Abstract

Aim of the paper
In Germany, most local infrastructure projects had traditionally been financed by municipalities (WERNER 2008). However, the disposable revenues for fixed asset investments decreased in west German municipalities from 387 Euro per capita in 1992 to 281 Euro per capita in 2009 and for east German municipalities from 662 Euro per capita to 318 Euro per capita, which means an effective decrease of more than 25% and more than 50% respectively (WERNER 2008).

The financial situation of most municipalities therefore means also a major challenge concerning the modernization or built up of sport venues. As the cost of these sport venues have increased significantly over the last two decades (VORNHOLZ 2005) and the disposable revenues for fixed asset investments decreased in west German municipalities from 387 Euro per capita in 1992 to 281 Euro per capita in 2009 and for east German municipalities from 662 Euro per capita to 318 Euro per capita, which means an effective decrease of more than 25% and more than 50% respectively (WERNER 2008).

The theoretical background
LLTs are an instrument of a Fußballbundesligist's customer relationship management (ADAMSON, JONES & TAPP 2005): A Fußballbundesligist offering LLTs tries to skim the willingness-to-pay of its "true loyal" fans (MAHONY, MADRIGAL & HOWARD 2000). They are asked to spend all their money for tickets today "en bloc" – instead of spending it season by season in the future. With that amount of money the Fußballbundesligist might be able to finance - in the present - a stadium to be built newly. In order to find the appropriate price for a LLT it is necessary to calculate the LLT's net present value (NPV). Our NPV's calculation is based conceptually on the CAPM, the capital asset pricing model, a model that is rooted theoretically in neoclassical economics (ROSS, WESTERFIELD & JAFFE 2009). By using the CAPM we take into account that to price a LLT adequately the opportunity cost of capital (OCC) has also to be considered. The OCC is in our case represented by the rate of return that a consumer forgoes by buying the LLT instead of saving the same amount of money and investing it in capital assets such as bonds. The Fußballbundesligist can account for that by offering a discount for LLTs that covers at least the consumer's OCC.

Research design and data analysis
A football stadium in Germany is typically used for about 20 years (seasons). Therefore we took this time period as a base of our calculation of the LLT's NPV (t=20). We assumed furthermore - following DIMSON, MARSH & STAUNTON (2002) - a rate of return of 8% representing the consumers' OCC.

In addition we interviewed fans of a leading Fußballbundesligist in Germany (n=781). The survey form (ten pages in length) included demographic information (age, gender etc.), questions about the respondent's sport consumption and the task to evaluate nine typical Fußballbundesligist's home match offerings (four attributes with each three levels: Fußballbundesligist's opponent; seating category; attendance expected for the match the Fußballbundesligist is going to play; price). To estimate the fans' willingness-to-pay for the home matches that the Fußballbundesligist holds in 20 years we conducted a conjoint analysis following the suggestions by JEDIDI & ZHANG (2002).

Results
19.4% (9,700) of the Fußballbundesligist's fans are willing to pay for a LLT in general. For them a LLT is on average 14,012 Euro worth. The LLT's NPV therefore is - again on average - (14,012 Euro/1.08 to the 20=) 3,006 Euro.

Discussion and conclusion
Offering LLTs helps financing sport venues: According to our study the Fußballbundesligist would be able to collect (9,700 * 3,006 Euro =) 29.2 m Euro from its fans - a sum that reduces the amount of money that is to be spent by other sources such as the municipality significantly. LLTs seem furthermore to be a logical addition to personal seat licenses (PSL). A PSL gives the holder the right to buy a season ticket for a certain seat in a stadium. LLTs allow the fan to buy the season ticket for that certain seat not only for one year, but also for future periods.

By developing a method that helps specifying the contribution of LLTs for sport venue financing in advance, i.e., before construction or modernization, we contribute considerably to sport marketing science and practice.
References: