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Post-COVID recovery of the Polish tourism sector: the Tourist Satellite Account results

Ożywienie polskiej branży turystycznej po pandemii COVID-19: wyniki rachunku satelitarnego turystyki

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Abstract: The COVID-19 pandemic and restrictions imposed to prevent its spreading has precipitated an economic crisis on a global scale, with the tourism sector being particularly hard-hit. The objective of the article is to provide an answer to the question regarding the impact of the virus on the Polish tourism sector. The Tourist Satellite Account (TSA) methodology, which was implemented in the analysis to address the research questions, provides the most comprehensive insight into the tourism sector in Poland, as it showcases its results from both the demand and supply sides in a comprehensive manner. The majority of the findings pertain to 2022 and demonstrate that the economic performance of the sector was relatively robust, primarily due to a substantial increase in the consumption of domestic tourists. Conversely, the favorable economic condition of enterprises providing accommodation and catering services can be partly ascribed to government support during the pandemic. The article is divided into four sections, with an introduction and conclusions. The research methodology, tourist demand, supply and investment outlays are discussed.

Key words: tourism economy, TSA, post-covid recovery

Abstrakt: Pandemia COVID-19 i ograniczenia nałożone w celu zapobiegania jej rozprzestrzenianiu się uderzyły w gospodarki na całym świecie, a turystyka okazała się jedną z jej najpoważniejszych ofiar. Celem prezentowanego

badania jest odpowiedź na pytanie o wpływ COVID-19 na polski sektor turystyczny. Metodologia Tourist Satellite Account (TSA), która została wykorzystana w analizie pozwalającej odpowiedzieć na postawione pytania badawcze, oferuje najpełniejszy wgląd w sektor turystyczny w Polsce, ponieważ pokazuje jego wyniki zarówno od strony popytu, jak i podaży w sposób kompleksowy. Większość ustaleń dotyczy 2022 r. i dowodzi, że wyniki ekonomiczne sektora okazały się stosunkowo dobre, głównie dzięki znacznemu wzrostowi konsumpcji turystów rezydentów. Natomiast dobra kondycja ekonomiczna przedsiębiorstw świadczących usługi noclegowe i gastronomiczne może być częściowo przypisywana rządowemu wsparciu w czasie pandemii. Główna część artykułu składa się z czterech części uzupełnionych wstępem i wnioskami. Omówiono metodykę badania, popyt turystyczny, podaż oraz nakłady inwestycyjne.

Słowa kluczowe: gospodarka turystyczna, rachunek satelitarny turystyki, ożywienie polskiej branży turystycznej po pandemii COVID-19

Introduction

The COVID-19 pandemic and restrictions imposed to prevent its spreading, hit the economies around the world. However, the effects of the shock were uneven and tourism turned out to be one of its most serious victims (Aldao, Blasco and Poch Espallargas, 2022; UN Tourism, 2024). Among the many analyses and studies, one of the most important questions was reflection about its future. They tried to find out how the pandemic would affect the visitor behaviour and how tourism businesses would cope with the restrictions, the loss of income and potentially different patterns of tourist demand (Aldao, Blasco and Poch Espallargas, 2022; Jones, 2022). Initial observation of the actual trends and lessons learned from the similar crises from the past suggested turn to the domestic tourism, more interest in less crowded, outdoor destinations. These new travel patterns, together with the pandemic restrictions, affected demand for transport services, as visitors preferred self-guided and self-driven travel (Aldao, Blasco and Poch Espallargas, 2022). However, it is an open question if these patterns represent the permanent shift in visitor behaviour. The study conducted by Aldao, Blasco and Poch Espallargas (2022) suggests that visitors will return to their previous habits and destinations, and tour operators and travel agents may benefit from this situation as they offer more

predictable terms of travel. On the other hand, it may be expected that the economic downturn caused by the COVID-19 pandemic will affect visitors' propensity to spend and they will look for cheaper options or shorten the duration of their trips.

As it could be predicted it was the international travel that was the most severely disrupted by the pandemic. For many countries, where international tourism is important for the economy as a whole, this is a major challenge (Jones, 2022; Peters, Peters and Peters, 2020). Some authors predict that VFR will be the first type of tourism to rebound the international travel, while others call for stronger government action (Jones, 2022). The tourism industry experts interviewed by Aldao, Blasco and Poch Espallargas (2022) believe that the return will be natural but it will take some time to fully recover.

The data published by UN Tourism illustrate the size of the downturn caused by COVID-19 pandemic and the pace of recovery. Using year 2019 as a benchmark the data reveal that international tourist arrivals in the world dropped by 72% in 2020, it was 33% in 2022 and 11% in 2023. In real terms, export revenues were by 23% lower in 2022 than in 2019 and only 1% lower in 2023. The tourist direct gross domestic product (TDGDP) in nominal terms was down by 23% in 2022 and reached the same level in 2023 as in 2019 (UN Tourism, 2024, p. 3).

The methodology of the Tourist Satellite Account (TSA) offers the insight into of the tourism sector in Poland, as it shows its performance from both demand and supply side in a comprehensive way. The purpose of this study is to answer the question about the effects of COVID-19 on the Polish sector. The majority of the findings relate to 2022, because most of the monetary data was not available at the time of compiling the TSA.

The main body of the paper consists of four parts complemented by an introduction and conclusions. It is structured as follows: introduction, methodology, demand side perspective, supply side perspective together with fixed capital formation and conclusions.

Methodology

The TSA for 2022 with a projection for 2023 is based on the recommendations regarding the methodology, which were published in 2008 (UN, UNWTO, OECD, 2011) and the currently applicable classifications of economic activities and products and services: PKD 2007 and PKWiU 2015.

An important element of the TSA methodology is defining its scope from the demand and supply sides. As for

the demand side, in 2022 and 2023 it was assumed, as in previous years, that it is made up of consumer expenditures of tourist traffic participants. On the supply side, the TSA takes into account four types of products and their corresponding types of economic activity:

- tourism characteristic,
- country-specific tourism characteristic,
- tourism-related,
- non-tourism related products and activities.

The subject of the analysis is limited to the activity of producers who are residents of a given economy. In accordance with the recommendations of the TSA recommended Framework 2008 (UN, UNWTO, OECD, 2011), the TSA consists of a module comparable on the international and national scale. The first one includes a group of products and their corresponding types of activities, which by their very nature can be considered characteristic of tourism: these are accommodation, food and beverage serving, passenger transport, tour operators and travel agencies, cultural and recreational services. The national module includes services supporting air transport, healthcare services under medical supervision and activities related to the organization of fairs, exhibitions and congresses.

The TSA includes a set of six tables illustrating tourist consumption (Tables 1-4), a production account related to tourism (Table 5), a supply and use account of tourist and other products (Table 6). The account is supplemented by tables showing: expenditure on fixed assets in characteristic types of tourist activity (8a and 8b), a table concerning persons employed in these types of activities (table 7) and three additional tables relating to collective consumption and some non-monetary indicators (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024).

The main sources of data included:

- EUROSTAT database tourism expenditure, structural business statistics, national accounts, balance of payments,
- Data supplied by the National Revenue Administration,
- Supply and use table for 2020 (GUS b, 2024),
- Data supplied by the Ministry of Sport and Tourism,
- The Central Statistical Office publications on tourism (GUS, 2020, 2023, 2024),
- Local Data Bank of the Central Statistical Office,
- Households' Budgets Survey by the Central Statistical Office,
- Business Register of the Central Statistical Office.

The full version the report (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024) discusses in detail the sources of information and methods for estimating the tourist consumption of residents (including the consumption of resident households in terms of domestic trips and business trips of residents), the tourist consumption of non-residents, the supply of tourist services, employees, and outlays and the value of fixed assets. In the calculations for 2022, the value of expenditure on the purchase of valuables and the related margin were estimated for the first time.

In addition to data on tourist flows, the second main source for estimating the consumption of tourism services by visitors is data on tourism expenditure. It should be noted that this concept encompasses not only the monetary expenditure on goods and services purchased in connection with a tourist trip and incurred by tourists and same-day visitors (or on their behalf), which is detailed in the concept of tourist expenditure, but also a number of other items, such as the value of consumption related to the use of own holiday homes/apartments and various benefits in kind available to visitors (e.g. tourist information services, various services provided free of charge and used by visitors, e.g. public concerts).

Demand side perspective

In order to assess the changes that occurred during the period of the global pandemic and the subsequent return to the base year, which in this study is considered to be 2019, it is first necessary to estimate the volume of tourist traffic and the level of tourist expenditure. Table 1.1 presents a picture of tourist traffic for the years 2019-2022. It shows that the estimated number of both domestic and foreign tourists exhibits slightly different dynamics and a different pace of return to the state from 2019. It is evident that the number of trips abroad by both residents and nonresidents in 2022 will remain significantly below the level recorded in 2019 (see Table 1.1). A similar rate of return in the number of international trips to the 2019 figure was recorded in other European countries. As indicated by estimates from the UN Tourism, 18% fewer tourists came to Europe in 2022 than in the period before the pandemic (International Tourism Highlights, 2024, p. 8). Conversely, the number of domestic trips is projected to not only return to the level observed in the base year, but to exceed it by approximately 2.3%. In the case of non-resident trips to Poland, the number is expected to increase by approximately 64% compared to 2021, although it will not reach the level observed prior to the pandemic. Similarly, Poland is not exempt from these trends, which are corroborated by data from the UN Tourism on global tourism (International Tourism Highlights, 2024, pp. 5-6). It is also noteworthy that the structure of trips underwent a change during the period 2019-2022. Among Polish residents, there was a shift towards domestic trips, while among non-residents coming to Poland, there was a shift towards one-day trips (see Table 1.1).

Table 1.1. Tourist trips in 2019 - 2022 (in millions)

	Domestic trips by Polish residents	Outbound trips by Polish residents	Inbound trips by non- residents to Poland (tourists)	Inbound trips by non- residents to Poland (same-day visitors)
2019	59,8	15,3	21,2	67,4
2020	46,2	6,8	8,4	42,7
2021	55,1	7,4	9,7	41,3
2022	61,2	13,2	15,9	55,9
2022:2019	1,023	0,86	0,75	0,829

Source: (GUS, 2020, 2023, 2024).

In 2022, the highest intensity of domestic tourism was recorded in the following voivodships, which exhibited a similar pattern to that observed in the preceding year, prior to the onset of the pandemic. The highest levels of domestic tourism were recorded in the following voivodships: Lesser Poland, Pomerania, Masovian, Western Pomerania and Lower Silesia. Conversely, the greatest number of non-resident arrivals originated from Germany, Ukraine, the United Kingdom, the United States of America and France. However, the composition of non-resident travel was altered due to the influx of a considerable number of Ukrainians as a consequence of the outbreak of war.

The structure of travel by main purpose of arrival slightly changed, with increase in the proportion of VFR arrivals by non-residents in 2022 as compared to 2019 (from 10% to 11%) and business travel (from 8% to 10%).

In 2022, the **total value of tourist consumption** on the economic territory of Poland was estimated at PLN 148,207.0 million (Dziedzic E. et al., 2024, pp. 22-32). This represents an increase from the 2019 figure of PLN 116,333 million, which was 21.5% lower. In 2022, domestic tourist consumption by residents constituted 51.1% of the total, amounting to PLN 75,770.5 million. The consumption of

tourists by households, in terms of both domestic and foreign trips, represented 5% of domestic consumption in the household sector. This figure represents an increase from 4.6% in 2019.

Table 1.2. Internal tourist consumption (monetary and in kind) in 2022 by products and segments of consumers PLN million current prices

current prices								
	Non- residents consump tion	Domestic consumpti on of residents	Other components of tourism consumption	Tourism consump tion in total				
Accommodatio n services	6837,7	16909,9	3263,1	27010,7				
Food and beverage serving services	5407,6	21896,0	0,0	27303,6				
Passenger rail transport services	230,0	1731,7	539,4	2501,126				
Passenger land transport services	300,0	3500,4	103,1	3903,5				
Sea, coastal and inland water passenger transport services	40,0	118,5	0,0	158,5				
Passenger air transport services	3272,4	7764,6	936,6	11973,7				
Activities of tourism organizers	1412,3	4811,2	268,2	6491,7				
Cultural and recreational services	1810,5	1154,0	248,7	3213,2				
Services incidental to air transport	920,0	197,5	0,0	1117,5				
Organization of fairs, exhibitions and congresses services	120,0	0,0	794,6	914,6				
Health care and rehabilitation services	150,0	638,5	1200,0	1988,5				
Retail trade	8757,3	2939,0	0,0	11696,3				
Oil refined products	3997,4	13696,5	2208,1	19902,0				
Other products	16303,3	380,2	0,0	16303,3				

Source: Dziedzic, E. Skalska, T., Dębski M., and Bartoszewicz W., 2024.

In 2022, expenditure on tourism characteristic products (TCP, including country-specific characteristic products) was the predominant expenditure category, accounting for 58.4% of total tourist consumption in 2022

and 54.5% in 2019 (Dziedzic E. et al., 2024, pp. 22-32). Tourism-related products accounted for 31.9% (2022) and 29.4% (2019), respectively, while the remaining products accounted for 9.7% (2022) and 16.1% (2019) of total domestic tourist consumption. In the category of tourism characteristic products (TCP) purchased by visitors, the highest expenditure in 2022 was on accommodation (including hotel stays, other collective accommodation facilities, and private apartments/holiday homes) and meals. The proportion of expenditure on accommodation was 31.2%, while expenditure on food accounted for 31.5% (a figure that is higher than that recorded in 2019). Consequently, transport services constituted 22.7% of TCP consumption (25.5% in 2019).

In 2022 the **total expenditure of non-residents** was estimated at PLN 49,558.5 million (in 2019 50,839.6 million PLN). The data for 2022 indicate that the revenue generated from inbound tourism has not reached the level of expenditure observed in 2019, prior to the pandemic. A comparable pattern was discerned in other European countries. In a recent report, the UN Tourism indicated that international tourist receipts in 2022 exhibited a decline of approximately 4% in comparison to the 2019 (International Tourism Highlights, 2024, pp. 10-11).

The estimated value of TCP purchases by non-residents was PLN 20,500 million in 2022 and PLN 21,758 million in 2019. In 2019, the figure represented 42.8% of the total revenues (Dziedzic E. et al., 2024, pp. 22-32). In 2022, the total revenue generated by the TCP and other products and services sector was PLN 49,559 million. In the TCP group (including country-specific ones), the most significant item in non-residents' tourist consumption has been, for an extended period, services related to accommodation (in 2022, 33.4% of TCP and in 2019, 28.1%) and catering (26.4% and 22.1%, respectively). In 2022, the proportion of total expenditure allocated to accommodation costs was 13.7%, while expenditure on catering costs constituted 10.9% of the total. The proportion of expenditure by non-residents on passenger transport services (across all modes of transport, excluding fuel purchases) was slightly lower than in 2019, representing 7.8% of total consumption.

In both 2022 expenditure on recreational, entertainment, sports-related and museum services was estimated at 8.8% of the total TCP (including country-specific), respectively (8.1% in 2019). These expenditures constituted approximately 3.6% (2022), and 3.5% (2019) of the total tourist consumption of non-residents.

In turn, with regard to the proportion of travel agency services, defined as the margin of travel agencies facilitating inbound tourism to Poland, it was estimated at 6.9% of TCP (including those country-specific) respectively to 8.1% in 2019. These expenditures constituted approximately 3.6% (2022), and 3.5% (2019) of the total tourist consumption of non-residents.

In 2022, the estimated domestic consumption of residents was PLN 75,770.5 million, representing a significant increase of 26.9% compared to 2019 (PLN 59,701.1 million). During the same period, household consumption among Polish residents increased by 34.2% (GUS c, 2023). In accordance with the methodological assumptions adopted by the TSA, the consumption of residents is divided into two distinct categories: expenditure related to travel within the country and that part of the expenditure on outbound travel (UN, UNWTO, OECD, 2011). The latter category is primarily constituted of the margin of tour operators and expenditure on resident passenger transport enterprises. The estimated expenditure on domestic travel (within the country) by tourists was PLN 58,322 million, representing 86.6% of the total expenditure on travel by households. Conversely, the estimated expenditure on internal consumption as part of business trips was estimated to be PLN 4.4 billion (Dziedzic E. et al., 2024, pp. 22-32).

In both 2019 and 2022, expenditure on tourist characteristic products (TCP) constituted the dominant expenditure category, accounting for 77.5% and 63.7% of the total, respectively. In contrast, tourism-related products accounted for only 22.5% (in 2022) and 33.1% (in 2019) of the total expenditure. The data for 2022, when considered in conjunction with those from previous TSAs (for 2018 and 2019), provide further evidence of the dynamic development of tourist consumption by residents within the country. This is evidenced not only by a significant increase in the value of expenditure in absolute terms, but also by a positive change in the structure of consumption, with an increase in the share of expenditure on tourist products.

With regard to the proportion of expenditure allocated to the TCP, the figure reached 77.5% in 2022. The proportion of expenditure allocated to the acquisition of services from organisers and intermediaries also exhibited

a slight increase, despite the advent of online platforms facilitating the sale of tourist services. Moreover, expenditure on air transport is also increasing at a notable rate (from 6.2% in 2019 to 10.2% in 2022). This can be attributed to the increase in the number of low-cost and charter flights. In a departure from previous practice, the TSA estimates for 2022 include expenditure on valuables purchased by visitors (PLN 380.2 million), along with the related retail margin.

Table 2.1. Enterprises by CTA in 2019 and 2022

			Table 2.1.	Enterprises by CTA in 201	.9 and 2022			
Activity		2019		2022				
		total	in which with 0-9 persons employed	total	2019=100	in which with 0-9 persons employed	2019=100	
55.	Accommodation	16 936	0,92	20 590	121,6	0,93	123,8	
56.	Food and beverage serving activities	52240	0,94	57894	110,8	0,94	111,4	
49.1	Passenger rail transport, interurban	35	0,69	34	97,1	0,79	112,5	
49.3	Other passenger land transport	49453	0,98	39421	79,7	0,98	79,7	
50.1	Sea and coastal passenger water transport	178	0,96	131	73,6	0,96	73,7	
50.3	Inland passenger water transport	145	0,97	144	99,3	0,97	99,3	
51.1	Passenger air transport	1164	0,99	1451	124,7	0,99	124,7	
77.11	Renting and leasing of motor vehicles	4 028	0,97	4244	105,4	0,97	105,4	
79.	Travel agency, tour operator reservation service and related activities	7 690	0,98	7266	94,5	0,98	94,9	
91. ª	Libraries, archives, museums and other cultural activities	4600	0,81	4643	100,9	0,81	101,2	
93. ª	Sports activities and amusement and recreation activities	48347	0,97	50993	105,5	0,97	105,6	

a) data from business register

Source: (GUS, no date)(Association for Tourism Research, Development and Promotion, 2024).

The supply side perspective

The lockdowns and other restrictions related to the COVID-19 pandemic caused the unprecedented downturn in production of many industries. Those forming tourist characteristic activities (CTAs) were especially hardly affected. Not only was tourist travel and all mobility severely restricted, but restaurants, museums, gyms and other recreational facilities had to close for many weeks. It is therefore interesting to learn how their recovery looks like in terms of the number of enterprises, which were in operation in 2022, the first year without severe restrictions. Table 2.1 informs about the number of enterprises in particular CTAs, as well as on the number of micro enterprises (with 0-9 persons employed).

The data in Table 2.1 show that passenger land and water transport, as well as tour operators and travel agencies were most affected by the COVID-19 crisis. The other CTAs showed growth in the number of enterprises, surprisingly the highest in passenger air transport and accommodation. The share of micro-enterprises remained stable, except for accommodation and interurban passenger rail transport for which it slightly grew.

The other metric that can be used to examine the recovery in CTAs is global production in 2022. As the TSA for Poland is compiled in current prices the condition of specific industries has been presented according to the pace of their recovery. In 2022, total output of CTAs amounted to PLN 175,780.4 million (2.6% of the country's total production), while in 2019 it was PLN 134,686.6 million (2.9% of the country's total output). If country-specific CTAs are taken into account, it was 2.9% of the country's total output in 2022 (3.1% in 2019) (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024). These aggregates suggest that the recovery in CTAs was slower than in the economy as a whole, whose growth reached 45.6% in current basic prices. Among the CTAs the best results were noted for passenger air transport, but the exact data for this industry are uncertain due to the confidentiality policy of the Central Statistical Office. The high rate of growth was observed also for food and beverage (F&B) serving services (42,9%), sea passenger transport (36,3%) and accommodation (31%). At the same time, land transport and cultural and recreational activities showed relatively weak results.

While data on the total output provide the general picture of rebound after the COVID-19 pandemic, the actual economic situation of the specific CTAs and of the sector as a whole can be assessed by examining the gross value added generated by them. In 2022, for basic CTAs, this value was

PLN 71,910.4 million, and taking into account country-specific CTAs, PLN 82,493.6 million. This represented 2.6% and 3% respectively of the gross value added generated in the economy. In 2019, the aforementioned aggregate reached the value of PLN 56,229.4 million for the basic CTAs and PLN 59,369.0 million after including country-specific CTAs. This was 2.8% and 2.9% respectively of the gross value added generated this year in the entire economy (Dziedzic, Dębski and Skalska, 2023; Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024).

The gross value added for the whole sector is an aggregate of the proportion of gross value added in the output of particular CTAs and their share in the output of the sector as a whole. In 2022 the ratio of gross value added in output for the economy as a whole amounted to 40,7% (ec.europa.eu, 2024), while in 2019 it was 43%. Among the CTAs, whose output is the most significant for the tourism sector, accommodation achieved the best results. In 2022 it was 67%, significantly higher than in 2019 (by 17 percentage points). In the case of F&B serving services value of the ratio was close to 40%, slightly higher than in 2019 (37%). The significant drop was observed for tour operators and travel agencies (from 44% to 26%) and other land transport (from 48% to 33%) (Association for Tourism Research, Development and Promotion, 2024; Dziedzic, Dębski and Skalska, 2023; Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024).

The direct contribution of tourism to the economy is linked not only to the performance of the CTAs, but also to the value and structure of the tourism consumption. It was calculated as gross value added generated by manufacturing characteristic and tourism-related products both in CTAs and as a secondary production of other industries and complemented by the gross value added attributed to other products purchased by visitors. The corresponding data are presented in Table 2.2.

Table 2.2 Direct tourism gross value added by product in 2022, PLN million current prices

	Tourist direct	
	gross value	
Products	added	Poland=100
55 Accommodation services	17731,6	37,5
Owned vacation homes	471,4	1,0
56 Food and beverage serving services	11124,1	23,6
49.1 Passenger rail transport services, interurban	1068,4	2,3
49.3 Other passenger land services	1274,1	2,7
50.1 See and coastal passenger water transport	11,6	0,0
50.3 Inland passenger water transport services	0,0	0,0
51.1 Passenger air transport services	2197,5	4,7
77.11 Renting and leasing motor vehicle services	14,6	0,0
79 Travel agency, tour operators and related services	1685,1	3,6
91 Library, archive, museum services	136,8	0,3
93Sporting services and recreational and amusement services	1325,3	2,8
52.23 Support services to air transport	713,3	1,5
82.3 Convention and trade show organisation services	189,5	0,4
86 Human health services	1136,2	2,4
47 Retail trade services in fuel a)	2208,0	4,7
47 Retail trade services of food products, clothing	1376,2	2,9
Other products	4568,0	9,7
Total	47231,8	100,0

Source: own estimations (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024).

The total tourism direct gross value added (TDGVA) amounted to PLN 47 231,8 million in 2022, which equated to 1.7% of total gross value added in the country. This means the slight drop in comparison with 2019, when this ratio was 1.9% (Dziedzic, Dębski and Skalska, 2023). Accommodation services and F&B serving services provided the most significant input into this value, 37.5% and 23.6% respectively. In 2019 this dominance was less visible, as the ratio was 27% and 14% respectively. The contribution of these two activities grew also in 2023. The preliminary data for this year show that gross value added generated by them increased by 19%.

A particularly important aggregate describing the contribution of tourism to the economy is tourism direct GDP (TDGDP), which includes tourism direct gross tourist value added supplemented by the value of net indirect taxes paid by purchasers of tourist services. Calculated in this way the direct tourist GDP amounted to PLN 61 731.2 million, which means growth by 25% as compared in 2019. In this period the Poland's GDP in current prices grew by 35% that led to the drop in the contribution of tourism to GDP from 2,2% in 2019 to 2% in 2022.

In 2022 the labour force engaged in the CTAs amounted to 509,265 persons employed, which constituted 3.4% of all employed in Poland. Among them, 74.4% were employees, and the rest were self-employed. Those working in microenterprises dominated, accounting for 52.4% of the total number of persons employed in CTAs . In 2023 (as of June 30), the total number of persons employed in the CTAs was significantly higher and amounted to 596,760 (3.9% of those employed in the economy). This means the increase of 17.1% compared to the previous year (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024). The observed increase may be the result of the reconstruction of the tourism economy after the COVID 19 pandemic, as well as the effect of tourism seasonality, because the data for 2023 concern the peak of the tourist season (the 30th of June).

The specific types of activity were characterized by significant diversification in terms of the number of persons employed and the share of microenterprises. The largest number of persons employed were involved in service activities related to food and beverage serving (48% of all persons employed in the CTAs in 2022) and accommodation (16.4%). At the opposite end of the spectrum was passenger water transport, employing 769 persons (Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024).

A precise comparison of this aggregate with the one for 2019 is impossible due to the changes in the method

of data collection adopted by the Central Statistical Office. As for the total number of employees in CTAs, compared to 2019, it fell in 2022 by almost 100 thousand, i.e. by 16.4% (Dziedzic, Dębski and Skalska, 2023; Dziedzic, E. Skalska, T., Dębski and Bartoszewicz, 2024). An optimistic signal is the increase in this number in 2023. As for the share of CTAs in the number of persons employed in the economy, it fell from 3.9% to 3.4%, but in 2023 it returned to the state of 2019.

The concept of investment can be defined in a relatively simple way as any outlay made to sustain, create or increase owned assets (Najman, 2020). In the similar way this the term is defined by the PWN encyclopaedia (encyklopedia.pwn.pl, no date), that indicates it is "an outlay made to create or increase fixed assets that contribute to the production for future consumption of goods and services". According to that, investments results in a change in the value of fixed assets.

Moreover, the methodological recommendations for creating a tourism satellite account distinguish the following components of tourism gross fixed capital (UN, UNWTO, OECD, 2011):

- fixed asset investments in characteristic tourism activities;
- tourism industry investments in fixed assets not directly related to tourism;
- investments in tourism-related infrastructure.

The issue of the tourism product should be approached broadly, and consequently the problem of tourism outlays and investments should also be treated broadly. All discussions dedicated to that should take into account components such as accommodation, passenger transport, catering, transport support services, maintenance of transport infrastructure, travel agencies, cultural services, or services related to recreation and entertainment (Figini and Patuelli, 2022).

Statistical data show a systematic development of both accommodation and tourist activity in 2005-2019 in Poland. Because of the COVID-19 pandemic, this trend collapsed in 2020. It should be pointed out that analysis of the accommodation infrastructure (its changes and use) is important from the perspective of analysing tourism expenditures and investments. Its development clearly indicates the development of tourism in a destination and, as can be expected, is linked to the investment in other elements of the destination product.

When estimating the level of tourism gross fixed assets formation and the value of these assets, the most important components of tourism supply were taken into account. It was: accommodation, passenger transport, catering, entities providing services supporting transport, maintenance of transport infrastructure, travel agencies, cultural services, or facilities providing services related to recreation and entertainment (i.e. CTAs). It was in line with the methodology of the tourism satellite account. Despite the political uncertainty that characterizes the years 2022-2023, the upward trend in terms of fixed assets outlays was maintained during this period. In 2023, the dynamics of these total outlays (compared to 2022) amounted to 109.5. The state of foreign direct investments also looks positive. Although in 2023 their number decreased by 3%, the scale is larger and it is estimated that they generated 21% more jobs (ey.com, 2024).

Before the COVID -19 pandemic, according to estimates, the value of fix capital expenditures in enterprises responsible for CTAs amounted to PLN 6,58.6 million in 2019. According to the Fixed Asset Classification, the largest expenditures were allocated to buildings and means of transportation. In the conducted analysis, the Tourism Consumption Ratio was used, which made it possible to estimate the real level of investments in tourism development within each category. The results obtained for key tourist activities are presented in Table 2.3. After correcting with the Tourism Consumption Ratio, these figure was PLN 2,611 million.

Table 2.3 Fixed capital formation in CTAs in 2019, 2022 and 2023, current prices PLN million, estimated values

	2019		2022		2023	
Activity	Total	Direct tourism	Total	Direct tourism	Total	Direct tourism
Intercity passenger rail transport	633	509.3	2,454.9	761	2, 688.1	833.3
Other passenger land transport	1,871	396.7	4,325.9	1,124.7	4,736.9	1,231.6
Passenger air transport	314. 6	291.6	n/a	n/a	n/a	n/a
Accommodation	803	728.6	936.5	870.9	1,025,4	953.7
Food services	843	282.5	1,216.8	438	1,332.5	479.7
Activities of travel agents and intermediaries and tour operators	56. 6	46.9	38.9	24.5	42.5	26.8
Activities of libraries, archives, museums and other cultural activities	1,071.6	183.2	3,516.2	597.8	3,850.3	654.5
Sport, entertainment and recreational activities	981.4	167.8	4,545.5	772.7	7,100.8	846.1

Source: Own study based on data obtained from the Central Statistical Office, case US-DK02.601.52.2022, case GUS-DK02.601.1956.2024.

After pandemic the total value of gross fixed capital formation in the CTAs amounted to PLN 17 035 million in 2022 and PLN 18 653 million (according to the estimation) in 2023. However, it should be remembered (in accordance with the comments on the specificity of the destination product), that enterprises serving tourists also provide their services to residents. As mentioned before, the analysis used the Tourist Consumption Ratio. After correcting with this factor, the total value of gross fixed capital formation in the CTAs was PLN 4,589.7 million in 2022 and 5025.7 million in 2023, respectively.

The information presented in Table 2.3 indicates an increase in the value of investments in most categories. This is particularly evident in the case of "activities of libraries, archives, museums and other cultural activities" and "sports, entertainment and recreational activities." The significant change in these categories is associated with large investments in museums and other infrastructure facilities. The overall increase in investment may also partly be result of the inflation. However the change exceeds the inflation rate, which certainly indicates a real increase in investment compared to the pre-pandemic period.

The consequence of outlays on gross fixed capital formation is the net value of fixed assets held by enterprises. These values for characteristic tourism activities are presented in Tourist Satellite Account for Poland 2022-2023 . In total, in 2022, this value for the analysed entities amounted to PLN 226,469million PLN, while in 2023 this amount was estimated at PLN 234,776million. In the period under review, an increase in value can be observed, but at the same time it should be remembered that for 2023 at the time of preparation of the paper there was no precise data yet.

Conclusions

The presented study indicates that tourist consumption increased by approximately 27.4% in 2022 in comparison to 2019 in nominal terms. This growth can be attributed to a significant increase in consumption by resident tourists. Notable increases were observed in expenditure on a range of characteristic tourist products, including catering services, accommodation services, the activities of tour operators, and air transport services. Furthermore, there was a notable increase in expenditure on country-specific products, particularly those associated with business tourism and health

tourism. Conversely, there was a decline in the consumption of transport services (excluding air transport) and cultural and recreational services.

In terms of long-term changes, it is important to highlight that the level of total consumption (resident households, non-residents and other components of tourist consumption combined) has increased. This is particularly evident in the period between 2015 and 2018, as well as in the subsequent increase in consumption following the pandemic. These developments offer a promising indication of the role of tourism in the recovery of the economy and point towards a favourable outlook for the future. Hence, the findings of the TSA support expectations that in the post-COVID era the domestic consumption will be the driving force of the recovery. The same applies to the role of VFR travel in the case of inbound tourism.

The economic performance of the sector turned out to be in a relatively good condition. There was not a significant drop in the number of enterprises and their performance. The most affected were land transport and recreational services, again in accordance with the expectation expressed in the subject literature (e.g. Aldao et al., 2022). However, it should be kept in mind that a good economic condition of accommodation and F&B services may be partly attributed to the government support during the pandemic. They became net benefiters of subsides (table 6 of the TSA Dziedzic, E. Skalska, T., Dębski, M. and Bartoszewicz, W. 2024), which was in the strong opposition to the situation in 2019, when they were significant payers of taxes on production (Dziedzic, E., Dębski, M. and Skalska, T., 2023).

It should be noted that the presented outcomes of the TSA have been based on varied sources of data, which were sometimes inconsistent. Hence, they should treated as estimates and may be revised if new data are published.

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