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TAXATION OF GOLF COURSES IN POLAND AND SELECTED COUNTRIES IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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ABSTRACT: The aim of the article is to present golf in the context of sustainable development and to assess the national tax conditions for the development of this discipline against the background of solutions of selected Central and Eastern European countries. Current literature on the comprehensive impact of golf on sustainable development is very limited, primarily discussing the health and tourist aspects of this discipline. The article is literature-empirical. The impact of golf on sustainable development was examined based on a review of domestic and English literature, analysis of source materials of various golf organizations and federations, and analysis of statistical data of internet databases. A comparative analysis of golf sectors in selected countries was carried out. Tax conditions were assessed based on the analysis of legal regulations and the comparison of tax rates between selected countries. The article shows that golf is conducive to health and economic development, while its impact on the natural environment is debatable. Golf is not very popular in Poland, and the golf sector is less developed compared to countries such as the Czech Republic, Estonia, Slovenia and Slovakia. In particular, property taxation is not conducive to the development of this discipline. In Poland, the golf sector has rather a low impact on sustainable development.

KEY WORDS: golfing, golf industry, sustainable development, taxation of golf courses

Introduction

The latest UNO 2030 Agenda for sustainable development has 17 goals (UNO, 2015). Achieving these goals requires not only international cooperation but above all, the establishment of comprehensive partnerships at the national and local level. States have committed themselves to mobilize public funds and take appropriate actions and tools (measures). Preliminary source studies indicate that such a measure may be playing golf and preferential taxation of golf courses may contribute to the development of this discipline. Golfing can contribute in particular to three goals of 2030 Agenda: goal number 3 (ensuring a healthy life and promoting well-being for persons of all ages), goal number 8 (promoting sustainable, inclusive growth, full and productive employment and decent work for all) and the goal 15 (protecting, restoring and promoting the sustainable use of terrestrial ecosystems, sustainable forest management, combating desertification and stopping and reversing land degradation, and halting the loss of biodiversity). The existing literature on the subject mainly focuses on the health and tourist aspects of golf, while the other aspects of sustainable development require more extensive and recent analysis.

The aim of the paper is to present golf in the context of the three goals of sustainable development presented above and to assess the national tax conditions for the development of this discipline against the background of solutions of selected Central and Eastern European countries.

An overview of the literature

National and English-language literature on the overall impact of golf on sustainable development is very limited. The most scientific positions were recorded in the field of health aspects of golf. A good meta-analysis of this literature is given by Murray, Daines, Archibald et al. (2016). These authors reviewed 301 scientific papers on the impact of golf on health published in the period before 1960 and until the end of 2016. These publications were published in 22 countries, most of them in the United States (162), Great Britain (38) Australia (27) and Japan (12) as well as Canada and South Korea (10 each). Most publications (over 100) were published in the years 2000-2009.

In the context of the golf's impact on economic, social and environmental aspects, various types of reports and studies of golf organizations dominate. In particular, valuable are studies originating in Australia, Canada and the United States in which golf is a very popular sport discipline and the golf industry has become an important sector of the economy.

Unfortunately, in Poland, these topics are rarely ever the subject of interest from science. It is worth mentioning here two items by Kowalczyk (2010) and Kowalczyk and Derek (2010) dealing with the role of golf in sustainable tourism and an article by M. Mitukiewicz (2004) illustrating the global dimension of golf. Kowalczyk and Derek (2010, p. 328) also indicate that despite pre-war traditions, golf in Poland did not become a popular game until the end of the 20th century. The internet resources of the Polish Golf Association and national golf clubs also do not contain any advanced studies on the impact of golf on sustainable development.

Research methods

The paper is literature-empirical. The impact of golf on sustainable development was examined on the basis of a review of domestic and English literature, analysis of source materials of various golf organizations and federations, and analysis of statistical data of internet databases (mainly Statista). The size of the golf sector and the economic benefits of golf have been compared across countries in different time configurations depending on the availability of data. Generally, the analysis covered the years 2008-2017. Using the indicators of the total number of golfers per population and the average number of golfers per golf course, the current state and potential for further development of the discipline in individual countries were also compared.

The tax conditions for running golf clubs are presented in two stages. First, the scope of taxation of these entities in Poland was presented from the point of view of the legal and organizational form of conducting a business activity, and then comparative analysis of the applicable rates in the most important taxes was made in such countries as the Czech Republic, Estonia, Poland, Slovenia and Slovakia. Data on this subject was obtained from the European Commission's database (*Data on taxation*). The analysis covered the years 2017-2019.

Results of the research

Health effects of golf

Murray, Daines, Archibald et al. (2016) show that regular golfing primarily strengthens the player's physical condition and prevents numerous diseases. The health benefits most often include improved lung function, improved cardiovascular system and aerobic fitness, better metabolism and improved functioning of the musculoskeletal system. As a result, the risk of

injury and diseases such as hip fracture, type 2 diabetes, heart attack, stroke, colorectal cancer and lung cancer is reduced. Golf is also moderately injurious compared to other disciplines. Researchers also point to the mental and social benefits of taking up this discipline, although these require further in-depth research. The first include improvement of self-esteem, an increase of self-worth, effectiveness, resistance to stress, an increase of satisfaction and improvement of well-being. The latter are expressed, *inter alia*, in the possibility of establishing new interpersonal relationships, belonging to a specific local sports group (golf club), charity. For example, Australians indicate that mental and social factors mainly motivate them to play golf (2018 Golf Club Participation Report of Australia, 2019, p. 6; Community Impact Survey September 2017, p. 37 et seq.). Scientists from Sweden prove that a golfer, regardless of gender, age and social status, lives about 5 years longer than a person who does not play golf (Farahmand, Broman, de Faire et al., 2009). Given the social status, the studies show that people with very different levels of wealth play golf. People with lower incomes may use public, inexpensive golf courses and rent golf equipment at a very affordable price.

Researchers also indicate health risks associated with taking up this discipline. These include the risk of skin cancer, dehydration and exhaustion in the event of hours of effort in the sun. The first risk may also result from the use of artificial fertilizers on golf courses. Also, especially during competitions, increased nervous tension and pressure increase are noted among competitors. However, these risks can be minimized by appropriate organizational and mental preparation for the game (proper clothing, sunscreen, lotions and conditioners, looking for shade, etc.).

Due to health and social values, regular golfing is recommended for people of all ages, especially the elderly. In some countries, both with a developed golf industry (e.g. in Canada, Australia, the United States) and ones the developing the golf industry (e.g. in India) golf is also included in the curricula and games of primary, secondary and higher education (Future Links, www.golfinschools.golfcanada.ca; Golf Australia, www.golf.org.au/schoolevents; Community Impact Survey, September 2017, p. 77 et seq.; Tee20, Strategic Plan, The Indian Golf Union, November 2013). It is also worth emphasizing that in recent years golf has been playing an increasingly important role in the rehabilitation of people with physical and mental disabilities.

One of the main causes of the appearance of diseases is low physical activity (Community Impact Survey, September 2017, p. 62). The health benefits of golfing result from many hours of moderate physical effort in the open air during one round of the game (18 holes). Regular and moderate physical activity (burning from 3.5 to 7.0 kcal/min) is recommended by the World Health Organization (EU Guidelines, 2008, pp. 8 and 9). Usually, the

game takes place in a group of two to a maximum of four people. Research shows that golfers perform from 11.2 to 16.7 thousand steps, walk from 6.4 to 12.8 km and burn from 531 to 2467 kcal (from 3.3 to 8.15 kcal/min). The scope of performance depends mainly on your handicap skills, gender and whether the player uses a trolley with a bag filled with clubs or uses the help of a caddy (a person who carries a bag with player's golf clubs, as well as gives advice and mentally supports the player). In contrast, people using golf carts generally achieve worse results by half. It is also worth emphasizing that significant physical effort is also made by supporters who follow players during tournaments (Lyu and Lee, 2013).

Economic benefits

A detailed description of the structure of the "golf industry" and its economic results are provided, among others, by TEconomy reports. They relate to the golf industry in the United States and are prepared every 5 years (e.g. US Golf Economy Report, 2017). Golfing contributes to income, employment and wages directly in the "golf industry" as well as indirectly in other sectors of the economy. In the United States, the golf industry is divided into key and supportive parts. The key industry includes entities and activities such as clubs and golf courses, investment in golf courses (construction of new courses and modernization of existing ones), producers and suppliers of golf equipment (clubs, bags, balls, clothing, etc.), golf services and charity golf events. Golf clubs and courses play the crucial role, they generate revenues mainly from green fees (fee for entering the field and using greens) and membership fees and bear the costs of maintaining golf courses. The clubs also offer additional golf services, e.g. organize tournaments, occasional events, rent space. Charity is also an important part of the industry being researched. It mainly takes place during professional tournaments in which golfers donate part of the cash prize for specific social purposes. Within the supportive industry, the real estate market in golf resorts (hotels, restaurants, houses, apartments, etc.) and the golf tourism industry stand out.

Indirect economic effects arise mainly in sectors outside the golf industry that provide products and services to the golf sector. Also, induced effects are distinguished, which constitute additional income generated in the entire economy caused by expenses of employees employed in the golf industry and its suppliers. Finally, the beneficiaries of golf are also the state and local governments, which earn tax revenues on the golf industry and related industries. The distribution of economic benefits, however, varies greatly across countries and regions depending on the degree of development and popularity of the discipline.

Golfing is one of the most popular sport in the world. Murray, Daines, Archibald and others in an article from 2016 place golf in third place in the world and say that 55 million registered amateur and professional players play golf in 206 countries, while 250 million players play football, 75 million players play tennis, and 5 million players – rugby (Murray, Daines, Archibald et al., 2016, p. 4).

Table 1. The number of registered players and golf courses in selected countries and regions in 2017

Countries	Population	Number of registered players	Number of golf courses	Number of players/ population	Number of players/ golf course
United States ¹	322 179 605	23 800 000 ²	15 014	7.39%	1 585.2
Japan ¹	127 748 513	5 500 000 ²	2 290	4.31%	2 401.7
Canada	36 624 199	5 700 000 ²	2 298	15.56%	2 480.4
Australia	24 450 561	978 000 ²	1 656	4.00%	590.6
Europe	741 447 158	4 140 000	6 861	0.56%	603.4
England	55 619 400	655 839	1 872	1.18%	350.3
Germany	82 521 653	644 943	731	0.78%	882.3
Sweden	9 995 153	468 570	442	4.69%	1 060.1
France	66 804 121	410 171	602	0.61%	681.3
Netherlands	17 181 084	387 797	250	2.26%	1 551.2
Spain	46 528 024	270 464	349	0.58%	775.0
Scotland	5 424 800	187 802	560	3.46%	335.4
Czech Republic	10 578 820	60 301	106	0.57%	568.9
Slovenia	2 065 895	8 762	13	0.42%	674.0
Slovakia	5 435 343	8 689	26	0.16%	334.2
Poland	37 976 687	5 646	33	0.01%	171.1
Estonia	1 315 635	2 843	8	0.22%	355.4

¹ data for 2016; ² total number of players.

Source: author's work based on US Golf Economy Report, 2017, p. 4; NGF's 2017 Participation Report Golf, April 2017, www.thengfq.com [21-11-2019]; Club Participation Report of Australia 2017, June 2018, p. 3 and 10; Golf Facilities in Canada, 2017, Golf Canada, The PGA of Canada, p. 4; Canadian Golf Consumer Behaviour Study, NAVICOM, The National Allied Golf Associations (NAGA), www.canadagolfs.ca [20-11-2019]; Japanese playing golf 2016-2030, www.statista.com [17.11.2019]; Top 100 golf courses, www.top100golfcourses.com [17-11-2019].

In turn, on the PledgeSports website in the 2017 ranking, golf was placed 10th in the world, also after such disciplines like table tennis, cricket, basketball, volleyball, field hockey and badminton (10 Top Most Played Sports, www.pledgesports.org). In 2017, the largest number of players was recorded in the United States, Japan, Canada and Europe, and these are also the places where there were most of the registered golf courses (table 1).

In the years 1990-2010, in Europe alone, the number of golfers increased from 1.7 to 4.4 million, after which it decreased and at the end of 2017 reached 4.1 million (www.statista.com). In 2017, over 73.0% of the total number of players was registered in seven countries, i.e. England, Germany, Sweden, France, the Netherlands, Spain and Scotland. These countries also owned over 70.0% of the total number of golf courses registered in Europe.

Based on the total number of golfers per population and the average number of golfers per golf course, you can compare the current state and potential for further development of the discipline in individual countries, and the higher these indicators are, the better. This means that the demand for golf is still rising and outstripping supply. The table shows that the best-developed golf industries include the United States, Japan, Canada, Australia, England, Sweden, Scotland and the Netherlands. Scotland, England and Australia should also be considered very stable, where the relative balance between high demand and supply of golf services is maintained. The relatively high player rates for the population in the United States, Japan and Canada result from the analysis of all players, while only some of them are registered in clubs or play regularly. For example, in Canada, the share of these players in the total number of players is 62.0%.

In Central and Eastern Europe, in the years 2010-2017, golf was the most popular game in the Czech Republic, Slovakia, Slovenia, Poland and Estonia. The total number of golfers in these countries increased from over 64.9 to 86.3 thousand (figure 1), and the number of fields increased from 137 to 186 (figure 2). Most players were registered in the Czech Republic, Slovenia and Slovakia, and the most golf courses – in the Czech Republic, Poland and Slovakia. In the remaining countries of the region, the number of golfers did not exceed 2,000 and the number of golf courses (except Russia and Hungary) – 9. The indicated countries, except Poland, are considered to be markets with development potential (KPMG, 2016, p. 10). Unfortunately, in Poland, the golf sector development forecasts did not come true, as at the end of 2010, as many as 142 golf courses were anticipated (Mitukiewicz, 2004, p. 170). Table 1 shows that the interest in golf in Poland in 2017 was relatively low compared to other countries, and the number of fields was enough to meet the average demands for the game.

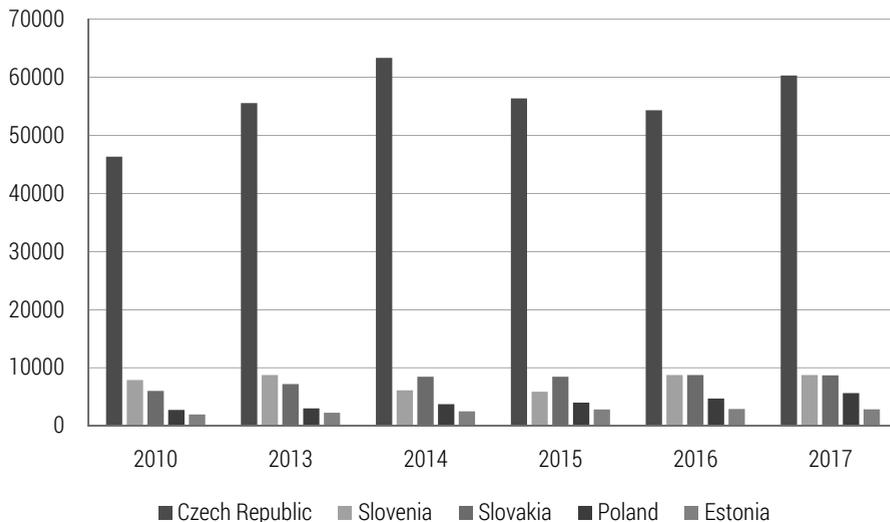


Figure 1. Number of registered golfers in 2010-2017 in selected countries of Central and Eastern Europe

Source: author's work based on www.statista.com [17-11-2019].

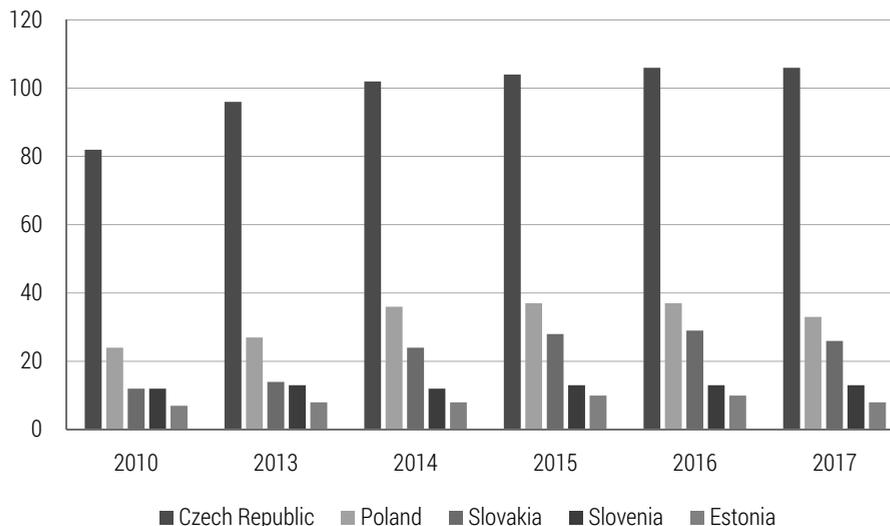


Figure 2. Number of golf courses registered in the years 2010-2017 in selected countries of Central and Eastern Europe

Source: author's work based on www.statista.com [17-11-2019].

Considering the gender and age broken down into male seniors, female seniors (15+) and juniors, the data obtained shows that in all the countries surveyed (table 1) and other European countries seniors predominate. For

Table 2. Economic effects of golf in selected countries and regions in 2008, 2011, 2012, 2016 and 2017 [million euros]

Specification	Australia (2008)	United States (2011)	Europe 2011/2012 ¹	Great Britain (2011/2012) ¹	Canada (2013)	United States (2016)	Australia (2017) ²
Clubs and golf courses	1 125	22 688	8 435	3 621	3 412	32 696	
Investments in golf courses	164	1 575	1 715	756	273	2 048	
Production of golf equipment and services	317	5 839	3 237	1 490	4 476	5 741	1 983
Charity work	19	2 972	85	63	362	3 743	
Golf course real estate industry	47	3 599	95	10	5 663	8 874	
Golf tourism	393	15 622	1 553	229	4 981	24 438	315
Direct effect (total)	2 065	52 295	15 120	6 169	19 166	77 540	2 299
Total effect	no data	176 829	no data	no data	25 109	191 911	no data
Total employment in the golf industry	21 237 ³	1 976 477	180 000	78 900	300 100	1 885 674	no data
Salaries	no data	42 223	4 420	1 766	no data	55 732	no data
GDP	739 205	11 812 362	14 108 474 ⁴	1 912 458 ⁴	1 338 251	17 771 830	1 197 374 ⁵
Share of direct effects in GDP	0.28%	0.44%	0.11%	0.32%	1.43%	0.44%	0.19%
Share of total effects in GDP	-	1.50%	-	-	1.88%	1.08%	-
Number of registered golfers	1 181 100	25 700 000	4 400 300	1 359 400	5 700 000	20 100 000	978 000
Direct effect on the golfer (euro)	1 749	2 035	3 436	4 538	3 258	3 363	2 350

¹April 2011-March 2012, ²as of September 2017, ³only in golf clubs; ⁴state at the end of 2011; ⁵as of the end of 2017.

Source: author's work based on The 2016 US Golf Economy Report, Golf 20/20, Teconomy, 2017; The 2011 US Golf Economy Report, Golf 20/20, October 2012; The Economic Impact of Golf on the Economy of Europe, Sports Marketing Surveys, February 2013; Community Impact Study September 2017, Australian Golf Industry Council; The Australian Golf Industry Economic Report 2010, Australian Golf Industry Council, 2010; NGF's 2017 Participation Report Golf, April 2017, www.thengfq.com [21-11-2019]; Club Participation Report of Australia 2017, June 2018; 2014 Economic Impact Study of Golf in Canada, The National Allied Golf Association, May 2014.

example, in 2016 in the United States juniors constituted 14.4% of players and men constituted 76.0% of players (US Golf Economy Report, 2017, p. 4; NGF's 2017 Participation Report Golf, April 2017, www.thengfq.com), while in Australia in 2017 juniors constituted only 3.5% of the total number of golfers, and men – as much as 80.0% (2017 Golf Club Participation Report, 2018, ps. 3 and 20). In 2015, in European countries, the average share of seniors in the total number of players was 66.0%, and for juniors – 9.0% (Golf Participation Report for Europe 2016, p. 11). It is worth noting that, e.g. in Slovakia, Slovenia and Germany the share of seniors in the total number of players was relatively high (34, 35 and 35% respectively), while in Turkey, Macedonia, Azerbaijan, Greece and Serbia – the share of juniors (respectively 44, 35, 33, 32 and 30%). In Poland, in 2015, golf was also clearly masculinized, as male seniors constituted as much as 74.0% of players, female seniors – 18.0%, and juniors – 8.0%.

The data obtained shows that golf brings the greatest economic benefits in the United States (table 2). This is due to the fact that the United States has most golfers, clubs and golf courses.

However, the share of direct effects in the economy is relatively similar in the countries studied and ranges from 0.11 to 1.43% of GDP, and per golfer – it ranges from less than 1.1 thousand euros in Europe to over 4.5 thousand euros in the UK. Economic benefits of multiplier effects have also been estimated in the United States and Canada. In the United States, they are more than twice as high than direct effects. The structure of economic benefits is very similar in all countries studied. Golf clubs, the tourism industry, and golf equipment and services providers earn the most.

Impact on the natural environment

The environmental impact of golfing is under discussion. Kowalczyk (2010, p. 278, 280 and 281) indicates that golf infrastructure brought more losses to the natural environment than benefits in the 90s of the last century. The negative impact is primarily related to the maintenance of the golf course, which first changes the original landscape, and then requires regular fertilization and consumption of large amounts of water). Consequently, there arises a conflict related to nature, the risk of disturbance of water management in nearby areas, the risk of soil erosion, as well as the extinction of some species of plants and animals. It should be emphasized, however, that losses in the natural environment also depend on the location, of course. For example, the uncontrolled construction of golf courses in selected countries of Central and Eastern Asia in the 1990s was criticized (Kowalczyk, 2010,

p. 281; Kowalczyk and Derek, 2010, p. 322 and 323). The fields were built on the site of rice fields, around temple complexes inscribed on the UNESCO list, national parks or nature reserves, which destroyed not only the natural environment but also the local cultural landscape, the lifestyle of residents and traditions.

However, in parallel with criticism, golf clubs take actions that reduce the negative effects and improve the image of the sports discipline. Table 3 presents the threats to the ecosystem caused by playing golf, actions taken by golf environments and the principles of ecological behaviour of golfers during the game.

Table 3. The impact of golf on the environment

Threats to the ecosystem	Activities of golf environments	The principles of ecological behaviour of golfers
<ul style="list-style-type: none"> • Polluting of ground and surface waters with chemical fertilizers, • Low water quality in the stream due to shoreline erosion, • Using large amounts of water for golf course irrigation, • Degradation of natural areas, • The harmful influence of chemicals on various species of plants and animals, • Cultivation of unnatural grasses as a result of the sophisticated expectations of golfers, • Loss or defragmentation of wildlife, • Destruction of wetlands, • Replacement of natural plant communities with managed landscape and alien plants. 	<ul style="list-style-type: none"> • Creating the necessary wildlife reserves, • Preservation of natural areas in the urban environment, • Caring for a wilderness of the region, • Protection of water resources, • Filtering the outflow of rainwater through wetlands and bogs on the golf course, • Better hydration management, • Noise reduction, • Saving energy consumption, • The use of natural fertilizers, • Taking care of degraded areas, • Construction of golf courses in degraded areas, • Improving air quality in the area of the golf course, • Using electric golf carts, • Health and environmental education of golfers, • Research and training in the field of ecological golf course management, • Introduction of ecological compliance. 	<ul style="list-style-type: none"> • Repairing damage to grass caused by divot or pitch mark, • Walking instead of using a cart or golf vehicle as far as the person is physically fit, • Hitting further and seeking consistency with the terrain rather than speed (low mowing height is more disruptive to the ecosystem), • Staying away from natural habitats and reserves, • Waste recycling, • Saving water when washing golf clubs, • Environmental education of other golfers, • Putting pressure on clubs for environmental activities.

Source: author's work based on Golf and Environment, www.auduboninternational.org [21-11-2019]; Golf Course Environmental Profile, www.gcsaa.org [21-11-2019]; The environmental principles for golf courses in the United States, www.beyondpesticides.org [21-11-2019]; Kowalczyk, 2010, p. 280 and 281; Kowalczyk and Derek, 2010, p. 322 and 323.

A good example of such action is building golf courses in degraded areas, wasteland, abandoned farms, along the coast, among opencast mines, quarries and in deserts. An example of this is the creation of a 9-hole golf course at the former landfill site in Gorzów Wielkopolski by Zakład Utylizacji Odpadów Sp. z o.o. (Pole Golfowe Zawarcie, www.golfzawarcie.pl [25-11-

2019]). In 2012, an 18-hole golf course in the middle of barren lava fields was put into use in Grindavik (Iceland) (www.gggolf.is [12-04-2020]). Research also shows that an environmentally friendly field is more attractive to golfers, is better managed, and also reduces insurance costs (Golf and Environment, 2019). Awareness about the dangers and more responsible gaming among golfers is also rapidly growing.

Tax conditions for golf clubs in Poland

In Poland, Golf clubs run their own business and are subject to various taxes. The most important taxes include personal income tax (PIT), corporate income tax (CIT), value-added tax (VAT) and real estate tax (PN). In the case of departmental fields, Excise duties on alcohol products may also play an important role. The scope and amount of taxation depend primarily on the legal and organizational form of the club as well as ownership and access to the golf course. Table 4 presents the scope of taxation of goal clubs depending on the above criteria.

Table 4. The scope of taxation of golf clubs in Poland due to ownership and access to the golf course

Owner of the field (legal and organizational form)	Access to the field					
	No field	Urban public field	Paid public field (daily fee)	Departmental field	Semi-private field	Private field
Local government unit (legal entity)		VAT	VAT, PN			
One-man business (natural person)			PIT, VAT, PN	PIT, VAT, PN	PIT, VAT, PN	PIT, VAT, PN
Private Limited company. (legal entity)			CIT, VAT, PN	CIT, VAT, PN	CIT, VAT, PN	CIT, VAT, PN
Joint-stock company (legal person)			CIT, VAT, PN	PIT, VAT, PN	CIT, VAT, PN	CIT, VAT, PN
Association (Legal person)	PN		PN	PN	PN	

Source: author's work based on Kelley, 2019, www.liveabout.com [25-11-2019]; www.pzggolf.pl [04-11-2019 – 25-11-2019]; The Act of February 15, 1992 on corporate income tax, i.e. Laws 2019, item 865, as amended; Act of 26 July 1991 on personal income tax, i.e. Laws 2019, item 1387, as amended; Act of 11 March 2004 on tax on goods and services, i.e. 2018, item 2174, as amended; Act of 12 January 1991 on local taxes and fees, Journal of Laws 2018, item 1445.

In Poland, golf clubs usually operate in the form of a limited liability company, joint-stock company, association with legal personality or sole proprietorship. Then they are subject to PIT or CIT, as well as other taxes, depending on the scope of sale and assets owned. Associations are subject to CIT, but according to art. 17, paragraph 1, item 4 of the Act, the income is exempt from tax in part intended for statutory purposes, e.g. in the scope of physical culture and sport, educational activity. Membership fees, donations and voluntary contributions to associations do not constitute turnover within the meaning of VAT.

The owner of the field can also be a local government unit that supports the field from the local budget. Such fields are called urban public fields. They are available to the public at all times for free or for a small fee. Very often such fields have the character of city parks, so they are dealt with by budgetary units separated in the structure of local government units. In Poland, local government units are exempt from CIT, as well as municipal land and buildings that are not occupied for business activities are exempt from property tax (Article 7, item 15 of the Act on local taxes and fees). Local government units, on the other hand, are subject to VAT on general principles. A review of golf facilities shows that public urban fields do not yet exist in Poland (The Polish Golf Association, www.pzggolf.pl [04-11-2019 – 25-11-2019]), while they are very popular, among others in Canada, Australia and the United States (see, e.g., *Golf Facilities in Canada*, 2017, p. 4).

Public paid fields are also available to the general public; however, the owners are private entities, so they are usually better quality and more expensive than urban fields. The departmental field is an element of a larger real estate complex, usually including a luxury hotel, restaurant, wellness, other sports infrastructure, etc. Such golf courses are also available for a fee, but different rules for using the golf course usually apply to guests.

Semi-private fields are available primarily to club members, invited guests, and only for a limited time and under certain conditions (e.g. the appropriate handicap) also to the public. In turn, private fields are closed to the public, and made available only to club members and invited guests. Membership involves both relatively high fees and numerous privileges.

It is also worth paying attention to the functioning of the so-called social clubs that do not own golf courses. These clubs usually operate in the form of associations and are created mainly for players' handicap purposes. These clubs use other golf courses under the terms of separate agreements.

The degree of restrictiveness of access to fields varies across countries. In Poland, the borders between private and public fields are blurring. Mostly there are semi-private fields with open, paid and non-restrictive access for

the general public. In turn, belonging to the club allows you to play all year round on the field with an unlimited number of entries.

Selected elements of taxation in Poland and other European countries

Table 5 presents tax rates imposed on important products and real estate in the activities of golf clubs in selected countries in 2017-2019.

Table 5. Tax rates imposed on selected products and real estate in the Czech Republic, Estonia, Poland, Slovenia and Slovakia in 2017-2019

Tax	Czech Republic	Estonia	Poland	Slovenia	Slovakia
VAT (01.01.2019)					
Golf equipment	21%	20%	23%	22%	20%
Playing on the golf course	15%	20%	8%	9,5%	20%
Water supply	15%	20%	8%	9,5%	20%
Fertilizers	15%	20%	8%	9,5	20%
Hotel services	15%	9%	8%	9,5%	10%
Food services	15%, 21%	20%	8%	9,5%	20%
Excise duty (01.07.2019)					
Unleaded petrol [euro/1000 lit.]	498.4	563.0	425.7	490.1	547.0
Natural gas for heating business operations [euro/ gigajoule]	0.33	1.67	0.30	1.85	0.37
Electricity [Euro/MWh]	1.10	4.47	1.17	3.85	1.32
Beer [euro/hl Plato or Alcohol]	1.24	12.7	1.82	12.1	3.59
Wine [euro/hl]	0.0	147.8	36.92	0.0	0.0
PIT (2018)	15% (flat tax)	20,0% (flat tax)	18%, 32% (progressive scale)	16%, 27%, 34%, 39%, 50% (progressive scale)	25% (flat tax)
Tax wedge (2017)	38.1%	36.8%	34.3%	34.1%	33.8%
CIT (2018)	19%	20,0%	19%	19,0%	21%
ITR ¹ (2017)	(20.2% ITR)	(7.4% ITR)	(12.1% ITR)	(18.3% ITR)	(29.3% ITR)

Tax	Czech Republic	Estonia	Poland	Slovenia	Slovakia
Real estate tax (2019) (Property tax)	<ul style="list-style-type: none"> • 0.2 CZK (0,03 PLN)/m² from land, • 2.0 CZK (0,32 PLN)/m² from built-up lands, • 10.0 CZK (1.66 PLN)/m² – usable area of buildings, • 6.0 CZK (0.96 PLN)/m² – other buildings and structures. 	0.1 – 2.5% of land value.	<ul style="list-style-type: none"> • 0.93 PLN/m² – land for business activities, • 23.47 PLN/m² – usable area of buildings, • 2% – the value of the building. 	Amounts are set by municipalities.	<ul style="list-style-type: none"> • 0.25% of land value, • 0.033 EUR (0.14 PLN)/m² – structures in built-up areas.

¹ *Implicit Tax Rate.*

Source: author's work based on Data on taxation, www.europa.eu [15-11-2019].

The table shows that the VAT rates imposed on products and services in selected countries are quite diverse. Similar rate distributions occur in Poland and Slovenia, only golf equipment is taxed at the basic rate, and services – at reduced rates. The highest rates occur in Estonia and Slovakia. The VAT regulations in individual countries do not contain any special tax preferences directly related to running clubs and golf courses. Considering excise rates, there are clear differences in energy and wine taxation. The highest electricity rates are found in Estonia and Slovakia, and the lowest – in the Czech Republic. In the Czech Republic, Slovenia and Slovakia, wine is taxed at 0%.

The income of individuals is taxed with the lowest flat taxes in the Czech Republic and Estonia. There are progressive taxes in Poland and Slovenia, but the nominal rates are the highest in the latter country. The tax burden on labour (the so-called tax wedge) is similar in all countries. Corporations are actually taxed the lowest in Estonia and Poland, and the highest in Slovakia. It is worth noting that the particularly low tax in Estonia is due to the fact that only profit divided between shareholders is taxed with CIT.

However, property tax is key to the operation of golf courses because of its potential costs. The structure of this tax varies in the countries surveyed because its competence divides countries with local governments. In the Czech Republic and Poland, land and buildings are taxed, while in Estonia – the value of land and buildings is taxed. There is a mixed system in Slovakia, and only local authorities decide on the amount of tax in Slovenia. These taxes have similar statutory objective (VAT) exemptions and most often relate to land, buildings and various structures for public use (education of children and youth, defence, parks, etc.). Only in the Czech Republic and Slo-

venia, among the statutory exemptions, the land intended for the construction of sports infrastructure for the public was also included. Tax rates vary, but in the Czech Republic they are definitely lower than in Poland. It should also be emphasized that in all countries, local authorities have the right to introduce additional tax preferences, e.g. in the form of reduced rates or objective (VAT) exemptions.

In Poland, pursuant to statutory provisions, a golf course is interpreted as an object located on agricultural land intended for conducting business activity and is therefore subject to real estate tax instead of agricultural tax (Lewandowski, 2012); Article 2 of the Act on local taxes and fees; Article 1 of 15 November 1984 on agricultural tax, i.e. Journal of Laws 2019, item 1256, as amended). Land constituting wasteland, ecological arable land, wooded and shrubland, except for land used for running a business, is also exempt from property tax. On this basis, it can be assumed that the area on the golf course, except for *fairway* and *greens*, is not intended for economic activity, so it should be exempt from tax. The basis for taxing all buildings within the golf complex (greens, bunkers, bridges, sheds, etc.) is their value, and of buildings (home, club, hotel, etc.) – usable area.

Conclusions

Regular golfing generally fits into the context of sustainable development. It contributes to the achievement of Goal 3 of the 2030 Agenda, as it improves the physical and mental condition of players, also has a positive effect on social development and prolongs life. The advantages of this game make it popular among senior citizens, and it is also increasingly important in the rehabilitation of people with disabilities. In many countries, this discipline is part of the curricula of primary, secondary and higher education. Golfing also contributes to the achievement of Goal 8 of the Agenda, as it increases income, employment and wages in the economy and gives impetus for economic development although the effects vary across countries depending on the popularity of the discipline.

The most controversial is the impact of the discipline on the natural environment (Goal 15 of the Agenda). Threats mainly result from landscape changes, the use of artificial fertilizers and high water consumption. However, it should be emphasized that the main allegations were directed to the creation of golf courses in East Asia in the 90s of the last century. Currently, golf clubs operate more environmentally friendly. This is not only due to legal regulations and pressure of the environment, but also to improving the awareness of golfers themselves.

In the economy of sustainable development, taxes are included in the group of economic policy instruments and are intended, for example by reducing them, to stimulate specific actions for sustainable development (Cieślukowski, 2014, p. 197). A review of tax solutions in selected countries shows that the golf industry in question is not treated in a special way compared to other sectors. However, there are clear differences in taxation at the state level. The lowest taxation of turnover occurs in Slovenia and Poland, while the lowest taxation of income – in the Czech Republic and Estonia. Unfortunately, Poland offers, at a statutory level, definitely worse property tax conditions for golf courses particularly compared to the Czech Republic and Slovakia.

In view of applicable national regulations, exempting golf courses from property tax is the responsibility of the commune council. It should be noted, however, that municipalities can apply for only subject and not subjective property tax exemptions. Such an exemption should apply to sports infrastructure intended for public purposes, and thus available to the general public at all times free of charge or against payment. The type of field owner (private person, local government unit or association) should be irrelevant. The golf courses meet those criteria; however, the problem is that municipalities, for fear of losing revenue, do not want to consider the golf courses as sports infrastructure and exempt them from property tax. They consider them as business activity lands and impose the proper tax.

In the opinion of representatives of the golf sector in Poland, in particular, preferential taxation of golf courses with a real estate tax would give impetus to the development of the golf sector and popularization of the discipline (Sport, 2013). Especially that in 2016 golf returned to the Olympic program after a 112-year break.

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