

PILOT TOURISM SATELLITE ACCOUNTS FOR GREECE: RESULTS, ISSUES AND NEEDS

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This paper summarizes the main results and data issues of the first Tourism Satellite Accounts (TSA) pilot project for Greece, which is one of the few countries in Europe which still have not developed TSA, depriving policy makers and the scientific community of a highly relevant tool for measuring tourism's direct economic impact. The EU funded project involved the documentation of available data sources relative to their consistency with TSA-concepts, identification of data gaps, and recommendations for improvements. From establishing the TSA-Tables, total expenditures of inbound, domestic, outbound and internal tourism as well as their structure by consumption categories are defined, which constitutes the first step to measure the impact triggered by tourism demand. The results show how crucial it is for tourism analysis to properly measure all components included in tourism consumption, and to separately treat overnight from same-day visitors, parameters which are not yet considered in current practice of Greek tourism statistics.

Keywords: *Tourism Satellite Accounts (TSA), tourism expenditure, tourism statistics, pilot exercise, Greece, data issues.*

INTRODUCTION

Tourism Satellite Accounts (TSA) are an internationally accepted framework for the measurement of tourism's direct impact on the economy. Greece is one of the few countries in Europe that still has not developed TSA, despite the fact that tourism is a significant driving force for the Greek economy. Thus policy makers and scientific community are deprived of an important and, given the current economic crisis, urgently needed measurement tool.

Studies on special visitor activities (Diakomihalis and Lagos 2008; Diakomihalis 2007)ⁱ, theses (Hatzimarinakis 2011; Giannopoulos 2010; Diakomihalis 2006), evaluation reports (Zacharatos 2004) and experimental approaches at local and regional level (the example of Hersonissos Municipality in Creteⁱⁱ; Giannopoulos and Boutsinas 2014, pp. 7) have been undertaken so far, but never has a fully-fledged TSA been developedⁱⁱⁱ. More importantly, a previous attempt for the establishment of a national TSA^{iv} was conducted during 2006-08 under a EU funded programme^v, yet never reached the level of successfully rendering the accounts operational (Hackl, P. and Hatzimarinakis, S. 2017a^{vi}).

During 2016-17, a pilot project for the compilation of a Greek TSA was held under the Structural Reforms Support Service (SRSS) provided by the EU^{vii}. The objective was to evaluate the available data sources in terms of their consistency with TSA-concepts, to perform a pilot compilation of the core TSA-Tables and to suggest the appropriate institutional agent for a routine-wise implementation. The project involved a close collaboration with main data producers, namely the Hellenic Statistical Authority (ELSTAT) and the Bank of

Greece (BoG), along with the examination of international experience (Eurostat 2009a; Eurostat 2009b; Eurostat 2014; UN 2016) using as framework reference the most recently revised standards for TSA (UN, et al. 2010 (herein referred to as TSA:RMF 2008)) and tourism statistics (UN and WTO 2010 (herein referred to as IRTS 2008)). The main output consists of the comprehensive documentation of TSA-relevant database including related gaps and deficiencies, of proposals for improvements of these data, and of pilot TSA-Tables related to tourism consumption of the year 2015. The pilot character of the tables is due to the fact that certain data issues are not resolved and hence some of the used data are provisional; final TSA-Tables compiled in the future might differ in some results from the ones obtained in this project.

An important output of the pilot project is the enhancement of the apprehension to what extent TSA requirements are met. The main issues of concern related to the TSA-relevant database and feasible treatments are discussed. An analysis of tourism expenditures based on the TSA-Tables 1 to 4 is presented. Results show how crucial it is for tourism analysis to properly measure all components of tourism consumption such as the international transport of passengers and the imputed value of using owned vacation homes, and to separately treat overnight from same-day visitors. Finally, the necessary steps are discussed for transforming the pilot exercise into a routine-wise TSA for Greece.

THE SCOPE OF TSA FRAMEWORK

TSA is an extension of National Accounts (NA) (European Commission et al. 2009, par 29.89-29.101; European Commission 2013, par. 22.123-22.129), a framework for the measurement of various economic variables (production, consumption, capital investment, income, and other). Tourism data are dispersed within NA, and TSA, operating as a satellite, gathers all related data for

measuring direct effects of internal Tourism Consumption (CT), i.e., the immediate effects on macroeconomic variables of the (additional to that of the resident) demand for goods and services activated by tourism.

According to TSA:RMF 2008, TSA consists of the following ten tables:

Table 1: Inbound tourism expenditure by products and classes of visitors

Table 2: Domestic tourism expenditure by products, classes of visitors and types of trips

Table 3: Outbound tourism expenditure by products and classes of visitors

Table 4: Internal tourism consumption by products

Table 5: Production accounts of tourism industries and other industries (at basic prices)

Table 6: Total domestic supply and internal tourism consumption (at purchasers' prices)

Table 7: Employment in the tourism industries

Table 8: Tourism gross fixed capital formation of tourism industries and other industries

Table 9: Tourism collective consumption by products and levels of government

Table 10: Non-monetary indicators

Product analysis is based on the degree of relevance for tourism consumption; products typically included in tourism consumption are defined as *Tourism Characteristic Products* (TCP)^{viii}.

The activities that typically produce TCPs as their principal output are defined as *Tourism Characteristic Activities* (TCA). A

tourism industry is composed of all establishments that serve visitors directly and whose main activity is a particular TCA.

The international TSA framework identifies 32 activities (4-digit codes of Nace Rev2^{ix}) and 76 products (6-digit codes of CPA 2008^x) for international comparison (Hatzimarinakis 2011, appendix 2).

Country-specific TCP and TCA which are characteristic for tourism consumption particularly in the country of reference may also be included in the analysis of products and activities.

Also included are all other consumption products and activities that are not considered as tourism characteristic, *Tourism Connected Products* (TCnP), which do not comply to the TCP criteria yet are of importance for tourism analysis, and *Non-Tourism Related Products*, which refer to all other consumption products supplied in the economy. Additionally, included are non-consumption products; *valuables* that might be acquired by visitors during their trips.

COMPILATION OF TSA-TABLES FOR GREECE: GENERAL REMARKS

Discussed are the most crucial issues concerning the compilation of the TSA-Tables, such as the available breakdowns of expenditures and products based on existing data and proposals for improvement, components and issues to be taken into consideration in order to precisely measure inbound and outbound tourism expenditures from the Greek Balance of Payments, the treatments applied on various issues, such as domestic expenditures in outbound trips, same-day visitors and reservation services, and important issues remaining to be resolved, such as the measurement of imputed value for accommodation on own account and tourism shares.

In the TSA project, priority was given to compile the core tables for the evaluation of tourism's economic contribution to Greece; a pilot exercise was conducted for TSA-Tables 1 to 6. Based on the availability of the most recent and comprehensive data, 2015 was decided to be the reference year for the pilot exercise. The main data sources for the Greek TSA-Tables are:

- the Balance of Payments (BoP) and in particular the Travel Item and Transport Item for Passengers; the Frontier Survey and the

Cruise Survey are used for the compilation of the former. These sources are used for TSA-Tables 1 and 3.

- Survey of Qualitative Characteristics of Resident Tourists (Vacation Survey (VS) until 2014 and as such referred to in this report) as the main source for TSA-Table 2,
- Household Budget Survey, used for further product breakdown in TSA-Tables 2, 3, and 4,
- Supply-Use Tables, base for TSA-Tables 5 and 6.

Owner of the Balance of Payments data is the Bank of Greece, ELSTAT that of the other sources.

Available Breakdowns And Proposals For Improvement

Breakdowns of expenditures from demand side statistics and of product and activities from supply side statistics are available, yet in a form and quality that does not fully match TSA requirements. This affects the structure of all TSA-Tables.

In particular, regarding **demand-side statistics** the following breakdowns of expenditures are provided:

- The *Vacation Survey* (VS) provides a breakdown of total domestic and outbound expenditures into a) accommodation, b) restaurants, cafes, bars, etc., c) transport, d) recreational and sport activities, e) cultural activities, f) purchases of various goods. Further breakdowns have been proposed within the TSA-project to ELSTAT, e.g., inclusion of a residual category of expenditures, a refined breakdown of purchases of goods between edible and non-edible retail goods.
- In the *Frontier Survey* (FS), total inbound and outbound expenditures are broken down into a) accommodation, b) restaurants and bars, c) transportation (local), d) recreational, cultural and sport activities, and e) purchases and other expenditures (goods and services). It should be noted that expenditures *made in destination* and *in the home country* prior

of departing for the trip are separately treated in the FS methodological framework. The latter expenditures are evaluated as a lump sum after having deducted all expenditures that are not attributed to the destination economy. A modeling procedure was recommended within the TSA project to define the components included in this lump sum based on the distribution of overnights over the different patterns of answers in the relative questions of the FS questionnaire. The application of this procedure results in a plausible structure of expenditures made in the home country; these relate to *accommodation* and *other services* (car rental, guided tours etc.). Due to the fact that this part of the expenditures is based on a modelling procedure, totals for a) *accommodation*, b) *transportation* and c) *recreational, cultural and sport activities* may be over- or underestimated to a rather limited extent. This lump sum accounts for one third of the total inbound and almost 10% of total outbound expenditures. Outbound expenditures are further broken down in the TSA-Tables by HBS factors, as discussed below. No respective information is available for inbound expenditures, limiting the possibility of a more detailed analysis; supplementary research should provide further details.

- The *Household Budget Survey* (HBS) provides an analytical breakdown of domestic and outbound expenditures regarding a) accommodation (e.g., rented dwelling, hotels, rented rooms, camping), b) food and beverage serving services (restaurants, café-cafeterias-patisseries, fast food, etc.), and c) transportation (detailed rail, road, sea, air transportation). These household consumption factors are derived from section D for overnight tourism trips in HBS and are useful to obtain a more precise allocation of expenditures to the various broad categories of the TSA product classification. Further breakdowns on additional consumption categories have been proposed to ELSTAT, mainly

regarding *Recreational and sporting services* (COICOP-HBS^{xi} 09.4.1) and *Cultural activities* (COICOP-HBS 09.4.2).

Concerning the **supply-side statistics**, the most analytical *Supply and Use Tables* (SUT) of the year 2015 (provisional) have been used, providing a breakdown of 80 activities and 130 products, used as data input for TSA-Tables 5 and 6. Yet, further breakdowns are required in order to comply with the TSA classification of TCPs and TCAs; e.g., passenger services separated from freight services are not available. This needs to be elaborated by the national account experts of ELSTAT using a suitable structure, e.g., one obtained from *Structural Business Statistics* (SBS) for transport services. TSA-Tables 5 and 6 remain in a preliminary stage; further development requires the input of background information which is available in the national account division of ELSTAT.

Due to the lack of appropriate breakdowns of expenditures, the following two categories of products are possible to be distinguished in the TSA-Tables:

- a) *Internationally Comparable Tourism Characteristic Products (TCP-IC), as defined by the TSA classification of TCAs and TCPs*
- b) *Other Products, which include other consumption and non-consumption products supplied by the economy, i.e. Country-Specific Tourism Characteristic Products of Greece (TCP-GR), Tourism Connected Products (TCnP), Non-Tourism Related Products as well as Non-consumption products (valuables), which need to be further investigated in order to be distinguished.*

Future specification of country specific categories, such as *TCP-GR*, and *TCnP* will result in a further breakdown of *Other Products* in the TSA-Tables according to TSA specifications.

A respective but not exhaustive list of products and related activities has been proposed within the TSA-project, as a base for further investigation. Regarding *TCP-GR*, for goods the list includes

the retail trade services of souvenirs and arts (CPA 2008: 47.00.69);
for services, proposed are:

- a) rental services of sea and coastal water vessels for passengers with operator (CPA 2008: 50.10.20),
- b) rental services of passenger air transport equipment with operator (CPA 2008: 51.10.20),
- c) rental and leasing services of water transport equipment (CPA 2008: 77.34.10), and
- d) rental and leasing services of motorcycles, caravans and campers (CPA 2008: 77.39.13).

As *TCnP*, it is proposed to specify

- a) urban and suburban transportation services (CPA 2008: 49.31.1 and 49.31.2),
- b) retail trade services of automotive fuel (CPA 2008: 47.00.81), and
- c) bridges and tunnel operation services (CPA 2008: 52.21.23), i.e. tolls.

Significant Issues For The Measurement Of Tourism Expenditures From The Greek Balance Of Payments

Policies based on traditional estimates of tourism expenditures are likely to be misguided, as significant parameters of tourism measurement are not considered in current practice. For precise measurement of total inbound and outbound tourism expenditures from the Greek BoP the following three issues should be taken into account.

- INCLUSION OF INTERNATIONAL PASSENGER TRANSPORT SERVICES IN EXPENDITURE MEASUREMENTS

Prevailing practice in Greece for measuring inbound and outbound tourism expenditure is to solely consider the *Travel Item* data of the

BoP, omitting to include the value of *International Passenger Transport Services*, that is BoP's receipts and payments on transport services to and from the destination, respectively; this part of tourism expenditures is allocated to the destination economy and is separately recorded in the BoP. Not accounting for the international part of transport services misreports the actual volume of total receipts and payments due to tourism; for the year 2015, these services account for 9,3% (1.442,7 mio €) of total inbound and for 36,2% (1.153,6 mio €) of total outbound expenditures. Their contribution significantly affects the average expenditures per overnight and per individual trip as illustrated in below tables.

| Table 1: Inbound Travel Expenditures | | | |
|---|-----------------------------|--|---------------|
| 2015 | Only Travel Receipts | Receipts for Travel + Int. Passenger Transport Services | Δ in % |
| Average per overnight | 75,1 € | 83,5 € | 11% |
| Average per individual trip | 540,9 € | 596,2 € | 10% |
| Total expenditures (in mio) | 14.125,8 € | 15.568,5 € | 10% |

| Table 2: Outbound Travel Expenditures | | | |
|--|-----------------------------|--|---------------|
| 2015 | Only Travel Payments | Payments for Travel + Int. Passenger Transport Services | Δ in % |

| | | | |
|-----------------------------|-----------|-----------|-----|
| Average per overnight | 50,3 € | 85,4 € | 70% |
| Average per individual trip | 323,9 € | 507,2 € | 57% |
| Total expenditures (in mio) | 2.037,4 € | 3.191,0 € | 57% |

SEPARATION OF NON-VISITORS FROM TRAVELLERS

The BoP framework records transactions between residents and non-residents, irrespective of whether a traveller is considered a visitor or not; both *Travel* and *Transport* refer to the broader definition of traveller; transactions of non-visitors such as boarder and seasonal workers as well as students and patients staying at destination longer than a year, should be deducted from the BoP *Items* in order to comply with the TSA specifications of the “visitor” definition. Due to lack of appropriate data non-visitors cannot yet be distinguished in the pilot TSA-Tables for Greece. Starting with 2016, the *Frontier Survey* questionnaire contains a question for identifying boarder and seasonal workers; this will offer a good base for a proper treatment in future.

- SEPARATE TREATMENT PER CLASS OF VISITORS-TRAVELLERS

Another crucial issue for more precise measurements in expenditure analysis is to separately treat classes of travellers, in particular the overnight and the same-day travellers. Without doing so, current practice misreports the particular contribution of overnight travellers, which are in the focus of the dominant tourism research and decision making in Greece. A per class segregation of data shows great variation in expenditure averages compared to a common

treatment, as shown below in Table 3 and Table 5. This is due to a much higher share of same-day travellers on the number of trips than on the expenditures; *same-day* and *cruise travellers* account for 4% of total inbound expenditures (receipts), yet for 15% of total inbound trips, and *same-day travellers* account for 6% of total outbound expenditures (payments), yet for 50% of total outbound trips.

Treatment Of Same-Day Visitors' Expenditure Structure

Same-day visitors have a significant impact on visitor flows in Greece; a special treatment needs to be applied; as mentioned above, a common treatment of same-day and overnight visitors results in misreporting average expenditures per overnight and per trip.

According to VS dataset, expenditures of same-day visitors in domestic trips account for 21% (0.4 bn €) of total domestic tourist expenditures (1.9 bn €) in Greece. The structure yet of expenditures over the products is not available from the TSA-relevant sources (VS and HBS), posing limitations to the compilation of TSA-Table 2. When such case occurs, it is widely acceptable in international good practice and is also applied in the Greek case, to assume that same-day visitor has the same expenditure habits as the overnight visitor, yet with some necessary adjustments; consumption structure of same-day visitor is defined by:

- a. not accounting for accommodation expenditures,
- b. applying appropriate transport treatment, in particular excluding expenditures on non-land transport means (it is reminded that HBS factors are used to further breakdown transport expenditures of the overnight visitors), and
- c. assuming, due to lack of information, that no reservation services^{xiii} are involved in same-day visits.

Regarding outbound trips, a structure of same-day travellers' expenditures over the consumption categories is obtained from the FS dataset. For a further product breakdown, expenditure factors from

the HBS for outbound trips are applied. Special care is needed for transportation services, as in the case of domestic same-day visits. Within the adaptation procedure of the same-day expenditure structure, in order to be consistent with the conceptual framework of *Travel Item*, it is necessary to exclude any COICOP-HBS code related to outbound trips that corresponds (or may correspond) to international passenger services, which are not recorded in the *Travel Item*, or does not (or may not) correspond to a *resident to non-resident* transaction, which is out of the scope of the BoP. Additionally, no domestic expenditures in outbound trips are included in Greek TSA-Table 3 due to lack of relevant data, which shall be provisional until further investigation.

Main Issues Remaining To Be Resolved

Remaining to be compiled are also the other tables of TSA (7 to 10). Data sources are available for TSA-Table 7 (employment), such as Erganis (information system of the Ministry of Labour), Social Security Institution (IKA) and Labour Force Survey of ELSTAT, as well as for TSA-Table 10 (non-monetary indicators), such as the registers kept by the Ministry of Tourism (register of tourism enterprises - MHTE) and the Hellenic Chamber of Hotels, but need to be reviewed and configured according to TSA specifications. TSA-Table 8 regarding *Tourism gross fixed capital formation* and TSA-Table 9 for *Tourism collective consumption* are being experimentally compiled worldwide and may be investigated at a later stage after a study on international experience.

For the compilation of TSA-Tables 1 to 6, the core objective of the TSA-project, the most crucial issues are presented below.

- TREATMENT OF RESERVATION SERVICES (RS) AND RESIDENCY OF SERVICE PROVIDERS

TSA requires that services typically provided by travel agencies, tour operators and other providers of reservation services (RS), should be treated separately from the rest of tourism consumption services that are purchased through their intermediation as this affects the breakdown of products and the global value of tourism consumption by form of tourism (TSA:RMF 2008, annex 3).

In the compilation of the TSA-Tables, such treatment for RS has been applied where related information was available. The obtained values, however, are underestimated to an unknown extent, because:

- The VS misreports expenditures on products that have been intermediated, yet a refined approach of the issue via existing questionnaire structure regarding the reservation mode may render the distinction of RS from the rest of the services feasible.
- The FS makes such deductions following its own standard methodology. In particular for package trips paid in visitor's home country; from the package tour's total costs (as declared by the respondent), 10% (the percentage agreed upon within the TGT^{xiii}) are deducted for the payment of the various services supplied^{xiv}. However, RS are not deducted from the expenditures made in destination; these correspond to 66% and 9% of total travel receipts and payments, respectively, as no related information is provided in the FS dataset. The issue needs to be further investigated.

Summarizing, open issues for further investigation regard both the identification of the RS gross margin, as well as the residency status of service providers; expert opinion, administrative data and mini surveys are options to be considered for resolution. In the pilot tables, lack of information has led to a simplified yet provisional approach regarding the residency of RS providers; all RS in inbound trips are assumed to be non-residents and all RS in domestic and outbound trips as residents. This approach is followed by other countries as well in cases where no reliable information is available. It should also be noted that no treatment has been applied in the case of non-resident carriers providing scheduled domestic flights; this should also be

included in future investigation. According to TSA specifications, related expenditures, though activated within domestic trips, should actually be allocated to outbound expenditures.

- **EVALUATION OF IMPUTED VALUE RELATED TO VACATION HOMES**

Measurements in other countries show that other components of tourism consumption (measured in column 4.2 of TSA-Table 4), of which one component is the imputed rent for using owned vacation homes, contribute significantly to the broader notion of tourism consumption. These components have an average share on Total Internal Tourism Consumption ranging from about 10%-15% (France, Spain, Slovakia, Finland, Estonia, Poland) up to 30% in some cases (Italy) (Hackl, P. and Hatzimarinakis, S. 2017b, pp. 20-22; Eurostat 2013, pp. 16; Eurostat 2017, pp. 18).

An appropriate treatment of the imputed value of user owned vacation homes is a significant issue for the Greek TSA, as this type of accommodation is used by a substantial 17% of both domestic and inbound visitors according to VS and FS datasets. Regarding the case of residents, HBS can be the source of information for estimating the imputed rent for secondary dwellings either owner occupied or provided free of charge or at a reduced rent. A precise estimation will depend on an appropriate distinction of vacation homes from other secondary homes. An estimation of the respective imputed value for non-residents is very crucial and also remains to be resolved.

- **RECONCILIATION OF DEMAND AND SUPPLY AND DEFINITION OF TOURISM SHARES**

The confrontation and reconciliation between domestic supply and internal tourism consumption is in the core of TSA methodology. TSA-Table 6 is where such reconciliation is made; tourism shares are defined as the share of internal tourism consumption in each component of supply. The total value of internal tourism consumption

of a particular product equals the value of all tourism shares for that product supplied by various activities, either domestically produced or imported. Based on these shares, the TSA indicators which measure the direct economic impact of tourism, are defined, viz. *Tourism Ratio* on total domestic supply of products^{xv}, *Tourism Direct Gross Value Added* (TDGVA)^{xvi} and *Tourism Direct Gross Domestic Product* (TDGDP)^{xvii}.

Based on the provided analysis of 80 activities and 130 products of the Greek SUT 2015 (provisional), codes directly corresponding to TCPs and TCAs or including them due to lack of further breakdown have been identified and distinguished, following the structure of the TSA-Table as recommended in TSA:RMF 2008. The TSA-Table 6 needs to be completed by the national account experts of ELSTAT who possess all the necessary background information for the complex procedure of reconciling tourism consumption and domestic supply and properly distributing tourism shares over the various components of supply; guidelines for such a task have been provided by the TSA-project according to the TSA:RMF 2008 specifications.

EXPENDITURE ANALYSIS AND RELATED DATA BASED ON THE PILOT TSA-TABLES

This section summarizes the main results of the pilot TSA-Tables for Greece and the related database. Expenditures by the forms of tourism and classes of visitors/traveller, related expenditure structures by product, as well as the number of overnights and trips are in the focus. A simplified version of TSA-Tables produced in the TSA project is available in a dropbox link created for public use (see Hackl, P. and Hatzimarinakis, S. 2017c).

For a better understanding of the presented results, it is recalled that inbound and outbound expenditures actually refer to travellers, as non-visitors cannot yet be distinguished from the tourism related items of the BoP. It is also noted that the numbers of inbound and outbound overnights in Table 3 and Table 5 do not coincide with those

published on BoG’s website; BoG assigns one overnight to each same-day visit^{xviii} for reasons of rendering calculations feasible.

For the year 2015, the total internal tourism expenditures in Greece amounted to 17.466 million €. The share of inbound expenditures accounted for 89% of total (15.569 mio €) and of domestic expenditures for 11% (1.898 mio €). Outbound expenditures amounted to 3.191 million €.

In inbound travel, as shown in Table 3, overnight travellers account for 85% of trips and 96% of expenditures. Yet same-day travellers record a higher average spending per day (99 vs. 82 €). The average duration of trips is 8.3 days for overnight travellers. It is noted that overnights of inbound cruise travellers refer to those outside the cruise ship, on Greek territory before embarkation; the *Travel Item*, which is one of the main sources, does not record overnights on ships as cruise carriers are dominantly owned by non-resident enterprises and the non-resident to non-resident transactions are out of the scope of both the BoP and the TSA.

International comparison shows that the **average expenditure per overnight trip** recorded in Greece (678€) is one of the highest among European countries, yet the **average expenditure per night of overnight trip** (82€), an indicator of the spending capacity of visitors, is one of the lowest; this controversial performance is due to a prolonged length of stay (8.3 days), which is higher in Greece compared to other countries. Average expenditure on same-day trips is also one of the highest among European countries (Hackl, P. and Hatzimarinakis, S. 2017b, pp. 17-19; Eurostat 2013, pp. 11; Eurostat 2017, pp. 12).

Table 3: INBOUND TRAVEL – main figures

| | Overnights (in thousands) | Average Exp. per Overnight | Trips (in thousands) | Average Exp. per Trip | Total Expenditures (in mio) |
|------|---------------------------------|----------------------------------|----------------------------|--------------------------------|-----------------------------------|
| 2015 | | | | | |

| | | | | | |
|----------------------|----------------|---------------|---------------|----------------|-------------------|
| | | | | | |
| Overnight Travellers | 183.509 | 81,6 € | 22.081 | 678,0 € | 14.971,7 € |
| Same-day Travellers | - | - | 1.519 | 98,9 € | 150,2 € |
| Cruise Travellers | 2.985 | 149,6 € | 2.515 | 177,6 € | 446,6 € |
| TOTAL | 186.493 | 83,5 € | 26.114 | 596,2 € | 15.568,5 € |

Regarding domestic tourism, Table 4 shows that the overnight visitors contribute a 78% to total domestic tourism expenditures, yet account for only 28% of total domestic trips as same-day visits are dominant. Average duration of the overnight trip is 11.8 days. It should be noted that the average expenditure per overnight is very low compared to that of the inbound overnight traveller, which may predominantly be explained by the following two facts:

- a) the reduced capacity for spending due to the negative effects of the economic crisis on salaries and wages, and,
- b) the widespread use of non-market accommodation as the main type of accommodation; according to VS data, 75% of overnight visitors use non-market accommodation, the 42% of which relates to owned vacation homes and the 33% to accommodation provided for free by relatives or friends.

Compared to other countries (58%), Greece records a very low share (11%) of domestic tourism expenditures over internal expenditures. Due to the fact that domestic expenditures on domestic trips are not separately reported from domestic expenditure on outbound trips in international reports for TSA, in combination with the fact non-monetary data (number of trips and overnight stays) only cover trips/stays in the country of origin, no reliable international comparison is available regarding average domestic expenditures per

trip/overnight (Hackl, P. and Hatzimarinakis, S. 2017b, pp. 19-20; Eurostat 2013, pp. 14; Eurostat 2017, pp. 15-16).

Table 4: DOMESTIC TOURISM – main figures

| 2015 | Overnights (in thousands) | Average Exp. per Overnight | Trips (in thousands) | Average Exp. per Trip | Total Expenditures (in mio) |
|-------------------|--|---|-------------------------------------|--------------------------------------|--|
| Overnight Visitor | 61.415 | 24,2 € | 6.224 | 238,3 € | 1.483,6 € |
| Same-day Visitor | - | - | 15.874 | 26,1 € | 414,3 € |
| TOTAL | | | 22.098 | 85,9 € | 1.897,9 € |

In outbound travel, the overnight travellers contribute to total outbound expenditures far more substantially than the same-day travellers (94% as opposed to 4%), even though they have an equal share in the total number of trips. Additionally, the average duration of an overnight trip is 9.9 days. Average expenditure per overnight is equal to that of the inbound traveller. The fact that average expenditure per trip is higher compared to inbound travellers does not by any means denote that Greek traveller spends more: the respective values include international transportation to/from Greece, which is mainly carried out by non-resident carriers; such interactions between the travellers and the carriers are recorded in the Greek BoP and TSA when made by residents in outbound trips as a resident to non-resident transaction, yet not recorded in the Greek Statistical System when made by inbound travellers as a non-resident to non-resident transaction, since the domestic economy is not the final beneficiary.

Compared to other countries (Eurostat 2013, pp. 17; Eurostat 2017, pp. 20), Greece records an average performance regarding the

average expenditure per same-day trip (58€), per night of overnight trip (81€) and per trip (507€).

Table 5: OUTBOUND TRAVEL – main figures

| 2015 | Overnights (in thousands) | Average Exp. per Overnight | Trips (in thousands) | Average Exp. per Trip | Total Expenditures (in mio) |
|----------------------|---------------------------------|----------------------------------|----------------------------|-----------------------------|-----------------------------------|
| Overnight Travellers | 37.351 | 80,5 € | 3.163 | 951,1 € | 3.008,6 € |
| Same-day Travellers | - | - | 3.128 | 58,3 € | 182,4 € |
| TOTAL | | | 6.291 | 507,2 € | 3.191,0 € |

The significance of TSA lies upon the identification of the related products and their share on total expenditures, which provides the fundamental step to determine tourism's contribution not only to the overall economy but also by product when tourism consumption is compared with the supply side-statistics; this task remains to be completed in TSA-Table 6. Available breakdown of expenditures of the Greek TSA database is presented in Table 6.

In inbound expenditures, the structure of overnight is very different from that of same-day visitor/traveller; *accommodation* and *food and beverage serving services* account for 63% of the expenditures of overnight travellers, while half of the expenditures of the same-day travellers is made for purchases of goods and of services other than those identified as *TCP-IC*.

The share of *other products* is also crucial in the case of domestic expenditures, which include mainly purchases for goods; according to the VS, *purchases for food, drinks, souvenirs etc.* account for about a quarter of the expenditures of overnight visitors. For both overnight and same-day visitors the low share for transportation as well as for

accommodation due to the use of owned vehicle and vacation home is characteristic. Dominant is the share on *food and beverage serving services*.

In the outbound expenditure structure, only about one third of the expenditures made by overnight travellers are allocated to *accommodation* and *food and beverage serving services*; according to FS, about half of the outbound overnights are made in owned vacation homes or in accommodations provided by relatives or friends without charge. *TCP-IC* account for three quarters of total expenditures of overnight travellers, while in the case of same-day travellers they have a fairly equal share with *Other Products*.

| Table 6: Expenditure structure in TSA-Tables by form of tourism and class of visitor/traveller | | | | | | |
|---|---|------------|---|------------|---|------------|
| 2015 | TSA-Table 1 Inbound expenditures ^(*) | | TSA-Table 2 Domestic expenditures | | TSA-Table 3 Outbound expenditures | |
| | <i>OV</i> | <i>SDV</i> | <i>OV</i> | <i>SDV</i> | <i>OV</i> | <i>SDV</i> |
| <i>Class of visitor/traveller</i> | | | | | | |
| Accommodation services | 49,2% | 30,9% | 16,5% | X | 16,8% | 38,4% |
| Food and beverage serving services | 14,2% | | 35,8% | 43,8% | 15,2% | |
| Railway passenger transport services | 20,4% | 16,3% | 0,3% | 0,6% | 0,0% | 0,5% |
| Road passenger transport services | | | 0,9% | 1,7% | 1,3% | 4,4% |
| Water passenger transport services | | | 5,2% | 0,0% | 0,2% | 3,4% |
| Air passenger transport services | | | 3,2% | X | 37,4% | X |

| | | | | | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Transport equipment rental services | | | 0,3% | 0,6% | 0,8% | 0,5% |
| Travel agencies and other reservation services | 0,0% | X | 1,6% | X | 0,0% | X |
| Cultural services | 3,5% | 1,6% | 0,6% | 0,7% | 2,6% | 8,3% |
| Sports and recreational services | | | 1,0% | 1,3% | | |
| Internationally Comparable Tourism Characteristic Products (TCP-IC) | 87,3 % | 48,8 % | 65,4 % | 48,6 % | 74,3 % | 55,5 % |
| Other Products (**) | 12,7 % | 51,2 % | 34,6 % | 51,4 % | 25,7 % | 44,5 % |
| OV = Overnight Visitor (actually traveller for inbound and outbound expenditures) | | | | | | |
| SDV= Same-day Visitor (actually traveller for inbound and outbound expenditures) | | | | | | |
| X = Does not apply | | | | | | |
| (*) Not including expenditures of cruise visitors, as no breakdown by product is yet available for them. | | | | | | |
| (**) <i>Other Products</i> includes other consumption and non-consumption products supplied by the economy. | | | | | | |
| Any discrepancies between the sum of the individual components and the related totals are due to the rounding of figures. | | | | | | |

Regarding the presented breakdowns, the following should be kept in mind to better evaluate structures:

- a. The share of transport services, and as a consequence *TCP-IC*, of inbound expenditures is not comparable with that of

domestic and outbound. HBS factors, which provide a further product breakdown, have been applied to the latter; this has allocated a significant part of transport-related expenditures (25% in outbound, 64% in domestic) to the category of *Other Products*. These expenditures regard *urban and suburban transportation services, fuels* for rented or owned vehicles and *tolls*, which are not considered as *TCP-IC*; these are defined as *TCnP* in TSA-Tables 2 and 3.

- b. Expenditures on accommodation services may also include food and beverage serving services sold under a unique price (e.g. accommodation with half-board, etc.).
- c. RS net evaluation still remains an issue to be further refined as described above. Thus, *Travel agencies and other reservation services* is misrepresented in structure of all forms of tourism; RS gross margin is not yet well separate from intermediated services mainly concerning accommodation and transportation.

CONCLUSIONS

For policy makers, TSA is highly relevant because it allows a detailed analysis of the actual expenditure and the patterns of consumption made by tourists and same-day visitors. TSA in combination with Input-Output analysis offers a solid base for measuring overall tourism effects and monitoring inter-industrial technological relations and leakages from the production structure due to imports; this latter is crucial to be determined and monitored for the Greek economy with permanent deficits in the balance of trade^{xix}.

On the technical level, the TSA-project has laid the basis that would allow ELSTAT the routine-wise implementation of TSA in Greece. Additionally, the awareness of the related data issues among producers and users of tourism statistics has substantially increased as

deficiencies of the TSA-relevant database have been indicated and proposals have been provided to amend the available database. Yet further work on the TSA-Tables has to be conducted by ELSTAT. The next steps in establishing TSA for Greece must deal with the adaptations of the TSA-related databases in order to resolve weaknesses and fill gaps following the clarification of open questions and inconsistencies. It should be noted that the scope of the main data sources, if different from that of TSA, such as in the case of the FS, may pose a limitation to the extent to which proposals made within the TSA project may be easily adopted. Other factors such as budgetary or contract issues regarding the operation of the existing sources must also be taken into account.

The TSA-project has proved that the cooperation of experts from the relevant institutions such as ELSTAT, Bank of Greece and Universities can produce good quality tables as internationally defined in TSA:RMF 2008. The fact that TSA are an extension of national accounts and that most of data and statistics which are necessary for TSA are in the portfolio of the Greek national statistical institute renders ELSTAT the logical and only candidate for operating routine-wise the TSA in the future; international experience shows that National Statistical Institutes are predominantly responsible for TSAs (Eurostat 2013, pp. 9; Eurostat 2017, pp. 10). This would also require a close inter-institutional cooperation with other agents and stakeholders as producers or users of tourism statistics. It is of crucial importance that regular, annual workshops on tourism statistics will be organized under ELSTAT in order to guarantee a continuously improving quality of tourism data and hence of TSA results.

TSA shall annually provide politics, the public administration, the businesses, the academic community and the public of Greece with statistics that they need for assessing tourism's direct economic impact. TSA is particularly helpful for policy makers in the current situation of economic crisis.

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ⁱ Based on the OECD TSA framework (OECD 2000)

ⁱⁱ See <http://www.hersonisos.gr/municipal/tourism/tourism-satellite-accounts.html>

ⁱⁱⁱ WTTC's *Travel and Tourism economic impact analysis reports* (claimed in previous years to be a product of "simulated TSAs") for Greece are not mentioned, as their research on countries do not constitute a TSA and should not be considered a TSA replacement, as denoted in their website's methodology section (see <https://www.wttc.org/economic-impact/country-analysis/methodology/>)

^{iv} Based on the first EC-OECD-UN-WTO TSA framework (Commission of the European Communities et. al. 2001)

^v The project was developed as part of the overall project *Development and Operation of an Integrated Information System (IIS) for Strategic Tourism Planning: Tourism Satellite*

Account (TSA) and Observatory, EU-financed within the Operational Programme *Information Society* of the 3rd Community Support Framework.

^{vi} The specific report as well as the rest documentation of the SRSS project files is available at the official site of Ministry of Tourism (<https://mintour.gov.gr/doryforos-logariasmos-toyrismoys-dynatotites-kai-anagkes/>) under the title *Tourism Satellite Accounts: Potentials and Needs* as well as by the authors.

^{vii} Beneficiary agent of the Structural Reforms Support Service was the Greek Ministry of Tourism. More specifically, the TSA project was undertaken within the framework of the EU-funded *Technical Assistance action to support tourism planning and policy for the promotion of sustainable tourism development in Greece*, and particularly within the Activity I.1.1: “Develop monitoring and reporting tools for Greek tourism: a national accounting and statistical system” of the Component 1, “Tools for strategic policy making”.

^{viii} The criteria for characterizing a product as a TCP are analyzed in IRTS 2008, par. 5.10

^{ix} NACE, the official statistical Classification of Economic Activities in the European Community – From the French, *Nomenclature Statistique des activités économiques dans la Communauté européenne*. The Revision 2 is the latest used.

^x CPA, the official statistical Classification of Products by Activity in the European Economic Community. The 2008 version is the latest used.

^{xi} COICOP-HBS (Classification Of Individual Consumption by Purpose adapted to the needs of HBS)

^{xii} Although services of travel agencies related to transportation or tourist guide services might be used, e.g. booking bus trips and the use of a guide.

^{xiii} TGT: Technical Group Travel - a special working group for travel balance of payments set up by the European Statistical Service (Eurostat).

^{xiv} see methodology in BoG’s Economic Bulletin No 27, July 2006, p.70 at <http://www.bankofgreece.gr/BogEkdoseis/econbull200607.pdf>

^{xv} The proportion of total domestic supply accounted for by internal tourism consumption, per product and in total.

^{xvi} Tourism direct gross value added (TDGVA) is the part of gross value added generated by tourism industries and other industries of the economy that directly serve visitors in response to internal tourism consumption.

^{xvii} Tourism direct gross domestic product (TDGDP) is the sum of the part of gross value added (at basic prices) generated by all industries in response to internal tourism consumption plus the amount of net taxes on products and imports included within the value of this expenditure at purchasers’ prices.

^{xviii} see

http://www.bankofgreece.gr/Pages/en/Bank/News/PressReleases/DispItem.aspx?Item_ID=5293&List_ID=1af869f3-57fb-4de6-b9ae-bdfd83c66c95&Filter_by=DT

^{xix} see <https://www.bankofgreece.gr/en/statistics/external-sector/balance-of-payments/balance-of-goods>