findings suggested that viewers prefer offence-generating teams (e.g. Aldrich et al. 2005; Tainsky et al. 2014a) and high-scoring games (e.g. Dietl et al. 2009; Paul and Weinbach 2007). Several scholars indicated that the presence of successful contestants in terms of (e.g. game-day) *winning percentages* (e.g. Carney and Fenn 2004; Aldrich et al. 2005; Paul and Weinbach 2007; Biner 2014; Tainsky et al. 2014a), *league rankings* (e.g. Pérez et al. 2015) or *FIFA Rankings/Elo Ratings* (e.g. Feddersen and Rott 2011; Nuesch and Franck 2009) have a positive effect on the demand for sports telecasts. In a US sports context, findings suggest that less famous teams which have unusual success in a competition, '*cinderellas*', are able to attract larger audiences (Grimshaw et al. 2013). In contrast, Buraimo and Simmons (2015) did not find that good performance in the English Premier League leads to higher audiences when looking at the combined points of the teams gathered per game.

Status of the contestants: Aspects such as the *popularity* of the teams (e.g. Buraimo and Simmons 2009; Grimshaw and Burwell 2014; Pérez et al. 2015) or *long tenure* of teams (e.g. Tainsky and McEvoy 2012; Tainsky et al. 2014c) were found to positively influence TV demand. With the exception of Cox (2015), there is also clear evidence that fan interest is particularly high when watching a game with or between newly *promoted teams* (e.g. Kuypers 1996; Forrest et al. 2005) since these are presumed to exert a novelty effect. Several scholars have also found that (classic) *rivalries* due to historical competitiveness (e.g. García and Rodríguez 2006) and *derbies*, that is games involving teams which share a similar geographical boundary, tend to lead to greater TV audiences (e.g. Buraimo 2008; Buraimo and Simmons 2009; Dietl et al. 2009; Caruso et al. 2016). In contrast, however, Kuypers (1996), Forrest et al. (2005), Di Domizio (2013) and Buraimo and Simmons (2015) did not find derbies to be related to TV demand.

Quality of talent: Several football-related studies have found that viewers are drawn to games where more *expensive talent* is on the show. In this regard, the combined wage bill of the contestants seems to matter more than wage bill differences between the competing teams (e.g. Forrest et al. 2005; García and Rodríguez 2006; Buraimo 2008; Mongeon and Winfree 2012; Di Domizio 2013; Buraimo and Simmons 2015, Caruso et al. 2016). Other papers unveil the positive impact of *international players*, players listed in their respective national teams, on TV demand (Kuypers 1996). This finding

might be explained by the theory of *superstars*. That few individuals in selected professions can enjoy substantial salaries has been defined in the seminal works of Rosen (1981) and Adler (1985) as the 'superstar' phenomenon. Rosen (1981) derived their existence from the premise that consumers consider lower quality an imperfect substitute for higher quality, while Adler (1985) indicated that superstars may exist regardless of talent and that popularity is an important dimension in the emergence of stars. Both approaches suggest that stars captivate fans through their exceptional talent and capabilities, impressive performance and immense popularity. The majority of previous papers demonstrate a positive impact on TV demand regardless of whether they proxy superstars according to Rosen's definition, as just talent (e.g. Yang and Kumareswaran 2009; Di Domizio 2013; Tainsky et al. 2013; Dang et al. 2015) or as both definitions, talent and popularity (e.g. Hausman and Leonards 1997; Kanazawa and Funk 2001; Bennett et al. 2007; Schreyer and Torgler 2016). Only Dietl et al. (2009) could not find a statistically significant effect of superstars on the demand for football highlights.

Quality of the competition: Finally, the *relevance* of the competition (e.g. Feddersen and Rott 2011; Meier and Leinwather 2012; Biner 2014; Konjer et al. 2015) also affects consumer decisions about whether or not to view an event. For instance, findings suggested that the games of an *international competition*, such as the UEFA EURO or FIFA World Cups, are valued more by consumers than friendly games between national teams (Feddersen and Rott 2011; Meier and Leinwather 2012). In a US context, *playoffs* and *mega sporting events* such as the Superbowl tend to draw more TV viewers than regular season games (e.g. Biner 2014). In general, the relevance or quality of a competition is closely related to the uncertainty and suspense of a competition. This will be explained and discussed in the following.

3.1.3 Uncertainty of Outcome Hypothesis (UOH)

Since Rottenberg's (1956) and Neale's (1964) seminal articles testing the uncertainty of outcome hypothesis (UOH), the assumption that fans' interest is higher in competitions with an uncertain outcome, is key when dealing with demand in sports. This is not surprising, given that the "*competitive balance argument is the main pro-competitive justification that sports leagues offer to defend agreements otherwise prohibited by anti-trust laws*" (Mehra and Zuercher 2006: 1505).

Competitive balance (CB) consists of three dimensions (Cairns et al. 1986): the short-term, the uncertainty of an individual game's outcome (closeness of a specific game); mid-term which captures the intra-seasonal uncertainty, the closeness of a sub-competition such as the championship race; and the long-term dimension, which captures inter-seasonal uncertainty, or the closeness in team rankings, points, winning percentages etc. over time (static component), and the domination (or not) of particular teams over time (dynamic component).

The vast majority of studies dealing with the impact of CB on the demand for sports focused on the short-term dimension, the uncertainty of game outcome. In contrast to the popular claim that competitions need to be tight to be attractive, most studies on game-level attendance reported the opposite effect: stadium attendance rises as the certainty of a home (or away) team win rises (e.g. Coates and Humphreys 2012; Pawlowski and Anders 2012; Coates et al. 2014). Whereas studies focusing on TV demand provide mixed evidence, as will be discussed.[4]

A number of predominately non-football-related studies found support for the UOH. Carney and Fenn (2004), Paul and Weinbach (2007), Biner (2009), Tainsky and McEvoy (2012), Tainsky et al. (2014a), and Grimshaw and Burwell (2014) found that an expected to be closer score or game in the NFL attracts more viewers. Similar findings are also evident in a motorsports context, with scholars indicating that viewing audiences have a preference for close races (Berkowitz et al. 2011; Schreyer and Torgler 2016). In line with this, Chung et al. (2016) focused on Korean baseball's minute-by-minute viewership ratings and found game uncertainty to matter. Dang et al. (2015), dealing with TV demand determinants for the Australian Football League (AFL), found that TV audiences valued both the anticipated and actual closeness of the contests. Van Reeth (2013) on television demand for the Tour de France, and Tainsky et al. (2014a) on the NFL, showed that viewers have a distaste for potential dynasties, the dominance of previous competition winners.

Other scholars, however, found rather mixed evidence (e.g. Yang and Kumareswaran 2009; Fortunato 2011; Di Domizio 2013) or only weak support for the UOH (e.g. Johnsen and Solvoll 2007; Biner 2014; Grimshaw et al. 2013; Grimshaw and Burwell 2014; Cox 2015; Konjer et al. 2015). For instance, Yang and Kumeraswaran (2009), looked at ten different measures of game uncertainty for the TV ratings of rugby games in New Zealand and found only five out of ten supporting the hypothesis. Overall, only two out of 17 studies found that TV viewers have a preference

for close football games (Buraimo and Simmons 2009; Meier and Leinwather 2012). On the other hand, Buraimo (2008), focusing on TV audience demand for second-tier English football, Nuesch and Franck (2009) on the FIFA World Cup and UEFA Euro broadcasts in Switzerland, Dietl et al. (2009) on the interest in highlights of the German Bundesliga, Buraimo and Simmons (2015) on the English Premier League, and Caruso et al. (2016) on the Italian Serie A, found no support for the UOH.

Several papers also pointed towards the existence of moderating aspects with regard to the impact of the UOH on the demand for sports telecasts. For instance, Forrest et al. (2005), examining the impact of UOH on the demand for English football broadcasts, noted that the impact of UOH depends on the *half of the season* under consideration. For the first half of the season they found no support for the UOH, but for the second half, results were in line with the UOH. Tainsky et al. (2014b) and Salaga and Tainsky (2015) found that the impact of game uncertainty varies at the point of estimation (i.e. start-game ratings, mid-game ratings, end-game ratings). They showed that consumers initially preferred more certain NFL games, but the demand for them increases systematically *during a contest* when uncertainty increases. Similarly, Tainsky et al. (2014b) noted that in NFL telecasts viewers want a *close finish* rather than a close game, and as such, they concluded that game uncertainty matters, but only in terms of actual closeness shortly before the end of the game. Fortunato (2011) on the demand for NFL *Sunday and Monday games*, found (no) support for the UOH regarding the former (latter). Other studies showed that the impact of UOH depends upon the *broadcasting platform*. García and Rodríguez (2006) focused on La Liga games in Spain and confirmed the relevance of the UOH for games broadcast on free-to-air (FTA) channels. In contrast, they did not find support for the UOH for games broadcast on pay-tv channels. Meier and Leinwather (2012), analysing the TV ratings for the German national football team, found *gender-related differences* in the impact of game uncertainty. They noted that the UOH is relevant only for the male audience, whereas it is statistically insignificant for female viewers. In contrast, however, Tainsky et al. (2014b) could not find any significant differences between genders. Tainsky et al. (2014c) showed that the (ir) relevance of the UOH depends upon the *market perspective*. Analysing demand for NFL games they found (no) support for the UOH in nonlocal markets (local markets). Finally, Di Domizio (2013) UOH to be important among the Italian football TV audience in determining fan demand, but that when including the *team win probabilities* the UOH has a negative

effect on demand. He tried to explain this finding with the notion that Italian TV spectators may be mainly interested in watching their favourite team win, and further assumed that neutral fans watch games on TV in the hope of witnessing an upset (i.e. an underdog winning). With secondary data that does not allow the different fan groups to be distinguished, however, such statements are based purely on speculation rather than on hard (i.e. empirically proven) facts.

Although all these studies implemented uncertainty measures using secondary data, few studies have used survey data to evaluate the relevance of UOH using Likert scales. For instance, Gantz et al. (2006) found *unpredictability* to be significant for sports viewers. Solberg and Hammervold (2008) correlated interest in sports telecasts with the *uncertainty of outcome* in different sports and found it positive and significant only for snowboarding. Several papers focused on *drama* (Kim et al. 2008, 2009; Andrew et al. 2009), the closeness of the fight or combined *suspense* and drama (Bennett et al. 2007), and found it to be positively associated with media consumption (Bennett et al. 2007; Kim et al. 2008, 2009). In contrast, Andrew et al. (2009) found drama to decrease the respondents' motivation to watch any sporting event on TV. Recently, Pawlowski et al. (2016) introduced a novel measure of *perceived game uncertainty* based on perceived home win probabilities by fans. Motivated by Zimbalist (2002: 112) who stated that "*the best measure of competitive balance is the one to which fans show the greatest sensitivity*", this approach builds upon the idea that fans might perceive closeness of a game differently than economists tend to measure it. Indeed, some recent evidence based on survey data suggests that differences between fans' perceptions of competitive balance (PCB) and 'objectively' (statistically) measurable competitive balance (OCB) might exist (Pawlowski 2013; Pawlowski and Budzinski 2013; Nalbantis et al. 2015). In contrast to this literature focusing on long- and mid-term components of CB, however, Pawlowski et al. (2016) found that (i) the short-term measure of *perceived game uncertainty* is comparable to the objective measures frequently tested in the literature and (ii) that fans do not value game uncertainty.

3.1.4 Opportunity Costs

Effective decision making postulates comparing the additional costs of alternatives with the additional benefits. Watching a sports event on TV may entail costs for individuals that condition their viewing behaviour. In

general, the higher utility an individual gains from foregone opportunities, the higher the opportunity costs of viewing. Studies in this context focus predominately on weather conditions, seasonal aspects, and scheduling issues.

Weather conditions: It can be presumed that when sporting events take place during good weather conditions, the costs of viewing them live on TV are higher since individuals have a greater set of available alternatives to choose from. While some studies detected a negative association between *temperatures* and TV viewing (e.g. Feddersen and Rott 2011; Meier and Leinwather 2012; Caruso et al. 2016; Schreyer and Torgler 2016) others indicated a positive association between them (Van Reeth 2013). Some studies found *rain* to have a positive effect (e.g. Feddersen and Rott 2011; Van Reeth 2013; Caruso et al. 2016) while others could not find any significant impact at all (e.g. Dietl et al. 2009; Meier and Leinwather 2012). Dietl et al. (2009) and Schreyer and Torgler (2016) also considered *sunshine duration* and respectively found it to diminish demand for football highlight-telecasts and F1 racing broadcasts.

Seasonal aspects: Seasonal aspects such as *months* or *matchday* are closely related to weather conditions, and league schedules. A priori expectations about the impact of seasonal aspects on demand can be challenging. It is possible that the demand for sports telecasts increases at the *opening of the season* due to the audience's anticipation of viewing (new) teams'/players' performance. On the other hand, audiences may (also) increase at the *end of the season*, since it contains games important for the achievement of certain milestones (playoff participation, winning the championship, avoiding relegation, securing a place in UEFA club competitions). However, given the rather good weather conditions at the beginning (August) and end (May) of a typical football league season, the opposite effect, that is, a lower TV audience at the beginning and /or closing of the season, is theoretically equally likely.[5] In this regard, Di Domizio (2013) found that TV audiences for the Italian Serie A reduce as the league's season evolves. In contrast, Pérez et al. (2015) for La Liga regional telecasts, found a generally increasing trend as the contest's season evolves. Likewise, Cox (2015) showed that games played in the English Premier League from October onwards attract larger audiences compared to the start of the season. In a US sports context, Hausman and Leonard (1997) for the NBA, and Paul and Weinbach (2007) for MLB, indicated that the opening month of the season (NBA: October; MLB: September) receives

the highest ratings, while Tainsky and McEvoy (2012) for NFL (opening month: September) found that the second half of the season (in winter) attracts greater audiences. In contrast, Tainsky et al. (2013) for the Ultimate Fighting Championship (opening month: January) found a generally increasing trend as the contest's season evolves.

Results concerning winter months are inconclusive. For instance, it was found that NBA telecasts in December received the lowest ratings (Hausman and Leonard 1997), whereas Forrest et al. (2005) for the English Premier League, García and Rodríguez (2006) for the Spanish La Liga, Dietl et al. (2009) for German Bundesliga highlights and Konjer et al. (2015) for tennis telecasts in Germany all found that viewing figures are highest in winter. In leagues with no games over winter (e.g. the Danish or Norwegian leagues), results indicated that spring contests attract the most viewers (Johnsen and Solvoll 2007).

Scheduling: Sports fans were found to be content-oriented and to engage in pre-game planning and information searching (Gantz et al. 2006). In general, if a sporting event takes place during working hours, the opportunity costs of viewing it would be quite high, considering that viewing sports is a time-consuming activity (duration including breaks of a typical football game: 105 minutes; of an NBA game: 120–150 minutes; of an NFL /MLB game: 180–200 minutes). Whereas some findings showed that sports telecasts scheduled for weekends have no significant effect on TV consumption (e.g. Biner 2009; Feddersen and Rott 2011; Meier and Leinwather 2012; Rodríguez et al. 2015; Watanabe 2015), others found them to be positively linked with viewing (e.g. Kanazawa and Funk 2001; Forrest et al. 2005; Johnsen and Solvoll 2007; Nuesch and Franck 2009; Berkowitz et al. 2011; Van Reeth 2013; Buraimo and Simmons 2015, Cox 2015). Several studies (e.g. Buraimo and Simmons 2009; Tainsky et al. 2013; Dang et al. 2015; Salaga and Tainsky 2015; Caruso et al. 2016) indicated a negative impact. This might have been because consumers are possibly more limited during the week with regard to their leisure activity opportunities (Dang et al. 2015). Ambiguity is also evident with regard to the effect of (public) holidays on the viewing of TV sports events. While some studies found no effect (e.g. Feddersen and Rott 2011) or a positive effect (e.g. Van Reeth 2013; Salaga and Tainsky 2015), other findings point towards a negative effect (e.g. Watanabe 2015).

Theoretically, there is no clear expectation with regard to the impact of *prime time* scheduling. On the one hand, during *prime time* the size of

available audience increases in general. Therefore, sporting events broadcasted during prime time should also benefit from an increased audience size. On the other hand, however, the considerable number of (attractive) non-sports-related content available during this time slot increases the opportunity costs of viewing sports. A number of papers attested to a strong preference for TV telecasts broadcast during *prime time* (e.g. Yang and Kumareswaran 2009; Tainsky 2010; Feddersen and Rott 2011; Meier and Leinwather 2012; 2013; Konjer et al. 2015). Few other scholars could not, however, confirm this effect (e.g. Kanazawa and Funk 2001). In contrast, Dietl et al. (2009) and Tainsky et al. (2014c) found a negative association between prime time telecasts and demand, which is consistent with the opportunity costs argumentation. The authors further argued that consumers tend to watch evening games in public places such as sports bars. This viewing behaviour is not considered in viewing figures or other TV demand measures based on secondary data TV demand measures.

Substitutes were also a focus of previous studies. Substitution effects may occur (amongst others) due to the change in the opportunity costs of viewing. Yang and Kumarewaran (2009), Tainsky and McEvoy (2012), Grimshaw and Burwell (2014), Konjer et al. (2015) and Caruso et al. (2016) provided support for diminished demand in the presence of a close substitute, when there another game of the same competition is broadcast on a different network. Berkowitz et al. (2011), Grimshaw et al. (2013) and Van Reeth (2013) confirmed this finding with regard to the concurrent telecast of other league/sports. In contrast, Rodríguez et al. (2015), focusing on the programming of general interest, such as films, series or documentaries, found that viewing rates for cycling were significantly higher when competing channels transmit newscasts.

3.1.5 Other Aspects

In addition to the determinants discussed, there are several relevant factors which do not belong to any of the aforementioned groups – consumer evaluations, supporter status, discrimination/patriotism, scandals and socio-demographic characteristics.

Consumer evaluations: A growing strand of literature focusing on sports consumer behaviour deals with hedonic motives that may affect the consumer's decision making. These are experiential in nature involving subjective

emotional responses to the product (Funk et al. 2009). In this regard, several studies using Likert scales for survey data correlated *attitude towards* (e.g. Lim et al. 2010), *interest in* (e.g. Kim et al. 2008, 2009), *knowledge* (e.g. Andrew et al. 2009) and *enthusiasm about* (e.g. Andrew et al. 2009; Bennett et al. 2007) a competition (or a sport) with TV consumption and found them to be positively related.

Supporter status: Given that emotional motivation for consumption depends upon the affective dispositions (see affective disposition theory (Zillmann and Cantor 1972)) of the viewers towards the competing teams (Raney 2006), controlling for supporter status seems important. *Identification* (e.g. Brown et al. 2013; Wann et al. 2013), *involvement* (e.g. Bennett et al. 2007; Dwyer 2011) and *affinity* (e.g. Yang and Kumareswaran 2009) of fans with their favourite teams, athletes or sport are important drivers of TV demand. Tainsky and McEvoy (2012) indicated that *fans* without a traditional home team in their region tend to favour the closest team to their own market when watching sports. Tainsky et al. (2014c) showed that demand for out-of-market games increases when the local team is actively competing in the same tournament. Finally, Pawlowski et al. (2016) showed that home and away fans are more likely to watch the game of their favourite team than are neutral fans.

Discrimination/patriotism: Since the seminal work of Becker (1957) there is an abundance of papers dealing with the economics of discrimination. Overall, the evidence suggests that consumers prefer members of their own race across many (commercial) settings (e.g. Borjas and Bronars 1989). Also in a sports context, several studies focused on *racial discrimination* and *ethnic diversity* issues. Findings suggested that there are racially-based patterns of fan viewing (e.g. Kanazawa and Funk 2001; Carney and Fenn 2004; Aldrich et al. 2005) and a general distaste for multi-ethnic national teams (Meier and Leinwather 2013). Another issue is patriotism which concerns "*an affective attachment towards the in-group implying feelings of belongingness, responsibility and pride*" (Mummendey et al. 2001: 160). In this regard, a number of studies showed that individuals have a preference for viewing fellow countrymen competing, suggesting a certain degree of *patriotism* (e.g. Bennett et al. 2007; Kim et al. 2008; Nuesch and Franck 2009; Van Reeth 2013; Rodríguez et al. 2015, Konjer et al. 2015). With regard to football, Nuesch and Franck (2009, p. 8) noted that due to the fact that football "*is the world's most widely played team sport, the chances to form patriotic attachments are greater than in any other sport.*"

Scandals: The psychological attachment of spectators with teams /athletes is based (amongst other things) on trust and shared values (Bee and Kahle 2006). As such, scandals, and in particular *doping incidents,* may have a detrimental impact on the demand for televised sports due to the decline of trust in a fair competition. Van Reeth (2013) studied event-day TV audience figures of the Tour de France broadcasts on Flemish public television. Results based on a short-term measure (capturing whether or not a stage takes place the first day following the release of Tour de France-related doping news in the Belgian press) and a 'long-term' measure (capturing year-after reactions to the main doping scandals in the year before) suggested the negative impact of doping on viewing figures. In contrast, Rodríguez et al. (2015) did not find any significant impact from doping on TV demand in cycling, although this finding may be misleading as the author's proxy for the doping incidents was rather imprecise.

Socio-demographic characteristics: In general, media use tends to change with an individual's age. Older individuals are both more likely to watch TV and to spend more time in front of the TV (Dimmick et al. 1979; Bondad-Brown et al. 2012). Mares and Sun (2010), however, found that the impact of age depends upon programming. Moreover, several findings suggest that there are distinct tastes and preferences in TV programming among the various ethnic /racial groups (for an in-depth discussion on this issue see Poindexter and Stroman 1981). However, these ethnic/racial differences may be mediated by the socio-demographic characteristics of the individuals. It is presumed that less educated, less privileged and/or divorced/separated individuals are generally more inclined to watch TV, since TV viewing may function as an escape from uncomfortable feelings (Kubey 1996). In a sports context, not much is known about the possible impact of socio-demographic characteristics on the TV viewing of sports events. Nesbit and King (2010) found *racial background, marital status, age* and *education* to be correlated with the viewership of MLB and NFL, yet their results indicated that the impact of the socio-demographic variables varies across competitions. In football and in contrast to the general notion, Pawlowski et al. (2016) showed that being *single* is negatively associated with the likelihood of watching a game live on TV, whereas *age* and being *female* have no statistically significant effect. Males generally spend more time watching sporting events and have a greater preference for sports programming than female viewers (Tang and Cooper 2012), but *gender* differences may be driven by different types of

sports (Van Reeth 2015). Interestingly, evidence for the Olympic Games, suggests that regardless of the viewer gender, women's competitions attract larger audiences than men's competitions (Van Reeth 2015).

3.2 Summary of Previous Findings and Their Limitations

Since the previously conducted research on the determinants of TV demand for sports events offers several ambiguous findings, we summarise the major findings in Table 3.1.

Overall, based on our review of the existing studies, five major shortcomings can be identified: *first*, the majority of papers use TV ratings to capture demand, neglecting certain environments where many people frequently view football games, in bars and other public places, and via online streaming. Even though several companies, such as Nielsen, try to track and incorporate online media consumption in their measurements, the online streaming of programming is measured separately from that of standard TV. As a result, it is hard to identify whether there is any overlap between standard TV viewers and the live streaming viewers of an event. Time-shifting, which is very popular in the USA, is also not fully captured by the ratings. *Second*, the few existing studies based on survey data often focus on imprecise demand proxies such as 'interest' in football broadcasts (e.g. Solberg and Hammervold 2008) or future ITC in rather abstract scenarios (Bennett et al. 2007). Several surveys involve samples that are rather limited in size (e.g. Andrew et al. 2009; Kim et al. 2008; Gantz et al. 2006; Tang and Cooper 2012) or that focus on particular fan segments such as fantasy sports participants (Nesbit and King 2010), which raises a number of concerns with regard to the representativeness and generalisability of the results. *Third*, there is a lack of consensus about the impact of several factors associated with TV demand. On the one hand, factors such as socio-demographics were often omitted from demand models either due to a lack of available data (studies based on TV ratings) or a lack of research interest (studies based on survey data). On the other hand, the measurement of factors often varies across the studies, making any comparison of results very difficult. *Fourth*, as related to the aforementioned issue, the relevance of a core factor for league management, the uncertainty of outcome, has not yet been fully explored. While the relevance of game uncertainty has been frequently tested, other dimensions such as championship uncertainty have so far been neglected

Table 3.1 Summary of demand determinants and their impact on sports telecasts

	Expected impact[1]	*Football*[1]	*Other sports*[1]		*Expected impact*[1]	*Football*[1]	*Other sports*[1]
Economic aspects				***Opportunity costs***			
Market size	↑	↑	↑	*Temperature*	↓	↓	↔
Income	↑or↓	↔	↔	*Rain*	↑	↑	↑
Unemployment	↑	↑	↔	*Sunshine*	↓	↓	↓
Price	↓	/	↑	*Winter months*	↑	↑	↔
Quality aspects				*Opening month*	↑or↓	↔	↔
Scoring	↑	↑	↑	*End of season*	↑or↓	↔	↔
Playing performance	↑	↑	↑	*Weekend*	↑	↔	↔
Popularity	↑	↑	↑	*Holidays*	↑	↔	↔
Tenure	↑	↑	↑	*Primetime*	↑or↓	↔	↔
Promoted clubs	↑	↑	/	*Concurrent programming*	↓	↓	↓
Derbies/rivalries	↑	↑	/	***Other factors***			
Talent expenses	↑	↑	↑	*Supporter status*	↑	↑	↑
International players	↑	↑	↑	*Discrimination/patriotism*	↑	↑	↑
Star players	↑	↑	↑	*Scandals*	↓	/	↓
Competition quality	↑	↑	↑	*White*	↑or↓	/	↔
Uncertainty of outcome				*Married*	↓	↑	↔
Short-term	↑	↔	↔	*Males*	↑	↔	↔
Mid-term	↑	↔	↔	*Age*	↑or↓	↔	↔
Long-term	↑	/	/	*Education*	↓	/	↓

Notes: [1]Based on previous findings; ↑ = rather positive impact; ↓ = rather negative impact; ↔ = rather inclusive or non-statistically significant impact; / = no findings in the surveyed literature

in empirical TV demand analysis. The elicitation and utilisation of uncertainty proxies such as 'drama' (e.g. Andrew et al. 2009; Kim et al. 2009) lack direct implications for league and club managers. *Fifth*, although international media rights constitute a continuously growing income stream there is no prior research evaluating the determinants of demand for foreign league telecasts and it may be that overseas consumers experience and consume football products differently than local football enthusiasts. Indeed, some recent findings demonstrate different viewing patterns when considering games involving 'out-of-market' contestants even within the same country (e.g. Tainsky and McEvoy 2012; Tainsky et al. 2014b; 2014c).

This project tries to overcome these shortcomings by employing a novel empirical design to gather survey data and analyse US demand for European football telecasts. The data gathering process and the data itself will be described in the next chapter.

Key Facts 2

1. So far, few football-related TV demand studies are available.
2. Many studies that looked at the determinants of TV demand in sports tested factors similar to those frequently explored in the context of in-stadium attendance.
3. These factors can be classified as economic aspects, quality aspects, uncertainty of outcome, opportunity costs and other aspects.
4. The impact of several determinants on TV demand is ambiguous, with the most prominent ambiguity being the impact of the UOH.
5. The major shortcomings with regard to the existing studies relate to the measurement of demand, the lack of consensus with regard to the impact of key determinants, the lack of direct applicability of survey study findings and the absence of research focusing on transnational demand.

Notes

1. An overview of papers focusing on the demand for football telecasts is provided in Appendix A.1
2. *TV ratings* account for the percentage of the total population of televisions tuned to a particular programme. *TV shares* account for the percentage of televisions actually in use. *Minute-by-minute* ratings account for the audience per minute divided by the total of a population. *TV ratings, TV shares*

and *minute-by-minute ratings* measure the *relative demand* for broadcasts, as they depend on what else is on television at the time. *Audience sizes* report the total population of TVs tuned to a particular program and measure the *absolute demand* of the broadcast.

3. For an extensive discussion on methodological issues related to the measurement of expenditure elasticities see Pawlowski and Breuer (2012).
4. A detailed overview of the findings of football-related research with regard to the impact of UOH is provided in Appendix A.1.
5. In contrast to TV demand, findings from studies on stadium demand show that audience size increases both at the beginning and the closing of the season pointing towards a U-shape relationship between matchdays and in-stadium attendance (e.g. Pawlowski and Anders 2012; Pawlowski and Nalbantis 2015).

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CHAPTER 4

Data

Abstract Chapter 4 provides detailed insights about the research design and the sample selection process. In this regard, the elicitation methods, the operationalisation of the variables and the implementation process of the surveys are discussed. Furthermore the data are described and some background information about the Premier League, the Bundesliga, Ligue 1, Serie A and La Liga is provided. Finally, the chapter offers a comparison between the sample characteristics of this study and other US-based football surveys as well as US Census data.

Keywords Survey design · Sample selection · Sample description

This chapter provides an overview of the sample selection (Section 4.1), the survey method and implementation (Section 4.2), and details of the data and the employed cleaning process (Section 4.3). Finally, it displays the characteristics of the sample (Section 4.4) and examines its representativeness (Section 4.5).

4.1 Sample Selection

To provide an in-depth analysis of the demand for football telecasts in the USA, this research relied on primary data. Two surveys were conducted on two different dates, the end of TOP 5 league season 2014–2015 and the

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beginning of TOP 5 league season 2015–2016. The following chapters provide some background information on the choice of leagues and games (Section 4.1.1), and that of individuals (Section 4.1.2).

4.1.1 Leagues and Games

Leagues: The focus in both surveys was on the TOP 5 leagues, the English Premier League, the Spanish La Liga, the German Bundesliga, the Italian Serie A and the French Ligue 1. Table 4.1 provides some key facts about these leagues. The TOP 5 leagues represent the most significant proportion (86 %) of the world's 50 most valuable football brands (Brand Finance 2015) and are the most in-demand football leagues worldwide, having recently sealed lucrative media rights contracts in many large markets, including the USA.

The TOP 5 leagues, however, differ significantly with regard to both off-field competitiveness (domestic media revenues, club aggregate revenues, wage expenditures, etc.) and on-field competitiveness (quality of play and CB). For instance, the annual domestic media revenues are much higher in the Premier League ($2,093 million) compared to Serie A ($968 million), La Liga ($808 million), Bundesliga ($629 million), Ligue 1 ($555 million) and MLS ($90 million). Initial analysis reveals also significant differences with regard to on-field competitiveness. According to some global indicators (see Section 5.2.1 for some methodological background information), MLS is the most balanced league, followed by Ligue 1, the Premier League and Bundesliga, whereas Serie A and La Liga are comparably less balanced.

Games: Survey 1 focused on *European cup finals* where the TOP 5 league clubs were involved. The UEFA Champions League Final and two international friendly games played by the US Men's National team (USMNT) – against the Netherlands and against Germany – were also included in order to test whether demand is mediated by the kind of competition (i.e. national vs. international games). Likewise, the sample also contains group stage games of the USMNT in the CONCACAF Gold Cup 2015, which took place in the USA and Canada.

The focus in Survey 2 was on *TOP 5 league games* and the *MLS league games* taking advantage of the 'break' for national team fixtures end of August/beginning of September.[1] Since it was not feasible to include all the league games in the respective leagues, we decided to focus on a sample of games selected by game importance and the popularity of the contestants.[2]

Table 4.2 provides an overview of the games included in both surveys. When examining the game scheduling, it becomes apparent that there

Table 4.1 Key facts about the TOP 5 leagues and MLS

	Top 50 brands[1]	*Revenues (in million $)*[2]			*Expenditures (in million $)*		*Ranking*		
	# clubs	*Clubs*	*Domestic media*	*Attendance*	*Wage*[2]	*Average transfer investments*[3]	*UEFA*[4]	*FIFA*[5]	*CB*[6]
EPL	18	4,251	2,093	747	2,482	1,062	3	10	3
LFP	5	2,180	808	425	1,214	510	1	6	6
ISA	7	1,853	968	214	1,352	505	4	17	5
GBL	9	2,398	629	517	1,240	329	2	2	4
L1	4	1,635	555	172	1,043	293	5	22	2
MLS	0	461	90	120	159.7	–	–	29	1

Notes: [1]Top 50 football brands are provided by Brand Finance (2015); [2]Aggregated club revenues, domestic media and attendance revenues and wage expenditures per league are based on the financial year 2014 and are provided by UEFA (2015). All figures are converted into US dollars (€1 = $1.09). MLS club revenues are retrieved from Forbes (2015) and wage expenditures are based on player salaries for 2015 from the MLS Players Union report. TOP 5 league wage expenditures include all employees (technical, administrative and players); [3]Average transfer investments for the period 2013–2015 are provided by CIES Football Observatory (2015); [4]UEFA's association club coefficients ranking (as of season 2015); [5]FIFA/Coca-Cola World Rankings (as of 1 October, 2015); [6]CB overall rankings are based on secondary data for seasons 2010–2015. Details on the methods used are provided in Section 5.1.2 and Table 5.1. *Abbreviations*: *CB* competitive balance; *EPL* English Premier League; *FIFA* Fédération Internationale de Football Association; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UEFA* Union of European Football Association

Table 4.2 Overview of games included in the surveys

	Competition (country)	*Contestants*[1]		*Scheduling*		
		'Home' team	*'Away' team*	*Date*	*Time (EST)*[2]	*TV network*[3]
Survey 1	Coppa Italia (ITA)	SS Lazio	Juventus FC	20 May	2.45 p.m.	beIN Sports
	FA Cup Final (ENG)	Arsenal FC	Aston Villa FC	30 May	12.30 p.m.	FOX
	DFB Cup Final (GER)	BvB Dortmund	VfL Wolfsburg	30 May	2.00 p.m.	ESPN
	Coupe de France Final (FRA)	AJ Auxerre	Paris St.-Germain FC	30 May	3.00 p.m.	beIN Sports
	Copa del Rey Final (ESP)	Athletic Club de Bilbao	FC Barcelona	30 May	3.30 p.m.	ESPN
	Friendly (men)	Netherlands	USA	5 June	2.30 p.m.	ESPN/Univision
	UEFA Champions League Final	Juventus FC	FC Barcelona	6 June	2.45 p.m.	FOX
	Friendly (men)	Germany	USA	10 June	2.45 p.m.	FOX/Univision
	CONCACAF Gold Cup 2015	USA	Honduras	7 July	9.30 p.m.	FOX/Univision
	CONCACAF Gold Cup 2015	USA	Haiti	10 July	8.30 p.m.	FOX/Univision
	CONCACAF Gold Cup 2015	USA	Panama	13 July	9.30 p.m.	FOX/Univision
Survey 2	Ligue 1 (FRA)	Paris St.-Germain FC	FC Girondins de Bordeaux	11 Sept	2.30 p.m.	beIN Sports
	MLS (USA)	New York Red Bulls	Chicago Fire	11 Sept	7.00 p.m.	Univision
	Premier League (ENG)	Everton FC	Chelsea FC	12 Sept	7.45 a.m.	NBC
	Bundesliga (GER)	FC Bayern Munich	FC Augsburg	12 Sept	9.30 a.m.	FOX
	Premier League (ENG)	Manchester United FC	Liverpool FC	12 Sept	12.30 p.m.	NBC
	La Liga (ESP)	Club Atlético de Madrid	FC Barcelona	12 Sept	2.30 p.m.	beIN Sports
	MLS (USA)	Los Angeles Galaxy	Montreal Impact	12 Sept	10.30 p.m.	TWCSN
	Serie A (ITA)	Internazionale Milano	AC Milan	13 Sept	2.45 p.m.	beIN Sports/RAI

Notes: [1]The choice of 'home' and 'away' teams in football cup finals is a formality; [2]The time is displayed as Eastern Standard Time (UCT: –5 hours); [3]Displayed are the TV networks and not the channels which broadcast the games. *Abbreviations*: *CONCACAF* Confederation of North, Central American and Caribbean Association Football; *DFB* German Football Association; *ENG* England; *ESP* Spain; *FA* The Football Association; *FRA* France; *GER* Germany; *ITA* Italy; *MLS* Major League Soccer; *UEFA* Union of European Football Association; *USA* United States of America

were only minor scheduling conflicts for the live viewing audience.[3] All European games took place from early morning to early afternoon and no European game was aired (live) in the prime time zone, in contrast to the CONCACAF and MLS games. The selected games were broadcast on US TV networks live,[4] and tape-delayed in full length, and were also available on the online platforms of the respective networks via live streaming.

Coppa Italia Final: The 2015 Coppa Italia Final took place on 20 May 2015 at the Stadio Olimpico in Rome (Italy) between SS Lazio and Juventus FC. It was SS Lazio's eighth time in a Cup Final (they've won six), and the 15th final for Juventus FC (won nine). SS Lazio finished third in Serie A with 69 points, and Juventus FC won the championship with 87 points. Juventus won the final (2–1) in extra time. The game was broadcast live on beIN Sports en Español, beIN Sports, beIN SPORTS CONNECT and Fubo TV (the latter two are online streaming platforms).

FA Cup Final: The 2015 FA (English Football Association) Cup Final took place on 30 May 2015 at the Wembley Stadium in London (England) between Arsenal FC and Aston Villa FC. It was Arsenal FC's 19th time in a cup final (won 11), and Aston Villa FC's 11th final (they have won seven). Arsenal FC finished third in the English Premier League with 75 points, while Aston Villa FC barely avoided relegation to the Football League Championship, finishing 17th in the Premier League with 38 points. Arsenal won the final (4–0). The game was broadcast live on FOX Deportes, FOX Network and FOX Soccer 2GO (online streaming platform).

DFB Cup Final: The 2015 DFB (German Football Association) Cup Final took place on 30 May 2015 at the Olympiastadion in Berlin (Germany) between BvB Dortmund and VfL Wolfsburg. It was BvB Dortmund's seventh cup final (won three), and the second for VfL Wolfsburg final (no prior win). BvB Dortmund finished seventh in the German Bundesliga with 46 points, and VfL Wolfsburg managed to secure second place in the league with 69 points. VfL Wolfsburg won the final (3–1). The game was broadcast live via online streaming on ESPN Deportes+, ESPN3 and WATCH ESPN.

Coupe de France Final: The 2015 Coupe de France Final took place on 30 May 2015 at the Stade de France in Paris (France) between AJ Auxerre and Paris Saint-Germain FC. It was AJ Auxerre's sixth cup final (won four), and the 13th for Paris Saint-Germain FC (won eight). AJ Auxerre

competed in the French Ligue 2 and finished ninth with 52 points, and Paris Saint-Germain FC won the Ligue 1 championship with 83 points. Paris Saint-Germain FC won the final (1–0). The game was broadcast live on beIN Sports en Español, beIN Sports, beIN SPORTS CONNECT, Fubo TV (the latter two are online streaming platforms).

Copa del Rey Final: The 2015 Copa del Rey Final took place on 30 May 2015 at the Camp Nou in Barcelona (Spain) between Athletic Club de Bilbao and FC Barcelona. Bilbao had previously played in 35 finals (won 23), and FC Barcelona had participated in 36 finals (won 26). Athletic Club de Bilbao finished seventh with 55 points in the Spanish La Liga, and FC Barcelona won the championship with 94 points. FC Barcelona won the final (3–1). The game was broadcast live on ESPN2, ESPN Deportes and WATCH ESPN (online streaming platform).

UEFA Champions League Final: The 2015 UEFA Champions League Final took place on 6 June 2015 at the Olimpiastadion in Berlin (Germany) between Juventus FC and FC Barcelona. Both, Juventus FC and FC Barcelona had previously played in eight European Cup/UEFA Champions League Finals, with Juventus FC winning two and FC Barcelona four finals. Both teams were champions in their respective leagues. FC Barcelona won the final (3–1).The game was broadcast live on FOX Deportes, FOX Network and FOX Soccer 2GO (online streaming platform).

National team friendly games: To prepare for the 2015 CONCACAF Gold Cup, the USMNT played against the Dutch National team on 5 June 2015 at the Amsterdam Arena in Amsterdam (Netherlands). In the FIFA/Coca-Cola World Ranking (from 4 June 2015) the USMNT was ranked 27th (823 points), and the Netherlands were ranked sixth (1,378 points). USMNT won the friendly game (4–3).The game was broadcast live on ESPN, Univision Deportes, Watch ESPN and Univision Deportes en Vivo (the latter two are online streaming platforms). On 10 June 2015, the USMNT played another friendly against the German National team at the Rhein Energie Stadion in Cologne (Germany). In the FIFA/Coca-Cola World Ranking (from 4 June 2015) Germany was ranked first (1,775 points). USMNT won the friendly game (2–1).The game was broadcast live on FOX Sports 1, Univision Deportes, UniMás, FOX Sports GO and Univision Deportes en Vivo (the latter two are online streaming platforms).

CONCACAF Gold Cup 2015: In the group stage of the 2015 CONCACAF Gold Cup the USMNT played against the Honduran

National team on 7 July 2015 at the Toyota Stadium in Frisco (USA). In the FIFA/Coca-Cola World Ranking (from 4 June 2015) Honduras was ranked 75th (462 points). The USMNT won the game (2–1). On 10 July 2015, the USMNT played against the Haitian National team at the Gillette Stadium in Foxborough (USA). In the FIFA/Coca-Cola World Ranking (from 4 June 2015) Haiti was ranked 76th (442 points) and therefore right behind Honduras. For the record, USMNT won the game (1–0). On 13 July 2015, the USMNT played against the Panamanian National team at the Sporting Park in Kansas City (USA). In the FIFA/Coca-Cola World Ranking (from 4 June 2015) Panama was ranked 54th (597 points). The game ended in a tie (1–1). All three group stage games were broadcast live on FOX Sports 1, Univision Deportes, UniMás, FOX Sports GO, FOX Soccer 2GO and Univision Deportes en Vivo (the latter four are online streaming platforms).

Ligue 1: The game between the previous season's champion, Paris Saint-Germain FC, and FC Girondins de Bordeaux on 11 September 2015 at the Parc des Princes in Paris (France) was selected from the Ligue 1 games. Before the game, Paris Saint-Germain FC was ranked first (12 points) and FC Girondins de Bordeaux tenth (5 points). The game ended in a tie (2–2). The game was broadcast live on beIN Sports en Español, beIN SPORTS CONNECT and FuboTV (the latter two are online streaming platforms).

Premier League: The survey includes two games from the fifth matchday of the English Premier League (season 2015–2016). Everton FC competed against the previous season's champions, Chelsea FC, on 12 September 2015 at Goodison Park in Liverpool (England). Before the game, Everton FC was ranked ninth (5 points) and Chelsea FC 13th (4 points). Everton FC won the game (3–1).The game was broadcast live on NBCSN, NBC UNIVERSO, NBC Sports Live Extra and NBC Deportes En Vivo Extra (the latter two are online streaming platforms). The second game was the North West Derby, Manchester United FC versus Liverpool FC on 12 September at Old Trafford in Manchester (England). Prior to the game, both teams had seven points. Manchester United FC won the game (3–1). The game was broadcast live on NBC, Telemundo, NBC Sports Live Extra and NBC Deportes En Vivo Extra (the latter two are online streaming platforms).

Bundesliga: The game between the previous season's champion, FC Bayern Munich, and FC Augsburg (final result: 2–1) on 12 September at the Allianz Arena in Munich (Germany) was selected from the Bundesliga

games. Before the game, FC Bayern Munich was second in the league (nine points) and FC Augsburg 15th (one point). The game was broadcast live on FOX Sports 1, FOX Sports GO and FOX Soccer 2GO (the latter two are online streaming platforms).

La Liga: The game between 2014's Supercopa de España winner Club Atlético de Madrid and last season's champion FC Barcelona (final result: 1–2) on 12 September at the Vicente Calderón Stadium in Madrid (Spain) was selected from the La Liga games. In the first two matchdays, both teams were victorious (6 points). The game was broadcast live on beIN Sports, beIN Sports en Español, beIN SPORTS CONNECT and FuboTV (the latter two are online streaming platforms).

Serie A: The Milan Derby between Internazionale Milano and AC Milan (final result 1–0) on 13 September at the Stadio Giuseppe Meazza in Milan (Italy) was selected from the Serie A games. On the first two matchdays, Internazionale Milano had six points and AC Milan three points. The game was broadcast live on beIN Sports, beIN Sports en Español, RAI International, beIN SPORTS CONNECT and FuboTV (the latter two are online streaming platforms).

MLS: The survey further included two games from the MLS season 2015. The game between New York Red Bulls and Chicago Fire on 11 September at Red Bull Arena in New York (USA) was selected from the Eastern Conference.[5] The New York Red Bulls held second place in the East, just 2 points behind first place, and Chicago Fire was last in the standings, and winless in away games. The game was broadcast live on UniMás, Univision Deportes and MLS Live (online streaming platform). The Western Conference vs. Eastern Conference game between Los Angeles Galaxy and Canadian Montréal Impact on 12 September at StubHub Center in Los Angeles (USA) was also selected. Los Angeles Galaxy was second place in the Western Conference, two points out of the top spot, and Montréal Impact were in the sixth place (final post-season position) in the Eastern Conference. The game was broadcast live on TWCSN, MLS Direct Kick and MLS Live (online streaming platform).

4.1.2 Individuals

Subjects were recruited from an online panel offered by a professional market research company. To ensure the highest quality standards, a

mixed design was implemented with regard to sample selection. Probability sampling was employed in the first stage. In this way, it was guaranteed that the subjects were randomly recruited and every individual had an equal opportunity of selection. At the second stage, a screen-out question about general interest in football was used at the beginning of the surveys to ensure that our sample would contain participants who were (at least slightly) interested in football.[6]

The reason for choosing this particular target population instead of focusing on the general population is twofold. *First*, it guaranteed that the respondents would have the necessary knowledge of the sport in order to be able to answer the related questions. *Second*, according to a survey conducted by Upshot in cooperation with YouGov, on behalf of the New York Times (2014),[7] about 40 % of the US population is (at least slightly) interested in football (Fig. 4.1). Even though the share of football-interested US individuals at first glance seems fairly low compared to other countries like Germany (82 %), it becomes apparent from taking a closer look at the total population of football-interested individuals per country, that worldwide the USA contains one of the largest football-interested populations.

4.2 Survey Method and Implementation

This chapter describes the design and structure of the surveys (Section 4.2.1) and the operationalisation of the variables (Section 4.2.2).

4.2.1 Design and Structure of the Surveys

We had five overall objectives when designing the questionnaires:

1. As no study so far has dealt in depth with the demand for televised football in the USA, the questionnaires should be able to provide a reasonable overview of the country's football-interested population.
2. The questionnaires should be able to tackle the drawbacks of existing research by following a design which takes into consideration the type of consumption (tape-delayed or live viewing) and the setting of consumption (at home or in a public place). Focus is also on thoroughly developed proxies of demand.

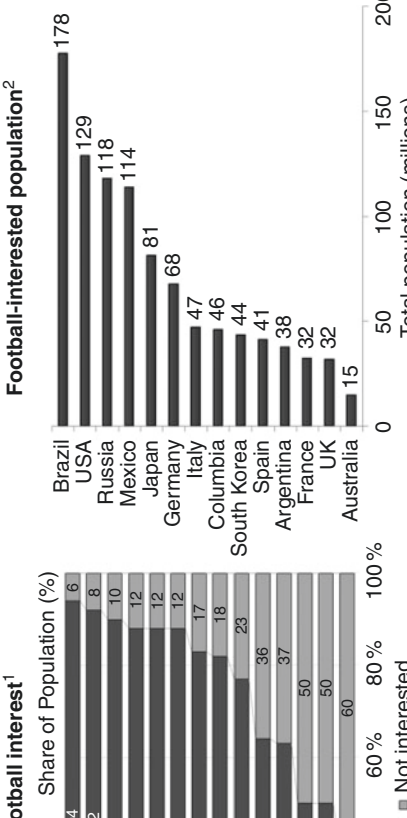

Fig. 4.1 The share and total population of football-interested individuals. *Notes*: [1]Survey conducted by Upshot in cooperation with YouGov on behalf of the New York Times; [2]The estimation of football-interested population per country is based on the extrapolation of the survey's shares on 2014 population estimates of the United Nations (http://esa.un.org/unpd/wpp/)

3. The questionnaires should capture the impact of several factors that are supposed to influence consumer decision making with regard to television viewing of football games. To do so, they have to use determinants previously found to influence demand and factors which have so far been overlooked (accessibility of leagues/competitions, socio-demographic characteristics, different dimensions of CB and else).
4. In contrast to prior research based on survey data, the questionnaires should entail measures/factors which will have direct implications for league or club managers.
5. The questionnaires should enable a direct comparison between the relevant leagues and competitions by following a uniform design.

To accomplish the aforementioned goals, the questionnaires were organised in four major blocks. The first block consisted of general questions about (general) football interest, amounts paid by respondents for TV programming and additional sports packages, and language preferences when watching football games. The second block accommodated questions at league level, such as accessibility and interest in leagues/competitions, consumption of football telecasts or willingness-to-pay (WTP) for league/competition add-on subscriptions. The third block included questions focusing on single games such as intention to consume (ITC), WTP for a ticket and the perceived closeness of the games. The fourth block focused on the socio-demographic characteristics of the survey participants.

To ensure that the order of questions/choices would not influence the survey results, the order of the items (i.e. leagues/competitions and games) was randomised for every survey participant. All survey questions were mandatory, and thus respondents obliged to provide an answer before they were allowed to proceed to the next page. Validation filters were set up on open-ended questions, where the respondent had to provide numbers (ZIP code, WTP elicitation items etc.).[8]

4.2.2 Operationalisation of the Variables

To measure demand, we employed four different strategies. The first two focused on league level and the latter two on game level. In particular:

1. *League viewership elicitation*: In the league-level demand questions, US consumers were asked to state the number of football games (per league/competition) they watched live on a typical matchday/week considering the concluded season (Survey 1: 2014–2015) and the ongoing season (Survey 2: 2015–2016) regardless of the medium of consumption (online or TV) or the type of consumption (tape-delayed or live). To capture the amount of differentiation/bias introduced by the setting of consumption (at home or in a public place) we included a question about the share of games that football viewers usually watched outside their household. The viewership statements enabled us to assess the demand for each respective league/competition.
2. *Willingness-to-pay (WTP) for telecasts*: In both surveys, a WTP scenario with an open-ended design was created. Survey participants were asked to state how much they pay for their current TV programming and for additional sports packages (if existing), and about how much they would be *willing* to pay at most, per month, for an exclusive add-on package for corresponding leagues and competitions. This setting enabled us to monetarily evaluate the demand for each particular league and competition. Although several practitioners tend to prefer a closed-ended elicitation format (Hanemann, 1984), an open-ended design was chosen.[9] Open-ended designs have several advantages like the absence of an 'anchoring' or a 'starting point' bias. These biases are evident in closed-ended designs, as respondents tend to be influenced by the starting bid or the sequence of bids (see Green, Jacowitz et al. 1998). However, a disadvantage of open-ended designs is that they may be susceptible to 'hypothetical' and 'strategic' bias. Loomis (2014: 35) defined hypothetical bias "*as the difference between what a person indicates they would pay in the survey or interview and what a person would actually pay*". In this regard, Schläpfer and Fischhoff (2012) showed that a high familiarity with a good exerts a diminishing effect on the hypothetical bias, especially when also the context is meaningful and familiar. Our sample consists of football-interested individuals which reasonably

convey a certain degree of familiarity with the product (i.e. football). Concerning the context, as the vast majority of US-based multichannel operators offer add-on sports packages, we are fairly confident that our respondents had the necessary contextual cues (note that 86 % of the available US households are pay-tv subscribers). Therefore, the disparity between 'true' and hypothetical WTP in our surveys should be kept at minimum level. With regard to strategic bias, this occurs in cases where the respondent may attempt to influence the outcome or result by not responding truthfully (Schulze et al. 1981). To circumvent this, in the surveys we intentionally avoided the display of any logos (i.e. of FIFA, the concerning leagues, CIES and of our academic institution).[10] Additionally, we explicitly stated in the introductory remarks of the surveys that data are collected for research purposes only. As such, we are confident that the respondents did not conceive any statements made in the questionnaires as eventually having any impact on the policies of FIFA and/or of the concerning leagues. Finally, some recent research implementing open-ended WTP scenarios for market goods (like football tickets) showed that average WTP by sports consumers are in line with actual market prices and are therefore reliable proxies for demand (see Nalbantis et al. 2015).

3. *Intention-to-consume (ITC) approach*: US consumers were surveyed on both occasions, prior to a selection of upcoming games (see Section 4.1.1), about their intention to view these football games, regardless of the setting (outside and inside household), and the medium of consumption (online or TV), but taking into account the type of consumption/viewing alternatives (highlights, tape-delayed or live viewing). In Survey 2, an additional question was included in order to determine whether US consumer viewing intentions for the selected football games in Survey 1 corresponded to 'actual' consumption. The ITC approach was adopted from Nalbantis et al. (2015) and Pawlowski et al. (2016) and enabled us to assess the demand for each respective game.
4. *Willingness-to-pay (WTP) to attend a football game*: Using an open-ended design (as described earlier), we developed a WTP scenario in

both surveys where US consumers were asked about their WTP for a ticket to attend a selection of upcoming games, under the premise that the games took place in a stadium near their residence and at a time and date that would be convenient for them to attend. In this way, we were able to monetarily evaluate the demand for each particular game.

In addition to the aforementioned demand proxies, both surveys included questions about the US consumers' favourite European and MLS football clubs, their interest in games of the corresponding leagues/competitions, and their general attitude towards the European countries which host the concerning leagues. The latter was adopted from Parameswaran and Yaprak (1987) and attempted to determine whether the predispositions of sports consumers towards European football were connected with their attitude towards the respective countries and if there is a 'patriotic bias'. Socio-demographic questions (such as gender, income, education, occupation, citizenship, ethnicity, migration background and age) were included. These questions were adopted (and adapted) from the US Census Questionnaire. Both surveys included a question about US consumer perceptions of the quality of the leagues/competitions concerned. Consumers were asked to state, on a scale of 0–10 (0 = very low – 10 = very high), how they would generally rate the quality of football that is being played on the pitch in the respective leagues/competitions. While previous studies of broadcast demand (e.g. Nuesch and Franck 2009) only considered measured quality objectively, this approach attempts to also capture the perceived dimension of this determinant and to attest its relevance on viewership, and on the WTP for league and competition telecasts. Finally, three different CB questions were implemented to measure and depict the three dimensions of CB, the long-term, mid-term and short-term CB:

1. *Perceived competitive balance (PCB)*: In both surveys, US consumers were asked to state, on a scale of 0–10 (0 = extremely unbalanced – 10 = extremely balanced), how balanced they thought competitions were in the following leagues/competitions (season 2014–2015). This item aimed to capture the long-term dimension of CB and was partly adopted from Koenigstorfer et al. (2010). Since the surveys took place on two different dates (the end of football season 2014–2015; the beginning of football

season 2015–2016) we were able to test whether average perceptions deviated between the surveys.

2. *Perceived championship uncertainty*: In Survey 2, respondents were asked (on a scale of 0–10, 0 = very easy – 10 = very hard) how hard or easy they thought it was to predict the season's champion in the respective league/competition. This item attempted to capture the degree of perceived championship (un)certainty, the mid-term dimension of CB.
3. *Perceived closeness of games*: In both surveys, US consumers were asked to state, on a scale of 0–10 (0 = Club A will definitely win – 10 = Club B will definitely win), which team they thought was more likely to win in the upcoming game. In this manner, we are able to measure the short-term dimension of CB, the perceived uncertainty of outcome/closeness of a specific game. This item was adopted from Pawlowski et al. (2016).

4.2.3 *Implementation of the Surveys*

The surveys were designed and administered by Questback, which is a global leader in enterprise feedback management, and the respondents were recruited from an online panel provided by Lightspeed GMI, which is one of the largest online sample providers in the world.[11] Respondents were invited to take part in the survey via email at designated times, through an automatic queuing system. The survey link was posted on each subject's password-protected panel home page. A subject invited to the survey had to visit the panel provider's website and enter their email address and password before accessing the link to the survey in order to ensure that the survey link could not be opened by anyone else with access to that mailbox. The invitation emails were CAN-SPAM compliant and special software tagged each computer with a unique identifying number to guarantee that only one respondent per computer could answer the survey. Upon completion of the surveys, reward points were deposited immediately into the survey participant accounts. These points could be redeemed for online gift certificates, merchandise, and PayPal cash deposits. Finally, respondents who successfully took part in Survey 1 were re-invited to participate in Survey 2. In this way, we attempted to create a panel design enabling us to compare and examine responses over time.

4.3 Data and Quality Corrections

The gross survey sample was expected to consist of 3,000 football-interested US residents. In the event that respondents of the first wave did not participate in the second survey, we arranged further potential recruitment until we reached the agreed sample size for both waves with the panel provider. For Survey 1, the panel provider distributed $N = 6{,}590$ invitations and around 47 % ($N = 3{,}085$) of the respondents took part and completed the survey. A total of 45 % were screened out as they indicated 'no interest' in football and 8 % did not start the survey at all.[12] For Survey 2, $N = 5{,}805$ respondents were invited, of which 54 % ($N = 3{,}152$) completed the questionnaire, almost 36 % were excluded from the survey due to 'no interest' in football and about 9 % did not start the survey at all.

The gross sample underwent several quality corrections. Lightspeed GMI has special technology to identify and remove fraudulent survey data. We implemented the Questback quality correction program to identify and remove survey speedsters. This feature enables the estimation of an individual quality variable based on the time that each participant took to complete a particular page of the survey in relation to the average processing time of the entire sample for this page. According to the recommendations by Questback, we set a quality threshold of 0.25, and only respondents who needed more than half as long as the average processing time per page were included in the analysis.[13] Taking advantage of the fact that approximately half the sample consists of panellists, individuals who participated in both surveys, we checked whether the panellists' responses were consistent with regard to age and gender in both waves. In general, any inconsistency among panellists can be attributed either to wrong statements or to the fact that they may belong to the same household, that is, they are different persons whose responses must then be considered truthful and accurate. To determine the cause of such inconsistencies, we examined whether 'switchers' differed, apart from age and gender, in more than one characteristic, such as education, occupation, income, marital status, household size, and US citizenship status. Those who differed in more than one characteristic, apart from gender, ($N = 17$) were awarded a new ID since this inconsistency may be attributed to participation in the survey of different members of the same household. The respondents who differed only by gender were awarded a missing value for gender ($N = 3$) since the inconsistent

statement was likely to be attributed to a mistype. Those who differed in more than one characteristic, apart from age, were awarded a missing value for age ($N = 72$). The respondents whose response inconsistency only concerned age ($N = 43$) were awarded the mean age based on both survey statements, since this inconsistency was likely to be attributed to a mistype.

After data cleaning, as described earlier, the quality-corrected database contained $N = 2{,}717$ respondents for Survey 1 and $N = 2{,}699$ respondents for Survey 2. Those who participated in both surveys (i.e. panellists) amounted to $N = 1{,}217$ respondents.

4.4 Sample Characteristics

Figure. 4.2 provides an overview of the distribution of certain socio-demographic characteristics in the quality-corrected database. As can be seen, there are more males than females in both samples. Since our survey addressed individuals 18 years old or older, the average age of the sample is relatively high, with survey respondents being on average 48 to 51 years old. In detail, the largest proportion of respondents is 50 years and older and only 10 % are less than 29 years old. About two-thirds of the sample gives their marital status 'now married', and only every fifth respondent has never been married. The average reported household size is 2.7 members, with more than one-third of the survey participants living in two-person households.

As indicated in Fig. 4.3, the sample consists of fairly highly educated individuals. Almost half of the sample reported their highest level of education as either the successful completion of Bachelor or postgraduate studies. Almost two out of ten respondents reported having attended college without a college degree and only 1 % reported having neither finished high school nor having attended any school.

Almost two-thirds of the survey participants reported being employed for wages or self-employed. As per the fairly mature sample, approximately two out of ten are retirees. The unemployment rate in the survey is 6–7 %, with just 2 % stating that they are not looking for a job opportunity. Our survey consists of relatively affluent respondents as regards annual household income (before taxes). Accordingly, the highest share of survey participants (almost one-third) reported an annual household income between $40,000 and

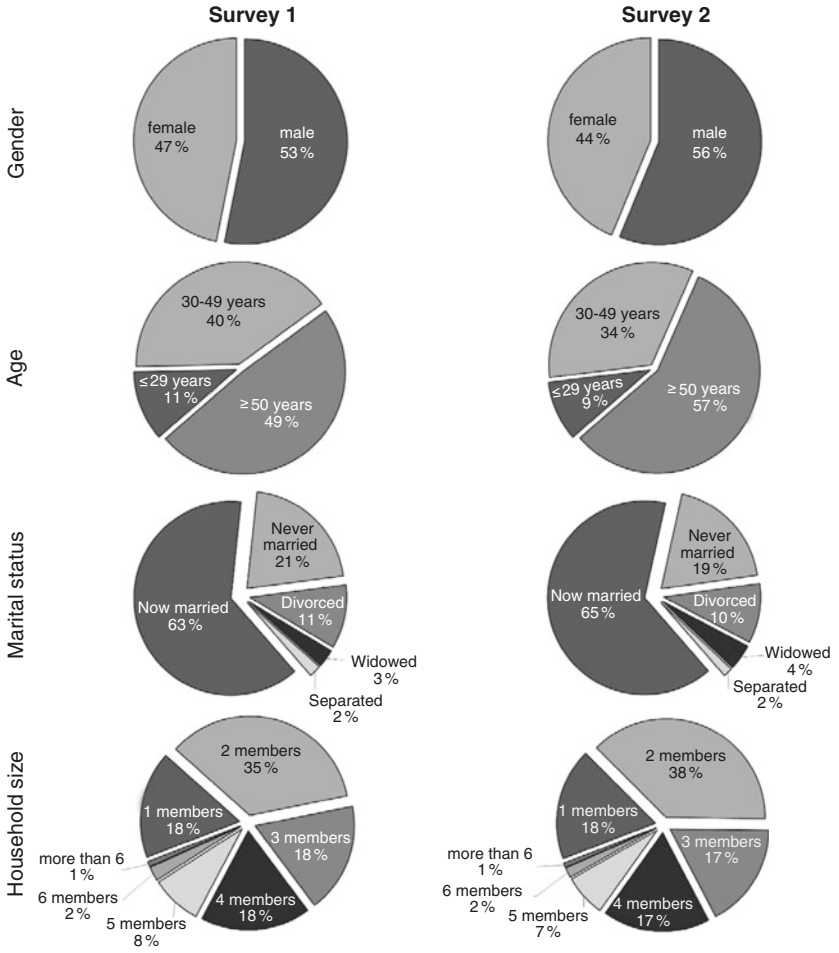

Fig. 4.2 Distribution of socio-demographic characteristics within the sample, part 1

$75,000, with the second largest income category being individuals annually earning $100,000 or more.

Concerning the background characteristics of the sample (Fig. 4.4), about 85 % are US citizens born in the USA, Puerto Rico, Guam, the US

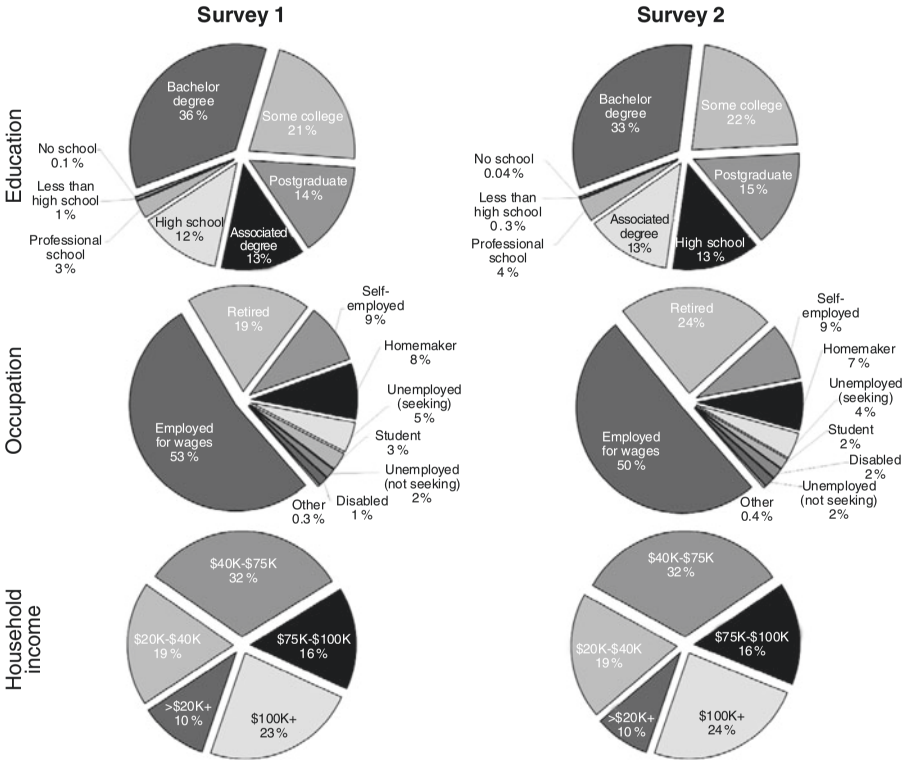

Fig. 4.3 Distribution of socio-demographic characteristics within the sample part 2

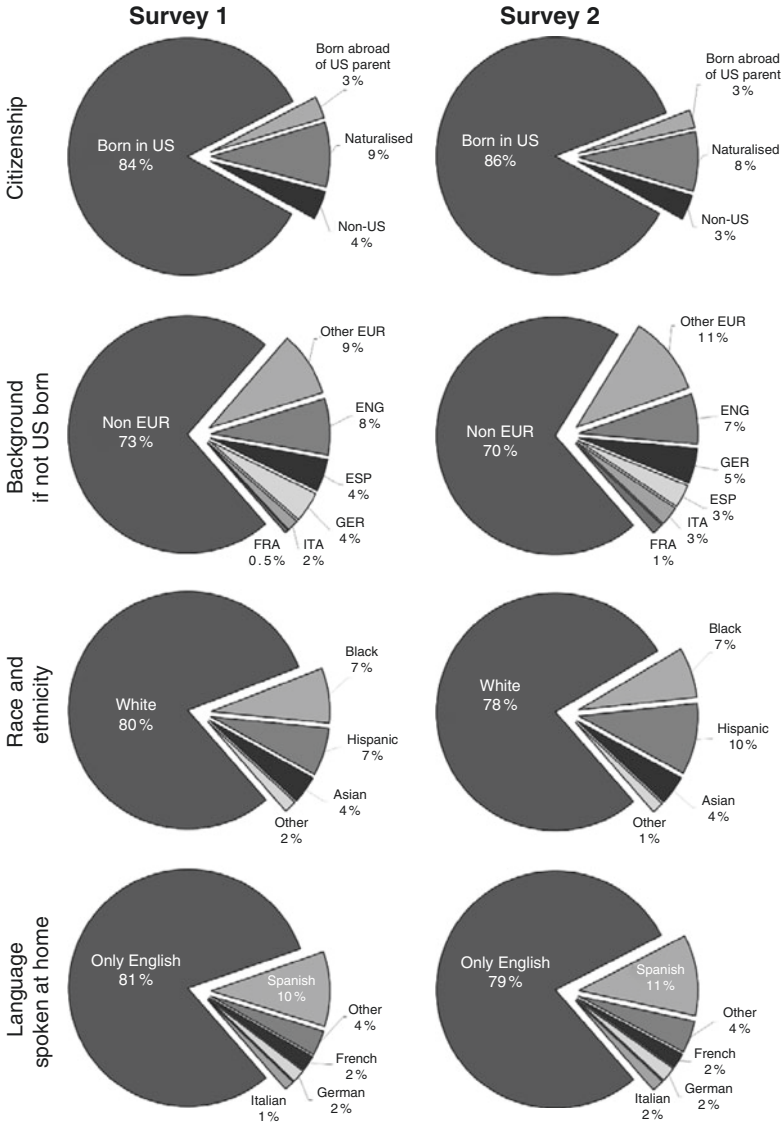

Fig. 4.4 Distribution of socio-demographic characteristics within the sample part 3. *Abbreviations*: *ENG* England, *ESP* Spain, *EUR* Europe, *FRA* France; *GER* Germany; *ITA* Italy, *US* United States

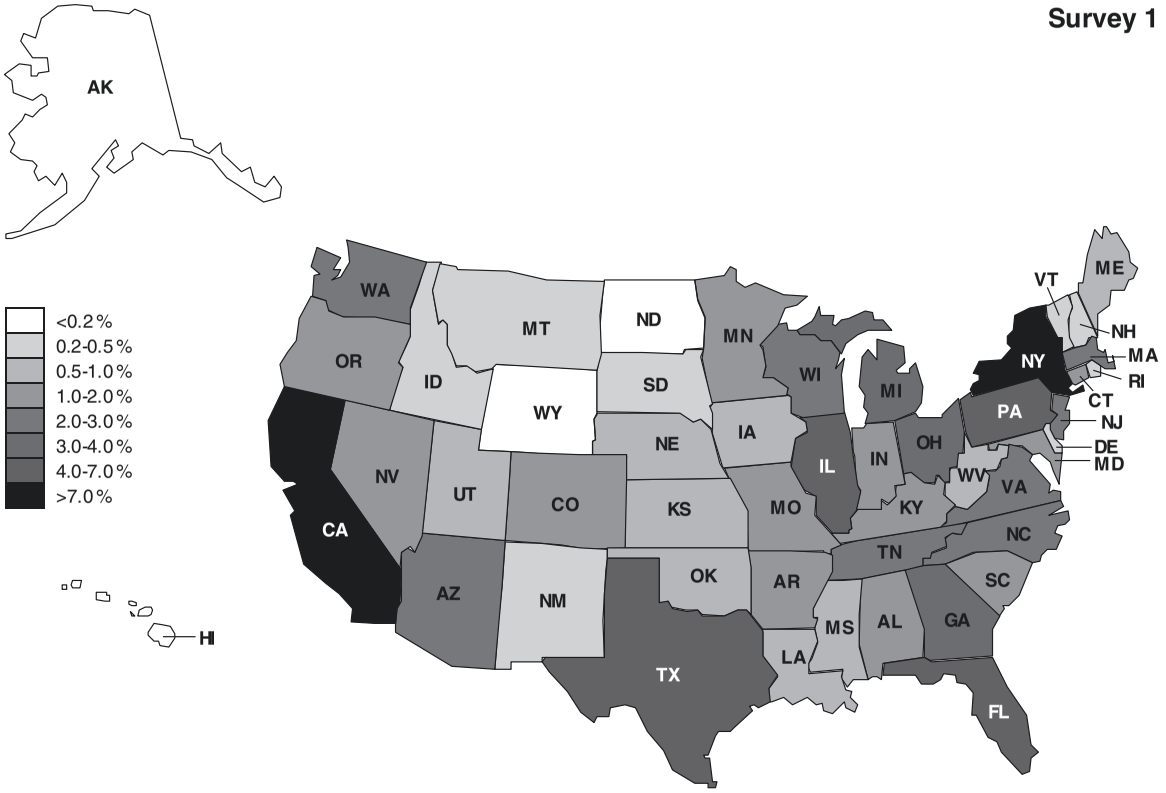

Fig. 4.5 Geographical distribution of the sample

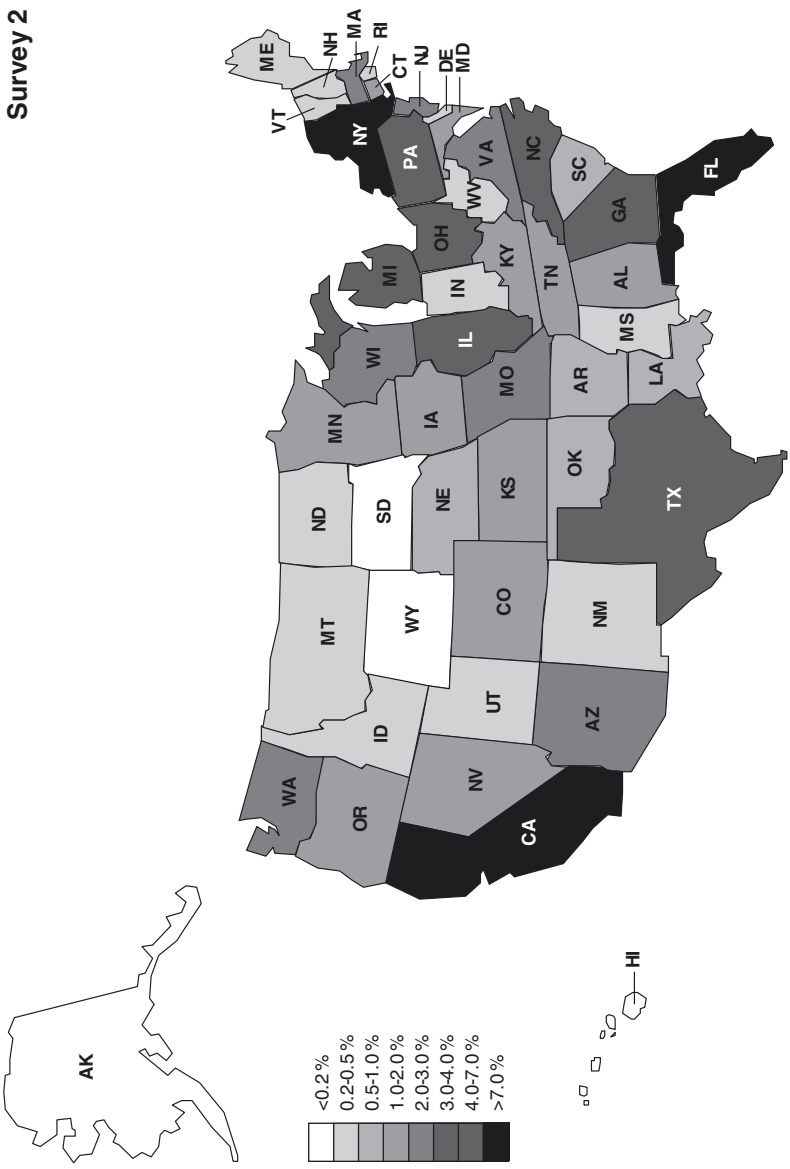

Fig. 4.5 (Continued)

Virgin Islands, or Northern Marianas. Of those who were not born in the USA, almost seven out of ten were born in, or are (were) citizens, of a non-European country, and the rest reported a European background. Eight out of ten respondents are white, 7–10 % are black/African American or have a Hispanic, Latino or Spanish origin. Eight out of ten reported that they only speak English at home and about every tenth speaks Spanish at home in addition to English.

Finally, with regard to the geographical distribution of the sample (Fig. 4.5), the survey respondents are from all 50 states and the District of Columbia. The largest share of respondents lives in California (about 11 % of the sample), followed by New York (about 8 % of the sample) and Florida (about 7 % of the sample). The lowest share of respondents comes from Alaska, Hawaii and Wyoming (less than 0.2 % of the sample).

4.5 Representativeness of the Sample

This chapter attempts to assess the representativeness of the survey's sample. We begin by considering whether there is an over- or under-representation in the sample concerning respondent interest in football. To our best knowledge, the only available data to do so comes from a US-wide representative survey conducted by Upshot in cooperation with YouGov on behalf of the New York Times (2014).

Table 4.3 provides proportions of the football-interested US population, comparing our sample with that of Upshot.[14] It becomes apparent that the proportions of the football-interested US population are very similar to those of our project. The marginal deviations may be attributed to the fact that the Upshot survey was conducted before the FIFA World Cup 2014. In this competition, the USMNT reached Round 16 which arguably may have boosted the US population's interest in the sport. As shown in Section 2.3, football in the USA is enjoying remarkable growth year after year.

We compared the distribution of the gender and age of survey participants with that of independent research conducted by Scarborough USA (Sport Business Journal 2014) for US fans of European football (Table 4.4).[15] Comparisons reveal similar patterns between the samples, with our sample being marginally older on average than that of the Scarborough survey.

Table 4.3 Representativeness of football interest

	NY Times Survey[1]	*Survey 1*[2]	*Survey 2*[2]
Football interest	**%**	**%**	**%**
Very	11	12	13
Somewhat	11	15	19
Slightly	18	21	24
Not at all	60	52	44

Notes: [1]Survey conducted by Upshot in cooperation with YouGov on behalf of the New York Times; [2]Football interest levels were calculated based on the 'not at all' figures of the survey screen-out statistics

Table 4.4 Gender and age distribution among US fans of European football

	Scarborough[1]	*Survey 1*[2]	*Survey 2*[2]
Gender/Age	**%**	**%**	**%**
Men 18–34	26	19	20
Men 35–49	20	19	18
Men 50 or older	19	23	27
Women 18–34	14	14	10
Women 35–49	10	15	13
Women 50 or older	11	11	12

Notes: [1]Survey conducted by Scarborough USA+ 2013 Release 1 (Sport Business Journal, 2014); [2]For the definition of the US fans of European football of our sample, we considered those who stated that they are fans of the respective league clubs

To get a better overview of whether football-interested respondents differ from the general population, we compared several characteristics of the sample with the US Census data (2012). We considered the socio-demographic characteristics (Table 4.5). Our sample contains more males and is on average older than that of the general US population. There are several similarities in marital status and household size.

On average (Table 4.6), the survey respondents reported a higher household income than that of the general US population. This is in line

with a recent report by Nielsen (2015b) for MLS football fans in the USA which finds them more likely to have a higher income than the average American household. The deviations from the US Census data regarding household income, and consequently educational attainment, therefore, seem to be plausible. Comparisons of the distribution of labour force and employment show that there are no substantial deviations between the populations.

Table 4.5 Socio-demographic characteristics comparison with US Census

	US Census 2012[1]	*Survey 1*	*Survey 2*
Gender	%	%	%
Male	48	53	56
Female	52	47	44
Age			
18–20 years	5	1	1
21–44 years	42	40	33
45–64 years	35	43	44
65 years and over	18	17	22
Marital status			
Married[2]	54	63	65
Widowed	6	3	4
Divorced	11	11	10
Separated	2	2	2
Never married	28	21	19
Household size			
One member	27	17	18
Two members	34	35	38
Three members	16	18	17
Four members	13	18	18
Five members	6	8	7
Six members	2	2	2
Seven or more	1	1	1

Notes: [1]US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2012; [2]Excludes separated. Includes individuals with spouses who are not living in the household (e.g. the spouse is living in a correctional facility)

Table 4.6 Socio-economic characteristics comparison with US Census

	US Census 2012[1]	*Survey 1*	*Survey 2*
Educational attainment	%	%	%
Less than high school	13	1	<1
High school	30	13	13
Some college or associate's degree	29	34	35
Bachelor's degree	18	36	33
Advanced degree	10	17	18
Labour force and employment[2]			
In civilian labour force	65	69	65
Not in civilian labour force	35	32	35
Employed	92	91	91
Unemployed	8	9	9
Household income[3]			
Less than $9,999	8	4	3
$10,000 to $14,999	6	3	3
$15,000 to $19,999	6	4	3
$20,000 to $24,999	6	4	5
$25,000 to $34,999	11	10	10
$35,000 to $49,999	14	14	13
$50,000 to $74,999	18	23	24
$75,000 to $99,999	12	16	16
$100,000 and over	21	23	24

Notes: [1]US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2012; [2]Percent based on persons in the civilian labour force. Everyone is defined as civilian labour except those defined as homemaker, student, retired or disabled; [3]Total money income is the sum of wages and salaries, net income from self-employment, and income other than earnings

Rough comparisons of the background characteristics (Table 4.7), and in particular birth, citizenship, and the language spoken at home (apart from English) suggest no considerable deviations between our sample and that of the US Census, and there appears to be an over (under-) representation of whites (Hispanics and black/African Americans). It has to be noted, however, that race and ethnicity questions, as implemented by US Census and in this research may be subject to response bias.[16] Often individuals are confused by the current wording, or find it misleading or insufficient to describe their identity. A conclusive assessment of over (under-) representation with regard to race and ethnicity is thus not possible.

Table 4.7 Background characteristics comparison with US Census

	US Census 2012[1]	*Survey 1*	*Survey 2*
Birth and citizenship	%	%	%
Native	84	84	86
Foreign-born[2]	16	13	12
Naturalised	7	9	8
Not a citizen	9	4	3
Race and ethnicity			
White	67	81	78
Hispanic[3]	15	7	10
Black	12	8	7
Asian	5	4	4
Other[4]	1	2	2
Language spoken at home[5]			
Only English	80	81	83
Spanish	12	11	10
French	5	2	2
Italian	<1	2	1
German	<1	2	2
Other	6	5	4

Notes: [1]US Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2012; [2]Foreign-born includes anyone who was not a US citizen or US national at birth; [3]Survey 1 includes white Hispanics and black Hispanics, and Survey 2 contains white non-Hispanics, black non-Hispanics etc. Survey 2 corresponds to the US Census; [4]Includes American Indian and Alaska natives, native Hawaiian and other Pacific Islanders alone, and two or more races; [5]Source: US Census Bureau, 2006–2008 American Community Survey

Finally, the geographical distribution of the survey's respondents (see Fig. 4.5) appears to be fairly similar to the distribution of the general US population (Fig. 4.6).

In summary, even though an extensive evaluation of the survey sample is not feasible due to the pioneering character of this research, there is no clear evidence of an over- or under-representation of certain types of individuals. We can thus argue that our findings are both representative of US residents in general and football-interested US residents in particular. This suggests that the football interest is rather equally distributed amongst US residents.

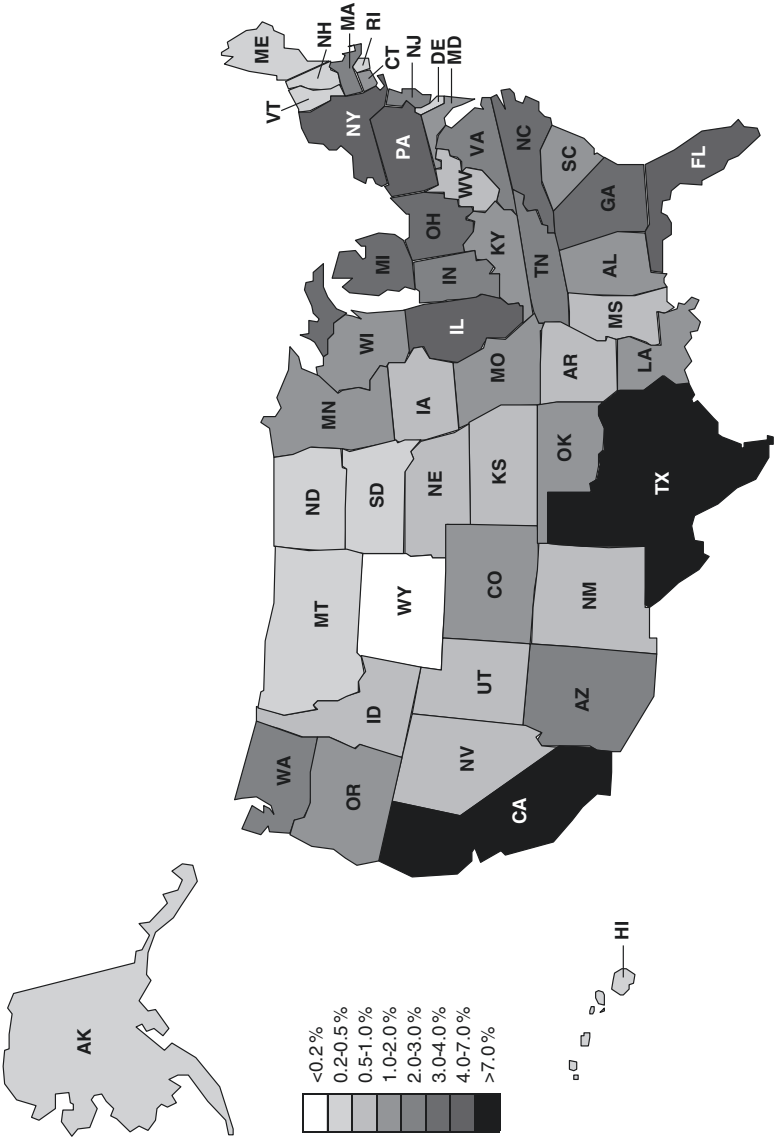

Fig. 4.6 Geographical distribution of US population

Key Facts 3

1. The research focuses on the TOP 5 leagues. These are the most marketable football leagues worldwide, though they differ significantly with regard to their off-field and on-field competitiveness. The surveys further include questions about MLS and the UEFA Champions League.
2. Overall, 19 different football games were selected, six European football finals, five national games and eight league games in the leagues concerned.
3. Demand is measured with four different items. Two of those focus on league-level demand (viewership statements and WTP). The other two focus on game-level demand (ITC and WTP).
4. To capture demand determinants the surveys included items previously found to influence demand and factors, which have been so far overlooked in the literature.
5. The sample is recruited from a US-wide representative online panel. The sample consists of football-interested US respondents 18 years old or older. There were two surveys on two different dates (mid-May 2015; the beginning of August 2015) and the quality-corrected database contains N = 2,717 (N = 2,699) respondents for Survey 1 (Survey 2).
6. A comparison of the sample characteristics with US-based football surveys and US Census data revealed that there was no clear evidence of the over- or under-representation of football-interested individuals.

Notes

1. For Ligue 1 and the Premier League it was the fifth matchday, for the Bundesliga the fourth matchday and for La Liga and the Serie A it was the third matchday.
2. The estimation of each club's popularity is based on the results of Survey 1. A detailed description is provided in Section 5.1.1, Figure 5.6 and Appendix A.2.

3. The DFB Cup Final was scheduled 60 minutes before the Coupe de France Final. The Copa del Rey Final started 30 minutes after the Coupe de France Final. Undoubtedly, this could raise some concerns in cases in which the respondents stated that they intended to view both games live, however, all the European football finals were also offered on the online platforms of the respective networks via live streaming, and thus, with sports consumers being able to watch the games of their choice simultaneously, we are fairly confident that those who stated their intention to view both games had the opportunity to do so.
4. The only exception constituted the German DFB Cup Final which was only available online via live streaming and was later broadcast tape-delayed on TV. Apparently ESPN decided to dedicate its live TV programming to the Copa del Rey Final which was scheduled 90 minutes after the German DFB Cup Final.
5. The regular MLS season runs from March to October. Teams are divided into the Eastern and Western Conferences. Teams play 34 games in an unbalanced schedule, i.e. 24 games against teams within their conference, plus 10 games against teams from the other conference. Unlike European football leagues, the MLS regular season is followed by a 12-team MLS Cup Playoffs in November, ending with the MLS Cup championship final in early December.
6. Please note that from this point onward we define individuals who are at least slightly interested in the sports as 'football-interested'.
7. Data were collected between May and June 2014 via online surveys. Quota for age, gender, race, education and internet usage were employed to generate a sample that was representative of the total population.
8. The questionnaires for both surveys are available in Appendix A.5.
9. Note that major parts of the subsequent discussion are based on Nalbantis et al. (2015).
10. The rationale of not displaying the logo of the University of Tübingen, lies on the fact that it could possibly affect the response behaviour with regard to the German Bundesliga and perceptions about the friendliness of Germany.
11. Complying with the rules of our university we arranged an official tender procedure to award the implementation of the survey and the recruitment of a panel sample to a qualified company. Key elements for successful bidding were: (a) prior experience in the implementation of academic research projects; (b) prior experience in the implementation of surveys in the USA; and an (c) ISO 26362 certification, ensuring the quality of the access panel. The bidding process was concluded at the end of March 2015, with Questback AG (questback.com) being the successful bidder.

12. Detailed information about participation and invitation rates (Table A.4.1) is provided in Appendix A.4.
13. There were $N = 14$ cases where the ID of a respondent appeared twice in the survey. These cases concerned respondents who encountered problems in their first attempt to fill the questionnaire according to Questback. It was decided to delete the chronologically first response of each respective case. Detailed information about the distribution of the quality index among survey participants (Table A.4.2) is provided in Appendix A.4.
14. As mentioned already, individuals who successfully participated in Survey 1 were re-invited to participate in Survey 2, and therefore the football interest statistics from Survey 2 are somewhat inflated due to the fact that the proportion of 'not at all' interested individuals is comparably lower.
15. The survey was conducted in 2013 using computer-assisted telephone interviews among approximately $N = 207{,}000$ individuals aged 18 years and over in the USA. The data were weighted for geography, age within gender, household size, education, race and Hispanic ethnicity (where applicable).
16. The 2010 US Census included two separate questions, one about race and one about ethnicity, a design which we followed in the design of Survey 2. Due to concerns about the suitability of those questions, however, the 2020 US Census will include a combined race and ethnicity question, in which people will be offered all races and ethnicity options at one place. A similar design followed Survey 1.

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CHAPTER 5

Results

Abstract Chapter 5 presents information about the US consumers' interest in football as well as the perceived on-field competitiveness and quality in the concerning leagues and competitions. Furthermore, this chapter presents the analysis of factors associated with the consumption of European and MLS football telecasts. Overall, results of various econometric demand models do not reveal any substantial differences (in terms of opposing effects) between the different leagues and competitions.

Keywords Econometric models · Intention-to-consume · Willingness-to-pay

This chapter deals with the analysis of factors associated with league-level (Section 5.1) and game-level (Section 5.2) demand. In line with the aforementioned research objectives of this project and the shortcomings of existing studies, the focus is on the impact of competition and game uncertainty.

5.1 League-Level Demand

This chapter focuses on league-level demand and presents information about the respondents' interest in football in general, and in leagues/competitions, and information on supporter status (Section 5.1.1). The respondents' perceptions of the league/competition CB (Section 5.1.2)

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and quality of play (Section 5.1.3) are discussed. An overview of the respondents' statements with regard to viewership is provided and associated factors are examined (Section 5.1.4). The final (Section 5.1.5) presents the results of the WTP scenario on league and competition add-on subscription packages, examining several factors that may affect the respondents' purchasing behaviour.

5.1.1 Interest in Football, Leagues and Supporter Status

Interest in football: As already indicated, the sample consists of football-interested US respondents excluding all those individuals who reported no interest in football. Overall, 43 % of respondents are 'slightly interested', 31–33 % are 'moderately interested' and 24–26 % are 'very interested' in football (Fig. 5.1).

In Survey 2 respondents were asked to state, on a scale of 1–7 (1 = not at all interested – 7 = extremely interested), their interest in men's and women's football in order to identify possible differences. Figure 5.2 provides an overview of the sample's distribution with regard to this item.

On average, US respondents seem to be more interested in men's football (4.7 out of 7) than in women's football (4.2 out of 7). Taking a closer look at whether the level of interest differs between both genders, it becomes apparent that there are significant statistical differences, but only with regard to men's football. Male respondents have on average an interest level in men's football of 4.9, and the female respondents' average level of interest is 4.4 (Pearson $chi^2(6) = 96.8431$ $Pr = 0.000$). On the other hand, there are no significant statistical

Fig. 5.1 Football interest of the sample

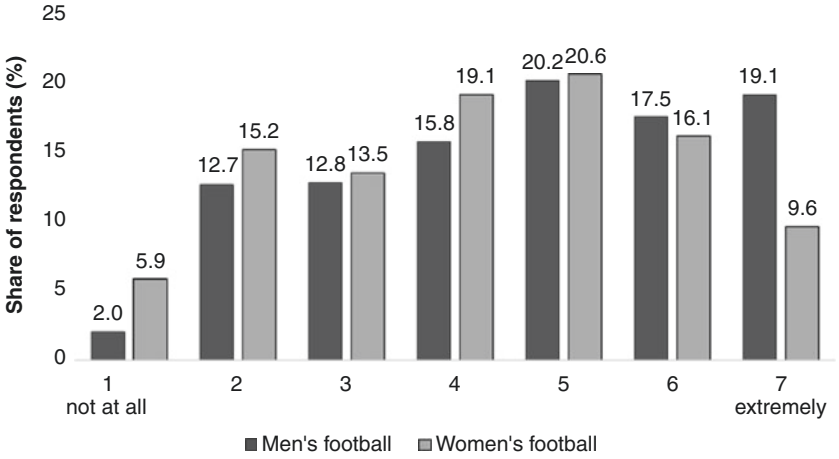

Fig. 5.2 Distribution of interest in men's and women's football (Survey 2)

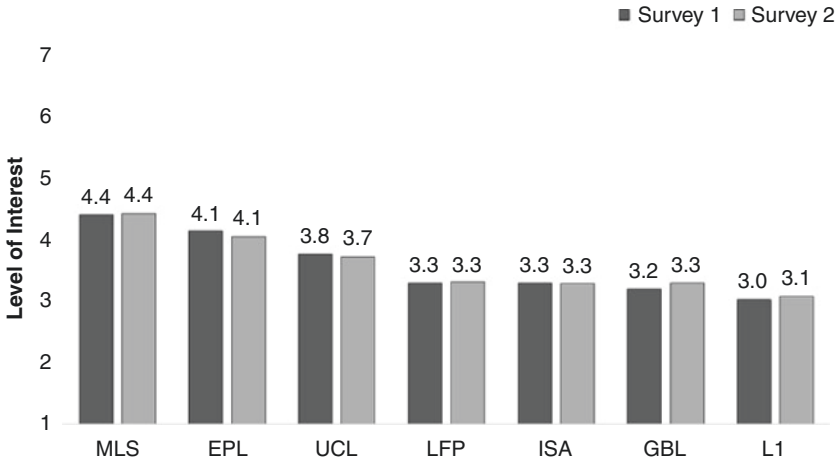

Fig. 5.3 Level of league/competition interest (1 = not at all interested – 7 = extremely interested). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer

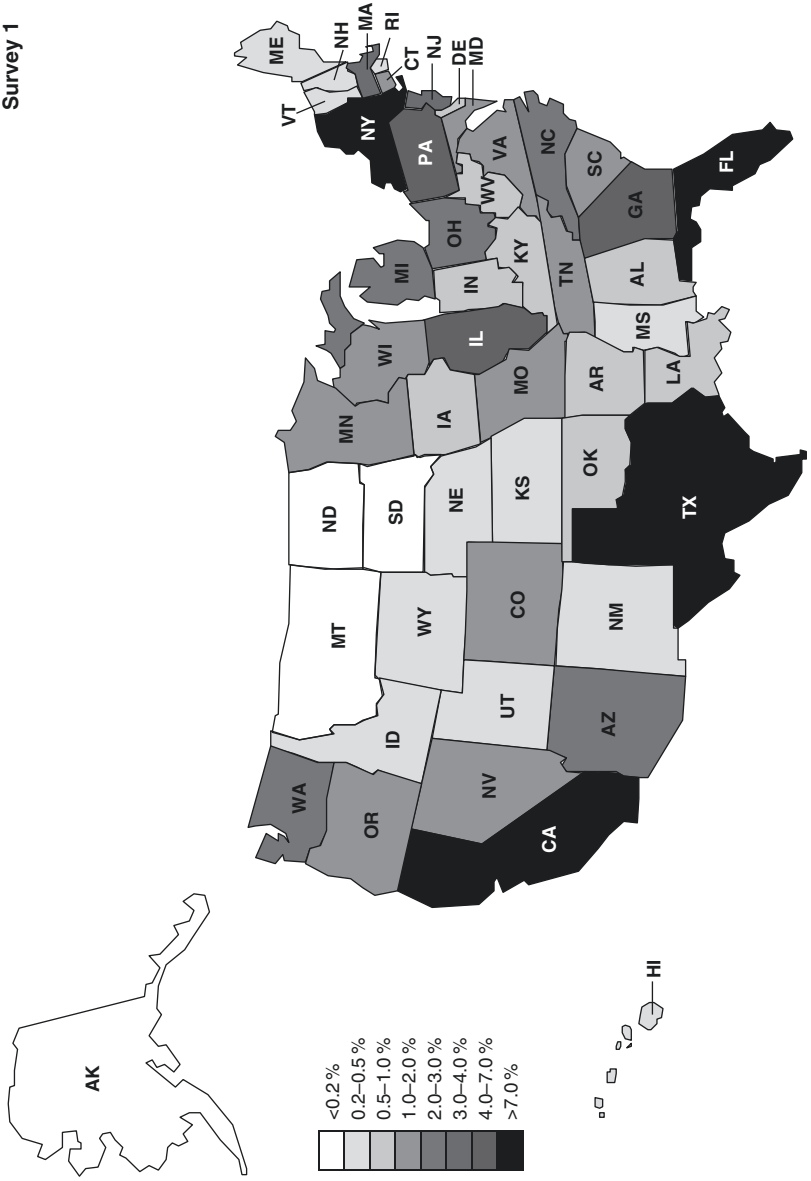

Fig. 5.4 Geographical distribution of TOP 5 league club supporters

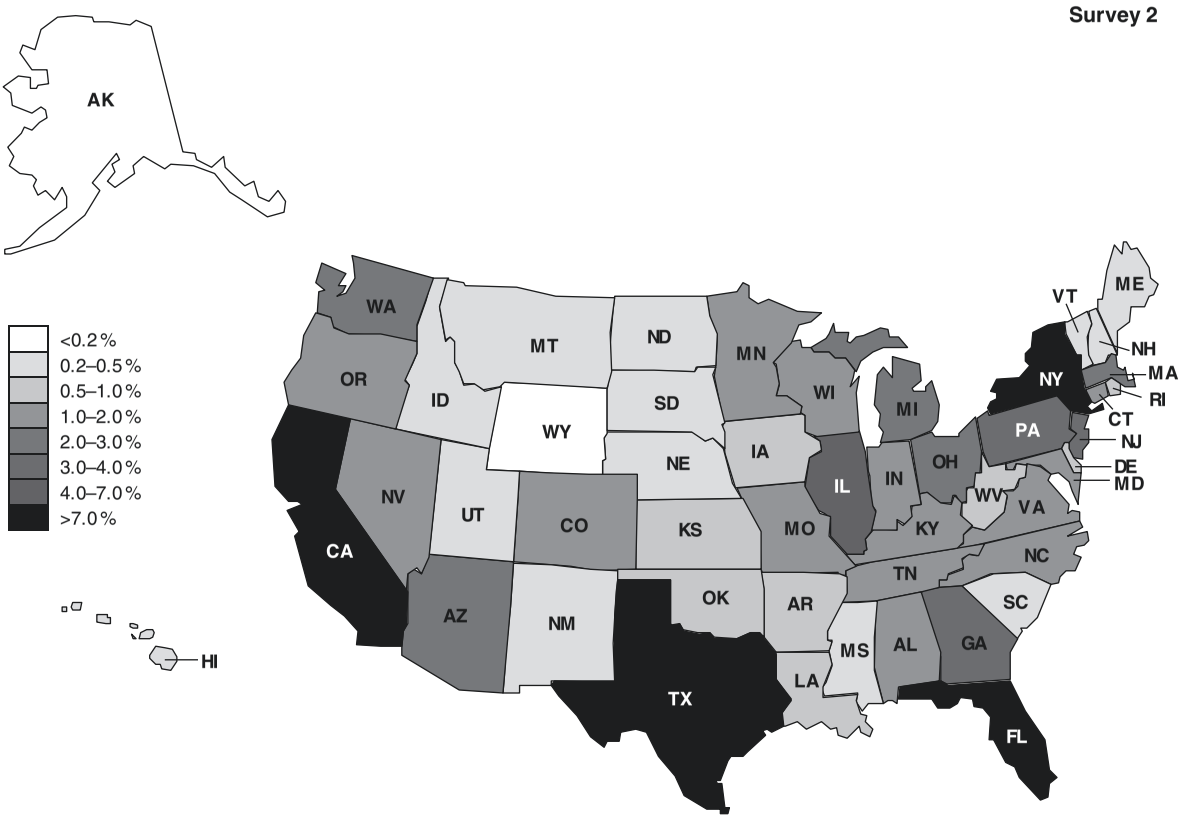

Fig. 5.4 (Continued)

gender differences for women's football, with both genders on average stating an interest level of 4.2 (Pearson chi^2(6) = 10.9900 Pr = 0.089).

Interest in leagues: On a scale of 1–7 (1 = not at all interested – 7 = extremely interested), respondents were asked to state their interest in the respective leagues/competitions. As Fig. 5.3 shows, the highest interest on average is evoked by MLS, the Premier League and the UEFA Champions League at around 4, with La Liga, Serie A, Bundesliga and Ligue 1 having relatively equal interest rates of around 3.

Supporter status: Of all the leagues under consideration, MLS has the highest share of club supporters (38 %). Almost 40 % of the survey participants reported at least one favourite club in the respective European leagues. Figure 5.4 provides a complete overview of the geographical distribution of the TOP 5 league supporters. In Survey 1 (Survey 2), the highest shares of TOP 5 league club supporters are found in the states of California (15.3 % (14.9 %)), New York (12.1 % (13 %)), Texas (7.8 % (7 %)) and Florida (7.2 % (9 %)).

Figure 5.5 shows that among the TOP 5 leagues, the Premier League has the highest share of club supporters (34–30 %) followed by La Liga (15 %). Serie A and Bundesliga (both 12 %) and Ligue 1 (7 %).

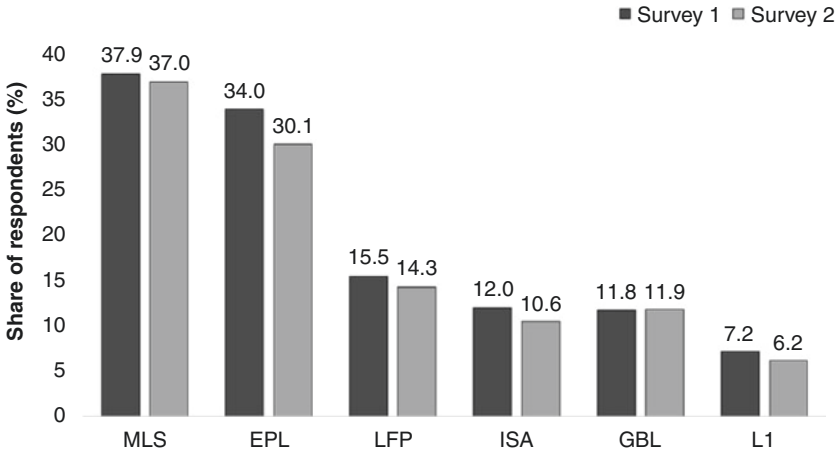

Fig. 5.5 Share of club supporters per league. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer

Figure 5.6 provides an overview of the 20 most popular football clubs among the survey participants. According to the respondents' statements 10 out of the 20 most popular clubs come from MLS, 5 out of 20 from the Premier League and 2 out 20 from La Liga and Serie A. FC Bayern München

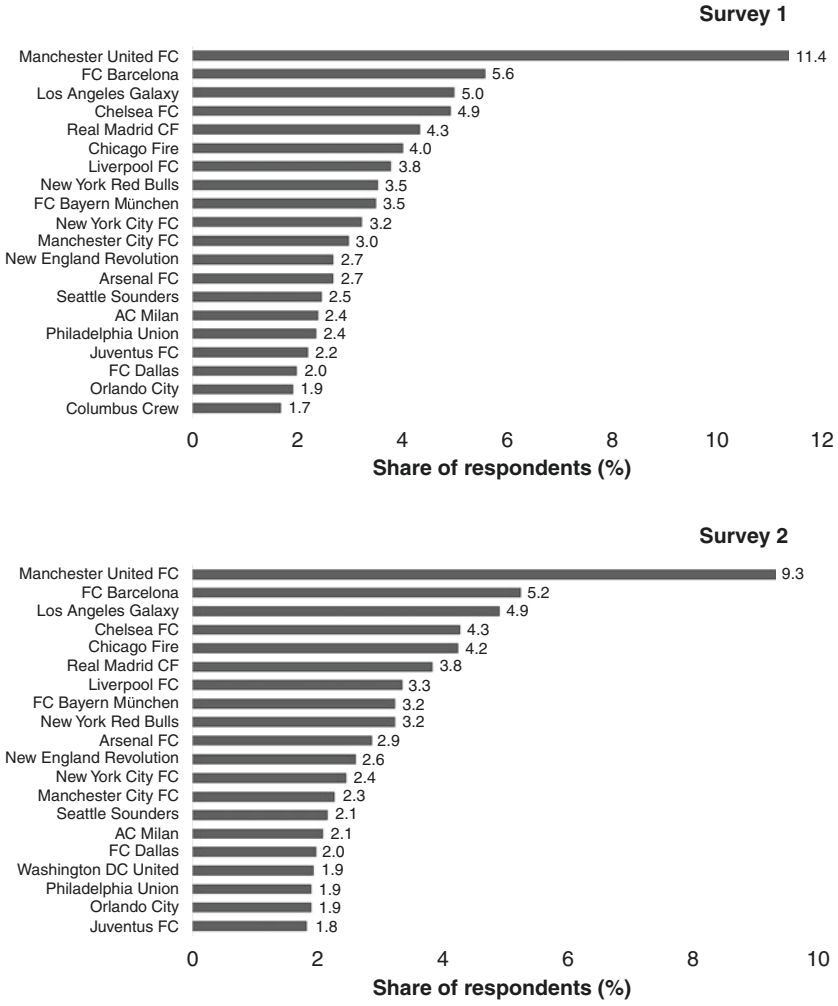

Fig. 5.6 The 20 most popular clubs among all survey participants

is the only Bundesliga club amongst the Top 20, and there is no single club from Ligue 1. Overall, the most popular club is Manchester United, followed by FC Barcelona. The club with the third most supporters among the survey participants is Los Angeles Galaxy, followed by Chelsea FC.[1]

5.1.2 Competitive Balance

Objective competitive balance (OCB): For a general idea of the recent developments of objectively measurable CB in the leagues/competitions, Fig. 5.7 provides an overview of some core CB indicators based on the last five seasons (from the 2010–2011 season to the 2014–2015 season) and for the 2014–2015 season only.

According to the *HICB*[2] which captures the *long-term* CB (*static* component),[3] MLS is the most competitive league, followed by Ligue 1. While Bundesliga, Premier League and Serie A have on average a quite similar (moderate) level of competitiveness, La Liga is considerably less balanced based on this measure.

To capture the *dynamic* component of *long-term* CB in the competitions we further examined the distribution and concentration of championships/titles between 2010 and 2015 with the HHI_{champ}.[4] The league/competition with the most balanced distribution of titles is the UEFA Champions League, followed by the Premier League. The Ligue 1, La Liga and MLS have a similar level of dynamic CB, and the most unbalanced leagues with regard to this index are the Bundesliga and Serie A.

For the *mid-term* dimension of CB, we estimated the relative percentage of games in which at least one of the teams can still win the championship based on the *UCS index*.[5] On average, and taking into account the last five football seasons (2010–2015), the highest percentage of championship relevant games is for Ligue 1, followed by the Premier League and Serie A. In contrast, the lowest share championship relevant games is for La Liga.

Finally, with regard to the *short-term* dimension of CB, we estimated the share of 'predicted-to-be-close games' based on the *Theil index*, which measures the uncertainty of a game's outcome.[6] According to this index the highest share of 'predicted-to-be-close games' can be found in MLS, followed by Ligue 1 and the Bundesliga. In contrast, the lowest share of 'predicted-to-be-close games' can be observed for the UEFA Champions League. The following results for the 2014–2015 MLS season demonstrate a significant increase in the share of 'predicted-to-be-close games' and the opposite is true for La Liga.

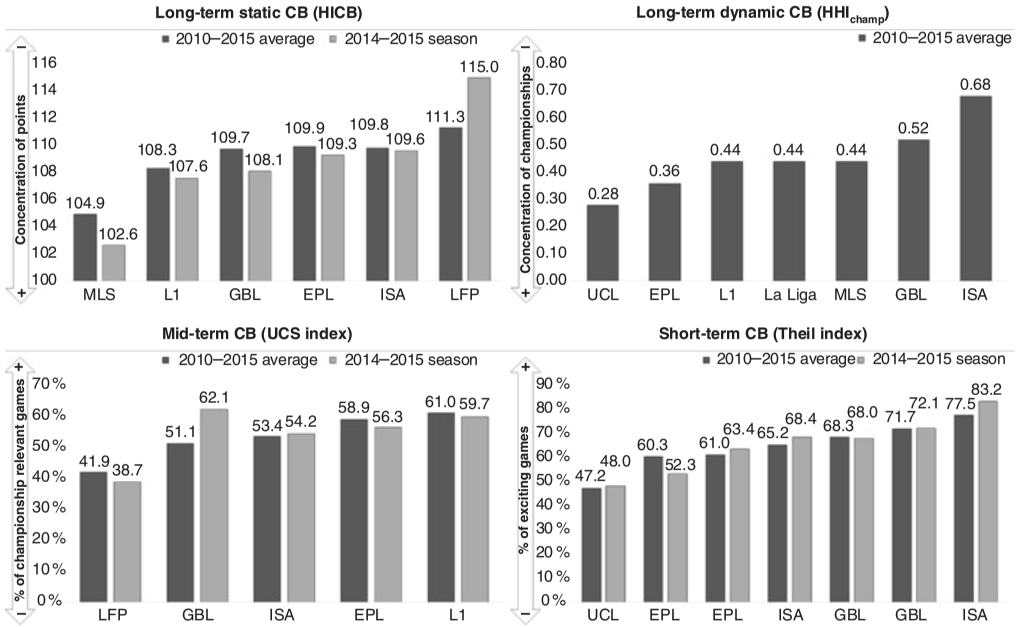

Fig. 5.7 Objective competitive balance (OCB) in the relevant leagues/competitions. *Notes*: Plus (+) indicates an improvement in CB, whereas minus (–) indicates a deterioration in CB. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *HICB* Herfindahl-Hirschman Index of competitive balance; HHI_{champ} Herfindahl-Hirschman Index of championship concentration; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League; *UCS* Championship uncertainty index

Perceived competitive balance (PCB): In contrast to the partly marked differences between the leagues/competitions with regard to OCB, differences with regard to PCB are rather small. According to the question asked in the survey, MLS is perceived as the most balanced league followed Premier League and UEFA Champions League (Fig. 5.8).[7] These perceptions of competitiveness do not differ much between the two surveys.

Objective vs. perceived competitive balance: At first glance – similar to Pawlowski (2013a, b) and Pawlowski and Budzinski (2013) – OCB and PCB measures seem to differ,[8] however, by taking into account the static and dynamic components of the long-term OCB, it becomes apparent that at least with regard to the three leagues/competitions perceived as most competitive, the MLS, Premier League and Champions League, there seems to be a convergence. The only exception is Ligue 1 (see Table 5.1 for a summary).

Perceived championship uncertainty: In Survey 2 respondents were asked how hard or easy they thought it was to predict the season's champion in the respective league/competition. As indicated by Fig. 5.9, respondents

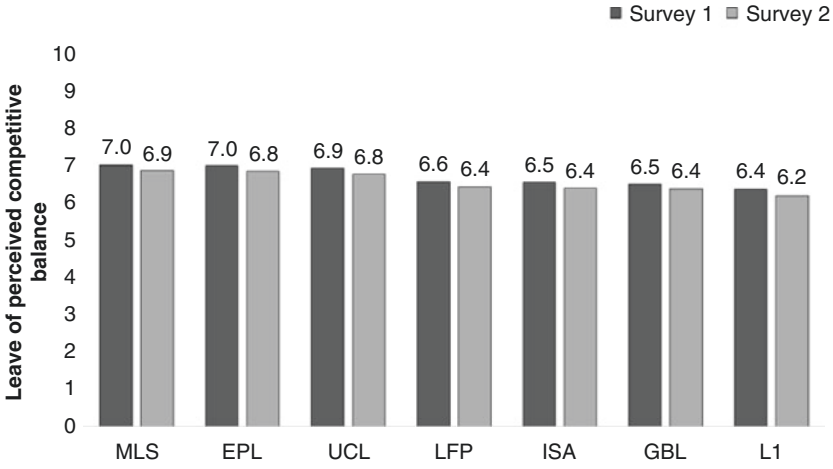

Fig. 5.8 Perceived competitive balance per league/competition (0 = extremely unbalanced – *10 = extremely balanced*). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

Table 5.1 Competitive balance rankings of the leagues/competitions

	Long-term			*Mid-term*	*Short-term*	*Overall*[2]	*PCB*
	HICB	HHI_{champ}	*Overall*[1]	*UCS*	*Theil*		
EPL	3	2	3	2	5	3	1
MLS	1	3	2	–	1	1	1
UCL	–	1	1	–	7	4	1
LFP	5	3	5	5	5	7	4
ISA	3	7	7	3	4	6	4
L1	2	3	3	1	2	2	4
GBL	3	6	6	4	3	4	4

Notes: Rankings based on Figs. 5.7 and 5.8. [1]Based on HICB and HHI_{champ} ranking; [2]Based on all CB rankings (long-, mid-, and short-term). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *HICB* Herfindahl index of competitive balance; HHI_{champ} Herfindahl–Hirschman Index of championship concentration; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *PCB* Perceived competitive balance; *UCL* UEFA Champions League; *UCS* Championship uncertainty index

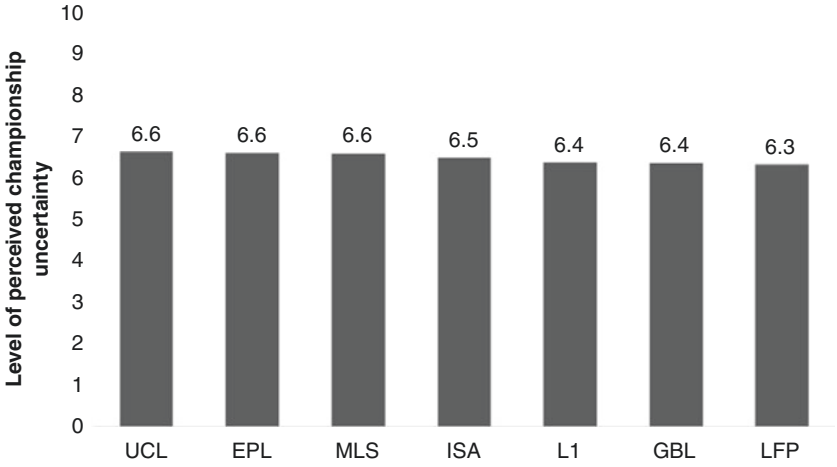

Fig. 5.9 Perceived championship (un)certainty per league/competition (0 = very easy . . . – 10 = very hard . . . to predict the season's champion). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

either did not perceive any differences between the different competitions or they found it too difficult to answer this question and therefore decided to rank all competitions similarly.[9]

5.1.3 *Perceived Quality of Play*

Figure 5.10 provides an overview of the average level of perceived quality of play in the different competitions (excluding the 'don't know' respondents).[10] Again, only minor differences are found with regard to the different competitions. The highest on average (perceived) quality of play reported is that of the Premier League with around 7.8, followed by the UEFA Champions League with around 7.6. The league with the lowest level of (perceived) quality is Ligue 1, with around 6.8. Interestingly, the leagues quality ranking corresponds to their average transfer investments (see Table 4.1) with the exception of the MLS. All in all, respondents' perceptions do not differ much between the two surveys.

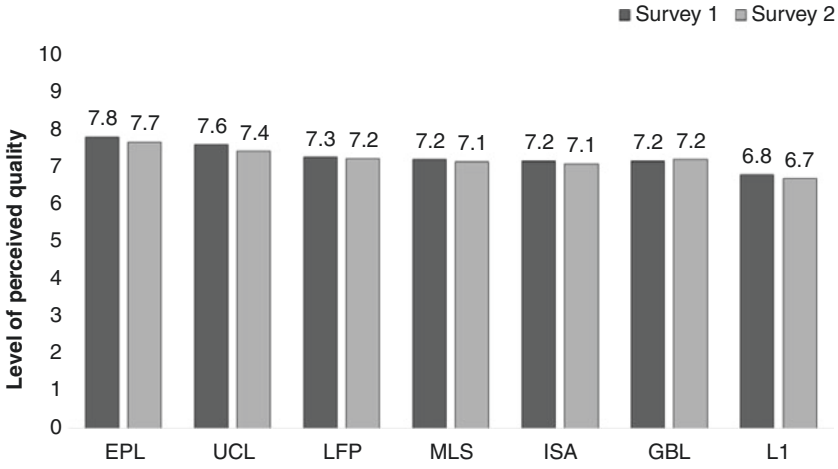

Fig. 5.10 Perceived quality per league/competition (0 = very low – 10 = very high). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

5.1.4 *League and Competition Viewership*

Preferred language format for football telecasts: A considerable number of football telecasts is broadcast simultaneously in two or even more channels in the USA. There are regular broadcasts in both English and Spanish-language format. Figure 5.11 provides the respondents' preferred language format when watching football games. Even though currently more than two-thirds of football programming is offered in Spanish, only 2 % of respondents prefer a football broadcast in Spanish and another 1 % prefer a format in any other language than English or Spanish. Interestingly, even within the Hispanophone sub-sample, the vast majority of viewers prefer to watch games in English (about 80 %).

Accessibility of the leagues/competitions: The ranking of leagues/competitions with regard to their accessibility is the same for both the total population (see Tables 2.1 and 2.2) and our sample (Fig. 5.12). Overall, around 60 % of the respondents indicated that their TV programming includes live MLS football games. The second most accessible league is the Premier League with around 50 %, and the least accessible league is the Ligue 1 (around 16 %). Notably, the increase in accessibility of the Bundesliga between Surveys 1 and 2 is quite small given the considerable reach of FOX Networks compared to GOL TV. This might be attributed to the fact that the current holder of the Bundesliga broadcasting rights (FOX Networks) started promoting its coverage of the league's games just two weeks before the launch of the 2015–2016 season (FOX Sports Press Pass 2015). Possibly several survey respondents were not aware when

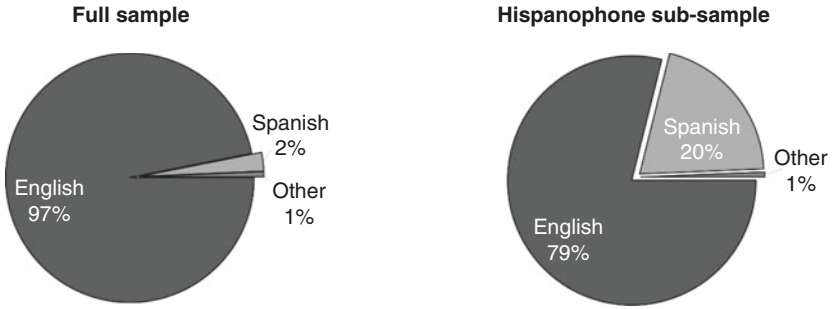

Fig. 5.11 Preferred language format for football telecasts

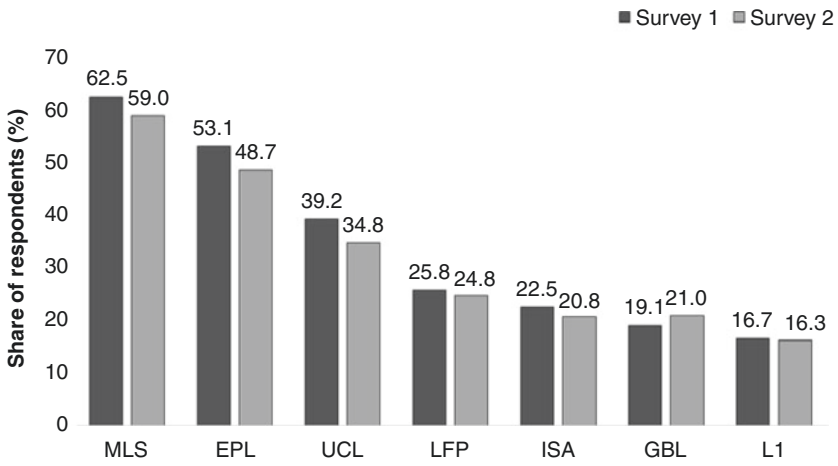

Fig. 5.12 Accessibility of the leagues/competitions. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LEP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

answering the survey of having access in the 2015–2016 season to watch football games of the Bundesliga on FOX Networks.

Stated viewership: Figure 5.13 shows how many games the respondents reported watching (live or tape-delayed) on a typical matchday/week. The highest share of viewers reported in Survey 1 (Survey 2) is for the MLS, with about 67 % (63 %) of the sample reporting that they watch on average at least one game per matchday/week. The second highest share of viewers is reported for Premier League games, with about 58 % (53 %), followed by the UEFA Champions League with almost 46 % (43 %). The least viewed league is Ligue 1 with around 29 % (28 %) of the respondents reporting that they watch at least one game per matchday/week.

Note that viewing rates differ between the two surveys. This may be attributed to the fact that Survey 1 took place at the end of the season (2014–2015), whereas Survey 2 took place on the first matchdays of the next season (2015–2016).

As already indicated, the secondary data (e.g. TV ratings) reported frequently in the literature as a demand measure does not provide a full

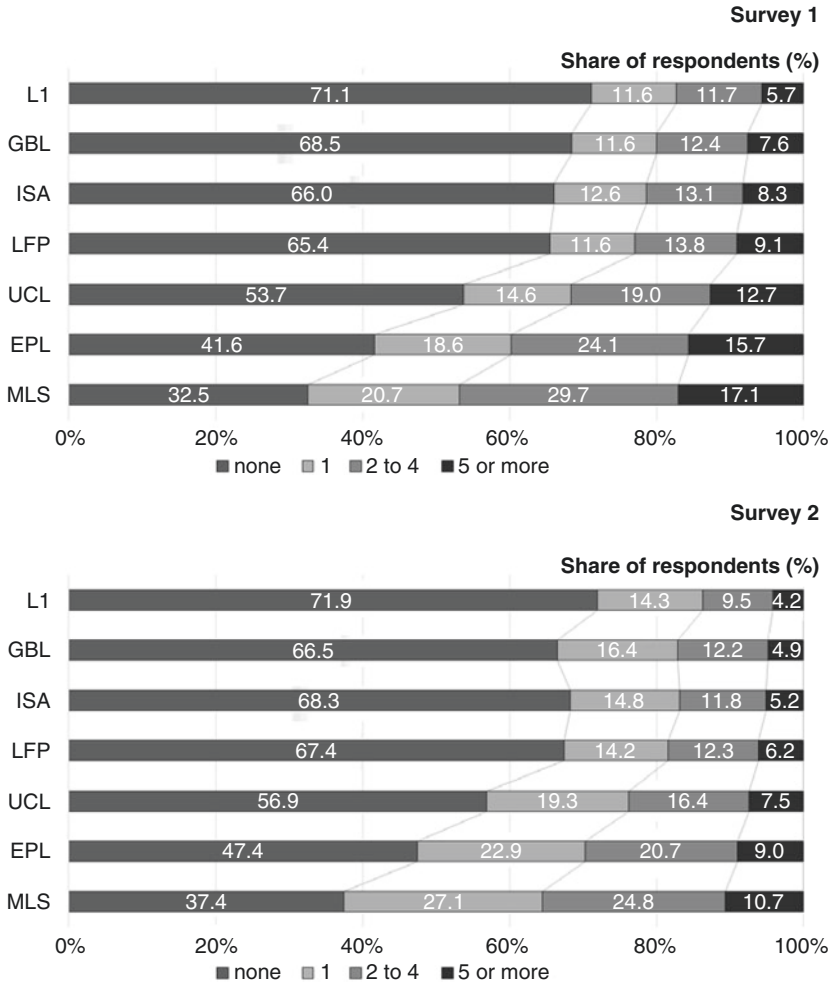

Fig. 5.13 Viewership per league/competition on a typical matchday/week. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

overview of the market, as it inevitably overlooks (amongst other things) audiences in environments outside the household (i.e. bars and other public places), where sports events are frequently viewed (often by large numbers of individuals). To somewhat quantify the magnitude of bias that this drawback introduces, those respondents who reported that they watch (live or tape-delayed) one or more games on a typical matchday/week, were asked to give the proportion of games they watch in a public place (e.g. bar). As shown in Fig. 5.14 about 60–70 % of the US viewers of European and MLS football games reported watching at least some (every week/matchday) outside their household. Note that the share of 'public viewers' does not considerably vary in both surveys, suggesting that the 'public' viewing activity may not depend on whether a league/competition season is almost concluded (Survey 1) or in its first matchdays (Survey 2). Another interesting element is that the leagues/competitions with the highest share of 'public viewers' are those with the lowest reported accessibility (see Fig. 5.12).

Factors associated with viewership: The previous sections have provided some general information about the viewership of the different leagues/competitions under consideration. This section analyses the association between different factors and consumer choices for viewing league/competition telecasts. The dependent variable of our models is discrete and ordered, taking the value of 0 = *none*, 1 = *1 game*, 2 = *2 to 4 games* and 3 = *5 or more games* and denotes consumption behaviour with regard to the relevant league/competition on a typical matchday/week.

Bearing in mind that several previous empirical findings have suggested the presence of substitution effects on the viewership of sporting events, it may be that the consumer decisions about their viewership frequency for each respective league/competition are closely related.[11] The estimation of simple ordered probit models would have been inefficient, and therefore multivariate ordered probit (MVOP) models are estimated. MVOP models are a generalisation of the ordered probit models, applied when it is assumed that the decisions of an individual are dependent from each other. They have a structure similar to that of a seemingly unrelated regression with the exception that the dependent variable used is discrete and ordered. The advantage of MVOP models is that they fully exploit the correlation structure (Lesaffre and Molenberghs 1991) and allow a flexible structure for the unobservable variables (Roodman 2011). With few exceptions (e.g. Burk et al. 2016)

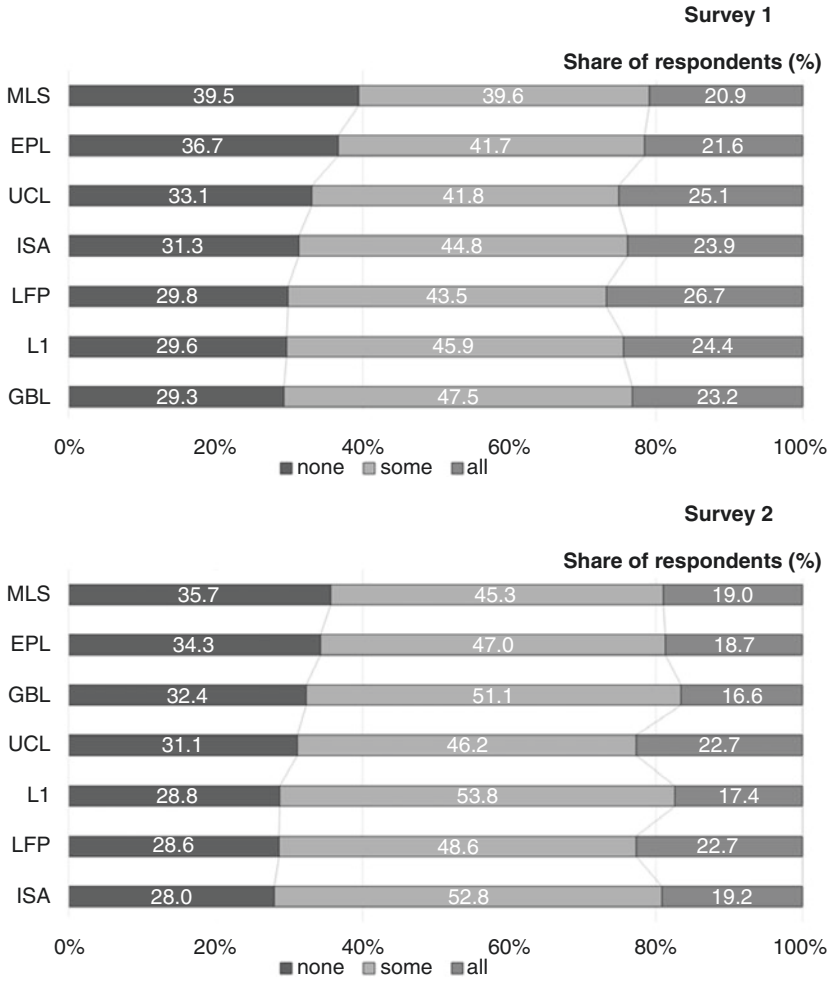

Fig. 5.14 Public viewership per league/competition on a typical matchday/week. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

MVOP models have not found a wide use in the sports-related literature, which is predominately ascribed to the fact that the computation of the multivariate normal integrals and their derivatives has proven to be very challenging so far (Greene 2012). Our models are estimated with the STATA command CMP (Roodman 2011).

Concerning the econometric specification and following Wooldridge (2010) the latent variable $VIEW_k^*$ (k = MLS, Premier League, UEFA Champions League, La Liga, Bundesliga and Ligue 1) depends upon a vector of characteristics x with β denoting the marginal influences and ε capturing unobserved and unobservable influences. It is assumed that these errors are multivariate normal distributed across all leagues/competitions. The thresholds or cut-off points, which reflect the predicted cumulative probabilities at covariate values of zero, are denoted by μ_1, μ_2 and μ_3. Accordingly, the empirical model for the viewership frequency of telecasts can be expressed as follows:

$$VIEW_k = \begin{cases} 0 \text{ if } VIEW_k^* \leq \mu_1 \\ 1 \text{ if } VIEW_k^* \leq \mu_2 \\ 2 \text{ if } VIEW_k^* \leq \mu_3 \\ 3 \text{ if } VIEW_k^* \leq \mu_3 \end{cases} \tag{5.1}$$

with

$$VIEW_k^* = x\beta_k + \varepsilon_k \tag{5.2}$$

The estimated model controls for accessibility of the leagues/competitions, interest in the leagues/competitions, PCB, perceived quality, supporter status, socio-demographic characteristics and perceived friendliness of the respective league's country towards the USA. Time zone dummies are included, as well as a dummy indicating whether the respondent's given residence is within a 50-mile radius of a city hosting an MLS team.[12] Due to the existence of 'don't know responses' in the statements with regard to PCB and perceived quality,[13] we report models based on both a reduced (i.e. including perceptions) and a full sample (i.e. excluding perceptions), with the latter models being superior in terms of goodness of fit as shown by the Wald chi^2 statistics. The estimated variance inflation factors (VIFs) of all models suggest that there is no linear dependence on other predictors. Moreover, we implemented heteroskedasticity-consistent standard errors (robust errors) as developed by White (1980). We focus on Survey 1 since the fact that it took place at the end of the

season 2014–2015 provides a more comprehensive overview of consumer viewing behaviour. Survey 2 responses at the beginning of season 2015–2016 are arguably temporary since several findings suggest that demand for sports telecasts varies as the season evolves. Nevertheless, for completeness, the Survey 2 estimates are also provided in the Appendix.[14] It is important to note that this simple model is only able to reveal correlations for Factors i–iv. The results are summarised in the following, providing information about the overall direction (sign) of the statistical association as well as its statistical significance.

i. A greater **interest** in the specific league/competition is associated with a greater probability of being a frequent viewer of this league/competition with the relationship being statistically significant across all leagues/competitions.
ii. Being a **supporter** of a club is associated with a higher probability of watching games in the respective league/competition, with the relationship being statistically significant across all leagues/competitions. Remarkably, 'between competition' effects are observable in this regard. For instance, being a supporter of a TOP 5 league club is positively associated with a higher probability of frequently watching games in the UEFA Champions League, and there is no significant relationship with MLS viewership.
iii. An increase in **PCB**, and in **perceived quality** of play is associated with a greater probability of being a frequent viewer, with the relationship being statistically significant across all leagues/competitions. With regard to **perceived championship uncertainty**, estimates reveal a U-shape relationship, the probability of being a frequent viewer increases when respondents are either certain or uncertain about which club will be current season's champion. This relationship, however, is not statistically significant for La Liga, Serie A and Ligue 1.
iv. Concerning **accessibility**, respondents who report that their TV programming includes telecasts of the respective leagues/competitions have a greater probability of being a frequent viewer, with the relationship being statistically significant across all leagues.
v. **European background** is not statistically associated with regular viewership. **Hispanophone** respondents are more likely to be

regular viewers with the impact being statistically significant across all leagues/competitions. **Non-whites** are more likely to be a regular viewer of the leagues/competitions with the impact being statistically significant for Ligue 1 and UEFA Champions League games.

vi. Relatively **highly educated** respondents have a lower likelihood of being regular viewers of a football league, with the effect being non-significant just for the UEFA Champions League.
vii. **Unemployment** is negatively associated with the likelihood of regular football viewership (but) with the effect being weak statistically significant only for MLS and Bundesliga.
viii. With regard to **income**, affluent respondents are more likely to be regular viewers of the relevant league/competition telecasts with the impact being statistically significant across all leagues/competitions.
ix. The probability of being a regular viewer declines with increasing **age**, with the impact being statistically significant across all leagues/competitions.
x. **Males** have a higher probability of being frequent viewers of football games, with the impact being statistically significant across all leagues/competitions.
xi. **Married** respondents are more likely to be regular viewers, with the impact being weak statistically significant for MLS, Premier League, Serie A and Ligue 1.
xii. **Household size** is positively associated with the probability of being a frequent viewer of football games with the impact being statistically significant for MLS, Premier League, UEFA Champions League and Bundesliga games.
xiii. Evidence partially suggests a positive correlation between a country's (that are 'exporting' football broadcasts) **perceived friendliness** towards the USA and viewership with the impact being weak statistically significant for La Liga and Ligue 1 games.
xiv. **Time zone** is generally not statistically associated with league/competition viewership, but partial evidence suggests that respondents whose residence is in the Mountain Time region are less likely to be regular viewers of MLS and Bundesliga games compared to those living in the Eastern Time region, although the association is only weakly significant.

xv. Respondents whose stated residence is within a **50-mile radius** of an MLS city have a greater likelihood of being regular viewers, with the impact being statistically significant across all leagues/competitions.

5.1.5 Willingness to Pay

Before examining the analysis of our WTP scenario, it is pertinent to get an overview of the sample's average monthly spending (before taxes and fees) on pay-tv, as reported in Fig. 5.15. Excluding implausible statements,[15] the survey respondents on average spend about $94 on their current TV programming. The reported expenses in our sample are similar to the average cost of pay-tv service ($99.10) as reported by a recent survey of the Leichtman Research Group (research firm) (2015).[16] About 40 % of the respondents reported having an additional sports package subscription, with an average monthly cost for sports packages at about one-third of their overall TV programming costs (between $36 and $33).

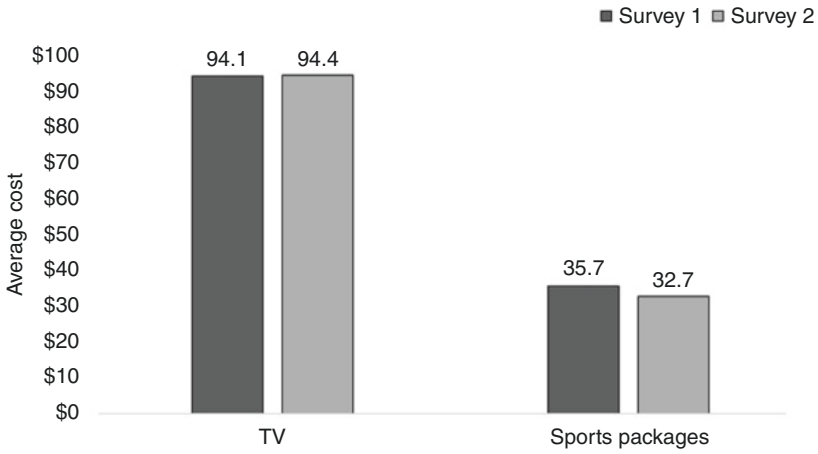

Fig. 5.15 Monthly cost of TV programming and additional sports packages. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

In our WTP scenario, survey participants were asked to state how much they would be willing to pay at most for a league/competition package per month (before taxes and fees) in addition to their current TV programming expenditures. The package was defined as providing season-long access to all games of the corresponding leagues/competitions via TV, computer, tablet, phone or any other favourite connected device.

Figure 5.16 provides the reported average WTP, excluding zero values.[17] The highest average WTP is reported for the La Liga and the UEFA Champions League, at around $22. On the other hand, the lowest average WTP is reported for the Bundesliga, Serie A and MLS, at around $19. These values are well in the range of real market prices. For instance, FOX Soccer Plus as a premium network for football telecasts which can be ordered separately costs $14.99 per month, and its online streaming counterpart FOX Soccer 2GO costs $19.99 per month. Access to live out-of-market MLS games via satellite/cable (MLS Direct Kick) and via online streaming (MLS Live) together costs about $14.2 per month.[18]

Factors associated with willingness to pay: The previous section provided an overview of respondent WTP statements. This section analyses the association between different factors and consumer WTP with a censored regression model that is a tobit model (Tobin 1958).[19] The rationale of

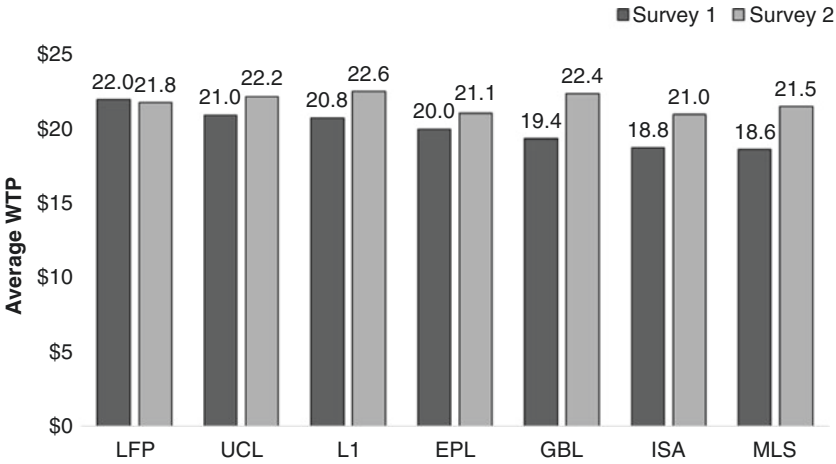

Fig. 5.16 Willingness to pay for a league/competition add-on subscription excluding zero values.

choosing tobit models instead of ordinary least squares (OLS) models lies in the fact that the dependent WTP variable is censored at $0. In such cases, OLS models yield a downward-biased estimate of the slope coefficient and an upward-biased estimate of the intercept (Wooldridge 2010). Another alternative would have been the estimation of Heckman models (Heckman 1976). These models, however, consider zero WTP as unobserved. We assume that zero statements in our sample are an expression of choice, as such Tobit models are favoured in our case. In general, Tobit models imply nonnegative predicted values for the dependent variable and have sensible partial effects over a wide range of the explanatory variables (Wooldridge 2010). Another advantage is that the maximum likelihood estimation implemented in the Tobit models is strongly consistent (Amemiya 1973).

Following Wooldridge (2010), the continuous latent variable WTP_k^* (k = MLS, Premier League, UEFA Champions League, La Liga, Bundesliga and Ligue 1) depends upon a vector of explanatory variables x, with β being a vector of coefficients to be estimated, and ε a vector of normally distributed error terms with variance σ^2.

$$WTP_k^* = x\beta_k + \varepsilon_k \tag{5.3}$$

Denoting the observed dependent variable as WTP_k, then

$$WTP_k = \begin{cases} WTP_k^* \text{ if } WTP_k^* > 0 \\ 0 \quad \text{if } WTP_k^* \leq 0 \end{cases} \tag{5.4}$$

with left-censoring (the lower limit) being zero WTP statements. Similar to the viewership model, the estimated model controls for the accessibility of the leagues/competitions, interest in the leagues, PCB, perceived quality, supporter status, socio-demographic characteristics and perceived friendliness of the respective league's country towards the USA. Time zone dummies were included, and a dummy indicating whether the respondent's stated residence is within a 50-mile radius of a city hosting an MLS team.[20] We report models based on both a reduced (i.e. including perceptions)[21] and a full sample (i.e. excluding perceptions), with the latter models being superior in terms of goodness of fit, as denoted by the pseudo R^2 coefficients. Since Tobit models rely heavily on homoskedasticity in the underlying latent variable, we use robust (heteroskedasticity-consistent) standard errors. Moreover, the

estimated VIFs of all models reject the possibility of linear dependency between the predictors. It is important to note that this simple model is only able to reveal correlations for Factors i–iv. The results are summarised in the following, providing information about the overall direction (sign) of the statistical association as well as its statistical significance.

i. A greater **interest** in the specific league/competition is associated with a greater WTP for this league, with the relationship being statistically significant across all leagues/competitions.
ii. Being a **supporter** of a club is associated with a higher WTP, with the relationship being statistically significant across all leagues/competitions. Interestingly, 'between competition' effects suggest that being supporter of a TOP 5 league club is positively associated with higher WTP also for MLS telecasts.
iii. An increase in **PCB**, and in the **perceived quality** of play is associated with an increase in WTP, with the relationship being statistically significant across all leagues/competitions. Past season PCB is also positively related with WTP, with the relationship being statistically significant for MLS, Premier League and Bundesliga. Concerning **perceived championship uncertainty**, there is a linear positive relationship, with the impact being weakly significant across all leagues with the exception of the UEFA Champions League and Ligue 1.
iv. With regard to **accessibility**, respondents who state that their TV programming includes telecasts of the respective leagues/competitions have a significantly higher WTP across all leagues.
v. Having a **European background** or being **Hispanophone** is not statistically associated with WTP. **Non-whites** have a significantly higher WTP across all leagues/competitions.
vi. Relatively **highly-educated** respondents have a (weakly) significantly higher WTP across all leagues/competitions.
vii. **Unemployment** has a negative effect on the WTP for a particular league, with the impact being weakly significant across all leagues/competitions.
viii. **Income** is positively associated with WTP, with the impact being statistically significant across all leagues/competitions.
ix. WTP declines with increasing **age**, with the impact being statistically significant across all leagues/competitions.
x. **Males** have a higher WTP, with the impact being weakly significant across all leagues/competitions except for MLS and La Liga.

Table 5.2 Summary of factors associated with league-level demand

	Viewership	*WTP*
Interest		
League interest	↑	↑
Supporter status		
Supporter of a club	↑	↑
Perceived competitive balance		
Perceived competitive balance	↑	↑
Perceived championship uncertainty	↔	↑
Perceived quality of play		
Perceived quality	↑	↑
Accessibility of the leagues		
TV programming includes the league	↑	↑
Socio-demographic characteristics		
European background	↔	↔
Hispanophone	↑	↔
White	↓	↓
Education	↓	↑
Unemployed	↓	↓
Income	↑	↑
Age	↓	↓
Male	↑	↑
Married	↑	↔
Household size	↑	↑
Perceived friendliness towards the USA		
Friendly	↑	↑
Time zone		
Time zone	↔	↔
Distance from MLS stadium		
Radius of 50 miles	↑	↑

Notes: ↑ = rather positive impact; ↓ = rather negative impact; ↔ = rather inclusive or non-statistically significant impact

xi. Marital status (being **married**) does not have any statistically significant effect on the WTP for any of the leagues or competitions under consideration.

xii. An increase in **household size** is positively associated with a higher WTP, with the impact being statistically significant across all leagues/competitions.
xiii. Evidence partially suggests a positive correlation between the **perceived friendliness** of a country (that is, 'exporting' football broadcasts) towards the USA and WTP, with the impact being weakly significant for Serie A and Ligue 1.
xiv. **Time zone** is generally not statistically associated with WTP for a TV league/competition package.
xv. Respondents whose stated residence is within a **50-mile radius** of an MLS city have a significant higher WTP across all leagues/competitions.

In a nutshell: Table 5.2 summarises the league-level econometric findings of viewership and WTP. The main differences between them are in the impact of perceived championship uncertainty, Hispanophone background, educational attainment and marital status.

5.2 Game-Level Demand

Where the previous section provided an overview of the factors associated with league-level demand, this section focuses on game-level demand. It starts with an overview of the reported game uncertainty (Section 5.2.1). It then provides an overview of the factors associated with reported ITC (Section 5.2.2) and WTP statements (Section 5.2.3), with a special focus on the relevance of game uncertainty.

5.2.1 Game Uncertainty

Similarly to previous studies, our uncertainty measure is based on the 'home' team's winning probability. Instead of using betting odds data from bookmakers to derive 'home' win probabilities, our measure relies on subjective evaluations. The survey respondents were asked to answer on an 11-point scale from 0 to 10 (0 = Team A will definitely win – 10 = Team B will definitely win) which team they thought was more likely to win in the upcoming game.

Table 5.3 reports the subjective (i.e. perceived) 'home' win probabilities per game.[22] The highest perceived 'home' win probability was reported for the CONCACAF Gold Cup group stage games of the

Table 5.3 Overview of respondent evaluations per game

	Competition (country)	*Contestants*[1]		*Average…*			
		'Home' team	*'Away' team*	*Subj. hwin (%)*[2]	*Obj. hwin (%)*[2]	*Live (%)*[3]	*WTP ticket*[3]
Survey 1	Coppa Italia (ITA)	SS Lazio	Juventus FC	45.1	28.1	13.7	$36.9
	FA Cup Final (ENG)	Arsenal FC	Aston Villa FC	53.4	62.6	21.9	$42.8
	DFB Cup Final (GER)	BvB Dortmund	VfL Wolfsburg	48.9	44.9	13.4	$40.3
	Coupe de France Final (FRA)	AJ Auxerre	Paris St.-Germain FC	43.6	5.7	11.5	$38.5
	Copa del Rey Final (ESP)	Athletic Club de Bilbao	FC Barcelona	36.7	6.7	19.3	$43.8
	Friendly (men)	Netherlands	USA	41.0	62.6	29.6	$44.0
	UEFA Champions League Final	Juventus FC	FC Barcelona	37.9	16.6	22.1	$50.0
	Friendly (men)	Germany	USA	45.6	64.5	32.3	$45.1
	CONCACAF Gold Cup 2015	USA	Honduras	60.0	66.9	29.1	–
	CONCACAF Gold Cup 2015	USA	Haiti	63.1	85.2	27.5	–
	CONCACAF Gold Cup 2015	USA	Panama	60.2	64.9	29.4	–
Survey 2	Ligue 1 (FRA)	Paris St.-Germain FC	FC Girondins de Bordeaux	52.2	75.7	9.3	$34.5
	MLS (USA)	New York Red Bulls	Chicago Fire	48.0	60.1	19.6	$34.7
	Premier League (ENG)	Everton FC	Chelsea FC	40.0	25.3	18.7	$37.4
	Bundesliga (GER)	FC Bayern Munich	FC Augsburg	54.6	84.7	13.2	$35.9
	Premier League (ENG)	Manchester United	Liverpool FC	55.2	48.1	25.5	$41.3
	La Liga (ESP)	Atletico Madrid	FC Barcelona	40.6	28.1	15.1	$38.3
	MLS (USA)	Los Angeles Galaxy	Montreal Impact	53.2	64.0	16.2	$35.3
	Serie A (ITA)	Internationale Milano	AC Milan	43.8	43.6	11.9	$36.9

Notes: [1]The choice of 'home' and 'away' teams in football cup finals is a formality; [2]Objective 'home' win probabilities estimated from betting odds (betbase.info), subjective 'home' win probabilities are estimated from survey responses; [3]Live viewership shares are shown (see Fig. 5.18), and WTP figures to attend a game based on survey responses, excluding zero WTP statements (see Fig. 5.20). *Abbreviations*: *CONCACAF* Confederation of North; Central American and Caribbean Association Football; *DFB* German Football Association; *ENG* England; *ESP* Spain; *FA* The Football Association; *FRA* France; *GER* Germany; *ITA* Italy; *MLS* Major League Soccer; *UEFA* Union of European Football Association; *USA* United States of America

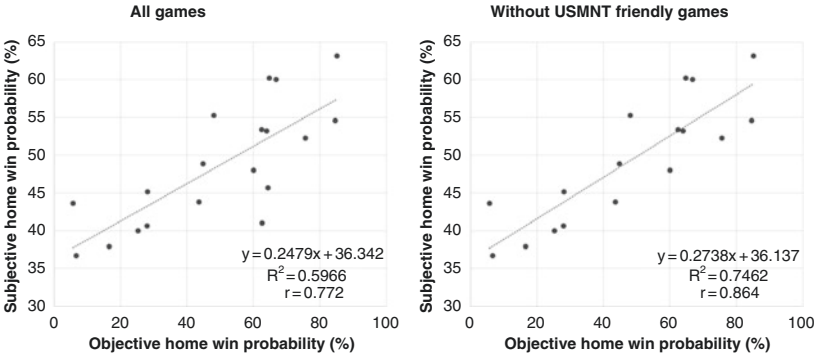

Fig. 5.17 Objective versus subjective home win probability. *Notes*: The choice of 'home' and 'away' teams in football cup finals is a formality. Objective 'home' win probabilities estimated from betting odds (betbase.info), subjective 'home' win probabilities are estimated from survey responses. R^2 = trend line's goodness of fit; r = Pearson correlation coefficient

USMNT (between 60 % and 63 %), followed by Manchester United (55 %) in the Premier League game against Liverpool The 'home' teams (perceived as) least likely to win were Juventus FC (38 %) and Athletic Club de Bilbao (37 %), against FC Barcelona in the UEFA Champions League and the Copa del Rey Final, respectively.

Figure 5.17 is a scatter plot of the 'home' win probabilities as be derived from betting odds and the respondents subjective evaluations. The Pearson correlation coefficient between subjective and objective 'home' win probabilities is almost $r = 0.772$ and the goodness of fit of the trend line between the two is $R^2 = 0.597$. By excluding the two friendly games of the USMNT, the Pearson correlation coefficient improves to almost $r = 0.864$ and the goodness of fit of the trend line between the two is about $R^2 = 0.764$. According to this, the respondent evaluations of win probabilities seem to match up quite well with the predictions that can be derived from betting odds.

5.2.2 Intention to Consume

We focus in the following on European football finals, USMNT games and a selection of European and MLS league games. We start by evaluating the consistency of the different ITC statements. After this

regression, results for the association between various factors and ITC are presented.

European football finals and USMNT games: In Survey 1, US respondents were asked to state, in the weeks prior to games, their viewing intention for the TOP 5 league cup finals, including the UEFA Champions League Final, two friendlies of the USMNT and its group stage games in the CONCACAF Gold Cup. Our ITC elicitation took into consideration all available viewing alternatives: those who did not intend to watch the game (s) at all, those who intended to watch only their highlights, those who intended to watch the games on tape-delay and finally those who intended to watch the games live.[23]

Figure 5.18 provides the reported ITC per game. The highest intended live (tape-delayed) viewing was reported for the friendly games the USMNT friendly against Germany with 32.3 % (13.1 %), and against the Netherlands with 29.6 % (12.4 %), followed by the CONCACAF Gold Cup group stage games against Panama with 29.4 % (13.8 %), Honduras with 29.1 % (13.1 %) and Haiti with 27.5 % (13.7 %). Among the European football finals, those that most respondents intended to view were the UEFA Champions League Final with 22.1 % (9.2 %) and the Final FA Cup Final with 21.9 % (11.9 %), followed by the Copa del Rey Final with about 19 % (8.5 %). About 13.7 % (8.9 %) and 13.4 % (8.8 %) of respondents intended to view the Coppa di Italia Final and the DFB Cup Final, and the European football final that fewest respondents intended to view were the Coupe de France Final, with about 11.5 % (8.2 %).[24] Note that amongst all finals, the channels/networks which aired the last three in the ITC rankings finals (i.e. Coppa di Italia, DFB Cup and Coupe de France) had the lowest accessibility.

European and MLS league games: Similar to Survey 1, US respondents were asked in Survey 2 to report, in the weeks prior to matchdays, league game ITCs (not at all, highlights, tape-delay and live viewing).

Figure 5.18 provides the reported ITC per game. The highest intended live (tape-delayed) viewing was reported for the Premier League game between Manchester United FC and Liverpool FC with 25.5 % (9.9 %), followed by the MLS of New York Red Bulls against Chicago Fire with 19.6 % (10 %). The two league games that respondents least intended to view were the Derby di Milano (Internazionale Milano vs. AC Milan) and the Ligue 1 game of Paris St-Germain against FC Girondins de Bordeaux with 11.9 % (7.9 %) and 9.3 % (7.2 %).

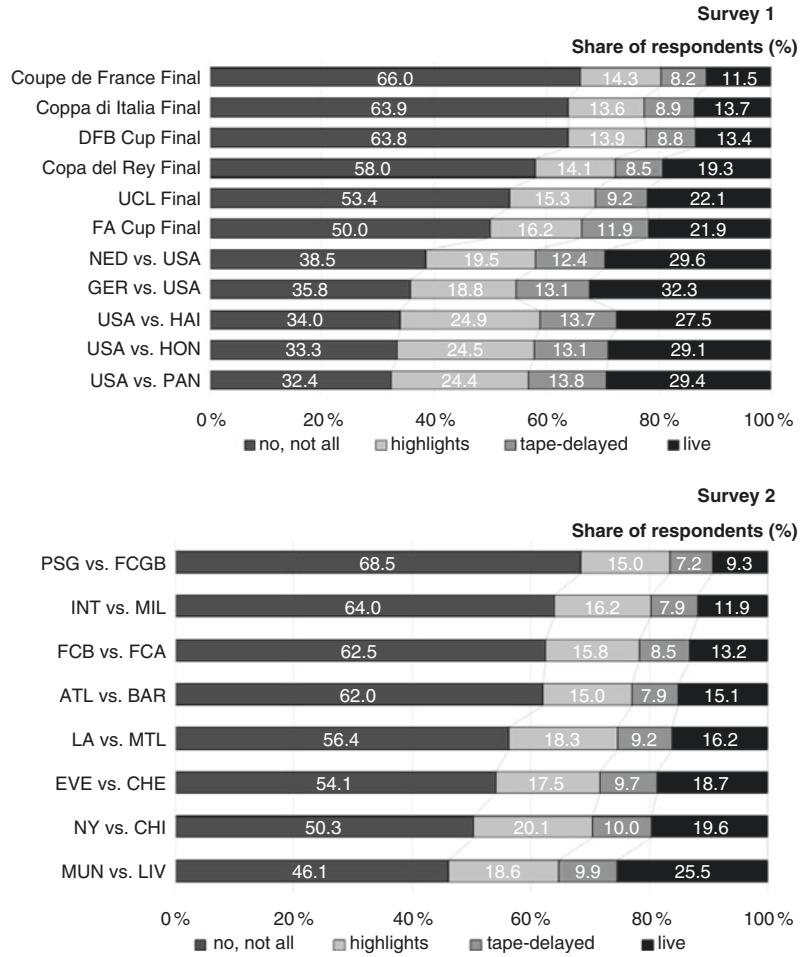

Fig. 5.18 Viewing rates (intention-to-consume) per game. *Abbreviations*: *ATL* Club Atlético de Madrid; *BAR* FC Barcelona; *CHE* Chelsea FC; *CHI* Chicago Fire; *DFB* German Football Association; *EVE* Everton FC; *FA* The Football Association; *FCA* FC Augsburg; *FCB* FC Bayern Munich; *FCGB* FC Girondins de Bordeaux; *GER* Germany; *HAI* Haiti; *HON* Honduras; *INT* Internazionale Milano; *LA* Los Angeles Galaxy; *LIV* Liverpool FC; *MIL* AC Milan; *MTL* Montreal Impact; *MUN* Manchester United FC; *NED* Netherlands; *NY* New York Red Bulls; *PAN* Panama; *PSG* Paris St.-Germain FC; *UCL* UEFA Champions League; *USA* United States of America

All in all, it becomes apparent that games involving the USMNT, MLS and Premier League clubs have higher shares of ITC than other games. Interestingly, the country ranking with regard to ITC ratings is fairly similar for both cup finals and league games (see Fig. 5.18).

Consistency checks: Compared to viewers of other TV genres, sports fans are more likely to be content-oriented and to engage in pre-game planning and information searching (Gantz et al. 2006). Asking respondents a few days prior to the relevant sporting events about their viewing intentions (not at all, live, on tape-delay or only highlights) may thus disclose accurate representations of their viewing behaviour.

To determine this, respondents in Survey 2 were asked to state whether they had (actually) watched the games expected. Figure 5.19 provides an overview of the 'intended viewing' and 'actual viewing' statements of those respondents who participated in both surveys. While about 63 % of the 'intended viewing' and 'actual viewing' statements are consistent for cup finals, the figure decreases to about 47 % for USMNT games. This difference might be attributed to the timing of the ITC elicitation. The European football finals took place just a few days prior to Survey 1, and the USMNT's games, and in particular the CONCACAF Gold Cup group

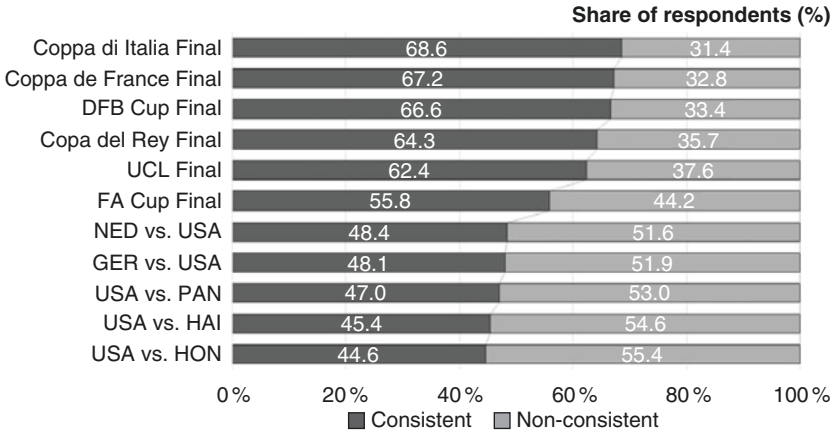

Fig. 5.19 The consistency of 'intended viewing' and 'actual viewing' statements. *Abbreviations*: *DFB* German Football Association; *FA* The Football Association; *GER* Germany; *HAI* Haiti; *HON* Honduras; *NED* Netherlands; *PAN* Panama; *UCL* UEFA Champions League; *USA* United States of America

stage games, took place several weeks later. The timing of the ITC elicitation, therefore, seems to be important, since the sooner the game the more reliable the statements of respondents with regard to ITC.

Factors associated with ITC: While the previous section provided some general information on ITC of different games, this section analyses factors associated with ITC for European cup finals and league games separately. The dependent variable of our models (ITC) measures specific game consumption behaviour with four possible outcomes, 0 = *not at all*, 1 = *live*, 2 = *tape-delayed* and 3 = o*nly highlights*. Since the survey respondents have more than two unordered alternatives to choose from, we rely on the implementation of a generalisation of logit models, i.e. pooled multinomial logit (MNL) models. An alternative estimation strategy would have been the implementation of separate logit models. In this regard, the advantage of MNL is its simultaneous fitting, whereas separate logit models are less efficient and tend to yield larger standard errors (Agresti 2012). A further possibility would have been the use of multinomial probit (MNP) models. In contrast to MNP, however, MNL has the advantage of not requiring numerical integration and in most cases, they converge to a global optimum (Greene 2012). Additionally, in many situations (even assumptions are not met) MNL is proven more accurate than MNP (Kropko 2007). Therefore, MNL has found a wide use in the analysis of discrete choice data also in a sports context (e.g. Robinson and Simmons 2014). In general, the MNL approach relies on the assumption of independence from irrelevant alternatives (IIA). The IIA postulates that if a subset of the choice set is truly irrelevant, then its omission from the estimation will not yield a systematic change of the parameter estimates (Hausman and McFadden 1984). To determine this, the Small-Hsiao test (Small and Hsiao 1985) is implemented, with results suggesting that the assumption has not been violated. Furthermore, we examine whether the alternatives in the choice set can be collapsed. The Wald test results reject this possibility.

Coming to the econometric specification, following Cameron and Trivedi (2010), the probability (P) that an individual i chooses to experience the game in fashion j out of a choice set k can be expressed as:

$$P_{ij} = e^{X_i\beta_j} / \sum_{k=1}^{K} e^{X_i\beta_k} \quad with \quad j = 0, 1, 2, 3 \tag{5.5}$$

with β_j being a vector of parameters related to the explanatory variables x and e being the unobserved and unobservable influences on the individual's decision. By using 0 = *not at all* as base category, the probability of each outcome may be specified as

$$
\begin{aligned}
P_i(j = \text{not at all}) &= 1/1 + \sum_{k=1}^{3} e^{\beta_k X_i} \\
P_i(j = \text{live}) &= e^{\beta_1 X_i}/1 + \sum_{k=1}^{3} e^{\beta_k X_i} \\
P_i(j = \text{tape delayed}) &= e^{\beta_2 X_i}/1 + \sum_{k=1}^{3} e^{\beta_k X_i} \\
P_i(j = \text{only highlights}) &= e^{\beta_3 X_i}/1 + \sum_{k=1}^{3} e^{\beta_k X_i}
\end{aligned}
\tag{5.6}
$$

To estimate the parameter vectors β_1, β_2 and β_3 we use maximum likelihood. As the respondents stated their viewing intentions separately for every single game under consideration, the data contains repeated game observations for each survey participant and is organised in a balanced panel.[25] Given the structure of data, it may be that the intentions of the same individual are correlated. The failure to adequately account for within-individual correlation can result in misleading inferences (Fitzmaurice et al. 2004). Therefore, we employ robust error terms clustered by individuals. Moreover, the estimated VIFs of all models suggest that there is no linear dependence on other predictors.

Both models control for the accessibility of the leagues, interest in the leagues, game uncertainty, supporter status, socio-demographic characteristics and perceived friendliness of the respective league country towards the USA. Game and time zone dummies are included, and a dummy indicating whether the respondent's stated residence is within a 50-mile radius of an MLS city.[26] Preliminary results are summarised in the following.[27]

i. A greater **interest** in the specific league is associated with a greater probability of watching the game(s) live, tape-delayed or just highlights.

ii. Being a **supporter** of a club in the league, or of a competing club, is associated with a higher probability of watching the game(s) live, tape-delayed or just highlights.
iii. Regarding game uncertainty, the relationship between **perceived 'home' win probability** and ITC is U-shaped (linear) for live (tape-delayed/'only highlights') viewing.
iv. Concerning **accessibility**, respondents who state that their TV programming includes telecasts of the respective leagues have a greater probability of watching the games, regardless of an alternative.
v. Respondents with a **European background** are more likely to watch tape-delayed broadcasts, with the impact being statistically significant for league games. **Hispanophone** respondents are more likely to watch live games with the impact being statistically significant for league games. **Non-whites** are more likely to be viewers of both final and league games.
vi. Relatively **highly educated** respondents have a lower likelihood of being viewers of cup finals.
vii. **Unemployment** is negatively associated with the likelihood of single-game viewership, however, the effect is statistically significant only for league games (cup finals) live (tape-delayed) viewership.
viii. **Income** is positively associated with viewing cup finals, but there is no statistically significant relationship with viewing league games.
ix. The probability of being a live or tape-delayed viewer of league games declines with increasing **age** at decreasing margins.
x. **Males** have a higher probability of being viewers of cup finals and league games.
xi. **Married** respondents are more likely to watch league games live. They are also more likely to watch tape-delayed cup finals and league games.
xii. **Household size** is positively associated with the probability of watching both types of games live.
xiii. The likelihood of watching cup finals live is higher when a country (that is 'exporting' football broadcasts) is **perceived** as **friendly** towards the USA.
xiv. Concerning **time zones**, respondents whose residence is in the Pacific/Alaskan/Hawaiian Time region are more likely to be tape-delayed or 'only highlights' viewers compared to those living in

the Eastern Time region. This impact is, however, only weakly significant for league games.

xv. Living within a **50-mile radius** of an MLS city is not associated with a higher probability of live viewing; however, there is a decreased likelihood of 'only highlights' viewership, with the impact being statistically significant for league games.

5.2.3 Willingness to Pay

Survey participants were asked to imagine that a number of selected football games were relocated and take place in a stadium near their residence and at a time and date that would be convenient for them to attend. Based on this information they were asked to state how much they would be willing to pay, at most, for a ticket to attend these games.

Figure 5.20 provides an overview of the average reported WTP per game excluding zero responses.[28] The highest average WTP for a ticket was reported to the UEFA Champions League ($50), followed by the two USMNT friendly games against Germany ($45) and the Netherlands ($44). On average, US respondents are willing to pay $43 and $37 to attend European cup finals and European league games respectively. Interestingly, the differences between certain games are fairly similar with regard to both average WTP (Fig. 5.20) and average ITC (Fig. 5.18).

To evaluate the reliability of these estimates, we compare our findings with real ticket prices. Figure 5.21 shows the average ticket price to attend Major League and European league games in 2015. According to this, US consumers need to pay on average nearly twice as much for attending NFL games ($86) compared to MLS games ($46). The highest ticket price level with regard to European leagues is reported to the Premier League (about $83), followed by La Liga ($78), whereas German fans pay the least (about $35) across all relevant football leagues.

Factors associated with willingness to pay: Pooled Tobit models (Tobin 1958) were used to analyse the factors associated with the consumer WTP.[29] Following Wooldridge (2010) the continuous latent variable WTP^{*}_{ig} which denotes the WTP statements of individual i concerning game g depends upon a vector of explanatory variables x with β being a

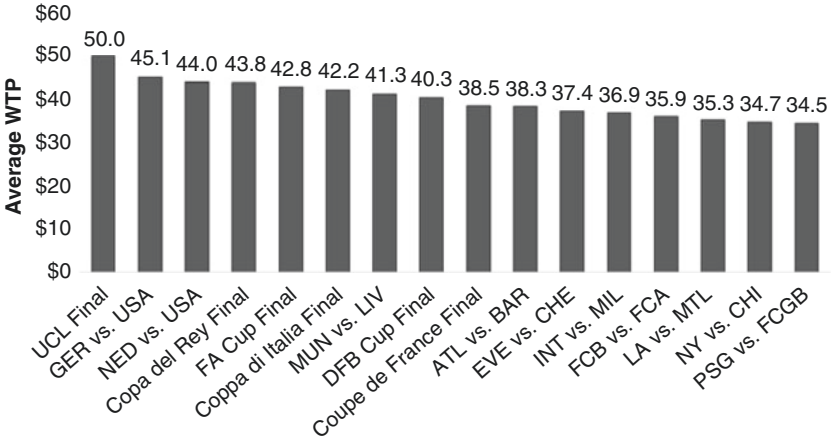

Fig. 5.20 Willingness to pay for a football ticket. *Abbreviations*: *ATL* Club Atlético de Madrid; *BAR* FC Barcelona; *CHE* Chelsea FC; *CHI* Chicago Fire; *DFB* German Football Association; *EVE* Everton FC; *FA* The Football Association; *FCA* FC Augsburg; *FCB* FC Bayern Munich; *FCGB* FC Girondins de Bordeaux; *GER* Germany; *INT* Internazionale Milano; *LA* Los Angeles Galaxy; *LIV* Liverpool FC; *MIL* AC Milan; *MTL* Montreal Impact; *MUN* Manchester United FC; *NED* Netherlands; *NY* New York Red Bulls; *PSG* Paris St.-Germain FC; *UCL* UEFA Champions League; *USA* United States of America

vector of coefficients to be estimated, and ε being a vector of normally distributed error terms with variance σ^2.

$$WTP^*_{ig} = x\beta_{ig} + \varepsilon_{ig} \tag{5.7}$$

Denoting the observed dependent variable as WTP_{ig}, then

$$WTP_{ig} = \begin{cases} WTP^*_{ig} & \text{if } WTP^*_{ig} > 0 \\ 0 & \text{if } WTP^*_{ig} \leq 0 \end{cases} \tag{5.8}$$

Similar to the ITC models the data contains repeated game observations for each survey participant and is organised essentially in a

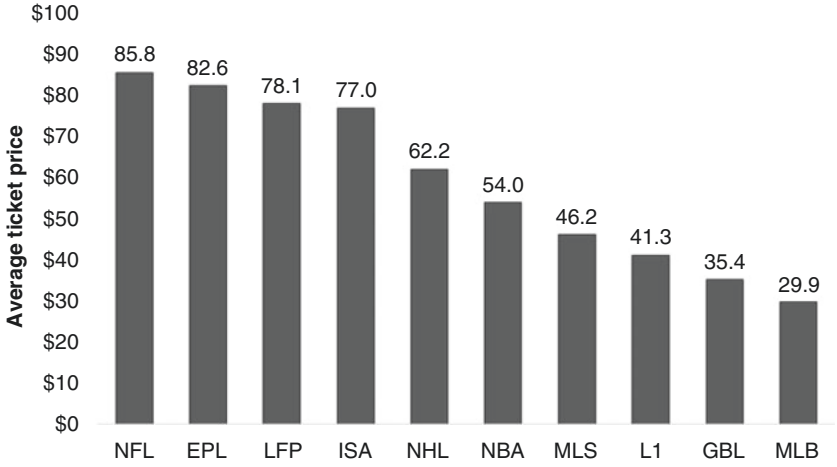

Fig. 5.21 Average ticket price (in dollars) per league. *Notes*: As of 2015. Prices for MLS and European leagues were retrieved from GoEuro (2015). Prices for the MLB, NBA, NFL and NHL were retrieved from Team Marketing Report (2015). *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLB* Major League Baseball; *MLS* Major League Soccer; *NBA* National Basketball Association; *NFL* National Football League; *NHL* National Hockey League; *UCL* UEFA Champions League

balanced panel. We account for within-individual correlation by estimating robust error terms clustered by individuals. The estimated models control for accessibility of the leagues, interest in the leagues, game uncertainty, supporter status, socio-demographic characteristics and the perceived friendliness towards the USA of the respective league's country. Apart from a dummy indicating whether the respondent's stated residence was within a 50-mile radius of a city hosting an MLS team, the models further include game dummies.[30] Preliminary results are summarised in the following.

i. A greater **interest** in the specific league is associated with a greater WTP to attend the corresponding games.
ii. Being a **supporter** of a club in the league, or of a competing club, is associated with a higher WTP.

iii. Concerning game uncertainty, **perceived 'home' win probability** is statistically significant and points towards a U-shaped relationship: the WTP evolves with increasing 'home' (and 'away') win probability, although at a diminishing rate.
iv. With regard to **accessibility**, respondents who reported that their TV programming includes telecasts of the respective leagues had greater WTP.
v. Having a **European background** is not statistically associated with WTP. Being **Hispanophone** has a positive (though weakly significant) impact on the WTP. **Non-white** respondents indicated a higher WTP, with the impact only being significant for attending cup finals.
vi. **Educational attainment** is not statistically associated with WTP for a ticket.
vii. **Unemployment** is not related to WTP for a ticket.
viii. **Income** is positively associated with WTP to attend a game, with the impact being statistically significant for both cup finals and league games.
ix. WTP declines with increasing **age**, with the impact being statistically significant for both cup finals and league games.
x. **Males** reported a higher WTP with the impact being significant for league games only.
xi. Being **married** is associated with a lower WTP, with the impact being significant for cup finals only.
xii. **Household size** is positively associated with WTP, with the impact being significant for league games only.
xiii. There is a positive correlation between the **perceived friendliness** towards the USA of countries (that are 'exporting' football games) and WTP, with the impact being statistically significant for the attendance of cup finals.
xiv. Living within a **50-mile radius** of an MLS city is not related to WTP to attend a game.

In a nutshell: Table 5.4 summarises the game-level econometric findings of the ITC and WTP. The main differences between them are of the impact of socio-demographic characteristics, such as educational attainment, and occupational and marital status.

Table 5.4 Summary of factors associated with game-level demand

	ITC	*WTP*
Interest		
League interest	↑	↑
Supporter status		
Supporter of a club	↑	↑
Perceived competitive balance		
Perceived home win probability	U	U
Accessibility of the leagues		
TV programming includes the league	↑	↑
Socio-demographic characteristics		
European background	↔	↔
Hispanophone	↑	↑
White	↓	↓
Education	↓	↔
Unemployed	↓	↔
Income	↑	↑
Age	↓	↓
Male	↑	↑
Married	↑	↓
Household size	↑	↑
Perceived friendliness towards the USA		
Friendly	↑	↑
Time zone		
Time zone	↔	/
Distance from MLS stadium		
Radius of 50 miles	↔	↔

Notes: ↑ = rather positive impact; ↓ = rather negative impact; ↔ = rather inclusive or non-statistically significant impact; / = variable not included in the estimations; U = U-shaped relationship. The summary for the ITC models is based on live viewership findings

Key Facts 4

1. Male consumers are, in general, more interested than female consumers in men's football, and there are no differences between the genders with regard to women's football.
2. The most popular football club amongst US residents is Manchester United, followed by FC Barcelona and the largest share of TOP 5 league club supporters can be found in the states of California and New York.
3. PCB statements are comparable to objective measures (i.e. based on secondary data). MLS is the most balanced league among those surveyed, with regard to both objective and subjective measures.
4. The majority of Hispanophone consumers seems to prefer watching games in English.
5. Although the Bundesliga improved its audience reach by almost six times compared to the season before (2014–2015), there are no significant differences with regard to the stated accessibility of the league between both seasons.
6. The USMNT, Premier League, UEFA Champions League as well as MLS telecasts generate the highest interest amongst US consumers.
7. Results of the econometric models reveal no substantial differences (in terms of opposing effects) between the leagues/competitions with regard to the impact of the determinants.
8. The perceived level of CB within a whole league or competition (long-term CB) and the perceived level of championship (un) certainty (mid-term CB), matters to consumers, albeit only with regard to their WTP in the latter. On the other hand, consumers do not value game uncertainty (short-term CB).
9. Viewers of (European) football are more likely to be supporters of a (European) club, Hispanophone, non-whites, relatively affluent, male, young, with a comparatively low educational background, and people who live within the boundaries of an MLS city.

Notes

1. A detailed overview of supporter distribution with regard to their favourite clubs per league is provided in Appendix A.2.
2. The Herfindahl-Hirschman Index (Hirschman 1964) of competitive balance (*HICB*) measures the sum of the quadratic share of points won by each club in a league. The version of the index used is a modified version following Depken (1999). An increase of this index signals a decline of the competitive balance. As the MLS is organised in two conferences (Eastern and Western), we calculate for each conference the *HICB* and report the average *HICB* in both. Note that due the competition format of the UEFA Champions League, i.e. group stages and elimination rounds, the index is not applicable for this league.
3. An in-depth discussion about static and dynamic CB measures is provided by Buzzacchi, Szymanski and Valletti (2003).
4. The HHI_{champ} measures the sum of the quadratic share of championships won by a club in a league in a given time period. The version of the index used in this analysis is a modification introduced by Leeds and Von Allmen (2005). An increase of this index signals an imbalance in the distribution of championships.
5. The *UCS index* (Janssens and Késenne 1987) takes into account the points required to be champion in a given season, the points already collected in the season so far, the maximum points that can be achieved during the season and the maximum points that can be collected until the certain matchday. The version of the index used in this analysis is a modification introduced by Pawlowski and Anders (2012).
6. The *Theil index* (Theil 1967) is based on the distribution of all three possible outcomes during a football game, i.e. home win, draw and away win. Outcome probabilities were derived from betting odds. The version of the index used in this analysis is introduced by Pawlowski and Bloching (2013). For the calculation of the share of 'predicted-to-be-close games' in the UEFA Champions League we considered only the group stage games. Historical betting odds used in the analysis are retrieved from football-data.co.uk for the TOP 5 leagues and from oddsportal.com for the MLS and UEFA Champions League.
7. Note: a considerable number of 'don't know' responses were given for each competition. Those respondents were eliminated for Fig. 5.9. The number of 'don't know' responses is as follows in Survey 1 (Survey 2): $N = 890$ (875) for MLS; $N = 997$(1,015) for Premier League; $N = 1{,}165$(1,138) for UEFA Champions League; $N = 1{,}357$(1,278) for La Liga; $N = 1{,}363$ (1,301) for Serie A; $N = 1{,}383$(1,274) for Bundesliga; $N = 1{,}431$(1,338) for Ligue 1.

8. A detailed discussion of the (non-)divergence between OCB and PCB, as well possible theoretical reasons for it on the basis of behavioural economics considerations, is provided by Pawlowski and Budzinski (2014).
9. Note: a considerable number of 'don't know' responses were given for each competition. Those respondents were eliminated for Fig. 5.8. The number of 'don't know' responses is as follows: $N = 894$ for MLS; $N = 993$ for Premier League; $N = 1{,}100$ for UEFA Champions League; $N = 1{,}215$ for La Liga; $N = 1{,}236$ for Serie A; $N = 1{,}211$ for Bundesliga; $N = 1{,}275$ for Ligue 1.
10. The number of 'don't know' responses is as follows in Survey 1 (Survey 2): $N = 653$ (644) for MLS; $N = 789$(761) for Premier League; $N = 994$(903) for UEFA Champions League; $N = 1{,}143$(1,022) for La Liga; $N = 1{,}173$(1,036) for Serie A; $N = 1{,}176$(993) for Bundesliga; $N = 1{,}236$(1,083) for Ligue 1.
11. Indeed, the highly significant correlations (Appendix A.3. Survey 1: Table A.3.10; Survey 2: Table A.3.12) reveal that consumer decisions about the viewing frequency of the leagues are closely related.
12. A description of the variables included in the model (Table A.3.1), a detailed overview of the viewer characteristics for all relevant leagues (Tables A.3.2–A.3.8), as well as the results of the multivariate ordered probit model (Survey 1: Table A.3.9; Survey 2: Table A.3.11) are available in the Appendix A.3. The sign of the estimates determines the direction of the effect of the covariates on the probabilities of observing the highest (5 or more games) or the lowest outcomes (none) and not for the intermediate outcomes (Wooldridge 2010). What follows is a description of findings. A discussion and evaluation of all findings is provided in Section 6.2.
13. It is important to note that PCB and perceived quality are highly correlated ($r > 0.70$), therefore we report only the PCB variable. Models estimated with perceived quality reveal – similar to PCB estimates – a positive and statistically significant relationship across all leagues.
14. The main difference between the Survey 1 (Table A.3.9) and Survey 2 (Table A.3.11) model estimates relies on statistical significance and not on the direction of the statistical relationship. Survey 2 results show a significant and positive relationship between three factors (being non-white, having a European background, degree of perceived friendliness of a country towards the USA) with the probability of being regular viewers, whereas income is not statistically significant.
15. Implausible statements we considered all statements in which the cost of additional sports packages exceeded the overall cost of TV programming expenses ($N = 95$ Survey 1; $N = 78$ Survey 2). These cases were excluded in the subsequent estimations.
16. For this survey, Leichtman Research Group conducted a nationwide telephone survey of $N = 1{,}222$ U.S. adults in June 2015.

17. Zero WTP statements account for about 50 % of the overall WTP statements.
18. Prices as of March 2016. The cost of an MLS Direct Kick subscription corresponds to the prices charged by DIRECTV ($89 per year). The cost of an MLS Live subscription corresponds to the prices (without discounts) charged by MLS ($79.99 per year). Note that on MLS Live and MLS Direct Kick all nationally-televised games are blacked out.
19. In contrast to viewership statements, our WTP scenario allows for no substitution effects, as it depicts the maximum WTP for each respective league individually. As such no multivariate analysis was required.
20. A description of the variables included in the model (Table A.3.1), as well as the results of the Tobit models (Survey 1: Table A.3.13; Survey 2: Table A.3.14) are available in the Appendix A.3. What follows is a description of the findings. A discussion and evaluation of all findings is provided in Section 6.2.
21. It is important to note that PCB and perceived quality reveal a high-degree collinearity ($r > 0.70$), and therefore we report only the PCB variable. Models estimated with perceived quality reveal a positive association with regular viewership, with the relationship being statistically significant across all leagues.
22. Note that the choice of 'home' team is a formality in the cup finals. In the FA Cup the 'home' team is decided by the alphabetical order of the contestants, in the DFB Cup, Coupe de France and UEFA Champions League it is determined by an additional draw, and in the Spanish Copa del Rey the 'home' team is the oldest founded club among the contestants. In general, the 'home' team's advantage in cup finals is associated with matters such as the choice of jersey colour, the selection of locker rooms and the seating arrangement of the fans.
23. Respondents were intentionally asked about 'watching live' instead of 'watching live on TV' to make sure that the ITC measure would also take into account the portion of sports consumers who prefer to view the games via online streaming on their computer, tablet, phone or favourite connected device.
24. The 2015 Coppa Italia Final was originally scheduled for 7 June, however with the qualification of Juventus for the 2015 UEFA Champions League Final, the date was changed to 20 May. Our survey was already on-field before the announcement; therefore statements for the Coppa di Italia ITC include both 'actual' and 'intended' viewing. In this regard it is indicative, that the response consistency for the Coppa di Italia is the highest among all finals (see Fig. 5.19).
25. Note that the Coppa di Italia Final was excluded from all estimations (see Footnote 24 for the rationale).
26. The sign of the estimates determines the direction of the effect of the covariates on the probabilities of observing a particular category/choice

vis-à-vis the reference category, i.e. 'not at all' (Wooldridge 2010). What follows is a description of findings. A discussion and evaluation of all findings is provided in Section 6.2.

27. Results are available on request as a working paper (Nalbantis and Pawlowski 2016).
28. Zero WTP statements account for approximately 50 % of the overall WTP statements. Including zero statements, the highest on average WTP for a ticket was reported for the USMNT friendly games against Germany ($29) and the Netherlands ($28). For attending European cup finals US respondents are willing to pay on average $21 with the highest WTP being reported for the UEFA Champions League Final ($26). In contrast, the average WTP to attend a European league game is about $18, with the highest WTP being reported for the Premier League game between Manchester United and Liverpool ($23).
29. A discussion about the suitability of Tobit models and the rationale behind their choice in this analysis is provided in Section 5.1.5.
30. The estimated VIFs of all models suggest that there is no linear dependency between the explanatory variables used. A detailed description of the variables included in the model, as well as the results of the Tobit models, are available in Nalbantis and Pawlowski (2016). This working paper will be available upon request. What follows is a description the findings. A discussion and evaluation of all findings is provided in the last chapter (Section 6.2) of this report.

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CHAPTER 6

Discussion and Conclusion

Abstract Chapter 6 summarises the study and discusses managerial implications for league organisers, broadcasters and club managers that might follow, such as the relevance of (long-term) competitive balance. The chapter concludes by discussing the limitations of this research and by offering avenues for further research.

Keywords Managerial implications · Future research

This chapter includes a synopsis of the research report (Section 6.1), discusses the main findings and their managerial implications (Section 6.2) and provides an overview of the limitations of the project and avenues for future research (Section 6.3).

6.1 Synopsis of the Research Report

The US broadcast market is highly dynamic and dominated by the pay-tv industry. In this environment, football – even though it holds a relatively small share of the US broadcast market – is a rapidly evolving product with great prospects for further growth. Despite its significant progress in the

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current decade, little is known about the market and its fans. Football-related studies have predominantly focused on demand in European countries, while studies from North America have mainly focused on the demand for the 'Big Four' Major Leagues, NFL, NBA, MLB and NHL. This project is, therefore, the first to provide a comprehensive overview of US consumer demand for (overseas) televised football.

The project is based on survey data gathered in two waves, at the end of the 2014–2015 season (mid-May) and at the beginning of the 2015–2016 season (beginning of September). The focus was on the TOP 5 European leagues and the UEFA Champions League, which represent the most popular and marketable football competitions worldwide. Various comparisons of our sample with US Census data and other sources available online suggest that there is no clear evidence of an over- or under-representation of individuals with regard to certain demographic characteristics or the degree of football interest in our data.

Table 6.1 summarises the evaluation of leagues and competitions by respondents with regard to different proxies for current demand and interest. To facilitate a comparison between the different proxies, we provided league and competition ranks according to the perceived relative performance of leagues and competitions by US consumers. Based on all proxies, the overall ranking reveals the following preference pattern: Premier League > UEFA Champions League > MLS > La Liga > Bundesliga > Serie A > Ligue 1. Interestingly, a similar pattern is evident with regard to actual viewing behaviour based on secondary data such as TV audience figures (see Section 2.3).

In a next step, we were interested in the factors associated with between-competition and between-individuals differences in the past, present and future consumption of European and MLS football telecasts. We employed different regression models, using some of the aforementioned proxies for demand and interest in leagues and competitions, as dependent variables. Two models each were estimated for both league-level (viewership and WTP) and game-level demand (ITC and WTP). Table 6.2 summarises the results of our econometric models and compares them with a priori expectations. A discussion of the findings and managerial implications follows, in Section 6.2.

Table 6.1 League and competition rankings based on respondent interest and demand

	League level					*Game level*				*Overall rank*
	INT	*SUP*	*ACC*	*VIEW*	*WTP*	*ITC FNLs*	*ITC LGs*	*WTP FNLs*	*WTP LGs*	
EPL	2	2	2	2	3	1	1	3	1	**1**
UCL	3	–	3	3	1	1	–	1	–	**2**
MLS	1	1	1	1	7	–	2	–	5	**3**
LFP	4	3	4	4	1	3	3	2	2	**4**
GBL	4	4	6	6	3	4	4	5	4	**5**
ISA	4	4	5	5	7	4	5	4	3	**6**
L1	7	6	7	7	1	6	6	6	6	7

Abbreviations: *ACC* Accessibility; *EPL* English Premier League; *FNL* Final games; *GBL* German Bundesliga; *INT* Interest in the leagues; *ISA* Italian Serie A; *ITC* Intention-to-consume; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *LGs* League games; *MLS* Major League Soccer; *SUP* Supporter share; *UCL* UEFA Champions League; *VIEW* Overall league viewership; *WTP* Willingness-to-pay

Table 6.2 Summary of factors associated with league- and game-level demand

	League-level		*Game-level*	
	Viewership	*WTP*	*ITC*	*WTP*
Interest				
League interest	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Supporter status				
Supporter of a club	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Perceived competitive balance				
Perceived competitive balance	↑ (↑)	↑ (↑)	/	/
Perceived championship uncertainty	↔ (↑)	↑ (↑)	/	/
Perceived home win probability	/	/	U (∩)	U (∩)
Perceived quality of play				
Perceived quality	↑ (↑)	↑ (↑)	/	/
Accessibility of the leagues				
TV programming includes the league	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Socio-demographic characteristics				
European background	↔ (↑)	↔ (↑)	↔ (↑)	↔ (↑)
Hispanophone	↑ (↑)	↔ (↓)	↑ (↑)	↑ (↓)
White	↓ (↑ or ↓)	↓ (↑ or ↓)	↓ (↑ or ↓)	↓ (↑ or ↓)
Education	↓ (↓)	↑ (↑)	↓ (↓)	↔ (↑)
Unemployed	↓ (↑)	↓ (↓)	↓ (↑)	↔ (↓)
Income	↑ (↑ or ↓)	↑ (↑)	↑ (↑ or ↓)	↑ (↑)
Age	↓ (↑ or ↓)	↓ (↑ or ↓)	↓ (↑ or ↓)	↓ (↑ or ↓)
Male	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Married	↑ (↓)	↔ (↓)	↑ (↓)	↓ (↓)
Household size	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Perceived friendliness towards the USA				
Friendly	↑ (↑)	↑ (↑)	↑ (↑)	↑ (↑)
Time zone				
Time zone	↔ (↑ or ↓)	↔ (↑ or ↓)	↔ (↑ or ↓)	/
Distance from MLS stadium				
Radius of 50 miles	↑ (↑)	↑ (↑)	↔ (↑)	↔ (↔)

Notes: In parenthesis are the a priori expectations about the impact of the concerning variables, based on previous findings and theoretical considerations (see Chapter 3 and Section 6.2 for a discussion). The summary for the ITC models is based on live viewership findings. ↑ = rather positive impact; ↓ = rather negative impact; ↔ = rather inclusive or non-statistically significant impact; / = variable not included in the estimations; U = U-shaped relationship; ∩ = inverse U-shaped relationship

6.2 Discussion of the Findings and Managerial Implications

Interest in the leagues: Unsurprisingly and similar to those of Kim et al. (2008), our findings reveal that a higher interest in the leagues is associated with a greater likelihood of regular viewership. It is thus important for both league management and broadcast networks to stimulate US consumer interest. A possible way to achieve this could be by demonstrating 'product' features and the resulting customer benefits. Generating a unique selling proposition (USP), rather than simply focusing on what other football leagues cannot or do not offer, but with regard to the unique features of the sport in comparison to other sports, may prove very helpful in stimulating the overall demand for football and consequently for all professional football leagues in the USA.

Supporter status: As anticipated, and similar to prior findings (e.g. Pawlowski et al. 2016), being a supporter of a club in the respective league affects the viewership likelihood and purchase behaviour of US consumers. Consequently, it would be appropriate for European league organisers to actively endorse their clubs in efforts to gain a greater fan base. Arguably, an effective way to do this may be through the participation of clubs in pre-season tours in the USA. The leagues could actively take part in the organisation of exhibition games or facilitate the clubs in their organisation, for instance, by extending the summer break or even by subsidising travel expenses.[1] It has to be noted, however, that so far little is known about the effectiveness of such marketing activities.

We find partial support for the frequently discussed 'Eurosnobs' phenomenon in the USA (e.g. Gardner 2012). 'Eurosnobs' are described as football fans in the USA who refuse to follow domestic clubs, and instead only support and follow European teams, even though they have no personal ties with them. Our findings suggest that supporters of TOP 5 league clubs do not have a greater likelihood of regularly watching MLS games; however, supporters of MLS clubs are more likely to be regular viewers of TOP 5 league games. This finding suggests that close cooperation between MLS and European clubs could be beneficial for the latter. Interestingly, particularly Premier League clubs are already active in establishing links with US-based football clubs. Currently, there are at least eight different partnerships between English and American clubs. On the relevance of such partnerships, Ferran Soriano (Manchester City's chief executive) noted, after the recent acquisition of an MLS expansion club:

"*If you really want to be in the market you can't do it every two years on a tour. You have to do it every day*" (Washington Post 2014).

Perceived competitive balance: A comparison of the objective (statistically) measurable level of CB and the perceptions of respondents about the level of CB in the different leagues and competitions reveals some differences between OCB and PCB, however, according to the long-term dimension of CB, there seems to be a convergence between OCB and PCB, at least with regard to the three most balanced leagues and competitions, the MLS, Premier League and Champions League.

Further analysis reveals three issues. *First*, the perceived level of CB within a whole league or competition (long-term CB) matters to consumers with regard to both their ITC and their WTP. *Second*, results show that the perceived level of championship (un)certainty (mid-term CB) also plays a certain role for consumers. While league-level viewership does not seem to be directly associated with this measure, there is a positive (though weakly significant) relationship between this measure and WTP for league add-on subscriptions. The missing link between mid-term CB and viewership is in line with recent findings by Buraimo and Simmons (2015) for TV demand in England. *Third*, our game-level analysis does not provide any support for the UOH based on the game uncertainty measure (short-term CB) used. In contrast, ITC and WTP are maximised when either the 'home' or 'away' team is expected to win by a clear margin. This finding is in line with previous studies employing the same measure in a setting of German football fans (Pawlowski et al. 2016) and other studies focusing either on TV demand for football telecasts in Europe (e.g. Buraimo and Simmons 2015) or stadium attendance in North America (e.g. Coates et al. 2014), however, it contradicts previous studies focusing on TV demand for Major League games (e.g. Paul and Weinbach 2007; Tainsky and McEvoy 2012; Tainsky et al. 2014). This suggests that US consumers have similar preferences to European consumers when watching European football telecasts with regard to game (un)certainty (Nalbantis and Pawlowski 2016), that is games involving top clubs are preferred (e.g. Pawlowski and Anders 2012) as is an ex-ante favourite promising the potential of viewing an upset (e.g. Coates et al. 2014).

Accordingly, the implications that can be derived from these findings are also threefold: *First*, with regard to overseas demand in the USA, it seems to be advisable for club and competition managers in Europe to ensure a certain level of long-term CB within the different leagues and competitions. *Second*, and in line with this, it seems to be important that there is no

long-term dominance of single teams within a league or competition. Our findings here support the evaluations by Richard Scudamore (Premier League's chief executive)[2] and Don Garber (MLS commissioner).[3] *Third*, when organising exhibition league or friendly games in the USA, organisers should not worry too much about a high degree of ex-ante game uncertainty. It is important that top clubs are playing, while the possibility of witnessing an upset remains to be of some relevance.

Perceived quality: Remarkably, the ranking of TOP 5 leagues with regard to demand and interest (see Table 6.1) corresponds almost perfectly to the league ranking according to average transfer spending over the last three years (see Table 4.1). In line with this, our econometric results reveal that respondents who perceive the *quality of play* in the respective leagues as high have a greater likelihood of being regular viewers. In the context of our WTP league add-on subscription scenario, we find that perceived quality also influences US consumer purchasing behaviour. This finding is in line with several studies on TV demand for European football in Europe (e.g. Buraimo and Simmons 2015).

According to these findings, talent investments and a boost in the quality of play may generally enhance the viewership of leagues. The attraction of superstar players may well enhance consumer perceptions of the league's on-field quality and consequently foster demand. This idea has already been successfully implemented by MLS. For instance, it is indicative that the presence of David Beckham in the league doubled ticket sales (home and away) for the MLS games (Lawson et al. 2008). Another way to improve *perceived* quality might be the application of endorsements with famous Major League athletes. This idea has so far, however, only been implemented by teams that are already of high quality. A notable example is a collaboration between FC Barcelona and Kobe Bryant (NBA athlete, 18-time All-Star) in the club's 2015 US tour (FC Barcelona 2015).

Accessibility of the leagues: As expected, our econometric findings demonstrate that US consumers, who said that their TV programming includes telecasts of the respective leagues, have greater viewership likelihood. The reported accessibility also affects consumer purchasing behaviour. Despite our intuition about this finding, it offers interesting managerial implications if we bear in mind that accessibility consists of two elements, physical access to the corresponding networks and knowledge of the fact that these networks/channels broadcast football games.

League and competition organisers should ensure that selected broadcast partners have a generally high audience reach. Broadcast networks should assign football telecasts to the channels with the highest audience reach. Our findings support the decision by FOX Networks to offer games from the Bundesliga's second season half via OTA/FTA platforms in order to respond to the low viewing audiences of the league.

It is striking to note that although the Bundesliga improved its audience reach by almost six times compared to the season before (2014–2015), we did not find any significant differences with regard to the stated accessibility of the league between both seasons. Although we were unable to test this directly, it seems plausible to assume that a reason for this might be the delayed promotion of the league's coverage by the FOX Networks. It seems advisable that league and competition organisers and TV networks should develop and implement promotion strategies in a timely manner.

Socio-demographic characteristics: The analysis reveals some interesting associations between certain socio-demographic characteristics and the different proxies for demand and interest.

In contrast to a priori expectations, there is no strong link between viewership and having a European background, suggesting that football in the USA has evolved from being merely the sport of European immigrants (see Goksøyr 2009) to a multicultural sport. This offers opportunities for football in general since interest in this sport can be expected to further diffuse.

Respondents who speak Spanish at home (in addition to English) are more likely to be regular viewers of European football telecasts, highlighting the significance of the Hispanophone audience, however, since Hispanophone consumers also prefer watching games in English there is no need to increase the number of games broadcast in Spanish. Hispanophone consumers are not associated with a higher WTP for league telecasts. As such, broadcast networks focusing on this specific population may instead increase revenues indirectly, via higher viewership and consequently more valuable advertisements, than directly via high pay-tv subscription fees. In contrast to this and to previous findings of MLS attendance (Jewell and Molina 2005), however, Hispanophone consumers indicate a higher WTP to attend exhibition games. Apart from that, our findings suggest that non-white viewers are highly relevant with regard to the demand for European football games.

Relatively highly educated US consumers are in general less likely to be viewers of European football telecasts. This is in line with Nesbit and King (2010) and the general notion that relatively highly educated individuals

have lower viewing levels (Robinson and Godbey 1997). For broadcasters, this finding may imply that advertisements promoting their football programming could be more effective on radio or television, than in print media (e.g. newspapers, magazines). Nevertheless, bearing in mind that highly educated individuals have a greater WTP for league telecasts, it may be pertinent for broadcasters and leagues to include this demographic in their marketing strategies in order to maximise direct revenues.

Unemployed individuals are in general less likely to be viewers of European football telecasts. This contradicts the findings by Peréz et al. (2015) and the a priori expectations of a positive impact but might be attributed to the fact that the majority of football telecasts are available on pay-tv platforms. In line with this argument, income exerts a positive effect on consumer viewership and purchasing behaviour. This is consistent with Tainsky et al. (2014) and might suggest an orientation towards high-income consumers enabling both higher subscription fees and higher advertising revenues.

In contrast to Nesbit and King (2010), we find that younger US consumers are associated with a greater WTP and are more likely to be viewers of European football. It is indicative that networks broadcasting football have, on average, a younger audience (48 years) than other broadcast networks (e.g. MLB Network: 51 years). Overall, this finding supports the notion that football in the USA has a solid base in the younger generations, with its implications being threefold. *First*, networks may reduce the average age of their total viewership by acquiring football broadcasting rights, opening up new opportunities for advertising revenues. *Second*, marketing and promotion efforts should focus on young US consumers. Our findings support the initiatives of several major US networks like FOX and NBC to offer live streams of football games via mobile applications (apps). *Third*, league and club management may try to foster the net-savvy young US audience, following the examples of several football clubs by launching dedicated North American versions of their official websites (e.g. Arsenal (arsenalamerica.com), FC Bayern Munich (fcbayernmunich.com) and Manchester United (manutdusa.com)).

In line with findings by Nesbit and King (2010) about the demand for MLB telecasts, males are on average more interested in men's football than females. However, there are no statistically significant differences between both genders with regard to women's football. Marketing efforts targeting male consumers are therefore well placed. Despite this, the female audience should not be neglected. US female viewers could play an important role in

the football broadcast market in the future. It is indicative that the 2015 World Cup Final game featuring the US women's team against Japan averaged about 24 million viewers, with female viewers accounting for over 43 % of the viewership (Nielsen 2016).

Similar to Pawlowski et al. (2016) and in contrast to a priori considerations our findings suggest that married US consumers are more likely to be viewers of football. Moreover, they have a greater WTP. The same pattern is also evident with regard to individuals living in large households. This finding implies that broadcasters might consider including family-oriented programming along with football telecasts in order to increase the viewing rates of non-football-related genres or vice versa. Leagues that typically attract male-oriented product advertising might expand their advertising partnerships with companies producing (offering) family-oriented products (services).

Perceived friendliness: Similar to the findings of several other studies (e.g. Nuesch and Franck 2009), which suggest that viewing behaviour is affected by patriotic motives, our findings with regard to the perceived friendliness of the respective league countries suggest ethnocentric consumer preferences in the demand of overseas telecasts. The managerial implication is that leagues may want to incorporate national symbols (e.g. the US flag) in their US marketing strategies or possibly de-emphasise the national identity of their products, building upon a more a cosmopolitan approach.

Time zone: Despite considerations that local time variations may affect the football viewership in the USA, our findings suggest that there is only a weak association between time zones and viewership or purchasing behaviour. This is relatively important considering that scheduling adapted to the different time zones is not feasible for the majority of European football leagues.

Distance from MLS city: Finally, as anticipated, our results suggest the positive effect of living within a 50-mile radius of an MLS team on regular viewership and purchasing behaviour. Bearing in mind that many European clubs have a strong and consecutive presence in the USA through preseason tours and participation in friendly games, this finding may highlight their importance in the generation of a regular/devoted viewership. This finding also implies that broadcasters and league managers may want to focus their marketing efforts on MLS city residents in order to maximise their audiences.

6.3 Limitations and Future Research

Although this project clearly enhances the overall understanding of the US demand for European football telecasts, it has some shortcomings that might be addressed in future research.

First, unfortunately, including minors (<18 years old) in our sample would have been very complicated due to legal issues (parental consent and supervision) and would have required the exclusion of several highly relevant elicitation items (e.g. WTP scenarios). The sample thus consists of US respondents aged 18 years and older only. This is a considerable limitation given the findings that younger respondents indicate higher interest and demand in our survey.

Second, the questionnaires did not include any questions about the viewership of Major League events (except with regard to MLS games) due to financial, time and capacity constraints. Future research is therefore advised to focus on how and in what manner the demand for Major Leagues games affects the demand for televised football. In this regard, it would be interesting to explore how consumers allocate their time to other sporting events in general.

Third, several survey instruments implemented in this analysis may be subject to an overestimation bias. While average WTP statements seem to be in line with realistic values according to market prices, the extrapolation of viewership and ITC statements may not correspond to actual audience sizes, although the relative differences between the leagues with regard to *stated* and *actual* demand reveal fairly similar patterns. Therefore, this potential overestimation bias is not expected to affect our general findings of the factors associated with league-level and game-level demand.

Fourth, the project is focused on some of the most marketable football leagues in the USA, but other leagues such as the Mexican Liga MX hold a considerable share of the domestic football market. While there is no evidence to suggest that the major findings might change in a different setting, such as telecasts of games played in other leagues, testing this is an important task for future research.

Fifth, even though the managerial implications of this research highlight the relevance of pre-season tours in the USA, no research so far has tried to explicitly evaluate their impact. It would be very useful for future research to explore the impact of such marketing strategies on the generation of fan bases and on domestic consumer purchasing behaviour.

Sixth, our findings may in time become dated due to changes in sporting preferences and new innovations in broadcasting technology. However, this limitation lies within the nature of any empirical research when conducted within environments that are subject to rapid change.

Key Facts 5

1. In general, it seems advisable to generate a USP by focusing not only on what other football leagues cannot or do not offer but emphasising the unique features of the sport in comparison to other sports.
2. The participation of clubs in pre-season tours in the USA could be important in the generation of a regular/devoted viewership. However, further research is needed to test the effectiveness of such marketing measures.
3. US consumers have similar preferences as European consumers when watching European football telecasts: they do not value game uncertainty – at least with regard to current levels of game uncertainty. However, it is advisable for competition managers in Europe to ensure a certain level of long-term CB within the different leagues and competitions.
4. Talent investments and a boost in the quality of play may generally enhance the viewership of leagues.
5. League and competition organisers should ensure that selected broadcast partners have a generally high audience reach. Broadcast networks should assign football telecasts to the channels with the highest audience reach.
6. Promotion of the league's coverage should be done in a timely manner and may possibly be more effective through advertisement on radio or television, than in print media.
7. Targeting Hispanophone consumers may increase revenues indirectly, via higher viewership, rather than directly, via high pay-tv subscription fees.
8. An orientation towards high-income consumers and a focus on MLS city residents seems advisable in order to maximise audiences.
9. Networks may reduce the average age of their total viewership by acquiring football broadcasting rights. Moreover, current rights holders should further develop their online portfolios. Leagues and clubs may try to foster the net-savvy young US audience with dedicated North American versions of their official websites.
10. The incorporation of US national symbols in marketing strategies or de-emphasising the national identity of their products seems to be advisable for leagues and club managers.

Notes

1. The German Bundesliga has already introduced a special 'pot' to financially support clubs playing exhibition games abroad (Die Welt 2013). The amount of financial support (max. $330,000 (€300,000)) depends on whether a Bundesliga club chooses to travel in one of the 11 predefined (by the league) target markets (including the USA), as well as on its five-year average performance in the UEFA club rankings.
2. "With no disrespect to Chelsea we like the idea that the champions aren't the champions next year and there is a new name on the trophy every year because it shows the competitive dynamic of the league" (CNN 2015).
3. "We have wealthy owners but we are very committed to the idea that at the start of every season every fan can think their team can win a championship. We want someone in Kansas City, even though they are smaller than New York City, to think they can win the title" (The Guardian 2015).

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Appendix

A.1 Overview of Football-Related TV Demand Studies

This table summarises the studies dealing with the demand for televised football in chronological order. Focus is on the measurement of competitive balance (CB) and on whether or not the studies find support for the uncertainty of outcome hypothesis (UOH). The organisation of this table follows Pawlowski (2013b).

A.2 Share of Club Supporters Per League

The following figures provide a detailed overview of the supporters' distribution with regard to their favourite clubs per league. Amongst all MLS supporters, the most popular club is Los Angeles Galaxy (around 13%). Amongst all Premier League supporters, the most popular club is Manchester United (around 34%). Amongst all La Liga supporters the most popular club is FC Barcelona (around 36%). Amongst all Serie A supporters the most popular club is AC Milan (around 20%). Amongst all Bundesliga supporters the most popular club is FC Bayern Munich (around 30%). Amongst all Ligue 1 supporters the most popular club is Paris Saint-Germain (around 17%). Note that in both surveys the popularity rankings in the top-ranked clubs remain more or less the same, with the exception of Ligue 1.

G. Nalbantis, T. Pawlowski, *The Demand for International Football Telecasts in the United States*, Palgrave Pivots in Sports Economics,
DOI 10.1007/978-3-319-48075-6

#	*Author(s)*	*Data and method*	*General findings*	*CB measure*	*CB findings*	*UOH support*
1	Kuypers (1996)	***Contest:*** 1st Division ***Period:*** 1993-1994 ***Country:*** England ***Focus:*** General ***Dep. var:*** TV shares ***Model:*** OLS reg.	Quality, number of goals scored and fan loyalty have a significant impact on TV demand.	**Short-term:** (1) Betting odds (max-min); **Mid-term:** (2) Points difference from 1st place; (3) points difference from last place.	(1) Not significant; (2) Negative significant; (3) Positive significant.	Partly (only for mid-term)
2	Forrest et al. (2005)	***Contest:*** 1st Division ***Period:*** 1993-2002 ***Country:*** England ***Focus*** UOH ***Dep. var:*** ln(aud. sizes) ***Model:*** OLS reg.	Game between newly promoted teams, seasonal aspects and team quality affect TV demand.	**Short-term:** (1) Home advantage plus the difference between home and away team's points per game. Home advantage is the difference between points (per game) won by all home and away teams in last season; **Mid-term:** Game-significance: (2) teams in top 2 positions; (3) teams in top 2 vs. teams in positions 3–7; (4) teams in top 2 vs. team in positions 8–14; (5) teams in top 2 vs. teams in positions 15–20; (6) teams in positions 3–7 against similarly ranked teams.	(1) Negative significant only for the second half; (2) Positive significant regardless scheduling; (3) Positive significant; (4) Positive significant; (5) Positive significant; (6) Positive significant; (3-6) Only for the second half of the season.	Partly (depends on scheduling matters for both broadcasters and audience)

3	García and Rodríguez (2006)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	1st Division 2000–2003 Spain General ln(aud. sizes) OLS reg.	Whether the game is the Classico and seasonal components have an impact on TV demand.	**Short-term:** (1) Home advantage plus the difference between home and away team's points per game. Home advantage is the difference between points (per game) by all home and away teams in last season.	(1) Not significant for broadcasters. Negative significant for free-to-air channels and not significant for pay-tv channels.	Partly (depends upon TV network, matters for fans but not for broadcasters)
4	Johnsen and Solvoll (2007)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	1st Division 1998–2007 Norway, Denmark General Aud. sizes OLS reg.	TV demand depends on factors related to scheduling	**Short-term:** (1) Factor consisting of 4 items and denoting the difference in the number of points (per game) the home (away) team is behind the classifications leader.	(1) Not significant.	No
5	Buraimo (2008)	***Contest:*** ***Period:*** ***Country:*** ***Focus*** ***Dep. var:*** ***Model:***	2nd Division 1997–2004 England General ln(aud. sizes) 2SLS reg.	Larger stadium attendances have positive impact on TV demand.	**Short-term:** (1) Home advantage plus the difference between home and away team's points per game. Home advantage is the difference between points (per game) by all home and away teams in last season.	(1) Not significant.	No
6	Buraimo and Simmons (2009)	***Contest:*** ***Period:*** ***Country:*** ***Focus*** ***Dep. var*** ***Model:***	1st Division 2003–2007 Spain UOH ln(aud. sizes) 2SLS reg.	Home attendance has a positive effect on TV demand. The appearance of Barcelona and Real Madrid in any game leads to higher TV demand in general.	**Short-term:** (1) Absolute difference home/away win probabilities; additional interactions with: (2) Barcelona and; (3) Real Madrid.	(1) Negative significant; (2) Positive (in) significant; (3) Not significant.	Yes

(*continued*)

(continued)

#	*Author(s)*	*Data and method*	*General findings*	*CB measure*	*CB findings*	*UOH support*
7	Dietl et al. (2009)	***Contest:*** Bundesliga ***Period:*** 1998–2002 ***Country:*** Germany ***Focus:*** Football highlights ***Dep. var:*** ln(aud. sizes) ***Model:*** PW reg.	Scheduling, entertainment dimensions and alternative leisure activities have a significant impact on the TV demand for football highlights.	**Short-term:** (1) THEIL-Index, without draw probabilities; (2) Share of close games; (3) Difference in rankings; **Mid-term:** (4) GINI; (5) Point difference between first and last ranked team; (6) Variation coefficient of achieved points; (7) Vrooman-Index.	(1) Not significant; (2) Not significant; (3) Not significant; (4) Not significant; (5) Not significant; (6) Not significant; (7) Not significant.	No
8	Nuesch and Franck (2009)	***Contest:*** National games ***Period:*** 2000–2006 ***Country:*** Switzerland ***Focus:*** Patriotism ***Dep. var:*** Aud. sizes ***Model:*** OLS reg.	TV demand is driven by the expected game quality, and patriotism.	**Short-term:** (1) Absolute difference between scores in the World Football Elo Rating.	(1) Not significant.	No
9	Alavy et al. (2010)	***Contest:*** 1st Division ***Period:*** 2002–2006 ***Country:*** England ***Focus:*** UOH ***Dep. var:*** ln(mbm ratings) ***Model:*** AR one-step and two-step GMM	Games that end in victories have a higher TV demand than games that end in draws.	**Short-term:** (1) Squared difference between home and away team win probabilities; (2) Probability of a draw; (3) Sum of squared deviations from initial probabilities.	(1) Positive significance; (2) Negative significance; (3) Positive significance.	Partly (fans prefer eventful games in which one side wins, rather than draws)

10	Feddersen and Rott (2011)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	National games 1993–2008 Germany General Aud. sizes OLS reg.	Viewers prefer to watch star players and high-quality opponents. Factors such as scheduling and weather also affect TV demand.	*None*	*None*	*None*
11	Meier and Leinwather (2012)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	National games 1995–2011 Germany Gender ln(aud. sizes) PW- reg.	Female audience is similar to male audience though the former responds more strongly to opportunity costs.	**Short-term:** (1) Win probability based on differences between the FIFA rankings of the teams.	(1) Negative significant.	Yes
12	Di Domizio (2013)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	1st Division 2009–2010 Italy General TV shares OLS reg.	Market size, the quality of the game schedule and seasonal placement of the games significantly affect TV demand.	**Short-term:** In 6 different models: (1) Home win probability (squared); (2) Away win probability (squared); (3) Absolute win probability difference.	(1) Significant, U-shaped (x1), not significant (x2); (2) Significant, U-shaped (x2), not significant (x1); (3) Not significant (x3), negative significant (x3).	Partly (models with homogenous sample point towards no support)
13	Meier and Leinwather (2013)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	National games 1995–2011 Germany Ethnic diversity ln(TV ratings) Linear reg. with OLS reg with PCSE	Audience has a distaste for a multi-ethnic national team. National team is of less importance for immigrants.	**Short-term:** (1) Win probability based on the differences between the FIFA rankings of the teams.	(1) Not significant.	No

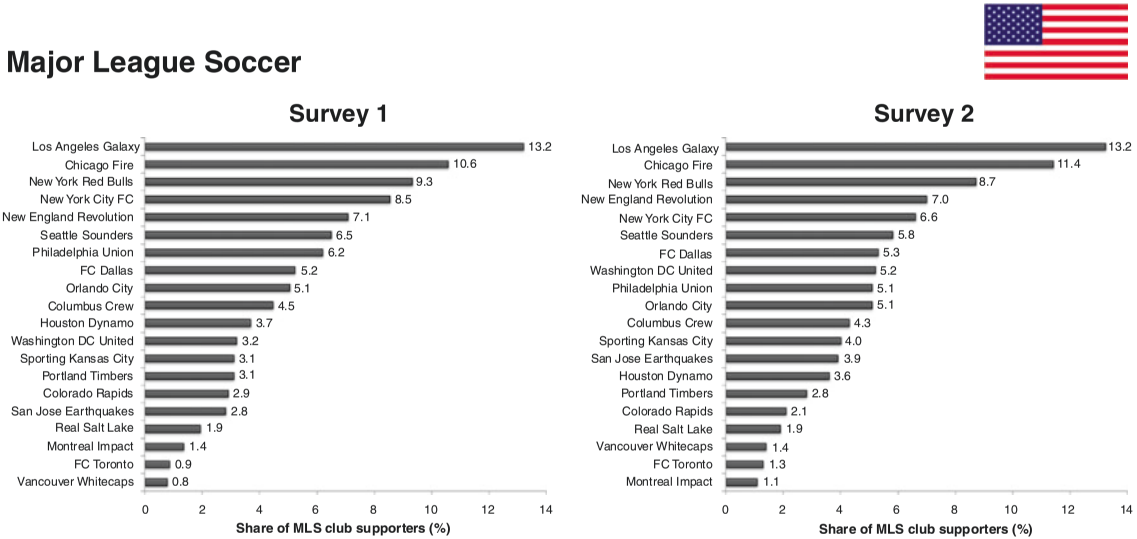
(*continued*)

(continued)

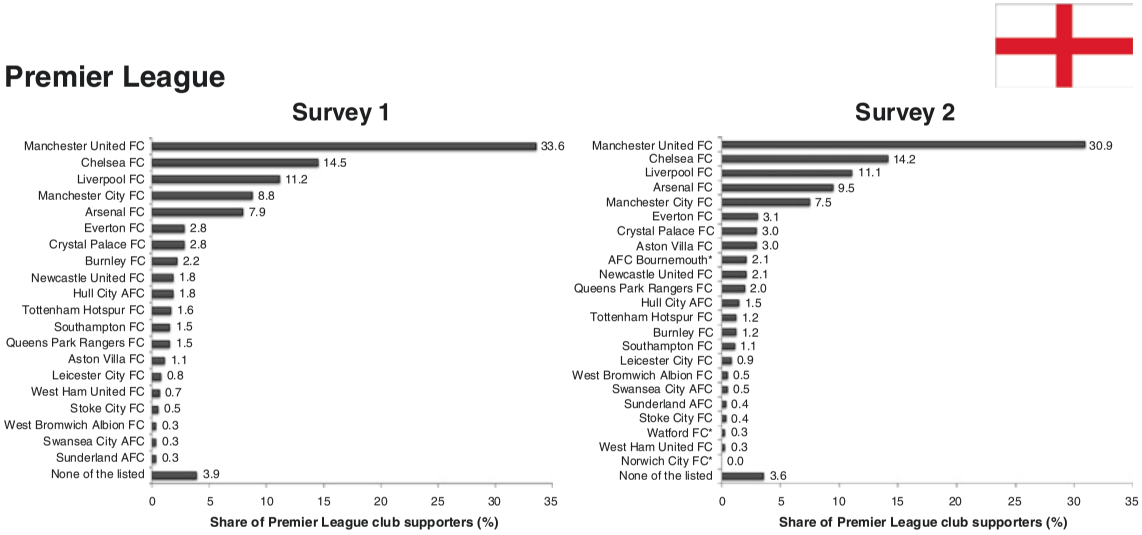
#	*Author(s)*	*Data and method*	*General findings*	*CB measure*	*CB findings*	*UOH support*
14	Buraimo and Simmons (2015)	***Contest:*** 1st Division ***Period:*** 2000–2008 ***Country:*** England ***Focus:*** UOH, quality ***Dep. var:*** ln(aud. sizes) ***Model:*** Heckman selection/OLS reg	There is a preference for talent. TV demand is influenced more by the teams' identity than by their performances.	**Short-term:** (1) Absolute win probability difference; (2) Theil index; **Mid-term:** Contention for: (3) Championship; (4) European competition; (5) Avoiding relegation.	(1) Not significant; (2) Not significant; (3) Not significant; (4) Not significant; (5) Not significant.	No
15	Cox (2015)	***Contest:*** 1st Division ***Period:*** 2004–2012 ***Country:*** England ***Focus:*** UOH ***Dep. var:*** ln(aud. sizes) ***Model:*** Cross-sectional OLS	Team performances have no impact, and the number of goals conceded by the home team has a positive impact on TV demand.	**Short-term:** (1) Home win probability (squared); (2) Dummy variables for distinct home win probability values; (3) Probability of a draw; (4) Absolute win probability difference.	(1) Not significant; (2) Positive (in) significant for a home win probability (36%–45%); (3) Not significant; (4) Negative (in) significant.	No (findings favouring UOH are barely statistically significant)
16	Pérez et al. (2015)	***Contest:*** 1st Division ***Period:*** 2008–2012 ***Country:*** Spain ***Focus:*** General interest ***Dep. var:*** ln(aud. sizes) ***Model:*** FE reg	With the exception of games played by local teams, Real Madrid and Barcelona, there is no nationwide 'general interest' in free-to-air broadcasting of football games.	**Mid-term:** (1) Dummy variable denoting whether a game was decisive for the relegation, championship and European qualification race.	(1) Positive significant.	Yes

17	Caruso et al. (2016)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	1st Division 2008–2014 Italy General ln(aud. sizes) ln(TV shares) OLS reg	Fans are attracted by talent and top-ranked teams. As such entertainment aspects are crucial for TV demand.	**Short-term:** (1) Absolute difference in win probabilities; (2) Absolute difference payroll.	(1) Not significant; (2) Positive significant.	No
18	Pawlowski et al. (2016)	***Contest:*** ***Period:*** ***Country:*** ***Focus:*** ***Dep. var:*** ***Model:***	1st Division 2014 Germany UOH lTC (survey) Logit (pooled & FE)	Football fans do not value game uncertainty which can be explained by them exhibiting loss aversion.	**Short-term:** (1) Respondent evaluations of home win probability (squared).	(1) Significant; U-shaped.	No

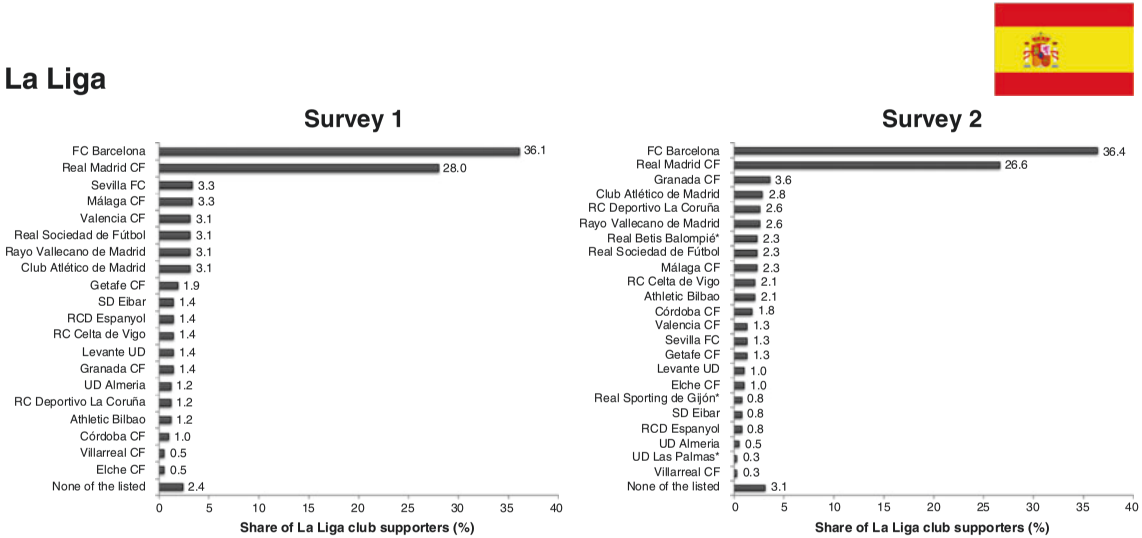
Abbreviations: *AR* Arellano-Bond, *aud* Audience, *CB* Competitive balance, *FE* Fixed effects, *FIFA* Fédération Internationale de Football Association; *GMM* Generalised method of moments; *ITC* Intention-to-consume; *Ln* Logarithm, *Max* Maximum; *mbm* Minute-by-minute, *Min* Minimum, *OLS* Ordinary least squares, *PCSE* Panel-corrected standard error, *PW* Prais-Winsten, *Reg* Regression, *TV* Television, *UOH* Uncertainty of outcome hypothesis, *2SLS* Two-stage least squares.



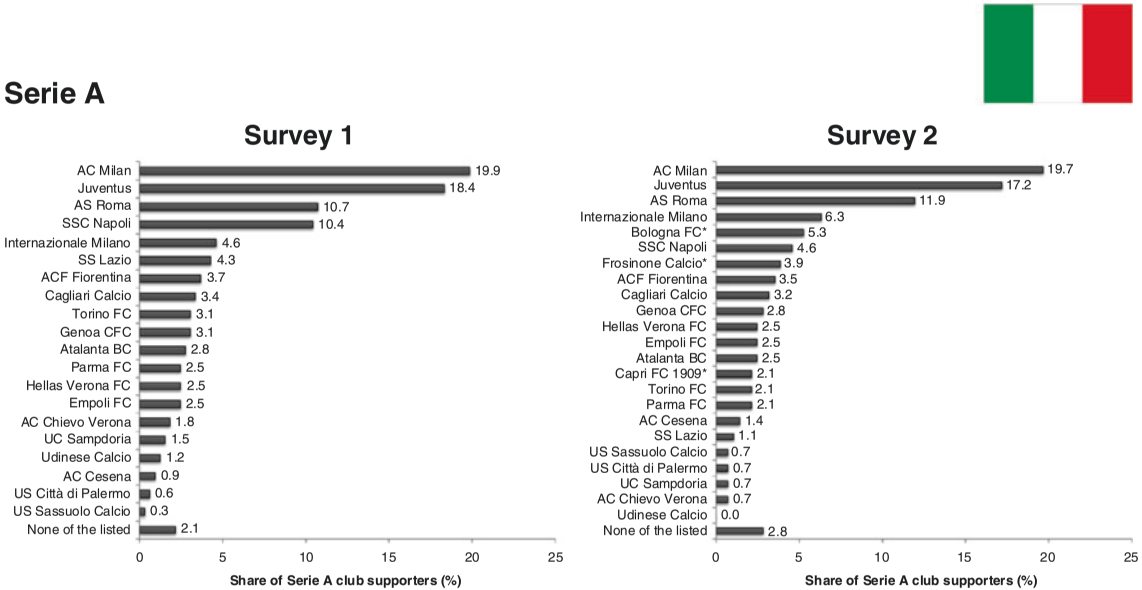
Notes: In Survey 1 and Survey 2 teams are represented that participated in the 2015 MLS campaign



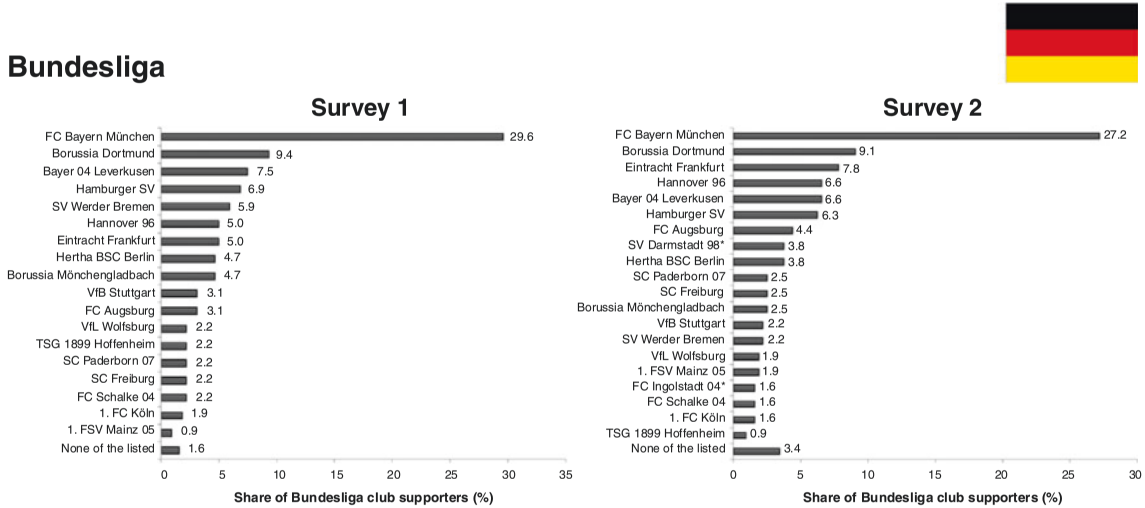
Notes: In Survey 1 teams are represented that participated in the 2014–2015 La Liga campaign. In Survey 2 teams are represented that participated in the 2014–2015 La Liga campaign, plus the newly promoted teams (*) for the 2015–2016 season



Notes: In Survey 1 teams are represented that participated in the 2014–2015 La Liga campaign. In Survey 2 teams are represented that participated in the 2014–2015 La Liga campaign, plus the newly promoted teams (*) for the 2015–2016 season

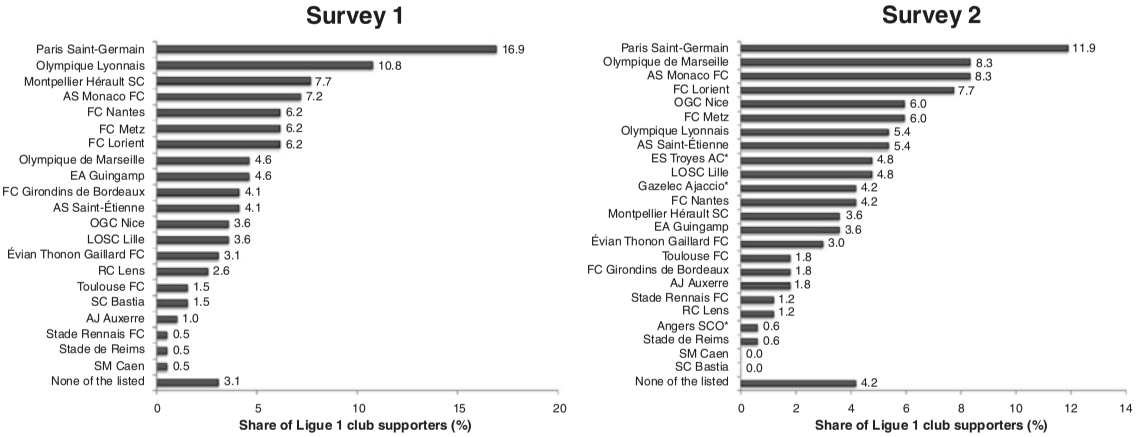


Notes: In Survey 1 teams are represented that participated in the 2014–2015 Serie A campaign. In Survey 2 teams are represented that participated in the 2014–2015 Serie A campaign, plus the newly promoted teams (*) for the 2015–2016 season



Notes: In Survey 1 teams are represented that participated in the 2014–2015 Bundesliga campaign. In Survey 2 teams are represented that participated in the 2014–2015 Bundesliga campaign, plus the newly promoted teams (*) for the 2015–2016 season

Ligue 1



Notes: In Survey 1 teams are represented that participated in the 2014–2015 Ligue 1 campaign. In Survey 2 teams are represented that participated in the 2014–2015 Ligue 1 campaign, plus the newly promoted teams (*) for the 2015–2016 season

A.3 Detailed Information About the Viewership Models

Table A.3.1 Description of the variables included in the models

Variables	*Type*	*Description*
Viewing behaviour		
Viewer	Dummy	Viewer of telecasts in league *k* (0 if 'none'; 1 if 'one game per week'; 2 if 'two to four games per week'; 3 if 'five or more games per week')
Willingness-to-pay		
WTP	Metric	WTP statements for league k add-on subscription package
Interest in football		
MLGINT	Dummy	Moderate interest in league *k*: 7-point scale (1 if value = 4)
HLGINT	Dummy	High interest in league *k*: 7-point scale (1 if value≥5)
Supporter status		
MLSSUP	Dummy	Supporter of a Major League Soccer club (1 if 'yes')
LGKSUP	Dummy	Supporter of a club in league *k* (1 if 'yes')
TOP5SUP	Dummy	Supporter of a TOP 5 league club (1 if 'yes')
Perceived competitive balance		
PCB	Metric	Perceived competitive balance in league *k*: 11-point scale
Perceived championship uncertainty		
PCU	Metric	Difficulty in predicting the season's champion in league *k*: 11-point scale
Accessibility of the leagues		
ACC	Dummy	TV programming includes league *k* (1 if 'yes')
Socio-demographic characteristics		
EURBKGRD	Dummy	European background (1 if 'Born in Europe or is (was) European citizen')
HISP	Dummy	Hispanophone, language at home apart from English (1 if 'Spanish')
WHITE	Dummy	Racial background (1 if 'white')
SOMECOL	Dummy	Highest educational level is some college/associate degree (1 if 'yes')
COLGRAD	Dummy	Highest educational level is college graduation or higher (1 if 'yes')
UNEMP	Dummy	Currently unemployed and/or seeking a job (1 if 'yes')
INC20–49.9	Dummy	Gross household income between USD 20K and 49.9K (1 if 'yes')
INC50–74.9	Dummy	Gross household income between USD 50K and 74.9K (1 if 'yes')
INC75–99.9	Dummy	Gross household income between USD 75K and 99.9K (1 if 'yes')
INC100–149.9	Dummy	Gross household income between USD 100K and 149.9K (1 if 'yes')
INC150M	Dummy	Gross household income more than USD 150K (1 if 'yes')
AGE	Metric	Age (in years)
MALE	Dummy	Male (1 if 'yes')
MARRIED	Dummy	Marital status (1 if 'married')
HSIZE	Metric	Household size

Table A.3.1 (continued)

Variables	*Type*	*Description*
Perceived friendliness towards the USA		
FRIEND	Dummy	League's country of origin *k* is friendly: 5-point scale (1 if value≥4)
Time zone		
EST	Dummy	Residence in Eastern Standard Time region (−5h) (1 if 'yes')
CST	Dummy	Residence in Central Standard Time region (−6h) (1 if 'yes')
MST	Dummy	Residence in Mountain Standard Time region (−7h) (1 if 'yes')
PST/AKST/ HST	Dummy	Residence in Pacific (−8h), Alaskan (−9h) or Hawaii (−10) Standard Time region (1 if 'yes')
Distance from MLS city		
R50M	Dummy	Residence in a radius of 50 miles of a city hosting an MLS club (1 if 'yes')

Descriptive statistics conditional on the number of games watched on a typical matchday/week

Table A.3.2 Major League Soccer

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	13%	47%	74%	95%	15%	60%	87%	97%
Moderate league interest	15%	25%	15%	4%	17%	22%	10%	2%
Supporter status								
Supporter of an MLS club	8%	32%	52%	76%	11%	40%	57%	75%
Supporter of a TOP5 club	17%	37%	52%	77%	15%	38%	56%	75%
Accessibility								
TV prog. includes MLS	22%	67%	85%	95%	31%	66%	80%	92%
Socio-demographic characteristics								
European background	5%	2%	4%	5%	4%	3%	5%	6%
Hispanophone	6%	10%	13%	20%	6%	9%	16%	17%
White	84%	80%	79%	77%	82%	79%	72%	72%
Some college	35%	37%	35%	26%	36%	36%	35%	32%
College graduate	50%	53%	51%	61%	50%	50%	52%	53%
Unemployed	7%	7%	7%	2%	8%	6%	4%	2%
Less than $20K	16%	11%	8%	4%	12%	8%	6%	5%
Income $20K–$49.9K	33%	26%	28%	19%	32%	30%	23%	17%
Income $50K–$74.9K	22%	25%	23%	23%	23%	22%	27%	28%
Income $75K–$99.9K	13%	15%	16%	21%	14%	16%	18%	18%
Income $100K–$149.9K	12%	16%	17%	23%	14%	16%	19%	24%
Income more than $150K	5%	7%	8%	10%	6%	8%	7%	7%
Age	51	49	47	42	55	52	47	42
Male	49%	52%	51%	64%	51%	57%	58%	66%
Married	55%	62%	66%	75%	60%	62%	69%	75%
Household size	2	3	3	3	2	3	3	3
Time zone								
Eastern	50%	51%	50%	54%	53%	48%	52%	52%
Central	27%	28%	25%	23%	27%	28%	24%	24%
Mountain	8%	5%	6%	5%	7%	4%	6%	4%
Pacific & Hawaii	15%	16%	19%	18%	14%	20%	18%	20%
Distance from MLS city								
Radius of 50 miles	30%	34%	37%	53%	30%	36%	41%	50%
Observations	871	552	778	444	998	709	654	276

Table A.3.3 Premier League

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	10%	52%	77%	97%	11%	62%	87%	97%
Moderate league interest	13%	23%	13%	2%	15%	22%	10%	2%
Supporter status								
Supporter of an MLS club	19%	43%	50%	63%	21%	46%	54%	60%
Supporter of an EPL club	6%	35%	53%	79%	5%	35%	59%	83%
Accessibility								
TV prog. includes EPL	14%	64%	85%	95%	18%	64%	83%	93%
Socio-demographic characteristics								
European background	3%	5%	5%	6%	3%	5%	5%	7%
Hispanophone	6%	11%	14%	22%	5%	10%	17%	22%
White	85%	78%	78%	76%	84%	75%	73%	64%
Some college	38%	31%	34%	26%	38%	35%	32%	30%
College graduate	47%	58%	54%	62%	48%	52%	54%	59%
Unemployed	7%	8%	5%	3%	7%	6%	4%	2%
Less than $20K	15%	10%	8%	4%	11%	7%	6%	6%
Income $20K–$49.9K	33%	28%	24%	20%	32%	28%	23%	15%
Income $50K–$74.9K	24%	21%	24%	22%	24%	24%	25%	24%
Income $75K–$99.9K	12%	15%	19%	20%	15%	16%	16%	19%
Income $100K–$149.9K	11%	18%	19%	24%	12%	17%	21%	31%
Income more than $150K	5%	8%	7%	10%	6%	7%	9%	6%
Age	52	47	46	42	56	50	46	40
Male	44%	54%	56%	71%	49%	59%	63%	68%
Married	57%	61%	69%	73%	61%	61%	71%	81%
Household size	2	3	3	3	2	3	3	4
Perceived friendliness towards the USA								
Friendly	76%	82%	86%	87%	81%	86%	87%	90%
Time zone								
Eastern	48%	55%	53%	50%	51%	52%	51%	50%
Central	30%	24%	23%	23%	27%	27%	24%	27%
Mountain	7%	5%	6%	5%	6%	4%	4%	6%
Pacific & Hawaii	15%	16%	18%	21%	16%	17%	21%	17%
Distance from MLS city								
Radius of 50 miles	29%	37%	41%	51%	32%	34%	42%	56%
Observations	1117	491	631	406	1263	603	535	236

Table A.3.4 UEFA Champions League

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	9%	48%	80%	97%	10%	60%	86%	96%
Moderate league interest	14%	24%	13%	2%	15%	23%	11%	4%
Supporter status								
Supporter of an MLS club	25%	43%	53%	61%	24%	51%	56%	59%
Supporter of a TOP5 club	18%	54%	70%	87%	15%	53%	74%	91%
Accessibility								
TV prog. includes UCL	9%	52%	77%	93%	10%	52%	76%	90%
Socio-demographic characteristics								
European background	3%	5%	7%	8%	3%	5%	7%	9%
Hispanophone	6%	13%	19%	23%	5%	12%	20%	26%
White	85%	77%	75%	75%	84%	73%	69%	62%
Some college	37%	33%	31%	25%	38%	34%	29%	29%
College graduate	48%	52%	58%	67%	47%	52%	61%	59%
Unemployed	7%	6%	6%	2%	7%	5%	4%	2%
Less than $20K	14%	9%	6%	4%	10%	7%	5%	5%
Income $20K–$49.9K	32%	26%	26%	16%	32%	27%	21%	14%
Income $50K–$74.9K	24%	21%	22%	22%	24%	24%	26%	25%
Income $75K–$99.9K	13%	17%	18%	22%	15%	16%	16%	21%
Income $100K–$149.9K	12%	19%	19%	27%	13%	19%	22%	29%
Income more than $150K	5%	8%	9%	9%	6%	7%	10%	6%
Age	52	47	44	39	55	50	44	38
Male	46%	53%	62%	67%	50%	59%	67%	70%
Married	58%	62%	70%	77%	61%	62%	72%	81%
Household size	2	3	3	4	2	3	3	4
Time zone								
Eastern	51%	48%	53%	52%	51%	52%	51%	49%
Central	28%	28%	21%	23%	27%	25%	23%	25%
Mountain	7%	6%	6%	6%	6%	5%	5%	5%
Pacific & Hawaii	15%	18%	20%	20%	16%	17%	22%	21%
Distance from MLS city								
Radius of 50 miles	30%	39%	44%	53%	32%	37%	44%	56%
Observations	1437	385	490	333	1513	508	427	189

Table A.3.5 La Liga

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	7%	47%	79%	97%	8%	55%	88%	99%
Moderate league interest	12%	29%	14%	3%	13%	24%	8%	0%
Supporter status								
Supporter of an MLS club	29%	49%	54%	57%	28%	55%	55%	52%
Supporter of an LFP club	2%	17%	42%	73%	2%	20%	50%	69%
Accessibility								
TV prog. includes LFP	6%	38%	68%	89%	7%	40%	72%	89%
Socio-demographic characteristics								
European background	3%	6%	5%	11%	3%	6%	6%	9%
Hispanophone	4%	17%	25%	39%	4%	17%	27%	37%
White	85%	76%	72%	67%	85%	69%	62%	54%
Some college	36%	31%	33%	24%	37%	36%	30%	24%
College graduate	49%	57%	58%	65%	48%	51%	61%	66%
Unemployed	8%	4%	4%	3%	7%	5%	3%	1%
Less than $20K	13%	6%	6%	3%	10%	8%	3%	6%
Income $20K–$49.9K	30%	30%	24%	16%	31%	25%	20%	14%
Income $50K–$74.9K	24%	23%	20%	20%	24%	27%	25%	23%
Income $75K–$99.9K	14%	15%	18%	22%	15%	14%	18%	23%
Income $100K–$149.9K	13%	19%	23%	30%	14%	19%	27%	27%
Income more than $150K	6%	7%	8%	10%	7%	7%	8%	7%
Age	51	44	41	38	55	46	42	35
Male	49%	53%	56%	72%	54%	55%	65%	65%
Married	59%	63%	72%	78%	61%	63%	76%	83%
Household size	2	3	3	4	2	3	3	4
Perceived friendliness towards the USA								
Friendly	56%	67%	73%	82%	55%	62%	77%	82%
Time zone								
Eastern	51%	50%	54%	49%	52%	48%	50%	48%
Central	27%	27%	18%	26%	27%	26%	22%	22%
Mountain	7%	4%	5%	6%	5%	7%	6%	4%
Pacific & Hawaii	15%	19%	23%	20%	15%	19%	22%	26%
Distance from MLS city								
Radius of 50 miles	31%	42%	47%	57%	32%	40%	48%	61%
Observations	1747	305	356	237	1794	366	320	157

Table A.3.6 *Serie A*

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	8%	52%	80%	95%	8%	59%	85%	95%
Moderate league interest	12%	27%	13%	4%	14%	25%	11%	5%
Supporter status								
Supporter of an MLS club	29%	49%	61%	56%	28%	57%	53%	55%
Supporter of an ISA club	1%	17%	32%	54%	2%	18%	35%	53%
Accessibility								
TV prog. includes ISA	4%	35%	64%	82%	5%	36%	64%	85%
Socio-demographic characteristics								
European background	3%	7%	6%	7%	3%	6%	5%	10%
Hispanophone	6%	19%	21%	29%	6%	17%	23%	23%
White	84%	73%	72%	78%	83%	71%	63%	63%
Some college	36%	31%	28%	26%	37%	31%	32%	28%
College graduate	50%	55%	62%	63%	48%	57%	57%	60%
Unemployed	7%	4%	5%	1%	6%	5%	4%	2%
Less than $20K	13%	8%	5%	2%	10%	7%	3%	6%
Income $20K–$49.9K	30%	28%	23%	15%	31%	22%	21%	14%
Income $50K–$74.9K	24%	23%	21%	22%	24%	25%	26%	24%
Income $75K–$99.9K	14%	13%	18%	28%	15%	16%	19%	18%
Income $100K–$149.9K	13%	22%	25%	25%	14%	21%	25%	31%
Income more than $150K	6%	8%	9%	7%	6%	10%	6%	8%
Age	51	44	40	39	54	46	40	38
Male	50%	54%	60%	63%	54%	60%	59%	69%
Married	59%	65%	70%	80%	61%	67%	78%	79%
Household size	2	3	3	4	2	3	3	4
Perceived friendliness towards the USA								
Friendly	60%	64%	76%	84%	57%	67%	76%	89%
Time zone								
Eastern	51%	53%	52%	50%	51%	51%	52%	50%
Central	27%	26%	22%	21%	28%	25%	21%	22%
Mountain	7%	5%	5%	5%	6%	3%	5%	6%
Pacific & Hawaii	15%	16%	21%	24%	15%	20%	22%	22%
Distance from MLS city								
Radius of 50 miles	32%	37%	49%	59%	32%	42%	50%	57%
Observations	1764	332	336	213	1820	385	301	131

Table A.3.7 Bundesliga

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	8%	50%	78%	95%	8%	56%	83%	98%
Moderate league interest	14%	25%	16%	4%	14%	24%	14%	2%
Supporter status								
Supporter of an MLS club	29%	52%	57%	60%	28%	55%	56%	46%
Supporter of a GBL club	2%	16%	34%	55%	2%	20%	38%	55%
Accessibility								
TV prog. includes GBL	3%	32%	55%	87%	5%	37%	59%	84%
Socio-demographic characteristics								
European background	3%	5%	8%	9%	3%	7%	7%	9%
Hispanophone	6%	20%	20%	31%	6%	14%	23%	27%
White	83%	76%	72%	74%	83%	71%	64%	66%
Some college	36%	32%	29%	22%	37%	34%	29%	25%
College graduate	49%	58%	60%	66%	48%	55%	59%	65%
Unemployed	7%	6%	4%	2%	6%	5%	4%	2%
Less than $20K	13%	9%	4%	5%	10%	7%	5%	
Income $20K–$49.9K	30%	29%	20%	13%	31%	25%	22%	10%
Income $50K–$74.9K	24%	22%	21%	20%	24%	24%	26%	20%
Income $75K–$99.9K	14%	14%	21%	24%	16%	13%	19%	17%
Income $100K–$149.9K	13%	19%	25%	28%	13%	22%	22%	37%
Income more than $150K	6%	7%	9%	9%	7%	8%	7%	10%
Age	51	43	41	37	54	47	41	37
Male	50%	55%	58%	68%	53%	59%	66%	65%
Married	59%	65%	75%	77%	61%	66%	75%	85%
Household size	3	3	3	4	2	3	3	4
Perceived friendliness towards the USA								
Friendly	60%	65%	71%	84%	61%	68%	76%	86%
Time zone								
Eastern	51%	48%	55%	49%	52%	53%	43%	53%
Central	28%	25%	19%	24%	27%	24%	28%	22%
Mountain	7%	5%	6%	4%	6%	4%	6%	6%
Pacific & Hawaii	15%	21%	20%	23%	15%	19%	24%	19%
Distance from MLS city								
Radius of 50 miles	32%	40%	44%	59%	32%	41%	45%	62%
Observations	1832	299	320	194	1767	430	315	125

Table A.3.8 Ligue 1

Number of games	*Survey 1*				*Survey 2*			
	0	*1*	*2–4*	*≥5*	*0*	*1*	*2–4*	*≥5*
Interest								
High league interest	7%	47%	79%	95%	6%	54%	84%	98%
Moderate league interest	12%	31%	15%	4%	15%	26%	13%	2%
Supporter status								
Supporter of an MLS club	30%	53%	56%	63%	30%	54%	56%	50%
Supporter of an L1 club	1%	6%	25%	51%	1%	11%	23%	47%
Accessibility								
TV prog. includes L1	3%	28%	58%	80%	4%	31%	58%	82%
Socio-demographic characteristics								
European background	3%	6%	6%	10%	3%	6%	8%	7%
Hispanophone	7%	20%	25%	26%	7%	16%	23%	26%
White	84%	70%	75%	69%	83%	66%	64%	62%
Some college	36%	32%	27%	26%	37%	30%	31%	27%
College graduate	50%	55%	63%	63%	48%	58%	57%	62%
Unemployed	7%	5%	4%	3%	6%	5%	2%	3%
Less than $20K	13%	9%	4%	3%	10%	6%	6%	5%
Income $20K–$49.9K	30%	25%	20%	14%	30%	25%	18%	11%
Income $50K–$74.9K	23%	24%	22%	21%	24%	23%	27%	25%
Income $75K–$99.9K	14%	13%	21%	26%	15%	16%	16%	21%
Income $100K–$149.9K	13%	21%	26%	24%	14%	23%	25%	32%
Income more than $150K	6%	8%	7%	10%	7%	7%	9%	6%
Age	51	43	39	38	54	45	40	35
Male	51%	54%	57%	66%	55%	57%	60%	67%
Married	59%	67%	75%	78%	61%	70%	75%	82%
Household size	3	3	3	4	2	3	3	4
Perceived friendliness towards the USA								
Friendly	53%	63%	73%	81%	51%	67%	77%	88%
Time zone								
Eastern	51%	53%	53%	44%	51%	52%	48%	50%
Central	27%	24%	20%	28%	27%	23%	24%	23%
Mountain	7%	6%	5%	4%	6%	5%	5%	8%
Pacific & Hawaii	15%	18%	21%	24%	16%	21%	23%	19%
Distance from MLS city								
Radius of 50 miles	32%	44%	48%	57%	33%	41%	49%	58%
Observations	1894	306	300	145	1912	376	244	105

Table A.3.9 Multivariate ordered probit estimates (Survey 1)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
HLGINT	0.787***	0.940***	1.037***	0.992***	0.896***	1.042***	1.022***	1.162***	1.245***	1.323***	1.338***	1.214***	1.349***	1.353***
	(0.081)	(0.083)	(0.088)	(0.090)	(0.089)	(0.088)	(0.093)	(0.062)	(0.066)	(0.067)	(0.075)	(0.072)	(0.071)	(0.075)
MLGINT	0.343***	0.460***	0.541***	0.602***	0.572***	0.599***	0.647***	0.697***	0.741***	0.719***	0.848***	0.764***	0.822***	0.871***
	(0.083)	(0.083)	(0.088)	(0.090)	(0.091)	(0.090)	(0.086)	(0.063)	(0.064)	(0.070)	(0.071)	(0.070)	(0.069)	(0.070)
PCB	0.095***	0.096***	0.129***	0.121***	0.127***	0.126***	0.155***							
	(0.013)	(0.013)	(0.015)	(0.015)	(0.016)	(0.015)	(0.016)							
MLSSUP	0.516***	0.071	0.050	0.012	0.031	0.086	0.081	0.651***	0.155***	0.131***	0.115**	0.136***	0.115***	0.181***
	(0.057)	(0.056)	(0.059)	(0.063)	(0.063)	(0.063)	(0.065)	(0.049)	(0.046)	(0.049)	(0.050)	(0.048)	(0.046)	(0.050)
LGKSUP		0.296***		0.375***	0.448***	0.260***	0.407***		0.368***		0.496***	0.491***	0.335***	0.516***
		(0.051)		(0.064)	(0.057)	(0.066)	(0.075)		(0.049)		(0.062)	(0.057)	(0.063)	(0.073)
TOP5SUP	0.047		0.145**					0.015		0.181***				
	(0.054)		(0.056)					(0.049)		(0.052)				
ACC	0.680***	0.763***	0.721***	0.635***	0.442***	0.635***	0.520***	0.841***	0.931***	0.927***	0.721***	0.601***	0.719***	0.629***
	(0.062)	(0.061)	(0.057)	(0.063)	(0.058)	(0.062)	(0.069)	(0.050)	(0.051)	(0.051)	(0.056)	(0.055)	(0.058)	(0.067)
EURBKGRD	0.002	−0.185	0.152	0.205	−0.071	0.179	0.150	-0.088	-0.140	0.159	0.134	-0.025	0.211*	0.096
	(0.130)	(0.123)	(0.123)	(0.139)	(0.136)	(0.131)	(0.137)	(0.114)	(0.120)	(0.119)	(0.130)	(0.127)	(0.124)	(0.125)
HISP	0.150*	0.176**	0.128	0.380***	0.210**	0.146	0.025	0.205***	0.257***	0.188**	0.532***	0.333***	0.299***	0.211***
	(0.084)	(0.083)	(0.084)	(0.091)	(0.086)	(0.091)	(0.087)	(0.075)	(0.075)	(0.076)	(0.084)	(0.078)	(0.081)	(0.081)
WHITE	−0.009	0.068	−0.050	−0.085	−0.038	−0.097	−0.188**	−0.079	0.008	−0.111*	−0.106	−0.077	−0.106	−0.214***
	(0.069)	(0.069)	(0.073)	(0.079)	(0.081)	(0.081)	(0.082)	(0.059)	(0.061)	(0.064)	(0.069)	(0.070)	(0.069)	(0.070)
SOMECOL	−0.211**	−0.172*	−0.023	−0.109	−0.151	−0.196*	−0.174	−0.132*	−0.154**	−0.009	−0.087	−0.206**	−0.175*	−0.142
	(0.086)	(0.091)	(0.094)	(0.106)	(0.114)	(0.113)	(0.114)	(0.074)	(0.078)	(0.084)	(0.092)	(0.095)	(0.092)	(0.097)
COLGRAD	−0.245***	−0.201**	−0.141	−0.265**	−0.328***	−0.279**	−0.381***	−0.179**	−0.178**	−0.027	−0.205**	−0.281***	−0.213**	−0.222**
	(0.086)	(0.090)	(0.096)	(0.107)	(0.112)	(0.113)	(0.116)	(0.075)	(0.077)	(0.083)	(0.092)	(0.094)	(0.091)	(0.098)
UNEMP	−0.251**	−0.067	−0.031	−0.110	−0.166	−0.250	0.040	−0.190*	−0.044	−0.029	−0.242	−0.167	−0.224*	0.042
	(0.108)	(0.122)	(0.129)	(0.169)	(0.181)	(0.163)	(0.166)	(0.097)	(0.105)	(0.113)	(0.149)	(0.144)	(0.135)	(0.138)
INC20–49.9	0.158	0.080	−0.000	0.339**	0.158	−0.188	0.093	0.185**	0.168*	0.131	0.384***	0.328***	0.020	0.244*
	(0.107)	(0.116)	(0.122)	(0.143)	(0.148)	(0.139)	(0.153)	(0.087)	(0.095)	(0.106)	(0.123)	(0.120)	(0.114)	(0.126)

(*continued*)

Table A.3.9 (continued)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
INC50–74.9	0.252**	0.184	0.111	0.428***	0.293*	0.064	0.271*	0.240***	0.175*	0.163	0.404***	0.353***	0.145	0.335**
	(0.113)	(0.122)	(0.129)	(0.154)	(0.154)	(0.150)	(0.161)	(0.093)	(0.102)	(0.111)	(0.131)	(0.126)	(0.122)	(0.132)
INC75–99.9	0.348***	0.283**	0.222	0.478***	0.601***	0.208	0.356**	0.320***	0.289***	0.284**	0.434***	0.601***	0.266**	0.416***
	(0.126)	(0.134)	(0.144)	(0.165)	(0.168)	(0.163)	(0.175)	(0.103)	(0.111)	(0.121)	(0.140)	(0.134)	(0.131)	(0.141)
INC100–149.9	0.248*	0.245*	0.195	0.598***	0.454***	0.145	0.384**	0.284***	0.281**	0.280**	0.554***	0.557***	0.223*	0.470***
	(0.128)	(0.132)	(0.143)	(0.168)	(0.164)	(0.160)	(0.175)	(0.106)	(0.112)	(0.121)	(0.143)	(0.133)	(0.130)	(0.142)
INC150M	0.403***	0.293*	0.262*	0.568***	0.321*	0.176	0.278	0.399***	0.357***	0.320**	0.552***	0.404***	0.328**	0.382**
	(0.149)	(0.154)	(0.156)	(0.184)	(0.180)	(0.176)	(0.195)	(0.124)	(0.131)	(0.135)	(0.160)	(0.149)	(0.145)	(0.161)
AGE	−0.004*	−0.006**	−0.007***	−0.013***	−0.016***	−0.016***	−0.018***	−0.005***	−0.007***	−0.009***	−0.017***	−0.019***	−0.020***	−0.023***
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
MALE	0.103*	0.190***	0.153**	0.141**	0.045	0.041	−0.026	0.180***	0.295***	0.264***	0.218***	0.168***	0.171***	0.143**
	(0.054)	(0.056)	(0.060)	(0.063)	(0.063)	(0.065)	(0.066)	(0.047)	(0.049)	(0.051)	(0.054)	(0.054)	(0.055)	(0.057)
MARRIED	0.034	0.050	0.013	0.053	0.032	−0.037	0.110	0.093*	0.118**	0.036	0.061	0.119*	0.023	0.153**
	(0.065)	(0.068)	(0.074)	(0.080)	(0.081)	(0.084)	(0.086)	(0.055)	(0.057)	(0.062)	(0.068)	(0.066)	(0.069)	(0.070)
HSIZE	0.040	0.039	0.058**	0.022	0.022	0.025	−0.001	0.061***	0.054**	0.076***	0.038	0.030	0.055**	0.022
	(0.025)	(0.025)	(0.026)	(0.027)	(0.027)	(0.027)	(0.027)	(0.021)	(0.022)	(0.022)	(0.024)	(0.022)	(0.022)	(0.023)
FRIEND		−0.002		0.031	0.059	0.005	−0.002		0.026		0.081*	0.113**	0.024	0.073
		(0.062)		(0.058)	(0.056)	(0.057)	(0.056)		(0.052)		(0.048)	(0.047)	(0.046)	(0.047)
CST	−0.007	0.024	0.000	0.099	−0.036	−0.102	−0.047	0.011	−0.048	−0.018	0.090	−0.016	−0.104	−0.043
	(0.065)	(0.068)	(0.071)	(0.080)	(0.078)	(0.081)	(0.079)	(0.055)	(0.057)	(0.060)	(0.066)	(0.064)	(0.067)	(0.068)
MST	−0.133	0.110	0.136	0.066	−0.042	−0.218	−0.231	−0.199**	0.032	0.075	0.029	−0.102	−0.245*	−0.185
	(0.119)	(0.124)	(0.136)	(0.132)	(0.129)	(0.154)	(0.146)	(0.100)	(0.102)	(0.110)	(0.111)	(0.112)	(0.131)	(0.120)

PST/AKST/HST	−0.068	0.070	−0.011	−0.036	0.103	−0.019	0.005	−0.020	0.040	−0.023	−0.054	0.111	−0.017	0.003
	(0.073)	(0.074)	(0.078)	(0.082)	(0.083)	(0.082)	(0.087)	(0.063)	(0.066)	(0.069)	(0.074)	(0.075)	(0.073)	(0.076)
R50M	0.100*	0.110*	0.034	0.108	0.173***	0.090	0.109	0.125***	0.155***	0.142***	0.141**	0.174***	0.113**	0.179***
	(0.057)	(0.057)	(0.061)	(0.066)	(0.065)	(0.067)	(0.067)	(0.049)	(0.051)	(0.053)	(0.056)	(0.056)	(0.057)	(0.057)
μ1	0.634***	0.954***	1.211***	1.216***	0.832***	0.570**	0.662***	0.903***	1.142***	1.262***	1.130***	0.862***	0.552***	0.679***
	(0.206)	(0.214)	(0.219)	(0.234)	(0.271)	(0.244)	(0.249)	(0.163)	(0.176)	(0.185)	(0.196)	(0.209)	(0.195)	(0.192)
μ2	1.707***	2.050***	2.182***	2.132***	1.811***	1.472***	1.676***	1.849***	2.111***	2.115***	1.974***	1.730***	1.355***	1.574***
	(0.210)	(0.220)	(0.223)	(0.238)	(0.280)	(0.249)	(0.252)	(0.168)	(0.181)	(0.190)	(0.199)	(0.216)	(0.201)	(0.197)
μ3	3.060***	3.280***	3.413***	3.393***	2.912***	2.672***	2.918***	3.175***	3.336***	3.288***	3.180***	2.777***	2.480***	2.740***
	(0.216)	(0.226)	(0.232)	(0.243)	(0.293)	(0.258)	(0.258)	(0.174)	(0.187)	(0.195)	(0.203)	(0.225)	(0.208)	(0.203)
N	1,865							2,645						
Wald chi^2 (df)	(180)	2232.97***						(172)	3154.67***					

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League. Variables abbreviations and description is provided in Table A.3.1

Table A.3.10 Correlation matrix of the multivariate ordered probit models (Survey 1)

	Reduced sample (with perceptions)						*Full sample (without perceptions)*					
	MLS	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*
EPL	0.746***						0.748***					
	(0.041)						(0.035)					
UCL	0.648***	0.775***					0.579***	0.729***				
	(0.040)	(0.042)					(0.034)	(0.036)				
LFP	0.642***	0.703***	0.809***				0.627***	0.663***	0.737***			
	(0.042)	(0.048)	(0.046)				(0.035)	(0.038)	(0.038)			
ISA	0.611***	0.684***	0.723***	0.856***			0.593***	0.657***	0.729***	0.846***		
	(0.041)	(0.044)	(0.044)	(0.047)			(0.034)	(0.037)	(0.037)	(0.042)		
GBL	0.576***	0.739***	0.842***	0.778***	0.855***		0.552***	0.717***	0.808***	0.808***	0.909***	
	(0.040)	(0.042)	(0.046)	(0.047)	(0.050)		(0.034)	(0.036)	(0.038)	(0.041)	(0.043)	
L1	0.559***	0.680***	0.769***	0.847***	1.008***	0.829***	0.553***	0.633***	0.755***	0.861***	0.972***	0.883***
	(0.042)	(0.043)	(0.045)	(0.048)	(0.052)	(0.047)	(0.036)	(0.036)	(0.039)	(0.044)	(0.046)	(0.042)

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

Table A.3.11 Multivariate ordered probit estimates (Survey 2)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
HLGINT	0.970***	0.853***	0.875***	1.113***	1.122***	1.007***	1.066***	1.278***	1.221***	1.283***	1.371***	1.309***	1.291***	1.409***
	(0.098)	(0.097)	(0.086)	(0.094)	(0.094)	(0.088)	(0.094)	(0.067)	(0.071)	(0.069)	(0.074)	(0.071)	(0.068)	(0.075)
MLGINT	0.408***	0.398***	0.494***	0.499***	0.632***	0.501***	0.499***	0.635***	0.695***	0.749***	0.682***	0.799***	0.712***	0.757***
	(0.104)	(0.099)	(0.090)	(0.091)	(0.096)	(0.086)	(0.088)	(0.067)	(0.068)	(0.069)	(0.068)	(0.068)	(0.064)	(0.069)
PCB	0.104***	0.099***	0.109***	0.111***	0.074***	0.110***	0.099***							
	(0.015)	(0.013)	(0.016)	(0.016)	(0.017)	(0.015)	(0.017)							
PCU	−0.072*	−0.129***	−0.134***	−0.056	0.019	−0.082**	−0.039							
	(0.043)	(0.040)	(0.044)	(0.041)	(0.047)	(0.036)	(0.041)							
PCU SQ	0.009**	0.012***	0.014***	0.007**	0.001	0.010***	0.007**							
	(0.004)	(0.003)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)							
MLSSUP	0.440***	0.105*	0.145**	0.048	0.079	0.016	0.012	0.652***	0.276***	0.326***	0.272***	0.320***	0.213***	0.227***
	(0.057)	(0.059)	(0.061)	(0.065)	(0.066)	(0.065)	(0.067)	(0.051)	(0.050)	(0.053)	(0.056)	(0.055)	(0.055)	(0.057)
LGKSUP		0.484***		0.346***	0.250***	0.265***	0.242***		0.523***		0.396***	0.301***	0.346***	0.321***
		(0.054)		(0.066)	(0.065)	(0.065)	(0.080)		(0.048)		(0.061)	(0.060)	(0.057)	(0.071)
TOP 5 SUP	−0.006		0.142**					0.007		0.226***				
	(0.054)		(0.059)					(0.046)		(0.051)				
ACC	0.503***	0.654***	0.744***	0.494***	0.466***	0.478***	0.468***	0.522***	0.726***	0.786***	0.585***	0.526***	0.537***	0.532***
	(0.059)	(0.059)	(0.061)	(0.066)	(0.062)	(0.058)	(0.066)	(0.045)	(0.047)	(0.050)	(0.057)	(0.055)	(0.050)	(0.056)
EURBKGRD	−0.092	0.038	0.274**	0.404***	0.279*	0.351**	0.323**	−0.062	0.121	0.305***	0.468***	0.272**	0.385***	0.380***
	(0.128)	(0.128)	(0.131)	(0.142)	(0.151)	(0.144)	(0.146)	(0.116)	(0.114)	(0.118)	(0.124)	(0.127)	(0.127)	(0.129)
HISP	0.035	0.116	0.184*	0.337***	0.049	0.135	0.022	0.120	0.141*	0.250***	0.407***	0.135	0.274***	0.118
	(0.086)	(0.093)	(0.095)	(0.095)	(0.098)	(0.096)	(0.100)	(0.078)	(0.084)	(0.085)	(0.085)	(0.088)	(0.086)	(0.090)
WHITE	−0.036	−0.094	−0.038	−0.171**	−0.119	−0.085	−0.139	−0.076	−0.166**	−0.105	−0.217***	−0.216***	−0.112	−0.185**
	(0.071)	(0.077)	(0.080)	(0.080)	(0.084)	(0.081)	(0.085)	(0.061)	(0.067)	(0.069)	(0.071)	(0.074)	(0.071)	(0.075)

(*continued*)

Table A.3.11 (continued)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
SOMECOL	−0.147	−0.192**	−0.135	0.045	−0.021	−0.057	−0.034	−0.174**	−0.192**	−0.115	0.030	−0.045	−0.017	0.005
	(0.092)	(0.092)	(0.103)	(0.108)	(0.115)	(0.106)	(0.107)	(0.073)	(0.076)	(0.085)	(0.089)	(0.092)	(0.087)	(0.087)
COLGRAD	−0.333***	−0.274***	−0.146	0.015	−0.091	−0.143	−0.163	−0.349***	−0.286***	−0.080	−0.037	−0.111	−0.081	−0.094
	(0.093)	(0.091)	(0.104)	(0.110)	(0.115)	(0.107)	(0.111)	(0.073)	(0.076)	(0.084)	(0.090)	(0.091)	(0.086)	(0.089)
UNEMP	−0.358**	−0.227	−0.391**	−0.369**	−0.096	−0.105	−0.282*	−0.343***	−0.253**	−0.378***	−0.344***	−0.087	−0.125	−0.271*
	(0.142)	(0.150)	(0.162)	(0.152)	(0.166)	(0.138)	(0.171)	(0.113)	(0.121)	(0.135)	(0.130)	(0.137)	(0.112)	(0.139)
INC20–49.9	−0.140	−0.250*	−0.069	−0.128	0.115	−0.206	−0.299*	−0.043	−0.109	−0.045	−0.031	0.140	−0.150	−0.149
	(0.137)	(0.142)	(0.153)	(0.163)	(0.182)	(0.146)	(0.161)	(0.104)	(0.111)	(0.119)	(0.129)	(0.147)	(0.123)	(0.127)
INC50–74.9	−0.048	−0.266*	−0.029	−0.170	0.125	−0.145	−0.181	0.067	−0.105	0.008	0.012	0.186	−0.105	−0.039
	(0.145)	(0.150)	(0.162)	(0.171)	(0.189)	(0.153)	(0.170)	(0.110)	(0.118)	(0.126)	(0.136)	(0.153)	(0.129)	(0.136)
INC75–99.9	0.039	−0.246	0.039	−0.125	0.058	−0.204	−0.174	0.115	−0.081	−0.010	0.002	0.135	−0.170	−0.070
	(0.156)	(0.160)	(0.173)	(0.186)	(0.203)	(0.165)	(0.184)	(0.119)	(0.127)	(0.135)	(0.148)	(0.162)	(0.142)	(0.146)
INC100–149.9	0.056	−0.032	0.120	−0.082	0.225	0.059	−0.144	0.149	0.090	0.114	0.089	0.249	0.079	−0.014
	(0.154)	(0.158)	(0.171)	(0.183)	(0.197)	(0.163)	(0.180)	(0.120)	(0.127)	(0.136)	(0.148)	(0.161)	(0.140)	(0.146)
INC150M	0.094	−0.139	0.084	−0.059	0.093	0.131	−0.023	0.194	0.031	0.038	−0.006	0.197	0.040	0.011
	(0.175)	(0.173)	(0.192)	(0.209)	(0.219)	(0.189)	(0.201)	(0.138)	(0.141)	(0.154)	(0.167)	(0.180)	(0.161)	(0.161)
AGE	−0.009***	−0.009***	−0.014***	−0.018***	−0.014***	−0.014***	−0.018***	−0.012***	−0.013***	−0.015***	−0.022***	−0.019***	−0.018***	−0.023***
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
MALE	0.080	0.070	0.119*	0.050	0.091	0.052	0.006	0.205***	0.208***	0.279***	0.142**	0.228***	0.186***	0.147**
	(0.059)	(0.060)	(0.065)	(0.066)	(0.068)	(0.066)	(0.069)	(0.048)	(0.050)	(0.054)	(0.055)	(0.055)	(0.055)	(0.057)
MARRIED	0.031	0.041	0.018	0.144*	0.151*	0.101	0.115	0.051	0.066	0.005	0.098	0.089	0.072	0.081
	(0.072)	(0.074)	(0.078)	(0.084)	(0.088)	(0.081)	(0.090)	(0.058)	(0.060)	(0.065)	(0.068)	(0.071)	(0.066)	(0.072)
HSIZE	0.028	0.086***	0.043	0.052*	0.066**	0.065**	0.081***	0.053**	0.098***	0.070***	0.082***	0.088***	0.087***	0.076***
	(0.027)	(0.028)	(0.029)	(0.031)	(0.030)	(0.031)	(0.031)	(0.023)	(0.023)	(0.025)	(0.025)	(0.026)	(0.025)	(0.026)
FRIEND		−0.022		−0.017	0.137**	0.162***	0.154**		0.042		0.009	0.112**	0.136***	0.160***
		(0.070)		(0.060)	(0.059)	(0.056)	(0.060)		(0.057)		(0.047)	(0.046)	(0.045)	(0.048)
CST	−0.012	0.113	0.012	0.047	−0.087	0.131*	0.021	0.013	0.120**	0.035	0.031	−0.041	0.168***	−0.023
	(0.067)	(0.070)	(0.074)	(0.080)	(0.079)	(0.075)	(0.080)	(0.055)	(0.058)	(0.062)	(0.066)	(0.065)	(0.062)	(0.067)

MST	−0.019	−0.036	0.047	−0.060	0.003	0.033	0.033	−0.103	−0.052	−0.057	−0.111	−0.144	−0.134	−0.105
	(0.125)	(0.141)	(0.139)	(0.157)	(0.162)	(0.159)	(0.161)	(0.107)	(0.117)	(0.113)	(0.132)	(0.133)	(0.130)	(0.138)
PST/AKST/HST	−0.020	0.007	0.022	0.126	0.036	0.029	−0.035	0.038	−0.031	−0.036	0.058	0.003	−0.010	−0.043
	(0.075)	(0.077)	(0.083)	(0.088)	(0.084)	(0.088)	(0.089)	(0.063)	(0.066)	(0.071)	(0.075)	(0.073)	(0.075)	(0.076)
R50M	0.087	0.081	−0.024	0.052	0.084	0.100	−0.032	0.105**	0.106**	0.048	0.042	0.117**	0.130**	0.022
	(0.059)	(0.061)	(0.065)	(0.068)	(0.066)	(0.068)	(0.069)	(0.049)	(0.052)	(0.056)	(0.058)	(0.056)	(0.057)	(0.059)
μ1	0.165	0.129	0.356	0.646**	1.110***	0.721***	0.449*	0.304*	0.581***	0.777***	0.601***	0.959***	0.777***	0.483**
	(0.267)	(0.265)	(0.279)	(0.273)	(0.301)	(0.262)	(0.269)	(0.179)	(0.188)	(0.198)	(0.196)	(0.220)	(0.189)	(0.196)
μ2	1.439***	1.469***	1.635***	1.786***	2.257***	1.980***	1.745***	1.467***	1.780***	1.891***	1.649***	1.995***	1.856***	1.624***
	(0.272)	(0.272)	(0.285)	(0.276)	(0.302)	(0.270)	(0.273)	(0.184)	(0.195)	(0.202)	(0.198)	(0.223)	(0.197)	(0.203)
μ3	2.764***	2.827***	2.926***	3.136***	3.490***	3.272***	2.973***	2.700***	3.054***	3.093***	2.893***	3.127***	3.038***	2.743***
	(0.281)	(0.279)	(0.290)	(0.286)	(0.308)	(0.280)	(0.275)	(0.190)	(0.200)	(0.205)	(0.206)	(0.229)	(0.204)	(0.207)
N	1,690							2,645						
Wald chi^2 (df)	(194)	2164.73***						(173)	3043.79***					

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League. Variables abbreviations and description is provided in Table A.3.1

Table A.3.12 Correlation matrix of the multivariate ordered probit models (Survey 2)

	Reduced sample (with perceptions)						*Full sample (without perceptions)*					
	MLS	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*
EPL	0.776***						0.817***					
	(0.040)						(0.033)					
UCL	0.716***	0.790***					0.720***	0.820***				
	(0.039)	(0.044)					(0.033)	(0.039)				
LFP	0.701***	0.778***	0.807***				0.749***	0.789***	0.796***			
	(0.040)	(0.043)	(0.047)				(0.035)	(0.039)	(0.042)			
ISA	0.703***	0.742***	0.749***	0.813***			0.738***	0.781***	0.786***	0.882***		
	(0.044)	(0.049)	(0.046)	(0.048)			(0.037)	(0.041)	(0.040)	(0.043)		
GBL	0.677***	0.741***	0.770***	0.901***	0.849***		0.731***	0.776***	0.793***	0.988***	0.919***	
	(0.042)	(0.045)	(0.043)	(0.047)	(0.048)		(0.035)	(0.039)	(0.038)	(0.042)	(0.043)	
L1	0.727***	0.790***	0.786***	0.861***	0.936***	0.981***	0.776***	0.785***	0.814***	0.928***	0.984***	1.017***
	(0.043)	(0.041)	(0.046)	(0.051)	(0.050)	(0.051)	(0.037)	(0.036)	(0.040)	(0.045)	(0.044)	(0.045)

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League

Table A.3.13 Tobit regression estimates (Survey 1)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*L1*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*L1*
HLGINT	8.968***	15.993***	22.899***	30.601***	24.788***	23.079***	28.054***	24.561***	32.608***	38.016***	45.580***	38.756***	37.579***	45.731***
	(3.262)	(4.297)	(5.091)	(4.913)	(3.876)	(3.692)	(4.891)	(3.138)	(4.447)	(4.753)	(5.018)	(4.174)	(3.957)	(5.697)
MLGINT	−4.210	9.071**	7.225	8.896**	13.318***	13.685***	11.884***	6.734***	18.898***	16.348***	21.453***	22.061***	22.389***	23.430***
	(3.411)	(4.552)	(4.719)	(4.155)	(3.364)	(4.066)	(4.011)	(2.582)	(3.810)	(3.468)	(3.325)	(2.994)	(3.342)	(3.739)
PCB	3.514***	4.084***	4.016***	3.666***	3.646***	4.004***	4.532***							
	(0.584)	(0.853)	(0.916)	(1.091)	(0.714)	(0.826)	(1.082)							
MLSSUP	2.146	−0.340	−0.321	−1.296	−1.806	−0.964	−1.926	7.341***	4.221*	3.510	6.419**	2.511	4.218*	4.833*
	(2.219)	(2.500)	(3.028)	(3.293)	(2.493)	(2.742)	(3.547)	(2.116)	(2.271)	(2.522)	(2.726)	(2.084)	(2.212)	(2.731)
LGKSUP		9.719***		5.242	9.524***	11.580***	6.122		13.795***		9.441**	11.724***	14.806***	9.990*
		(3.060)		(4.911)	(3.469)	(4.341)	(5.641)		(3.000)		(4.430)	(3.423)	(4.028)	(5.394)
TOP5SUP	10.512***		15.688***					12.609***		19.106***				
	(2.096)		(3.435)					(2.085)		(3.162)				
ACC	2.177	5.415	1.571	13.427***	6.787**	12.562***	15.927***	6.876***	9.057***	10.052***	18.977***	12.569***	18.053***	22.294***
	(2.657)	(3.811)	(4.069)	(4.524)	(2.905)	(3.361)	(4.423)	(2.199)	(3.113)	(3.241)	(3.753)	(2.834)	(3.203)	(4.565)
EURBKGRD	−5.870	−2.297	−6.578	−5.734	−3.485	−3.588	−9.962*	−3.431	1.603	−1.874	−1.146	−0.364	1.328	−4.168
	(3.673)	(3.726)	(4.818)	(4.883)	(4.339)	(4.825)	(5.692)	(3.488)	(3.445)	(4.227)	(4.449)	(3.863)	(4.415)	(5.112)
HISP	−1.227	−5.013	−0.629	−6.489	−3.368	−5.725	−4.200	−0.694	−2.050	0.747	−3.253	0.054	−1.758	0.117
	(3.137)	(3.892)	(4.176)	(4.174)	(3.693)	(4.005)	(4.388)	(2.822)	(3.286)	(3.612)	(3.731)	(3.076)	(3.406)	(3.804)
WHITE	−2.670	−7.822**	−6.274**	−6.500*	−7.959**	−8.443***	−9.837**	−5.581**	−9.504***	−7.677***	−8.100**	−7.865***	−7.768***	−9.576***
	(2.459)	(3.975)	(3.180)	(3.782)	(3.428)	(3.239)	(4.050)	(2.239)	(3.436)	(2.807)	(3.165)	(2.753)	(2.618)	(3.166)
SOMECOL	−6.709**	−7.313*	−6.925	−11.406*	−7.628*	−9.724*	−14.031**	−5.225*	−5.832*	−6.907*	−8.203*	−7.840**	−9.235**	−12.326***
	(3.298)	(4.285)	(5.000)	(6.818)	(4.425)	(5.284)	(6.730)	(2.740)	(3.484)	(3.783)	(4.675)	(3.211)	(3.700)	(4.588)
COLGRAD	−7.962**	−8.058*	−7.046	−10.881	−6.783	−9.407	−11.403*	−7.553**	−6.556*	−7.137*	−7.553	−6.213**	−8.590**	−7.966*
	(3.672)	(4.607)	(5.530)	(7.464)	(4.412)	(5.826)	(6.529)	(3.016)	(3.664)	(4.114)	(4.914)	(3.139)	(3.884)	(4.348)
UNEMP	−5.044*	−7.046*	−5.215	−16.696**	−9.592*	−9.121*	−14.842**	−3.251	0.258	1.556	−5.482	−2.396	−0.909	−2.848
	(3.009)	(4.044)	(4.611)	(6.565)	(5.490)	(5.159)	(6.998)	(2.720)	(3.436)	(3.902)	(4.715)	(3.865)	(3.810)	(4.755)
INC75–99.9	5.946*	9.641***	7.391*	7.280	9.991**	8.324*	6.637	5.266**	7.951***	6.845**	6.155*	7.376**	5.542*	4.707
	(3.119)	(3.627)	(3.916)	(4.965)	(4.512)	(4.441)	(5.342)	(2.658)	(3.074)	(3.148)	(3.684)	(3.307)	(3.332)	(3.891)
INC100–149.9	7.631**	12.243***	12.413**	7.460	8.619**	10.450**	8.053	6.681**	10.177***	11.527***	7.408*	6.974**	8.013**	5.866
	(3.387)	(4.315)	(4.953)	(5.590)	(3.468)	(4.577)	(5.102)	(2.923)	(3.637)	(4.067)	(4.144)	(2.755)	(3.373)	(3.880)

(*continued*)

Table A.3.13 (continued)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*L1*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*L1*
INC150M	10.170***	13.981**	15.048**	12.717*	11.358**	13.124**	11.505*	8.847**	11.494**	10.749**	7.250	5.812	5.549	2.917
	(3.901)	(5.535)	(6.062)	(6.990)	(4.696)	(5.363)	(6.982)	(3.698)	(5.005)	(5.106)	(5.348)	(3.903)	(4.374)	(5.394)
AGE	−0.383***	−0.493***	−0.483***	−0.504***	−0.424***	−0.503***	−0.660***	−0.387***	−0.455***	−0.442***	−0.610***	−0.471***	−0.564***	−0.694***
	(0.087)	(0.113)	(0.122)	(0.145)	(0.111)	(0.117)	(0.143)	(0.077)	(0.097)	(0.098)	(0.115)	(0.091)	(0.096)	(0.116)
MALE	0.032	−0.144	−2.566	−2.210	2.053	1.019	2.032	2.657	2.844	1.319	2.647	4.457**	4.031*	6.249**
	(1.996)	(2.687)	(3.083)	(3.563)	(2.667)	(2.892)	(3.615)	(1.782)	(2.271)	(2.374)	(2.547)	(2.164)	(2.212)	(2.775)
MARRIED	0.933	1.501	3.618	3.878	1.656	3.230	6.728	0.831	1.413	1.464	0.196	0.894	1.156	3.184
	(2.189)	(2.542)	(2.971)	(3.890)	(3.176)	(3.166)	(4.281)	(1.861)	(2.121)	(2.298)	(2.796)	(2.268)	(2.310)	(2.913)
HSIZE	0.424	1.478	0.724	0.712	0.392	−0.029	−0.517	1.263*	2.250**	1.393*	1.561	1.006	0.585	1.026
	(0.761)	(1.164)	(0.992)	(1.310)	(1.030)	(1.033)	(1.334)	(0.667)	(1.000)	(0.837)	(1.004)	(0.773)	(0.809)	(0.982)
FRIEND		−0.547		4.552	4.552*	0.494	5.912		3.292		2.820	3.801*	1.582	7.128***
		(3.712)		(3.355)	(2.530)	(2.806)	(3.805)		(3.051)		(2.389)	(1.951)	(2.144)	(2.654)
CST	−0.442	1.266	1.203	1.154	3.662	4.331	2.163	−0.200	−0.238	1.468	1.181	1.930	1.979	0.339
	(2.486)	(3.176)	(3.493)	(4.252)	(3.355)	(3.490)	(4.099)	(2.113)	(2.662)	(2.767)	(3.105)	(2.486)	(2.599)	(3.006)
MST	−5.404	−5.157	−0.840	−6.875	−4.486	0.812	−6.721	−5.217*	−5.538	−1.985	−4.131	−3.609	−0.305	−6.834
	(3.673)	(4.083)	(4.696)	(5.706)	(4.653)	(5.381)	(6.667)	(3.074)	(3.488)	(3.881)	(4.469)	(3.657)	(4.130)	(5.048)
PST/AKST/HST	−1.396	0.742	−0.054	−3.005	0.876	0.428	3.305	−2.516	−0.050	0.366	−0.889	1.694	−0.181	3.202
	(2.564)	(3.489)	(3.934)	(4.459)	(3.391)	(3.583)	(5.306)	(2.364)	(2.943)	(3.262)	(3.536)	(2.748)	(2.909)	(4.060)
R50M	1.133	−0.809	1.037	2.673	1.264	1.975	0.593	1.044	0.323	2.186	1.838	1.661	3.143	1.119
	(2.143)	(2.842)	(3.064)	(3.700)	(2.635)	(2.991)	(3.711)	(1.879)	(2.407)	(2.464)	(2.756)	(2.033)	(2.255)	(2.753)
CONSTANT	−13.192*	−19.897**	−29.882***	−24.372*	−26.430***	−21.087**	−20.826*	−14.050**	−24.678***	−30.749***	−23.860***	−21.779***	−15.874**	−21.721***
	(7.457)	(10.038)	(11.334)	(12.958)	(8.886)	(9.742)	(11.011)	(5.532)	(7.363)	(8.011)	(7.865)	(6.567)	(6.692)	(7.755)
σ	35.360***	43.415***	46.146***	49.210***	37.797***	39.928***	50.237***	35.233***	42.595***	44.024***	46.743***	36.228***	38.366***	47.031***
	(3.120)	(4.378)	(4.739)	(4.761)	(4.356)	(3.976)	(6.197)	(2.951)	(4.175)	(4.372)	(4.272)	(3.940)	(3.581)	(5.587)
Pseudo R^2	0.027	0.026	0.034	0.042	0.049	0.051	0.046	0.050	0.053	0.070	0.079	0.089	0.089	0.081
N	1,686	1,574	1,412	1,225	1,220	1,201	1,157	2,555	2,556	2,555	2,556	2,555	2,556	2,556
Uncensored N	1,136	1,073	902	742	721	705	655	1,282	1,225	1,068	917	884	869	823

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *K* one thousand; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League. Variables abbreviations and description is provided in Table A.3.1

Table A.3.14 Tobit regression estimates (Survey 2)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
HLGINT	22.984***	21.694***	25.836***	33.696***	26.370***	42.125***	42.291***	37.958***	36.414***	40.741***	49.287***	42.084***	57.366***	55.170***
	(5.049)	(4.607)	(5.275)	(8.871)	(5.209)	(9.946)	(8.802)	(4.946)	(4.695)	(5.078)	(8.167)	(4.426)	(10.485)	(7.852)
MLGINT	1.412	8.941*	11.243**	14.519***	15.591***	17.973***	20.432***	13.565***	19.208***	23.463***	28.263***	28.391***	29.704***	31.626***
	(4.725)	(4.569)	(4.577)	(5.536)	(4.720)	(6.159)	(7.566)	(3.726)	(3.750)	(4.106)	(5.432)	(4.027)	(6.015)	(6.416)
PCB	2.737***	2.102***	1.538	0.961	1.717	1.709*	–0.410							
	(0.705)	(0.670)	(0.966)	(1.128)	(1.087)	(0.961)	(1.443)							
PCU	1.136**	1.080**	0.789	1.375**	1.089*	1.092*	2.021							
	(0.497)	(0.520)	(0.680)	(0.579)	(0.599)	(0.660)	(1.283)							
MLSSUP	–2.997	–4.419	–2.233	–1.437	–3.278	3.328	–3.374	3.862	0.257	2.088	5.038	2.541	10.422**	3.356
	(2.755)	(2.763)	(3.109)	(4.041)	(3.232)	(4.407)	(4.305)	(2.561)	(2.377)	(2.717)	(3.424)	(2.439)	(4.188)	(3.327)
LGKSUP		15.208***		9.512*	7.926*	5.900	15.611*		18.389***		12.377**	12.500***	8.652*	15.207*
		(3.346)		(5.204)	(4.311)	(5.149)	(8.365)		(3.107)		(4.865)	(4.070)	(4.804)	(7.799)
TOP5SUP	14.514***		18.275***					16.768***		21.170***				
	(2.698)		(3.343)					(2.548)		(3.210)				
ACC	5.280*	3.007	6.016*	2.648	10.313***	18.538***	8.577	8.220***	6.354**	10.404***	7.500*	14.953***	22.963***	14.472***
	(2.990)	(3.204)	(3.521)	(4.356)	(3.245)	(6.232)	(5.858)	(2.459)	(2.588)	(2.937)	(3.865)	(2.974)	(6.133)	(4.773)
EURBKGRD	–2.332	10.115	3.687	2.912	4.715	24.198	12.061	0.852	11.485	4.870	4.960	7.136	20.830	14.305
	(10.555)	(11.441)	(7.246)	(7.390)	(7.213)	(17.544)	(12.643)	(8.250)	(8.771)	(5.911)	(6.160)	(5.965)	(13.793)	(9.616)
HISP	–7.046	1.969	–4.105	5.502	–3.592	–9.685	0.230	–2.720	5.379	2.514	5.395	–0.859	–2.504	5.835
	(4.281)	(5.383)	(4.499)	(6.881)	(4.732)	(7.745)	(7.862)	(4.227)	(4.759)	(4.447)	(5.879)	(4.225)	(6.306)	(6.762)
WHITE	–5.059	–2.273	0.859	0.158	0.960	–7.065	–0.532	–6.812**	–5.792	–2.659	–5.036	–5.311*	–11.175**	–6.961
	(3.669)	(4.112)	(3.273)	(5.033)	(3.509)	(6.083)	(5.908)	(3.191)	(3.589)	(2.913)	(4.068)	(2.897)	(5.368)	(4.546)
SOMECOL	1.920	0.703	0.645	6.378	8.337**	4.959	7.308	–4.004	–3.812	–1.910	0.982	0.719	–2.356	0.030
	(3.576)	(3.763)	(4.098)	(5.151)	(4.181)	(5.934)	(5.947)	(3.282)	(3.137)	(3.812)	(4.042)	(3.526)	(4.550)	(4.898)

(*continued*)

Table A.3.14 (continued)

	Reduced sample (with perceptions)							*Full sample (without perceptions)*						
VARIABLES	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*	*MLS*	*EPL*	*UCL*	*LFP*	*ISA*	*GBL*	*LI*
COLGRAD	−2.926	−3.130	−4.858	−0.250	1.234	−2.343	−2.992	−7.418**	−6.642**	−6.324*	−4.984	−2.999	−7.129*	−7.014
	(3.220)	(3.357)	(3.988)	(4.215)	(3.934)	(5.336)	(4.858)	(3.025)	(2.894)	(3.635)	(3.642)	(3.326)	(4.267)	(4.396)
UNEMP	−3.867	−2.526	−4.355	−2.951	−1.597	5.267	−4.300	1.218	−0.731	4.303	3.488	4.703	9.611	7.879
	(4.825)	(4.887)	(5.970)	(8.026)	(6.005)	(7.911)	(8.682)	(5.435)	(4.629)	(6.326)	(6.117)	(5.378)	(6.436)	(7.982)
INC75–99.9	4.416	9.041**	6.487	12.529***	9.173**	14.515**	7.275	2.250	5.336	1.042	5.408	2.736	5.357	3.205
	(3.602)	(4.138)	(4.102)	(4.732)	(4.103)	(5.840)	(4.675)	(2.998)	(3.243)	(3.403)	(3.783)	(3.139)	(4.524)	(3.718)
INC100–149.9	5.812	6.340*	5.533	8.810*	9.329**	6.942	7.652	3.027	3.399	1.371	3.823	4.049	2.631	2.774
	(3.626)	(3.500)	(3.980)	(4.508)	(4.234)	(5.713)	(5.289)	(3.109)	(3.053)	(3.315)	(3.768)	(3.335)	(4.597)	(4.192)
INC150M	15.659**	20.532***	18.291**	24.916**	22.103***	38.387**	31.485***	12.504**	14.763***	9.646	12.294*	12.702**	19.302*	16.815**
	(6.879)	(7.348)	(8.896)	(10.205)	(7.681)	(15.215)	(10.402)	(5.438)	(5.691)	(6.361)	(6.944)	(5.351)	(9.880)	(7.261)
AGE	−0.229	−0.465***	−0.504***	−0.673***	−0.701***	−0.590***	−0.850***	−0.278**	−0.482***	−0.489***	−0.689***	−0.639***	−0.738***	−0.789***
	(0.164)	(0.122)	(0.144)	(0.169)	(0.145)	(0.190)	(0.226)	(0.129)	(0.109)	(0.121)	(0.139)	(0.113)	(0.169)	(0.174)
MALE	0.844	2.256	3.043	4.812	5.697**	4.619	4.897	2.774	5.146**	3.616	5.531**	7.368***	6.769*	6.716**
	(2.628)	(2.732)	(2.872)	(3.731)	(2.896)	(4.642)	(3.981)	(2.231)	(2.261)	(2.460)	(2.799)	(2.359)	(3.478)	(3.194)
MARRIED	−2.652	−0.337	0.412	−5.044	−1.362	−5.076	−2.317	−1.914	−0.127	0.178	−2.571	−1.683	−3.925	−3.801
	(3.043)	(3.045)	(3.190)	(3.988)	(3.322)	(4.859)	(4.719)	(2.707)	(2.585)	(3.046)	(3.204)	(2.809)	(3.787)	(3.997)
HSIZE	5.569***	3.900**	4.496**	5.132**	4.084**	5.917**	5.219**	5.801***	4.508***	5.237***	4.604***	3.826***	5.454***	5.584***
	(1.859)	(1.546)	(1.836)	(2.289)	(1.606)	(2.771)	(2.278)	(1.734)	(1.313)	(1.765)	(1.736)	(1.364)	(2.104)	(2.160)
FRIEND		−1.697		−0.815	1.915	−4.755	−0.181		−0.734		1.148	4.156	−1.260	3.034
		(5.124)		(4.522)	(3.438)	(5.623)	(5.024)		(3.785)		(3.166)	(2.589)	(3.889)	(3.426)
CST	−2.222	−2.623	−5.147	−6.765	−5.108	−5.090	−5.805	−1.385	−2.696	−2.935	−5.288	−4.113	−4.813	−5.639
	(2.748)	(3.063)	(3.513)	(4.521)	(3.467)	(4.618)	(4.437)	(2.401)	(2.599)	(2.875)	(3.427)	(2.761)	(3.760)	(3.518)
MST	10.693	6.338	11.162*	6.230	15.404*	7.581	15.487	7.770	4.226	6.092	4.670	8.306	2.065	11.195*
	(6.761)	(5.974)	(6.398)	(7.220)	(8.060)	(8.551)	(9.411)	(5.272)	(4.537)	(5.141)	(5.636)	(5.591)	(6.677)	(6.641)
PST/AKST/HST	2.054	1.149	2.014	3.426	0.884	8.206	9.512	1.110	−1.197	−1.258	−0.119	−0.862	0.810	3.159
	(4.375)	(3.926)	(3.827)	(4.786)	(3.933)	(6.810)	(6.309)	(3.542)	(3.238)	(3.238)	(3.746)	(3.124)	(5.046)	(4.520)
R50M	1.988	2.737	2.979	2.895	2.105	−4.220	0.352	0.580	1.886	2.205	3.281	3.097	−2.219	2.998
	(3.021)	(2.883)	(3.177)	(3.641)	(3.084)	(5.056)	(4.307)	(2.556)	(2.454)	(2.611)	(2.838)	(2.422)	(3.937)	(3.355)

CONSTANT	−54.923***	−35.863***	−42.458***	−38.823***	−36.356***	−52.438***	−34.059**	−45.704***	−32.793***	−48.558***	−39.024***	−33.917***	−44.491***	−41.760***
	(16.877)	(10.456)	(14.623)	(14.540)	(11.508)	(17.868)	(14.203)	(12.972)	(8.678)	(11.641)	(12.359)	(8.809)	(14.688)	(11.275)
σ	48.520***	46.023***	48.981***	55.300***	44.006***	67.740***	57.556***	47.944***	45.119***	48.912***	52.824***	43.616***	63.938***	57.198***
	(5.825)	(5.671)	(6.312)	(9.717)	(4.404)	(12.189)	(9.257)	(5.305)	(5.050)	(5.764)	(8.487)	(3.898)	(10.982)	(8.195)
Pseudo R^2	0.024	0.028	0.033	0.033	0.044	0.031	0.039	0.045	0.059	0.069	0.070	0.083	0.064	0.072
N	1,547	1,432	1,298	1,173	1,145	1,180	1,110	2,558	2,558	2,557	2,556	2,558	2,558	2,558
Uncensored N	1,022	952	821	702	677	716	620	1,230	1,135	988	873	864	888	802

Notes: The robust standard errors are in parenthesis; the significance levels are: * = $p \leq 10\%$, ** = $p \leq 5\%$, *** = $p \leq 1\%$. *Abbreviations*: *EPL* English Premier League; *GBL* German Bundesliga; *ISA* Italian Serie A; *L1* French Ligue 1; *LFP* Liga de Fútbol Profesional (Spanish La Liga); *MLS* Major League Soccer; *UCL* UEFA Champions League. Variables abbreviations and description is provided in Table A.3.1

A.4 Surveys' Field Report

Table A.4.1 Surveys' participation and invitation rates per day

Survey 1					*Survey 2*				
Date	*Invitations*		*Completed*		*Date*	*Invitations*		*Completed*	
	%	*N*	*%*	*N*		*%*	*N*	*%*	*N*
May 15, 2015	9.2	603	7.6	234	August 31, 2015	4.9	283	7.1	225
May 16, 2015	7.2	471	6.3	195	September 1, 2015	11.2	650	16.5	521
May 17, 2015	4.3	284	3.6	111	September 2, 2015	9.5	550	13.9	438
May 18, 2015	3.8	252	2.9	90	September 3, 2015	3.2	184	4.8	151
May 19, 2015	2.0	133	1.8	54	September 4, 2015	6.7	387	6.1	192
May 20, 2015	23.4	1,543	24.5	757	September 5, 2015	7.7	447	6.7	212
May 21, 2015	19.2	1,265	20.5	631	September 6, 2015	3.6	211	3.0	95
May 22, 2015	4.0	261	3.5	108	September 7, 2015	18.7	1,085	13.9	439
May 23, 2015	3.2	208	2.6	81	September 8, 2015	27.8	1,614	22.7	715
May 24, 2015	2.6	173	2.5	76	September 9, 2015	6.8	394	5.2	164
May 25, 2015	1.6	103	1.6	49					
May 26, 2015	19.6	1,294	22.7	699					
Total	**100%**	**6,590**	**100%**	**3,085**	**Total**	**100%**	**5,805**	**100%**	**3,152**

Table A.4.2 The distribution of the quality index among survey participants

Survey 1				*Survey 2*			
quality	*N*	*%*	*Cum.*	*quality*	*N*	*%*	*Cum.*
0.05	2	0.06	0.06	0.01	1	0.03	0.03
0.06	2	0.06	0.13	0.03	3	0.1	0.13
0.07	3	0.1	0.23	0.04	2	0.06	0.19
0.08	8	0.26	0.49	0.05	6	0.19	0.38
0.09	5	0.16	0.65	0.06	7	0.22	0.6
0.1	5	0.16	0.81	0.07	7	0.22	0.83
0.11	14	0.45	1.27	0.08	12	0.38	1.21
0.12	5	0.16	1.43	0.09	14	0.45	1.65
0.13	17	0.55	1.98	0.1	11	0.35	2
0.14	15	0.49	2.47	0.11	21	0.67	2.67
0.15	13	0.42	2.89	0.12	26	0.83	3.5
0.16	23	0.75	3.64	0.13	29	0.92	4.42
0.17	21	0.68	4.32	0.14	19	0.6	5.03
0.18	32	1.04	5.36	0.15	19	0.6	5.63
0.19	27	0.88	6.24	0.16	31	0.99	6.62
0.2	29	0.94	7.18	0.17	18	0.57	7.19
0.21	37	1.2	8.38	0.18	28	0.89	8.08
0.22	31	1.01	9.39	0.19	32	1.02	9.1
0.23	48	1.56	10.95	0.2	27	0.86	9.96
0.24	25	0.81	11.76	0.21	36	1.15	11.1
				0.22	32	1.02	12.12
				0.23	26	0.83	12.95
				0.24	38	1.21	14.15
≥0.25	2,717	88.24	100	**≥0.25**	2,699	85.85	100
Total	**3,079**	**100**		**Total**	**3,144**	**100**	

A.5 Questionnaire (Survey 1)

Within the scope of a USA wide research project, we would like to acquire some information about your interest in and assessment of European soccer. The questionnaire will take approximately 6 minutes to complete. All information given in this questionnaire will be treated anonymously and will not be attributed to any group or individual.

1. How interested are you generally in soccer? (if interest = 1 → screen out)				
	not at all 1	**slightly** 2	**moderately** 3	**very** 4
Interest in soccer:	O	O	O	O

2. How much do you pay **per month** before taxes and fees for your current TV programming (e.g.: cable TV, satellite TV etc.)? *If you are unsure of the amount, please provide an estimate.*	
I pay **per month** before taxes and fees for my current TV programming	_____$

3. Does your current TV programming include any additional sports package(s)? *If you are unsure of the amount, please provide an estimate.*	
Yes	**No**
O I pay for **the sports package(s)** per month before taxes and fees_____$	O

4. In which language do you generally prefer to watch soccer games?	
English	O
Spanish	O
Other (please state)	O_____

5. Considering the *concluded* soccer season (2014 / 2015) of the following European soccer leagues as well as the *last year's* MLS; did your TV programming include any full-length soccer games of these leagues?

	Yes	**No**
German Bundesliga	O	O
English Premier League	O	O
Spanish La Liga	O	O
French Ligue 1	O	O
Italian Serie A	O	O
American Major League Soccer	O	O
UEFA Champions League	O	O

6. How interested are you generally in the following soccer leagues?

	not at all interested						**extremely interested**
	1	2	3	4	5	6	7
German Bundesliga	O	O	O	O	O	O	O
English Premier League	O	O	O	O	O	O	O
Spanish La Liga	O	O	O	O	O	O	O
French Ligue 1	O	O	O	O	O	O	O
Italian Serie A	O	O	O	O	O	O	O
American Major League Soccer	O	O	O	O	O	O	O
UEFA Champions League	O	O	O	O	O	O	O

7. Considering the *concluded* season (2014 / 2015) of the following European soccer leagues as well as the *last year's* MLS; how many games did you watch (*live or tape-delayed*) **on a typical matchday / week**? (If "none" in question 7 then question 9)

	none	1	2 to 4	5 or more
German Bundesliga	O	O	O	O
English Premier League	O	O	O	O
Spanish La Liga	O	O	O	O
French Ligue 1	O	O	O	O
Italian Serie A	O	O	O	O
American Major League Soccer	O	O	O	O
UEFA Champions League	O	O	O	O

8. Out of the above-stated number of games, how many games did you watch (*live or tape-delayed*) in a public place (e.g. bar) **on a typical matchday / week**?

	none	some	all
German Bundesliga	O	O	O
English Premier League	O	O	O
Spanish La Liga	O	O	O
French Ligue 1	O	O	O
Italian Serie A	O	O	O
American Major League Soccer	O	O	O
UEFA Champions League	O	O	O

9. How balanced do you think was the competition in the following leagues on a scale of 0–10?

	extremely unbalanced										**extremely balanced**	
	0	1	2	3	4	5	6	7	8	9	10	Don't know
The season 2014 / 2015 the German Bundesliga was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the English Premier League was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the Spanish La Liga was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the French Ligue 1 was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the Italian Serie A was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 the American Major League Soccer was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the UEFA Champions League was . . .	O	O	O	O	O	O	O	O	O	O	O	O

10. How would you generally rate the quality of soccer that is being played on the pitch in the following leagues on a scale of 0–10?

	very low										**very high**	
	0	1	2	3	4	5	6	7	8	9	10	Don't know
German Bundesliga	O	O	O	O	O	O	O	O	O	O	O	O
English Premier League	O	O	O	O	O	O	O	O	O	O	O	O
Spanish La Liga	O	O	O	O	O	O	O	O	O	O	O	O
French Ligue 1	O	O	O	O	O	O	O	O	O	O	O	O
Italian Serie A	O	O	O	O	O	O	O	O	O	O	O	O
American Major League Soccer	O	O	O	O	O	O	O	O	O	O	O	O
UEFA Champions League	O	O	O	O	O	O	O	O	O	O	O	O

11. Imagine your TV provider offers exclusive add-on soccer packages for several leagues. Each add-on would let you follow all games, all season long on your TV, computer, tablet, phone or favorite connected device. How much would you be willing to pay for such a league package **at most per month** before taxes and fees and in addition to your current TV programming expenditures?

I would be willing to pay **at most per month** before taxes and fees, so much for the add-on soccer package of the

German Bundesliga	_____$
English Premier League	_____$
Spanish La Liga	_____$
French Ligue 1	_____$
Italian Serie A	_____$
American Major League Soccer	_____$
UEFA Champions League	_____$

12. Are you a fan of a soccer club of the following leagues?		
	No	**Yes**
English Premier League	O	O Drop-down menu of Premier League soccer clubs
French Ligue 1	O	O Drop-down menu of Ligue 1 soccer clubs
German Bundesliga	O	O Drop-down menu of Bundesliga soccer clubs
Italian Serie A	O	O Drop-down menu of Serie A soccer clubs
Spanish La Liga	O	O Drop-down menu of La Liga soccer clubs
American Major League Soccer	O	O Drop-down menu of MLS soccer clubs

Now we would like to acquire some information about your interest in and assessment of soccer games that will take place in Europe in the following days / weeks.

13. Will you be watching **live** any of the upcoming soccer games? (drop- down, four answer options: (1) yes; (2) not live, but tape-delayed; (3) not live, but only highlights; (4) no, not at all)							
Date	**Time (ET)**	**Network**	**Competition**	**Game**			**Live**
5/30	3:30 PM	ESPN	Final Copa del Rey (*Spanish cup*)	Athletic Bilbao	vs.	FC Barcelona	O
5/30	3:00 PM	BeIN Sports	Final Coupe de France (*French cup*)	AJ Auxerre	vs.	Paris St.-Germain FC	O
5/30	2:00 PM	ESPN	Final DFB Cup (*German cup*)	BvB Dortmund	vs.	VfL Wolfsburg	O
5/30	12:30 PM	FOX Sports	Final FA Cup (*English cup*)	Arsenal F.C.	vs.	Aston Villa F.C.	O
6/5	2:30 PM	ESPN, Univision	International Friendly (*men*)	Netherlands	vs.	USA	O
6/6	2:45 PM	FOX Sports	Final UEFA Champions League	Juventus FC	vs.	FC Barcelona	O
5/20	2:45 PM	BeIN Sports	Final Coppa Italia (*Italian cup*)	S.S. Lazio	vs.	Juventus FC	O
6/10	2:45 PM	FOX Sports, Univision	International Friendly (*men*)	Germany	vs.	USA	O

14. Which team do you think is more likely to **win** in the upcoming game?														
				Team A will definitely win . . .							**Team B will definitely win . . .**			
Competition	**Team A**		**Team B**	0	1	2	3	4	5	6	7	8	9	10
Final Copa del Rey (*Spanish cup*)	Athletic Bilbao	vs.	FC Barcelona	O	O	O	O	O	O	O	O	O	O	O
Final Coupe de France (*French cup*)	AJ Auxerre	vs.	Paris St.-Germain FC	O	O	O	O	O	O	O	O	O	O	O
Final DFB Cup (*German cup*)	BvB Dortmund	vs.	VfL Wolfsburg	O	O	O	O	O	O	O	O	O	O	O
Final FA Cup (*English cup*)	Arsenal F.C.	vs.	Aston Vila F.C.	O	O	O	O	O	O	O	O	O	O	O
International Friendly (*men*)	Netherlands	vs.	USA	O	O	O	O	O	O	O	O	O	O	O
Final UEFA Champions League	Juventus FC	vs.	FC Barcelona	O	O	O	O	O	O	O	O	O	O	O
Final Coppa Italia (*Italian cup*)	S.S. Lazio	vs.	Juventus FC	O	O	O	O	O	O	O	O	O	O	O
International Friendly (*men*)	Germany	vs.	USA	O	O	O	O	O	O	O	O	O	O	O

15. Now imagine that the following soccer games are relocated and take place in a stadium near your residence and at a time and date that would be convenient for you to attend. How much would you be willing to pay **at most** for a ticket to attend these games?				
Competition	**Game**			
Final Copa del Rey (*Spanish cup*)	Athletic Bilbao	vs.	FC Barcelona	_____$
Final Coupe de France (*French cup*)	AJ Auxerre	vs.	Paris St.-Germain FC	_____$
Final DFB Cup (*German cup*)	BvB Dortmund	vs.	VfL Wolfsburg	_____$
Final FA Cup (*English cup*)	Arsenal F.C.	vs.	Aston Villa F.C.	_____$
International Friendly (*men*)	Netherlands	vs.	USA	_____$
Final UEFA Champions League	Juventus FC	vs.	FC Barcelona	_____$
Final Coppa Italia (*Italian cup*)	S.S. Lazio	vs.	Juventus FC	_____$
International Friendly (*men*)	Germany	vs.	USA	_____$

Between 7th and 26th July, the 2015 CONCACAF Gold Cup competition will be hosted in the United States and in Canada. We would like to acquire your assessment about this tournament.

16. How interested are you generally in the **CONCACAF Gold Cup**?

	not at all interested						**extremely interested**
	1	2	3	4	5	6	7
CONCACAF Gold Cup	O	O	O	O	O	O	O

17. How would you generally rate the quality of soccer that is being played on the pitch in the **CONCACAF Gold Cup** on a scale of 0-10?

	very low										**very high**
	0	1	2	3	4	5	6	7	8	9	10
CONCACAF Gold Cup	O	O	O	O	O	O	O	O	O	O	O

18. In the group stage of **2015 CONCACAF Gold Cup,** the US national soccer team (men) will play three games. Will you be watching **live** any of the upcoming games? (drop- down, four answer options: (1) yes; (2) not live, but tape-delayed; (3) not live, but only highlights; (4) no, not at all)

Date	**Time (ET)**	**TV Network**	**Game**			**Live**
7/7	9:30 PM	FOX Sports 1, UniMás	USA	vs.	Honduras	O
7/10	8:30 PM	FOX Sports 1, UniMás	USA	vs.	Haiti	O
7/13	9:30 PM	FOX Sports 1, UniMás	USA	vs.	Panama	O

19. Which team do you think is more likely to **win** in the upcoming group stage games of **2015 CONCACAF Gold Cup**?

			Team A will definitely win . . .								**Team B will definitely win . . .**		
Team A		**Team B**	0	1	2	3	4	5	6	7	8	9	10
USA	vs.	Honduras	O	O	O	O	O	O	O	O	O	O	O
USA	vs.	Haiti	O	O	O	O	O	O	O	O	O	O	O
USA	vs.	Panama	O	O	O	O	O	O	O	O	O	O	O

20. ZIP Code of your current residence: __ __ __ __ __

21. Gender: male O female O

22. Year of birth: 19_ _

23. Are you a citizen of the United States? (if citizen = 1 → Question 23; if citizen = 2, 3, 4 → Question 23.1)

Yes, born in the United States, Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas ..... O

Yes, born abroad of U.S. citizen parent or parents ..... O

Yes, U.S. citizen by naturalization ..... O

No, not a U.S. citizen ..... O

23.1 Are / were you a citizen or were you born in one of the listed countries? O Drop-down 7 options: (1) France; (2) Germany; (3) Italy, (4) Spain, (5) the United Kingdom; (6) another European country; (7) none of the listed

24. Please specify your race / ethnicity

White ..... O Hispanic, Latino or Spanish origin ..... O

Black or African American ..... O Asian ..... O

Other (*please state*): _____ ... O

25. What language other than English, do you speak at home?

Spanish ..... O German ..... O

French ..... O Other (*please state*) _____ ..... O

Italian ..... O None, only English ..... O

26. Marital status:

Now married ..... O Never married ..... O

Widowed ..... O Divorced ..... O

Separated ..... O

27. How many people (*including yourself*) live in your household: _____ (Drop-down 7 option from 1 to 6 or more)

28. The **highest** level of education that you have completed:

No schooling completed ..... O
Less than high school..... O
High school graduate-high school diploma or equivalent (e.g.: GED)..... O
Some college but no degree ..... O
Associate's degree (occupational / vocational / academic program) ..... O
Bachelor's degree (e.g.: BA, AB, BS)..... O
Professional school degree (e.g.: MD, DDS, DVM) ..... O
Postgraduate's degree (e.g.: MA, MS, MEng, Med, MSW, Ph.D., EdD)..... O

29. Are you currently . . . ?

Employed for wages . . . . . O
Self-employed . . . . . O
A homemaker. . . . . O
Other (*please state*) _____..... O
Unemployed (seeking for a job) . . . . . O
Unemployed (not seeking). . . . . O
A student . . . . . O
Retired. . . . . O

30. Adding up the income of all your household members during the last 12 months (including money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other money income), what is your **annual household income before taxes**?

Less than $10,000.... . . . . O
$10,000 to $14,999 . . . . . O
$15,000 to $19,999 . . . . . O
$20,000 to $24,999 . . . . . O
$25,000 to $29,999 . . . . . O
$30,000 to $34,999 . . . . . O
$35,000 to $39,999 . . . . . O
$40,000 to $49,999 . . . . . O
$50,000 to $59,999 . . . . . O
$60,000 to $74,999 . . . . . O
$75,000 to $99,999 . . . . . O
$100,000 to $149,999.... . . . . O
$150,000 or more . . . . . O

Before thanking you for your participation we have one last question. We would like to acquire your opinion about some countries.

31. The following country is friendly to the USA in international affairs . . .					
	strongly disagree				**strongly agree**
	1	2	3	4	5
Germany	O	O	O	O	O
United Kingdom	O	O	O	O	O
Spain	O	O	O	O	O
France	O	O	O	O	O
Italy	O	O	O	O	O
Netherlands	O	O	O	O	O

Thank you for your participation!

8.5 Questionnaire (Survey 2)

Within the scope of a USA wide research project, we would like to acquire some information about your interest in and assessment of European soccer. The questionnaire will take approximately 6 minutes to complete. All information given in this questionnaire will be treated anonymously and will not be attributed to any group or individual.

1. How interested are you generally in soccer? (if interest = 1 → screen out)				
	not at all 1	**slightly** 2	**moderately** 3	**very** 4
Interest in soccer:	O	O	O	O

2. More in particular, how interested are you generally in . . .							
	not at all interested						**extremely interested**
	1	2	3	4	5	6	7
. . . **men's** soccer	O	O	O	O	O	O	O
. . . **women's** soccer	O	O	O	O	O	O	O

3. How much do you pay **per month** before taxes and fees for your current TV programming (e.g.: cable TV, satellite TV etc.)? *If you are unsure of the amount, please provide an estimate.*	
I pay **per month** before taxes and fees for my current TV programming	_____$

4. Does your current TV programming include any additional sports package(s)? *If you are unsure of the amount, please provide an estimate.*	
Yes	**No**
O I pay for **the sports package(s)** per month before taxes and fees_____$	O

5. In which language do you generally prefer to watch soccer games?	
English	O
Spanish	O
Other (please state)	O_____

6. Did you watch **live** any of the listed soccer games that took place several weeks ago? (drop- down, four answer options: (1) yes; (2) not live, but tape-delayed; (3) not live, but only highlights; (4) no, not at all)

Date	Competition	Game			Yes
5/30	Final Copa del Rey (*Spanish cup*)	Athletic Bilbao	vs.	FC Barcelona	O
5/30	Final Coupe de France (*French cup*)	AJ Auxerre	vs.	Paris Saint-Germain FC	O
5/30	Final DFB Cup (*German cup*)	BvB Dortmund	vs.	VfL Wolfsburg	O
5/30	Final FA Cup (*English cup*)	Arsenal F.C.	vs.	Aston Villa F.C.	O
6/5	International Friendly (*men*)	Netherlands	vs.	USA	O
6/6	Final UEFA Champions League	Juventus FC	vs.	FC Barcelona	O
5/20	Final Coppa Italia (*Italian cup*)	S.S. Lazio	vs.	Juventus FC	O
6/10	International Friendly (*men*)	Germany	vs.	USA	O
7/5	Final 2015 FIFA Women's World Cup	USA	vs.	Japan	O
7/7	2015 CONCACAF Gold Cup (*group stage*)	USA	vs.	Honduras	O
7/10	2015 CONCACAF Gold Cup (*group stage*)	USA	vs.	Haiti	O
7/13	2015 CONCACAF Gold Cup (*group stage*)	USA	vs.	Panama	O

7. Considering the current soccer season of the following soccer leagues; does your TV programming include any full-length soccer games of these leagues?

	Yes	No
German Bundesliga	O	O
English Premier League	O	O
Spanish La Liga	O	O
French Ligue 1	O	O
Italian Serie A	O	O
American Major League Soccer	O	O
UEFA Champions League	O	O

8. How interested are you generally in the following soccer leagues?

	not at all interested						**extremely interested**
	1	2	3	4	5	6	7
German Bundesliga	O	O	O	O	O	O	O
English Premier League	O	O	O	O	O	O	O
Spanish La Liga	O	O	O	O	O	O	O
French Ligue 1	O	O	O	O	O	O	O
Italian Serie A	O	O	O	O	O	O	O
American Major League Soccer	O	O	O	O	O	O	O
UEFA Champions League	O	O	O	O	O	O	O

9. Considering the current season of the following soccer leagues; how many games do you watch (*live or tape-delayed*) **on a typical matchday / week?** (if "none" then question 11)

	none	1	2 to 4	5 or more
German Bundesliga	O	O	O	O
English Premier League	O	O	O	O
Spanish La Liga	O	O	O	O
French Ligue 1	O	O	O	O
Italian Serie A	O	O	O	O
American Major League Soccer	O	O	O	O
UEFA Champions League	O	O	O	O

10. Out of the above-stated number of games, how many games do you watch (*live or tape-delayed*) in a public place (e.g. bar) **on a typical matchday / week?**

	none	some	all
German Bundesliga	O	O	O
English Premier League	O	O	O
Spanish La Liga	O	O	O
French Ligue 1	O	O	O
Italian Serie A	O	O	O
American Major League Soccer	O	O	O
UEFA Champions League	O	O	O

11. How balanced do you think was the competition in the following leagues on a scale of 0–10?

	extremely unbalanced										**extremely balanced**	
	0	1	2	3	4	5	6	7	8	9	10	Don't know
The season 2014 / 2015 the German Bundesliga was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the English Premier League was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the Spanish La Liga was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the French Ligue 1 was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the Italian Serie A was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 the American Major League Soccer was . . .	O	O	O	O	O	O	O	O	O	O	O	O
The season 2014 / 2015 the UEFA Champions League was . . .	O	O	O	O	O	O	O	O	O	O	O	O

12. How hard or easy do you think is to predict this season's champion in the following leagues on a scale of 0–10?

	very easy										**very hard**	
To predict the champion in the.	0	1	2	3	4	5	6	7	8	9	10	Don't know
German Bundesliga is . . .	O	O	O	O	O	O	O	O	O	O	O	O
English Premier League is . . .	O	O	O	O	O	O	O	O	O	O	O	O
Spanish La Liga is . . .	O	O	O	O	O	O	O	O	O	O	O	O
French Ligue 1 is . . .	O	O	O	O	O	O	O	O	O	O	O	O
Italian Serie A is . . .	O	O	O	O	O	O	O	O	O	O	O	O
American Major League Soccer is . . .	O	O	O	O	O	O	O	O	O	O	O	O
UEFA Champions League is . . .	O	O	O	O	O	O	O	O	O	O	O	O

13. How would you generally rate the quality of soccer that is being played on the pitch in the following leagues on a scale of 0–10?

	very low										very high	
	0	1	2	3	4	5	6	7	8	9	10	Don't know
German Bundesliga	O	O	O	O	O	O	O	O	O	O	O	O
English Premier League	O	O	O	O	O	O	O	O	O	O	O	O
Spanish La Liga	O	O	O	O	O	O	O	O	O	O	O	O
French Ligue 1	O	O	O	O	O	O	O	O	O	O	O	O
Italian Serie A	O	O	O	O	O	O	O	O	O	O	O	O
American Major League Soccer	O	O	O	O	O	O	O	O	O	O	O	O
UEFA Champions League	O	O	O	O	O	O	O	O	O	O	O	O

14. Imagine your TV provider offers exclusive add-on soccer packages for several leagues. Each add-on would let you follow all games, all season long on your TV, computer, tablet, phone or favorite connected device. How much would you be willing to pay for such a league package **at most per month** before taxes and fees and in addition to your current TV programming expenditures?

I would be willing to pay **at most per month** before taxes and fees, so much for the add-on soccer package of the

German Bundesliga	_____$
English Premier League	_____$
Spanish La Liga	_____$
French Ligue 1	_____$
Italian Serie A	_____$
American Major League Soccer	_____$
UEFA Champions League	_____$

15. Are you a fan of a soccer club of the following leagues?		
	No	**Yes**
English Premier League	O	O Drop-down menu of Premier League soccer clubs
French Ligue 1	O	O Drop-down menu of Ligue 1 soccer clubs
German Bundesliga	O	O Drop-down menu of Bundesliga soccer clubs
Italian Serie A	O	O Drop-down menu of Serie A soccer clubs
Spanish La Liga	O	O Drop-down menu of La Liga soccer clubs
American Major League Soccer	O	O Drop-down menu of MLS soccer clubs

Now we would like to acquire some information about your interest in and assessment of European as well as MLS soccer games that will take place in the following days / weeks.

16. Will you be watching **live** any of the upcoming soccer games? (drop- down, four answer options: (1) yes; (2) not live, but tape-delayed; (3) not live, but only highlights; (4) no, not at all)							
Date	**Time (ET)**	**Network**	**Competition**	**Game**			**Live**
09/12	9:30 AM	FOX Sports 1	German Bundesliga	FC Bayern Munich	vs.	FC Augsburg	O
09/12	7:45 AM	NBC Sports	English Premier League	Everton FC	vs.	Chelsea FC	O
09/12	12:30 PM	NBC	English Premier League	Manchester United FC	vs.	Liverpool FC	O
9/12	2:30 PM	BeIN Sports	Spanish La Liga	Club Atlético de Madrid	vs.	FC Barcelona	O
09/11	2:30 PM	BeIN Sports	French Ligue 1	Paris St-Germain	vs.	FC Girondins de Bordeaux	O
09/13	2:45 PM	BeIN Sports	Italian Serie A	FC Internazionale Milano	vs.	AC Milan	O
09/11	7:00 PM	MLS LIVE, UniMas	MLS	NY Red Bulls	vs.	Chicago Fire	O
09/12	10:30 PM	MLS LIVE, TWCSN-LA	MLS	LA Galaxy	vs.	Montreal Impact	O

17. Which team do you think is more likely to **win** in the upcoming game?

				Team A will definitely win . . .								**Team B will definitely win**		
Competition	**Team A**		**Team B**	0	1	2	3	4	5	6	7	8	9	10
German Bundesliga	FC Bayern Munich	vs.	FC Augsburg	O	O	O	O	O	O	O	O	O	O	O
English Premier League	Everton FC	vs.	Chelsea FC	O	O	O	O	O	O	O	O	O	O	O
English Premier League	Manchester United FC	vs.	Liverpool FC	O	O	O	O	O	O	O	O	O	O	O
Spanish La Liga	Atletico Madrid	vs.	FC Barcelona	O	O	O	O	O	O	O	O	O	O	O
French Ligue 1	Paris Saint-Germain	vs.	FC Girondins de Bordeaux	O	O	O	O	O	O	O	O	O	O	O
Italian Serie A	FC Internazionale Milano	vs.	AC Milan	O	O	O	O	O	O	O	O	O	O	O
MLS	NY Red Bulls	vs.	Chicago Fire	O	O	O	O	O	O	O	O	O	O	O
MLS	LA Galaxy	vs.	Montreal Impact	O	O	O	O	O	O	O	O	O	O	O

18. Now imagine that the following soccer games are relocated and take place in a stadium near your residence and at a time and date that would be convenient for you to attend. How much would you be willing to pay **at most** for a ticket to attend these games?

Competition	Game			
German Bundesliga	FC Bayern Munich	vs.	FC Augsburg	_____$
English Premier League	Everton FC	vs.	Chelsea FC	_____$
English Premier League	Manchester United FC	vs.	Liverpool FC	_____$
Spanish La Liga	Atletico Madrid	vs.	FC Barcelona	_____$
French Ligue 1	Paris Saint-Germain	vs.	FC Girondins de Bordeaux	_____$
Italian Serie A	FC Internazionale Milano	vs.	AC Milan	_____$
MLS	NY Red Bulls	vs.	Chicago Fire	_____$
MLS	LA Galaxy	vs.	Montreal Impact	_____$

19. ZIP Code of your current residence: __ __ __ __ __

20. Gender: male O female O

21. Year of birth: 19_ _

22. Are you a citizen of the United States? (if citizen = 1 → Question 23; if citizen = 2, 3, 4 → Question 23.1)

Yes, born in the United States, Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas ..... O

Yes, born abroad of U.S. citizen parent or parents ..... O

Yes, U.S. citizen by naturalization ..... O

No, not a U.S. citizen ..... O

22.1 Are / were you a citizen or were you born in one of the listed countries? O Drop-down 7 options: (1) France; (2) Germany; (3) Italy, (4) Spain, (5) the United Kingdom; (6) another European country; (7) none of the listed

23. Are you of Hispanic, Latino or Spanish origin?

Yes ..... O

No ..... O

24. Please specify your race / ethnicity

White ..... O Asian ..... O

Black or African American. ..... O Other (*please state*): _____ ..... O

25. What language other than English, do you speak at home?

Spanish..... O German..... O

French ..... O Other (*please state*) _____. ..... O

Italian ..... O None, only English ..... O

26. Marital status:

Now married ..... O Never married..... O

Widowed ..... O Divorced..... O

Separated ..... O

27. How many people (*including yourself*) live in your household: _____ (Drop-down 7 option from 1 to 6 or more)

28. The **highest** level of education that you have completed:

No schooling completed ..... O

Less than high school..... O

High school graduate-high school diploma or equivalent (e.g.: GED)..... O

Some college but no degree ..... O

Associate's degree (occupational / vocational / academic program) ..... O

Bachelor's degree (e.g.: BA, AB, BS)..... O

Professional school degree (e.g.: MD, DDS, DVM) ..... O

Postgraduate's degree (e.g.: MA, MS, MEng, Med, MSW, Ph.D., EdD)..... O

29. Are you currently . . . ?

Employed for wages . . . . . O

Self-employed . . . . . O

A homemaker. . . . . O

Other (*please state*) _____..... O

Unemployed (seeking for a job) . . . . . O

Unemployed (not seeking). . . . . O

A student . . . . . O

Retired. . . . . O

30. Adding up the income of all your household members during the last 12 months (including money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments and any other money income), what is your **annual household income before taxes**?

Less than $10,000.... . . . . O

$10,000 to $14,999 . . . . . O

$15,000 to $19,999 . . . . . O

$20,000 to $24,999 . . . . . O

$25,000 to $29,999 . . . . . O

$30,000 to $34,999 . . . . . O

$35,000 to $39,999 . . . . . O

$40,000 to $49,999 . . . . . O

$50,000 to $59,999 . . . . . O

$60,000 to $74,999 . . . . . O

$75,000 to $99,999 . . . . . O

$100,000 to $149,999.... . . . . O

$150,000 or more... . . . . O

Before thanking you for your participation we have one last question. We would like to acquire your opinion about some countries.

31. The following country is friendly to the USA in international affairs . . .					
	strongly disagree				**strongly agree**
	1	2	3	4	5
Germany	O	O	O	O	O
United Kingdom	O	O	O	O	O
Spain	O	O	O	O	O
France	O	O	O	O	O
Italy	O	O	O	O	O

Thank you for your participation!

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