28th June 2023 TOURISM SATELLITE ACCOUNT 2022

GVA AND TOURISM CONSUMPTION SURPASSED PRE-PANDEMIC LEVELS

In 2022, there was a nominal increase of 72.7% in the Gross Added Value generated by Tourism (GVAGT) compared to 2021, according to the preliminary estimate of the Tourism Satellite Account. GVAGT represented 8.9% of the national GVA (5.7% in 2021), surpassing the levels of 2019, when it accounted for 8.1% of the national GVA.

Tourism Consumption in the Economic Territory (TCET) was equivalent to 15.8% of the national GDP (9.8% in 2021), also above 2019 levels, when it represented 15.3% of GDP.

Applying the 2017 Integrated System of Symmetric Input-Output Tables to the main results of the Tourism Satellite Account (TSA) it is estimated that the tourism activity has generated a direct and indirect contribution of 29.2 billion euros to GDP in 2022, which corresponds to 12.2% (7.8% in 2021 and 6.6% in 2020).

Statistics Portugal presents the preliminary estimate of the Tourism Satellite Account (TSA) for 2022, for four main aggregates: Tourism Consumption in the Economic Territory (TCET) and, using the system of Input-Output Tables, the Gross Value Added generated by Tourism (GVAGT), the total GVA and the total GDP of tourism.

Provisional results for 2021 (for the four main aggregates) are also released, as well as the final results for 2020.

1. In 2022, the (direct) GVA generated by tourism increased by 72.7%, reaching 8.9% of the national GVA

GVAGT amounted to 18,308 million euros in 2022 and represented 8.9% of national GVA (5.7% in 2021), surpassing the result observed in 2019, year in which it accounted for 8.1% of the national GVA, the maximum relative weight of the pre-pandemic period (since 2000, the first year for which TSA information is available in Portugal). TCET also increased substantially in nominal terms (79.3%), amounting to 37,836 million euros, equivalent to 15.8% of GDP, also surpassing the 2019 record (15.3%).

Table 1. TSA main indicators (2016 - 2022)

Main indicators	2016	2017	2018	2019	2020	2021Po	2022Pe
Tourism Consumption in the Economic Territory (TCET)							
Value (10 ⁶ euro)	23,501	27,696	30,454	32,906	16,847	21,097	37,836
Nominal rate of change (%)	//	17.9	10.0	8.1	- 48.8	25.2	79.3
Weight in National GDP (%)	12.6	14.1	14.8	15.3	8.4	9.8	15.8
Inbound Tourism Expenditure							-
Value (10 ⁶ euro)	14,800	18,140	19,904	21,187	8,593	х	х
Nominal rate of change (%)	//	22.6	9.7	6.4	- 59.4	//	//
Domestic Tourism Expenditure + Other Components					-	-	- 1
Value (10 ⁶ euro)	8,700	9,556	10,550	11,719	8,254	х	х
Nominal rate of change (%)	//	9.8	10.4	11.1	- 29.6	//	//
GVA Generated by Tourism (GVAGT)							÷
Value (10 ⁶ euro)	11,123	13,045	14,171	15,092	7,708	10,601	18,308
Nominal rate of change (%)	//	17.3	9.0	6.5	- 48.9	37.5	72.7
Weight in National GVA (%)	6.9	7.7	8.0	8.1	4.4	5.7	8.9
Employment in Tourism Characteristic Activities							
Value (FTE)	380,293	413,567	444,117	463,372	425,730	х	х
Nominal rate of change (%)	//	8.7	7.4	4.3	- 8.1	//	//
Weight in National Employment (%)	8.6	9.0	9.4	9.6	9.1	//	//
Compensation of Employees in Tourism Characteristic Activities							'
Value (10 ⁶ euros)	6,457	7,149	7,993	8,622	7,408	х	х
Nominal rate of change (%)	//	10.7	11.8	7.9	- 14.1	//	//
Weight in National Compensation of Employees (%)	8.0	8.3	8.7	8.9	7.6	//	//

GVAGT and TCET registered, respectively, nominal increases of 72.7% and 79.3% in 2022 compared to 2021. These indicators increased more sharply than national GVA and GDP (nominal change of 11.4% in both cases).

GVAGT and TCET were above 2019 levels, evidencing a more pronounced recovery dynamic than that observed for the national economy total in 2022.

10⁶ euro 15.8 15.3 14.8 40,000 16 14.1 14 12.6 30,000 12 9.8 8.9 10 8.1 8.0 **7**.7 6.9 20,000 8 6 10,000 2 0 2016 2017 2018 2019 2020 2021 Po 2022 Pe TCET GVAGT TCET (% of national GDP) GVAGT (% of national GVA)

Picture 1. GVAGT and TCET evolution (2016 – 2022)

In 2021, both tourism imports and exports increased around 30%, compared to the previous year. However, the values were still lower than those recorded in 2019: -31.0% in the case of imports and -45.6% in the case of exports.

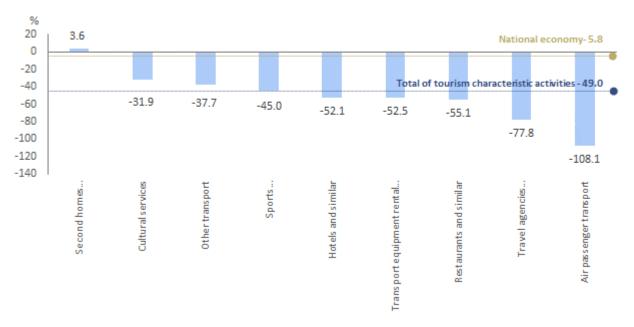
- 2. Main effects of the COVID-19 pandemic on tourism, in 2020
- 2.1 Decrease of 48.9% of total GVAGT and of 49.0% of the GVA generated by the tourism characteristic activities

In 2020, the total GVAGT recorded a contraction of 48.9%, compared to 2019, while the GVA of the national economy decreased by 5.8% in the same year.

The decline in GVA was more pronounced for the characteristic activities of tourism (-49.0%), especially in air passenger transport, since its GVA registered even negative values in 2020 (thus reaching a variation of -108.1%), in travel agencies and similar (-77.8%), in restaurants and similar (-55.1%), in passenger transport equipment rental (-52.5%) and in hotels and similar (-52.1%).

Only the GVA of second homes - own account (imputed rents of secondary homes) increased 3.6% in 2020.

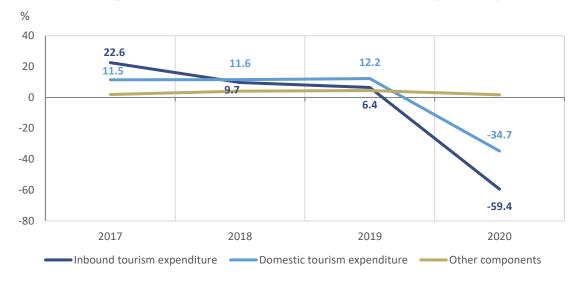
Picture 2. Rate of change (%) of the GVA of tourism characteristic activities and national economy GVA (2019/2020)



2.2 Decrease of 59.4% in expenditure on inbound tourism, which compares with a negative variation of 34.7% in domestic tourism, in 2020

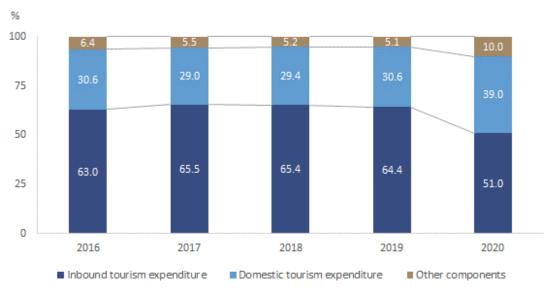
Inbound tourism expenditure was the most affected by the pandemic context, registering a negative rate of change of 59.4%, which compares to a 34.7% decrease in domestic tourism expenditure, and to a 1.7% increase in expenditure associated to other components, in 2020.

Picture 3. Rate of change (%) of inbound tourism, domestic tourism and other components expenditure (2017-2020)



The less pronounced decrease in domestic tourism expenditure (-34.7%), compared to inbound tourism expenditure (-59.4%), resulted in an increase of the weight of domestic tourism in total TCET, which evolved from 30.6% in 2019 to 39.0% in 2020. Conversely, there was a reduction in the weight of inbound tourism expenditure (from 64.4%, in 2019, to 51.0%, in 2020), nevertheless maintaining its primacy over domestic tourism and other components expenditure.

Picture 4. Weight (%) of inbound tourism, domestic tourism and other components expenditure in the TCET (2016-2020)



Source: Statistics Portugal (Tourism Satellite Account)

Inbound tourism expenditure accounted for 11.6% of total exports of goods and services in 2020, diverging from the upward trajectory observed until the start of the COVID-19 pandemic, which culminated in 22.7% in 2019, the highest record since 2016.

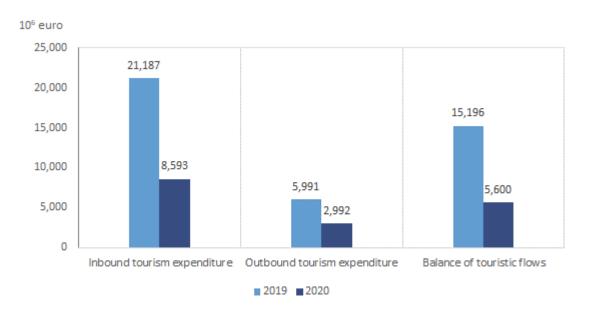
106 euro 93,271 100,000 89,144 40 83,717 74,989 74,286 75,000 30 22.7 22.3 21.7 19.7 50,000 20 21,187 11.6 9,904 18,140 4,800 25,000 10 3,593 0 2016 2017 2018 2019 2020 Weight (%) of inbound tourism expenditure in total exports Inbound tourism expenditure Total exports (goods and services)

Picture 5. Evolution of inbound tourism and total exports of goods and services (2016-2020)

Source: Statistics Portugal (Tourism Satellite Account and National Accounts)

The contraction in inbound tourism expenditure (-59.4%) was also responsible for the decrease in the balance of tourism flows compared to 2019 (-63.1%) since outbound tourism expenditure recorded a less pronounced decrease (- 50%).

Picture 6. Inbound tourism expenditure, outbound tourism expenditure and balance of tourism flows (2019-2020)

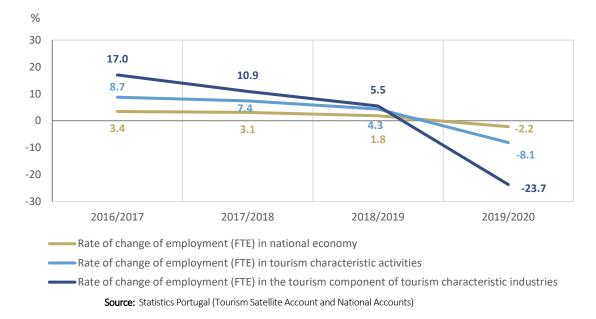


2.3. Decrease of 8.1% and 14.1%, respectively, in employment and compensation of employees in tourism characteristic activities, in the first year of the pandemic (2020)

Employment in the tourism characteristic activities decreased 8.1% compared to 2019, standing at 425,730 Full-Time Equivalents (FTE), which represented 9.1% of total national employment. This reduction was higher than that observed in the national economy (-2.2%).

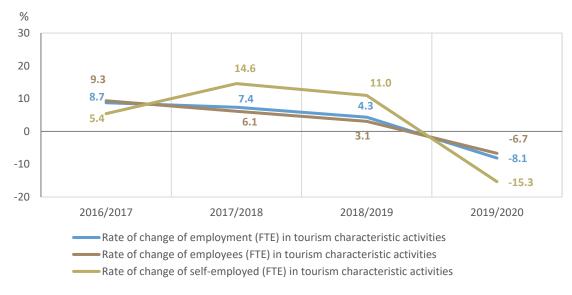
Considering exclusively the touristic component of the tourism characteristic activities, this corresponded to 4.4% of total national employment (206,691 FTE), decreasing 23.7% in 2020.

Picture 7. Rate of change (%) of total employment in the national economy, tourism characteristic activities and in the touristic component of tourism characteristic activities (2016-2020)



The reduction observed in employment in the tourism characteristic activities, in 2020, was more pronounced in the self-employed (-15.3%) than in the employees (-6.7%).

Picture 8. Rate of change (%) of total employment, employees and self-employed in tourism characteristic activities (2016-2020)

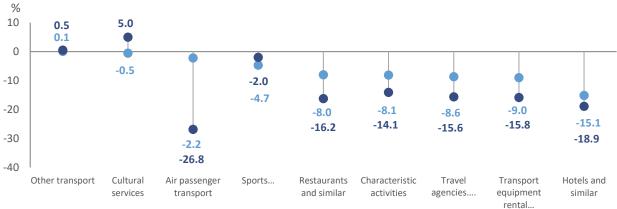


Source: Statistics Portugal (Tourism Satellite Account)

With the exception of the other transport (road, railway and water), the tourism characteristic activities showed an accentuated reduction in employment in 2020, which was more pronounced in hotels and similar (-15.1%), in passenger transport equipment rental services (-9.0%) and travel agencies and similar (-8.6%).

In general, the compensation of employees in tourism characteristic activities registered a more pronounced decrease than total employment (FTE), which is due, in part, to public policy measures to support income and employment, namely the simplified lay-off regime. The discrepancy observed in air transport stands out: -2.2% in total employment (FTE) vs. -26.8% in compensation of employees.

Picture 9. Rate of change (%) of total employment and compensation of employees in tourism characteristic activities (2019/2020)



Rate of change of employment (FTE) in tourism characteristic activities

Rate of change of compensation of employees in tourism characteristic activities

Source: Statistics Portugal (Tourism Satellite Account)

In 2020, the compensation of employees in tourism characteristic activities represented 7.6% of total compensation of employees in the national economy. Considering only the touristic component, the weight of compensation of employees corresponded to 3.7% of the national economy.

Compensation of employees in tourism characteristic activities recorded a decrease of approximately 14% in 2020, while in national economy the rate of change was null.

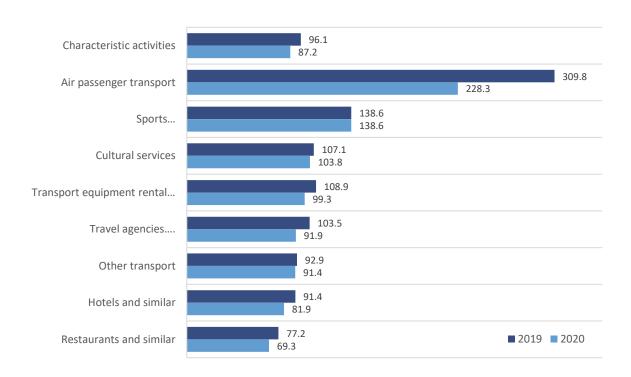
In 2020, the average compensation of employees in tourism characteristic activities was lower than the national average: -12.8% in 2020, which compares to -3.9% in 2019.

There were, however, relevant differences by activity in 2020. Only in air passenger transport (+128.3%), in sports, recreation and leisure (+38.6%) and in cultural services (+3.8%) the average compensation *per* employee was higher than in national economy.

In restaurants and similar and in hotels and similar, the gap to the national average compensation *per* employee has increased, standing at -30.7% and -18.1%, respectively.

Picture 10. Average compensation per employee index in tourism characteristic activities (2019-2020)

National economy = 100

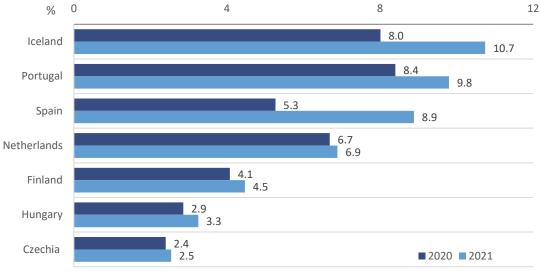


Source: Statistics Portugal (Tourism Satellite Account)

3. Weight of TCET (touristic demand) in national GDP was the second highest in 2021, for the set of European countries with available information

Considering the information available for the year 2021 for European countries (provisional or preliminary data), it was observed that Portugal was the second country with the highest relative importance of tourism demand in GDP (9.8%), being surpassed only by Iceland (10.7%).

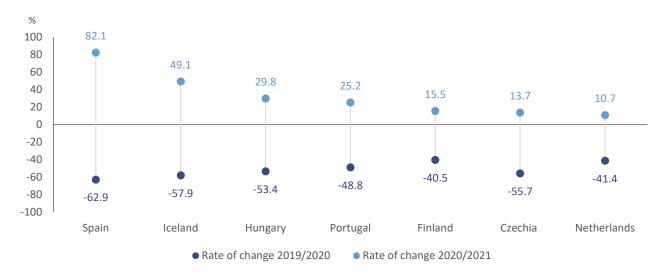
Picture 11. Weight (%) of TCET in GDP in some European countries (2020 and 2021)



Sources: Statistics Portugal (Tourism Satellite Account); Statistics Iceland; Instituto Nacional de Estadistica (España); Statistics Netherlands; Statistics Finland;
Hungarian Central Statistical Office and Czech Statistical Office

In terms of change, there was a significant recovery in tourism demand in 2021 in all European countries with available information, oscillating between 82.1% (Spain) and 10.7% (Netherlands). In Portugal, tourism demand increased by 25.2%, compared to 2020, when it had registered a decrease of 48.8%.

Picture 12. Rate of change (%) of TCET in some European countries (2019/2020 and 2020/2021)



Sources: Statistics Portugal (Tourism Satellite Account); Statistics Iceland; Instituto Nacional de Estadistica (España); Statistics Netherlands; Statistics Finland; Hungarian Central Statistical Office and Czech Statistical Office

With regard to the weight of GVAGT in the national economy GVA, there is only information available for 2020, year in which Portugal recorded the second highest relative importance of GVA generated by tourism in the national economy (4.4%), surpassed by Spain (5.3%).

Only Iceland (-73.4%) and Czechia (-49.4%) recorded a higher decrease in GVAGT than that observed in Portugal (-48.9%), in 2020.

20.0 8.1 4.4 7.6 2.4 6.9 5.3 4.4 2.3 5.3 3.2 4.0 3.2 3.9 2.3 2.9 1.7 2.8 1.5 2.7 1.7 2.4 1.6 1.9 1.3 1.2 1.0 0.0 -20.0 -7.7 -40.0 -23.9 -30.1 -33.7 -34.7-37.7 -41.7 -41.8-42.6-60.0-48.0 -48.9 -49.4 -80.0 -73.4 -100.0 Iceland Slovenia -uxembourg Portuga Vetherlands ithuania. ■ Weight (%) of GVAGT in national GVA in 2019 ■ Weight (%) of GVAGT in national GVA in 2020 GVAGT rate of change 2019/2020 (%)

Picture 13. Weight (%) of GVAGT in national GVA and rate of change (%), in some European countries (2019-2020)

Sources: Statistics Portugal (Tourism Satellite Account) and Eurostat (Tourism Satellite Accounts in Europe | 2023 edition).

4. In 2022, touristic consumption contributed 12.2% for the national GDP

By applying the Integrated Symmetric System of Input-Output Tables¹ to the main results of the TSA, it is possible to determine the direct and indirect impact of tourism activity in the national economy.

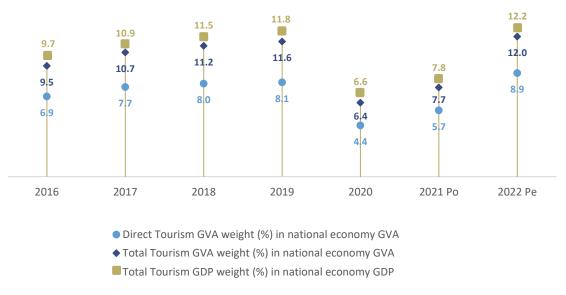
The Input-Output system, respecting the general equilibrium between aggregate supply and demand, represents the interaction between the different domestic economic activities. Thus, it allows estimating, under some assumptions², the spillover effect of tourism consumption changes to all economic activities.

It is estimated that, in 2022, tourism consumption had a total contribution (direct and indirect) of 29.2 billion euros to GDP, equivalent to 12.2% of that aggregate, and of 24.9 billion euros to the national economy GVA (12.0%). In this year, tourism GDP registered a nominal variation of 75.2%, compared to 2021, and of 15.0% compared to the pre-pandemic period (2019).

¹ The 2020 Input-Output Tables were applied to the definitive TSA results for 2020. The 2017 Input-Output Tables were applied to the provisional and preliminary results of the TSA for 2021 and 2022, respectively.

² Among these assumptions are highlighted: constant technical coefficients, no economies of scale, inexistence of changes in relative prices and no substitution effects, unlimited productive capacity; homogeneous goods and absence of financial restrictions.

Picture 14. Evolution of the weight (%) of GVAGT (direct), total tourism GVA (direct and indirect) and total tourism GDP in the national economy (2016-2022)

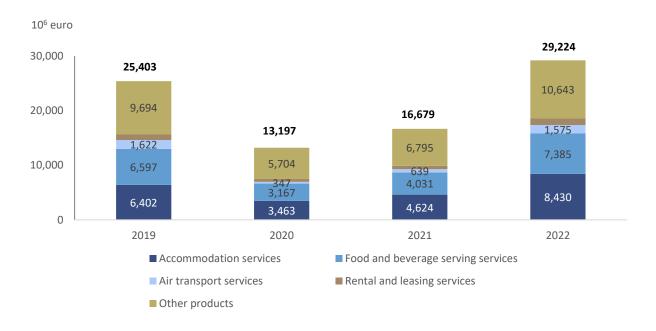


In 2022, the intense recovery of economic activity, which began in 2021, continued, with GDP growing, in nominal terms, 11.4% and 7.1%, respectively.

In the same way that during the pandemic, the sharp reduction in tourism activity penalized the GDP evolution, in 2022 an opposite trend was observed, with tourism being decisive for the growth of economic activity, having been responsible for 5.8 p.p. of the 11.4% nominal GDP growth.

The most relevant products to tourism GDP, such as accommodation, restaurant and similar services, transport (especially air passenger transport) and rental services, which were the ones that suffered the most from the economic effects of the COVID-19 pandemic, showed increases between 146.5% (air transport) and 82.3% (accommodation services), compared to 2021.

Picture 15. Evolution of the main products contributing to the tourism GDP (2019-2022)





SUSTAINABLE GOALS and Tourism Satellite Account





TSA provides information for the construction of indicators <u>8.9.1 - Tourism direct GDP as a proportion of total GDP and in growth rate (proxy data)</u> and <u>12.b.1 - Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability</u>, which monitor targets 8.9 and 12.b of the Sustainable Development Goals (SDG).

Table 2. TSA indicators in SDG (8.9.1 and 12.b.1)

SDG	Indicator	2016-2022	2021-2022	
9.0.1	ලිVA generated by tourism as a proportion of total GVA	•	•	
8.9.1	Growth rate of GVA generated by tourism			
12.b.1	Implementation of standard accounting tools to monitor the		0	
	economic and environmental aspects of tourism sustainability			

Favourable trend

No evaluation

Source: Statistics Portugal (Thematic folder Sustainable Development Goals)

METHOODOLOGICAL NOTES

The Tourism Satellite Account (TSA) has as methodological framework the Eurostat's "<u>European Implementation on Tourism Satellite Accounts</u>" and the "<u>Tourism Satellite Accounts</u>" and the "<u>Tourism Satellite Accounts</u>" of the United Nations, OECD, Eurostat and World Tourism Organization (UNWTO).

On the other hand, and since the TSA is a project consistent with the System of National Accounts, its concepts, classifications and methodological references, such as the United Nations System of National Accounts (SNA2008) and the European System of Accounts (ESA2010), are essential.

The United Nations International Recommendations for Tourism Statistics 2008 is the main conceptual reference of International Tourism, ensuring the consistency of the TSA with the Tourism Statistical Information Subsystem, for concepts and definitions, as well as with other subsystems such as the Balance of Payments. Reference is also made to the publications "Measuring the role of tourism in OECD economies. The OECD manual on tourism satellite accounts and employment da OCDE e Designing the Tourism Satellite Account (TSA)" and "Methodological Framework" UNWTO.

TCET and GVA generated by tourism

Tourism consumption in the Economic Territory (TCET) includes:

- The inbound tourism expenditure, which corresponds to final consumption expenditure made by non-resident visitors in Portugal
- The domestic tourism expenditure, which corresponds to the final consumption expenditure of resident visitors traveling within Portugal, in places other than their usual environment, as well as to the domestic tourism expenditure made by resident visitors travelling to a different country (domestic component of outbound Tourism)
- The other components of tourism consumption, which include the housing services of second homes on own account, the financial intermediation services and those components of tourism consumption that cannot be broken down by type of tourism and visitor. The other components also include products whose expenditure is made by the General government and whose consumption has individual nature.

The Gross Value Added generated by tourism (GVAGT) corresponds to the share of GVA that is generated by the provision of goods and services to visitors in Portugal, whether resident in the country or not. This value can be considered as the contribution of the tourism activity to the GVA of the national economy.

Estimates for 2021 and 2022

The estimates for 2021 and 2022 include four main aggregates: TCET and, using the Input-Output Tables, GVAGT, total tourism GVA and total tourism GDP.

The components of the 2021 and 2022 TCET were estimated from the projection of the respective preliminary values of the 2020 and 2021 TSA, based on the indicators already available, most suitable for each component of the TSA:

- Inbound tourism expenditure has as its main data source the Balance of Payments, the credit items of Travel and Passenger Transport³.
- Domestic tourism expenditure the main data sources used were the Survey on guest stays in hotel establishments and other accommodations, the Travel Survey of Residents and the Consumer Price Index (CPI). These sources were combined according to the nature of the TSA aggregates, that is, according to the purpose of the trip (personal or professional) and the main destination of the trip (Portugal or abroad). Statistics from the Portuguese Car and Truck Rental Association (ARAC) were also used.

For 2021, the Simplified Business Information (SBI) and the provisional versions of the Portuguese National Accounts (PNA) were also used, in particular the estimates by industries.

- Other components of tourism expenditure
 - Rents of own seasonal housing: PNA, Housing Price Index and the CPI.
 - Remaining components: PNA, namely the institutional sectors' estimates, the data from the Government budget (General State account), the accounts for General Government and the TSA aggregates, previously estimated, given the more indirect nature with regard to tourism of these components.

Data Revisions

The revisions of the TSA resulted essentially from the revisions of the main sources of information, which released revised data, namely the Balance of Payments, the National Accounts, the SBI, sources of fiscal information and statistics more directly related to tourism, namely the Balance of Payments and some Statistics Portugal surveys.

With regard to the 2020 GVAGT, the difference between the final results, the provisional results (released on June 27, 2022) and the first estimate (released on May 14, 2021) was essentially due to the fact that air passenger transport registered a negative value (an atypical situation observed in the pandemic context), in line with the final results of the National Accounts for the GVA of the respective industry (released on 23 September, 2022).

It should be noted that the first estimate and the provisional results of the GVAGT for 2020 were estimated using the Input-Output tables system, and the table for the year 2020 was released by the National Accounts on December 19, 2022.

³ This item refers exclusively to international transport.

Table 3. TSA revisions (2020 and 2021)

Year	Indicator	First estimate	Provisional value	Definitive value	Diference between first estimate and provisional value (milion euro or p.p)	Diference between provisional value and definitive value (milion euro or p.p)
2020	GVAGT (million euro)	8,105	8,382	7,708	277	-674
	GVAGT (Weight % in national GVA)	4.6	4.8	4.4	0.2	-0.4
	TCET (million euro)	16,273	16,754	16,847	481	93
	TCET (Weight % in national GDP)	8.0	8.4	8.4	0.4	0.0
	Total GVA (miliion euro)	10,903	11,319	11,121	416	- 198
	Total GVA (Weight % in national GVA)	6.2	6.5	6.4	0.3	-0.1
	Total GDP (million euro)	12,813	13,207	13,197	394	- 10
	Total GDP (Weight % in national GDP)	6.3	6.6	6.6	0.3	0.0
2021	GVAGT (million euro)	10,671	10,601	х	-70	//
	GVAGT (Weight % in national GVA)	5.8	5.7	х	-0.1	//
	TCET (million euro)	21,334	21,097	x	-237	//
	TCET (Weight % in national GDP)	10.1	9.8	x	-0.3	//
	Total GVA (miliion euro)	14,422	14,228	x	-194	//
	Total GVA (Weight % in national GVA)	7.9	7.7	х	-0.2	//
	Total GDP (million euro)	16,842	16,679	x	-163	//
	Total GDP (Weight % in national GDP)	8.0	7.8	х	-0.2	//

Some adjustments were also introduced in the TSA results, referring to the period between 2016 and 2019, which are duly indicated in the tables available on the Statistics Portugal website (E.2.1.5 - Production Account; E.2.1.6 - Domestic supply and tourism consumption on the economic territory and E.2.1.9 - Main indicators). The impact on the main aggregates of the TSA was null or not very significant.

These adjustments are essentially due to the change in the presentation of information on distribution margins in the hotels and similar, and to an upward revision of estimated values for water transport, taking into account the results of the 2019 TSA of the Autonomous Region of Madeira, elaborated by the Regional Directorate of Statistics of Madeira.

CONVENTIONAL SIGNS

Pe: First estimate - Preliminary data

Po: Provisional value

//: Non applicable

X: Non available

ACRONYMS AND ABBREVIATIONS

ARAC Portuguese Car and Truck Rental Association

CPI Consumer Price Index

ESA 2010 European System of Accounts 2010

Eurostat: Statistical Office of the European Union

FTE Full Time Equivalent

GDP: Gross Domestic Product

GVA: Gross Value Added

GVAGT: Gross Value Added generated by Tourism

OECD: Organisation for Economic Co-operation and Development

p.p.: Percentage points

PNA Portuguese National Accounts

SBI Simplified Business Information

SNA 2008 System of National Accounts 2008

TCET Tourism Consumption in the Economic Territory

TSA Tourism Satellite Account

UNWTO World Tourism Organization