Spending Power and match attendance: 
is Romanian football a normal or an inferior good?

Vlad ROŞCA
The Bucharest University of Economic Studies
vlad_rsc@yahoo.com

Abstract. Drawing on a database containing information on spending power of individuals and match attendance in the national football championship for 2006-2010, this research has the purpose to find out whether Romanian football is a normal or an inferior good. For making the correlation between the two economic proxys, the bivariate analysis function in SPSS was used. The results show a significant and negative correlation between the variables, indicating that football is an inferior good. In the discussion section, the paper presents some of the reasons that made local soccer reach inferiority and shows suggestions that could be implemented in order to not allow further coverage and attendance losses to occur due to the inferior status. The paper contributes to a better understanding of the local football industry, the latter one lacking economic and business oriented management which could make it more performant.

Keywords: championship; football; inferior good; match attendance; spending power.

JEL Codes: C20, D10, L83, M31.
REL Codes: 5K, 9C, 14G.
1. Introduction

Attendance at football matches is a function of the prices clubs charge for admission into the venue (Feehan, 2006). While adding a variable regarding consumer wealth – such as earnings, spending power, wage rate, or unemployment, for example – in the demand function, it can be determined whether attendance at a football game is a normal or an inferior good. A normal good has a positive relationship, meaning that an increase in the consumers’ earnings leads to an increase in demand, while an inferior good has a negative relationship, thus an increase in earnings translating into a decrease in demand. Hence, the income elasticity for inferior goods is negative (Downward, Dawson, 2002). For example, if the demand for match tickets has an income elasticity of 3.6%, then a 1% increase in consumer incomes will result in a 3.6% decrease for the demand of match tickets, thus a 3.6% decrease of attendance.

The purpose of this paper is to find out whether Romanian football is an inferior or a normal good. Not the entire structure of Romanian football is analyzed, but the research focuses on Liga 1, the top tier of the Romanian professional football league. Since the 2006-2007 season, eighteen teams participate yearly in Liga 1, a competition which is tied to the lower tiers through a promotion-relegation system. The hypothesis is that Liga 1 football is an inferior good, as previous research has shown that in weakened economies – such as the Romanian economy at the moment – people tend to increase the consumption of sports when their income drops (Roșca, 2012).

2. Literature review

Existing literature was not able to clear whether professional sports spectating was a normal or an inferior good (Feehan et al., 2003). Cairns’ (1990) analysis shows that whereas basketball and Australian-rules football are normal goods, hockey is an inferior good. Matters get complicated for football (soccer), for which Cairns also couldn’t tell what type of good it was, due to the mixed results obtained.

Downward and Dawson (2002) believe that it is difficult to estimate the status of spectator sports, and that results should not be taken for granted. Indeed, a whole of other aspects non-identifiable with quantitative approaches may influence ticket demand. As Cairn showed, different sporting disciplines can have different elasticities. This made Baimbridge et al. (1996) believe that spectator sports are both normal and inferior goods, depending on the games that are analyzed. For example, while Bambridge et al. find rugby league
matches to be a normal good, Bird (1982) shows that association football is an inferior good. Then, the period analyzed in the research may also bias results. Changes in the quality of life, once, and in the quality of the offered spectator sport, twice, may provide different results if the research is being made at different dates, especially if the distance between the researches is considerable. Therefore, qualitative approaches should also be taken into consideration when discussing the issue of elasticity in sports.

On the one hand side, spectator sports have been traditionally associated with inferior goods, the relationship between attendances and income levels being often an inverse one (Westerbeek, Smith, 2003). As people get wealthier, they afford to buy other forms of leisure as well, such as going on a trip, going to the movies, or acquiring a laptop or a TV set with a DVD player, and are less interested in going to sporting events. During the history, at least up to the 1990’s, attendances at sporting events were formed, in high proportion, by the working-class (Jones, 1992). The social structure of attendances slightly changed over the last two decades, with the exclusion of the middle-class (Collins, Kay, 2003, Wagg, 2004), but sports often continued to maintain their inferior good status, although Szymanski (2009) believes that English football has lost its inferiority, becoming a normal good, mainly after the changes implemented through the Taylor Report took effect.

Bird (1982) tried to find out the full cost of attending a football game, by taking into consideration transport costs in order to determine the whole expenditures a fan has with going to a game. In his paper, Bird created a demand equation for English Football League attendances between 1948 and 1980. The low price elasticity for demand of football tickets, and the negative income elasticity determined Bird to mention that attending football games is an inferior good. However, some researches made since Bird’s paper question the validity of his thesis. Dobson and Goddard (2011) believe that using only income as a variable is not enough to determine whether this was the influence which caused attendance figures to change. Feehan (2006) also thinks that the decision regarding normality or inferiority should be taken only after determining the total cost of attending a game, thus including not only the ticket cost, but also match-related costs, such as transport costs, participation-related costs (of buying club-branded memorabilia or refreshments while at the game, or parking costs), and opportunity costs. Several other factors apart from consumers’ income may influence attendances to change, such as weather conditions, broadcasting or non-broadcasting of the game, quality of the opponent or the team’s success in recent games (Garcia, Rodriguez, 2002). Bird’s approach, encouraged by Feehan, was taken up by Marburger (1997),
who demonstrated that complementary consumption (consumption related to attending a football game, thus the rest of costs involved in spectating excepting ticket purchase costs) has chances to produce inelastic demand.

3. Methodology

Economic proxies used in research to test the status (normality or inferiority) of spectator sport goods vary. In Bird’s (1982) study, real consumer expenditure is aggregated from different separate costs of attending a match, in order to form the price of attending a match, whose correlation with income is then tested. Borland’s (1987) proxy is represented by regional average earnings, and Hynds and Smith (1994) divide average wage rates by a retail price index to show that attendance at cricket tests is only unsignificantly influenced by income. Simmons (1996) uses wage rates as well, but showing that these strongly and positively influence attendance at football games, while Jennet (1984) and Baimbridge et al. (1996) both use unemployment, coming however to different results: the first shows that football is a superior good, while the second shows rugby is an inferior good. A handful of proxies can be used as long as they are indicators of the spectator’s quality of life, most of the variables concerning fan’s wealth. Such being the case, the independent variable used for this study is spending power. The assumption is that spending power has an influence on the dependent variable: average match attendance. To test the relationship between the two variables, a bivariate correlation was done in SPSS.

No final data on spending power was found, so raw data had to be computed in order to obtain the necessary information. Spending power (2006-2010) has been calculated through the consumer price indices (CPI) provided by the Romanian National Institute of Statistics (2011). A base and a target year were first chosen. Then, the CPI of the base year was divided to the CPI of the target year, and the result was multiplied by 100. The difference to one hundred represented the spending power modification for that year. Each time, the difference between the base year and the target year was exactly one year, which made it possible to have five pieces of information on spending power, for each football season between 2006 and 2011.

The second indicator, average game attendance per season, was obtained by dividing the entire number of spectators who attended the Liga 1 matches during a season to the total number of games played in that season: 306. Attendance data was collected from the websites www.transfermarkt.de and www.onlinesport.ro. Once data for the years 2006-2011 was found for both variables, SPSS was used to correlate the two variables.
4. Data analysis and discussion

The results of the analysis, highlighted in Table 1, confirm the research hypothesis, Romanian football being indeed an inferior good. The figures in Table 1 show that there is a reasonably strong and negative correlation between spending power and game attendance. The Pearson correlation is close to 1 ($r = -0.829$), which means that the modifications in one variable are powerfully tied to the modifications in the other variable. Next, the Pearson correlation is negative, which means that the two variables are indirectly proportional. Thus, the second variable transforms in the opposite direction of the other’s variable modification.

There are two possible meanings of the results:

I. The spending power of consumers decreases when they buy match tickets and increases when they stop going to matches;

II. If the spending power of Romanian consumers increases, the attendance at football games would decrease.

Table 1

| Correlation between the spending power (Var 1) and the average game attendance in Liga 1 (Var 2) |
|---------------------------------------------------------------|---------------|
| VAR00001 | VAR00002 |
| Pearson Correlation | 1 | -0.829 |
| N | 5 | 5 |

As the first meaning is obvious (spending power increases when people save money from going to matches and decreases when they spend the money), I shall concentrate on analyzing the second meaning. The inferiority of Romanian football means that people who go to the matches of Liga 1 do so because they don’t afford to buy more enjoyable entertainment. Would they have more money, consumers would quit attending football matches for buying better entertainment. The choice of up-market leisure activities is encouraged by several factors that changed the local landscape of spare time consumption:

- the poor quality of the game and its surrounding stakeholders, hence the low value fans can extract from spectating a football match;
- the technological developments which turned football fans into digital devices (smartphones, tablets etc.) and online entertainment fans;
the increasing rows around Romanian football and the tabloidization of the local sporting press, both annoying fans;

- the emergence of a „malling subculture” during the local economic boom of 2003-2008 which influenced consumer preferences, leading to people spending more time in shopping and entertainment malls;

- the foreign direct investments done in Romania during 2003-2008, which led to the emergence of foreign entertainment brands on the local market;

- the freedom of choice from a rich supply of entertainment activities Romanians earned after the fall of the Communist regime;

- and, last but not least, the severe effects the latest financial crisis had on households’ spending power.

The aggregated effect of at least two or more of these changes led to a shift in consumer tastes, which are no longer oriented to football consumption as they used to be several years ago. Facing this crowded marketplace (Byon et al., 2010; Rein et al., 2006), which provides consumers with a variety of leisure activities to choose from at the expense of football, sport marketers need to use relationship marketing not to lose costumers. Relationship marketing can increase fan loyalty in several ways. For example, it can help by adding value to the brand of a club. Creating a meaningful and rich brand identity, which to offer positive brand associations, would lead to an improved brand awareness and a higher brand fidelity, that can make fans support their beloved team even when faced with other possibilities of entertainment, because they can draw benefits from cheering for the football brand. However, for this to happen, some changes have to occur in the way Romanian clubs are run. More value has to be offered to costumers, thus, first of all, a better sporting performance has to be produced. This requirement is hard to meet when not less than thirty managerial changes are made during a season, as was the case in 2010/2011 (Gazeta Sporturilor, 2011). The boards of the clubs shall guarantee steady positions to the coaches, if not for a sequence of years, then at least for one season. If disrupted by too many managerial changes over a short period, players will be confused and they won’t perform good on the pitch, which will lead to fan unsatisfaction. Club directors should create a supportive environment for their managers. The tool for doing this is internal marketing, which can consolidate the inner relationships in the club and set the standards for performance.
5. Conclusions and further research

The short-run nature of this research does not produce much variation in data concerning spending power. For a more reliable outcome, data spreading over more years, even decades, should be used, as economic variables act on long-term: the economic situation of a community is influenced by changes accumulating over more years, while sport-related changes, such as the decision to attend a game or not, are short-term influenced, like when a team plays a good game which convinces the fans to attend the game next week as well. Also for a more reliable result, a multivariate research may be done, with other variables apart from spending power being correlated at the same time (for example average hours spent per day in front of the television or on social networks, money spent on other forms of entertainment, like cinema, theatre, or on going out etc.), so as to see which of them really has an impact on consumers’ decisions to attend games or not.

References


Szymanski, S. (2009). *Play The Game Conference*
