

# Willingness-to-Pay in Non-Profit Sports Clubs

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## Abstract

In Germany, some sports clubs increasingly encounter financial problems due to decreasing public subsidies. A way to compensate for the decrease is to increase membership fees. Therefore, the aim of this study is to analyze members' willingness-to-pay (WTP) for membership fees and to identify determinants of WTP. For this study, active, adult members ( $n = 10,013$ ) in 21 sports were surveyed. The results show that members paid an average annual membership fee of €148 and stated an average WTP of €265. The consumer surplus for all sports amounted to €113 on average. The results of the regression analysis reveal that WTP is determined significantly by the current membership fee, personal income, level of education, years of participation, and level of performance. The findings of the study suggest that increasing membership fees might be one option for sports clubs experiencing financial problems. Sport-specific differences have to be considered in this regard.

**Keywords:** leisure economics, non-profit organization, membership fee, consumer surplus

## Willingness-to-Pay in Non-Profit Sports Clubs

In Germany, non-profit sports clubs play an important role for the sports supply of the population. All in all, there are more than 90,000 sports clubs with over 27 million memberships (German Olympic Sports Confederation, 2010). This implies that about one in three Germans is a member of a sports club—the actual number is most likely lower as some people are members of multiple sports clubs. Despite this popularity, sports clubs face many financial challenges in today's economic environment. The results from a survey of sports clubs in Germany reveal the financial situation is problematic for many clubs, with 3.6% of the clubs experiencing serious financial problems (Breuer & Wicker, 2009).

There are several reasons why German sports clubs might have financial problems. One reason is a decrease in public subsidies. Non-profit sports clubs receive different types of public subsidies, for example, direct subsidies, tax allowances, or the use of public sports facilities for little or no fees (Horch, 1992). In Germany, the voluntary sports sector (e.g., sports confederations and non-profit sports clubs) receives several

million Euros annually from public lotteries. However, this public monopoly of gambling funds is uncertain. Recently, federal states and communities have reduced public subsidies for the voluntary sports sector (Federal Statistical Office, 2007a). Additional challenges (e.g., demographic change, changes in sport demand, and increasing competition through for-profit sports providers such as fitness centers) can negatively impact the financial situation of sports clubs as they can lead to decreases in memberships—this can in turn lead to decreasing revenues from membership fees. Besides decreasing revenues, increasing expenditures (e.g., increase in the value added tax in 2007 and increasing energy costs in Germany) also have to be considered. As a consequence of the challenges noted, the question arises whether declining revenues, coupled with increasing expenditures, might be compensated for by increase in revenue from membership fees.

Therefore, the overall objective of the study is to analyze whether members of sports clubs in Germany are willing to pay higher membership fees in order to help in reducing the financial problems of their sports clubs. The paper has three main objectives. The first objective is to determine members' WTP for membership fees. Second, the consumer surplus is calculated based on the current membership fee and the stated WTP. Finally, the third objective is to find out the determinants of WTP for membership fees in German non-profit sports clubs. This analysis was undertaken for 21 different sports to give information about sport-specific differences. For this study, members ( $n = 10,013$ ) of non-profit sports clubs were surveyed.

The analysis of WTP in non-profit sports clubs requires an understanding of some peculiarities in the membership fees of non-profit sports clubs. Sports clubs produce club goods and members have mutual benefits from sharing productions costs, members' characteristics, and excludable benefits (Cornes & Sandler, 1986; Downward et al., 2009). Sharing members' characteristics means that members of sports clubs have a common interest regarding the sports programs at the club (Horch, 1992; Nagel, 2008). In German non-profit sports clubs, memberships are based on partnership agreements whereby members agree to have their resources (e.g. membership fees) pooled in order to share productions costs. This is more efficient for members than organizing sports on their own (Downward et al., 2009). In contrast to customers of for-profit sports providers (e.g., fitness centers), members are not only consumers, but concurrently they are producers, financiers, and decision-makers of the sports programs (Horch, 1992). Excludable benefits means that only the members of the club have the right to use the sports programs. Through paying the membership fee, they obtain a general usage right of the club's sports programs, which is typical for club goods.

As a consequence of the club goods character, the membership fees of non-profit sports clubs differ from a *regular* price, such as the entrance fee of a for-profit fitness center, as it is a mixture of purchasing and shareholding (Horch, 1992). The purchasing aspect refers to members as consumers of the sports programs. The shareholding aspect refers to the members as decision-makers and producers of the sports programs and to the pooling of resources (membership fees in particular). Thus, the club belongs to all members; it does not have a single owner—like, for example, the owner of a fitness center. As sports clubs are democratic organizations, members make all club decisions during member meetings (Horch, 1992). For this reason, decisions about the amount of the membership fees are made by all members during the meeting of mem-

bers. Generally, the amount of membership fees is determined by the total amount of money that is needed to finance the sports programs and is commensurate with the amount of money members can afford to pay. As non-profit sports clubs are social organizations, particular groups of members—such as children, youth, unemployed people, pensioners, and families with many children—pay cheaper membership fees (e.g., Breuer & Wicker, 2009). Moreover, the membership fees differ from club to club and from sport to sport. As members have similar interests and reasons for being a member of a club, memberships are long lasting (even life-long), and members usually do not switch their membership to another sports club due to cheaper membership fees in another club (Horch, 1992). The aspects noted suggest members are interested in maintaining the existing sports programs when the club has financial problems. As members are the shareholders of their club, it is assumed they would act to help the club by paying a higher membership fee without an expectation of additional programs or services. For this reason, it makes sense to ask the members for their WTP as it is highly likely they will have an interest in the continuation of the club. It must be noted that, theoretically, there are several possibilities for reducing financial problems (e.g., increasing sponsoring revenues). The advantage of addressing the issue via changes to the membership fee is that it represents a constant revenue source for sports clubs as the fees are paid at regular intervals, usually annually. For this reason, the focus of this paper is on the exploration of the extent of members' WTP for membership fees.

## **Literature Review**

In general, there are several methodological approaches for estimating WTP. However, all approaches with real purchases such as lotteries (Becker et al., 1964), auctions (e.g., McAfee & McMillan, 1987), and reverse pricing (e.g., Spann et al., 2005) are not suitable for the sports club context. Moreover, indirect approaches, such as conjoint-analysis (e.g., Balderjahn, 2003) and the travel-cost method (e.g., Lindberg & Aylward, 1999), are also not applicable to sports clubs.

The most suitable and appropriate method for the analysis of WTP in sports clubs is the contingent valuation method (CVM; Mitchell & Carson, 1989). Within a survey, respondents are asked for their WTP for the improvement of a specific good. As noted in the previous section, there would be no improvements due to the club good character, and thus, respondents are asked for their WTP for membership fees. The existence of current membership fees should make conducting CVM easier as members are already familiar with paying for sports clubs' services. Moreover, the CVM is suitable for analyzing membership fees in sports clubs as members with different membership fee—that is, membership fees differ from club to club and also within a club—can be surveyed and the WTP question is readily understood. It is feasible to use either open- or closed-ended approaches to questions about the WTP, but the open-ended approach has been applied in most studies (for an overview see Carson, Wright, Carson, Alberini, & Flores, 1995). Due to a high level of standardization, the CVM is said to be a very objective method (Wricke & Herrmann, 2002). This approach is also less cost-intensive and time-consuming than other methods.

However, it must be noted that there are some criticisms of CVM in the literature (e.g., Balderjahn, 2003; Neill, Cummings, Ganderton, Harrison, & McGuckin, 1994). The two main criticisms of CVM are the hypothetical and strategic biases. A strategic

bias occurs when the respondent intentionally overestimates or underestimates WTP (Rollins & Trotter, 1999–2000). If the respondent assumes price increases will be implemented on the basis of his stated WTP, the respondent will underestimate his WTP. In the case of hypothetical bias, it is suggested that respondents would not pay the price they stated in the WTP question. There is a considerable body of research which finds the hypothetical WTP exceeds the actual WTP (e.g., Kealy, Dovidio, & Rockel, 1988; Loomis, Brown, Lucero, & Peterson, 1996; Neill et al., 1994; Seip & Strand, 1992). Conversely, some studies have found no differences between hypothetical and actual WTP (e.g., Carlsson & Martinsson, 2001; Dickie, Fisher, & Gerking, 1987; Sattler & Nitschke, 2003). These biases have to be considered when interpreting the results of this study.

The CVM has been applied in several contexts (for an overview, see Carson et al., 1995; Walker & Mondello, 2007). The first application of CVM in the sports context was by Johnson and Whitehead (2000), who measured the value of public goods of sports stadiums. Further studies in spectator sports have estimated the WTP for the construction of new stadiums and the value of public goods generated by sports teams (e.g., Johnson, Groothuis, & Whitehead, 2001; Johnson, Mondello, & Whitehead, 2006, 2007; Owen, 2006). Analyses of WTP were also undertaken for hosting major sport events like Soccer World Cups or Olympic Games (e.g., Atkinson, Mourato, Szymanski, & Ozdemiroglu, 2008; Süßmuth, Heyne, & Maennig, 2010; Walton, Longo, & Dawson, 2008), World Cup tickets (Voeth & Schumacher, 2003), and soccer reports on the internet (Theysohn, 2006). In addition to spectator sports, studies about WTP in amateur sports have been carried out (e.g., Johnson, Whitehead, Mason, & Walker, 2007; McCarville, 1991). A huge body of literature exists on the WTP for entrance fees in national and recreational parks (e.g., for an overview see Carson et al., 1995; Lindberg & Aylward, 1999). The current state of research indicates that WTP has been analyzed in many research fields in the sports context; however, there is a research gap concerning WTP in non-profit sports organizations such as sports clubs.

## Variables and Hypotheses

The determinants of WTP are presented in this section (for an overview of the variables, see Table 1). Hypotheses regarding the impact of the determinants on WTP are formulated based on the findings of previous studies on sport expenditure and WTP. It is suggested that the current membership fee, income, educational level, level of performance, and years of participation determine WTP. The first determinant is the current price of the product, which, for this paper, is the current membership fee. There is high variation among membership fees in German sports clubs as the fees differ among clubs, sports, and even within a club (e.g., children, youth, and families are charged lower fees). The literature on pricing indicates that the current price serves as a reference price for other pricing decisions (Homburg & Krohmer, 2003). This aspect can be easily transferred to the sports club context and suggests that the current membership fee serves as a reference price for the stated WTP. In this context, it must be noted that the stated WTP should not be lower than the current membership fee that is paid by the member. According to previous research, the current price is important to WTP

Table 1: Overview of the variables

Variable	Description	Scale
WTP	Maximum WTP for the membership fee (in € per year)	metric
<i>ln WTP</i>	Log of WTP	metric
MF	Membership fee (in € per year)	metric
<i>ln MF</i>	Log of membership fee	metric
Y	Income (net per person and month; from 1 = up to €500 to 11 = more than €5,000)	ordinal
EDU	Educational level; highest graduation attained (1 = at least A-levels, equivalent to high school diploma)	dummy
<i>ln YP</i>	Log of years of participation; number of years that the sport has been practiced	metric
LP	Self-assessed personal level of performance (from 1 = occasional sportsman to 5 = elite sportsman)	ordinal

(e.g., McCarville & Crompton, 1987; Muller & Ruffieux, in press). Therefore, the first hypothesis (H1) predicts that the current membership fee has a positive effect on WTP.

The following two determinants (i.e., income and educational level) relate to the socio-economic characteristics of the members. The monthly net disposal income people will have an influence on their WTP. The findings in previous research regarding the income effect on WTP differ. Some studies have found no evidence for an income effect (e.g., Johnson & Whitehead, 2000; Johnson et al., 2001). In contrast, there are many studies that have shown that people with a higher income are more likely to state a higher WTP (e.g., Atkinson et al., 2008; Johnson, Mondello, et al., 2007; Owen, 2006). Therefore, the second hypothesis (H2) assumes that income has a positive impact on WTP.

The third determinant is educational level, which is the highest graduation attained by the individual. In one previous study on WTP for hosting the Soccer World Cup, education had a positive influence on WTP (Süssmuth et al., 2010). The authors assumed that people with a higher level of education could make a better assessment of complex situations in general. This means that they might have a better assessment of the positive effects for the country that go along with hosting a major sports event. This idea is pertinent to sports clubs, as it would mean that members with a higher educational level would know more about the situation of sports clubs in general and also of their financial challenges. If this is the case, it follows they would be more aware about the reduction in public subsidies and the effects of the demographic change on memberships in their sports club. For this reason, the third hypothesis (H3) predicts that level of education has a positive influence on WTP.

The following determinants refer to the member's sports profile. Therefore, the years of participation are the fourth determinant. This variable presents the period of time the sport has been practiced by the member. Empirical findings regarding the effect of the years of participation on sport expenditure differ. Some studies have documented a positive relationship (Ohl, 1991), whereas other studies have yielded a negative one (Taks, Renson, & Vanreusel, 1999). In the context of WTP, it must be taken into account that members with many years of participation have a high level of

knowledge and experience with prices. Moreover, they are likely to have more information about the costs of the sports programs in a sports club. These aspects are supposed to influence their reference prices and price sensitivity. Moreover, previous studies have shown that cost information has a positive effect on WTP (e.g., McCarville, 1991). In the case of sports clubs, this knowledge about membership fees could lead to less price-sensitive members. Therefore, the fourth hypothesis (H4) assumes that the years of participation have a positive influence on WTP.

The fifth determinant is concerned with the individual level of performance. In sports clubs, there are sportsmen with different levels of performance that can range from occasional and leisure sportsmen to competitive and top-level athletes. Occasional and leisure sportsmen do not participate in competitions as they are understood to practice sports for reasons of health. In contrast, competitions are important to competitive and top-level athletes who participate in different types of competitions, such as league matches, tournaments, or championships. According to previous research, competitive sportsmen spend more money on sport than people who practice sport for health reasons (e.g., Taks et al., 1999) and have more money to direct into their sport than leisure sportsmen (Weber, Schnieder, Kortlücke, & Horak, 1995). One explanation for the higher expenditures of competitive sportsmen can be greater traveling expenses due to national and international competitions (Breuer & Wicker, 2010). Competitive sports is very cost intensive, both for the athletes and the sports club. Sports clubs with many competitive athletes have higher expenditure to pay out on coaches, training lessons, and competition fees. If competitive sportsmen who usually have a high level of performance are aware of these high expenditures, they may feel they should give something back to their sports club. Therefore, the fifth hypothesis (H5) predicts that the level of performance has a positive impact on WTP.

## Method

### *Data collection*

During 2006 to 2008, active and adult sports club members ( $n = 10,013$ ) from 21 sports were questioned concerning their membership fees and their WTP. The sport-specific subsamples are convenience samples because there is no register available for all sports club members in Germany (the sample sizes of the subsamples can be seen in Table 2). For this reason, random samples could not be drawn. The sport-specific subsamples were developed through contact with people online (via e-mail and online questionnaire) and also by contacting people in writing. These two methods were used to reach as many members as possible and to reach all categories of members. Online surveys have several advantages compared to surveys in written form because they are less expensive, faster, and more confidential, and a greater number of people are reached (Couper & Coutts, 2006). The link for accessing the online questionnaire was posted on internet forums and on the homepages of German sports confederations and sports clubs. However, it should be noted that younger people and men are more likely to use the internet (van Eimeren & Frees, 2005). As some people are not familiar with the internet, a survey in written form was also conducted. The questionnaires were distributed at training facilities, sports events, and competitions. Unfortunately, there is no information about the type of survey (written vs. online) in the dataset. As

a result, comparisons between these two subsamples could not be made. However, in previous studies on sports clubs, there were no differences in the structure of the samples between written surveys and online surveys (e.g., Breuer & Wicker, 2011).

Several issues were taken into account regarding the size of the subsamples. Generally, it is assumed a sample should be as large as possible in order to consider representative criteria. Moreover, a sample size of at least 300 is considered adequate with regard to several statistical constraints (Bortz, 2005). Furthermore, it must be considered that sports club members are very heterogeneous (Nagel, Conzelmann, & Gabler, 2004). Therefore, subsamples with a size of about 400 respondents were considered adequate. However, more people who identified with sports like diving and equestrian participated in the survey. Although the subsamples were drawn carefully, they can be biased to some extent. For example, people with no internet access might be underrepresented. Moreover, members who do not attend competitions or matches as athletes, coaches, or spectators are expected to be underrepresented. Previous member surveys reported that similar problems were faced (e.g., Gabler & Nagel, 2006; Nagel, 2003).

In the total sample, 65.8% of the respondents were male and 34.2% female. The respondents were on average 34.1 years old ( $SD = 13.6$ ). The average net income per month amounted to 3.8, which is equivalent to the interval between €1,000 and €2,000. With regard to the highest educational level, 63.1% of the respondents had at least A-levels (equivalent to high school diploma). In the total sample, 5.6% of the respondents were occasional sportsmen who only practiced sporadically and 24.5% were leisure sportsmen who practiced regularly, but they did not take part in competitions. Most of the respondents (44.1%) were so-called mass sportsmen who take part in competitions but at a low level. About one fifth (21.2%) were top-level athletes (criterion: strong performance orientation and competitions) and 4.6% of the respondents were elite athletes (top national athletes who also take part in international competitions). The average level of performance was about 3, which is equivalent to competitive mass sportsmen (see Table 2). The structure of this convenience sample was compared to samples of previous sports club member surveys. The comparisons showed that the sample structure is similar to previous member surveys (e.g., Nagel, 2003) and to the statistics of the German Olympic Sports Confederation (2010), as the share of men and of younger people is higher than that of women and older people. It must also be noted that people with a higher level of education and a higher income than the average population (Federal Statistical Office, 2007b) are typically overrepresented in sports clubs (e.g., Nagel, 2003).

The questionnaire consisted of three pages. In the first part of the questionnaire, members were asked to provide information about their sports profile and years of participation, as well as level of performance. Next, the current membership fee paid by the respondent was assessed. The variable WTP was sought with the following question: What is your maximum willingness-to-pay for the annual membership fee in your current sports club? In the last part of the questionnaire, the socio-demographics were questioned, including questions about the highest educational level and monthly income (for an overview of the variables see, Table 1).

**Table 2: Descriptive statistics**

Variables	Mean (SD)
<i>ln WTP</i>	5.1 (0.9)
<i>ln MF</i>	4.5 (0.9)
Y	3.8 (2.5)
EDU	0.63 (0.5)
<i>ln YP</i>	2.5 (0.8)
LP	2.9 (0.9)

Table 3: Membership fees and WTP for membership fees in different sports per year (in €)

Sport	n	MF		WTP	
		Mean	SD	Mean	SD
Skiing	448	48.67	35.21	113.72	101.64
Football	460	52.96	31.01	118.17	79.13
Mountain sports	422	59.26	22.98	110.43	54.69
Table tennis	394	69.59	30.52	170.81	124.32
Handball	612	70.42	47.38	159.14	101.73
Shooting	403	72.48	51.73	168.98	152.45
Volleyball	404	74.88	31.76	143.60	71.69
Track and field	408	83.08	54.46	126.84	71.07
Cycling	400	83.42	50.45	112.23	63.89
Badminton	405	85.06	36.75	107.94	42.36
Gymnastics	403	98.56	26.21	152.09	50.36
Swimming	400	99.74	67.12	205.45	147.81
Diving	934	102.66	44.43	193.31	116.20
Basketball	406	102.88	79.63	202.30	126.41
Sailing	569	110.88	123.37	286.22	600.53
Judo	422	123.23	85.23	241.44	208.05
Equestrian	775	151.93	698.19	240.83	1,088.75
Field hockey	420	163.80	134.55	408.51	399.90
Dancing	528	240.51	114.63	390.83	233.26
Tennis	400	258.48	108.38	313.39	119.68
Golf	400	970.17	490.27	1,577.65	898.05
Total (all sports)	10,013	148.07	274.77	264.69	477.02

### Data analysis

For all analyses of the total sample, the data were weighted by the sport-specific cases. Therefore, results were not biased with regard to the different sample sizes of the sport-specific studies. An alpha level of .05 was used for all statistical tests. The data analysis consists of three steps. First, descriptive statistics are presented. For the current membership fee and stated WTP, the sport-specific values are also presented. Second, the average consumer surplus for every sport, and for the total sample, is calculated by subtracting the current membership fee from the stated WTP. In the third step, the hypotheses regarding the determinants of WTP are tested using linear regression analysis. For the regression analysis, the natural logs of the variables WTP, MF, and YP are used. This is a common procedure for financial variables (e.g., Frick, 2006; Lucifora & Simmons, 2003). The model is below:

$$\ln WTP = \beta_0 + \beta_1 \ln MF + \beta_2 Y + \beta_3 EDU + \beta_4 \ln YP + \beta_5 LP \quad (1)$$

### Results

Table 3 shows the average membership fees and the average WTP in each sport-specific study and for all sports—values are sorted in ascending order of the average membership fee. Active and adult members of sports clubs are charged an annual



Table 4: Consumer surplus in different sports (in €)

Sport	Average consumer surplus
Badminton	22.49
Cycling	27.22
Track and field	44.80
Mountain sports	51.40
Gymnastics	53.53
Tennis	56.10
Skiing	63.94
Football	64.51
Volleyball	68.80
Handball	87.38
Equestrian	88.90
Diving	90.61
Shooting	96.29
Basketball	98.68
Table tennis	101.27
Swimming	105.31
Judo	119.85
Dancing	151.13
Sailing	176.97
Field hockey	244.71
Golf	616.15
Total (all sports)	113.15

Table 5: Result of the linear regression analysis for  $\ln$  WTP (model for all sports;  $t$ -statistics and  $p$ -values are displayed)

Variable	Model for $\ln$ WTP
Constant	35.728***
$\ln MF$	142.259***
Y	15.894***
EDU	3.955***
$\ln YP$	2.689**
LP	11.820***
R <sup>2</sup>	.739
R <sup>2</sup> <sub>adj</sub>	.739
F	5,000.324
p	< 0.001***

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

membership fee of €148 on average. Stated WTP is about €265 on average and thus more than €100 higher than the current membership fee. On a sport-specific level, the range of the annual membership fees measures from approximately €49 for skiing to €970 for golf. In every sport, average WTP is higher than the current membership fee. However, the high standard deviations indicate that there are great differences both within one sport and among different sports with regard to membership fees and stated WTP.

Based on the current membership fee and stated WTP, the average consumer surplus for the total sample and for each sport is calculated. Table 4 gives an overview of the average consumer surplus—values are sorted in ascending order. The average consumer surplus for all sports amounts to about €113. The comparison of different sports shows that consumer surplus is lowest in badminton and cycling, as well as track and field. The consumer surplus is highest in sailing, field hockey, and golf. The range of the average consumer surplus is between approximately €22 (badminton) to about €616 (golf).

The results of the regression analysis are shown in Table 5. All factors have a significant impact on the dependent variable ( $\ln$  WTP). The influence of the membership fee ( $\ln MF$ ) is positive, which means that the higher the membership fee, the higher the stated WTP. Therefore, the first hypothesis (H1) can be confirmed. The positive and significant income effect is in accordance with the previous assumption and, therefore, the second hypothesis (H2) can be confirmed. The factor educational level also has a positive and significant impact on the dependent variable,  $\ln$  WTP. For this reason, the third hypothesis (H3) can be accepted. The effect of the years of participation ( $\ln YP$ ) is negative, which is not in accordance with the previous assumption of it having a

positive influence. Therefore, the fourth hypothesis (H4) cannot be confirmed. The last factor is the individual level of performance, which has a significant, positive effect on stated WTP. This means that people with a high level of performance are more likely to state a high WTP. This result is in accordance with the previous assumption and, therefore, the fifth hypothesis (H5) can be confirmed. The regression model is significant,  $F = 5,000.324$ ,  $p < .001$ , and explains almost 74% of the observed variation in the dependent variable (*ln WTP*).

## Discussion

The average current membership fee and the high standard deviation indicate a great heterogeneity of pricing in sports clubs, both among sports and within one sport. Consequently, the stated WTP is also highly heterogeneous and differs among sports. Average WTP is more than €100 higher than the current membership fee. However, stated WTP and current membership fee were identical for some members. The high variation of the values shows that the perception of an appropriate membership fee differs among members. This is most likely due to the peculiarities in membership fees that have been discussed previously in this study. As there is no concrete service in return for the membership fee (members only obtain a general usage right), the determination of the adequate amount of the membership fee seems to be difficult for members. Moreover, it can be assumed that some members are not aware of the costs of the sports programs and consequently stated a relatively low WTP. The descriptive findings of this study are difficult to compare with previous research due to the different objectives of the investigation. If comparisons are made, the average WTP is higher than in previous studies on amateur sports (e.g., Johnson, Whitehead, et al., 2007; McCarville, 1991).

The average consumer surplus indicates that the current membership fee is still lower than the members' utility they have from being a member of a sports club and using the sports programs which are offered. On average, sports club members of all sports would be willing to pay higher membership fees. However, differences among sports have to be considered. When comparing the average consumer surplus to the average membership fees (see Table 2), it becomes evident that consumer surplus is higher in sports with higher membership fees. Moreover, there could be a relationship between consumer surplus and sport-specific expenditure. As it stands, consumer surplus is higher in sports where members have high annual sport expenditures (e.g., Taks et al., 1999; Wicker, Breuer, & Pawlowski, 2010). These sports are, for example, golf, sailing, and dancing. It would be interesting to find out whether consumer surplus and sport expenditures are correlated. This should be investigated in further research.

The findings regarding the consumer surplus have implications for sports clubs. In the case of financial problems, increasing the membership fees might be one option for sports clubs. However, this should be done with care. When clubs want to increase membership fees, they should provide cost information to the members as knowledge of costs was found to be important to WTP (McCarville, 1991). For clubs, this means that members should be informed about the financial problems of the club, decreasing public subsidies, and the costs of providing the sports programs. Cost transparency can be very important to those sports clubs that want to increase the membership fees.

The findings about WTP and the consumer surplus might be biased to some extent. As mentioned in the literature review, there might be a strategic and hypothetical bias. In the case of a strategic bias, the respondents would assume that stating a high WTP would lead to an increase in the membership fee, which is not in their best interest. Therefore, some respondents might have intentionally underestimated their WTP (e.g., Rollins & Trotter, 1999–2000). In the case of a hypothetical bias, it would be expected that the hypothetical WTP of this study would exceed the actual WTP of the members. This would mean that members would not pay the maximum membership fee they stated in the WTP question. As there is evidence for a hypothetical bias in previous research (e.g., Loomis et al., 1996; Neill et al., 1994), this aspect has to be taken into account when interpreting the results.

In the regression model, all factors have a significant influence on  $\ln$  WTP. The positive effect of the current membership fee is in accordance with previous studies where the current price has been important to WTP (e.g., McCarville & Crompton, 1987; Muller & Ruffieux, in press). Thus, a higher membership fee is strongly correlated with a high WTP. In this context, it is suggested that the current membership fee and, consequently, stated WTP might be correlated with the sport. As indicated in Table 3, there are differences among sports regarding membership fees and WTP. The positive income effect is not surprising as it is in accordance with previous studies (e.g., Johnson et al., 2001; Johnson, Mondello, & Whitehead, 2007; Owen, 2006). Educational level is also positively correlated with WTP, indicating that people with at least A-levels (equivalent to high school diploma) are more likely to state a higher WTP. This positive education effect corroborates with results in previous research (e.g., Süssmuth et al., 2010). One explanation for this effect could be that people who have achieved a high educational level are more aware of the challenges facing sports clubs in Germany are facing, such as decreasing public subsidies. Therefore, they might have stated a higher WTP in accordance with the knowledge that the members have to pay higher fees if less public money is available. Summing up the first three determinants, it can be noted that well-educated members with a high monthly income who pay a high membership fee are more likely to state a high WTP. Thus, the determinants of WTP in this study on non-profit sports clubs are in accordance with previous CVM studies (e.g., Johnson et al., 2001; Süssmuth et al., 2010).

Moreover, WTP in sports clubs is also determined by the years of participation and the level of performance. For these effects comparisons are difficult as they were not considered in previous research on WTP. In research on sport expenditures, there is also evidence for a negative effect of the years of participation and the positive effect of the level of performance (e.g., Taks et al., 1999). In contrast to the previous assumption, the years of participation influence WTP negatively. An explanation for this finding could be that knowledge and experience of prices increase with increasing years of participation. Apart from a better understanding of prices, this can lead to a fixed expectation of prices and, therefore, the stated WTP is relatively low. Moreover, members might think that they should get something back from the sports club with the increasing years of participation. The level of performance positively determines WTP. One possible explanation for this finding is that top-level and elite athletes are aware their training and competition fees are very expensive and that they benefit from cross-subsidies in their sports clubs (e.g., the mass sports and leisure sports section

supports the top-level section and passive members support active members; Horch, 1992). It must be noted that the sports clubs pay the costs for top-level sports, whereas the athletes can possibly generate revenues (e.g., prize money). For this reason, they might be willing to give some money back to the club through higher membership fees, and thus, contribute to the financing of their sporting endeavors.

The regression model explains almost 74% of the observed variation in WTP. The explained variance is higher than many of the previous studies on WTP (e.g., Loomis et al., 1996; Noonan, 2003). In this regard, it can be concluded that the chosen determinants are suitable for explaining WTP in sports clubs in this setting. Nevertheless, one quarter of the variation is not explained by the model, indicating that further factors might be relevant. Possible factors in this context could be the individual motivation for sport, quality of the sports programs, or possibilities of substitution (e.g., other leisure activities).

There are some limitations present in this study that also provide directions for further research. First, the study was restricted to individual variables. This means that variables on the club level, such as number of members or the quality of sports programs and facilities, were not included in the survey. Second, the study was limited to active and adult members. Children, youth, and passive members were not part of the survey. Moreover, non-members were also excluded from the survey. Third, the quality of the sample has to be mentioned. The sport-specific subsamples and the total sample are only convenience samples. Although random samples could not be drawn in the study, this aspect has to be acknowledged as a limitation. The results, therefore, cannot be generalized. Moreover, the sample is based on cross-sectional sampling and not on time-series data. Therefore, no developments over time can be analyzed. Fourth, not all sports played in Germany were covered by the study. Although the study provided findings for 21 sports, some sports are not represented, such as ice hockey, fencing, and triathlon. Even with these limitations, the current research contributes to the research on WTP as it provides results for non-profit sports clubs that have not been investigated in previous research.

## Conclusion

This study analyzed WTP for membership fees in non-profit sports clubs in Germany. The current membership fees and the stated WTP indicated that members of a sports club are highly heterogeneous. In this context, sport-specific differences must be taken into account. From the average consumer surplus, there might be a tendency that members of a sports club are willing to pay a higher membership fee. Therefore, a sports club might consider an increase in its membership fees in the case of financial problems. According to the results of the regression analysis, the current membership fee, income, educational level, years of participation, and level of performance are significant determinants of WTP, with years of participation having a negative impact.

Future research should include detailed sport-specific analyses and extend the object of investigation. It would be interesting to survey the groups of members that were not part of this study (e.g., passive members, youths, and children) and compare their WTP with the results of this study. As the acquisition of new members is important to sports clubs, information about the WTP of non-members would also be useful. Furthermore, the structure of the sports club (e.g., sports supply and financial situa-

tion) could have an influence on WTP. It could be fruitful to combine the individual variables (micro-level) with variables on the organizational level (meso-level). These variables can be combined using multi-level analyses which could lead to interesting results on WTP in sports clubs.

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