Community sport clubs are important sport providers and represent the backbone of the voluntary sport system in many countries (e.g., Lamprecht, Fischer & Stamm, 2011; Misener & Doherty, 2009; Scheerder & Vos, 2010; Taylor, Barrett & Nichols, 2009). In order to be able to provide sporting opportunities for the population, community sport clubs must be financially healthy, although they are non-profit organizations and making profits is not their main goal. As indicated by Young (2007, p. 3), “money is very important to the sustenance and success of nonprofit organizations”. However, it is not only crucial that enough revenues are available, but also where they come from (Kearns, 2007). The composition of an organisation’s total revenues can have an impact on the perceived legitimacy and importance of the organisation by its publics (Chang & Tuckman, 1994). The management of the income portfolio can be challenging, as complex interactions exist among the different income sources of non-profit organisations (Anheier, 2010). The purpose of this study is to analyse the interactions among income sources of community sport clubs.

From a theoretical perspective, the interactions among income sources are referred to as crowd-out effects or crowd-in effects, respectively (Kearns, 2007). They indicate how the providers of one income source are influenced by the providers of other income sources (Young, 2007). Crowd-out effects when increases in some revenue categories lead to decreases in other categories (Anheier, 2010; Young, 2007). For example, in sport clubs where members have to pay high membership fees and service fees, members are less willing to provide donations to the club and consequently membership and service fees would have crowded out donations. In most previous studies, governmental subsidies were found to crowd out donations (Kingma, 1989; Payne, 1995; Steinberg, 1991). Moreover, previous research has documented that sales revenue also crowded out donations (Kingma, 1995). Crowd-in effects also have to be considered in the management of the income portfolio. They occur, when support providers are more inclined to provide resources to organisations that already generate many resources (Kearns, 2007). For example, a sport club receives many donations and consequently a business company might think this club would make a significant contribution to the community and would therefore be worthy of sponsorship money. In this case, donations would have crowded in sponsorship income. A few previous studies have shown that governmental subsidies could also crowd in donations (e.g., Schiff, 1990) and that public capital crowded in private capital (Aschauer, 1989). The review of previous literature indicates that the sport sector has been neglected in previous research on crowd-out/crowd-in effects with a few exceptions (Enjolras, 2002).

The crowd-out/crowd-in effects were analyzed using data from the Sports Development Reports 2007/2008 and 2009/10 in Germany. The data were collected using a nationwide online survey of German community sport clubs. The e-mail addresses of the sport clubs were provided by the federal state sports confederations. In the invitation e-mail, the clubs received a personalised link to the online questionnaire where they were asked amongst others for their income sources. In the second wave in 2007 (October to December 2007), n=13,068 sport clubs participated in the survey (response rate: 35.1%). In the third wave, the survey took place from October to December 2009 and n=19,345 sport clubs took part in it (response rate: 33.3%). From these two cross-sectional samples a longitudinal dataset was created which contained all clubs that participated in both waves. These were n=5,026 sport clubs. The income figures refer to the year before each survey (2006 and 2008). For the analysis, the club’s income sources were summarized in seven revenue categories labelled revenues from sport supply (incl. membership fees, admission fees, and service fees), other supply (incl. revenues from sport events, social events, and club restaurant), asset management (interests), subsidies, donations, economic activities (incl. revenues from sponsorship and business operations), and credits.

The data analysis consisted of two main steps. First, descriptive statistics were carried out to provide an overview of the club characteristics and income sources. Second, elasticity measures (ε) were used to estimate the interactions among revenue categories (Young, 2007). Generally speaking, elasticity is a sensitivity measure from micro-
economics that represents the percentage change in a dependent variable (DV) as a result of a percentage change in an independent variable (IV; Hardes, Schmitz & Uhly, 2002). The revenue elasticities of the current study were estimated within a multiple regression framework where the marginal effects (non-standardised coefficients) represented the elasticity values. All revenue categories except asset management were used as IVs as it was assumed that assets would only liquidated when there was a need for it and thus asset management is always presumed to be a DV.

The descriptive statistics showed that revenues from sport supply were the most important revenue category in both years, followed by revenues from other supply, donations, and subsidies. Revenues in all categories except asset management and credits have increased between 2006 and 2008. However, not only the total revenues of clubs have increased, but also the total expenditure of the clubs. Only 63.6% of clubs could at least break even in 2006 and 71.7% in 2008. The revenue elasticity values revealed a significant positive interaction between donations and sport supply (ε=.044**) supporting a crowd-in effect, i.e. donations could have crowded in revenues from sport supply. A significant negative interaction was found between revenues from economic activities and other supply (ε=-.150***). According to the development of revenues, increased revenues from economic activities could have partially crowded out revenues from other supply. Another negative interaction became evident between revenues from other supply and credits (ε=-.031*) supporting a crowd-out effect, i.e. increased revenues from other supply could have crowded out credits. Significant positive interactions were found between revenues from donations and asset management (ε=.111***), as well as between economic activities and asset management (ε=.127***), where increased revenues from donations and economic activities could have crowded in revenues from asset management. Moreover, positive interactions became evident between revenues from subsidies and donations (ε=.164***), as well as between subsidies and economic activities (ε=.067*) where increased revenues from subsidies could have crowded in revenues from donations and economic activities.

The composition of the income portfolio of German sport clubs was similar to sport clubs in other European countries where revenues from members also represented the most important income source (Lamprecht et al., 2011; Scheerder & Vos, 2010; Taylor et al., 2009). The revenue elasticities provided evidence about the interactions between income sources. The crowd-out effect between government subsidies and donations that has mainly been found in previous research (e.g., Payne, 1998; Steinberg, 1991) could not be confirmed in this study. Furthermore, the previous finding that sales revenue (i.e. revenues from economic activities in this study) crowded out donations (Kingma, 1995) could not be supported by the current results. The results support the findings of a study in Norway where commercialized organizations also received a high share of public sector support (Enjolras, 2002). The findings have implications for the management of community sport clubs. The positive interaction and the crowd-in effects between revenues from donations, subsidies, and economic activities showed that the club management can play a major role in creating a sport club that seems worthy of receiving funds from several providers.