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Tourist mobility of Polish residents in the context of the COVID-19 pandemic

Andrzej Matczak^{1, CDFMR}, Daniela Szymańska^{2, CDFMR}

¹University of Łódź, Institute of Urban Geography and Tourism Studies, Kopcińskiego 31, 90–142 Łódź, Poland, e-mail: andrzej. matczak@geo.uni.lodz.pl, https://orcid.org/0000-0002-9509-5879; ²Nicolaus Copernicus University in Toruń, Department of Urban Studies and Regional Development Lwowska 1, 87-100 Toruń, Poland; e-mail: dani@umk.pl (corresponding author), https:// orcid.org/0000-0001-6079-6838

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Abstract. The purpose of this study is to identify the impact that the COVID-19 pandemic had on the tourism sector in Poland in terms of the tourist mobility of Poles, i.e., on the volume and nature of tourist trips of Polish residents. It is based on a comparison of the numbers and natures of tourist trips made during the pandemic (2020–2021) against the preceding period (2018–2019). This study is based on data from Statistics Poland collected from several hundred thousand participants (an average of over 136,000 people surveyed annually). The study discusses changes in: Polish residents' level of participation in tourist trips; the number and breakdown of tourist trips; and the reasons/purposes for tourist trips. In addition, changes in the breakdown of accommodation facilities used and means of transport used during tourist trips are shown. Changes observed in tourist travel expenses from 2018 to 2021 are also discussed. Another subject of our analysis is changes in tourist travel destinations and the seasonality of these trips.

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tourist mobility of Polish residents, the COVID-19 pandemic, tourist travel destinations, number and structure of tourist trips, travel expenses

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1. Introduction

Tourism is one of the world's main economic sectors. It is the third largest export area (after fuels and chemicals). The leisure industry, including tourism, culture, sport and recreation, was one of the fastest growing areas of the world economy in the last decade. In the last decade, all regions of the world saw a large increase in the number of international tourists, reaching 1.5 billion in 2019. Around 9 billion people traveled within their home countries. This situation changed dramatically at the beginning of 2020.

According to data from the United Nations World Tourism Organization (UNWTO), tourism alone generated over 10% of global GDP and employed almost 12% of the workforce (2019), but the COVID pandemic decimated a \$9.6 trillion industry, halving its production value and leaving 62 million people out of work (WTTC conference in Manila, 21-04-2022; https://www.gmanetwork. com/news/money/economy/829261/wttc-globaltourism-to-recover-from-pandemic-by-2023-post-10-year-growth-spurt/story/).

Tourism has been one of the sectors of the economy directly affected by the crisis resulting from the COVID-19 pandemic, which greatly upset and disrupted the tourism industry, and it is claimed that its effects will last for another decade.

Travel & Tourism GDP declined by 50.4% (USD 4,855 billion) in 2020 vs the overall economy's decline of 3.3%, Travel & Tourism GDP grew by 21.7% (USD 1,038 billion) in 2021 vs the overall economy's growth of 5.8%/ (EIR2022-GlobalTrends.pdf; https://wttc.org/Portals/0/Documents/Reports/2022/EIR2022-Global%20Trends.pdf).

Research by the World Travel and Tourism Council (WTTC) shows that Travel & Tourism GDP could return to 2019 levels by the end of 2023. The industry is expected to post an annual average growth rate of 5.8% from 2022 to 2032 versus the 2.7% increase in global GDP, and what is more, the sector is expected to create nearly 126 million new jobs within the next decade (WTTC conference in Manila, 21-04-2022).

The COVID-19 virus took the international community by surprise, and its spread was rapid, because, according to Gössling, Scott & Hall (2021), in the period from December 2019 to March 2020 it spread from China to most areas of the world, covering 90% of the world population. Therefore, on March 12, 2020, the World Health Organization (WHO) declared a pandemic. Tourism became a victim of the pandemic on the one hand, and,

on the other, contributed to its spread (Hall et al., 2020). Different countries and states responded to the pandemic differently (Cole & Dodds, 2021). Traditional methods of physical isolation were introduced to prevent the spread of the virus. State borders were closed, mobility was limited, blockades and quarantines were introduced, educational and cultural institutions were closed, and even measures such as curfews were introduced. Teaching and working adopted remote models. This created economic uncertainty and reduced social capital (Fetzer et al., 2021). It was particularly severe and very costly for the economy, especially for tourism.

The "waves" of rising and falling case rates resulted in restrictive measures being tightened or loosened, and the introduction of Covid-19 vaccines as of the last days of December 2020 allowed them to be further significantly loosened. The relaxation of restrictions was conducive to tourist trips, while heavier restrictions clearly reduced their number. After the decrease in tourist travel seen around the world in 2020 (including in Poland), there was an increase in 2021.

The purpose of this study is to identify the impact of the COVID-19 pandemic on the tourism sector in Poland – specifically on the tourist mobility of Poles, i.e., on the volume and nature of tourist trips by Polish residents.

It was based on a comparison of the numbers and natures of tourist trips made during the pandemic (2020–2021) against the preceding period (2018–2019).

2. Literature review

The COVID-19 pandemic has had a profound impact on the modern tourism industry, with a spectacular decline in tourist travel, especially international travel (UNWTO 2020, 2021a). The outcomes have included a surge in scientific research (Zopiatis et al., 2020; Sigala, 2020). Platforms such as Google Scholar already contain thousands of articles on the topic (Gösling & Schweiggart, 2022). Several reviews of scientific research to date addressing the impact of the COVID-19 pandemic on tourism have been presented (Zopiatis et al., 2020; Yang et al., 2021; Utkarsh & Sigala, 2021; Huang & Wang, 2022; Pahrudin et al., 2022). The pandemic was transformative, allowing significant changes in both the strategic and operational functioning of the tourism industry, as well as affecting the specifics of scientific research undertaken (Sigala, 2020). Many researchers have taken the opportunity to examine

the impact of the COVID-19 pandemic on tourism from different perspectives (Zopiatis, et al., 2020; Yang et al., 2021; Utkarsh & Sigala, 2021; Huang & Wang, 2022; Pahrudin et al., 2022). Some templates have also been provided by earlier studies on the impact that SARS (2003), H1N1 (2009), MERS (2012), Ebola (2014), Zika (2016), natural disasters, terrorism, etc. had on tourism (Pansiuk, 2020; Hall et al., 2020; Gössling et al., 2021; Aronica et al., 2021).

The issue of the impact of the COVID-19 pandemic on tourism demand is addressed in numerous reports by international organizations, institutions and individual countries. Examples include: the reports of the European Commission (Marques Santos et al., 2020), the Organization for Development and Economic Cooperation (Dupeyras et al., 2020; OECD, 2021), the World Tourism Organization (Note 1) (UNWTO, 2020, 2021a), the United Nations Conference on Trade and Development (UNCTAD, 2020), the Swiss tourist association AIEST (Bieger & Laesser, 2020) and others; the results of surveys monitoring the intention to travel tourist of USA residents during the COVID-19 period (MMGY Travel Intelligence, 2020); and the results of monthly reports on UK visitors during the COVID-19 period in the UK (Visit Britain, 2020). In Poland, surveys of participation in tourism are conducted by Statistics Poland (Główny Urząd Statystyczny - Central Statistical Office GUS), which publishes industry yearbooks entitled "Tourism" (data for 2020-2021 are included here) and develops Signal Information (e.g., GUS published a study entitled "Tourism in Poland in the face of the COVID-19 pandemic" in 2020). In addition, several hundred academic publications on tourism in the context of COVID-19 were published during the pandemic (Rogerson & Rogerson, 2021; Gösling & Schweiggart, 2022). Academic reports and research mainly use surveys, especially online surveys conducted via social media. The results of academic studies of consumer demand for tourist travel are now available for many countries (Rogerson & Rogerson, 2021; The Impact of COVID-19 on Tourism..., 2021; (Note 2).

Most research to date has focused on the possibly huge potential for transforming tourism towards sustainability without a critical look at the depletion of our planet's resources. For many years, the current model of tourism based on a steadily growth in tourist trips that generate high income at the expense of damage to nature, local communities, etc. has been the subject of sharp criticism from both academic and non-governmental organizations (Higgins-Desbiolles, 2020; Higgins-Desbiolles et al., 2021). The need for more sustainable tourism development is indicated. Currently, most research advocates for more sustainable, responsible and equitable tourism after the pandemic, but hardly any research explores in depth whether, why and how such theoretical proclamations have materialized (Utkarsh & Sigala, 2021). The COVID-19 pandemic has begun to be perceived as an event that could significantly change the existing paradigms deeply rooted in the tourism industry (quantitative growth in travel as a goal to generate income, jobs, etc.) (e.g., Sigala, 2020; Niewiadomski, 2020; Zenker & Kock, 2020; Zenker et al., 2021; Prideaux et al., 2020; Galvani et al., 2020; Romagosa, 2020; Ioannides & Gyimothy, 2020; Brouder, 2020; UNWTO, 2021; Abbas et al., 2021). Most of these studies were conceptual in nature due to the paucity of data at the time, and they were based on theoretical considerations in the existing literature on pandemics, crisis management and the nature of sectoral recovery (Sigala, 2020; Hall et al., 2020; Gössling et al., 2021). In subsequent studies, the impacts and harmful effects of the COVID-19 pandemic on tourism began to come to the fore, with particular emphasis on the risks and challenges that it brought. Studies have been performed on the impact that the risk of viral infection during tourist travel had on: the size and distributions of tourism demand (Kock et al., 2020; Zheng et al., 2021; Li et al., 2020; Jacobsen et al., 2021; Sánchez-Cañizares et al., 2020); the monitoring, valuation and forecasting of economic costs of the pandemic for tourism (Bausch et al., 2021; Polyzos et al., 2021; Yang et al., 2021; Zhang et al., 2021); social costs (Qiu et al., 2020); and governments' responses and proactive actions to stimulate tourism demand and tourism recovery (e.g., WTTC, 2021, 2022; Sharma et al., 2021; Haywood, 2020; Dupeyras et al., 2020). Attention has also been drawn to the impact that new technologies implemented during the pandemic had on tourism (Fenell, 2021; Gretzel et al., 2020; Kwok & Koh, 2021; Zeng et al., 2020). In addition, the impact of mass media (agenda setting) on decisions to undertake tourist travel has been described (Matczak et al., 2022; Chemli et al., 2020), as has the impact of vaccinations on tourist demand recovery, which also recently became a subject of research (Wang et al., 2022; Bęben et al., 2021; Gursoy et al., 2021).

The growing abundance of primary data has enabled empirical research into the attitudes and behaviors of tourists and companies, and the development of appropriate models for both tourism and hotel activities (Walas & Kruczek, 2020; Napierała et al., 2020; Fotiadis et al., 2021; Škare et al., 2021). The literature indicates that numerous studies of behavioral intentions conducted online (which has certain inherent limitations) are a poor indicator of actual behavior (Kock et al., 2020), while field studies, experimental and qualitative data have thus far been scarce in tourism analyses (Viglia & Dolnicar, 2020; Volgger et al., 2021).

The literature to date contains two opposing assessments of the impact of the COVID-19 pandemic on tourist travel: 1) there will be a transformation in the participation and nature of tourist travel (presented in numerous academic publications: e.g., Sigala, 2020; Hall et al., 2020; Gössling et al., 2021) and 2) there will be no transformation in the participation and nature of tourist travel, and, after the shock period, they will return to a slightly modified pre-pandemic state, this second suggesting that tourism is highly crisis-resistant. Tourism should receive government support to recover quickly (preferably on a sustainable model). This is indicated by the ongoing discussions on the global paths of tourism recovery (e.g., UNWTO, 2021b; WTTC, 2021, 2022; Kennell, 2020; Jones, 2022).

3. Data

The data used in the study come from the survey of participation in tourism and recreation of Polish residents conducted by Statistics Poland (GUS) by interview method. In these studies, GUS uses a random sample used in studying household budgets. The random sample includes many thousands of members of these households (e.g., in 2020 there were almost 130,000 people from almost 51,000 households (Note 3), but it does not include people absent from these households (pupils, students, people in old people homes, etc.). There are thus differences in selected sociodemographic characteristics between the sample and the population of Poland, which indicates certain limitations in generalizing the results of research conducted by GUS in this area. In general terms, however, these study results are highly representative and prognostic, while in detailed cross-sections they can serve to illustrate the socio-demographic and economic conditions of participation in tourism. Polish residents' participation in tourism is surveyed systematically every year (2014), using more-or-less the same research methods, which allows for basic comparative analyses. The purpose of the research by GUS is to determine the level of participation of Polish residents in travel, the characteristics of domestic and foreign trips with one or more overnight stays (e.g., start date, end date and main purpose of trip, places visited,

number of nights, type of accommodation, form of trip, type of transport used, method of booking) including related expenses (accommodation, meals, transport, shopping, cultural and recreational services, etc.). The results of these surveys are made available in the published yearbook entitled "Tourism" (Turystyka), in section III entitled "Participation of Polish residents in travels". The results and tables in the publication are synthetic, which somewhat limits the scope for more detailed analyses. However, it sufficiently allows us here to conduct synthetic analyses of changes caused by the COVID-19 pandemic in Polish residents' level and nature of participation in tourism. This article uses data published in the "Tourism" yearbooks for 2018, 2019, 2020 and 2021 (Note 4). They make it possible to assess changes in the volume and structure of tourist trips in particular years, the motives for undertaking them, the type of accommodation used, tourist destinations and their seasonality, and the size and breakdown of expenditures incurred on tourist trips.

4. Results

4.1. Polish residents' level of participation in tourist trips

In light of the data sources of Statistics Poland (GUS) mentioned above, an upward trend in Polish residents' participation in tourism has been observed in the last few years. In 2019, 20.8 million (64.1%) Polish residents aged 15 or over participated in at least one private tourist trip with at least one overnight stay (Table 1). This fell radically to 14.1 million, i.e., by 43.6%, in 2020, probably due to the COVID-19 pandemic. The size of this decrease in 2020 varied according to the demographic, social, economic and spatial structure of Polish society. The decrease in participation in tourism was slightly deeper among women (32.7%) than men (31.7%). Participation in tourism by people aged 65 and over dropped by 40.7%, while in younger age groups (15–64) it was lower (at around 27.8– 38.9%). The social and economic characteristics of Polish residents had a much stronger influence on the depth of the decline in participation in tourism. Level of education had a significant impact on the size of the decline in participation in tourism. In general, the lower the level of education, the greater the decline in participation in tourism.

Breakdown			Vear		Changes:	Drop in	Changes: Rise in				
			i cai		2020-201	9	2021-202	20			
	2018	2019	2020	2021	in mill.	in %	in mill.	in %			
Total	20.0	20.8	14.1	17.0	6.7	32.2	2.9	20.6			
			By sea	ĸ							
Men	9.6	10.1	6.9	8.4	3.2	31.7	1.5	21.7			
Women	10.4	10.7	7.2	8.6	3.5	32.7	1.4	19.4			
By age											
15 – 19 years	1.8	1.8	1.3	1.6	0.5	27.8	0.3	23.1			
20 – 24	1.7	1.8	1.1	1.3	0.7	38.9	0.2	18.2			
25 - 44	8.2	8.6	6.0	7.1	2.6	30.2	1.1	18.3			
45 – 64	5.7	5.9	4.1	5.0	1.8	30.5	0.9	21.9			
65 and older	2.6	2.7	1.6	2.0	1.1	40.7	0.4	25.0			
			By educatio	n level							
Higher	6.2	6.0	4.7	5.9	1.3	21.7	1.2	25.5			
Secondary and post-	7.2	7.9	5.3	6.2	2.6	32.9	0.9	17.0			
secondary											
Basic vocational	3.8	4.2	2.4	2.8	1.8	42.9	0.4	16.7			
Lower secondary, primary	2.8	2.7	1.7	2.1	1.0	37.0	0.4	23.5			
and no education											
		Ву	labor marl	ket status							
In work	12.1	12.6	9.4	11.2	3.2	25.4	1.8	19.1			
Unemployed	0.8	0.8	0.4	0.4	0.4	50.0	0.0	0.0			
Student or pupil	2.4	2.5	1.8	2.3	0.7	28.0	0.5	27.8			
Other not in the labor force	4.7				2.4						
		В	y place of re	esidence							
Urban	13.4	13.7	9.4	11.6	4.3	31.4	2.2	23.4			
Rural	6.6	7.1	4.7	5.4	2.4	33.8	0.7	14.9			

Table 1. Participation of Polish residents aged 15 or over in private tourist trips (with at least one overnight stay) in 2018–2021 (in millions)

Source: as in Note 4

The size of the decline in Polish residents' tourism participation differed greatly by labor market status. Among the employed and students, the decrease in participation in tourism was lowest (25.4% and 28.0%, respectively), while among the unemployed and persons not in the labor force (e.g., retirees and those on permanent benefits, etc.) it was highest (50% and 49%). Participation in tourism is also strongly differentiated by place of residence. City dwellers participate in tourism to a much greater extent than rural dwellers. The decline in tourism participation caused by the COVID-19 pandemic was slightly lower for urban residents (31.4%) than in rural areas (33.8%).

The COVID-19 pandemic fundamentally changed the breakdown of reasons for lack of participation in tourism among Polish residents aged 15 or over. While a sense of insecurity was a marginal factor in not participating in tourism in the years preceding the COVID-19 pandemic (in

Table 2. Reasons for non-participation in tourism by Polish residents aged 15 and over in private tourist trips (with at least one overnight stay) in 2018–2020 (in %)

Breakdown of causes	Year						
	2018	2019	2020	2021			
Lack of security	0.8	0.7	36.9	32.3			
Financial reasons	37.2	37.4	21.7	21.6			
No motivation to travel	14.9	14.8	11.3	13.0			

2019, it was reported by 0.7% of the inhabitants of Poland), in 2020 the lack of security resulting from the COVID-19 threat was the most important reason for not taking a tourist trip (reported by 36.9%). Both prior to and during the COVID-19 pandemic, financial reasons and no motivation to travel had a traditionally high share among factors limiting the undertaking of tourist trips in Polish society (see Table 2).

In 2021, despite the still high risk of COVID-19 infection and the various restrictions in force in many areas of socio-economic life, especially in the tourism industry, there was a significant increase in Polish residents' participation in tourism compared to 2020 (Table 1). However, this increase did not bring Polish residents' participation in tourist trips back to 2020 levels. Similarly to the preceding decline in participation, this increase varied according to the demographic, social, economic and spatial structure of Polish society. There was a general pattern that the older and better educated the inhabitants, the higher the increase in their participation in tourist travel in 2021. Among students, school pupils, retirees and other people not among the labor force, the increase in participation in tourist trips was significantly higher than among either the employed or the unemployed. In 2021, participation in tourist trips increased far more among urban residents (23.4%) than rural residents (14.9%).

4.2. Number and structure of tourist trips

We should mention here that, since Poland's 2004 accession to the European Union (EU), Polish society's interest in tourist travel, domestic and (especially) foreign, has been steadily growing. In 2019, tourist trips reached 75.1 million, including domestic trips (59.8 million) and foreign trips (15.3

million, which accounted for 20.4% of all tourist trips made that year). The COVID-19 pandemic caused tourist trips to decrease to 53 million in 2020 (i.e., by 29.4% compared to 2019), with the number of domestic trips falling by 22.7%, and foreign trips by as much as 55.5%. The 2021 increase in tourist trip numbers was only a partial recovery from the decrease of 2020. It affected domestic trips, especially long trips, more than foreign ones, whose number increased only slightly (Table 3).

In domestic tourism, short trips (2-4 days) clearly exceeded long trips (5 days or more). In 2019, 34.5 million domestic short trips and 25.3 million domestic long trips were made (Table 3). In 2020, despite the decrease in absolute numbers of domestic trips to 26.1 million short and 20 million long, the ratio of the one to the other did not change. In foreign trips, however, the breakdown was different, with long trips (12.4 million) prevailing over short trips (2.9 million) in 2019, and long trips decreasing to 5.5 million in 2020 while short-term trips fell to 1.3 million. The growth of 2021 was clearly limited (domestic growth of nearly 20% and foreign growth not exceeding 10%). Both before and during the pandemic, the ratio of short trips to long, both domestic and foreign, changed little.

The data analysis shows that the COVID-19 pandemic caused a significant decrease in the number of domestic and foreign tourist trips in 2020, both short and long, and the increase in 2021 did not constitute a recovery from that fall. In 2021, the share of domestic trips increased from 79% in 2019 to 88.2%, while the share of foreign trips decreased (from 20.4% to 11.8%, accordingly). The significant decrease in tourist trip numbers during the COVID-19 pandemic did not change the proportions between short trips (2–4 days) and long (5 days or more), neither in domestic nor foreign trips.

Table 3. Tourist trips of Polish residents in 2018–2021 (in millions)

Breakdown		y	Year		Changes 2020 relativ	: Fall in ve to 2019	Changes: Fall in 2021 relative to		
							202	0	
	2018	2019	2020	2021	in mill.	in %	in mill.	in %	
Total	72.1	75.1	53.0	62.5	22.1	29.4	9.5	17.9	
National:	57.7	59.8	46.2	55.1	13.6	22.7	8.9	19.3	
2-4 days	33.6	34.5	26.1	30.9	8.4	24.3	4.8	18.4	
5 days or more	24.1	25.3	20.0	24.2	5.3	20.9	4.2	21.0	
Foreign:	14.4	15.3	6.8	7.4	8.5	55.5	0.6	8.8	
2-4 days	2.7	2.9	1.3	1.4	1.6	55.2	0.1	7.7	
5 days or more	11.7	12.4	5.5	6.0	6.9	55.6	0.5	9.1	

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4.3. Breakdown of reasons for undertaking tourist trips

In the years preceding and during the COVID-19 pandemic alike, Polish residents aged 15 or over undertook tourist trips mainly for leisure purposes (rest, recreation, vacation) and visiting friends and relatives (VFR tourism). These two reasons were in equal standing among total tourist trips (each accounting for slightly over 45%). Their shares differed between domestic and foreign trips. Among domestic trips, VFR generally dominated, especially for short trips, whereas leisure generally dominated among long trips. By contrast, trips abroad for leisure were almost twice as common as those for VFR. The pandemic saw the share of foreign trips undertaken to visit friends and relatives rise and the share of leisure trips fall. Business trips were an important reason for travel. Their share was almost unchanged in 2018-2021, especially in domestic travel (3.5% share), whereas for foreign travel there was a slight upward trend (from nearly 9% in 2019 to 13% in 2021). Other reasons for tourist travel,

despite having a marginal share in the structure of tourist trips in 2018–2019, fell to even lower levels in the breakdown of reasons for tourist travel during the COVID-19 pandemic – especially trips for religious, educational and other purposes (Table 4).

In summary, although the COVID-19 pandemic caused a deep decrease in tourist trip numbers, it had a very limited impact on the breakdown of reasons to travel.

4.4. Accommodation facilities used during tourist trips

The breakdown of tourism objectives among Polish residents aged 15 and over presented (Table 4) and discussed above is also reflected in the breakdown of the use of accommodation facilities (Table 5). In 2018–2019, overnight stays in rented and non-rented facilities were almost equal. The COVID-19 pandemic resulted in a slight increase in the share of non-rented accommodation in tourist travel, especially in that provided by family or friends, and

Table 4. Reasons for tourist trips by Polish residents aged 15 and over in 2018–2021 (in millions)

Journeys		Y	ear		Chang in 2 relat 20	es: Drop 2020 ive to 019	Changes: Rise in 2021 relative to 2020	
	2018	2019	2020	2021	in mill.	1 n %	in mill.	1 n %
		To	tal					
Rest, recreation, vacation	27.0	28.8	20.8	24.6	8.0	27.8	3.8	18.3
Visiting friends, family	27.0	28.1	20.0	23.9	8.1	28.8	3.9	19.5
Work	2.9	2.9	2.0	2.3	0.9	31.0	0.3	15.0
Health	1.5	1.6	0.8	1.1	0.8	50.0	0.3	37.5
Other	2.1	2.1	1.1	1.2	1.0	47.6	0.1	9.0
Total	60.5	63.5	44.7	53.1	18.8	29.6	8.4	18.8
		Natio	onal:					
Rest, recreation, vacation	19.9	21.1	17.7	21.0	3.4	16.1	3.3	18.6
Visiting friends, family	23.1	24.1	17.9	21.8	6.2	25.7	3.9	21.8
Work	1.7	1.7	1.3	1.4	0.4	23.5	0.1	7.7
Health	1.4	1.5	0.7	1.1	0.8	53.3	0.4	57.1
Other	1.6	1.6	0.9	1.0	0.7	43.7	0.1	11.1
Total	47.7	50.0	38.5	46.3	11.5	23.0	7.8	20.3
		Fore	ign:					
Rest, recreation, vacation	7.1	7.7	3.1	3.5	4.6	59.7	0.4	12.9
Visiting friends, family	3.9	4.1	2.1	2.1	2.0	48.8	0	0
Work	1.1	1.2	0.7	0.9	0.5	41.7	0.2	28.6
Health	0.1	0.1	0	0	0.1	100.0	0	0
Other	0.5	0.5	0.2	0.3	0.3	60.0	0.1	50.0
Total	12.7	13.6	6.1	6.8	7.5	55.1	0.7	11.5

to a lesser extent in the use of second homes. On the other hand, the importance of rented facilities (especially hotels and holiday resorts) in meeting tourist accommodation needs decreased in the same period, but the share of private and agritourism lodgings in the accommodation provision for tourist trips increased (Table 5). The breakdown of accommodation facilities used during tourist trips differed between domestic and foreign trips. During domestic tourist trips, overnight stays were most often provided in nonrented facilities, i.e., with friends and relatives, especially during short trips (which accounted for

Table 5. Tourist accommodation establishments used for overnight stays during tourist trips by Polish residents aged 15or over in 2018–2021 (in millions)

					Change	s: Drop	Change	es: Rise	
Accommodation					in 2	020	in 2021		
		Y	ear		relati	ve to	relati	ve to	
					20	19	20	20	
	2018	2019	2020	2021	in mill.	in %	in mill.	in %	
		Journe	ys total						
Rented accommodation	20.2	32.0	20.4	24.5	11.6	36.2	4.1	20.1	
of which:	29.2	52.0	20.4	24.3	11.0	50.2	7.1	20.1	
hotels and similar	16.8	18.8	10.7	12.9	8.1	43.1	2.2	20.6	
holiday vacation facilities	2.5	2.6	1.4	1.8	1.2	46.1	0.4	28.6	
private and agritourism	6.4	7.1	5.8	6.5	1.3	18.3	0.7	12.1	
other	3.5	3.5	2.5	3.3	1.0	28.6	0.8	32.0	
Non-rented accommodation	21.2	21.6	24.2	20.2	7 2	22.1	4.0	16 5	
of which:	51.5	51.0	24.5	20.3	7.5	23.1	4.0	10.5	
staying with friends or relatives	29.2	29.4	22.3	25.9	7.1	24.1	3.6	16.1	
Other	2.1	2.2	2.0	2.4	0.2	9.1	0.4	20.0	
Total rented and non-rented	60.5	63.6	44.7	52.8	18.9	29.7	8.1	18.1	
		Domest	ic travel						
Rented accommodation	20.0	22.0	165	20.3	6 5	20.2	2.0	22.0	
of which:	20.9	23.0	10.5	20.3	0.5	20.3	5.0	23.0	
hotels and similar	10.4	11.8	7.8	9.5	4.0	33.9	1.7	21.8	
holiday vacation facilities	2.2	2.3	1.3	1.7	1.0	43.5	0.4	30.8	
private and agritourism	5.4	5.9	5.1	6.1	0.8	13.6	1.0	19.6	
Other	2.9	3.0	2.3	3.0	0.7	23.3	0.7	30.4	
Non-rented accommodation	26.9	27.0	22.0	26.0	5.0	10 5	1.0	10.2	
of which:	26.8	27.0	22.0	26.0	5.0	18.5	4.0	18.2	
staying with friends and relatives	24.8	25.0	20.0	23.7	5.0	20.0	3.7	18.5	
Other	2.0	2.0	2.0	2.3	0	0	0.3	15.0	
Total rented and non-rented	47.7	50.0	38.5	46.3	11.5	23.0	7.8	20.3	
		Foreig	n travel						
Rented accommodation	83	9.0	3.8	4.5	5.2	57.8	0.7	18.4	
of which:	0.5	9.0	5.8	4.5	5.2	57.8	0.7	10.4	
hotels and similar	6.4	7.0	2.8	3.4	4.2	60.0	0.6	21.4	
holiday vacation facilities	0.3	0.3	0.1	0.1	0.2	66.7	0	0	
private and agritourism	1.1	1.2	0.6	0.7	0.6	50.0	0.1	16.7	
Other	0.5	0.5	0.3	0.3	0.2	40.0	0	0	
Non-rented accommodation	4 5	4 5	2.4	2.2	2.1	167	0.1	4.2	
of which:	4.3	4.3	2.4	2.3	2.1	40./	-0.1	-4.2	
staying with friends and relatives	4.4	4.4	2.3	2.2	2.1	47.7	-0.1	-4.3	
Other, e.g., second homes	0.1	0.1	0.1	0.1	0	0	0	0	
Total rented and non-rented	12.8	13.5	6.2	6.8	7.3	54.1	0.6	9.7	

two thirds of trips) However, in long-term travel, accommodation in rented facilities prevailed (especially hotels and private lodgings). In domestic long trips, the share of hotel facilities among accommodation services fell slightly during the COVID-19 pandemic, while the importance of private and agritourism lodgings rose.

When traveling abroad, two thirds of trips were in rented facilities – mainly hotels and, to a lesser extent, private accommodation. The remaining third of trips used unrented rooms, mainly staying with friends and relatives. The COVID-19 pandemic, in addition to significantly decreasing the number of foreign tourist trips, produced limited changes in the breakdown of accommodation facilities used during these trips.

4.5. Means of transport used during tourist trips

The COVID-19 pandemic not only caused a significant decrease in the number of tourist trips (sections 4.1 and 4.2), but also changed the structure of means of transport used (Table 6). In the pre-pandemic period, private and hired motor vehicles (mainly cars) accounted for just over 75% of domestic trips (both short and long) and close to 30% of cross-border trips. During the pandemic, the role of passenger cars in servicing tourist trips clearly increased for both domestic and foreign travel (by ~8% and ~10%, respectively). In the case of domestic travel, this was mainly at the expense of reduced shares of other means of transport). International travel was dominated by air transport, both prior to and during the pandemic. Despite a large decrease (of 4.6 million) in the number of air trips in 2020 compared to 2019, and with a slight increase of 0.5 million trips in 2021 (over 2020), air travel still served slightly over half of foreign tourist trips. The increase in importance of cars in servicing foreign travel during the COVID-19 pandemic was due to a significant reduction in public transport use. The car, which better facilitates social distancing, turned out to be a safer means of tourist transport than public transport – hence its increased importance in servicing tourist travel during the pandemic.

4.6. Tourist travel destinations

The COVID-19 pandemic caused a change in domestic tourist travel destinations (Table 7). Cities were hardest hit. Before the pandemic, they

			Changes	: Fall in	Changes: Fall in						
Journeys		Ye	ar		2020 rela	ative to	2020 rela	ative to			
					201	19	202	20			
	2018	2019	2020	2021	in mill.	in %	in mill.	in %			
		Total:									
Flights	6.8	7.7	3.0	3.6	4.6	60.6	0.6	18.8			
Bus, coach (scheduled, chartered)	7.9	7.7	3.4	4.1	4.3	55.4	0.6	19.1			
Automobiles (private and rented)	40.6	42.6	35.3	41.8	7.4	17.2	6.5	18.5			
Other	5.1	5.5	3.0	3.6	2.5	45.6	0.6	19.2			
Total	60.4	63.5	44.7	53.1	18.8	29.6	8.3	18.6			
National:											
Flights	0.1	0.1	0	0	0.1	64.1	0	19.9			
Bus, coach (scheduled, chartered)	6.2	6.0	2.9	3.6	3.1	51.6	0.6	21.6			
Automobiles (private and rented)	36.7	38.7	32.8	39.3	5.9	15.3	6.5	19.8			
Other	4.7	5.2	2.9	3.4	2.3	65.8	0.6	20.0			
Total	47.7	50	38.6	46.3	11.4	22.9	7.7	20.0			
		Foreign:									
Flights	6.7	7.6	3.0	3.5	4.6	60.6	0.6	18.8			
Bus, coach (scheduled, chartered)	1.7	1.6	0.5	0.5	1.1	69.8	0	4.6			
Automobiles (private and rented)	4.0	4.0	2.5	2.6	1.4	36.1	0	1.3			
Other	0.4	0.3	0.2	1.8	0.2	52.6	0	6.0			
Total	12.7	13.5	6.2	6.8	7.3	54.3	0.6	10.1			

Table 6. Tourist trips by selected means of transport among Polish residents aged 15 and over in 2018–2021 (in millions)

accounted for slightly over half of tourism trips, but around 45% during the pandemic. The decrease in trips to cities in 2020 was as much as 9.6 million, a drop of 32.5% compared against 2019. In turn, in 2021, the increase of 2.8 million in the number of trips compensated to a limited extent for the loss of the previous year. Despite rural areas increasing their share in travel services in 2018-2021 from 21.4% to 23.3%, they lost 1.3 million trips in 2020 compared to 2019 and regained only 0.5 million in 2021 compared to 2020 – an only partial recovery from the decrease of a year earlier. The country's most attractive tourist destinations are coastal and mountain areas, and, although these recorded significant decreases in trip numbers in 2020 (of 1.4 million and 1.8 million, respectively), their share rose steadily between 2018 and 2021 (from 14.9% to 18.1% and from 12.5% to 13.4%, respectively). In 2021, mountain areas received 0.8 million more trips, recovering only half the loss of the previous year. In the second year of the pandemic, coastal areas were the only ones to not only make up for the losses but to even exceed 2019's pre-COVID trip numbers by 0.3 million (Table 7).

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There are interesting observations to be made regarding the distances traveled abroad by Poles. Polish residents' trips abroad are mainly to neighboring countries and countries in the Baltic Sea basin whose capitals are not more than 1,000 km from Warsaw as the crow flies. Despite heavily decreasing the number of trips abroad, the COVID-19 pandemic increased the importance of this zone for Polish residents traveling abroad (Table 8). In 2019, 42.6% of trips went to this distance zone, but ~55% during the pandemic. This zone's share in trips to visit friends and relatives increased particularly markedly (from 51.2% in 2019 to 66.7% in 2021), and its share of business trips also increased. Conversely, its share in rest, recreation and vacation trips increased to a lesser

extent (from 41.0% in 2019 to 45.7% in 2021). In turn, countries 1,000-2,000 km capital-to-capital from Poland (mainly in the eastern and western Mediterranean) accounted for 36.4% of all foreign tourist trips in 2019, and the COVID-19 pandemic caused only a slight decrease (of 2.6%) in its share of total foreign trips. However, Polish residents' reasons for travel to this zone were clearly changed by the pandemic's impact on the zone's share in servicing foreign travel. Travel for rest, recreation and vacations accounted for 37.1% in 2019, then fell to 32.3% in 2020, but in 2021 not only recovered its pre-pandemic share, but significantly exceeded it, rising to 40.0%. The pandemic affected differently the zone's share of trips to visit friends and relatives, business and other, significantly reducing it. It should also be mentioned here that, in 2019, prior to the pandemic, countries more than 2,000 km from Poland handled 21% of Poles' foreign tourist trips and the pandemic reduced this share by almost half (to 11.8%). This zone was visited mainly for leisure purposes, while other reasons for travel (VFR, business trips and other) had a marginal share (despite the significant number of Polish emigrants and Polish diaspora in the Americas). Therefore, for this zone, the pandemic only slightly reduced the share of trips for leisure purposes, while it reduced the share of trips for other purposes by almost half.

4.7. Seasonality of tourist travel

In studying tourism mobility, it is interesting to attempt to identify whether the COVID-19 pandemic changed the seasonal distribution of tourist trip numbers. Thus, COVID-19 cases peaking in the colder periods of 2020 and 2021 caused changes in the seasonal distribution of tourist trip numbers, domestic and foreign alike (Table 9). These changes consisted in increases in the shares of

Breakdown		Ye	ear		Changes: l relative	Fall in 2020 to 2019	Changes: Fall in 2021 relative to 2020		
	2018	2019	2020	2021	in mill.	in %	in mill.	in %	
Towns/cities	27.5	29.5	19.9	22.7	9.6	32.5	2.8	14.1	
Rural areas	11.5	12.5	11.2	11.7	1.3	10.4	0.5	4.5	
Coastal	8.0	8.8	7.4	9.1	1.4	15.9	1.7	23.0	
Mountains	6.7	7.7	5.9	6.7	1.8	23.4	0.8	13.6	
Total	53.7	58.5	44.4	50.2	14.1	24.1	5.8	13.1	

 Table 7. Selected destinations of domestic tourist trips of Polish residents aged 15 or over for private purposes in 2018–2021 (in millions)

Prostdown		Ve			Changes:	Drop in	Changes: Ris	se in 2021			
breakdown		16	ar		2020 rela 201	9	2020	0			
	2018	2019	2020	2021	in thous.	in %	in thous.	in %			
	Total:										
do 1 000 km	5.9	6.1	3.4	3.7	2.7	44.3	0.3	8.8			
1,000 – 1,999 km	4.8	5.2	2.1	2.3	3.1	59.6	0.2	9.5			
2,000 – 3,000 km	1.1	2.0	0.4	0.5	1.6	80.0	0.1	25			
over 3,000 km	1.0	1.0	0.3	0.3	0.7	70.0	0	0			
Total	12.7	14.3	6.2	6.8	8.1	56.6	0.6	9.7			
	Rest, recreation, vacation:										
do 1 000 km	2.9	3.2	1.5	1.6	1.7	53.1	0.1	6.7			
1,000 – 1,999 km	2.6	2.9	1.0	1.4	1.9	65.5	0.4	40.0			
2,000 – 3,000 km	1.0	1.1	0.3	0.4	0.8	72.7	0.1	33.3			
over 3,000 km	0.6	0.5	0.2	0.2	0.3	60.0	0	0			
Total	7.1	7.8	3.1	3.5	4.7	60.3	0.4	12.9			
			Visiting	friends	and relatives:						
up to 1,000 km	2.0	2.1	1.3	1.4	0.8	38.1	0.1	7.7			
1,000 – 1,999 km	1.6	1.7	0.8	0.7	0.9	52.9	-0.1	-12.5			
2,000 – 3,000 km	0.1	0.1	0	0	0.1	0	0	0			
over 3,000 km	0.2	0.2	0	0	0.2	0	0	0			
Total	3.9	4.1	2.1	2.1	2.0	48.8	0	0			
			Oth	ner (worl	k, other):						
up to 1,000 km	0.9	0.9	0.6	0.8	0.3	33.3	0.2	33.3			
1,000 – 1,999 km	0.5	0.6	0.2	0.3	0.4	66.7	0.1	50.0			
2,000 – 3,000 km	0.1	0.1	0	0	0.1	0	0	0			
over 3,000 km	0.2	0.2	0	0	0.2	0	0	0			
Total	1.7	1.8	0.8	1.1	1.0	55.5	0.3	37.5			

Table 8. Foreign trips by Polish residents aged 15 and over by distance of travel in 2018–2021 (inmillions)

Source: as in Note 4

summer months (June, July, August) and decreases in the shares of winter months (December, January, February). The decrease in total domestic trips made in the summer months in 2020 compared to 2019 amounted to 2.6 million, while the increase in 2021 compared to 2020 amounted to as much as 4.4 million. In turn, in the winter months, there were decreases in the number of trips in both 2020 and 2021 (of 1.6 million and 0.7 million, respectively) and in those months' share from 20.9% to 17.9% from 2020 to 2021. This translated into an increase in summer months' share in the number of domestic trips during the pandemic (from 42.6% to 49.9%, respectively). The summer-to-winter ratio of domestic trip numbers rose from 2.0 in the prepandemic period to 3.1–2.8 during the pandemic. In the summer months, for domestic travel, the increase in short trips was clearly less than the increase in long trips (Table 9).

There were similar changes in the seasonal distribution of foreign trips, because in the summer

months of 2020 the number of foreign trips fell by 3.3 million compared to 2019, and in 2021 rose by 1.1 million, recovering only 33.3% of the earlier decline. The share of summer months increased from 39.3% in 2019 to 43.7% in 2021. In turn, in the winter months, trips decreased in both 2020 and 2021 (by 0.6 million and 0.9 million), and their share decreased from 19.4% in 2019 to 16.6% in 2021). The summer-to-winter ratio of foreign trips increased from 2.0 in 2018–2019 to 2.6 in 2021. The change in number of foreign and domestic seasonal trips abroad was less among short trips than long trips (Table 9).

4.8. Travel expenses

Up until 2020, there had been a steady increase in spending on both domestic and foreign tourist travel by Polish residents (Table 10). In 2019, expenditures reached PLN 73.4 billion (PLN 29.3

Months	Year								Changes: Dr 2020 relative to 2019	rop in	Changes: Rise in 2021 relative to 2020	
	201	8	201	19	202	20	202	21				
	in mill.	in %	in	in	in	in	in	in	in mill.	in %	in mill.	in %
			mill.	%	mill.	%	mill.	%				
National total:												
Summer	20.3	42.6	21.3	42.6	18.7	48.5	23.1	49.9	2.6	12.2	4.4	23.5
Winter	10.0	20.8	10.5	20.9	8.9	15.7	8.2	17.9	1.6	15.3	-0.7	-7.9
	short-term											
Summer	9.7	33.3	10.0	33.3	8.4	37.5	10.3	38.6	1.6	16.0	1.9	22.6
Winter	6.8	23.3	7.0	23.3	6.0	26.8	5.8	21.6	1.0	14.3	-0.2	-3.3
						long-te	erm					
Summer	10.6	56.8	11.3	56.6	10.3	64.3	12.8	65.4	1.0	8.8	2.5	24.3
Winter	3.2	17.1	3.4	17.2	2.8	17.5	2.5	12.7	0.6	17.6	-0.3	-10.7
]	Foreign	total:					
Summer	5.0	39.9	5.3	39.3	2.0	34.2	3.1	43.7	3.3	62.3	1.1	55.0
Winter	2.5	19.2	2.6	19.4	2.0	31.2	1.1	16.6	0.6	23.1	-0.9	-45.0
						short-te	erm					
Summer	0.8	33.2	0.8	33.0	0.4	28.3	0.5	34.8	0.4	50.0	0.1	25.0
Winter	0.6	21.8	0.6	21.8	0.4	32.8	0.3	20.1	0.2	33.3	-0.1	-25.0
						long-te	erm					
Summer	4.3	41.6	4.4	41.0	1.7	35.8	2.5	46.0	2.7	61.4	0.8	47.1
Winter	1.9	18.5	2.1	18.8	1.5	30.9	0.9	15.6	0.6	28.6	-0.6	-40.0

Table 9. Changes in the seasonality of tourist trips by Polish residents aged 15 and over in 2018–2021 in millions of people

Source: as in Note 4, summer months (VI, VII, VIII), winter months (XII, I, II)

billion domestic and PLN 44.1 billion foreign). In 2020, relative to 2019, these expenses decreased by PLN 28.8 billion (i.e., by nearly 40%), of which, domestic travel spending decreased by only PLN 5.7 billion and spending abroad by PLN 23.1 billion. In turn, in 2021, expenditures increased, constituting a recovery of only 30.5% of the 2020 decrease and mainly due to a PLN 7 billion increase in expenditure on domestic travel. Spending on foreign travel increased by only PLN 1.8 billion. In 2020, the decrease in expenditure was highest for transport, food, accommodation and purchase of goods. In 2021, the increase in expenditure was attributable mainly to accommodation and meals, and then transport and other services (it constituted only a 19.7% recovery from the 2020 decrease in expenditure). Meanwhile, purchases of goods increased slightly (Table 10).

The domestic-to-foreign ratio of travel expenditures also changed (Table 10). Before the pandemic in 2019, spending on foreign travel accounted for 60% of total travel spending and domestic travel for 40%. During the pandemic, in 2021, these relationships were reversed, with total travel expenditure at home exceeding that abroad (57.3% compared to 42.7%, respectively). In domestic travel, the highest expenses in 2021 went on accommodation and meals (approximately PLN 10 billion each), half as much on transport, and least on purchasing goods and other services. It is worth mentioning that domestic travel expenses of 2021 exceeded those from 2019. In turn, in 2020, expenditure on foreign travel decreased most in transport services - by PLN 7.4 billion from PLN 12.9 billion in 2019 (i.e., by 57.6%) – and the increase in 2021 was negligible. There was also a significant decrease in expenditure on purchasing goods and other services in 2020, which did not increase in 2021. Total expenditure on accommodation and meals also fell by half (from PLN 16.9 billion to PLN 8.7 billion) and grew in 2021 by a similarly low level as the increase in spending on transport.

The COVID-19 pandemic, despite having resulted in a decrease in spending on tourist travel by Poles both domestically and (especially) abroad, did not lead to any major changes in the breakdown of expenditures: on domestic trips the highest share continued to go on accommodation, meals

Travel expenses	Year	r and exp bill	enses in l ion	PLN	Changes 2020 rela 201	: Fall in ative to 9	Changes: Rise in 2021 relative to 2020	
	2018	2019	2020	2021	in bill.	in %	in bill.	in %
Total:	66.8	73.4	44.6	53.4	28.8	39.2	8.8	19.7
Accommodation	16.2	17.9	11.6	14.8	6.3	35.2	3.1	27.0
Consumption in restaurants,	16.6	10.2	11.0	142	6 1	35.0	26	21.6
coffee shops, bars, etc.	10.0	10.2	11.0	14.5	0.4	33.0	2.0	21.0
Transport	16.1	18.3	9.7	11.8	8.6	46.9	2.1	21.9
Purchases of goods	14.4	15.3	9.4	9.9	5.9	38.8	0.5	5.4
Other services (cultural and recreational	2 E	27	2.1	26	16	12	0.5	22.1
services, entrance tickets, etc.)	5.5	5.7	2.1	2.0	1.0	43	0.3	22.1
National:	26.3	29.3	23.6	30.6	5.7	19.4	7.0	29.6
Accommodation	8.3	9.5	8.0	10.6	1.5	15.5	2.5	31.0
Consumption in restaurants, coffee shops,	07	0.6	76	0.0	2.0	20.4	2.2	28.0
bars, etc.	0./	9.0	7.0	9.9	2.0	20.4	2.2	20.9
Transport	4.9	5.5	4.3	5.6	1.2	21.6	1.3	31.4
Purchases of goods	2.8	2.9	2.5	2.9	0.4	15.5	0.5	19.0
Other services (cultural and recreational	16	18	12	16	0.6	34 5	0.5	30.6
services, entrance tickets, etc.)	1.0	1.0	1.2	1.0	0.0	54.5	0.5	59.0
Foreign:	40.5	44.1	21.0	22.8	23.1	52.3	1.8	8.6
Accommodation	7.9	8.4	3.6	4.2	4.8	57.4	0.7	18.1
Consumption in restaurants, coffee shops,	7 8	85	4.1	4.5	4.4	514	0.3	8.0
bars, etc.	7.8	0.5	4.1	4.5	4.4	51.4	0.5	0.0
Transport	11.3	12.9	5.4	6.2	7.4	57.6	0.8	14.6
Purchases of goods	11.6	12.4	6.9	6.9	5.5	44.3	0	0.5
Other services (cultural and recreational services, entrance tickets, etc.)	1.9	1.9	0.9	1.0	1.0	50.8	0	0.7

Table 10. Expenditures on travel for private purposes by Polish residents aged 15 and over in 2019–2020 (in PLN billion)

Source: as in Note 4

and transport, while on foreign trips expenditures continued to be highest for transport, purchase of goods, then accommodation and meals.

For domestic trips, the largest expenses were incurred on long trips (accounting for slightly over two thirds of total expenditure), and almost one third of total expenses went on short trips. The COVID-19 pandemic did not fundamentally change this spending structure. On the other hand, in the years preceding the pandemic, long trips accounted for slightly more than 60% of total expenditure on foreign travel; the pandemic reduced this share in 2020 and 2021 to 55.4% and 58.4%, respectively. The pandemic "introduced" similar trends in expenditures on short foreign trips: their share was 26.0–25.5% of total foreign travel expenses before the pandemic, which fell during the pandemic to 19.4% in 2020 and 23% in 2021 (Table 10). Expenditure on foreign one-day trips was characterized by different dynamics of change. The pandemic increased their share from nearly 30% in 2020 to 33.8% in 2021.

5. Discussion and conclusions

The research conducted thus far by international and national tourism organizations and institutions and academic research portray a fairly consistent image of consumer demand for tourist travel being changed by the COVID-19 pandemic. Our study generally confirms the trends in the volume and nature of tourist travel in response to the COVID-19 pandemic that have been observed in previous studies.

Reports by national and international organizations and tourism institutions, as well as academic research, clearly indicate a very large decrease in the number of tourist trips in the first year of the pandemic, including a much greater decrease in foreign travel than in domestic travel (UNWTO, 2021a; OECD, 2020; Korinth, 2020). Domestic trip numbers began to recover in 2021 (e.g., UNWTO, 2020a; Rogerson & Rogerson, 2021; The Impact of COVID-19 on *Tourism* ..., 2021; Arbulú et al., 2021). They increased much more sharply than did foreign trips. Foreign travel is only expected to recover in the next few years (Farzanegan et al., 2021).

Changes in the volume of demand for tourist trips among Polish residents during the COVID-19 pandemic were similar to those observed in many countries around the world. In 2020, foreign trips decreased in number more than did domestic trips (see Table 3). The decrease in travel was greatest among older, less educated and economically less well-off people (Table 1). As in many other countries, the volume of tourist trips began in 2021 to recover with domestic trips, which grew significantly more dynamically than did foreign trips (Table 3). The increase in travel was also higher among pupils/students and senior citizens than among the professionally active (Table 1). The recovery in tourist demand was also greater among urban than rural residents.

The sense of insecurity resulting directly from the COVID-19 pandemic not only decreased the number of tourist trips but also changed the nature of those trips. In Poland, the pandemic caused some changes in the breakdown of reasons for tourist travel (Table 4), the use of accommodation facilities (Table 5), the means of transport used (Table 6), destinations (Table 7 and 8), seasonality (Table 9) and travel expenditures (Table 10). The results of our study generally confirm the trends in the nature of tourist travel in other countries caused by the COVID-19 pandemic. However, in the case of residents of Poland, the structural changes in tourist trips during the COVID-19 pandemic were relatively small, as also indicated by, among other things, surveys (e.g., Kowalska & Niezgoda, 2020; Gierczak-Korzeniowska et al., 2021).

In Poland, as in many other countries, most tourist trips were made for leisure and visiting friends and relatives (VFR). Their share in the reasons for tourist trips increased during the pandemic, especially for VFR. On the other hand, business trips and trips to participate in events (e.g., meetings, incentives, conferences, exhibitions [MICE]) decreased dramatically. Our study shows that the volume of business trips among Polish residents decreased during the COVID-19 pandemic, but less than did all other tourist trips, so their share among reasons to travel showed a slight increase.

The need for social distancing during the pandemic clearly increased the use of private transport (cars, campers) on tourist trips, which may, over time, cause significant changes not only in the nature of travel but also in tourist development (*The Impact of COVID-19 on Tourism ...*, 2021). In foreign travel, private means of transport (cars,

campers) were used more during the pandemic than before, which shortened journeys and created a preference for more frequent trips to neighboring countries. Our study fully confirms the trends observed in this respect in other countries.

The greater inclination of tourists to visit areas of low overcrowding resulted in a preference for such forms of tourism as VFR and staying in second homes, campsites, agritourism lodgings and other small accommodation facilities, as well as in rural and environmentally valuable areas (both close to and further from the tourists' place of residence); these places had hitherto been more rarely visited, and tourists tended to stay longer, especially in the warm season (UNWTO, 2020b; OECD, 2020b; Wojcieszak-Zbierska et al., 2020). Only in seaside tourist areas were such tendencies not observed (Miedziński, 2022).

The greater threat of viral infection in cities (due to greater overcrowding) greatly decreased tourist arrivals and slowed the recovery in urban tourism (Kowalczyk-Anioł & Pawlusiński, 2021a; Kowalczyk-Anioł et al., 2021b). This recovery may require that visits deglomerate – from the central districts of cities towards less-known, peripheral facilities and spaces off the beaten track.

The COVID-19 pandemic changed the volume, structure and directions of tourist spending flows. Countries exporting tourism goods and services (especially those with a lower level of development) lost out, while countries importing them (those with a high level of development) gained. Tourists stayed in Poland and spent their money there, rather than taking it abroad. This deepened the financial difficulties of exporters and improved the finances of importers of tourist goods and services. The case of Poland fully confirms such trends observed in previous studies in many other countries.

Data from Statistics Poland (GUS) taken on the demand side allow for a reliable assessment of the impact that the pandemic had on participation in and the nature of tourist trips among Polish residents. To date, most studies have been conducted on the supply side (e.g., Gabryjończyk & Gabryjończyk, 2021; Bąk-Filipek et al., 2022; Stojczew, 2021), using, among others, GUS data, which point to huge losses having been incurred by tourist businesses (especially air transport, hotels, restaurants, etc.). This is also confirmed by surveys among tourism companies (Gruszka & Manczak, 2021). Academic analyses conducted on the demand side were usually based on proprietary data obtained during surveys of limited samples (e.g., Gierczak-Korzeniowska et al., 2021, 2022; Kowalska & Niezgoda, 2020; Widomski, 2020). The data from

GUS, which has for many years used a more-orless consistent research methodology regarding participation in and the nature of tourist trips, also provide an opportunity for some comparisons. This applies mainly to data relating to long tourist trips by Polish residents. They can be compared against the pandemic impact of other factors contributing to the transformation of tourism. Poland has experience of a planned economy and of a model of social tourism having been in effect. After the fall of communism, a market model of tourism was introduced. It was a strong factor transforming tourism in Poland, though entirely incomparable to the ongoing COVID-19 pandemic.

After the end of World War II, Polish residents' participation in leisure trips grew steadily until the end of the 1970s (Rocznik Statystyczny: 1977, 1989, 1990, 2001, 2021). In the period 1960-79 there was a slightly more than five-fold increase in this participation (from 3.5 million in 1960 to 18.1 million people in 1979). The crisis in the socialist state (martial law and restrictions on freedom of movement in the country) and in the planned economy reduced this participation by more than half, especially in the first half of the 1980s (to 8.5 million). It was a period of deep decline in Polish residents' participation in tourism. By the late 1980s, the easing of restrictions and then the end of martial law and the gradual normalization of the planned economy had brought the number of people participating in long-term recreational tourism steadily back to the level of the early 1970s (about 9.7 million).

In the 1990s, the number of people participating in long-term tourism (5 days or more) increased slowly (from 9.7 million in 1990 to 10.7 million in 2000). However, the level of participation in long-term tourism reached in the late 1970s has not been restored. The global economic slowdown in the first decade of the 21st century resulted in another decrease in this participation (to 8.5 million in 2010). It is only in the second decade of the new century that this share increased until the end of the decade (11.1 million in 2019). The COVID-19 pandemic again reduced the number of participants in holiday tourism (to 7.5 million in 2020), but much less so than the crisis of the socialist state and planned economy did.

After 1989, the nature of tourist travel by Poles also changed. The number of trips increased, while the length of individual trips decreased. Poles began to travel more often throughout the year but for shorter periods, similarly to most Europeans. Foreign travel increased. Destinations changed. Travel to former socialist countries of Central and Eastern Europe fell, while trips to Mediterranean and Western European countries, and to more distant countries on other continents, rose.

In the case of Poland, it can be concluded that the political and economic crisis of the 1980s reduced the number of Poles participating in tourism and changed its nature far more than have the economic fluctuations now taking place in the market economy or the restrictions introduced in connection with the COVID-19 pandemic. The COVID-19 pandemic is an important factor in the decline in Polish residents' participation in tourism and changes in its nature; however, in terms of scale, it is completely incomparable to the systemic changes introduced after 1989, though it is comparable to the impacts of periodic economic downturns to date. In the light of our research, it seems that the impact of COVID-19 on the tourist behavior of Poles is sometimes exaggerated. Perhaps COVID-19 will act like a delayed fuse and only a longer perspective will show whether it has led to a significant transformation of modern tourism.

Notes

- 1. UNWTO issues reports on travel restrictions related to COVID-19 entitled *Global Tourism Review*. These reports aim to support the tourism sector in dealing with the COVID-19 global health crisis by providing an overview and analysis of travel restrictions imposed by national governments. The reports are regularly updated and are designed to support mitigation and recovery efforts in the tourism sector.
- 2. The document prepared by the Polish Tourism Organization presents an overview of tourism policies in 18 selected countries around the world that were particularly heavily affected by the COVID-19 pandemic.
- In 2018, the survey covered 138.7 thousand people from ~52,000 households and subsequent years: 136.6 thousand from over 52,000 households in 2019; 128.7 thousand people from almost 51,000 households in 2020; and 142 thousand people from over 58,000 households in 2021.
- 4. All calculations in the study were made on the basis of GUS data published online: Participation of Polish residents in travel in 2018. In: *Tourism in* 2018, GUS, Warsaw 2019, Statistical analyses, pp. 99–109 and tables –

section III; Participation of Polish residents in travels. In: *Tourism in* 2019, GUS, Warsaw 2020, Statistical analyses, pp. 61–72 and tablessection III; Participation of Polish residents in travels. In: *Tourism in* 2020, GUS, Warsaw 2021, Statistical analyses, pp. 63–75 and tablessection III; Participation of Polish residents in travels. In: *Tourism in* 2021, GUS, Warsaw 2022, Statistical analyses, pp. 65–77 and tables-section III. Accessed: 24.07.2022.

References

- Abbas, J., Mubeen, R., Iorember, P.T., Raza, S. & Mamirkulova, G. (2021). Exploring the impact of COVID-19 on tourism: transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, 2: 100033. DOI: https://doi.org/10.1016/j.crbeha.2021.100033.
- Arbulú, I., Razumova, M, Rey-Maquieira, J. & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, 20: 100568. DOI: https://doi.org/10.1016/j.jdmm.2021.100568.
- Aronica, M., Pizzuto, P. & Sciortino, C. (2021). COVID- 19 and tourism: What can we learn from the past? *The World Economy*, 45(2): 430-444. DOI: https://doi.org/10.1111/ twec.13157.
- Bausch, T., Gartner, W.C. & Ortanderl, F. (2021). How to Avoid a COVID-19 Research Paper Tsunami? A Tourism System Approach. *Journal of Travel Research*, 60(3): 467– 485. DOI: https://doi.org/10.1177/0047287520972805.
- Bąk-Filipek, E., Szalkai, G. & Podhorodecka, K. (2022). Foreign inbound tourism to Poland and Hungary during the COVID-19 pandemic times – comparing the solutions and outcomes. *Rozwój Regionalny i Polityka Regionalna*, 58: 11–25. DOI: https://doi.org/10.14746/rrpr.2022.58.0.
- Bęben, R., Kraus Z., Młynkowiak-Stawarz, A. & Półbrat, I. (2021). Skłonność do podróżowania osób zaszczepionych i niezaszczepionych przeciw SARS-CoV-2 w kontekście teorii motywacji ochronnej i teorii planowanych zachowań (Willingness to Travel of Vaccinated and UnvaccinatedPeople against SARS-CoV-2 in the Context of The Protection Motivation Theory and Theory of Planned Behaviour- in Polish). *Przegląd Organizacji*, 10(981): 27-35. DOI: 10.33141/po.2021.10.04.
- Bieger, T. & Laesser, C. (2020). The Future of Tourism With and Potentially After SARS-CoV-2: Continuous Small Steps and Drawbacks Towards a Temporary New "Normal". St Gallen, Switzerland: AIEST.
- Brouder, P. (2020). Reset redux: Possible evolutionary pathways towards the transformation of tourism in a

COVID-19 world. *Tourism Geographies*, 22(3): 484–490. DOI: 10.1080/14616688.2020.1760928.

- Chemli, S., Toanoglou, M. & Valeri, M. (2020). The impact of Covid-19 media coverage on tourist's awareness for future travelling. *Current Issues in Tourism*, 25(2). DOI: https://doi.org/10.1080/13683500.2020.1846502.
- Cole, J., & Dodds, K. (2021). Unhealthy geopolitics: Can the response to COVID-19 reform climate change policy? *Bulletin of the World Health Organization*, 99(2): 148–154. DOI: 10.2471/BLT.20.269068.
- **Dupeyras, A., Haxton, P. & Stacey, J.** (2020). The Covid-19 Crisis and Tourism: Response and Recovery Measures to Support the Tourism Sector in OECD Countries. Paris: OECD.
- Farzanegan, M.R., Gholipour, H.F., Feizi, M., Robin Nunkoo, R. & Andargoli, A.E. (2021). International Tourism and Outbreak of Coronavirus (COVID-19): A Cross-Country Analysis. *Journal of Travel Research*, 60(3): 687 – 692. DOI: https://doi.org/10.1177/0047287520931593.
- Fennell, D.A. (2021). Technology and the sustainable tourist in the new age of disruption. *Journal of Sustainable Tourism*, 29(5): 767–773. DOI: 10.1080/09669582.2020.1769639.
- Fetzer, T., Hensel, L., Hermle, J., & Roth, C. (2021). Coronavirus perceptions and economic anxiety. *The Review of Economics and Statistics*, 103(5): 968–978. DOI: https://doi.org/10.1162/rest_a_00946.
- Fotiadis, A., Polyzos, S. & Huan, T.C. (2021). The good, the bad and the ugly on COVID-19 tourism recovery. *Annals of Tourism Research*, 87: 103117. DOI: https://doi. org/10.1016/j.annals.2020.103117.
- Gabryjończyk, K. & Gabryjończyk, P. (2021). Zmiany stopnia wykorzystania turystycznych obiektów noclegowych w okresie zwalczania pandemii COVID-19 w Polsce (Changes of occupancy in tourist accommodation establishments in the period of combating the COVID-19 pandemic in Poland- in Polish). *Turystyka i Rozwój Regionalny*, 15: 43-58. DOI: 10.22630/TIRR.2021.15.5.
- Galvani, A., Lew, A.A. & Perez, M.S. (2020). COVID-19 is expanding global consciousness and the sustainability of travel and tourism. *Tourism Geographies*, 22(3): 567–576. DOI: https://doi.org/10.1080/14616688.2020.1760924.
- Gierczak-Korzeniowska, B., Szpara, K. & Stopa, M. (2021). Regional tourism during the COVID-19 pandemic: Losses, missed opportunities and new developments for the tourism industry. *Turyzm/Tourism*, 31(2): 65–86. DOI: https://doi.org/10.18778/0867-5856.31.2.04.
- Gössling, S., Scott, D. & Hall, C.M. (2021). Pandemics, tourism and global change: A rapid assessment of COVID-19. Journal of Sustainable Tourism, 29(1): 1–20. DOI: https://doi.org/10.1080/09669582.2020.1758708.
- **Gössling, S. & Schweiggart, N.** (2022) Two years of COVID-19 and tourism: what we learned, and what we should have learned. *Journal of Sustainable Tourism*, 30(4):

915-931. DOI: https://doi.org/10.1080/09669582.2022.202 9872.

- Gretzel, U., Fuchs, M., Baggio, R., Hoepken, W., Law, R., Neidhardt, J., Pesonne J., Zanker M. & Xiang, Z. (2020). e-Tourism beyond COVID-19: a call for transformative research. *Information Technology & Tourism*, 22(2): 187– 203. DOI: http://dx.doi.org/10.1007/s40558-020-00181-3.
- Gruszka, I. & Manczak, I. (2021). Funkcjonowanie podmiotów turystycznych w dobie pandemii COVID-19 – studium przypadku Dolnego Śląska i Małopolski (The functioning of tourism entities in Poland during the pandemic – the case of Dolny Śląsk and Małopolska - in Polish). Studia Periegetica, 4(36), 71-89. DOI: https://doi.org/10.5604/01.3001.0015.8059.
- Gursoy, D., Can, A.S., Williams, N. & Ekinci, Y. (2021). Evolving impacts of COVID-19 vaccination intentions on travel intentions. *The Service Industries Journal*, 41(11-12): 719-733. DOI: https://doi.org/10.1080/02642069.2021.193 8555.
- Hall, C.M., Scott, D. & Gössling, S. (2020). Pandemics, transformations and tourism: Be careful what you wish for. *Tourism Geographies*, 22(3): 577–598. DOI: https://doi. org/10.1080/14616688.2020.1759131.
- Haywood, K.M. (2020). A post-COVID future: Tourism community re-imagined and enabled. *Tourism Geographies*, 22(3): 599–609. DOI: 10.1080/14616688.2020.1762120.
- Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies*, 22(3): 610- 620. DOI: https://doi.org/10.108 0/14616688.2020.1757748.
- Higgins-Desbiolles, F., Bigby, B.Ch. & Doering, A. (2021). Socialising tourism after COVID-19: reclaiming tourism as a social force? Journal of tourism futures, 8(2): 1-12. DOI: 10.1108/JTF-03-2021-0058.
- Huang, S. & Wang, X. (2022). COVID-19 two years on: a review of COVID-19-related empirical research in major tourism and hospitality journals. *International Journal of Contemporary Hospitality Management*, ahead-of-print. DOI: https://doi.org/10.1108/IJCHM-03-2022-0393.
- Informacja z rynków zagranicznych (2020). Polska Organizacja Turystyczna (POT). Warszawa.
- Ioannides, D. & Gyimothy, S. (2020). The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path. *Tourism Geographies*, 22(3): 624–632. DOI: 10.1080/14616688.2020.1763445.
- Jacobsen, J.K.S., Farstad, E., Higham, J., Hopkins, D. & Landa-Mata, I. (2021). Travel discontinuities, enforced holi-daying-at-home and alternative leisure travel futures after COVID-19. *Tourism Geographies*, 1–19. DOI: https:// doi.org/10.1080/14616688.2021.1943703.
- Jones, P. (2022). A Review of the UK's Tourism Recovery Plans Post COVID-19. *Athens Journal of Tourism*, 9(1): 9-18. DOI: 10.30958/ajt.9-1-1.

- Kennell, J. (2020). Tourism policy research after the COVID-19 pandemic: reconsidering the role of the state in tourism. *Skyline Business Journal*, 16(1): 68-72. DOI: https://doi.org/10.37383/SBJ160106.
- Kock, F., Nórfelt, A., Josiassen, A., Assaf, A.G. & Tsionas, M.G. (2020). Understanding the COVID-19 psyche: The evolutionary tourism paradigm. *Annals of Tourism Research*, 85: 103053. DOI: 10.1016/j.annals.2020.103053.
- Korinth, B. (2020). The impact of COVID-19 on foreign travel plans of Polish tourists, 2020. *Studia Periegetica*, 32 (4): 59-69. DOI: 10.5604/01.3001.0014.658.
- Kowalczyk-Anioł, J. & Pawlusiński, R. (2021a). Miasto turystyczne wobec pandemii COVID-19. Pierwsze doświadczenia w świetle literatury przedmiotu (A tourist city in the face of the COVID-19 pandemic. First experiences in the light of the literature on the subject in Polish). Annales Universitatis Mariae Curie-Skłodowska, Sectio B, LXXVI: 208. Available at: https://journals.umcs. pl/b/article/view/12670/9313.
- Kowalczyk-Anioł, J.; Grochowicz, M. & Pawlusiński, R. (2021b). How a Tourism City Responds to COVID-19: A CEE Perspective (Kraków Case Study). Sustainability, 13: 7914. DOI: https://doi.org/10.3390/su13147914.
- Kowalska, K. & Niezgoda, A. (2020). COVID-19 as a tourist activity inhibitor as evidenced by Poles' holiday plans. *Studia Periegetica*, 4(32): 9-24. DOI: https://doi. org/10.5604/01.3001.0014.6526.
- Kwok, A.O.J. & Koh, S.G.M. (2021). COVID-19 and Extended Reality (XR). *Current Issues in Tourism*, 24(14): 1935-1940. DOI: https://doi.org/10.1080/13683500.2020.1798896.
- Li, J., Nguyen, T.H.H. & Coca-Stefaniak, J.A. (2020). Coronavirus impacts on post-pandemic travel behaviours. *Annals of Tourism Research*, 86: 102964. DOI: https://doi. org/10.1016/j.annals.2020.102964.
- Marques Santos, A., Madrid Gonzalez, C., Haegeman, K. & Rainoldi, A. (2020). Behavioural Changes in Tourism in Times of COVID-19. Luxembourg: European Commission. Publications Office of the European Union, Luxembourg. DOI: 10.2760/00411.
- Matczak, A., Bik, J., Dynkowska, K., Paprzycka, J., Stępowska, E. & Żak, A. (2022). Obraz turystyki w łódzkich mediach i jego odbiór przez mieszkańców w pierwszym roku pandemii COVID-19 (Image of tourism in Łódź media and its reception by residents in the first year of COVID-19 pandemic- in Polish). In: Makowska-Iskierka M., Wojciechowska J. (eds.) Warsztaty z Geografii Turyzmu, 12. Percepcja turystyki w przestrzeni i w czasie pandemii COVID-19, s. 57-66. (The image of tourism in the Łódź media and its reception by residents in the first year of the COVID-19 pandemic - in Polish). DOI: https://doi.org/10.18778/8220-907-5.03.
- Miedziński, M. (2022). Rozwój bazy noclegowej Kołobrzegu i jego zaplecza w czasie pierwszych dwóch lat trwania pandemii COVID-19 (Development of Kolobrzeg accommodation and

facilities during the first two years of the COVID-19 pandemicin Polish). In: Makowska-Iskierka M., Wojciechowska J. (eds.) Warsztaty z Geografii Turyzmu, 12. Percepcja turystyki w przestrzeni i w czasie pandemii COVID-19, s. 33-55. (Development of the Kołobrzeg accommodation base during the first two years of the COVID-19 pandemic - in Polish). DOI: https://doi.org/10.18778/8220-907-5.02.

- MMGY Travel Intelligence (2020). Travel Intentions Pulse Survey (TIPS) Impact of COVID-19. New York: MMGY Travel Intelligence.
- Napierała, T., Leśniewska-Napierała, K. & Burski, R. (2020). Impact of geographic distribution of COVID-19 cases on hotels' performances: Case of Polish cities. *Sustainability*, 12(11): 1-18. DOI: https://doi.org/10.3390/su12114697.
- Niewiadomski, P. (2020). COVID-19: from temporary deglobalisation to a re-discovery of tourism? *Tourism Geographies*, 22(3): 651-656. DOI: https://doi.org/10.1080/1 4616688.2020.1757749.
- OECD. (2020a). Rebuilding Tourism for the Future: COVID-19 Policy Response and Recovery. Paris: OECD. DOI: https:// doi.org/10.1787/47045bae-en.
- OECD. (2020b). The Future of Tourism in Natural Areas: Impact, Governance, Financing. Paris: OECD. Available at: https://www.oecd.org/cfe/leed/2020-TourNat-Toolkit.pdf.
- Qiu, R.T.R., Park, J., Li, S. & Song, H. (2020). Social costs of tourism during the COVID-19 pandemic. *Annals* of *Tourism Research*, 84: 102994: DOI: https://doi. org/10.1016/j.annals.2020.102994.
- Pahrudin, P., Liu L.W., Li, S.Y., Fahrurrozi, M. & Ali, M. (2022). Investigating the COVID-19 outbreak and tourism sector for future research agenda: a bibliometric analysis approach. *GeoJournal of Tourism and Geosites*, 42: 824– 831. DOI: https://doi.org/10.30892/gtg.422spl23-894.
- Panasiuk, A. (2020). Przyczynek do badań nad wpływem pandemii na stan gospodarki turystycznej (A contribution to research on the impact of the pandemic on the state of the tourism economy - in Polish). *Turystyka w Naukach Społecznych. Ekonomia i Finanse*, 3. Available at: https://przedsiebiorczosc. uj.edu.pl/turystyka-w-naukach-spolecznych-tom-3.
- Polyzos, S., Samitas, A. & Spyridou, A.E. (2021) Tourism demand and the COVID-19 pandemic: an LSTM approach. *Tourism Recreation Research*, 46(2): 175-187. DOI: 10.1080/02508281.2020.1777053.
- Prideaux, B., Thompson, M. & Pabel, A. (2020). Lessons from COVID-19 can prepare global tourism for the economic transformation needed to combat climate change. *Tourism Geographies*, 22(3): 667–678. DOI: https://doi.org/10.1080/ 14616688.2020.1762117.
- Rocznik Statystyczny (Statistical Yearbook of Poland) (1977). GUS (Central Statistical Office), Warsaw.
- Rocznik Statystyczny (Statistical Yearbook of Poland) (1989). GUS (Central Statistical Office), Warsaw.

- Rocznik Statystyczny (Statistical Yearbook of Poland) (1990). GUS (Central Statistical Office), Warsaw.
- Rocznik Statystyczny (Statistical Yearbook of Poland) (2001). GUS (Central Statistical Office), Warsaw.
- Rocznik Statystyczny (Statistical Yearbook of Poland) (2021). GUS (Central Statistical Office), Warszawa-Warsaw
- Rogerson, C.M & Rogerson, J.M. (2021). COVID-19 and Changing Tourism Demand: Research Review and Policy Implications for South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(1): 1-21. DOI: https:// doi.org/10.46222/ajhtl.19770720-83.
- Romagosa, F. (2020). The COVID-19 crisis: Opportunities for sustainable and proximity tourism. *Tourism Geographies*, 22(3): 690–694. DOI: https://doi.org/10.1080/14616688.2 020.1763447.
- Sánchez-Cañizares, S.M., Cabeza-Ramírez, L.J., Muñoz-Fernández, G. & Fuentes-García, F.J. (2020). Impact of the perceived risk from Covid-19 on intention to travel. *Current Issues in Tourism*, 24(7). DOI: https://doi.org/10. 1080/13683500.2020.1829571.
- Škare, M., Soriano, D.R. & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, 163: 120469. DOI: 10.1016/j.techfore.2020.120469.
- Sharma, G.D., Thomas, A. & Paul, J. (2021). Reviving tourism industry post-COVID-19: A resilience-based framework. *Tourism Management Perspectives*, 37: 100786. DOI: 10.1016/j.tmp.2020.100786.
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research*, 117: 312–321. DOI: https://doi.org/10.1016/j.jbusres.2020.06.015.
- Stojczew, K. (2021). Ocena wpływu pandemii koronawirusa na branżę turystyczną w Polsce (Assessment of impact of the coronavirus pandemic on the tourism industry in Polandin Polish). Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 65(1): 157-172. DOI: 10.15611/pn.2021.1.09.
- The Impact of COVID-19 on Tourism Sector Demand and Supply in South Africa. (2021). Final report: University of Johannesburg.
- Turystyka w Polsce w obliczu pandemii COVID-19 (Tourism in Poland in the face of the COVID-19 pandemic- in Polish). (2020). Informacje Sygnalne. GUS.
- Turystyka w 2018 r. (Tourism in 2018 in Polish) GUS 2019. https://stat.gov.pl/obszary-tematyczne/kultura-turystykasport/
- Turystyka w 2019 r. (Tourism in 2019) in Polish) GUS 2020. https://stat.gov.pl/obszary-tematyczne/kultura-turystykasport/
- Turystyka w 2020 r. (Tourism in 2020 in Polish) GUS 2021. https://stat.gov.pl/obszary-tematyczne/kultura-turystykasport/

- Turystyka w 2021 r. (Tourism in 2021 in Polish) GUS 2022. https://stat.gov.pl/obszary-tematyczne/kultura-turystykasport/
- UNWTO (2021a). 2020: A year in review. Available at: https:// www.unwto.org/covid-19-and-tourism-2020.
- UNWTO. (2021b). This crisis is an opportunity to rethink the tourism sector. Available at: https://www.unwto.org/ un-tourism-news-21.
- UNWTO (2020a). Understanding Domestic Tourism and Seizing its Opportunities. Madrid: UNWTO. Available at: https://doi.org/ 10.18111/9789284422111.
- UNWTO (2020b). UNWTO Recommendations on Tourism and Rural Development: A Guide to Making Tourism An Effective Tool For Rural Development. Madrid: UNWTO. DOI: https://doi.org/10.18111/9789284422173.
- Utkarsh & Sigala, M. (2021). A bibliometric review of research on COVID-19 and tourism: Reflections for moving forward. *Tourism Management Perspectives*, 40: 100912. DOI: https://doi.org/10.1016/j.tmp.2021.100912.
- Viglia, G. & Dolnicar, S. (2020) A review of experiments in tourism and hospitality. *Annals of Tourism Research*, 80: 102858. DOI: https://doi.org/10.1016/j.annals.2020.102858.
- Visit Britain. (2020). COVID-19 Consumer Monthly Profiling Report. London: Visit Britain.
- Volgger, M., Taplin, R. & Aebli, A. (2021). Recovery of domestic tourism during the COVID-19 pandemic: An experimental comparison of interventions. *Journal of Hospitality and Tourism Management*, 48: 428-440. DOI: 10.1016/j.jhtm.2021.07.015.
- Walas, B. & Kruczek, Z. (2020). The impact of COVID-19 on tourism in Cracow in the eyes of tourism entrepreneurs. *Studia Periegetica*, 30(2): 79-95. DOI: https://doi. org/10.5604/01.3001.0014.3664.
- Wang, M., Kunasekaran, P. & Rasoolimanesh, S.M. (2022) What influences people's willingness to receive the COVID-19 vaccine for international travel?, *Current Issues in Tourism*, 25(2): 192-197. DOI: 10.1080/13683500.2021.1929874.
- Widomski, M. (2020). Turystyka krajowa a pandemia (Domestic tourism vs. pandemic- in Polish). Poszerzamy Horyzonty, 21(1): 771-779.
- Wojcieszak-Zbierska, M.M., Jęczmyk, A., Zawadka, J. & Uglis, J. (2020). Agritourism in the Era of the Coronavirus (COVID-19): A Rapid Assessment from Poland. Agriculture, 10: 397. DOI: https://doi.org/10.3390/ agriculture10090397.
- World Travel & Tourism Council: Global Economic Impact & Trends 2021.
- World Travel & Tourism Council: Travel & Tourism Economic Impact Global Trends 2022.
- Yang, Y., Altschuler, B., Liang, Z. & Li, X.R. (2021). Monitoring the global COVID-19 impact on tourism: The

COVID-19 tourism index. *Annals of Tourism Research*, 90: 103120. DOI: 10.1016/j.annals.2020.103120.

- Yang, Y., Zhang, C.X. & Rickly, J.M. (2021). A review of early COVID-19 research in tourism: Launching the Annals of Tourism Research's Curated Collection on coronavirus and tourism. *Annals of Tourism Research*, 91: 103313. DOI: https://doi.org/10.1016/j.annals.2021.103313.
- Zeng, Z., Chen, P.J. & Lew, A.A. (2020). From high-touch to high-tech: COVID-19 drives robotics adoption. *Tourism Geographies*, 22(3): 724–734. DOI: https://doi.org/10.108 0/14616688.2020.1762118.
- Zheng, D., Luo, Q. & Ritchie, B. (2021). Afraid to travel after COVID-19?: Self-protection, coping and resilience against pandemic 'travel fear'. *Tourism Management*, 83: 104261. DOI: 10.1016/j.tourman.2020.104261.
- Zenker, S. & Kock, F. (2020). The coronavirus pandemic – A critical discussion of a tourism research agenda. *Tourism Management*, 81: 104164. DOI: 10.1016/j. tourman.2020.104164.
- Zenker, S., Braun, E. & Gyimóthy, S. (2021). Too afraid to travel?: Development of a pandemic (COVID-19) anxiety travel scale (PATS). *Tourism Management*, 84, DOI: 10.1016/j.tourman.2020.104164.
- Zhang, H., Song, H., Wen, L. & Liu, C. (2021). Forecasting tourism recovery amid COVID-19. Annals of Tourism Research, 87: 103149. DOI: https://doi.org/10.1016/j. annals.2021.103149.
- Zopiatis, A., Pericleous, K. & Theofanous, Y. (2020). COVID-19 and hospitality and tourism research: An integrative review. *Journal of Hospitality and Tourism Management*, 48: 275-279. DOI: https://doi.org/10.1016/j. jhtm.2021.07.002.

