ECONOMIC SPORT DEMAND DETERMINANTS

PhD cand JOSÉ VISEU

Deutsche Sporthochschule Koeln/Germany and Economic Policies Research Unit, Minho University/Portugal (Praxis XXI: BD 21736/99)

Paper presented at the 8th Congress of the
European Association for Sport Management (EASM)
September 6-10, 2000
Dipartimento di Economia e Tecnologia
Università degli Studi della Repubblica di San Marino
Republic of San Marino

ABSTRACT

In this paper, the economic and non-economic sport demand determinants are shortly presented in chapter 2 and 3. According to the chosen survey methodology, the economic sport demand determinants of the study are discussed one by one in chapter 4. Chapter 4 also tries to explore the interdependencies with the main dependent variable - the sport budget - and to settle possible questions each independent variable can answer. In chapter 5 we find the conclusion in form of a research model. In this model all the main variables are put in direct correlation with each other.

The paper is meant to be a background document to prepare sport economic field research regarding the success of my PhD thesis "The Sport Consumption in Portugal – The Economic Demand of Sport Merchandise and Sport Services" at the German Sports University Cologne, which is at the same time a research project of the Economic Policies Research Unit of the Minho University in Portugal.

ECONOMIC SPORT DEMAND
DETERMINANTS

PhD cand JOSÉ VISEU

DSHS Koeln / NIPE UM

1. Introduction

Sports are not exempt of costs: sport always costs time and money! The physical or sporting activity demands some former investments, like e.g. the investments made in sportswear, footwear, sport articles or monthly club fees.

The passive sport consumption also is not free of costs. A sport newspaper or a sport event ticket, they both cost money. The audience of live sport transmission is still the easiest (and cheapest) way of consuming passively sports. Nevertheless, we should not forget that live audience requires a huge investment of amounts of time. The sport demand is always the result of the individual time and money optimisation of benefits!

Economic and non-economic sport demand determinants may be easily deduced from general economic literature. We find them in those chapters of economic demand theory dedicated to the influence factors of economic demand. In chapter 2 and 3, I used mainly two publications: Varian 1994 and Stocker 1998.

2. Economic Sport Demand Determinants

- 2.1 The individual sport demand is influenced by the following classic determinants: (i) the income, well being, personal richness and possibilities of credit, (ii) the sport price and (iii) the price of other goods (substitution or complement goods). Additionally I consider two more economic sport demand determinants: (iv) time and (v) sport offer.
- 2.2 The total (or collective) sport demand is influenced by the following determinants: (i) the income distribution, (ii) the number of (potential) sport consumers (e.g. by regions).
- 2.3 In economic literature, other economic determinants that influence individual and collective demand are mentioned. Adapting them to sports, we have: (i) the sport offer and the other goods offer, (ii) the information on a sport good or sport service and the information on other consumption goods, (iii) the past sport demand and the past demand on other goods, (iv) the public and individual expectations relatively to the economic development, (v) the saturation point of the sport market and the market of other goods and (vi) the legal-institutional sphere (e.g. domestic EU-commerce restrictions or external commerce protection and its financial backing).

3. Non-Economic Sport Demand Determinants

The individual and collective sport demand determinants are equally influenced by the following non-economic determinants (see also Heinemann 1995): (i) the sport institutions, (ii) the sport preferences or other preferences (motivational structure, instrumental expectation or not of the personal utility of sports consumption, subjective benefit interpretation of the satisfaction of the consumers needs), (iii) other demographic variables [e.g. age, school education, profession, sex, place of living (geography), civil state, nationality (cultural biases), number of children, etc.], (iv) the sport participation rate and structure (type of physical activities, number and intensity of practised activities), (v) the current and future sport trends and sport fashions (e.g. fitness and aerobics), (vi) the sport cultural and historical circumstances of one country or region, (vii) the external influences (e.g. weather state, sport injury, etc.), (viii) the internal influences (e.g. own health, sport ability, sport performance, etc.) and (ix) the discovery of new sports by chance or their "natural evolution" into new sports (e.g. Sky Surfing and Base Jumping).

4. Determinants of "The Sport Consumption in Portugal"-survey

The chosen approach of a traditional mailing inquiry (40.000 questionnaires) will not allow us to have data about all main economic and non-economic sport demand variables. Sport price will not be raised, only the individual sport price perception. Also the sport offer will not be raised, we will only have data about the individual qualitative and quantitative sport offer perception.

The study includes seven main independent variables, which will be compared with the amount and the structure of individual and household sport budgets, our dependent variable. Here they are:

- 1. money: mainly the monthly income,
- 2. time: amount and availability of the free time,
- 3. offer: types of offer,
- 4. institutions: non-profit, for-profit, state and homes, e.g.: club, school, university, firm, family, institutions with lucrative purposes, institutions of social charity, etc.),
- 5. motives: instrumental and non-instrumental utility expectations to the sport,
- 6. demography: age, school formation (profession), gender, geography (place of living), civil state, nationality, number of children, etc.) and
- 7. sport: sport participation (types of physical activity, number and intensity of physical practice).

4.1 Income

Income and price are the main rational determinants of any type of consumption expenditures. Income is therefore our most important variable in order to explain economic sport demand. The question we are trying to answer is: *How do the absolute and relative sport expenditures (our sport budget) behave in relation to the monthly income?*

4.2 Sport Time versus Free Time

It was Gery Becker, who in 1982 published a scientific paper, where 'time' was used to advantage of economic theory. The application of this precious good for an activity automatically implies the abandonment of its application for the best possible alternative. The time not only limits the own capacity of income, as the utility or advantages that each person can take from the satisfaction of its individual necessities of goods consumption. On one side, any use of time is, therefore, associate to high opportunity costs and can be bought, as any another good, with money. On the other side, having time available may save us lots of money. Take e.g. Karting: if I give mechanical assistance and maintenance to my own kart, I will have to spend lots of time with it; but, if I look for a specialised firm of karts maintenance, I don't need time to do it myself, I only need good money to pay for this firm service.

For Becker (1982) time and money substitute themselves. I ask myself if this is practicable in sports? Is it like that too when individual benefits are taken from sports practice?

To benefit of passive or active sport consumption there is necessary a minimum of time and a minimum of money. A soccer game takes at least 90 minutes and to be able to run we need always adequate footwear (in the case you are thinking of running bare-footed, you are still not escaping to the factor 'money', since the upper spent of calories will forcibly imply an additional food ingestion...). It will be really interesting to discover from what time threshold or money threshold sport goods are no longer demanded... The questions we are trying to answer are: Which are the amounts of sport time and leisure time? How do absolute and relative sport time behaves in relation to leisure time? From what amount of leisure time on, active or passive sport consumption is no longer possible?

4.3 Sport Offer

I consider that the demand is also determined by the offer. The type of sport offer

determines, therefore, the value and the composition of the sport budget. Offers can exactly create an outstanding demand. In this study sport offers can only be raised subjectively: it will be raised through direct questioning on the types of perceived sport offers. The question we are trying to answer here is: Which is the influence of the sport offer on the sport consumption?

4.4 Sport Institutions

Today, sport is produced and presented at the market by some different institutions. These institutions are, therefore, in direct and mutual competition for sport consumers. Each institution has its specific and different interests and objectives: public administration (the state) is expecting from a more active and sport conscientious population, among others things, to spend less money in the national health system, while the private for-profit institutions only think about how to increase their profits. It must be, therefore, absolutely right to affirm that: each sport institution can be associate to a very specific type of sport participation, sport expenditures, physical activities, sport motives, etc. Question to answer: *How is the individual sport budget composed in relation to the different sport institutions?*

4.5 Sport Motives

The reason or motive of sports practice is the result of the sport consumers' expectation concerning the utility that he or she will get from active sport consumption. Athletes have personal needs. These personal needs are the validation of their choices. Each individual has his different preferences. The choice each athlete prefers, makes his motives "visible". From the satisfaction of the necessity of sport activity, the sport consumers expect a very specific personal utility: e.g. personal joy, social shelter and/or social prestige. The modern sport is more and more instrumental. Sport is used e.g. to lose weight, to be busy, to be social, to shape the body, to win, to belong to a group or to be able to make career in Politics or Economy.

The growth that the economic factor sport has lived in the last years has, however, also

its dark side. The instrumentalisation of the sport for other purposes than the sport purpose itself, raises substantially the possibility of substitution of sport through other non-sportive activities or merchandises. Take as an example aerobics: if daily gymnastics are used to reduce weight, than we might state that a new slimming pill can easily substitute aerobics. Another example: If the stadium visit is only done to increase personal entertainment value or experience strong personal emotions, than it could very indifferently be changed by rock concert or a terror film from the video store next door, resulting into the same satisfaction degree of personal necessities and expectations.

In summary: a gradual instrumentalisation of the sport hides new dangerous for the same sport, or either: the danger of sport becoming more and more easily replaceable! The question we are trying to answer here are: Why do people practice sports? What do people expect from passive sport consumption? Would it be possible for some people to substitute sports by any other not-sportive activity and to get from it the same benefit or to reach the same objectives?

4.6 Sport Demography

Demographic data serve to characterise in detail the socio-economic groups, that will be crossed later with our dependent and independent variables, in order to get explanations of the sport budget in relation to the income and the time, and of all its interdependencies with the variables age, sex, scholar formation, geography, etc. Question to answer: *How are the sport expenditures related to the several items demographic?*

4.7 Sport Participation

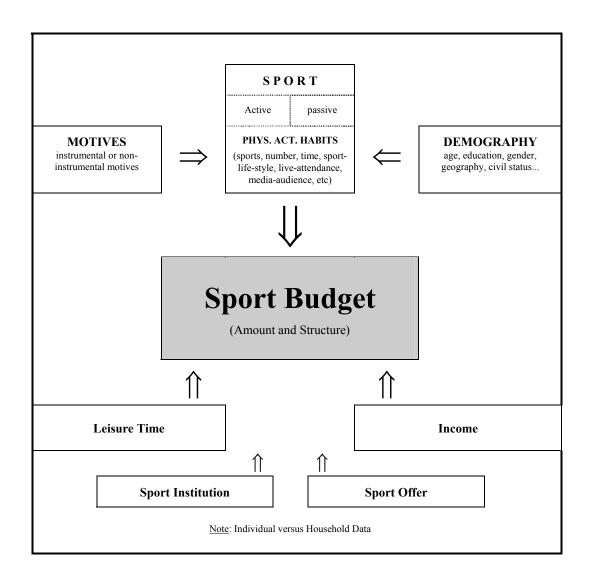
To play golf is much more expensive than running or to play basketball. The physical activity also determines the value of the sport costs. The objective of physical practice - high performance, competition or leisure – equally influences the sport expenditures. The top-level athletes have more often training and invest much more money in high quality sport articles. A higher or lower personal sport investment can equally vary with

the own practitioner's qualities. A experienced athlete, that is not satisfied enough by one only physical activity or that is pursuing the satisfaction of varied physical and mental necessities, will have a in such a way bigger budget, how higher the number of sport activities he will be involved in. The classic soccer adept, the one that follows his team everywhere, from interview to interview, from training to training, will equally have a huge amount of sport expenditures, even if they are from a different kind (travel expenses). Questions to answer: Which is the influence of the specific active or passive sport behaviour on the sport budget?

4.8 Compared Sport Demand

To compare the sport consumption in Portugal with the one of the other countries is one further possibility of this study. To fulfil this task, we have to have knowledge about Portuguese general indicators (prices, amount of free time, landscape/relief, unemployment rate, ages, climate, scholar formation, income and distribution of income) and of the Portuguese Sport (sport prices, sport tradition and culture, sport institutions, female sport, etc). Questions to answer: *Is active sport consumption in Portugal lower than in the northern European countries? Does the female sport exist in Portugal?*

5. Research Model (Conclusion)



REFERENCES

- **Becker**, Gery S. **(1982)**. *Der ökonomische Ansatz zur Erklärung menschlichen Handelns*. Tübingen.
- **Heinemann**, K. **(1995)**. *Einführung in die Ökonomie des Sports. Ein Handbuch* (Beiträge zur Lehre und Forschung im Sport, Band 107, Seite 87-125). Schorndorf: Hofmann.
- **Stocker**, F. **(1998)**. *Spaß mit Mikro: Einführung in die Mikroökonomik* (5., durchges. Aufl., Seite 189-190). München/Wien: Oldenburg.
- Varian, Hal R. (1994): Mikroökonomik. Wolls Lehr- und Handbücher der Wirtshaftsund Sozialwissenschaften. Dritte, völlig überarbeitete und stark erweiterte Auflage. Übersicht von Michaela Kleber und Martin Weigert. Verlag R. Oldenburg. München. Wien.