

Business Environment and The Performance of The Sports Industry in Relation to The Population Physical Activity of The EU

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Abstract

The promotion of sport and the physical activity of the population form the basis of the European Union's sport policy. Entrepreneurship and entrepreneurial activities are the backbone not only of modern economies but also of economic sciences. Entrepreneurship in the sports sector has not only a significant macroeconomic impact but entails also many other social benefits (the sport itself). This paper focuses on the relationship between the 2 derived macroeconomic indicators of sports satellite accounts and sports activity of the population of the European Union countries. The aim of the paper was to identify and quantify the impact of the economic output of sport (as a percentage of the total GDP) and employment (as a percentage of the total employment) in the sports sector on the physical activity of the population of the European Union countries. Based on the analysis of available empirical secondary data, the impact of the 2 derived macroeconomic indicators on the physical activity of the population was identified and quantified. Based on the results of the analyzes, 2 main hypotheses were refuted.

Keywords: business environment, sports activity of the population, sports industry, sports satellite accounts

JEL: E20, I15, M21

Introduction

The word sport has its basics in the Latin word "disportare" which can be loosely translated as "have fun". However, sport is not only a means of entertainment for the masses, it is also a physical and mental activity with a measurable impact on the health of the population as well as national economies. Sport and its economic impacts are still a poorly researched area. Fitzel (2006) states that the economy of sport is becoming an increasingly attractive and respected industry. The professional public has also started to pay attention to the outputs of the field.

Entrepreneurship and the business environment are based on a wide range of knowledge and competencies in the field of finance, management, legislation and many other disciplines. Given this multidisciplinary overlap, it is necessary to take an active and strategic approach to the development and thus the support of sport-related business activities pursued by self-employed persons, small and medium-sized enterprises, as well as companies with a global reach. Papula et al. (2018) perceive entrepreneurship not only as a manifestation of economic freedom, but also as an activity with societal and social impacts. Strong business environment represents a significant competitive advantage of a country. The development of a selected type of business/ business environment is measured using basic macroeconomic indicators, such as the share of gross domestic product or share of industry in total employment.

According to the 2018 study "Study on the economic impact of sport through sport satellite accounts" (European Commission, 2018), sport accounts for up to 2.12% of GDP and 2.72% of total employment in the European Union. Due to significant macroeconomic indicators, the attractiveness of sport for the masses and the multidisciplinary overlap, sport and its impact on society are gradually becoming the subject of interest and research of several scientific disciplines, including economics, as sport is no longer perceived just as a leisure activity, but also business with significant national economic output.

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The paper focuses on the possible relationship between the share of sport in selected macroeconomic indicators of the European Union and the level of sports participation in the population of these countries. The long-term declining sport activity of the population of the European Union countries was the main reason for emphasizing the promotion of a healthy lifestyle in the strategic sports documents (eg White Paper on Sport, Physical Activity Guidelines - Recommended Policy Actions in Support of Health-Enhancing Physical Activity etc.). According to a study by Eurobarometer 472 Sport and physical activity from 2018, 46% of the population never exercise or play sport, which represents an increase of 3% compared to 2013, while in the category of people aged 15-24 24% of the population never exercise or play sport. This % increases with the increasing age of individuals (European Commission, 2018).

When selecting indicators for comparative analysis and formulating hypotheses, we assumed that countries with a higher percentage of sport in selected macroeconomic indicators have a higher share of population engaged in sports and exercise than countries with lower share of sport. Monographs and articles in national and international peer-reviewed journals served as the theoretical basis of the paper were. The source of secondary data were mainly studies prepared by the European Commission and EUROSTAT - source of macroeconomic statistical databases.

Literature Review, Basic Definition of Sport and Sports Industry

Sport is a relatively broad concept with the multidisciplinary reach. Novotný et al. (2011) distinguish between 2 main branches of sport, namely sport with active and sport with passive participation of participants. Sport with active participation is further divided into institutionalized / organized sport and non-institutionalized / unorganized sport. The figure below shows a generally valid model for the classification of sports and the reach of the sports industry.

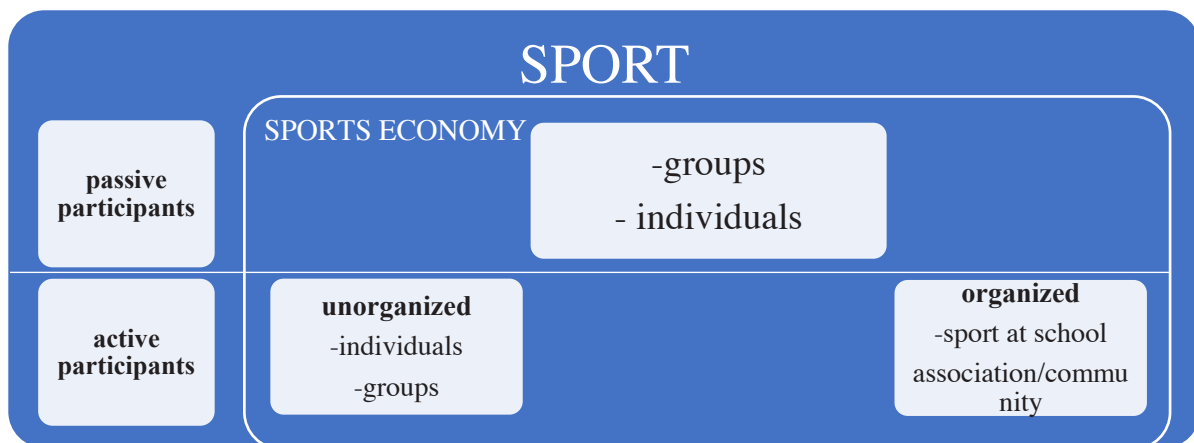


Figure 1. Basic Classification of Sport and the Impact of the Sports Industry

Source: made by the authors

Non-institutionalized sport means unorganized groups or individuals who practice sport independently and finance these activities from their own resources (so-called household expenditures). For example, an individual decides to improve their fitness in a fitness centre individually, or a group of colleagues take part in a "team building" and go on a hiking trip, etc.

One of the basic parts of the organized sports subsystem is school sports - it is a part of the educational process at primary and secondary schools and possibly also at universities. There is also association / community sport - amateur and professional competitions attended by athletes, sports experts such as referees, coaches, sports officials, etc. usually associated in sports organizations (sports clubs, sports associations etc.). Organized sport could be considered a driving force of the sports industry, as it is followed by people and media who wish to see the best of the best compete against each other on a professional level. The organized sport has a great impact on economy mainly due to goods / services sold:

- Production of sports equipment (clothing, sports equipment and tools, etc.)
- Production of nutritional supplements
- Construction and services of sports infrastructure (fitness centres, sports grounds, etc.)
- Services of sports professionals (coaches, players' managers, etc.)
- Sale of licenses and rights (marketing rights, broadcasting rights, transfers of athletes, etc.)

The passive component of sports are individuals / groups - mainly sports fans. The sports industry has also an impact on unorganized sport mainly in terms of goods / services:

- Production of sports equipment and souvenirs (clothing, sports equipment and souvenirs)
- Additional services of sports infrastructure (sale of refreshments, etc.)
- Sale of tickets and fees payment (tickets for matches, sports TV channels fees, etc.)

Businessdictionary.com (2020) defines business as the ability and willingness to develop, organize and manage a business together with all its risks in order to make a profit. Hudáková and the team of authors (2014) consider the most important features of business:

- a. independence,
- b. initiative,
- c. legal and economic education,
- d. willingness to take risks,
- e. creativity.

Butoracová, Šindleryová and Morovská (2009) perceive the business environment in the broadest sense of the word as a reflection of the quality of economic conditions and preconditions for the economic activity of business entities. According to Smriti (2018), the business environment is created by a set of conditions that surround people in a specific space and time. Klamová (2018) argues that a favourable business environment can be defined as an environment that creates equally favourable conditions for all.

When measuring the development of the business environment, Demjanová (2010) draws particular attention to the choice of suitable indicators for identifying development and the subsequent comparison of individual economies. Kuzmišín (2009) states that the quality of the business environment could be expressed using several indices with different construction, different types of data and different variables. When measuring the impact of the sports industry, sports satellite accounts are the preferred choice.

With regard to the societal impact of sport, it is important to draw attention to the existence of externalities acting on sport activities. Medveď, Nemeč et al. (2011) describe externalities as situations where economic activity brings benefits - positive externality as well as loss - negative externality, without paying for such a benefit or being compensated for damage suffered. Downward, Dawson and Dejonghe (2009) agree that externalities are one of the basic starting points for public policy-making in the field of sport.

According to the European Commission's Physical Activity Guidelines - Recommended Policy Actions in Support of Health-Enhancing Physical Activity (2008), regular physical activity significantly reduces the risk of cardiovascular disease, cancers, stress etc. (European Commission, 2008). In addition to the positive effects of sport and exercise on the health of the population, savings on health care should also be mentioned. According to an article published in The New York Times, a 30-minute physical activity 5 times a week saves \$ 2,500 in annual health care costs, with the physical inactivity of the population costs \$ 68 billion a year in terms of health care and lost productivity. Otarbaevich and Dlimbetovich (2021) also point to the beneficial effect of 30-minute physical activity not only on the physical but also mental health of individuals and subsequently the whole society. Thus, physical activity/ inactivity has an impact not only on the health of individuals, but also on health care expenditures.

From the societal point of view, the positive externalities of sport prevail, as an individual who exercises and play sports also actively reduces public spending on health care and at the same time improves the health profile of the population, contributes to increasing labour productivity and increases economic production as well as the competitiveness of countries on the globalized market.

Negative externalities also have their societal impact, for example construction of sports infrastructure and games and competitions (in protected natural areas). Montolio and Planells-Struse (2019) perceive the crime committed by football hooligans and club ultras as yet another significant negative externality of passive sport.

The Impact of Sport on Selected Macroeconomic Indicators Measured through Satellite Accounts

The "EU Conference on Sport Statistics" held in March 2011 identified the need to create a system of unified statistical sport records mainly due to the development of public policies in the field of sport. Andreff and Szymanski (2006) characterize the satellite account as a set of national statistical reporting techniques that cover a specific area. Some

of the first satellite accounts in the field of sport originated in France and Germany. Thus, sports satellite accounts represent a certain standardized approach in compiling and subsequently evaluating selected indicators that make it possible to measure the impact of sport on the economy, in particular the share of sport in gross domestic product, the share in employment and total expenditure. Shoji et al (2018) perceive satellite accounts as a defined set of goods and services in the field of sports, which, however, must take into account the specifics of national economies.

The problem in compiling a uniform methodology for measuring the impact of sport on the economy is not only the harmonization of procedures, tools and the scope of measuring and evaluating data. As already mentioned, there is a multidisciplinary overlap in terms of sport. When public or private funds are invested in unorganized sport, it is often not possible to clearly identify the purpose of the investment and thus the share sport has in such investment. This is mainly due to the fact that a number of projects focus on more areas than just sports - e.g. cycling routes, public swimming pools, etc. It is the overlap of sport in other sectors that is one of the most important obstacles making the estimate regarding the overall impact of sport on the country's economy and subsequently the community of European Union countries more difficult.

In 2018, the European Commission's study "Study on the economic impact of sport through sport satellite accounts" was published. It summarized the impact of sport and exercise on the economies of the countries of the Union and the European Union itself through the methodology of satellite accounts. The 2012 data are summarized in the following table.

Table 1. Impact of Sport on Selected Macroeconomic Indicators in the European Union

MEMBER STATE	SPORT-RELATED GDP IN M EUROS	SHARE OF SPORT-RELATED GDP	SPORT-RELATED EMPLOYMENT IN HEADS	SHARE OF SPORT-RELATED EMPLOYMENT
EUROPEAN UNION	279,697	2.12%	5,666,195	2.72%
AT – AUSTRIA	13,066	4.12%	226,129	5.63%
BE – BELGIUM	4,494	1.16%	71,440	1.59%
BG – BULGARIA	338	0.80%	44,756	1.55%
CY – CYPRUS	361	1.85%	7,813	2.08%
CZ – CZECH REPUBLIC	2,055	1.27%	84,803	1.76%
DE – GERMANY	104,707	3.90%	1,761,369	4.60%
DK – DENMARK	3,973	1.56%	64,082	2.45%
EE – ESTONIA	159	0.88%	13,656	2.31%
EL – GREECE	1,784	0.93%	47,486	1.31%
ES – SPAIN	14,984	1.44%	261,839	1.50%
FI – FINLAND	3,264	1.63%	50,634	2.09%
FR – FRANCE	39,923	1.91%	582,709	2.29%
HR – CROATIA	676	1.54%	27,908	1.83%
HU – HUNGARY	1,252	1.26%	75,771	2.00%
IE – IRELAND	1,804	1.03%	30,008	1.68%
IT – ITALY	21,217	1.32%	389,120	1.76%
LT – LITHUANIA	283	0.85%	20,043	1.62%
LU – LUXEMBOURG	630	1.43%	4,336	1.89%
LV – LATVIA	142	0.64%	12,611	1.48%
MT – MALTA	129	1.81%	3,306	1.98%
NL – THE NETHERLANDS	7,973	1.24%	150,687	2.04%
PL – POLAND	8,952	2.30%	332,939	2.17%
PT – PORTUGAL	1,879	1.12%	59,330	1.39%
RO – ROMANIA	1,389	1.04%	100,279	1.22%
SE – SWEDEN	5,949	1.41%	109,191	2.43%
SI – SLOVENIA	609	1.69%	21,916	2.43%
SK – SLOVAKIA	956	1.31%	47,095	2.03%
UK – UNITED KINGDOM	36,750	2.18%	1,064,939	3.75%

Source: based on a European Commission study (2018) "Study on the economic impact of sport through sport satellite accounts"

The table above shows that the highest sport-related GDP was found for Austria, Germany, Poland and the United Kingdom. Ahlert (2013) states that household expenditure contributes most significantly to the value of sport-related GDP. Austria, Germany, followed by the United Kingdom and Denmark report the highest number of sport-related jobs.

Sports Activity of the Population of the Countries of the European Union

The already mentioned positive externalities of sport are the most significant contributors to the society in terms of sport and physical activity. Based on the European Commission's paper "White Paper on Sport" published in 2007, the following could be identified as general objectives of public policy in the field of sport:

1. Healthy lifestyle promotion
2. Supporting the development of grassroots sports
3. Promoting social inclusion and volunteering
4. Prevention of negative phenomena in sport (matchfixing, doping, etc.)
5. Support for professional sports and sports representation of countries

According to the latest Eurobarometer 472 (2018) on sports activities of the population of the European Union, only 7% of the population regularly exercise or play sport, 33% of the population does exercise or play sport regularly, 14% stated they sometimes exercise or play sport, 46 % of the population never exercise or play sport. Compared with the previous survey of this kind (2014 - Eurobarometer 412), 4% more people stated they do not exercise or play sport. Compared with the survey conducted in 2010 - Eurobarometer 334, 7% more people in 2018 than in 2010 do not exercise or play sport. Based on the above, we can state that the percentage of the population of the European Union who exercise and play sport decreased in the observed period 2010-2018.

The table below shows an overview of sports activities of the population of all member states of the European Union for 2018. The Nordic countries (Denmark, Finland, Sweden) are among the countries with the most people engaged in physical activities. The countries with the lowest amount of people engaged in physical activities are Bulgaria, Greece and Portugal.

Table 2. Indicators of Sports Activity in Individual EU countries

	<i>Regularly</i>	<i>With certain regularity</i>	<i>Sometimes</i>	<i>Never</i>
EÚ28	7%	33%	14%	46%
BE	8%	41%	22%	29%
BG	2%	14%	15%	68%
CZ	5%	27%	27%	41%
DK	12%	51%	17%	20%
D-W	5%	45%	13%	37%
DE	5%	43%	14%	38%
D-E	4%	36%	17%	42%
EE	7%	28%	17%	48%
IE	13%	40%	13%	34%
EL	2%	21%	9%	68%
ES	14%	29%	11%	46%
FR	6%	36%	12%	46%
HR	5%	19%	20%	56%
IT	1%	27%	10%	62%
CY	11%	28%	15%	46%
LV	6%	22%	16%	56%
LT	11%	22%	16%	51%
LU	12%	44%	17%	27%
HU	9%	24%	14%	53%
MT	11%	19%	14%	56%
NL	6%	51%	12%	31%
AT	4%	34%	22%	40%
PL	5%	23%	15%	56%
PT	5%	21%	6%	68%
RO	6%	13%	18%	63%
SI	15%	36%	25%	24%
SK	5%	23%	23%	49%
FI	17%	52%	18%	13%
SE	14%	53%	18%	15%
UK	13%	34%	16%	37%

Source: processed according to statistical databases Eurobarometer 472 Sport and physical activity (https://data.europa.eu/euodp/en/data/dataset/S2164_88_4_472_ENG)

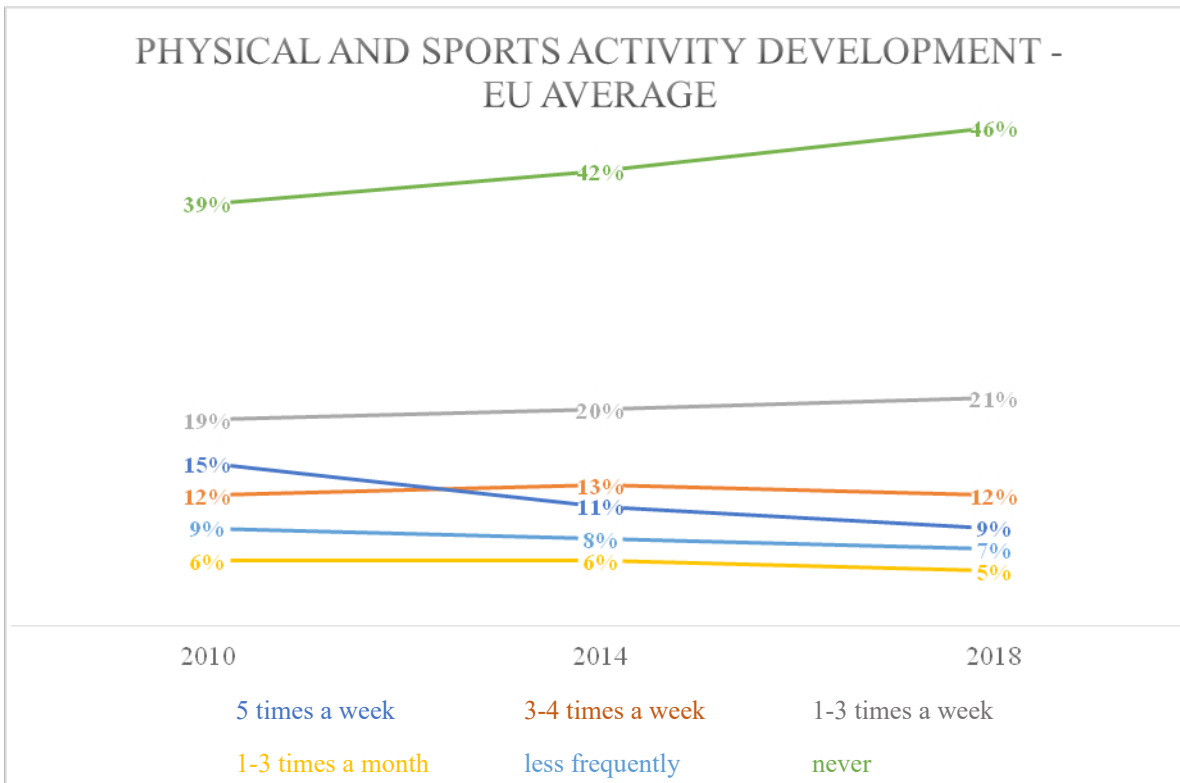


Figure 2. Development of Physical Inactivity in Selected Countries in the Observed Period 2010 – 2018

Source: compiled according to statistical databases Eurobarometer 472, Eurobarometer 412 and Eurobarometer 334 Sport and physical activity (Eurobarometer 472, available at: https://data.europa.eu/euodp/en/data/dataset/S2164_88_4_472_ENG Eurobarometer 412, available at: https://data.europa.eu/euodp/sk/data/dataset/S1116_80_2_412 Eurobarometer 334, available at: https://data.europa.eu/euodp/sk/data/dataset/S776_72_3_EBS334)

The above figure illustrates the development of physical activity / inactivity of the population of the countries of the European Union in the monitored years 2010, 2014 and 2018. The EU average shows a trend of increasing number of physically inactive population as the number of people who engage in physical activities or play sport decreases, in particular the number of the population who do sports 1-3 times a month and the number of people who do sports less often than 1-3 times a month. The number of people doing a physical activity or playing sport 3-4 times a week is stagnating. There was a slight continuous increase in the number of people doing a physical activity or playing sport 1-3 times a week.

Based on the data from the above figure, we can state that in the 8 years during which Eurobarometer monitored the indicators of physical and sports activity of the population of the countries of the European Union, the number of people engaged in physical activity or playing sports decreased.

Methodology

With regard to the identification of a possible relationship between the share of the sports industry in the economic output (expressed in % share of GDP), employment (expressed in % share of total employment) and physical activity of the population of European Union countries, the hypotheses and goals shown below were set.

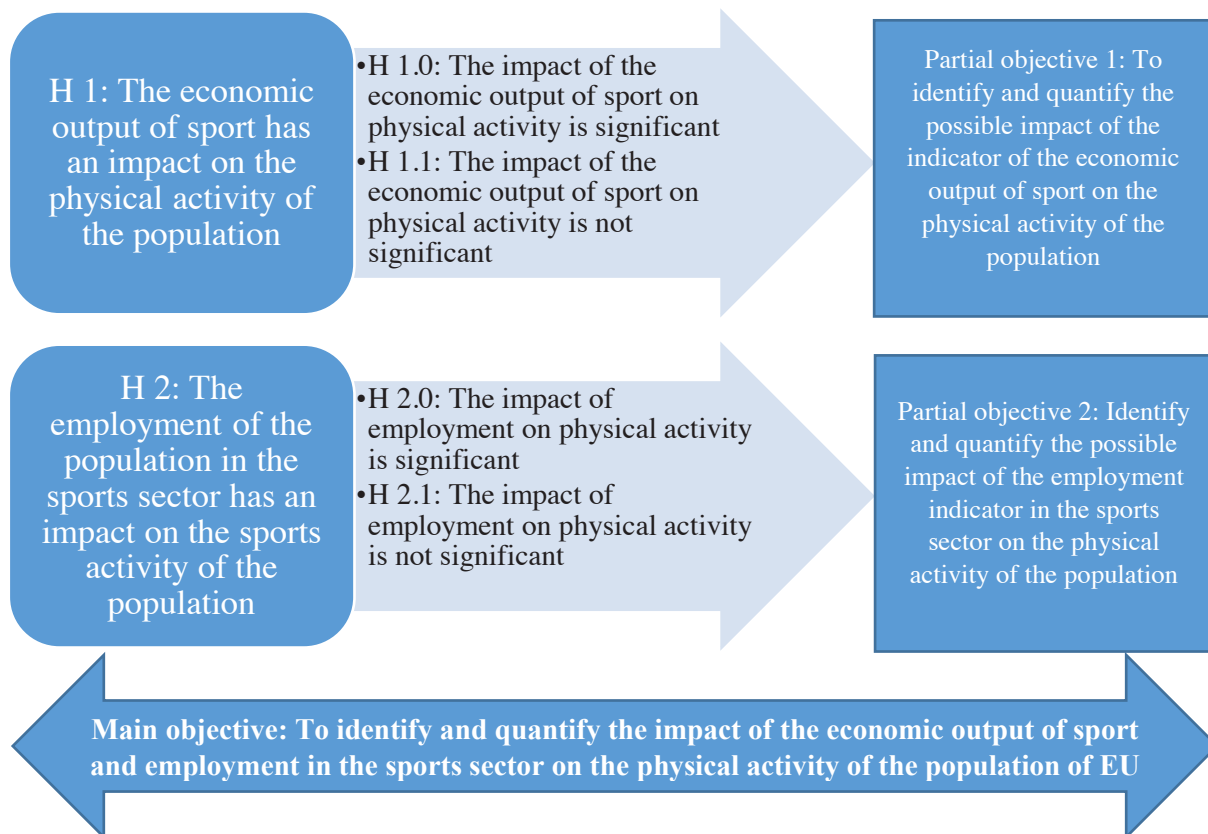


Figure 3. A Set of Partial Objectives and Set Hypotheses

Source: made by the author

The research focuses on 2 main macroeconomic indicators of the sports sector measured by means of sports satellite accounts and the indicator of the physical activity of the population of the European Union countries. The aim of the research is to find out whether the economic output of sport and employment in the sports sector and the indicator of physical activity of the population of the European Union countries have any impact.

The main sources of information include the secondary data contained in the study Eurobarometer 412 "Study on the economic impact of sport through sport satellite accounts" and the related datasets, international monographs and articles on sports financing written in particular:

1. Ahlert (2013)
2. Andreff (2006)
3. Downward, Dawson and Dejonghe (2009)
4. Montolio and Planells-Struse (2019)
5. Otarbaevich and Dlimbetovich (2021)
6. Shoji et al (2018)

Empirical, exploratory, comparative and statistical methods of examining secondary data were used to meet the partial as well as main objectives of the research. The analytical tools used include a linear regression analysis. This analysis will allow us to confirm or refute the hypothesis as to whether the selected 2 macroeconomic indicators of the sports sector have an impact on the physical activity of the population of the European Union. Linear regression analysis examines a possible relationship between two variables, where we assume that the value of the dependent variable (Y - physical activity) is affected by a change in the value of an independent variable (X - economic output of sports and the share of sports in total employment). The formula of the linear regression analysis for the purposes of the analytical part is as follows (b0 is the point where the regression line intersects the Y axis, b1 is the regression coefficient that determines the direction of the line, e is the measurement error):

$$Y = b_0 + b_1 \cdot X + e$$

Analytical Part and Discussion

The output of the regression analysis and correlation coefficient, which are based on the physical activity of the population Eurobarometer 412 and the corresponding dataset of macroeconomic indicators of the sports sector - % share of GDP and % share in total employment are summarized in the table below. We have divided the data of physical activity into 3 levels:

1. Frequent physical activity - several times a week
2. Occasional physical activity - several times a month
3. Physical inactivity – no physical activity

Table 3. Summary of Correlation and Regression Analysis Output

HYPOTHESES	CONFIRMATION / REFUSAL	CORRELATION VALUE	R-SQUARE	SIGNIFACANCE-F
H1: The economic output of sport has an impact on the physical activity of the population	NO	Frequent physical activity 0,20	Frequent physical activity 0,04	Frequent physical activity 0,31
H 1.0: The impact of the economic output of sport on physical activity is significant	NO	Occasional physical activity 0,21	Occasional physical activity 0,04	Occasional physical activity 0,29
H 1.1: The impact of the economic output of sport on physical activity is not significant	YES	No physical activity -0,25	No physical activity 0,06	No physical activity 0,20
H2: The employment in the sports sector has an impact on the physical activity of the population	NO	Frequent physical activity 0,31	Frequent physical activity 0,09	Frequent physical activity 0,11
H 2.0: The impact of employment on physical activity is significant	NO	Occasional physical activity 0,33	Occasional physical activity 0,11	Occasional physical activity 0,09
H 2.1: The impact of employment on physical activity is not significant	YES	No physical activity -0,39	No physical activity 0,15	No physical activity 0,04

Source: made by the authors

According to Pearson's correlation coefficient and Cohen's interpretation of the correlation coefficient, there is a small linear dependence between physical inactivity/ inactivity (negative in the case of sports inactivity) of the population and the value of the output of the sports sector expressed as a percentage of GDP. The regression analysis also showed a small, statistically insignificant link between the physical activity of the population and this macroeconomic indicator. This means that the higher output of the industry has not effect on the physical activity of the population.

There is a medium linear dependence between the physical activity of the population of the countries of the European Union (negative in the case of sports inactivity) and the share of the sports sector in total employment. The regression analysis in the case of the macroeconomic indicator in question showed a statistically more significant link between the physical activity of the population and this macroeconomic indicator. However, the above does not mean that higher employment in the sports sector also means higher physical activity/ lower physical inactivity of the population of the countries of the European Union.

The research carried out so far shows that changes in the physical activity-related values cannot be sufficiently explained by:

- a) changes in the volume of public investment in sport, expressed as a percentage of GDP. Škoric and Hodak (2011) also state that the indicator of the development of sports expressed by the number of registered athletes does not depend on the volume of invested public funds,
- b) changes in the value of the purchasing power parity of the population (purchasing power parity - actual expenditure in GDP per capita),
- c) changes in the value of the total employment,
- d) combination of the above 3 macroeconomic indicators.

Of the above 3 macroeconomic indicators, the value of employment in physical activity / inactivity of the population appears to be the indicator with the most significant impact on physical activity (correlation coefficient -0.5 for physical inactivity). The share of the sports sector in total employment also has a more significant impact on the physical activity of the population than the value of the sports sector's output in total GDP. Abel, Bernanke and Crushore (2008) link the development of employment, including unemployment, directly to the development of demand for goods and services where there is a positive correlation. Thus, if the demand in the field of sports increases, employment in the given sector also increases, which also has an impact on the overall economic growth of the economy. If we compare countries with a higher volume of sports output in the total composition of GDP, we can also observe a higher share of the sports sector in total employment.

In his study, Andreff (2009) focused on the GDP indicator, which, according to his outputs, has the most significant impact on the indicator of the number of physically active people. The value of GDP per capita together with the value of employment are definitely one of the main macroeconomic indicators of countries' economic stance. The more the population can afford, the higher the expenditures on goods / services are (on the top of basic needs). The Nordic countries are the countries with the highest standard of living in the European Union. The values of physical activity are also among the highest in these countries. However, it is not possible to apply this rule universally, as, for example, Portugal and Spain have a higher standard of living than the Slovak Republic, but the value of physical activity of the population is lower.

Indicators of sports success - the number of medals, awards, placement in sports rankings and the number of registered professional athletes appear to be dependent on the volume of funds invested in sports and the economic strength of the country. In their study, Škoric and Hodák (2011) focused on the dependence of the number of athletes who are members of sports organizations on the volume of invested public funds. Škoric, Bartoluci and Čustonja (2012) examined the dependence of medals received on the volume of public funds invested. In their research, Ivaškovič and Čater (2018) focused on the impact of public funds on the activities of selected sports organizations and the effectiveness of meeting their own goals in the use of public funds.

Possible reasons for the weak impact of the output of the sports sector as a percentage of GDP and employment in the sports sector on the sports activity of the population have already been partially indicated in the theoretical background. These include:

1. The system of satellite accounts in sport - the first attempt to unify the methodology for measuring the impact of sport on the economy was recorded in the study "Study on the economic impact of sport through sport satellite accounts" from 2018. In principle, however, reports on the impact of sport on economics e.g. within the EUROSTAT statistical databases, have not yet been unified. Each country (not just within the European Union), approaches the creation of satellite accounts in the field of sport differently, especially in terms of the range of goods and services attributed to the sport sector. Many countries do not even have satellite accounts for sports (e.g. the Slovak Republic, etc.).

2. The interconnectedness of sport to other economic sectors - it is difficult to assign a specific purchase of goods / services to the sports sector due to overlap with other sectors - most often recreation / tourism. Similarly, in the case of private or public investments, it is often difficult to determine which specific area of life is affected by the investment in question.
3. Absence of a justification why the population of a given country is more or less physically active - the already conducted surveys of sports activity of the population of European Union countries, specifically Eurobarometers 472, 412 and 334 from 2018, 2014 and 2010, failed to identify reasons why population of these countries:
 - a) does physical activity regularly
 - b) does physical activity irregularly
 - c) does not play sports at all

Conclusion

Promoting a healthy lifestyle and physical activity is one of the most important points of the strategic document "White Paper on Sport". The main objective of the analytical part was to identify and quantify the impact of the economic output of sport and employment in the sports sector on the physical activity of the population of EU countries. The main as well as partial objectives and hypotheses were based on the assumption that countries in which the sports sector contributes to GDP and employment more also have a more active population in terms of physical activity and sport than countries with less developed sports industries.

These assumptions were refuted in the analytical part of the paper. The impact of selected 2 macroeconomic indicators of the sports sector derived from sports satellite accounts on the indicator of sports activity of the population of European Union countries are not statistically significant. The physical activity / inactivity of the population cannot be linked to the basic macroeconomic indicators pointing to the development of national economies and the living standards of their population.

Possible reasons which could explain the statistically insignificant impact of the output of the sports sector as a percentage of GDP and employment in the sports sector on the physical activity of the population were summarized in 3 points:

1. Non-unified system of sports satellite accounts in the European Union
2. The link between sport and other economic sectors and the related complicated extraction of data linked exclusively to the sports sector
3. Absence of a justification why the population of a given country is more or less physically active in the surveys on physical activity / inactivity of the population.

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References:

- ABEL, A. B. – BERNANKE, B. S. – CROUSHORE, D. (2008). *Macroeconomics*. 6th edition, Boston: Pearson, 641 p., ISBN: 978-0-321-46948-9.
- AHLERT, G. (2013). The German Sport Satellite Account (SSA). In: GWS Discussion Paper, No. 04/2014, Osnabruck: Gesellschaft für Wirtschaftliche Strukturforchung mbH, p. 1-19, ISSN 1867-7290.
- ANDREFF, W. (2009). Public and private sport financing in Europe: the impact of financial crisis. The 84th Western Economic Association International Conference. Vancouver, available at: https://www.researchgate.net/publication/289127093_Public_and_private_sport_financing_in_Europe_the_impact_of_financial_crisis.
- ANDREFF, W. – SZYMANSKI, S. (2006). *Handbook on the Economics of Sport*. 1st edition., Chettenham: Edward Elgar, 830 p., ISBN: 978-1843766087.
- BUTORACOVÁ ŠINDLEROVÁ, I. – MOROVSKÁ, I. (2009). Podnikateľské prostredie v Slovenskej republike z pohľadu inováčných príležitostí a bariér regionálneho rozvoja. In: *Zborník vedeckých prác katedry ekonómie a ekonomiky. ANNO 2009*. p. 27-44. ISBN 978-80-555-0005-8.

- DEMJANOVÁ, L. (2010). Konkurencieschopnosť SR v rámci krajín V4 vzhľadom na vývoj podnikateľského prostredia a inovačnej aktivity podnikov. In: NÁRODNÁ A REGIONÁLNA EKONOMIKA VIII Herľany, 13 – 15. Október 2010. Zborník príspevkov z vedeckej konferencie. p. 193-203, ISBN 978-80-553-0517-2.
- DOWNWARD, P. – DAWSON, A. – DEJONGHE, T. (2009). Sport Economics. 1st edition, Abingdon-on-Thames: Routledge, 440 s., ISBN: 978-0-7506-8354-8.
- Entrepreneurship (2020), available at: <http://www.businessdictionary.com/definition/entrepreneurship.html>
- EUROPEAN COMMISSION (2018). Eurobarometer 472 Sport and physical activity, Luxembourg: Publications Office of the European Union, 133 p., ISBN: 978-92-79-80243-0, available at: https://data.europa.eu/euodp/en/data/dataset/S2164_88_4_472_ENG
- EUROPEAN COMMISSION (2014). Eurobarometer 412 Sport and physical activity, Luxembourg: Publications Office of the European Union, 78 p., ISBN: 978-92-79-36836-3, available at: https://data.europa.eu/euodp/sk/data/dataset/S1116_80_2_412.
- EUROPEAN COMMISSION (2010). Eurobarometer 334 Sport and physical activity, Luxembourg: Publications Office of the European Union, 63 p., available at: https://data.europa.eu/euodp/sk/data/dataset/S776_72_3_EBS334.
- EUROPEAN COMMISSION (2008). EU Physical Activity Guidelines Recommended Policy Actions in Support of Health-Enhancing Physical Activity, 38 p., available at: <https://eacea.ec.europa.eu/sites/eacea-site/files/eu-physical-activity-guidelines-2008.pdf>.
- EUROPEAN COMMISSION (2018). Study on the economic impact of sport through sport satellite accounts, Luxembourg: Publications Office of the European Union, 110 p., ISBN: 978-92-79-76925-2, available at: <https://op.europa.eu/s/n60H>.
- EUROPEAN COMMISSION (2007). White Paper on Sport, Luxembourg: Publications Office of the European Union, 20 p., available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52007DC0391>.
- EUROSTAT (2010-2018). Macroeconomical statistics, available at: <https://ec.europa.eu/eurostat>.
- FITZEL, J. (2006). Handbook of Sports Economics Research. 1st edition., New York: Routledge., 288 s., ISBN: 978-0-7656-1594-7.
- HUDÁKOVÁ, M. a kol. (2014). Rodinné podnikanie. Bratislava: Wolters Kluwer, 2014. 164 p. ISBN 978-80-8168-207-0.
- IVAŠKOVIČ, I. – ČATER, T. (2018). The influence of public funding on the strategies and performance of non-profit basketball clubs from South-Eastern Europe. In: Economic Research-Ekonomska Istraživanja, Vol. 31, No. 1, Abingdon: Routledge, p. 796-810, ISSN: 1848-9664.
- KUZMIŠIN, P. (2009). Kvalita podnikateľského prostredia a jej vplyv na konkurencieschopnosť podniku. In: Journal of Competitiveness. 1/2009. p. 42-55. ISSN 1804-171X.
- KLAMOVIČ, S. (2018). Podnikateľské prostredie v EÚ. Ekonomický ústav SAV, available at: <http://www.ekonom.sav.sk/sk/podujatia/podnikatelske-prostredie-v-eu>.
- MEDVEĎ, M. – NEMEC, J. et al. (2004). Verejné financie. 1st edition, Bratislava: Sprint dva, 640 p., ISBN: 978-80-89393-46-6.
- MONTOLOIO, D. – PLANELLS-STRUSSE, S. (2019). Measuring the negative externalities of a private leisure activity: hooligans and pickpockets around the stadium. In: Journal of Economic Geography. No: 2/2019, Oxford: Oxford University Press, p. 465-504, ISSN: 1468-2702.
- NOVOTNÝ, J. et al. (2011). Sport v ekonomice. 1st edition. Praha: Wolters Kluwer ČR, 512 p., ISBN: 978-80-7357-666-0.
- OTARBAEVICH, A. A. – DLIMBETOVICH, B. T. (2021). The Impact of Sports on Human Life and Health. In: International Journal of Academic Pedagogical Research, Vol. 5, No. 6/2021, p. 45 – 47, ISSN: 2643-9123.
- PAPULA, J. et al. (2018). Ako začať a úspešne podnikáť. Praha: Wolters Kluwer. ISBN 978-80-7552-985-5.
- REYNOLDS, G. (2016). What's the Value of Exercise? \$2,500. The New York Times, available at: <https://www.nytimes.com/2016/09/07/well/move/whats-the-value-of-exercise-2500.html>.
- SHOJI, H. et al. (2018). Construction of a Sport Satellite Account in Japan, Version 2: Focusing on the Difference between Japan and the EU Regarding Economic Statistics and the Structure of Definition of the Sport Industry. In: Journal of Japan Society of Sports Industry, Vol.28, No 3/2018, Tokyo: Japan Society of Sport Industry p. 257-264, ISSN: 1884-2534.
- SMRITI, CH. (2018). Business Environment: Nature and Significances of Business Environment, available at: <http://www.yourarticlelibrary.com/business/business-environment-nature-and-significances-of-business-environment/23367>.
- ŠKORIC, S. – HODAK, Z. (2011). The system of sports financing and management in the Republic of Croatia. In: Journal of Economics and Business, Vol. 29, No. 2, Rijeka: Faculty of Economics, p. 443-464, ISSN: 1331-8004.
- ŠKORIC, S. – BARTOLUCI, M. – ČUSTONJA, Z. (2012). Public financing in Croatian sport. In: Financial Theory and Practice, Vol. 36, No. 2, Zagreb: Institute of Public Finance, p. 179-197, ISSN: 1845-9757.