

EVALUATION OF THE ECONOMIC IMPACT OF SPORT IN DEVELOPED COUNTRIES AND IN CROATIA

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Abstract

Sport plays an important social and economic role in developed countries. In the sense of economy, sport generates numerous economic effects at both micro and macro levels. At the microeconomic level those effects influence the development of sport and complementary economic activities (sport and the catering industry, sport and tourism, sport and construction industry etc.). At the macro level, sport in the developed countries produces many economic effects.

The examples analyzed in this paper show that the annual income from sport in the USA amounts to 222 billion USD, with an ever growing tendency. The examples from the developed West-European countries suggest the total annual consumption for sport of around 80 billion USD. There are many other indicators that sport produces far greater economic effects than it causes on the budget expenses in the developed countries.

The data on the economic effects of sport in Croatia, as a country in transition, show that sport (directly or through tourism and other activities) generates significant economic effects, surpassing by far the expenses of the sport activities, but falling far behind the developed West-European countries.

Although the missing data for other European countries prevent a more reliable analysis, it is possible - on the basis of the presented examples - to perceive the impact of sport on the economic development.

Key words: sport, economic effects of sport, developed countries, Croatia

Zusammenfassung

VERGLEICHENDE ANALYSE SPORTWIRTSCHAFTLICHER AUSSWIRKUNGEN IN EINIGEN LÄNDERN

Der Sport spielt in den entwickelten Ländern eine wichtige gesellschaftliche und wirtschaftliche Rolle. Im wirtschaftlichen Sinne bewirkt der Sport viele Wirtschaftseffekte an der mikro- und makroökonomischen Ebene.

Die Wirtschaftseffekte an der mikroökonomischen Ebene tragen der Entwicklung von Sport und ergänzenden wirtschaftlichen Tätigkeiten bei (Sport und Gastgewerbe, Sport und Fremdenverkehr, Sport und Bauwesen u.ä.). An der makroökonomischen Ebene erreicht der Sport in den entwickelten Ländern zahlreiche Wirtschaftseffekte.

Die in der Arbeit erarbeitete Beispiele zeigen, dass Sport in den USA einen jährlichen Gewinn von 222 Mrd. US \$ erbringt und sich in steigender Tendenz befindet. Die Beispiele aus den entwickelten westeuropäischen Ländern erweisen den jährlichen Gesamtgewinn von 80 Mrd. US \$. Viele weitere Merkmale beweisen, dass in den entwickelten Ländern im Sport erzielte Gewinne höher als Staatszuschüsse dazu sind.

Die Angaben über sportwirtschaftlichen Effekte in Kroatien, einem Transitland, zeigen, dass direkt oder über Sport (durch Fremdenverkehr und andere Dienstleistungen) die bedeutenden Wirtschaftseffekte erzielt werden, die weit hinaus die Geldeinlagen darin überschreiten, die aber andererseits hinter denen aus den entwickelten europäischen Ländern zurückbleiben.

Obwohl eine zuverlässigere Analyse durch die fehlenden Angaben aus anderen europäischen Ländern unmöglich war, ermöglichen die analysierten Beispiele die Erkennung von sportwirtschaftlichen Effekten in der wirtschaftlichen Entwicklung.

Schlüsselwörter: Sport, sportwirtschaftliche Effekte, entwickelte Länder, Kroatien

Introduction

In modern society sport plays an important socioeconomic role. In this article the notion of "sport" includes all levels of sport as a social activity: sport in education, competition, sports recreation of citizens as well as kinesitherapy of people who are ill.

In all those areas sport has certain social (humanistic) and economic functions (Relac, Bartoluci, 1987).

The humanistic functions of sport become apparent through its health-care, sociocultural, educational, political etc. functions, which create the basic value of sport in any country.

Apart from the social values, sport in the developed countries generates numerous economic effects, thus becoming an important factor of the economic development. Sport produces economic effects at micro and macro levels.

The economic effects at the macro level are the total economic values generated by sport in a particular country or within a particular field of economic activity. They become apparent through a number of indicators, presented in the form of a table.

At the microeconomic level, the effects are created directly by sports organizations (associations, clubs) or in sports companies. In both cases the so-called multiplying effects of sport are revealed, affecting the production and consumption of sports articles and services.

Economic effects of sport

Table 1: Macroeconomic effects and microeconomic effects of sport

MACROECONOMIC EFFECTS	MICROECONOMIC EFFECTS
in the industry of sports articles	in sports organizations
in the trade of sports articles	in sports companies
in the construction of sports facilities	with large sports events
in tourism	
in the increased productivity of work	
in the lowered sick-leave costs	

Macroeconomic effects

Most macroeconomic effects are achieved in the production of sports articles. In all countries the industry of sports articles is complementary with sport, since it produces special articles for the sports market. Although there are no precise statistical data on the economic effects produced in this field of activity, some indicators suggest that in the USA about 35 billion USD annual income is achieved from the sales of sports equipment.

In the European countries this income amounts to 50-60 billion USD and in Asia to about 40 billion USD (Statistical Abstract of USA).

The fact that those incomes grow every year is important from the economic point of view. By the criterion of economic efficiency the sports industry is among the world's top industrial branches. Certainly, a great deal of the sports goods' turnover is made in trade. The trade of sports articles is very significant on the sports market. It is the logical sequence of the

sports industry. It is the role of trade to supply all the world markets with sports articles, regardless of the country where they were manufactured. The economic impact of trade is surely very high.

Far-reaching economic effects are achieved from the complementary relationship of sport and the construction of sports facilities. Most effects are produced in the organization of large sports events, when the host countries build, adapt or enlarge the existing sports facilities. Not only the construction industry, but also some other industrial branches take part in it.

Especially important economic effects of sport are achieved in tourism. Tourism and sport generate additional economic effects, thus becoming a significant item of tourist turnover in the receptive tourist countries.

An increased productivity of work is a significant economic indicator not only in a company, but also in a community. The basic assumption for achieving or increasing the individual productivity of work is the working capability of the employees. The research in Croatia and in the world has shown that various programs of sport and sports recreation may help increase working capability, resulting in a higher productivity of work. For example, in some German factories (Grundig, Siemens) productivity grew by 3-4% following different forms of exercises for workers. In "Tetex" textile factory, after an activity break during work, productivity in the morning shift grew by 3.45%, in the afternoon shift by 6.56% and in the night shift by 7.7%.³ There are many other examples in favor of that hypothesis.

If by various programs of sport and recreation the health of the working population is improved, this will reflect on the total productivity of work after some time, which may be significant from the economic point of view.

A similar hypothesis is advanced for increasing the efficiency of work by lowering the sick-leave rate. Sick-leave is a particular problem in some fields of activity, like the metal, the textile or the construction industries, where they amount to 10% of the total working time. Sick-leave has a negative impact on the efficiency of work, since it generates additional costs, thus lowering the economic efficiency of the business.

Investigations showed that sports and recreational activities during work may help lower the sick-leave rates, resulting in a higher income (Bartoluci, 1996).

Certain programs of recreation during the working process as well as medically programmed activity holidays (MPAO) have particular influence on reducing or eliminating some groups of illnesses like: nervous system diseases, circulatory and respiratory systems diseases and injuries at work.

According to such a concept of sport and recreation, we can conclude that the investment in those activities at the community level should not be

treated as an additional expense, but rather as an efficient investment in human resources, that will be paid back through higher productivity and efficiency of work.

Microeconomic effects of sport

At the micro level economic effects are produced within the very sports organizations, engaging in a particular sports activity. Sports organizations (associations, clubs) usually have legal and economic autonomy, which means that they receive an income from their activities and pay their expenses, but do not make a profit. Although they are non-profitmaking organizations, they do business on the principle of income and invest their profits into their own development. There is no doubt that sports organizations produce economic effects with which they pay their way for their activities, pay their employees and pay their taxes, similar to any other company.

Sports companies engage in sports activities and are organized as trading companies. They, of course, do business on the market and can make a profit. Although their income is not registered within sports activities, they are closely connected with sport. For instance, sports companies manufacturing various sports articles and equipment, sports agencies or companies offering different kinds of sports services etc., produce significant economic effects, especially in the developed countries.

Nowadays, large sports events are regularly organized on the basis of self-financing, through the market. The whole organizing business is usually managed by a separate company or corporation. The most indicative example is the organization of the recent Olympic Games. Namely, since the Los Angeles Olympics in 1984, the organization of the Olympic Games has been based on self-financing, with a considerable share of private capital (Džeba, Serdarušić, 1993).

Financial investments are quite large there, but so are incomes and profits. All other major European and world sports competitions are organized on similar principles, one of the major goals of the organizers being to make a profit.

Economic effects of sport in the developed countries

Numerous investigations throughout the world have confirmed that the economic effects of sport are much bigger than the total investment in sport. This will be analyzed on the examples of the USA, developed West-European countries and Croatia.

The development of sport and recreation in the developed countries is a function of two variables:

a) the economists always point out the importance of the income level achieved by an individual or by the national economy of a country. They emphasize the fact that the expenses for sport and recreation are higher (absolutely and relatively), the higher the income of an individual or a country;

b) sports teachers and athletes stress that the level of sports consumption is very much determined by the sports habits existing in a society, community or family and by the long-term education of an individual, acquiring the awareness that sport is an essential factor of the principle "mens sana in corpore sano" ("there is a healthy spirit in a healthy body").⁷

The topic of this paper deals with the first hypothesis only, not wishing to deny the importance of the other factor. Trying to verify the first hypothesis, we analyze the statistical data on the expenses of an individual and of a whole country for sport and recreation.

The economic effects of sport in the USA

We start the analysis with the expenses for sport and recreation, as registered in the official statistics of the USA (Table 2).

The expenses for sport and recreation have a growing tendency (they rose from 42.7 billion USD in 1970 to 222.3 billion USD in 1989, the last year for which we have records). It is especially significant that in the total expenses of the population this type of expenses has an ever increasing tendency (from 6.7% of the total consumption to 7.4% in 1989). This tendency remains unchanged, reflecting the tendency of the modern world: sport and recreation have become a growing need of people, for which they set aside a larger and larger part of their incomes.

Table 2: Expenses for recreation from individual consumption (1970-1989) (in billion USD)

ITEM	1970	1975	1980	1985	1989
Expenses for recreation (USD)	42,7	70,2	115,0	185,7	222,3
% of the total consumption	6,7	6,9	6,6	7,1	7,4
OUT OF THE TOTAL IN BILLION USD					
toys and sports articles	5,5	9,0	14,6	21,1	26,8
bicycles, sports equipment	5,2	10,2	17,2	26,7	33,4
tickets for:					
- sports events (commercial)	1,1	1,3	2,0	2,9	3,3
- sports meetings	2,4	4,9	9,7	15,1	17,3
Clubs and other organizations	1,5	1,9	3,0	4,8	5,4
Other	5,1	9,7	19,4	38,9	49,3

Source: Statistical Abstract of the USA, 1989

By comparison, let us state that the consumers in the USA spend less than 12 % of their incomes on food, which may be used as evidence that sport and recreation have become as important as "our daily bread", given the high incomes of a family and the whole of society.

The American statistics include many expenses for sport and recreation and register many items that other statistics neglect. These are the tickets for commercial sports meetings, membership fees and contributions to clubs, expenses for sports equipment and others (which is only partially specified in the Table 2).

A high percentage of the expenses for sport and recreation can be initially surprising, but it is slightly surprising if one takes into account the percentage of the American population that actually takes part in sports activities. According to the data in Table 3 as many as 216,963,000 US citizens took part in some sports activities in 1989, which makes almost 80% of the American population. Of course, these data should be taken with reservation.

The data in Table 3 show that more women than men are involved in sport, but there are significant differences in the preferences for particular sports between the sexes.

A high percentage of citizens in sports activities causes high expenses for sports equipment, enabling industry and trade to engage in the manufacture and trade of sports goods and do more business.

Table 3: Share in sports activities (1989)

ACTIVITY	number of participants (000)		
	TOTAL	MALES	FEMALES
	216.963	104.988	111.976
% of participants			
aerobics	10,7	3,2	17,7
basketball	11,6	17,1	21,9
cycling	24,5	24,7	24,4
camping	20,4	22,3	18,5
hiking	26,8	19,6	33,5
fishing:			
a) fresh water	18,5	25,1	12,4
b) sea	5,8	8,2	3,5
golf	9,3	14,5	4,5
hunting	9,5	16,7	2,8
running/jogging	11,4	13,6	9,5
rugby	4,5	5,9	3,3
swimming	30,5	29,7	31,1
tennis	7,8	8,9	6,8

Source: Statistical Abstract of the USA, 1989

Table 4: Expenses for sport in the European countries in 1991 in million USD

FINANCIAL SOURCE	TOTAL	Germany	Denmark	Belgium	Spain	France	Italy	Portugal	Great Britain	Sweden	Switzerland	Czech Republic	Hungary
State	3.515	120	53	130	309	1.333	1.066	191	132	47	38	39	57
Local authorities (city, municipal, regional, country)	16.710	5.788	275	170	993	4.334	1.422	224	2.487	426	464	113	14
TOTAL	20.225	5.908	328	300	1.302	5.667	2.488	415	2.619	473	502	152	71
Sponsorships		652	41	22	-	515	869	81	682	79	104	11	11
Sport at work		-	2	-	-	4	-	-	155	274	136	1	1
Broadcasting rights		176	3	3	-	146	157	-	-	6	7	1	-
Household expenses for sport:													
- sports articles	82.280	20.606	649	1.262	15.101	10.730	14.399	1.324	14.895	2246	404	489	175
- sports clothing and shoes		5.652	242	248	8.782	3.255	4.926	409	8.495	986	257	424	89
- sports equipment		3.424	125	101	-	1.168	3.687	296	1.517	657	-	-	40
- sports services		2.228	57	147	-	1.019	1.277	56	2.209	329	-	4	13
		9.302	225	766	6.319	5.288	4.509	563	2.674	274	147	61	33

Source: "The economic importance of sport in Europe: financing and economic impact". 14th Informal Meeting of European Sports Ministers, Strasbourg, April 1994, 155-195

Table 5. Economic indicators of sports in European countries in the year 1991

MEANS FINAN- CIAL OF NATION DESTI-	Germany	Den- mark	Belgium	Spain	France	Italy	Portugal	Great Britain	Sweden	Švicar- ska	Czech	Hun- gary
Economic impact of sport												
1. Production of sports articles	2.384	128	288	832	1.916	2.012	719	6.576	12	630	14	74
2. Sports labor market	604.000 jobs	8.000	173	508	1.804	2.127	79	336	1.792	-	42	-
3. Percentage of the total number of participants	39%	60%	39%	35%	47%	22%	27%	65%	54%	74%	35%	21%

Source: "The economic importance of sport in Europe: financing and economic impact", 14th Informal Meeting of European Sports Ministers, Strasbourg, April 1994, 155-195

Economic effects of sport in developed European countries

Similar results are obtained by the analysis of the consumption of sports articles and services in the developed European countries.

Due to insufficient data for all European countries, we analyzed the expenses for sport and recreation in the most developed ones, according to the available data gathered by the Council of the European Sports Ministers. The presented data enable the following conclusions.

In the structure of fiscal resources for sport financing in all the analyzed countries, the financial resources on the level of regional, county and city communities take the lead, as compared to the financial means earmarked from the state budget. It is clear that economically most of the developed countries set aside the highest financial means for sport. The first in rank is Germany, followed by France, Great Britain and Italy.

Sponsorships are an additional source of financing sport in all countries. The highest amounts of sponsorships are reached in Italy, Great Britain and Germany, followed by the other European countries.

To analyze the means for financing sport and recreation of the workforce, the data for some countries are unavailable, so this part cannot be compared to the USA. It is noted that considerable means for sport are collected from broadcasting rights, especially in Germany, Italy and France.

In all countries the highest item by far are household expenses for sport. Collective data for all the analyzed countries show that 20.225 billion USD is drawn from the National (state and local community) Budget. On the other hand, the total consumption of the population on various sports articles and services in all those countries amounts to 82.280 billion USD. These facts lead to the conclusion that the population of those countries spends four times as much money on various sports needs (articles and services) than the state sets aside for sport.

Obviously, not all of those means remain in sport. Most of them are realized by the sports industry and other complementary activities.

However, a great deal of that money (not only for sports services) remains in sport. Based on that fact, we can draw a conclusion that on the market sport in the developed countries achieves far more financial means than the state invests in it.

Other analyzed data are also very indicative. The production of sports articles has an annual value of around 15,585 billion USD, which is quite a significant item. The consumption of sports articles in relation to their own production in those countries is much higher than the value of their own production, leading to the conclusion that most of the articles are imported.

The sports labor market shows a relatively small share of professional employees in sport. This may be explained by the fact that in all countries most of the work in sport is done on a voluntary basis or in the related fields of activity (education, tourism, sports industry etc.).

Probably the most interesting data relate to the number of participants in sports activities. However, there are significant differences as for the methodology used in establishing the data. They are usually established by the selected sample method, so that it should be considered with reservation.

Regardless of the accuracy of the data on the number of participants in sport activities, it can be said that the higher national per capita income, the higher the number of participants. Yet, it does not depend on the standard of population only, but on the culture, habits and sports life-style. The second hypothesis is confirmed by the participants in sport activities in Denmark, Great Britain, Sweden and Switzerland.

Economic impact of sport in Croatia

Since the official statistics do not state identical indicators for sport in individual countries, only those

indicators available for Croatian sport will be analyzed. First of all, we will analyze the expenses for sport drawn from the Croatian national product.

Table 6: Expenses of social activities in the Croatian national product (% of the national product)

ACTIVITY	1980	1990	AVERAGE
1.Education	4,40	4,70	4,63
2.Science	0,72	1,02	0,94
3.Culture	2,69	2,18	2,11
4.Health care	5,20	5,90	5,50
5.Social welfare	1,40	1,23	1,26
6.Pension funds	7,30	7,90	7,36
7.SPORT	0,58	0,69	0,71
TOTAL	22,29	23,62	22,51

Source: Annual Statistical Report of Croatia, 1991

These comparative indicators show that over recent years in Croatia, of all the social activities, the smallest amount of the national product has been set aside for sport. However, one characteristic of the sport in Croatia is that it produces far greater means than registered by the official statistics. Those means are realized by direct sports activity through sports organizations (clubs) or by common activity of sports and business organizations in the form of sponsorships, contributions, shares, credits etc.

As for the active engagement of Croatian citizens in sport, the data for 1994 show the following situation⁸:

- Number of sports organizations - 3,135
- Number of active participants - 361,261
- Percentage of participants in sport- 8%

From these data, regardless of their accuracy, we can draw a conclusion that around 8% of the Croatian population is active in sports, which is far less than in the developed European countries. However, these are not the complete data, because they do not include the active participants outside the clubs, in private recreational centers, in tourism, sport activities of the disabled etc. Including those groups, the estimated number of participants rises to 15%, which is still less than in the developed European countries. Nevertheless, the achieved results, especially in some sports, give Croatia a much higher rank among European countries.

Additionally, the number of participants in Croatian sport is rising, especially since the end of the recent war. Therefore, the expectation that Croatia will reach the average level of 40% of sports participants in the West-European countries in a few years' time may well be achieved.

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The Croatian example confirms the above stated thesis that the level of income has significant influence on the share of engagement in sports activities.

As for the economic effects of sport on the micro and macro levels, only certain estimations without reliable indicators can be made, since the official statistics do not register them at all, or adds them to other complementary activities.

For instance, the economic effects of sport in Croatian tourism are apparent in the total income achieved by tourism (the income from sport is estimated at 3% of the tourist income - achieved directly or indirectly). Furthermore, the economic effects of sport are seen in the so-called "sports related overnight stays", which in the tourist sports centers range between 3-10% of the total overnight stays (Bartoluci, 1995).

Apart from tourism, sport in Croatia generates a high economic impact in some other activities, like the production and trade of sports articles and equipment. They are estimated at 300 million USD. However, Croatia has not exploited the numerous possibilities for production and trade of various kinds of sports articles and equipment, like sports clothing, sports shoes, sports equipment for gyms, open courts etc. In order to realize those sports production programs, many entrepreneurial programs in Croatian sport are being prepared (Bartoluci et al., 1996).

Conclusion

It can be concluded that sport plays an important role in the economies of the developed countries. It generates numerous economic effects, which can significantly contribute to the development of sport as well as to the economic growth of a country. The examples from the USA and West-European countries confirm that.

Nevertheless, for the sake of a wholesome economic analysis of sports activity as well as for the comparative analysis of sport in individual countries, it is necessary to standardize the methodology of data collected and presented. This is especially true of Croatia, where the data on the investment in different areas of sport or on its economic impact are not registered in the official statistics.

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