DESIGNING THE ECONOMICS OF SPORT ACTIVITIES - AN IMPERATIVE OF NEW TENDENCIES

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Abstract:

A modern man has more and more free time which is used both for rest and leisure. Simultaneously, the time spent in sport and recreational activities has also increased. Consequently, sport and recreation create a new market of goods and services whose dimensions and effects have not been researched enough, particularly not in Croatia. The data, collected and analysed for this paper, show, for example, that almost 150 million Americans are engaged in various exercise programmes every year, whereas almost 90 million are engaged in sports.

These indicators point to numerous aspects of spending both in sports as well as in other sport-complementary activities. Similar indicators and tendencies can also be applied in the developed European countries, for example Germany, for which the data are presented in this paper.

The purpose of this paper is to research the economic aspects of sport and to point to the need for a systematic economic approach to sports in general.

The development and the promotion of the economics of sport is an area of interest of scientists on the one hand, and expert managers in sport organizations and at sporting contests, on the other.

Key words: economics of sport, management of sport organizations, contests

ERSTELLUNG VOM SPORTWIRTSCHAFTLICHEN MARKT - AUFFORDERUNG NEUER TENDENZEN

Zusammenfassung:

Der moderne Mensch verfügt über mehr Freizeit. Sie wird für Erholung und Unterhaltung genützt und in dem Rahmen verlängert sich auch die im Sport und Erholungssport verbrauchte Zeit. Damit eröffnen Sport und Erholungssport einen neuen wirtschaftlichen und dienstleistenden Markt, dessen Grösse und Auswirkung noch immer nicht genung untersucht sind, besonders nicht in Kroatien. Die für diese Arbeit angesammelten und analysierten Tatsachen zeigen z.B., dass fast 150 Mio Amerikaner jährlich an verschiedenen Fitnessprogrammen teilnehmen und dass sich etwa 90 Mio am Sport beteiligen.

Mit den oben genannten Tatsachen hängt verschiedenartiger Geldaufwand zusammen, nicht nur auf dem Sportmarkt sondern auch in zahreichen komplementären Tätigkeiten. Ähnliche Tendenzen lassen sich auch in den entwickelten europäischen Ländern, wie z.B. in der BR Deutschland erkennen, und zusammenhängede Angaben und Tatsachen sind in dieser Arbeit vertretten.

Das Ziel dieser Arbeit ist die wirtschaftliche Sportauswirkung zu untersuchen und auf die Notwendigkeit einer systematischen Auseinandersetzung mit sportlichen Tätigkeit hinzuweisen.

Entwicklung und Förderung der Sportwirtschaft ist das Interessengebiet von Wissenschaftlern aber auch Fachmanager in den Sportbetrieben und bei den Sportkämpfen.

Schlüsselwörter: Sportwirtschaft, Sportbetrieb-Management, Wettkampf-Management

Introduction

The twentieth century saw a significant decrease of working hours for adults in economically developed countries. Between 1870 and 1992 (according to the data in Table 1) the number of working hours was decreased by, for example, 35% in Japan and by 50% in Italy. In 1870, a working man in today's economically developed countries spent 33.6% of a calender year working, in 1913 29.4%, in 1950 only 20.2%, and in 1992 only 18%. These big changes happened before our very eyes, and this may be the reason that we are not yet able to comprehend the whole range of their significance and consequences.

This decrease of working hours is ascribed to the new technological revolution which has enabled a multiple increase of productivity of the employed people which was accompanied by an increase in the welfare of the whole population. Globalization, which has been going on for the last twenty years, opens unpredictable perspectives to mankind in the 21st century, together with progress in the achievements in economic sciences as well. This is something one should prepare for. A research done in Finland describes the constant increase in the amount of time spent on leisure (in 1979 the time spent on leisure amounted on average to 5 hours and 19 minutes, whereas in 1987 this number was 5 hours and 35 minutes). Simultaneously, the time spent in sports and recreation also increases (Statistical Yearbook of Finland, 1996).

Therefore, the modern man has more and more free time which is spent for resting and

Table 1: Time spent at work by the employees in some countries - 1870-1992 (number of working hours annually) - according to Maddison, 1995.

Country	1870	1913	1950	1973	992
Austria	2,935	2,580	1,976	1,778	1,576
France	2,945	2,588	1,926	1,771	1,542
Germany	2,941	2,584	2,316	1,804	1,563
Italy	2,886	2,536	1,997	1,612	1,490
Sweden	2,945	2,588	1,951	1,517	1,515
Great Britain	2,984	2,624	1,958	1,668	1,491
Spain	-	-	2,200	2,150	1,991
Australia	2,945	2,588	1,838	1,708	1,631
Canada	2,964	2,605	1,967	1,788	1,656
USA	2,964	2,605	1,867	1,717	1,589
Japan	2,945	2,588	2,166	2,042	1,876

leisure. A significant increase in service activities in the 20th century (today these services employ as much as 80% of the total number of employees) in fact reflects the need for the improvement in quality of spending one's free time. More and more people spend more and more time getting their education thus preparing for the challenges of the future; the prolonged average lifespan requires better medical services; TV, film, theatre, sport and recreation provide entertainment. Six hundred million people travel to other countries all over the world every year (the data refer to the end of the 90s) in order to rest and meet other people and learn about other cultures.

Thus, a quick development of sport activities which appear in two forms should be observed:

- as enjoyment while watching sporting contests

Table 2: USA - Participation of people in various activities during their free time, 1997 (in % if not otherwise emphasized) - according to the Statistical Abstract of the USA, 1998, p. 270.

Index	Adult population (in millions)	Attendance			Share in:		
		movies	sport events	amusement fairs	exercising	sport participa-tion	"do-it-yourself"
Total	195.6	66	41	57	76	45	66
men	94.2	66	49	58	75	56	71
women	101.4	65	34	57	77	35	61
Age (years)							
18-24	23.7	88	51	76	85	67	57
25-34	40.1	79	51	70	82	63	63
35-40	45.3	73	46	68	79	52	76
45-54	44.7	65	42	53	77	40	75
55-64	20.9	46	33	40	69	19	71
65-74	19.6	38	21	29	65	23	55
75 -	12.3	28	16	18	56	13	44
Annual income (000 $)							
- 10	15.0	37	15	39	55	19	42
10 - 20	26.5	46	26	51	69	27	53
20 - 30	29.4	56	28	55	72	40	61
30 - 40	32.1	71	42	64	77	46	68
40 - 50	25.9	73	51	67	80	51	75
50 - 75	35.0	82	54	65	86	60	80
75 - 100	16.2	81	66	64	86	61	79
100 +	15.5	87	65	56	90	66	81

- as an activity of individuals who want to improve and maintain their psycho-physiological abilities and prolong their life expectations by engaging in a sports-recreational activity.

The second half of the 20th century saw the increase of the number of both the young people and of the older adults who were engaged in a sport activity. Organized sport activities appear more and more often as a specific service activity which, however, is neither yet organized at a world level nor scientifically and systematically researched and taught at universities. This is best reflected by the data referring to the USA in the year 1997 (Table 2). Approximately 150 million of grown-up Americans are engaged in various exercise programmes every year, whereas almost 90 million are engaged in sports. Social categories with high incomes are especially engaged in sports. Their engagement is more active then that of the households with lower incomes. It is fascinating that there are people who are physically active even in their old age (75 years of age and over!). In Finland, 82% of all adults are engaged in physical exercise at least once a week (only 72% watch TV, whereas only 35% of the adults had been to the movies within the last six months) (Statistical Yearbook of Finland, 1996). The purpose of this paper was to research the economic effects of sports and to emphasize the need for a systematic economic approach to sports-related activities which gain in significance all the time.

The extended theses which are going to be presented on the following pages will not be able to deal with all the countries, sports and economic aspects of these new, undoubtedly expanding activities. We are, therefore, forced to limit the research to the following:

- research into the dynamics of sport-related activities in two countries (the USA and Germany) which are considered to be the representatives of tendencies in the developed world, although we are aware that there are big differences between the countries (because of the differences in historical development, mentality, degree of economic development, etc.);

- research into microeconomic issues (management of the club economics or of the sport facility);

- research into macroeconomic aspects - economics of large competitions.

While writing this text, we found ourselves faced with difficulties due to the lack of uniformity between the national statistics: unlike the standardized data about the demography and economics, statistics of sport is in different countries still done according to different criteria and to a various extent, which makes it impossible, or at least more difficult, to carry out the comparative analysis. The standardization of the statistics that is concerned with both the sport activities and with sports-recreational activities is a necessary prerequisite, which should be dealt with more extensively in all countries, and it should imply the participation of international organizations as well.

Table 3: Attendance of spectators at the selected sporting events in the USA, 1980 - 1996 (in thousands) - according to the Statistical Abstract of the USA, 1991 & 1998.

Sport	1980	1985	1990	1993	1996
Baseball					
- regular season	43,014	46,824	54,824	70,257	60,097
Basketball					
- NCAA (men, college league)	30,692	26,584	28,741	28,527	28,225
- NBA (professional league)	10,697	11,534	18,586	19,120	21,797
American football					
- NCAA (college league)	35,541	34,952	35,330	34,871	36,083
- National league	14,092	14,058	17,666	14,772	-
Horse racing	74,690	73,346	63,803	45,668	43,367

Sport and recreation walk hand in hand

The data show that sport and recreation are more and more related. In the year 1997 as much as 66% of adult citizens in the USA went to the movies, 57% went to amusement fairs, and 41% to sporting events. The data displayed in Table 3 show that tens of millions of visitors attended sporting events in the USA, although this number today is stagnant due to the fact that more and more events are covered and broadcast on television. The attendance at horse races has significantly decreased. Still, the income from the organization of events is on the increase because of the sale of TV - coverage rights.

Apart from those people who passively watch the events, the number of those who take an active part in the process of physical exercising and in various sporting events is on the increase, which is especially reflected in the data presented in Table 4. Extensive reports, which are comprised in the USA by means of polls done on a representative sample of participants (Table 4 contains data only about those sports in which the number of people who participate actively is the largest), show that there are sports that have expanded significantly throughout the observed decades (basketball, exercise walking, hiking with or without equipment), but there are also those in which the number of participants is on the decrease (volleyball, American football, cycling, etc.). This enormous number of active participants in sport and recreation has led not only to the increased demand for sporting equipment, but also to costly expenditures for particular sports (which comprise, together with the equipment, the expenses connected with travelling to particular sports grounds and a whole series of related expenses). Let us show it using the following example: in the year 1996 the expenditures connected with recreational fishing accounted for 37.8 billion US$, for hunting 20.6, and for monitoring wild life in nature 29.2 billion American dollars!

Table 4: Participants (at least six times a year) in certain sport activities in the USA, 1989 and 1996 (in thousands of persons) - according to the Statistical Abstract of the USA, 1991 & 1998.

Sport activity	1989	1996
Exercise walking	66,558	73,307
Swimming	70,489	60,223
Bicycle riding	56,941	53,342
Exercise with equipment	31,476	47,823
Canoeing	46,514	44,695
Bowling	40,810	42,895
Fishing – fresh water	41,005	40,298
Billiards	-	34,477
Basketball	26,182	33,281
Hiking	23,561	26,457
Aerobics exercising	25,108	24,119
Golf	23,156	23,082
Running – jogging	24,803	22,239
Softball	22,092	19,873
Hunting with firearms	17,715	19,251
Volleyball	25,071	18,535
Target shooting	12,607	15,695
Baseball	15,406	14,823
Soccer	11,168	13,876
Football – touch	14,728	11,645

Accordingly, the number of sports grounds is on the increase. This is confirmed with the data describing the situation in the USA and the Netherlands (Tables 5 and 6). Although the data are incomplete, they speak about the fact that an increasing portion of the national capital is invested in this new segment of national assets. Naturally, it is also liable to the principles of economic management.

Table 5: Development of some sports facilities in the USA, 1975 - 1996 (in thousands)

Indicators	1975	1980	1985	1990	1996
Number of:					
- golf courses	11.4	12.0	12.3	12.8	14.3
- tennis courts	130	-	220	220	245
- bowling alleys	141	154	155	148	136
Number of vessels – total	-	570	637	504	619
- with an outboard engine	-	290	305	227	215
- with an inboard engine	-	8	17	15	11

Table 6: Number of visits to both indoor and outdoor sports facilities in the Netherlands in 1988 and 1994 - according to the Statistical Yearbook of the Netherlands, 1998, p. 458.

Year	Number of facilities	Number of visitors per week	The share of (...) in %		
			School sport	Clubs	Recreation
A. Indoor sports facilities					
1988. - total	1,620	1,170	36	43	20
1994. - total	2,040	1,050	32	42	26
out of which:					
- small halls	430	890	47	41	12
- big halls	860	1,370	41	47	11
- tennis courts	290	1,070	0	22	76
- other	450	590	2	39	58
B. Outdoor sports facilities					
1988 - total	4,030	510	-	-	-
1994 - total	4,190	510	-	-	-
out of which:					
- football fields only	1,280	400	-	-	-
- tennis courts only	680	470	-	-	-
- athletic and other arenas	500	340	-	-	-
- other sports	1,730	820	-	-	-

While analysing the tendencies in the increase of expenditures for sport and recreation, we, as economists, are going to use of the *income-based coefficient of elasticity* for this group of goods and services. This indicator describes what happens in the given economy if the general domestic product (GDP) or gross domestic product increases by 1%. The analyses carried out in the second half of the twentieth century show that consumers of different groups of products react in different ways to the income increase.

The lowest income-based elasticity is in food, firewood (fuel), flats and some other products (less than 1). The spending is elastic when the coefficients of elasticity fall between 1 and 2 (textiles, furniture, etc.). The spending is highly elastic when the income-based coefficients of elasticity are above 2.

Then we researched the tendencies of consumer spending for sport and recreation. The analysis shows that in the period between 1960 and 1998 the USA realized an annual

Table 7: The selling of products in the USA, 1980 - 1997 (in millions of American dollars) - according to the Statistical Abstract of the USA, 1991 & 1998, p. 269.

Categories of products	1980	1984	1988	1991	1994	1997
Products – total	16,691	26,401	43,937	47,104	53,453	62,932
Out of which:						
- sporting clothing	3,127	3,432	9,555	10,731	9,521	11,399
- sporting footwear	1,731	2,381	6,797	11,787	11,120	13,345
- sporting equipment	6,487	8,137	10,705	12,062	15,257	18,064
- golf	386	630	1,111	1,149	1,342	3,916
Recreational vehicles/vessels:	5,345	12,271	16,880	12,534	17,555	20,124
- vessels	2,718	6,209	9,637	5,862	7,679	9,474
- bicycles	1,233	1,840	2,131	2,686	3,470	3,251
- snow cars	216	140	273	362	715	946
- other	1,178	4,802	4,839	3,615	5,690	6,454

increase in gross domestic product (in real terms) of 2.2%, whereas the expenditures for sport and recreation rose annually by 5.3%. This means that the income-based coefficient of elasticity for this group of products and services was 2.4, so that the expenditures for sport and recreation fall into the group of highly elastic products.

The share of expenditures for recreation in the total American gross domestic product has tripled during the analysed 39 years. The American Ministry of Trade assesses that in 1997 Americans spent 573 billion dollars for golf, amusement fairs, sporting events, sporting equipment, going to the movies, etc. This enormous amount, which, as already said, increases annually by 5.3%, produces a demand for sport goods and services. The entrepreneurs attempt to meet this demand with new products. It should be added that the described tendencies are not specific for the North American continent only; these tendencies are to be found in all developed economies in Europe, Asia and Oceania. It is a universal phenomenon whose range is incomprehensible. As professors, we rarely prepare our students for the business challenges that they are going to face in their future.

These long-term tendencies continue, leading to numerous macro- and microeconomic effects such as:

- The manufacturers of sporting equipment can count both with the market which rapidly expands and with the demand whose purchasing power is increased. Since sport-related activities are numerous, a large number of specialized firms that realize an above-average profit have developed consequently. The shares of these firms have a long-term tendency to increase (Alper, 1999).

- The firms whose activities are connected with sport and recreation (ranging in the USA from golf centres to recreational centres in the cities) are based on the entrepreneurial spirit of small investors, and as a rule they realize a large profit, although there is a big risk both in making business decisions and in the management of facilities (a good manager is a big investment!).

Table 7 displays data about selling the sport-related products in the USA. In the seventeen analysed years cash outflows for sport-related products quadrupled (index = 377 - base = 1980). The outflows for sporting footwear (index = 771) and golf (index = as much as 1015). Such an increase in demand cannot be seen in any other sport activity, so that the share buyers are advised to invest their shares into the sporting equipment producers in order to maximize their profit (Alper, 1999).

Similar tendencies are expressed in the data collected about the sporting camping equipment in Germany (Table 8). The expenditures for sporting and camping equipment increased between 1994 and 1996 in all types of households, with a particular increase for the purchase of equipment in well-to-do households.

Table 8: Expenditures for sporting and camping equipment in Germany in 1993 and 1996 - according to Statistisches Jahrbuch, 1997, p. 566-575.

Indicator	Type of household					
	1993			1996		
	1	2	3	1	2	3
A. Former Federal Republic of Germany						
Monthly income (in DEM)	2,535	5,197	8,459	2,713	5,626	8,880
Expenditures for sporting and camping equipment	9	98	177	12	115	172
% of income	0.4	1.9	2.1	0.4	2.0	1.9
B. New Federal Countries and East Berlin						
Monthly income (in DEM)	2,519	4,059	5,305	2,810	4,673	6,047
Expenditures for sporting and camping equipment	21	53	80	15	60	87
% of income	0.8	1.3	1.5	0.5	1.2	1.4

Table 9: Participation in sports in 1996 (in thousands, persons older than 7 years of age who play quite frequently throughout the year, based on the sample)- U.S. Census Bureau, the Offical Statistics ™ Statistical Abstract of the United States, 1998.

Activity	Total	Persons		Annual household income ($)					
		Men	Women	below 15.000	15.000-24.999	25.000-34.999	35.000-49.999	50.000-74.999	75.000 and more
Total	237,745	115,443	122,301	43,372	36,377	35,382	42,878	50,791	28,944
Aerobics exercising	24,119	5,314	18,805	3,117	3,024	3,462	4,619	5,739	4,159
Backpacking	11,469	7,240	4,229	1,825	1,990	1,539	2,107	2,309	1,698
Badminton	6,084	2,909	3,175	866	710	1,054	1,259	1,415	780
Baseball	14,823	11,610	3,213	1,851	1,736	2,318	2,948	3,875	2,095
Basketball	33,281	22,375	10,906	4,296	4,660	4,825	6,886	7,908	4,706
Bicycle riding	53,342	28,595	24,747	7,802	6,775	7,883	10,287	12,575	8,020
Billiards	34,477	21,841	12,636	5,432	5,290	5,054	7,118	7,160	4,422
Bowling	42,895	22,579	20,316	5,542	6,150	6,515	8,636	10,648	5,404
Calisthenics	10,064	5,023	5,041	1,116	1,045	1,438	2,047	2,523	1,894
Camping	44,695	24,102	20,593	6,214	6,907	7,039	9,323	10,691	4,521
Exercise walking	73,307	26,666	46,641	12,821	10,945	10,464	13,534	15,846	9,698
Exercise with equipment	47,823	22,200	25,622	5,525	5,788	6,711	8,904	12,372	8,522
Fishing - fresh water	40,208	27,160	13,048	6,653	6,229	6,346	7,746	9,031	4,203
Fishing - salt water	11,045	7,926	3,119	1,501	1,341	1,219	2,049	3,115	1,820
Football, touch	8,953	7,969	983	1,569	1,624	1,286	1,723	1,825	925
Football, touch	11,645	9,603	2,042	1,893	1,676	1,757	2,137	2,981	1,202
Golf	23,082	18,219	4,863	1,575	2,069	2,641	4,233	7,119	5,444
Hiking	26,457	14,465	11,992	3,960	3,429	3,729	4,753	6,164	4,423
Hunting with firearms	19,251	16,317	2,933	2,662	2,960	3,160	4,329	4,151	1,989
Martial arts	4,673	3,286	1,387	755	625	736	794	1,084	679
Racquetball	5,582	3,768	1,814	517	809	695	1,015	1,569	976
Running - jogging	22,239	12,320	9,919	2,847	3,121	2,940	4,139	5,455	3,737
Skiing - alpine/downhill	10,466	6,277	4,188	726	992	801	1,597	2,979	3,370
Skiing - cross-country	3,385	1,820	1,566	249	310	327	752	976	772
Soccer	13,876	8,626	5,251	1,658	1,430	2,244	2,760	3,521	2,264
Softball	19,873	10,837	9,035	2,750	2,659	2,886	4,175	5,024	2,379
Swimming	60,223	29,145	31,078	7,944	7,482	8,181	11,115	15,859	9,643
Table tennis	9,542	5,907	3,635	1,136	1,165	1,178	1,680	2,600	1,783
Target shooting	15,695	11,097	4,598	2,416	2,528	2,507	3,141	3,244	1,859
Tennis	11,485	6,381	5,105	1,057	1,214	1,484	2,420	2,719	2,591
Volleyball	18,535	8,970	9,565	2,694	2,282	2,760	3,771	4,458	2,571

Table 10: German sport associations and membership in 1980 and 1996

Sporting	1980*	1996
Associations	74,802	85,938
Members (active and passive)		
- men	13,356,751	14,051,437
- women	7,675,693	8,580,601
Age of men		
- 15	2,093,773	2,896,827
15 - 26	-	3,004,472
27 - 40	-	3,083,593
41 and over	-	5,067,545
Age of women		
- 15	1,642,542	2,135,624
15 - 26	-	1,771,213
27 - 40	-	1,900,947
41 and over	-	2,772,617

* Federal Republic of Germany

The increase in the number of athletes, sport firms, sports clubs and sport associations

The increasing interest of people for sport and recreation (Table 9) has led to an increase in the number of athletes, members of sports clubs and the number of associations dealing with sports, which is expressed by very interesting data collected in Germany and displayed in Table 10. The number of female athletes is of special significance together with an increase of interest for the sports that used to be privileged. These changes are the result of the previously analysed income-based elasticity: it shows extremely high coefficients of elasticity in some (expensive and prestigious) sports, whereas the interest for other sports decreases with the increase of family income. The analysis may be carried out on the basis of comparison between the level of income in some categories of households and the participation share in some sports.

For the purpose of this paper we have analysed only several representative sports and categories (Table 11).

In the category in which the approach to a particular sport such as golf, tennis, fishing (salt-water) is expensive (due to the equipment used and the sports grounds) the participants are citizens with high personal incomes, whereas the share of 'middle class' is dominant in the whole series of other sport activities (badminton, hunting with firearms, billiards, etc.). These data undoubtedly lead to the following conclusion: participation in a particular sport is the function (to a large extent) of the financial resources that

Table 11: Out of the total number of participants in sport, an income category is attributed to a particular % of participants (the total number= 100)

Sport activity	In the income category (000 $) annually		
	- 25	25 - 50	50 and more
A. "Expensive" sports			
Golf	15.8	29.8	54.4
Tennis	19.8	34.0	46.2
Aerobics	25.5	33.5	41.0
Fishing – salt water	25.7	29.6	44.7
B. "Cheaper" sports			
Badminton	25.9	38.1	36.0
Bowling	28.0	34.6	37.4
Billiards	31.1	35.3	33.6
Hunting with firearms	29.2	38.9	31.9

are at one's disposal. Further improvements in the economic situation will definitely result in an increased number of people engaged in those sports which are considered to be more 'expensive'.

Recently, both the government administration and the local authorities consider sport and recreation as a part of the policy of a welfare state, so that more and more financial resources from the budget are intended for supporting the development of sport and recreation. This is reflected by the data displayed in Tables 12 and 13. These data relate to the financial support for sport in the Netherlands. It is interesting that in the Netherlands the support for art, cultural heritage and sport activities is the same - this is because according to the contemporary economic theory they belong to the one and the same economic category - *they support the elements of the modern welfare state.* These three components have an approximately same share in the distribution of budget resources which continually subsidize them. The amounts attributed to these components increase all the time (in the analysed nine years this increase was 20%). A symptomatic tendency can be noticed that less and less money comes from the government budget, and more and more from the local (county and municipal) authorities. As for the structure of subventions, the largest amounts are attributed for the building and maintenance of sport facilities, whereas the subventions for sport organizations appear to be the exeptions in this respect.

This example says that the expenditures for sport and recreation are more frequently understood not as investments into 'fun and entertainment', but as a part of the state policy regarding an increasingly important segment of the distribution of the free time of people. Sport is manifested in two aspects: on the one hand, there is the entertainment of the TV viewers of sporting events (more and more free time is spent watching these events), and on the other, there is the active participation in both sport and recreation (which becomes more significant for the maintenance of both the health status and the status of psycho-physical capacities). Subventions from the Budget, as a rule, are attributed to the second aspect of sport-related activities, since they are of great importance for the health status of the whole nation.

However, we should not forget that both aspects of sport have their economic values. In this paper these values are only expressed as such - their elaboration would exceed the frame of this paper.

Management of sports organizations and competitions

Globalization, especially expressed in the second half of the twentieth century, and the increased number of people who are engaged in sports have intensified the interest of people for top sport. Television has made it possible for millions of people in all parts of the world to

Table 12: Participation of persons older than 6 years of age in sport activities in the Netherlands in 1995 (in percentages) - according to the Statistics Netherlands: Statistical Yearbook 1998, p. 457.

Indicators	One or more sports	In it:				
		Fitness/ aerobics	Tennis	Cycling	Football	Swimming
Men	67	7	11	17	17	31
Women	65	15	9	13	2	39
Age (years)						
6-12	89	1	11	6	26	65
13-17	86	11	17	11	28	49
18-24	76	24	10	12	15	37
25-34	75	31	12	16	10	38
35-44	70	14	12	18	6	39
45-54	60	8	11	20	3	26
55-64	51	3	6	22	1	23
65 +	30	1	3	10	0	11
Total	66	11	10	15	10	35

watch big sporting competitions. Tens of millions, sometimes even two billion people enjoy watching the scenes from sports grounds at the same time. The sports most frequently covered by television are tennis, football, athletics, boxing, car racing, motor racing and basketball, as well as some sports that not so long ago were unknown to some parts of the world, for example sumo wrestling.

Apart from the Olympic Games, until recently the only really big world-level competition, numerous other competitions such as athletic meetings, continental competitions of national football champions, ATP tournaments and tens of similar competitions capture the attention of people all over the world. When billions of people watch a certain competition, then we can say that that is an ideal opportunity for market promotion of a product: advertisements and all kinds of commercial messages can be seen at every competition. They are the source of a significant amount of income for the organizers of sporting contests, together with the income from the tickets sold. However, the largest amount of income comes from selling the television coverage rights. The contests covered by TV will be watched by a huge number of viewers all over the world. Those who pay for their commercial messages know that these messages will reach even the farthest places on our planet and attract new consumers.

Thanks to the increased income from sporting contests, the clubs are able to pay 'their' top athletes. Transfers of football players, basketball players and other athletes bring millions of dollars both to the sports clubs and to the athletes themselves. In only one competition, the European Football Champions League in the 1995/1996 season, the amount of money involved was more than two hundred million Swiss francs (Table 14). This year season also saw an increase in the number of clubs and in the interest of TV viewers. The clubs that reach the finals of the competition can count on an income higher than 20 million Swiss francs. All this contributes to the increase of interest of football players and clubs - they see the opportunities for an increase of incomes in the internationalization of the competition.

However, this is not the case only with football! Athletics also underwent significant changes throughout the twentieth century. During the 30s, the Olympic winner Paavo Nurmi was disqualified, because he received an award, while visiting the USA, of several hundred dollars. The president of IAAF had to put enormous effort to clear Nurmi's name in 1952, although Lord Burghley was a conservative man all the same and he spoke in favour of pure and total amateurism. And look how far we are from that now! The recent president of IAAF, the deceased Dr.

Table 13: Government subventions for culture, sport and recreation in the Netherlands, 1985 - 1994 (in millions of Dutch guilders) - according to the Statistical Yearbook of the Netherlands, 1998, p. 459.

Subventions	1985	1989	1991	1994
Art - total	956	1,074	1,157	1,320
Cultural heritage	1,446	1,410	1,596	1,692
Sport - total	1,076	1,045	1,122	1,186
Out of which:				
- sports facilities	942	907	985	1,012
- sports organizations	107	109	110	146
- other	26	29	27	32
Recreation - total	1,227	1,283	1,367	1,445
- amusement fairs	871	931	1,003	1,137
- recreational facilities	308	282	295	304
- other	49	70	69	4
T o t a l	4,705	4,812	5,242	5,645
Sources:				
- government budget	1,355	1,015	1,165	1,216
- country budget	183	230	240	252
- municipal budgets	3,167	3,568	3,837	4,175

Table 14: Expenses of the European Champions League, season 1995/1996 (in thousands of Swiss francs) - according to Statistisches Jahrbuch, 1997, p. 566-575.

Clubs	In groups			Finals			Total (CHF)
	Fixed quota	Points	TV rights	Quarter-finals	Semi-finals	Finals	
Group A							
Olympiakos	2,000	4,000	550	3000			9,550
FC Croatia – Zagreb	2,000	3,000	500				5,500
FC Porto	2,000	2,500	550				5,050
AFC Ajax	2,000	2,500	1,100				5,600
Group B							
FC Juventus	2,000	3,500	3,025	3000	3,250		14,775
Galatasaray SK	2,000	3,000	632				5,632
Rosenborg BK	2,000	3,000	500				5,500
Athletic Club Bilbao	2,000	2,500	2,475				6,975
Group C							
Internazionale FC	2,000	4,500	2,475	3000			11,975
Real Madrid CF	2,000	4,000	3,025	3000			12,025
Spartak Moscow	2,000	3,000	500				5,500
SK Sturm Graz	2,000	500	500				3,000
Group D							
FC Bayern München	2,000	4,000	3,915	3000	3,250	4,000	20,165
Manchester United	2,000	4,000	2,475	3000	3,250	5,000	19,725
FC Barcelona	2,000	3,000	3,025				8,025
Brondby IF	2,000	1,000	500				3,500
Group E							
Dynamo Kiev	2,000	4,000	500	3000	3,250		12,750
RC Lens	2,000	3,000	3,025				8,025
FC Arsenal	2,000	3,000	3,025				8,025
FC Panathinaikos	2,000	2,000	450				4,450
Group F							
FC Kaiserslauten	2,000	4,500	4,785	3000			14,285
SL Benfica	2,000	3,000	450				5,450
PSV Eindhoven	2,000	2,500	900				5,400
HJK Helsinki	2,000	2,000	500				4,500
Total	48,000	72,000	39,382	24000	13,000	9,000	205,382
income of associations from TV coverage rights			11,075	income of associations from TV coverage rights			11,075
T o t a l			50,457				216,457

Primo Nebiolo[1], encouraged big athletic meetings all over Europe and organized the World Athletic Championship at which the winners were presented with medals and money awards - the best athletes received as much as one million dollars in one season.

The presented examples suffice for illustrating the discussed issues. Let us add that the necessity of sport management is recognized at three levels:

- the level of economy and utilization of sport facilities (the cost-benefit analysis has

[1]He had several honorary degrees, among them also the honorary degree of the University of Zagreb. Acknowledging all his credits for the development of athletics and student sport and at the suggestion of the Faculty of Physical Education, he became a *doctor honoris causa*. His work confirmed the justification of this title.

very frequently been neglected up till now;

- the managing of a sports club, that is, of a recreational process;

- organizational forms of international competitions today (from ATP tournaments to University Student Games, Mediterranean Games or Olympic Games).

On the basis of the findings it can be concluded that the economics of sport and recreation is insufficiently represented at all levels, and that very frequently people who are not adequately professionally trained take part in them. We are of the opinion that the faculties for kinesiology and sport should become the purveyors of such an education, implying and respecting the multidisciplinarity of the approach (from the point of view of economy, kinesiology, medicine, architecture, construction industry and other scientific disciplines) as the inevitability of the 21st century.

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