

MINISTRY OF ECONOMY TOURISM DEPARTMENT EUROPEAN UNION

TOURISM SATELLITE ACCOUNT FOR POLAND 2002

SUMMARY



Editor: Prof. Ewa Dziedzic, PhD

Written by:

Teresa Buczak, MA Prof. Ewa Dziedzic, PhD Magdalena Kachniewska, PhD Krzysztof Łopaciński, PhD Teresa Skalska, PhD

Reviewer: Alina Baran, PhD



European Commission

This study was commissioned by the Ministry of Economy, Tourism Department. Action has received funding from the European Community.

Institute of Tourism ul. Merliniego 9a 02-511 Warszawa tel. +48 22 8446347 e-mail: it@intur.com.pl www.intur.com.pl

Table of contents

Int	roduction	6
1.	The sources and scope of statistical information in the TSA for Poland	
	1.1. Basic methodological assumptions	8
	1.2. Basic data sources	
2.	Tourism consumption	15
	2.2. Characteristics of tourism consumption	
	2.3. Changes on 2001	19
3.	Domestic output and supply of tourism products	
	3.1. Characteristics of output and supply of tourism products	
	3.2. Changes on 2001	
4.	Value added and "tourism" GDP	
	4.1. Methodological remarks	
	4.2. Value added in tourism-specific activities	
	4.3. "Tourism" GDP	
	4.4. Changes on 2001	
5.	Tourism employment	
	5.1. Characteristics of labour force in tourism activities	
	5.2. Changes on 2001	
6.	Capital formation and non-financial assets of tourism activities	
	6.1. Fixed capital formation in tourism characteristic activities in 2002	
	6.2. Net fixed assets in tourism characteristic activities in 2002	
7.	Tax revenues and tourism-related subsidies	
	7.1. Tax revenues and subsidies for tourism in 2002	
	7.2. Tourism collective consumption	
8.	Conclusions and recommendations	
	8.1. Summarised findings from the TSA	
	8.2. Conclusions and recommendations for further work on the TSA	

List of tables

Table 6.1. Selected estimates for summer homes, vacation houses and country mansions in 2001-2003	33
Table 7.1. Tax revenues and subsidies for tourism by type of activities in 2002 (PLN thousand)	34
Table 8.1. Production specialisation and tourism consumption ratios by section	43

List of graphs

Graph 2.1. Tourism consumption by type of buyers in 2002	15
Graph 2.2. Tourism consumption by resident visitors by type of travel in 2002	18
Graph 2.3. Consumption of tourism products by type of travel in 2002	19
Graph 3.1. Total output of tourism characteristic products in 2002	21
Graph 3.2. Tourism consumption ratios for tourism characteristic products in 2002	23
Graph 4.1. Composition of tourism GDP in 2002	
Graph 5.1. Value added per person employed in TCA in 2002 (PLN)	30
Graph 6.1. Fixed capital formation in tourism characteristic activities by type of activity in 2002	32
Graph 6.2. Net fixed assets in tourism characteristic activities by industry in 2002	33
Graph 7.1. Direct contribution of tourism to tax revenues of the state in 2002	35
Graph 7.2. Direct tax revenues by type of activities and products (PLN thousand)	36
Graph 7.3. Tourism collective consumption by administrative level in 2002	38

List of abbreviations

CPC	- Central Product Classification (international product classification)
ТСР	- tourism characteristic products
TCA	- tourism characteristic activities
ESA 1995	- European System of Accounts
FTE	– full-time equivalent
ISIC	 International Standard Industrial Classification (international classification of economic activities)
MF	– Ministry of Finance
IMF	- International Monetary Fund
NACE Rev. 1	- European classification of economic activities
OECD	- Organisation for Economic Cooperation and Development
PKD	– Polska Klasyfikacja Działalności (Polish classification of activities)
PKWiU	 – Polska Klasyfikacja Wyrobów i Usług (Polish classification of goods and services)
RMF	- Recommended Methodological Framework
TSA	– tourism satellite account
SNA	 System of National Accounts (SNA 93 – the 1993 System of National Accounts)
TVA	– tourism value added
UNWTO (OMT)	– World Tourism Organisation
WTTC	- World Travel and Tourism Council

Explanation of other symbols

(-)	 not observed
(0)	– observed but less than 0.5

- () no information or no reliable information
- (x) data provision impossible or pointless

Introduction

The 2002 tourism satellite account (TSA) for Poland represents a follow-on from work on the TSA 2000 and 2001. All the versions were prepared on the basis of the corrected methodological proposal put forward to the Ministry of Economy in the autumn of 2001. Basically, it is consistent with the common methodology developed by the WTO (presently UNWTO), OECD and Eurostat1, recommended by the European Commission to be applied in Member States. For a detailed description of this methodology, including basic definitions and relationships between the TSA and the System of National Accounts, see the previous editions2. This version of the TSA is co-financed by the European Commission and includes experience of other countries, primarily Austria and Hungary, which should contribute to increased international comparability of the findings.

This report consists of a set of statistical tables presented in the final section and the preceding descriptive part devoted to analysing the most important findings from the TSA. Unlike the previous editions, this publication only comprises simplified versions of Tables 5 and 6, which should facilitate the perception of the TSA results.

The descriptive part of the report is divided into eight chapters. The first chapter presents the main information sources used to prepare the TSA. The remaining chapters focus on the analysis of the most significant findings from the account, concerning the following issues: tourism consumption, tourism output and contribution to GDP, labour force utilisation, fixed capital formation as well as taxes and subsidies related to the production of goods and services for visitors. Each chapter includes methodological explanations, the presentation of findings and a comparison with results for 2001. The final chapter contains remarks and recommendations concerning further improvement in the methodology of the tourism satellite account for Poland. The tourism satellite account presents a comprehensive picture of the Polish tourism economy in statistical terms and it should be useful for monitoring its performance and defining development strategies.

The summary has been based on the analytical part of the TSA report so it includes references to the TSA tables that are available in its full version.

¹ Tourism Satellite Account: Recommended Methodological Framework. 2001.

² Tourism Satellite Account for Poland 2001. Institute of Tourism 2004, Chap. I.

This version of the TSA was prepared by the following researchers from GUS, the Institute of Tourism and the Warsaw School of Economics:

Teresa Buczak, MA - issues related to taxes and subsidies,

Prof. Ewa Dziedzic, PhD - the editor and coordinator of the report,

Magdalena Kachniewska, PhD - tourism employment, including the employment module,

Krzysztof Łopaciński, PhD - investment and fixed capital formation,

Teresa Skalska, PhD – tourism consumption by non-resident visitors.

Work on the account was possible thanks to the financial contribution and efforts by the Tourism Department of the Ministry of Economy.

1. The sources and scope of statistical information in the TSA for Poland

1.1. Basic methodological assumptions

Initiatives to develop the tourism satellite account emerged at a relatively early stage, due to the significance of tourism as a sector of the global and national economy, as well as in consequence of the lack of adequate analytical tools within the framework of the core system of national accounts. Such efforts were also oriented towards greater reliability of information on tourism-related economic activities and performance comparability between sectors of the economy. Several frameworks were developed: initiatives in this respect were presented by the OECD, WTO-OMT and the World Travel and Tourism Council (WTTC). The proposed accounts adopted different solutions with the resulting significant differences between the results produced. For this reason, the OECD and the World Tourism Organisation decided to co-ordinate their efforts and propose a common methodology. It was adopted and published by the World Tourism Organisation, the OECD and Eurostat in 2001³, and has been recommended by the European Union as an instrument for measuring the effect of tourism on the national economy of Member States. In comparison with the methodology developed by the OECD, employed for the TSA 2000, the common methodology differs in the edition of tables; key concepts, the scope of the account and the classifications remained unchanged. Furthermore, the main objective of the account was also slightly different; the OECD framework focused on the determination of key macroeconomic aggregates describing the contribution of tourism to the national economy (primarily to GDP and employment), whereas the common methodology developed by the OECD, UNWTO and Eurostat put stress on a detailed analysis of supply and consumption. Due to the significance of the above-mentioned aggregates, their calculation is integrated into the methodology applied in Poland.

An important element of the TSA methodology is the determination of its scope in terms of demand and supply. As far as the demand side is concerned, the assumption was made that it consisted exclusively of consumption expenditure by visitors, defined as follows:

³Tourism Satellite Account: Recommended Methodological Framework. WTO, EU, OECD, UN 2001.

- visitors "any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of trip is other than the exercise of an activity remunerated from within the place visited";
- usual environment the criteria for identifying an area as the usual environment of a
 person include the frequency of stay in a given place on a routine basis and the
 distance; the vicinity of his/her home is considered to be part of his/her usual
 environment;
- tourism expenditure consumption made by or on behalf of a visitor for and during his/her trip and stay at destination, related to the trip. Tourism expenditure excludes purchases made during the trip but intended for resale, investment and tourism-related subsidies.

The TSA for 2001 also included tourism durables although such purchases are not directly related to a given trip. This report takes no account of such expenditure since other countries typically exclude it from tourism statistics and, as a consequence, the inclusion of such information compromises international comparability of TSA results.

Insofar as the determination of the scope of the tourism satellite account poses no major problems on the demand side, it is more difficult to establish its scope on the supply side. The TSA methodology applied in this report relies on a solution oriented towards the identification of the strength of the relationship between a given economic activity and the related products, and their importance to tourism consumption.

The TSA distinguishes three types of products and the corresponding economic activities:

- tourism characteristic,
- tourism connected,
- other.

Tourism characteristic products (TCP) should meet at least one of the following criteria:

- A given product represents a substantial part of tourism expenditure;
- A significant part of output of a given product or service is acquired by visitors;
- The absence of a given product would significantly affect visitor demand even if the product only accounts for a minor share of such demand.

Accordingly, *tourism characteristic activities* (TCA) include activities whose principal output consists of products or services which meet the aforementioned criteria.

Tourism connected products are products frequently acquired by visitors; their corresponding types of activity are referred to as tourism connected activities. *Other products* and *activities* include all other products which are occasionally acquired by visitors and their corresponding economic activities.

The classification of specific products and the corresponding activities into the above groups may vary over time and across countries, according to the patterns of consumer behaviour of visitors. However, there is a certain group of products and the corresponding types of activities which can be regarded, by their very nature, as tourism characteristic products. Those include accommodation and catering services, passenger transport, activities of travel agencies as well as cultural and recreational activities; in the OECD methodology, countries compiling their TSA are free to extend the catalogue. The list of tourism characteristic products, tourism connected products and the corresponding activities included in the TSA for Poland is presented at the end of this section.

The supply covered by the TSA is also determined by the location of producers within the economic territory of a given country. The analysis deals exclusively with producers which are resident entities of a given economy. Items related to imports, especially as regards imports of tourism characteristic products, are beyond the scope of the TSA. It means that outbound tourism consumption is only reflected in the demand and supply side of the TSA insofar as it is satisfied by producers who are resident operators of a given economy (e.g. margins charged by travel agencies dealing with outbound tourism).

In terms of categories applied in national accounts, tourism consumption is found in the following items:

- intermediate consumption as expenses on business trips, included in production costs,
- household consumption financed from personal incomes as household spending on travel for tourism purposes according to the above-mentioned definition of tourism expenditure; this item also includes expenses on business trips paid by enterprises, as well as purchases of non-market services in the part paid by households and the imputed rents on owned vacation homes,
- general government consumption as expenditure of the sector on tourism services in the form of social transfers in kind to households, primarily tourist information and tourism promotion services financed by general government units,
- consumption of non-profit institutions serving households (NPISH) as tourism services and goods in the form of social transfers in kind, such as cultural and recreational services, sports events organised by tourism organisations for the benefit of their members (where they did not pay for participation),
- **exports** as non-resident visitors' demand for tourism products and services provided by resident entities of a given country within its economic territory.

As regards the last component of final demand, i.e. capital formation, the definition of tourism expenditure excludes it from the scope of the tourism satellite account.

The TSA methodology focuses on the generation of income account by type of activities as well as on the supply and use account. Other accounts – those concerning capital formation and the distribution of income – are included only in part.

Tourism characteristic activities:

55.1 Hotels

55.2 Camping sites and other provision of short-stay accommodation

55.3 Restaurants

55.4 Bars

55.5 Canteens and catering

- 60.1 Transport via railways
- 60.2 Other land transport
- 61. Water transport
- 62. Air transport
- 63.23 Other supporting air transport activities
- 63.3 Activities of travel agencies and tour operators; tourist assistance activities n.e.c
- 71.1 Renting of automobiles
- 92.3 Other cultural and entertainment activities/Other entertainment activities
- 92.5 Library, archives, museums and other cultural activities
- 92.6 Sporting activities
- 92.7 Other recreational activities
- 93.04 Physical well-being activities
- 70.2 Letting of own property

Other tourism connected activities:

74.84.A Activities related to organisation of fairs and exhibitions

50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

51. Wholesale trade and commission trade, except of motor vehicles and motorcycles

52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods

Tourism characteristic products:

- 55.1 Hotel services
- 55.2 Camping sites and other short-stay accommodation services
- 55.3 Food serving services
- 55.4 Beverage serving services
- 55.5 Canteen and catering services
- 60.10.1 Interurban rail passenger transport services
- 60.21 Other scheduled land passenger transport services
- 60.23 Other land passenger transport services
- 61.10.1 Sea and coastal passenger transport services
- 61.20.1 Inland water passenger transport services
- 62.10.1 Scheduled air passenger transport
- 62.20.1 Non-scheduled air passenger transport
- 63.23 Other supporting services for air transport
- 63.3 Travel agency and tour operator services; tourist assistance services n.e.c.
- 71.1 Renting services of automobiles
- 92.3 Other entertainment services
- 92.5 Library, archive, museum and other cultural services
- 92.6 Sporting services

92.7 Recreational services

93.04 Physical well-being services

Tourism connected products:

- 15. Food products and beverages
- 16. Tobacco products
- 17.7 Knitted and crocheted articles
- 18. Wearing apparel, furs
- 19.3 Footwear
- 23.2 Refined petroleum products

50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

- 51 Wholesale trade and commission trade services
- 52 Retail trade services

74.84.15 Exhibition, fair and congress organisation services

On account of the availability of demand figures, as well as for the sake of simplification of analysis, all activities related to food and beverage serving services, water and air transport, cultural and recreational services were grouped in some cases.

1.2. Basic data sources

Due to the diverse and detailed character of data needed for the preparation of the TSA 2002 for Poland, it was necessary to use multiple sources of statistical information on economic and material dimensions of tourism consumption. As regards the **consumption of resident visitors within the economic territory of Poland**, the following information sources were used:

- modular survey of households conducted by GUS on a three-year basis, *Turystyka i wypoczynek* ("Tourism and recreation"), comprising tourism trips from 1 October 2000 to 30 September 2001⁴;
- household budget surveys concerning tourism-related expenditure conducted on a quarterly basis in 2001 and 2002;
- a survey on tourism activity and outbound tourism consumption by Polish residents, conducted by the Institute of Tourism in 2002;
- figures concerning expenditure on business trips calculated for national accounts; according to the methodology of national accounts, transport and accommodation

⁴ A major part of findings from the survey was published in *Turystyka i wypoczynek w 2001 r*. Warsaw GUS 2002.

services are included in intermediate consumption of enterprises, whereas expenses on business trips paid by enterprises are regarded as income of households;

• NBP data from the balance of payments on a cash basis used to eliminate the effect of outbound business and private trips by Polish residents.

The determination of tourism consumption by resident visitors was made more difficult by the fact that the modular survey, characterised by sufficient detail and adequate sampling, mostly described 2001 developments. It was necessary to adjust its results concerning consumption volume and structure on the basis of more aggregated and less accurate data from the household budget surveys conducted in 2002 and 2001.

The estimation of tourism demand of non-resident visitors was primarily based on the following four information sources:

- border surveys on inbound tourism and expenditure by non-residents (tourists and same-day visitors) conducted by the Institute of Tourism in 2002;
- surveys on expenses by foreign nationals in Poland, conducted by the Statistical Office in Zielona Góra in 2002;
- data of the National Bank of Poland compiled in the balance of payments on a cash basis (by mid-2002) and on a transaction basis.

However, none of the above-mentioned surveys served as a direct information source for the preparation of Tables 1 and 4 in the part concerning consumption by non-resident visitors since in 2002 no survey on inbound tourism was based on a representative sample (since adequate sampling was impossible) and, as such, they need to be treated with caution. However, the lack of reliable data from other sources encourages the use of their findings.

According to the methodology, figures on the demand side of the TSA are net values, i.e. the value of specific services purchased by visitors in the form of events was determined as separate estimates. The estimation of the structure of package tour services purchased by non-residents was based on a price survey conducted by the Institute of Tourism in 1996-2000 and a survey carried out in travel agencies providing guided inbound tourism services for non-resident visitors. The aim of the survey was to determine the structure of incomes of travel agencies to identify the margin and the cost of accommodation, food serving services, transport, recreational and other services (such as tourist assistance services and insurance).

The figures presented in Tables 5 and 6 were compiled according to the principles of the system of national accounts, in line with the ESA 1995 guidelines.

Relevant data in the tables in question are consistent with the corresponding figures presented in *Rocznik Statystyczny Rzeczypospolitej Polskiej 2005* (see "Dział XXV Rachunki Narodowe"). It mostly concerns categories such as total output, intermediate consumption, gross value added (labour costs, taxes levied on producers, subsidies to producers and gross operating surplus), imports of goods and services, exports of goods and services. Absolute figures for 2002 in national accounts are compiled according to the methodology adopted for 2000-2005.

Supply data for the tourism satellite account are mostly based on the following information sources:

- 1) working materials for the preparation of national accounts for 2002,
- 2) reports for the preparation of product accounts for 2002,
- compilation of reports on industrial production on the P-01 forms and P-01, mutation for 2002 – 465 balance groups x 58 divisions,
- 4) supply of goods and services account for 2002 465 balance groups x 58 divisions,
- 5) annual business survey for 2002 (the SP form),
- 6) report on economic activity of self-employed persons and civil partnerships in 2002 (the SP-3 form),
- 7) financial statistical report for 2002 (the F-02 form),
- 8) Bulletin of the State Insurance Supervision, The performance of the insurance sector for 2002 (*Biuletyn Państwowego Nadzoru Ubezpieczeń*. *Wyniki sektora ubezpieczeń za rok 2002*),
- 9) report on government budget execution from 1 January to 31 December 2002 (Vol. I) and compilations by the Ministry of Finance containing the following:
 - report on government budget expenditure from 1 January to 31 December 2002,
 - report on voivodship budget expenditure from 1 January to 31 December 2002,
 - report on poviat budget expenditure from 1 January to 31 December 2002,
 - report on municipality budget expenditure from 1 January to 31 December 2002,
 - report on district budget expenditure from 1 January to 31 December 2002.
- 10) computer database on foreign trade (SIHZ) based on figures declared in the Single Administrative Document (SAD, a customs document) and data on the balance of Poland's debts and claims for 2002; information on border traffic and expenditure by foreign nationals in Poland in 2000 was also used,
- 11) report on the value of material and energy consumption, third-party services and material stocks for 2000 (the G-05 form).
- 12) own estimates based on materials by GUS and the Ministry of Finance.

2. Tourism consumption

2.2. Characteristics of tourism consumption

Based on the methodology described in Chapter 1, **tourism consumption** within the economic territory of Poland in 2002 was determined at PLN **30,095,247,000** (Table 4), of which PLN 14,356,476,000 represented non-resident expenditure and PLN 15,738,771,000 was resident expenditure (household spending and expenses on business trips). According to GUS estimates, no tourism-related expenditure of the general government and NPISH sectors was recorded in 2002. The structure of tourism consumption by type of buyers is presented in Graph 2.1.



Graph 2.1. Tourism consumption by type of buyers in 2002

Trips by Polish residents accounted for more than half of tourism consumption (52%), with a dominant share of tourism-related spending by households (including expenses on business trips paid by enterprises). Broken down by product group, consumption was dominated by expenditure on tourism characteristic products – 60%, whereas tourism connected products accounted for 29% of consumption and other products – for 11% of tourism expenditure. Furthermore, spending on specific goods and services significantly varied within the three product groups. As regards tourism characteristic products, the largest item represented expenditure on all transport services – 23%, followed by hotel services – 11% (camping sites and other short-stay accommodation services – 6%), food serving services accounted for 14% and net travel agency services (margins, commissions, tourist assistance services etc.) – for 3%. Graph 2.2 shows a more detailed breakdown of consumption of tourism characteristic products. At the same time, expenditure on tourism connected products was largely determined by expenses on fuel, accounting for 15% of total tourism consumption in 2002.

As has already been mentioned, products included in the TSA for Poland as tourism connected products represented a significant share in expenditure by non-resident visitors.

This product group accounted for as much as 35% of the consumption of tourism products and 31% of total consumption by visitors. Within the group, the largest items included expenditure on fuels – PLN 4,642,624,000, as well as on food, beverages and tobacco products – PLN 4,811,585,000. Such spending represents partial substitution for purchases of transport and food serving services and its scale suggests that a significant share of tourist traffic within the economic territory of Poland is based on own transport and self-catering during trips.

Total **expenditure by non-resident visitors** in 2002, in Poland or abroad but for the benefit of Polish business entities, was estimated at **PLN 14,356,476,000**. Some 59% of the amount should attributed to inbound tourism and the remaining share – to same-day trips.

Overall tourism consumption by non-resident visitors consists of purchases of *tourism* characteristic products (a total of PLN 7,350,802,000, i.e. 51%) and *tourism connected* products and other goods and services (a total of PLN 7,005,674,000, i.e. 49%). Such composition results from the specific character of inbound tourism in Poland and the large share of products purchased for own use, included in tourism expenditure in accordance with the TSA methodology.

As regards the structure of tourism consumption by non-resident visitors by type of products, accommodation services (a total of 19%) and food serving services (15%) represented the largest items. The share of expenditure on passenger transport services provided by Polish carriers was relatively small (9%). It stemmed from the structure of inbound tourism by means of transport: a vast majority of non-resident visitors used own cars; accordingly, their spending on fuel exceeded the income of Polish carriers derived from passenger transport services purchased by tourists. The latter expenditure accounted for 11% of total consumption by non-resident visitors to Poland. As in previous years, transport services (15%) and rail transport services (9%). It is worth pointing out that the share of air transport and land passenger transport increased in comparison with the previous year. Other modes of transport (sea and inland water transport) played a marginal role.

Similarly, spending on *recreational, entertainment, sporting and museum services* also represented a minor share (a total of ca. 7%). At the same time, *travel agency services*, defined as margins charged by tour operators on services related to inbound tourism in Poland, accounted for a mere 1% of total expenditure. According to estimates, it was a significant decline compared to 2001.

The relatively significant share of *other products and services acquired by visitors* in the structure of spending by non-resident visitors (23%) requires explanation. As in previous years, this item was largely determined by rather substantial purchases made by both tourists and same-day visitors (excluding food products, wearing apparel and footwear as separate categories in the TSA), it also resulted from the inclusion of all services not elsewhere classified (such as certain services related to medical and educational exchange).

A comparison of non-resident demand in two groups, i.e. tourists and same-day visitors (cf. Table 1), allows to determine their share in the consumption of specific types of services as follows:

- income on the provision of accommodation services, inseparably linked to inbound tourism and estimated at approx. PLN 2,700,347,000, mostly represented income of *hotels, motels and boarding houses* – 82%; *other places of short-stay accommodation* accounted for the remaining share, i.e. 18%;
- demand for food and beverage serving services as well as catering services (items 55.3, 55.4 and 55.5 a total of PLN 2,189,289,000) was primarily generated by tourists (more than 71%), while same-day visitors represented the remaining part;
- Polish carriers provided services primarily to tourists (who generated 89% of the income of transport enterprises on transport of non-resident visitors), which mostly resulted from a significant share of air transport; it is also worth noting that transport via railways played a minor and declining role in serving inbound tourism (a mere 9% of the income of transport firms on transport of non-resident visitors); 2002 witnessed an interesting trend reflecting the fact that rail transport diminished in importance as means of transport for same-day visitors, whereas it played an increasingly significant role in serving tourists;
- same-day visitors accounted for 64% of expenditure on fuel;
- total non-resident demand for food products, wearing apparel and footwear was also dominated by same-day visitors (71%);
- at the same time, tourists generated 81% of demand for recreational, entertainment, sporting and museum services; in the group of same-day visitors average spending only amounted to PLN 5.2 per person.

As regards tourism consumption by **resident visitors**, presented in Tables 2 and 4, domestic trips accounted for a dominant share of household expenditure on the analysed types of travel – they accounted for 47% of tourism consumption of Poland's residents. Another major item represented expenses on business trips – 37%. Domestic portion of expenditure on outbound tourism and domestic same-day trips accounted for 8% each. Domestic share of outbound same-day trips was insignificant. However, one should bear in mind it is only a rough picture since expenses on same-day trips were estimated on very general assumptions. Other types of travel were much less relevant, as shown in Graph 2.2.



Graph 2.2. Tourism consumption by resident visitors by type of travel in 2002

The structure of tourism consumption by resident visitors by type of products was largely determined by spending on tourism characteristic products (72%), of which expenses on transport services deserve particular attention as they accounted for 32% of total tourism expenditure. Rail transport represented the largest share, but it was closely followed by scheduled interurban bus transport – 10%. Transport by coach, frequently regarded as the most typical means of transport for tourism, accounted for 4% of total tourism expenditure by resident visitors. It is noting that the structure of spending on accommodation services was definitely dominated by other places of short-stay accommodation, i.e. non-hotel facilities – they accounted for 11% of expenditure (whereas hotels only represented 3%). Other major items included food serving services, purchases of food products and fuel.

From the point of view of businesses operating in the tourism market, it should be interesting to identify the types of travel generating demand for specific product groups. This is illustrated in Graph 2.3 with reference to trips by non-resident visitors, resident households and business trips by residents.



Graph 2.3. Consumption of tourism products by type of travel in 2002

In the case of accommodation services, non-resident visitors definitely represented the most important group of hotel guests (accounting for approx. 65% of consumption of hotel services), closely followed by persons on business trips. At the same time, resident households were main clients of other places of short-stay accommodation. Food serving services were primarily purchased by non-resident visitors (with some 50% share of tourism consumption of such services) and households. Rail transport services and other land passenger transport services were preferred by resident households and business trippers. Furthermore, it should be pointed out that non-resident visitors accounted for a significant share of tourism consumption of cultural and recreational services (ca. 60%).

2.3. Changes on 2001

When comparing tourism consumption in 2002 with the respective value for the previous year, it is crucial to bear in mind the methodological differences: for the first time, the TSA for 2002 estimated the expenditure of resident visitors for same-day trips, but it excluded spending on tourism durables. If we take account of that change in calculations, it appears that in 2002 tourism consumption in Poland declined by total of 8.3% (consumption of PLN 28,760,476,000 compared to PLN 31,349,729,000 in the previous year). However, it followed general trends in the whole economy – in 2001 tourism consumption accounted for 2.02% of the total domestic use of goods and services, whereas it was 2.01% in 2002.

The fall in total tourism consumption was generated by reduced consumption by both nonresident and resident visitors. In 2002, expenditure by non-resident visitors dropped by 10.8% compared to the previous year. Average tourism expenditure by persons staying in Poland for at least one night (i.e. tourists) was slightly higher than a year before, at PLN 723.2 (up by 2.3%). Furthermore, same-day visitors also increased spending in comparison with the level recorded in 2001 - to PLN 161 (up by 3.1%). The decline in overall consumption by non-resident visitors stemmed from a reduction in the number of trips (by both tourists and same-day visitors) as well as from shorter duration of average stay (a fall from 4.6 to 3.9 nights). In the case of residents, tourism consumption decreased to a lesser extent, by 4.2%.

Compared to the previous year, there were also certain structural changes. An increased share of business trips accompanied by a reduced share of resident households was the most important shift. As regards the contribution of particular products to tourism consumption, in 2002 the dominant share of non-resident spending on *tourism characteristic products and services* was less evident than in 2001 (56% in 2001 and 49% in 2000). The share of accommodation services dropped to a total of 19% compared to 22% in 2001, as in the case of food serving services (15% compared to 17%). At the same time, there was a slight rise in the share of expenditure on passenger transport provided by Polish carriers (9% compared to 7% in 2001).

As far as resident visitors are concerned, significant changes were observed with regard to the share in consumption of hotel services (down to 3% from 10%) and other short-stay accommodation services (up from 9% to 11%) as well as all food and beverage serving services (up from 8% to 12%). Furthermore, there was a marked growth in the share of spending on cultural and recreational services (to 8% from 4%) and a fall in expenditure on fuel (from 16% to 10%).

3. Domestic output and supply of tourism products

3.1. Characteristics of output and supply of tourism products

According to the assumptions discussed in Chapter 1, the TSA analysis covers goods and services defined as tourism characteristic and tourism connected products, with the former naturally more important than the latter since their very existence depends on tourism and its scale. In 2002, the net value (exclusive of rents) of **output of tourism characteristic products**, at basic prices, was **PLN 59,955,469,000**, which accounted for 3.8% of total domestic output. Graph 3.1 presents the share of specific products in the total output of tourism characteristic products. For the sake of transparency, certain products were grouped, e.g. services related to food serving as well as cultural, sporting and recreational services.

An analysis of Graph 3.1 shows the largest share of transport services, i.e. a total of 32% of the overall output of tourism characteristic products, the most significant item being other scheduled passenger land transport services (19%). Those were followed by cultural and recreational services (with a share of 29%) and food and beverage serving services (21%). The total share of accommodation services only reached 9%, whereas (net) tour organisation and intermediation services only accounted for a mere 3%.



Graph 3.1. Total output of tourism characteristic products in 2002

As regards the place of production of tourism products, the **coefficient of concentration** (i.e. the share of the corresponding activity in the total output of a given product), presented in Table 5, shows that in most cases tourism products are produced in the corresponding

activities, although there are certain exceptions to the rule. The highest concentration (a coefficient of more than 0.9) characterised air passenger transport, interurban rail passenger transport, water passenger transport, recreational services as well as tour organisation and intermediation activities. The lowest concentration (a coefficient of less than 0.7) was found in the production of hotel services, food and beverage serving services and sporting services. The production of renting services of automobiles was characterised by a very low specialisation ratio (0.31). A total of some 11% of tourism products were generated by non-tourism activities.

However, it is worth pointing out that in a number of cases specific services produced outside the principal activity are by-products of related economic activities. It is particularly evident in the case of hotel services and food serving services, with a clear tendency to combine these two types of production; similarly, tour organisation and intermediation businesses account for a rather significant share of the output of hotel services. It means that in Poland, as in other countries, tourism characteristic services tend to become horizontally and vertically integrated.

Output is not tantamount to the **supply of tourism characteristic products** in the Polish market. With regard to goods, it is modified by imports and exports, whereas in the case of tourism characteristic products, i.e. services, the effect of foreign trade is very limited. The difference between output and supply largely results from taxes and subsidies. Table 6 presents relevant figures. Calculated as described above, in 2002 the supply of tourism characteristic products (exclusive of estimated rents) was PLN 118,914,035,000, i.e. 4.3% of supply in the Polish market.

Naturally, a significant share of products defined as tourism characteristic ones is also purchased by consumer groups other than visitors. For this reason, the determination of actual output and supply of tourism-related goods and services within the economic territory of Poland involves the use of *tourism consumption ratio*, expressed as the share of visitor consumption in the domestic supply of tourism services. Table 6 contains relevant figures. This ratio varies significantly between tourism-related products but, in general, for tourism characteristic products exclusive of estimated rents it is relatively low, i.e. only 30% (15% including rents). The varying tourism consumption ratios for particular tourism characteristic products are presented in Graph 3.2.

The highest tourism consumption ratios were found in hotel services (0.97), in other shortstay accommodation services and air passenger transport services. At the other extreme, cultural and recreational services were characterised by a ratio of merely 0.09. Interestingly, rather low tourism consumption ratios were observed in other land passenger transport services (0.19) and all food and beverage serving services (0.31). Travel agency services, with the tourism consumption ratio of 0.4, deserve special notice. Such a low ratio is hardly attributable to a considerable share of consumer groups other than visitors since such services primarily satisfy tourism demand. The only logical explanation seems to be the overestimation of supply, probably due to inaccurate company reports. According to the methodology of national accounts, agents should only report their margins but it is common knowledge that a great number of such operators are subject to simplified accounting requirements and may only report turnover. Therefore, the value of transport, accommodation and other services is included in the account several times and not treated as intermediate consumption⁵.

Finally, the full picture of the role of tourism consumption in the supply of goods and services should include tourism connected products. Although their share in visitor expenditure is significant (29%), the share of tourism consumption in their supply is relatively limited. This particularly concerns spending on food, wearing apparel and fuel. The respective tourism consumption ratios for the above-mentioned product groups were 2%, 2% and 12%.



Graph 3.2. Tourism consumption ratios for tourism characteristic products in 2002

3.2. Changes on 2001

Compared to the previous year, the total output of tourism characteristic products increased by 15.3%. Its share in total domestic production reached 3.8%, i.e. it showed a rise (from 3.5% in 2001). As regards the output of specific services, it varied to a significant extent. For example, the production of accommodation services dropped dramatically (by 30.5%), whereas the output of food serving services went up markedly (by 38%). A considerable increase in production was also recorded in the case of transport services (with the exception of air and water transport) and entertainment services. It brought about major shifts in the structure of output of tourism characteristic products. There was a decline in the share of accommodation services, particularly hotel services (from 10.5% to 6%), and a rise in the share of all food and beverage serving services (from 16% to 21%). Furthermore, tour organisation and intermediation services significantly diminished in importance (down to 3%)

⁵ In the TSA for 2000 and 2001 the consumption of tour organisation and intermediation services was adjusted by an estimated value of services on which commissions were charged. It resulted in the increased tourism consumption ratio, but the value of margins calculated in the TSA was criticised by travel agencies as overestimated.

from 6.6%), whereas the opposite was the case for cultural and recreational services (up from 25% to 29%).

No major changes were observed with regard to the coefficient of concentration, except the output of beverage serving services – in 2001 the corresponding activity only accounted for 41% of production, whereas it was 85% in 2002. More important changes concerned specialisation ratios, which showed a marked increase in the case of the production of hotel services and all food and beverage serving services, accompanied by a dramatic fall in the case of camping sites and other short-stay accommodation services (from 79% to 57%) and tour organisation and intermediation services (from 81% to 51%). Presumably, companies operating in the last two fields of activity started branching out to seek additional income.

As regards the tourism consumption ratio, it showed a particularly strong decline for food serving services (from 50% to 31%). A fall was also recorded in the case of cultural and recreational services (from 13% to 9%) and other land passenger transport services (from 17% to 14%). Such changes may seem insignificant, but it should be recalled that all the products accounted for a very large share of the total output of tourism characteristic products. Consequently, although 2002 witnessed a marked increase in the output, it was driven by demand of consumer groups other that visitors. In the case of accommodation services, which are intrinsically linked to tourism demand, there was a marked decrease in output.

Similarly, certain changes in the tourism consumption ratio could be also observed with regard to tourism connected products – even though it remained unchanged for foodstuffs, but it showed a dramatic drop in the case of expenditure on wearing apparel (from 13% to 2%) and a rise for fuel (from 7% to 12%).

4.1. Methodological remarks

The TSA presents tourism-related value added in two ways. Firstly, it shows *value added in tourism characteristic activities*. Secondly, it reports *tourism value added* adjusted by the tourism consumption ratio and production specialisation ratio. The product of the above ratios is *TVA ratio* (tourism value added ratio) shown in Table 6a. Value added for tourism products generated as secondary output was calculated on the basis of the relation of the value added to output for the principal activity corresponding to a given product.

It should be stressed that the presented rough figures concerning tourism value added and tourism GDP are rather underestimated since it is impossible to determine tourism consumption of renting services of automobiles or exhibition, fair and congress organisation services. Finally, consumption connected with owned vacation homes is also underestimated.

4.2. Value added in tourism-specific activities

In 2002, *value added in tourism characteristic activities* amounted to PLN **44,077,959,000** (or PLN 76,444,574,000 with imputed rents), which accounted for 6.2% of value added generated in the economy as a whole. If we also include tourism connected activities, mostly sale of motor vehicles and fuel as well as retail and wholesale trade, the total share of tourism-specific activities in value added generated in Poland in 2002 reached 26.2%. It is worth emphasising that the share of tourism characteristic activities in generating value added in the whole economy was markedly higher than their share in total output (6.2% compared to 2.8%). This means that such activities are characterised by limited material intensity, but their contribution to GDP is much greater than the national average.

In 2002, the total value of tourism value added generated by tourism characteristic activities was PLN 6,797,862,000 (exclusive of rents). It only accounted for 15.4% of total value added in such activities and 0.095% of value added generated in the whole economy.

As regards tourism connected activities, *tourism value added* generated by such activities amounted to PLN **5,340,476,000** in 2002. Furthermore, it should be added that the tourism value added generated outside tourism characteristic activities was estimated at PLN 1,070,947,000. It was related to tourism products representing secondary output of other fields of activity. In total, tourism value added calculated in the TSA was PLN 13,209,286,000 and accounted for 1.85% of value added generated by the Polish economy.

4.3. "Tourism" GDP

The determination of GDP generated by tourism involves adding the value of net indirect taxes on tourism products, i.e. the value of taxes on imports, VAT and excise tax less subsidies on tourism products, to tourism value added. Defined as above, in 2002 tourism GDP was PLN **16,283,193,000**, accounting for 2.02% of GDP generated in Poland. Its composition is presented in Graph 4.1.



Graph 4.1. Composition of tourism GDP in 2002

The largest share of tourism GDP represented tourism value added generated by tourism characteristic activities (41%), followed by tourism value added generated by tourism connected activities (33%) and net indirect taxes on tourism connected products (17%).

On the basis of the above figures, it is possible to calculate tourism GDP generated by tourism characteristic activities. It amounted to PLN **8,242,512,000** and accounted for ca. 1% of Poland's total GDP. This means that the output of tourism connected products and the indirect taxes on their sales combined to generate the remaining PLN **8,040,681,000** tourism GDP, i.e. as much as 49.4%.

4.4. Changes on 2001

In 2002, value added generated by tourism characteristic activities showed an increase by 6.5% compared to the previous year. It resulted from a number of trends observed in various fields of activity. The sharpest growth was recorded in the case of bars (485%) as well as artistic and entertainment activities (240%). There was a dramatic fall in hotels (by ca. 54%), railway transport (35%), other recreational activities (29%) as well as in tour organisation and intermediation services (25%).

As regards tourism value added generated by tourism characteristic activities, it should be emphasised that such figures are not fully comparable since the TSA for 2002, for the first time, included same-day trips by resident visitors. Nevertheless, it showed a decline by 33%. The comparison of total tourism value added (i.e. including all other activities) inspires a little more optimism as it only fell by 14%. As a consequence, there was a decrease in the share of tourism in GDP, from 2.3% in 2001 to ca. 2% in 2002. Furthermore, its composition changed as well – 2002 witnessed a dramatic decline in the share of value added generated by tourism characteristic activities (from 60% to 41%), a jump in the share of value added generated by tourism connected activities (from 23% to 33%) and in the share of net indirect taxes (from 9% to 19%).

5. Tourism employment

5.1. Characteristics of labour force in tourism activities

In 2002, the number of persons employed in tourism characteristic activities (TCA) was nearly 614,000. Thus, in 2002 TCA employment accounted for almost 5% of total labour force in the economy. However, actual employment related to tourist traffic, estimated on the basis of the TVA ratio, appeared to be much lower – only slightly more than 141,000.

The role of particular tourism characteristic activities in job creation varies significantly (Graph 5.1). At the group level (TVA-based figures), the largest employment was found in railway transport (27,600 persons, i.e. 20% of the total employment in tourism characteristic activities) and hotels (27,000). Other major employers included restaurants (17,000), other land passenger transport (nearly 16,000), non-hotel accommodation facilities (14,000) and bars (13,000). Employment in tour organisation and intermediation activities only accounted for 4% of the total number of persons employed in tourism characteristic activities (5,000).

Female employment in tourism was rather significant in 2002. Adjusted by the tourism consumption ratio, the number of women actually employed in services for tourist traffic was 73,000. It accounted for nearly 52% of the total employment in TCA in 2002, i.e. the share was much higher than that of women workers in the whole economy (less than 46%).

Employment by gender in 2002 suggests that women dominated in activities unambiguously associated with tourism, e.g. hotels (where they accounted for 65% of total employment in 2002) and other short-stay accommodation facilities (67%). As regards food serving services, their share in the total number of persons employed ranged from 64% in restaurants to 71% in canteens and catering companies. Furthermore, female employment was also significant in other tourism activities, primarily those of travels agencies (53%), as well as in air transport (49%). In 2002, the largest employers of women workers (measured in absolute numbers) among TCA were hotels (more than 17,000) and other short-stay accommodation facilities (9,500), restaurants (nearly 11,000) and bars (almost 9,000), as well as transport via railways (over 8,000). The section of hotels and restaurants provided jobs for more than 50,500 women, which accounted for 69% of all women employed in TCA and over 1% of female workers in the whole economy.

A separate analysis of data on hired labour and owners, co-owners and unpaid family labour (self-employed persons) suggests different trends. As a matter of fact, overall figures on all TCA are very similar: for both paid labour and the group of owners and co-owners, the proportion of men and women was almost equal. In the former case, there were 59,000 men compared to nearly 63,000 women, and in the group of self-employed persons there were 9,500 men and slightly over 10,000 women (the figures are TVA-based). Thus, men and

women showed similar activity with regard self-employment in all TCA (the share of self-employment in total employment was some 14% in both cases).

However, a more detailed analysis of specific TCA reveals certain differences. As regards self-employed persons, the section inseparably linked to tourism (hotels and restaurants) is dominated by women, particularly in food serving services and in non-hotel accommodation facilities (in both cases women accounted for 55% of self-employment). A similar situation is found in physical well-being facilities (78%) and in railway transport (where the share of women workers in total self-employment was as much as 85%, but the absolute number was marginal – only 66 persons). Self-employed men outnumbered self-employed women in other activities, particularly in other land passenger transport (where men accounted for ca. 90% of self-employment) as well as in tour organisation and intermediation services (58%).

An analysis of labour productivity (total output divided by the number of persons employed) demonstrated that in 2002 one person employed in tourism (TCA) generated total output of PLN 101,000, whereas the respective figure for the whole economy was PLN 122,400. This indicator varies significantly between activities: in hotels and restaurants (PLN 84,000) the highest productivity characterised employees of canteens and catering companies (PLN 171,000), as well as persons employed in hotels (PLN 104,000). A similar result (PLN 113,000) was found in other land passenger transport, whereas the respective figure was much higher in tour organisation and intermediation activities (PLN 310,000) and air transport (PLN 566,000). The highest labour productivity (PLN 1,735,000) was recorded in companies providing renting services of automobiles.

As regards value added per person employed, tourism characteristic activities were characterised by nearly 150% the figure for total employment in the economy (PLN 71,800 compared to PLN 55,800). The highest ratios were again found in renting services of automobiles (PLN 532,000), land passenger transport (PLN 171,000), travel agency services (PLN 148,000) and air transport (PLN 118,000). In hotels and restaurants one person employed generated PLN 41,000, and the highest levels in this section were recorded in canteens and catering (nearly PLN 80,000), non-hotel accommodation facilities (PLN 53,000) and in bars (PLN 40,000).



Graph 5.1. Value added per person employed in TCA in 2002 (PLN)

5.2. Changes on 2001

It is rather difficult to compare performance in 2001 and 2002 since the employment module was very limited in the former period due to the lack of data on micro-enterprises. Data on all entities for 2001 were only presented in the case of hotels and restaurants, with no possibility to estimate figures for specific groups. However, available data suggest that the total number of persons employed in TCA fell in 2002 (compared to 2001) by as much as 24% (from 811,000 to 614,000); hotels and restaurants experienced only a limited decline in employment (from 217,000 to 211,000 in 2002), whereas land transport services appeared to be a major problem. Unfortunately, due to the lack of detailed estimates for 2001 it is impossible to determine the actual share of employment reduction related to services for tourism traffic (data for 2001 included land passenger and freight transport combined).

At the same time, it may be surprising that self-employment in tourism showed a dramatic decline: from 162,000 in 2001 to 80,000 in 2002. The opposite was the case for the number of persons employed: there was a marked increase from 129,000 in 2001 to more than 530,000 in 2002. Such a strong shift of self-employment towards hired labour in tourism in 2002 brought about essential changes in the structure of tourism employment. The respective shares of paid labour and self-employment in total employment were 44% and 56% in 2001, whereas those proportions were 86% and 14% in 2002. Such changes seem to be confirmed by the fact that similar shifts were observed in the share of persons employed in companies with 9 employees or less and in enterprises with more than 9 employees. In 2001, 291,000 jobs were generated by micro-enterprises, whereas 520,000 – by larger entities. In 2002, the respective numbers were 153,000 and 461,000. Considering that tourism encourages self-employment, primarily in the form of small businesses, the fall in the number of persons employed in small

companies was naturally linked to the decrease in the number of self-employed persons.

Interesting changes were observed with regard to the share of men and women in total tourism employment. In 2001, the share of women workers was much lower: female employment accounted for 39% of total employment, 28% of self-employment and for 42% of hired labour. In 2002, the respective shares increased to 52% of total employment and hired labour, and to 51% of self-employment. At the same time, the share of female tourism employment in the total number of women workers in the Polish economy showed no major changes (6% in 2001 compared to slightly over 5% in 2002). However, it should be noted that the share of female labour in self-employment went down: in 2001 the share of self-employed women in tourism in the total number of self-employed women was 9%, whereas it dropped to a mere 3% in 2002. It stemmed from not only from a fall in female self-employment in tourism (from 48,000 in 2001 to 39,000 in 2002), but also from a significant increase in the number of self-employed women in tou?

An analysis of labour productivity suggests that it rose from PLN 74,000 in hotels and restaurants in 2001 to nearly PLN 84,000 in 2002. In the whole economy, there was a fall from PLN 142,000 per person employed in 2001 to PLN 122,000 in 2002. Similar changes were observed with regard to value added per person employed. Hotels and restaurants recorded a growth from PLN 38,500 in 2001 to PLN 41,000 in 2002, whereas the Polish economy experienced a decrease from PLN 62,900 to PLN 55,700. Unfortunately, due to the scope of data for 2001 it is impossible to make comparisons at the group level.

6. Capital formation and non-financial assets of tourism activities

6.1. Fixed capital formation in tourism characteristic activities in 2002

In 2002, fixed capital formation, i.e. expenditure on buildings and structures, means of transport and other fixed assets including land improvement expenditure, in tourism characteristic activities amounted to PLN 4.0 billion, accounting for 3.7% of fixed capital formation in the Polish economy. Capital expenditure increased by 18.8% on the 2001 figure. Graph 6.1 presents fixed capital formation by type of activities.



Graph 6.1. Fixed capital formation in tourism characteristic activities by type of activity in 2002

The two groups of activities accounting for major shares in fixed capital formation were hotels and other accommodation and air transport. In 2002, 788 facilities (new investment projects or general overhauls) were put into operation, their total capacity amounting to 1,092,000 m3, including 246 hotels. In 2002, construction and installation output in hotels and tourism accommodation facilities completed by contractors employing more than 9 persons was PLN 427.8 million, down by 39.3% compared to the previous year.

The above information referred to commercial accommodation. As regards private accommodation, the TSA only covered the so-called second homes. Since 2001, this group of facilities has included the category of summer homes, vacation homes and country mansions

in rural areas. In 2002, 983 facilities with a total capacity of 260,600 m3 and the value of PLN 72.6 million were put into use.

Table 6.1. Selected estimates for summer homes, vacation houses and country mansionsin 2001-2003

Specification	2001	2002	2003
Output of homes and houses put into use, PLN million	76.4	72.6	224.2
Number of homes and houses put into use	869	983	2730
Total capacity in m ³ thousand	274.3	260.6	804.5

Source: Budownictwo, wyniki działalności. Warsaw GUS 1995-2003 and estimates by the Institute of Tourism.

6.2. Net fixed assets in tourism characteristic activities in 2002

In 2002, the net value of fixed assets including produced non-financial assets (buildings and structures, means of transport and other produced non-financial assets) in tourism characteristic activities (net of the value of land and second homes) was PLN 30.4 billion, i.e. 3.7% of the total net value of fixed assets. Its breakdown by activity is presented in Graph 6.2.



Graph 6.2. Net fixed assets in tourism characteristic activities by industry in 2002

The net value of fixed assets given above excludes the value of land. Nor does it include the value of vacation homes.

7. Tax revenues and tourism-related subsidies

7.1. Tax revenues and subsidies for tourism in 2002

Table 7.1 presents particular categories of taxes and subsidies adjusted by the TVA ratio, i.e. "cleansed" from the part not directly related to services for tourist traffic.

	Tourism	of which:		Share of	
Specification	activities, total	1 Uui isiii	Other tourism connected activities	tourism in the economy, %	
Taxes, total	3,269,346	569,147	2,700,198	3.2	
Net taxes on products	3,073,908	373,710	2,700,198	3.3	
customs duties and other import charges	33,696	0	33,696	2.3	
value added tax	1,148,714	455,561	693,153	2.0	
other taxes on products (excise tax)	1,975,787	0	1,975,787	6.0	
subsidies on products	-84,290	-81,850	-2,439	5.6	
Net taxes levied on producers	195,438	195,438	x	1.9	
taxes levied on producers	211,370	211,370	Х	1.8	
subsidies to producers	-15,932	-15,932	Х	1.1	

Table 7.1. Tax revenues and subsidies for tourism by type of activities in 2002 (PLN thousand)*

* The calculation of tax revenues presented in the table was based on tourism consumption ratios and TVA ratios.

In 2002, **tax revenues directly generated by tourism** amounted to PLN 3,269,346,000, which means an increase by 62.5% (i.e. PLN 1,257,505,000) compared to the previous year. **Net taxes on products** from all types of tourism activities totalled PLN 3,073,908,000, accounting for 3.3% of total indirect tax revenues for the state. In 2002, revenues from taxes on production less subsidies dropped by 53.3% compared to the previous year, accounting for 1.9% of such revenues in the economy and for 6% of tax revenues generated by tourism.

The increase in the total amount of taxes paid pushed up the share of tourism in the analysed tax revenues in the Polish economy: from 1.8% to 3.2%. Graph 7.1 illustrates the effect of taxes directly generated by tourism on tax revenues of the state budget.



Graph 7.1. Direct contribution of tourism to tax revenues of the state in 2002

Indirect tax revenues exceeded subsidies in the case of both tourism characteristic and other tourism connected activities. Budget revenues from value added tax generated by tourism characteristic activities doubled on the 2001 figure, whereas they rose by 15.5% in other tourism connected activities. It should be mentioned that the rates of VAT on the activities in question remained unchanged in 2002. Revenues from excise tax jumped by 66.5%, while customs duties and other import charges declined dramatically: by PLN 208,736,000 (86.1%).

Negative net taxes on products and production were only recorded in land passenger transport (PLN -6,728,000) as well as in library, archive and museum services (PLN -12,000). In all other activities tax revenues exceeded subsidies.

Hotel and other short-stay accommodation services generated total tax revenues of PLN 216,086,000, up by 58.7% compared to the previous year.

Food serving and catering services contributed tax revenues of PLN 160,530,000, a sixfold increase on the 2001 figure.

Tax revenues generated by air passenger transport rose by PLN 23,205,000 (45.9%), but their share in total tax revenues from tourism activities remained practically unchanged in comparison with the previous year (2.3%).

Finally, budget revenues from taxes on travel agency activities also showed an increase (by 60%). Total revenues from taxes on products and production generated by this division amounted to PLN 73,056,000, i.e. only slightly less than in the case of air transport.

An analysis of the contribution of particular tourism characteristic activities to the generation of tax revenues indicates the dominant position of *food serving services and hotel services*. In 2002, indirect taxes and taxes levied on producers operating in both divisions accounted for 9% of total tax revenues generated by tourism, followed by air transport with a 2.3% share in total tax revenues. Travel agencies contributed 2.2% of budget revenues from tourism activities.

Beyond doubt, however, the largest proportion of tax revenues attributed to tourism was generated outside the category of tourism characteristic activities. The value of excise tax and VAT on fuels generated by tourism amounted to PLN 2,109,172,000, which accounted for



64.5% of total tax revenues from tourism. Graph 7.2 illustrates the contribution of particular tourism activities and products to tax revenues from tourism.

Graph 7.2. Direct tax revenues by type of activities and products (PLN thousand)

The above analysis focused on the contribution of tourism activities and products to taxes on production and imports. For a comprehensive presentation of the role of tourism in generating tax revenues for the state, it should be extended to include personal income tax and corporate income tax as well as social security contributions paid by employees and employers.

Despite the lack of direct information on this issue, the figures may be estimated. In order to calculate the value of personal income tax paid by those employed in tourism characteristic activities, an assumption was made that the actual rate of personal income tax was 15.85% (9.15%, net of health care contributions)⁶.

The TVA ratio was used to calculate the share of tourism employment in salaries and wages, and taxes paid on this amount were subsequently determined. The value of social security contributions was established in the same manner.

⁶ Informacja dotycząca rozliczenia podatku dochodowego od osób fizycznych opodatkowanych na ogólnych zasadach za 2002 r., Ministry of Finance, Warsaw 2003, p. 12, www.mf.gov.pl

According to the calculations, personal income tax revenues generated by tourism activities amounted to PLN 472,711,000, whereas social security contributions totalled PLN 456,909,000.

Having added the aforementioned figures and the value of taxes on products and production, we obtain total tax revenues generated by tourism, which amounted to PLN 4,198,964,000 in 2002, up by ca. 19% compared to the previous year. It should be emphasised that the final figure does not reflect overall tax revenues generated by tourism in 2002 since it is impossible to accurately estimate the receipts from corporate income tax.

7.2. Tourism collective consumption

Work on the TSA 2002 suggests that it is currently impossible to prepare the full balance of tourism revenue and expenditure at all budget levels. Nevertheless, an attempt was made to gain more insights into this subject. As regards budget revenues, specifically for district budgets, local governments receive a quasi-tax directly linked to tourism but it had to be excluded from the TSA for methodological reasons. It concerns the so-called local charge on short-stay accommodation in certain tourist and resort areas, which represents budget revenue for the local government. The rate of the local charge is established by law. In 2002, it was PLN 0.94 per day⁷. National accounts exclude such charges from the generation of income account and include them in the secondary distribution of income account, in the same way as income tax. Those charges are treated as current transfers. According to the Ministry of Finance, in 2002 revenues from local charges amounted to **PLN 18,805,000**.

As regards budget expenditure on tourism, the Budget Act⁸ and data by the Ministry of Finance indicate that it totalled **PLN 44,479,444,000** (Table 9). However, this amount is unlikely to represent total expenditure on tourism products by administration at different levels since the sole criterion for including specific expenses was the classification under the heading "tourism". Obviously, actual spending on tourism may well be found under different headings such as "culture", but it should be assumed that a vast majority of expenditure was taken into account. Furthermore, available information is insufficient to accurately identify specific activities financed from the budget. In general, it was tourism promotion, popularisation and administration. It is only possible to determine the share of specific administrative levels in such expenses, which is presented in Graph 7.3.

⁷ Obwieszczenie Marszałka Sejmu RP z dnia 31 października 2001 r. w sprawie ogłoszenia jednolitego tekstu ustawy o podatkach i opłatach lokalnych, Dz.U. No 9, item 84 of 7 February 2002.

⁸ Dz.U. 2002 no 30, item 275.



Graph 7.3. Tourism collective consumption by administrative level in 2002

District authorities accounted for the largest share of expenditure on tourism collective consumption (51%), followed by local governments in poviats and municipalities (36%). Expenses by the central government represented less than 0.5% of total tourism collective consumption.

8. Conclusions and recommendations

8.1. Summarised findings from the TSA

According to the TSA for 2002, it was a difficult year for Polish tourism. There was a marked decline in tourism consumption, both by resident and non-resident visitors (by 4.2% and 10.8% respectively). As a consequence, the share of tourism in Poland's GDP went down (from ca. 2.3% to 2%). Those developments were accompanied by certain structural changes – there was an apparent increase in the share of taxes in tourism GDP, particularly in the case of excise tax on tourism connected products. Furthermore, it is worth noting that most tax revenues generated by tourism and identified in the TSA represented central budget receipts, whereas regional and local governments accounted for nearly 100% of tourism-support expenses. Other structural changes included the search for additional income from non-tourism secondary production by tour organisation and intermediation companies. On a positive note, it should be emphasised that businesses engaged in tourism characteristic activities generated more value added than the national average, thus over-proportionally contributing to GDP growth. It is also true of job creation in such enterprises.

8.2. Conclusions and recommendations for further work on the TSA

This TSA was prepared within the framework of measures by the European Commission aimed at the popularisation and increased international comparability of the tourism satellite account. As regards TSA work in Poland, priority was given to improving the process of TSA preparation and the quality of findings. Key measures to achieve this objective included the establishment of the interdepartmental Task Force for the Tourism Satellite Account Methodology, consultations with Austrian and Hungarian partners, consultations on new information sources with various Polish institutions and a seminar on these subjects.

In order to increase international comparability of results, the reduced scope of the TSA excluded the consumption of tourism durables. Furthermore, the analysis of tourism characteristic products and activities was extended as they represent the most comparable part of the TSA in all countries. However, some comparability problems appeared unavoidable since they stemmed from insufficiently accurate definitions and methodological proposals. Nevertheless, research on these issues is in progress and, presumably, certain solutions will be adopted at the international level as only such arrangements may prove effective.

Efforts at solving all problems with data availability and quality were also unsuccessful – mostly with regard to the use of administrative data as an information source for the TSA preparation. It is particularly relevant to spa tourism and the possibility to use data collected

for debit and credit card transactions. Consultations in this area should be continued. Another very important problem – the estimation of expenditure by resident visitors on same-day trips – has been partly solved. This TSA is based on adequately adjusted data on short trips by residents, whereas the Institute of Tourism and GUS declared the inclusion of appropriate questions to their surveys. The declared measures should be implemented during 2007.

Changes in information sources and methods of estimating non-resident demand

Due to the specific information needs of tourism satellite account, starting from 2004 surveys conducted by the Institute of Tourism have been based on a questionnaire with an enlarged section concerning expenditure composition. It allows to separate expenditure estimates within main categories, particularly food (such as food serving services and purchases of food products), transports (such as fuel and fares) and products purchased for own use. It is relevant both to tourists and same-day visitors.

In 2004 the Institute of Tourism also introduced certain changes in the method of estimating Poland's total receipts in foreign currency from inbound tourism. There were four main reasons for such modification:

- The National Bank of Poland changed its method of estimating Poland's balance of payments under the heading *travel* replacing figures *on a cash basis* with data *on a transaction basis*; it means that the released balance of payments includes not only financial settlements of Polish economic entities with the foreign sector, previously adjusted by the Institute of Tourism to obtain expenditure by non-resident visitors to Poland and determined on the basis of border surveys, but also all transactions by visitors within the economic territory of Poland. Furthermore, in accordance with the European Union decisions minor transactions, i.e. those not exceeding EUR 12,500 (a very significant amount in the tourism sector) are not registered.
- In inbound tourism it has been increasingly popular to use non-cash means of payment and to purchase services in the place of residence, before the trip. Therefore, it was indispensable to pay particular attention to the fact that respondents should report all expenditure within the territory of Poland (irrespective of means of payment) as well as to expenses incurred prior to the trip such as advance payments for services provided within the economic territory of the visited country. In this way, it is possible to avoid repeated calculation of the same expenditure.
- At present, the estimation of some expenses incurred abroad, previously registered by the NBP in the balance of payments on a cash basis, is primarily based on findings from border surveys conducted by the Institute of Tourism; however, these are verified by means of unpublished data of the central bank, particularly with regard to items such as *financial settlements by travel agencies on provided tourism services* and *business trips*. The new method allows to separate estimates for expenditure incurred abroad and received by Polish economic entities, broken down by group of countries which generate the most tourism traffic to Poland.
- As concerns the changed method of estimating Poland's total receipts in foreign currency from inbound tourism, one should bear in mind that the years 2004 and

2005 represented a transitional period. Starting from 2007, border surveys are planned to be conducted according to new methodology providing representative results.

In the case of resident consumption, since 2003 the Institute of Tourism has been gathering data according to a new methodology which ensures improved information on tourism expenditure by resident visitors. Both the above-mentioned surveys and the modular survey carried out by GUS will continue to be refined for higher quality of data used for the preparation of the TSA.

As regards supply figures, the implementation of PKD 2007 will involve major changes. The classification should help obtain data on passenger transport and travel agency activities. The latter will be represented as a division in the new N section. However, the new PKD will not solve all the problems since a number of tourism-related activities will remain dispersed, e.g. physical well-being services, ski lifts etc. Improved quality of data on travel agency activities should be also favoured by changes in VAT – under new regulations introduced in connection with Poland's accession to the European Union, agency sales are subject to VAT on commissions/margins. Therefore, agencies will be interested in accurate calculation, which should improve the quality of reports filed with GUS.

Figures on employment, hired labour as well as on owners, co-owners and unpaid family labour (self-employment) are compiled for the TSA according to data from the Z-06 form as at 31 December of a given year. The form concerns economic entities regardless of type of ownership (the public and private sectors) with 9 or more employees. For the analysed group of enterprises (with 9 or more persons employed), the employment module data may be treated as a satisfactory source of information on actual employment (also by gender and broken down by paid labour and owners, co-owners and unpaid family labour). At the same time, the fact that the Z-06 report is filed on an annual basis presents a major limitation since it is impossible to analyse the seasonal fluctuations in employment. Therefore, employment surveys should be based on the Z-03 form (a full report submitted on a quarterly basis), which allowed to determine the employment level during the first three quarters of 2002. Unfortunately, such data provide no information on employment broken down by gender, which will reduce the usefulness of the module.

In the future, it will be desirable to analyse the level of salaries and wages in tourism – the Z-06 form contains information on average gross salaries and wages (total), but it offers no breakdown by gender or categorisation of labour as paid employment/self-employment.

The most important problem in analysing tourism employment under the TSA is employment in small enterprises (with 9 persons employed or less) since such companies are excluded from surveys based on the Z-06 form. It is particularly difficult on account of two crucial issues: the degree of data disaggregation to a level lower than the group and surveys of enterprises with 9 persons employed or less.

The group of micro-enterprises is only included in annual surveys (based on the SP-3 form – "Economic activities by enterprises with 9 persons employed or less" – but the lowest level of data aggregation in this form is the division, whereas most tourism characteristic activities are presented at the group level. Another problem is the fact that surveys of businesses with 9 persons employed or less based on the SP-3 form are sample surveys using random samples

(5%) conducted at the national level on an annual basis. Due to the lack of subclass in the sampling frame, it is impossible to estimate information at this level. Under methodological work conducted in 2005, GUS carried out a pilot survey of tourism connected activities (PKD class 63.30), commissioned by the Ministry of Economy. One of the goals of the survey was to verify the frame of micro-enterprises engaged in such activities. There will be a desirable change in this respect (from the point of view of the TSA) since in the new classification of activities to be applicable from 2007 the activities of travel agents, tour operators and tourist assistance activities will be a division, resulting in improved representation of such companies in surveys of micro-enterprises. Apparently, a similar verification would useful in the case of the frame of micro-businesses engaged in accommodation and food serving services (at present, SP-3 surveys continue to cover hotels and restaurants as one section, with no disaggregation into groups or even separating accommodation and food serving activities). Section I (Transport, storage and communication) is also very important from the point of view of tourism. The TSA would require at least separation of the category of passenger transport within railway and other land transport as well as in water and air transport. The section in question causes the most problems for the employment module, leading to dramatic overestimation of TSA results since a significant proportion of its output is irrelevant to tourism services or even passenger services. The PKD 2007 should bring about significant improvements in this area.

The possibility for compiling regional tourism satellite accounts remains a major challenge. The problem may be partly solved by the use of findings from surveys based on the SP-3 form and the REGON register. Since the above-mentioned survey is incomplete, it is necessary to estimate figures for particular regions (voivodships). Assuming that the level and structure of employment in tourism companies with 9 persons employed or less is relatively homogenous, an attempt may be made to generalise data on enterprises selected as a random sample to describe all tourism businesses (with 9 employees or less) in a given region (as in the TSA 2002 for Poland). In such a case, the identification of enterprises included in the scope of the TSA should be based on the REGON register for a given voivodship. Naturally, such data will be biased, but it will not be necessary to conduct additional surveys of the group of companies in question. At the same time, it will be possible to estimate employment in entities accounting for a significant share of tourism businesses, a vital part of the national economy both for the development of the tourism industry and from the point of view of searching for new opportunities to boost economic activity of the population.

During the preparation of the chapter on employment in the TSA 2002 a major problem was encountered – the actual possibility of disseminating data obtained from statistical surveys. In some cases, classes and subclasses categorised as tourism characteristic activities were subject to provisions of the act on classified statistical data. A similar obstacle will be encountered in the case of regional tourism satellite accounts. It was established for a set of data that ca. 32% of data could not be presented at the group level (under the act on classified statistical unit data), whereas the respective figure was ca. 22% at the division level, primarily for divisions 61, 62 and 71 (since only group 71.1 is selected). In the future, it seems necessary to seek permission from enterprises concerned, and then to request authorisation

to use statistical data in question from the Data Dissemination Department or from the President of GUS.

An important element of the project on improving the TSA for Poland was developing a methodology for the assessment of the performance of the tourism economy for periods for which the full account is not compiled. The starting point for developing such a methodology was to determine the desired parameters describing the tourism economy performance. The following seem essential: tourism value added and GDP, tourism employment (in tourism characteristic activities) and, possibly, information on the structure of value added.

As regards the estimation of value added and GDP, it is possible to apply two calculation methods: based on final demand or on financial results of activities. The final demand method requires the knowledge of tourism expenditure by resident households (less purchases outside the economic territory of Poland), tourism expenditure by non-resident visitors within the economic territory of Poland and spending by Polish enterprises on business trips outside the economic territory of Poland. However, as has been mentioned above, the methodology of analysing tourism consumption in Poland has been gradually modified since 2003. It means that survey results have not been verified according to the TSA methodology and using them for an assessment of performance of the tourism trade is a rather risky exercise.

In the case of methodology based on financial results of activities, it is possible to use data on sections of the economy; provisional data are published by GUS in September of the year following the reference year. In this case, the basis for calculating tourism GDP is the determination of the TVA ratio for sections, resulting from the production specialisation ratio and the tourism consumption ratio. Table 8.1 presents relevant ratios for sections included in the TSA.

Section	Production specialisation ratio		Tourism consumption ratio			
	2000	2001	2002	2000	2001	2002
G		0.8574	0.8320	0.0280	0.0409	0.0286
Н	0.7590	0.7787	0.8223	0.5486	0.6801	0.4952
Ι	0.1834	0.2186	0.1672	0.1745	0.3878	0.3492
0	0.1834	0.2384	0.2639	0.0342	0.1330	0.0942

Table 8.1. Production specialisation and tourism consumption ratios by section

The use of the above ratios results in fairly a good estimate of tourism value added, but it must be increased by the ratio of value added from secondary production (8% of estimated tourism value added). The problem about the method is that the structure of the Polish tourism economy is unstable. It particularly concerns tourism consumption ratios. The use of the regression function to estimate them is questionable due to the short data series (only 3 years). In this connection, the suggested solution is to take specialisation ratios and tourism consumption ratios for 2002 in the case of sections G and O, whereas for sections H and I it is recommended to assess structural changes in tourism expenditure on the basis of the household budget survey (findings for the third quarter of the year) and the survey of

expenditure by non-resident visitors. It is useful to prepare the full version of the TSA for 2005 (being the year following EU accession, as well as the year for which data from the GUS modular survey are available) and then for 2008, after the introduction of PKD 2007.

The discussed methodology will make it possible to estimate tourism value added broken down by group of activities and by section, but using it for estimating tourism GDP is problematic. The reason is that the burden of indirect taxes on tourism products is very unstable.

As regards employment in TCA, it is possible to make relevant estimations for the previous year on the basis of data on sections and TVA ratios as calculated in the manner described above.