

## PRICE ELASTICITY OF SPORT CLUB MEMBERSHIP FEES

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### INTRODUCTION

In Germany, sport clubs receive lots of public subsidies in terms of (1) direct payments (2) privileges (e.g. tax privileges or access to publicly financed sport facilities) or (3) indirect payments (e.g. funds from public lotteries). Considering the increasing scarcity of public money and the uncertainty of the persistence of public lottery monopoly, public subsidies for sport clubs probably will be cut in the future. To solve this problem, people in charge of recreational sport clubs have to put much effort in revealing new financial resources or improving traditional ones.

Traditionally, one of the most important financial resources are membership fees. Compared to commercial sport providers, membership fees of sport clubs are quite low. Hence, raising membership fees might be a possibility to overcome the lack of public funds. Analogous to the law of demand it is intuitive, that a raise of membership fees will lead to a decrease in demand. Therefore, to evaluate the mentioned possibility, the knowledge of price elasticity (PE) of membership fees is very important. The question is whether an increase of membership fees leads to a disproportionately decreasing demand (high PE) or not (low PE).

Although the question of PE has already been analysed in other non profit organisations (e.g. Huhtala, 2004), a research gap concerning sport clubs exists. Most of the studies related to PE in sport focus on sport facilities (e.g. Gratton & Taylor, 1995) or spectator sports (e.g. Forrest, Simmons & Feehan, 2002).

### METHOD

In order to contribute to the reduction of this research gap sport specific PE of sport club membership fees are surveyed in the context of a greater project in 2006 and 2007 (n=6,800). In this project, sport club members of 17 different sports are asked. At the EASM Conference, the data set of members in running clubs will be presented (n=404). Running club members are asked about their sport profile, their membership and their socio demographic profile. To obtain PE of membership fees, respondents are asked to state their willingness to pay (WTP) for their membership fee. It is often criticised that stated WTP would differ from true WTP at the point of purchase, but several studies document that people purchase goods according to their previous stated WTP (e.g. Dickie, Fisher & Gerking, 1987). According to Sattler and Nitschke (2003), this method is more valid and reliable than other forms of measuring WTP. Moreover, other methods of measuring WTP respectively PE are not suitable for the underlying question (e.g. conjoint-analysis, auctions). Concerning data analyses, mean values of membership fees, WTP, reference prices (appropriate membership fees) and minimal membership fees (that members want to pay at least) are estimated. Afterwards, with the help of the stated WTP, PE simulations are effected (e.g. how is the PE coefficient if membership fees increase by 5 percent?). Finally, with the help of linear regression analyses, predictors of relative WTP (relation WTP to membership fee) are determined.

### RESULTS

In running clubs, membership fee is on average € 62.78, estimated WTP is € 99.03, and relative WTP is 2.00. That means that, on average, members of running clubs would pay twice as much as their current membership fee. The span of the reference price lies between € 48.83 and € 91.14. Average minimal membership fee is € 38.38. PE simulations show that, if membership fees increase by 5 percent, demand reacts very elastically

(PE=2.52). That means that more than 5 percent of the members would decide to leave their running club. An increase of membership fees by 10 respectively 15 percent yields to PE-coefficients of 1.44 respectively 1.27. Further PE simulations show that the reaction of demand is almost unit elastic at a 20 percent increase of membership fees (PE=1.06). Demand reacts inelastically if membership fees increase by 25 percent (PE=0.97). The results of the regression analysis show that satisfaction with the sport club and education level have a significant positive effect on relative WTP ( $p < 0.05$ ). According to the b-coefficients, a higher education, for example A-levels instead of secondary school, leads to an increase by 8.3 percent of relative WTP.

## **DISCUSSION**

Compared to other findings, the surveyed membership fees here are relatively low (e.g. Breuer, in press). The span of reference prices typically lies in the range of the actual membership fee. Minimal membership fee is relatively high which could mean that members want to pay a certain membership fee in order to ensure a certain quality of the sport offered in the running club. It has to be noted that WTP measures are not absolutes and may differ from club to club. Because of the elastic demand, running clubs should not increase membership fees. PE simulations show that some members do not want to pay higher membership fees. This could have different reasons. One reason may be the financial situation of these people respectively households. In Germany, the increase of the value-added in 2007 tax (from 16 to 19 percent) leads to high prices of many goods. Moreover, energy costs tend to escalate as well. Moreover, because there is no need to provide special sport facilities or equipment (e.g. compared to tennis or golf clubs), members could think that the service in return of running clubs is not so high. In the regression analysis, concerning the positive effect of satisfaction, it is comprehensible that satisfied members want to pay more than unsatisfied members. With regard to the positive influence of education, it can be supposed that people with a higher education level are more able to sum up the situation of sport clubs in general. Therefore, it is likely that these people are aware of public subsidies and the scarcity of public money and therefore state a higher WTP.

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