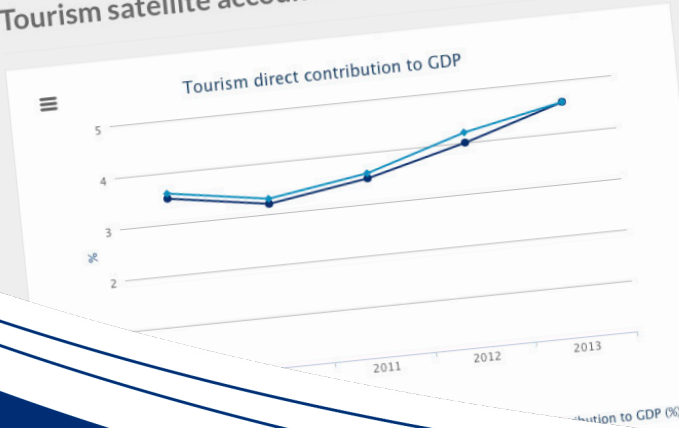


Tourism satellite accounts



Statistics

Tourist industry

- ▶ Inbound tourism expenditure in Iceland by consumption products and classes of visitors, 2009-2013
- ▶ Domestic tourism expenditure in Iceland by consumption products, 2009-2013
- ▶ Internal tourism consumption in Iceland by products 2009-2013
- ▶ Production accounts of tourism and other industries 2009-2013
- ▶ Total domestic supply and internal tourism consumption in Iceland, 2009-2013
- ▶ Number of trips and overnight by forms of tourism 2009-2013

The New Compilation of the Tourism Satellite Account in Iceland for 2009-2013

Data Sources, Methodology and Results

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The New Compilation of the Tourism Satellite Account in Iceland for 2009-2013: Data Sources, Methodology and Results

Cristi Frentz

ICELANDIC TOURISM RESEARCH CENTRE
NOVEMBER 2015

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1. Introduction

In the period 2008-2011, Statistics Iceland published Tourism Satellite Account (TSA) data. The reference period for the TSA data was 2000-2009. Three publications have been delivered by Statistics Iceland, the last in November 2011.

In June and August 2015 new TSA data have been published by Statistics Iceland for the reference period 2009-2013 (see Annex 1). This was a result of a collaborative project between the Icelandic Tourism Research Centre (ITRC) and Statistics Iceland (SI) following an agreement concluded in October 2014. The funds were channelled through SI from the Ministry of Industries and Innovation.

After some preparatory activities, i.e. discussions with key people from Statistics Iceland, initiating data requirements, the effective work on compiling TSA data was started in November 2014 but more extensive and exclusive work on this compilation started in February 2015 and lasted until August 2015.

From the very beginning, a warning should be issued that there is no comparability between the “old” TSA data for 2000-2009 and the “new” ones for the period 2009-2013. There are different reasons for this but what is obvious is that improved data sources are reflected in the new compilation (i.e. Balance of Payments data being produced by Statistics Iceland, starting in 2009). Moreover, the purpose of the new TSA for Iceland was to make it more comparable with the new international standards released in 2008. In this regard, to the extent possible the recommendations from the previous ITRC’s reports on TSA were strictly followed (see: Frent, 2013; 2014a).

This report will provide details about the new TSA compilation whose results were published by Statistics Iceland in the summer of 2015. Both methodological issues and some interpretations of TSA data are part of this report. All these are necessary not only for the TSA data users but also for different compilers of data from Statistics Iceland (more precisely people working at Statistics Iceland who contributed with their expertise to this TSA exercise (see Annex 2)).

This report is divided into four sections. The first section (ch. 2) is a presentation of the data sources used to produce the new TSA figures. Separate approaches are envisaged for existing data sources and *ad-hoc* data requests meant to remedy lack of data in some areas. The need for new data sources will also be highlighted in this section.

The second section (ch. 3) deals with the methodological background on which the new TSA estimates are based. Obviously, the main reference for this are the international standards in tourism statistics, more precisely the two documents released by United Nations World Tourism Organization (UNWTO): *Tourism Satellite Account: Recommended Methodological Framework (TSA:RMF, 2008)* and *International Recommendations in Tourism Statistics (IRTS, 2008)*. In addition, the results of a TSA project carried out by Eurostat in 2008-2009 were used, more precisely, the document entitled *Tourism Satellite Accounts in the European Union*,

volume 3: Practical Guide for the Compilation of a TSA: Directory of Good Practices (Eurostat, 2009).

In the third section (ch. 4) the focus is on analysing the new TSA results from different perspectives. The starting point of this endeavour is an examination of the evolution of the main TSA aggregates and some breakdowns of them. Further, comparability with other Icelandic sectors and comparability with other countries' TSA results are envisaged. Finally, the last section is devoted to some conclusions for this study.

Overall, this report wants to facilitate a better understanding of the compilation of the TSA data for the reference period 2009-2013 and provide insights into its methodology and data gathering. It is important to mention that this report was not conceived as a metadata document but rather as an instrument which is complementary to it. A reminder should be given that such a metadata document has already been provided to Statistics Iceland at the end of September 2015 and now this is available online at <http://www.hagstofa.is/en/publications/metadata?fileId=55312>.

It is clear that a basis for TSA construction exists in Iceland and that its compilation should be continued in a regular manner. It is in the best interest of the tourism sector in Iceland to have a reliable, internationally comparable and official statistical data instrument that measures the economic importance of tourism. This instrument is to be endorsed only by Statistics Iceland as the country's official data producer.

2. Data sources

There is no doubt that good data sources are vital for the compilation of TSA. This section will present the data sources that were used for the construction of TSA for Iceland. Mostly, the existing data sources were used so no official survey has been employed specially for this TSA exercise. However, some specific data requests were also made in order to handle the lack of data in some areas. Further, the need of new data sources is clearly highlighted and should be a priority for the future TSA compilations.

2.1. An overview of the data sources used in the TSA tables

An overview of all data sources that have been used for the compilation of each TSA:RMF table is provided in table 1. The table details demand and supply-side data sources, as well as administrative data sources and what one might call “unofficial” studies in the context of each TSA table compiled. It is important to note that there are data sources that were used in the compilation of more than one TSA table and data sources that were used only in the compilation of a single TSA table (i.e. the G.P. Wild study on cruise tourism and data requests from Icelandic universities).

Table 1: Data sources used for the new compilation of TSA in Iceland.

TSA:RMF table in Iceland (Annex 1)	Data sources used
TSA:RMF table 1 Inbound tourism expenditure by products and classes of visitors	<ul style="list-style-type: none"> • Detailed data from Balance of Payments statistics • 2014 GP Wild study entitled “Cruise Passengers and Crew Survey – Iceland” • Icelandic Tourism Research Centre data on number of cruise passengers • Data requests from Icelandic airlines • Data requests from Icelandic universities
TSA:RMF table 2 Domestic tourism expenditure by products	<ul style="list-style-type: none"> • Detailed data from Household Expenditure Survey and Household Final Consumption Expenditure • Icelandic Tourist Board (is. Ferðamálastofa) commissioned survey for Icelandic visitors • VAT Register (only used for restaurants and car rentals) • Accommodation statistics (only used for accommodation and restaurants) • Data requests from Icelandic airlines • Data requests from car rental companies • Data requests from Íslandsbanki (2015) tourism report (only used for Road passenger transportation)

TSA:RMF table in Iceland (Annex 1)	Data sources used
TSA:RMF table 4 Internal tourism consumption by products	<ul style="list-style-type: none"> • Data from the Financial Management Authority (is. Fjárfýsla Ríkisins) • Enterprise Accounts Register (EAR) • National Accounts data (on total travel allowances and imputed rental for summer houses) • Directorate of Internal Revenue RSK (breakdowns for travel allowances) • 2007 – 2008 Travel survey (demand side survey amongst Icelanders) • Detailed data from the Household Expenditure Survey • ISAVIA data (number of passengers at Icelandic airports)
TSA:RMF table 5 Production accounts of tourism industries and other industries (at basic prices)	<ul style="list-style-type: none"> • Production Accounts • Enterprise Accounts Register (EAR) • National Accounts data on subsidies • Data requests from ferry companies and Icelandic Road and Coastal Administration (is. Vegagerðin)
TSA:RMF table 6 Domestic supply and internal tourism consumption (at purchasers' prices)	<ul style="list-style-type: none"> • Enterprise Accounts Register (EAR) • Other National Accounts data (i.e. subsidies, taxes) • Balance of Payments statistics (imports) • Data requests from ferry companies and Icelandic Road and Coastal Administration (is. Vegagerðin)
TSA:RMF table 10 Non-monetary indicators: Number of trips and overnights by forms of tourism and classes of visitors (10a); International arrivals by modes of transport (10b); Number of establishments and capacity by types of accommodation (10c)	<ul style="list-style-type: none"> • Accommodation statistics (number of overnight stays, capacities and occupancies for accommodation establishments) • Icelandic Tourist Board (is. Ferðamálastofa) counting of foreign visitors • Icelandic Tourism Research Centre data on number of cruise passengers • ISAVIA data (Breakdown on scheduled vs. non-scheduled flights) • Registers Iceland data (number of summer houses)

Further, these data sources can be broadly divided between existing data sources (most of them) and some *ad-hoc* data requests that were made in order to fill the data gaps in some areas. Nevertheless, one should consider that these data requests do not substitute key surveys that need to be carried out in future TSA compilation for Iceland (see 2.4). The *ad-hoc* data requests were only specific solutions to facilitate the compilation process here reported.

A more detailed description of the existing and *ad-hoc* data sources and their usages will be given in the following sections (2.2 and 2.3).

2.2. Existing data sources

2.2.1. Balance of Payments

Balance of Payments (BoP) compilations for Iceland started in 2009, by Statistics Iceland. Due to its exhaustiveness, BoP is a good data source for TSA. Consequently, detailed data from BoP were used for the compilation of TSA:RMF table 1 referring to inbound tourism expenditure.

Expenditure of non-residents in Iceland (excluding international passenger transportation) is covered by the Travel item (credit side) within BoP. International passenger transportation is provided by Passenger transportation item from BoP. At the very beginning, the sum of Travel item and Passenger transportation item gives only a first approximation of expenditure made by foreign visitors in Iceland.¹

However, data from BoP were not accepted simply at face-value. Some adjustments had to be made in order to meet the criteria of inbound tourism expenditure from TSA standards. In a practical manner the adjustments referred to the following categories of non-residents who are not considered visitors to Iceland according to international standards:

- ✓ Crews of cruise ships
- ✓ Foreign students staying in Iceland more than one year
- ✓ Temporary foreign workers

In accordance with international standards the above categories are not considered visitors and thus their expenditure in Iceland is not tourism expenditure. Estimations have been made for each category and the related expenditures were deducted from the BoP data.

An important case with great impact on BoP figures is air passenger transportation. The figure of the related BoP item (Air passenger transportation) was not considered and instead calculations based on data requested from Icelandic airlines were used. The reason for this approach was twofold: on the one hand very detailed data from BoP compilers showed that a significant part of the revenues of Icelandic airlines were in fact “non-touristic revenues” (i.e. rental services of aircraft with crew for passenger transportation) and did not come directly from passenger transportation services to and from Iceland. On the other hand, there is the issue of transit passengers not entering Iceland and thus their related cost of airfare should be excluded from calculations. In addition, there are revenues of Icelandic airlines that come from abroad operations (i.e. transporting passengers between two points outside Icelandic territory).

¹ There are a lot of differences between tourism statistics and BoP statistics. These were specifically highlighted by IRTS (2008), pp. 70-76. Therefore, caution should be taken when using BoP data for tourism purposes. The author strongly believes that Tourism export in Iceland cannot be simply calculated as a sum of Travel item and Air passenger transportation item as it was promoted in all tourism publications in Iceland by both the public and the private sector. Users of tourism data in Iceland should be educated about the differences. More about this issue was presented by the author at the 24th Nordic Symposium in Tourism and Hospitality Research in Reykjavik, 3 October, 2015. Also, an article about this issue was written in the Icelandic newspaper Fréttablaðið and published there 29 October, 2015.

The result of the great impact of air passenger transportation is a difference between the TSA data (in the case of air passenger transportation) and the one from BoP. Under these conditions, the author chose to obtain data directly for Icelandic airlines through a specific data request in order to have more accurate figures (see 2.3.1).

2.2.2. Production accounts

Production accounts are the data used for the compilation of TSA:RMF table 5. In fact, data from these accounts were taken directly as provided by Statistics Iceland, National Accounts department, and put into the TSA table. The compilation of these accounts is made at ISAT five digits level, which is sufficient for TSA purposes (i.e. identification of tourism industries).

The following data were used from the production accounts:

- Output (at basic prices)
- Intermediate consumption (at purchasers' prices)
- Gross value added (at basic prices)
- Compensation of employees
- Taxes less subsidies on production
- Gross operating surplus

It is important to note that in the Production Accounts, the category 'Taxes less subsidies on production' was not estimated separately for each industry. Therefore, a correction item is introduced in the Icelandic National Accounts table entitled "Correction item, taxes and subsidies on product". This is how the Icelandic National Accounts are constructed so TSA (as a satellite to National Accounts) can only follow the National Accounts approach.

Considering the above, caution should be taken when analysing the components of Gross Value Added by tourism industries as they are only a sum of the categories 'Compensation of employees' and 'Gross operating surplus' whilst 'Taxes less subsidies on production' are not being estimated for each industry.

Another very important remark is the fact that there is no product breakdown of industries in the Icelandic Production accounts. So only an industry classification is used instead. The absence of a Supply and Use Table for Iceland made it impossible to divide output by products and no other data source has been identified to allow such classification in Iceland for the time being.

2.2.3. Using administrative data

Administrative data were used from the Enterprise Accounts Register and Value Added Register (both registers are produced by Statistics Iceland), Financial Management Authority (is. Fjársýsla Ríkisins) (data on the travel related expenditure of governmental institutions) and Directorate of Internal Revenue (is. Ríkisskattstjóri RSK) (data on breakdowns for travel allowances).

Enterprise Accounts Register (EAR) is the main data source used in the compilation of Production Accounts by Statistics Iceland. In fact, in Iceland the intensive use of registers for the compilation of National Accounts can be noted. EAR is derived from companies' accounts data delivered by companies to the tax authorities (Statistics Iceland, 2011). To a lesser extent the Value Added Register was also used.

Due to its completeness EAR was also used for obtaining data on the expenditure of enterprises for travel by their employees. It should be mentioned that there is a separate item entitled "Travel expenses" (is. Ferðakostnaður) in the company accounts which was used. However, the other item from company accounts entitled "Travel allowances" (is. Dagpeningar) was not directly used and instead more exhaustive data from National Accounts were chosen.

Data provided by the Financial Management Authority were used for the identification of travel related expenditure of governmental institutions. Data were accessed from the web platform <http://rikisreikningur.is>. Here, rather a conservative approach was envisaged and only the item codes starting with 542 were chosen² (see table 2). However, the only exception to this rule was to add the 54310 code *Bílaleigubifreiðar* for Car rental expenditures.³

Table 2: Codes for travel related expenditure from the Financial Management Authority.

Source: Financial Management Authority, 2015

Code	Icelandic names	English translation
54202	Fargjöld innanlands	Fares domestic
54212	Fargjöld erlendis	Fares abroad
54219	Óuppgerð fargjöld erlendis	Unsettled (unpaid) fares abroad
54222	Dagpeningar innanlands	Per diem domestic
54232	Dagpeningar erlendis	Per diem abroad
54239	Óuppgerðir dagpeningar erlendis	Unsettled (unpaid) per diem abroad
54240	Dvalarkostnaður innanlands	Cost of staying in Iceland

² This was suggested by Hólmfríður Sigurðardóttir from National Accounts department within Statistics Iceland.

³ This was made in order to include also the car rentals as type of expenditure because these types of expenditure were not included previously.

54242	Dvalarkostnaður innanlands án vsk	Cost of staying domestically without VAT
54243	Dvalarkostnaður innanlands	Cost of staying in Iceland
54252	Dvalarkostnaður erlendis	Cost of staying abroad
54280	Annar ferðakostnaður, innanlands	Other travel cost, domestic
54282	Annar ferðakostnaður, innanlands	Other travel cost, domestic
54283	Annar ferðakostnaður, innanlands	Other travel cost, domestic
54292	Annar ferðakostnaður, erlendis	Other travel cost, abroad
54299	Óuppgerður annar ferðakostnaður	Unsettled (unpaid) other travel cost

It is important to mention that not all items from the above tables were used. For instance, Cost of staying abroad, Per diems abroad and Other travel cost abroad are not expenditure related to internal tourism consumption (they can be assimilated with outbound tourism expenditure) and consequently these were excluded from calculations.

Other administrative data used were the ones from the Directorate of Internal Revenue. More precisely, data on breakdowns for travel allowances were used in order to separate the cost of accommodation from the cost of food which both are embedded in the travel allowances. Some aggregated shares were calculated from the Directorate of Internal Revenue (2015). It should be underlined that these data refer only to government employees. However, the shares were used in disaggregation of travel allowances of all employees.

2.2.4. Household Expenditure Survey (HES), estimates from Household Final Consumption Expenditure (HFCE) and other data from National Accounts

At first sight using the general Household Expenditure Survey (HES) is not useful for tourism as it does not separately capture tourism consumption. However, there are some items which can be related to tourism, but these items cannot be directly used for tourism and instead only some breakdowns were used (i.e. the case of transportation related expenditure by modes of transport (air, water, land)) or some shares calculated. In this case it should be noted that as a rule average shares for the period 2008-2012 were used and not absolute yearly data. This is to assure greater caution in using these data.

In the same manner as HES, data from Household Final Consumption Expenditure (HFCE) were used. HFCE is also compiled by National Accounts in Iceland. It should be noted that data from HFCE are more reliable than data from the HES since they are more complete. Therefore, as a general rule, when the level of aggregation is similar, HFCE was used instead of HES. In

other words, the HES was used only when it provided more detailed data than HFCE. Both HFCE and HES data were part of the data sources for the compilation of TSA tables 2 and TSA table 4.

Other exhaustive data from the National Accounts that have been used include:

- ✓ Travel allowances (total values) taken from Disposable income of household sector; these were used in the compilation of TSA:RMF table 4;
- ✓ Subsidies for air passenger transportation which were incorporated in the TSA:RMF tables 5 and 6;
- ✓ Taxes less subsidies on products (total value) which was part of TSA:RMF table 6.

2.2.5. Cruise passenger and crew survey carried out by G.P. Wild

G.P. Wild is a UK based consultancy company specialised in maritime and cruise industry consulting. This company has been commissioned to carry out surveys on board cruise ship berthing in Iceland in 2009 and 2014. The latter survey took place between May and September 2014 in the ports of Reykjavík, Akureyri and Ísafjörður. In total 4,131 cruise passengers and 732 crew members were investigated.

This survey provided important data on expenditure separately by crew and cruise passengers. Their expenditure was rather detailed and allowed a good correspondence with TSA products. It is important to repeat that, according to international standards, crew members are not considered visitors so their expenditure is not part of tourism expenditure. Naturally, under these conditions, the calculation of crew related expenditure was only used to make adjustments to the BoP data.

2.2.6. Using non-monetary data from different data sources

The following data sources/institutions provided non-monetary data that were used in the compilation process:

- ✓ Accommodation statistics carried out monthly by Statistics Iceland
- ✓ The 2007 – 2008 travel survey carried out by Statistics Iceland
- ✓ Icelandic Tourist Board
- ✓ ISAVIA
- ✓ Icelandic Tourism Research Centre
- ✓ Registers Iceland

One should distinguish between using non-monetary data directly for the compilation of TSA tables (i.e. 10a, 10b and 10c) and using these data in the internal compilation procedures, for checks and balances and other calculations. While the direct use of data is more of interest, the

use of data for internal compilation procedures should not be neglected. For instance, Icelandic Tourists Board's commissioned survey for inbound visitors provides some useful data (used internally) for analytical purposes (i.e. allowing the calculation of some averages such as average expenditure per meal per customer or average car rental expenditure).

Accommodation statistics compiled by Statistics Iceland provides data on number of overnights which were directly used in the compilation of TSA table 10a. These data were also used indirectly in the TSA table 2 for estimating domestic tourism expenditure for accommodation and food and beverages. However, even if the data source (from supply side) is relatively reliable it should be noted that it is not exhaustive. Means of accommodation such as staying with friends and relatives, accommodation in summer houses (including the ones owned by Trade Unions) and non-official forms of accommodation (i.e. Airbnb) were not covered. Accommodation statistics also provides data on capacities and occupancy needed for TSA table 10c.

The **2007-2008 travel survey** amongst Icelanders was also used but to a lesser extent as the data is somewhat dated. Under these circumstances only some shares were used. For instance, data on the purpose of travel of Icelanders in domestic and outbound trips were used in order to calculate a breakdown between domestic and outbound business trips. Another example is the share of booking through travel agencies. These were used in different compilations for TSA table 4.

Icelandic Tourist Board (ITB) provides data on the number of foreign visitors and Icelanders departing Iceland by modes of transport. These were used in the TSA tables 10a and 10b and also the number of departures of Icelanders abroad were used in TSA table 10a. ITB also commissioned market research for surveying inbound visitors and Icelandic tourists. Some data from the commissioned survey for Icelandic tourists were used in the compilation of TSA table 2, more precisely for estimating the items on cultural and recreational services. As stated above, the data provided by ITB were mostly used for analytical and checking purposes. Another important feature of the ITB commissioned survey for inbound visitors allowed for differentiating the components of package tours.

ISAVIA, which is the company responsible for operating all airports in Iceland, provided data on the number of passengers at Keflavik airport by scheduled and unscheduled (charter) flights. These data were used in the compilation of TSA table 10b. Also ISAVIA helped⁴ in obtaining more detailed data regarding the number of passengers on the Icelandic airports, data which were used in some internal compilation procedures (i.e. calculating market share of Icelandic airlines) for TSA:RMF table 4, for instance.

Icelandic Tourism Research Centre (ITRC) provided data on the number of cruise passenger arrivals in all Icelandic harbours. These data were more complete than the ones published by the Icelandic Tourist Board which refer only to a limited number of Icelandic harbours. ITRC

⁴ I want to particularly thank Grétar Már Garðarsson from ISAVIA, who always was very kind in assisting me with very useful data.

data were used for the compilation of TSA tables 10a and 10b and also for the estimation of cruise passengers' expenditure in TSA table 1.

Registers Iceland data were only used in TSA table 10c for the number of summer houses in Iceland. In fact, this was a result of a data request made previously in 2014 by the author (see: Frent, 2014a, p. 90).

2.3. Handling the lack of data: Initiating new *ad-hoc* data requests

In order to deal with missing data necessary for the compilation of TSA some *ad-hoc* data requests were made. These were addressed either to specific tourism enterprises such as airlines, car rental companies or ferries, or generally to other organizations (i.e. universities, public administration bodies).

Obviously, due to confidentiality reasons, the detailed data received cannot be published in this report. However, the general format of data requested can be shown.

2.3.1. Data requests from Icelandic airlines

The most detailed data provided by Balance of Payments compilers in Iceland were not enough in order to meet the domestic and inbound tourism expenditure concepts requested by TSA. It should be mentioned that the Balance of Payments (credit side) data encompasses all transactions between a resident and a non-resident entity and this cannot be blindly applied to tourism. Tourism is only defined as activities of visitors travelling outside their place of residence. In other words, it is clear that not all transactions from Balance of Payments (Travel item or Passenger transportation) mean tourism.

Therefore, in order to identify only tourism activities more data was needed. In the period March – May 2015 a short survey was made with Icelandic airlines transporting foreign passengers. Responses were collected from the following airlines: Icelandair, Air Iceland, Wow Air and Primera Air. These airlines operate international scheduled flights from Iceland. It is important to mention that according to calculations based on Isavia and Statistics Iceland's data these four companies accounted for over 80% of the total international traffic to and from Iceland. For other smaller Icelandic airlines (operating only domestic flights) some aggregated estimates have been done.

Specific data were requested for each Icelandic airline in order to clearly differentiate between domestic and foreign travellers (see table 3).

Table 3: Data requested from the Icelandic airlines on a yearly basis for 2009-2014.

1. Earnings from passengers fares, total (gross basis, without deduction of commissions)
1.1. Earning from <u>non-resident</u> travellers on <u>international</u> flights (excluding transit passengers from Keflavík airport)
1.2. Earnings from <u>non-resident</u> travellers on <u>domestic</u> flights
1.3. Earnings from <u>resident</u> travellers on <u>international</u> flights
1.4. Earnings from <u>resident</u> travellers on <u>domestic</u> flights
2. Commissions/fees paid to travel agencies in respect of passenger fares earned, out of which
2.1. Commissions paid to <u>Icelandic</u> travel agencies/agents
2.2. Commissions paid to <u>foreign</u> travel agencies/agents
3. Other earnings of your company (freight services, mail etc.)
4. Did your company supply travel tickets to your employees free of charge at reduced prices? If yes, what is the total value of this “subsidized part” supported by your company?
5. Number of passengers transported out of which
Foreigners (both inside Iceland and to/from Iceland)
Icelanders (total both in Iceland and abroad)

Valuable information was obtained through the short survey detailed in table 3. The data was directly used in the compilation of air passenger transportation item both for inbound and for domestic tourism. Moreover, the data allowed for the creation of an important detailed analytical framework for the receipts of Icelandic airlines.

2.3.2. Data requests from Icelandic universities

Education related travel of foreign students is also part of the Balance of Payments data. In this case there is a need to have more data on the duration of studies in Iceland. Therefore, in the period January-April 2015 a survey among Icelandic universities was carried out.⁵ The purpose was to collect data on the number of foreign students with breakdown by long-term foreign students (staying in Iceland more than one year) and short-term foreign students (mainly

⁵ On this occasion the author wants to thank the following contact persons from the Icelandic universities who provided data: Rúnar Gunnarsson (University of Akureyri), Friðrika Þóra Harðardóttir (University of Iceland), Þórunn Reykdal (Agriculture University of Iceland), Emil Karlsson (University of Bifrost), Björg Jóna Birgisdóttir (Icelandic Academy of the Arts), Guðlaug M. Jakobsdóttir (University of Reykjavík) and Hjördís Gísladóttir (Hólar University College).

exchange students). All seven Icelandic universities provided yearly data for the reference period 2009-2013. Detailed data are found in Annex 3.

The utility of these data for the Icelandic TSA was to allow the calculation of a share of short-term foreign students which is in fact a sort of “tourism share”. This was applied to the Balance of Payments internal data regarding the Travel item (credit side) for Education related travel.

2.3.3. Data requests from car rental companies

There is no specific data source from supply-side for the car rental sector in Iceland. Therefore, an attempt was made to fill this gap and some data were requested from the major car rental companies in Iceland. The major car rental companies were identified through the Íslandsbanki (2015, p. 26) report on tourism.

Table 4: Data requested from the main Icelandic car rental companies.

1. Total turnover <u>from car rental</u> (100%), out of which coming from	100%
Foreign tourists/companies	
Icelandic tourists	
Icelandic companies (including government and other institutions)	
2. Share of turnover from car rental in <u>total</u> turnover of your company (%)	

In particular, the data was used to estimate the domestic tourism expenditure for car rentals. It should be noted that for this data request the response rate was rather low (20%).

2.3.3. Data requests from ferry companies and the Icelandic Road and Coastal Administration

Both monetary and non-monetary data were obtained for water passenger transportation. The reason is twofold: in Iceland water passenger transportation is in some cases operated by freight companies; in addition, there was a need to obtain more detailed non-monetary information on water passenger transportation.

The ferry companies Eimskip (Herjólfur ferry) and Samskip (Grímsey ferry) provided the data. Both companies are included in the ISAT 2008 50.20 Sea and coastal freight water transportation. Thus, they were not technically a part of tourism industries. Therefore, additional data were needed to capture their “part” referring to water passenger transportation only and to make some adjustments to the National Accounts data in TSA:RMF table 5 and 6.

Data were also obtained from the Icelandic Road and Coastal Administration (is. Vegagerðin), referring both to subsidies and number of passengers transported by each ferry company. It should be mentioned that Statistics Iceland does not publish any data on the number of passengers on ferries even though this data does exist in Iceland.

2.3.4. Data requests from Íslandsbanki 2015 tourism report

In a report produced by Íslandsbanki in March 2015, 300 tourism companies were surveyed, representing most of the tourism industry. Therefore, detailed data were specially requested from Íslandsbanki.⁶ These referred to percentages of companies' sale due to foreign tourists for each part of the tourism industry investigated.

However, the data from Íslandsbanki were used only for the compilation of Road passenger transportation item for estimating the related domestic tourism expenditure.

2.4. Towards new data sources

Apart from the data sources already mentioned, there is an urgent need for new data sources to be used in future TSA compilations in Iceland. The following new data sources should be created if better estimates of TSA are sought:

- Annual creation of a Supply and Use Table by National Accounts
- Survey among travel agencies/tour-operators (supply-side)
- Survey on tourism consumption of Icelandic households (demand-side)
- Improving the procedure of counting foreign visitors at Keflavík airport
- Continuous border survey at Keflavík airport and Seyðisfjörður seaport

This compilation of TSA for Iceland was not based on a *Supply and Use Table (SUT)* since Iceland does not regularly produce such a table. Therefore, the Make Matrix from SUT does not exist in order to allow the completion of TSA table 5 and a disaggregation of output by products. Moreover, for this disaggregation a sort of a bottom-up method, based on data from EAR, was not possible. Under these conditions, TSA in Iceland was compiled only at industry level, considering all products of a certain industry. This approach is not very accurate but it had to be adopted due to lack of data. For instance, according to this approach, restaurants within hotels are embedded in accommodation services industry while it is clear that the consumption of tourists for accommodation and restaurants is different. This is one of the major limitations of this TSA compilation. Under these conditions, there is an urgent need to have a SUT for the future Icelandic TSA to be based on.

⁶ Special thanks are due to Elvar Orri Hreinsson from Íslandsbanki, who helped me in getting the data.

The survey among travel agencies/tour-operators will meet the need of having data for net valuation of the services provided by these operators. This was discussed in detail by Frent (2014a, pp. 27-32). A model questionnaire is hereby proposed to capture the data (see Annex 4), called *Survey on package tours (PT) for Icelandic travel agencies and tour operators*. An important point is that this model should be discussed with private sector representatives before being applied. An attempt was made to do this in the compilation process but due to time constraints it was not finalised.

It is well known that Iceland does not have an *official continuous survey for tourism addressed to Icelandic households* (a demand-side survey). The last one was conducted by Statistics Iceland in the period 2007-2008. In compiling the current TSA this old survey was also used although it is outdated. The reason for this was the fact that there was nothing else to substitute this data gap. Carrying out such a survey in the future is a must for having data on the number of trips (including separate data for day trips) and also for data on expenditure and other characteristics of a trip. Moreover, recommendations from the previous TSA studies detail fifteen recommendations suggested to be implemented for carrying out the future demand side survey amongst Icelanders (see: Frent, 2013; 2014a).

At the same time, there is a need to *improve the procedure of counting foreign visitors at Keflavík airport* in order to distinguish tourists from other types of travellers with a non-tourist purpose of their trip. It has been shown in the previous studies that the current counting at Keflavík airport overestimates the number of foreign visitors for Iceland and a model has been proposed to deal with this issue (see: Frent, 2013, pp. 80-84). An accurate number of foreign visitors in Iceland is in the best interest of all stakeholders in the tourism industry.

At present, a **continuous border survey** at the main gateway to enter/exit the country (i.e. Keflavík airport) is lacking. Carrying out a continuous survey for foreign visitors would provide precious data to be used by both the TSA and BoP compilers. More precisely, these data should refer to tourism expenditure and other characteristics of travel (e.g. purpose, means of accommodation, length of stay, travel party, means of transport used in Iceland, usage of package tours).

It is important to involve the **private sector** in supporting new surveys (i.e. on travel agencies, on foreign and domestic visitors). Particularly the representatives of the private sector (i.e. the Icelandic Travel Industry Association – SAF) have the interest and the capabilities to lobby its members for supporting the data collection required by the new surveys. This relates specifically to the sector of travel agencies and tour operators.

3. Methodological framework

In this section, more TSA specific topics will be presented dealing with classifications, compilation details, problematic issues and, not the least, some recommendations for future compilations. The purpose of this chapter is to give more specific information on the TSA procedures compared with the previous chapter.

3.1. Classifications

The classifications used in the Icelandic TSA have strictly followed the recommendations from TSA:RMF (2008) in order to assure the international comparability of Icelandic tourism data. In this regard the Icelandic classification of economic activities ISAT 2008 has been used. It should be remembered that at this moment there is no product classification used by the Icelandic National Accounts since there is no Supply and Use table available yet.

A correspondence table has been established between the UNWTO categories of products/industries and the related Icelandic ones (see table 5). This classification has been used in all TSA tables compiled in this exercise except the TSA tables referring to non-monetary indicators.

One can argue that only the classifications for international comparability have been used. This is particularly true as currently available statistics do not allow a separate identification of other types of products/industries which can be considered as being “Iceland specific”. More research should be done in this regard. However, some preliminaries have been discussed in an earlier publication (see: Frent, 2013, pp. 69-73).

In order to meet TSA:RMF (2008) requirements goods have been separated from services and a separate category was created, entitled “Goods purchased from trade activities”. One can see that both retail and wholesale activities were included here since in Iceland, as a specificity, some wholesalers are also selling directly to customers (including tourists). The most typical example in this regard refers to the sale of petrol, a product that is purchased by tourists renting a car.

At the same time, the category “Other services” is rather heterogeneous, but this is in fact a residual category comprising all other products not included in the previous groupings. Here, once again, more research should be done to separately identify some country specific services.

Table 5: Classification of products and the related industries from the Icelandic TSA.

No.	UNWTO categories	Icelandic categories	
		ISAT codes	Name
A.1. Tourism characteristic products/industries (for international comparability)			
1.	Accommodation services	55.10.1	Hotels and similar accommodation, without restaurants
		55.10.2	Hotels and similar accommodation, with restaurants
		55.20.0	Holiday and other short-stay accommodation
		55.30.0	Camping grounds, recreational vehicle parks and trailer parks
		55.90.0	Other accommodation
2.	Food-and beverage-serving services	56.10.0	Restaurants and mobile food service activities
		56.29.0	Other food service activities
		56.30.0	Beverage serving activities
3.	Road passenger transportation	49.32.0	Taxi operation
		49.39.0	Other passenger land transport not elsewhere classified (n.e.c.)
4.	Water passenger transportation	50.10.0	Sea and coastal passenger water transport
		50.30.0	Inland passenger water transport
5.	Air passenger transportation	51.10.1	Scheduled air transport
		51.10.2	Non-scheduled air transport
6.	Transport equipment rental	77.11.0	Renting and leasing of cars and light motor vehicles
		77.12.0	Renting and leasing of trucks
7.	Travel agencies and other reservation services	79.11.0	Travel agency activities
		79.12.0	Tour operator activities
		79.90.0	Other reservation service and related activities
8.	Cultural services	90.01.0	Performing arts
		90.02.0	Support activities to performing arts
		90.03.0	Artistic creation
		90.04.0	Operation of arts facilities
		91.02.0	Museums activities
		91.03.0	Operation of historical sites and buildings and similar visitor attractions
		91.04.0	Botanical and zoological gardens and nature reserves activities
9.	Sport and recreational services	77.21.0	Renting and leasing of recreational and sports goods
		92.00.0	Gambling and betting activities
		93.11.0	Operation of sports facilities
		93.13.0	Fitness facilities
		93.19.0	Other sports activities
		93.21.0	Activities of amusement parks and theme parks
		93.29.0	Other amusement and recreation activities
A.2. Other consumption products			
10.	Goods purchased from trade activities	46.00	Wholesale trade
		47.00	Retail sale
11.	Other services		All the rest of industries providing services to tourists

In addition, in the TSA table 6, Total domestic supply and Internal tourism consumption in Iceland, a new category was also introduced, named “Non-consumption products”, to account for all the other products in the Icelandic economy that cannot be considered consumption products and thus cannot be acquired by visitors. It is important to add that these products (i.e. non-consumption products) do not generate tourism shares (not being purchased by tourists) which further do not contribute to the calculation of Tourism Direct Gross Value Added and

Tourism Direct GDP. Their inclusion was made only in order to keep compliance with the tabular format from TSA:RMF (2008).

3.2. Compilation details

In this section, some specifications will be given for each TSA table compiled for Iceland for the reference period 2009-2013. All tables as produced can be examined in detail in Annex 1 at the end of this report. This complements to a certain extent the section referring to data sources (see chapter 2). Thus, the reader should always consult the data sources section for a better understanding and vice-versa.

3.2.1. TSA:RMF table 1

The starting point for compiling TSA table 1 is the Travel item (credit side) within Balance of Payments. However, as already mentioned, some adjustments were made in order to eliminate the “non-tourism” component within BoP (see p. 10 and 16).

It should be remembered that the Travel item does not include the international air passenger transportation, which is a separate item within BoP. But it should also be remembered that a detailed analysis of the International air passenger transportation item within BoP in Iceland has shown that the data included elements which are not directly linked with international passenger transportation to and from Iceland. This was the case of revenues from abroad operations of Icelandic airlines, rental services of aircrafts with crew and airfares from transit passengers not entering in Iceland. Considering these, data requests from Icelandic airlines have been seen as a better solution to capture air passenger transportation (both international and domestic passenger transportation). In other words, data on air passenger transportation were obtained directly from Icelandic airlines that provided data separately for non-residents and residents (see table 3). Obviously, in the TSA:RMF table 1 only data referring to non-residents were included.

Excepting air passenger transportation, all other items from TSA table 1 were estimated using adjusted data from BoP. In this endeavour, at the very beginning, data from a subdivision of the Travel item named “Education related travel” were separated and only the part referring to foreign students staying in Iceland less than one year was considered. The identification of this part was possible due to Icelandic universities who provided data on the number of exchange students (implicitly considered short term students) and the number of long-term students (see Annex 3). The breakdown of expenditure related to foreign exchange students was based on some assumptions in correlation with certain categories of expenses of Icelandic residents.

The breakdown of BoP data by products (excepting those referring to education related travel) was possible due to the existence of credit and debit card data (from the Travel item),

disaggregated by ISAT 2008 at five digits' level. These credit and debit card data are the most important part of the Travel item. In addition to these there are other components of the Travel item, such as the buying of Icelandic currency ISK by non-residents, cash/ATM withdrawals and the data from a survey among Icelandic enterprises selling to non-residents. While in the first two cases the same breakdown (taken from credit and debit card data) was used, in case of the data coming from the survey, the ISAT 2008 categorization of enterprises was considered.

As mentioned earlier, some adjustments to the Travel item were made to eliminate the expenditure related to crew of cruises and temporary foreign workers. In this regard, two different approaches have been envisaged. Whilst for the crew of cruises there were detailed expenditure data by products (provided by the G.P. Wild study), the case of potential expenditure of temporary foreign workers (captured by BoP) was calculated by making adjustments based on data from the Icelandic Tourist Board's commissioned survey on inbound visitors (more precisely data on temporary employment in Iceland as purpose of visit) and to a lesser extent data on the number of foreign workers in Iceland taken from the Directorate of Labour. This adjustment was applied also to data referring to expenditure for air passenger transportation.

In the TSA table 1, it was possible to estimate separately the expenditure on cruise passengers arriving in Iceland. The G.P. Wild study provided detailed data (by products) on their average expenditure while the Icelandic Tourism Research Centre had data on the total number of arriving cruise passengers.

Overall, with the exception of air passenger transportation, the compilation of this table was made following a top-down approach.

3.2.2. TSA:RMF table 2

Unlike TSA:RMF table 1, the compilation of TSA:RMF table 2 followed a pure bottom-up approach, meaning that each product was estimated separately following a specific procedure. Therefore, a combination of a diversity of data sources was used. The lack of an official continuous survey to capture the travel patterns of Icelandic households was the most significant problem in compiling this table.

In this regard there is a lack of data regarding the tourism expenditure of day visitors. If, in the previous table, some estimates have been done for cruise passengers (assimilated with inbound day visitors in Iceland), in the TSA:RMF table 2 this was impossible due to lack of data. So the estimates in the TSA:RMF table 2 are aggregated referring both to day visitors and overnight visitors (tourists). Only a household survey specific for tourism would provide the useful data.

At the same time, it is important to mention that in TSA table 2 the figures refer both to the expenditure made by Icelandic households for tourism trips in Iceland and to the expenditure made by the same households for the domestic part of trips abroad (the most typical being the

cost of airfare for travelling abroad with Icelandic airlines). Once again, due to lack of data a differentiation between these two types of tourism expenditure was impossible.

Another important remark is that tourism expenditure related to business trips paid by employers are not part of this table but part of TSA:RMF table 4. This was done in order to facilitate a better integration with National Accounts estimates and it should not be seen as a departure from the international standards. In any case, it is easy to add the estimates from TSA:RMF table 2 to the ones related to business trips from TSA:RMF table 4 in order to have the total tourism domestic expenditure as it is the TSA:RMF 2008 standard.

Even if the figures for TSA:RMF table 2 are characterising tourism demand, the estimation of tourism expenditure for some products was based mostly on supply-side data sources. This was particularly the case of air passenger transportation, road passenger transportation and car rentals. In fact, with the exception of air passenger transportation expenditure (which was based on data obtained directly from Icelandic airlines), a combination of data sources was used for the estimation of each product. For instance, in the case of Accommodation services, both data from accommodation statistics were used as well as data from the Household Expenditure Survey. In the same manner, restaurant services were based on a seasonality analysis of data from VAT turnover along with some estimates and assumptions from demand-side and supply-side (including accommodation statistics).

From a different perspective, it should be noted regarding goods that these also include estimates regarding durable goods and recreation equipment. To capture this detailed data, the Household Expenditure Survey and Household Final Consumption Expenditure were used. So-called tourism single purpose durable goods⁷ were included in the estimates but these were not separately presented as this is not required by international standards.

3.2.3. TSA:RMF table 4

One might say that in compiling TSA for the period 2009-2013, the TSA:RMF table 4 is merely a sum of TSA:RMF table 1 and TSA:RMF table 2. Yet this table also includes two elements which were not included in the previous tables. These are Imputed rental for summer houses and Employers' expenses for business trips of their employees.

It should be recognized that only the category of Imputed rentals for summer houses is in fact truly an imputed consumption which falls under the tourism consumption concept and is not a tourism expenditure. Instead, the category of Employers' expenses for business trips of their employees can be considered within the tourism expenditure concept. Once again, it should be

⁷ According to TSA:RMF 2008 these are consumer durables that are used exclusively or almost exclusively by individuals for trips. The concept of tourism expenditure includes the acquisition of tourism single purpose consumer durables both before and during the trips. Examples of such goods are camper vans, travel and tent trailers, camping equipment, and recreational and sporting equipment. For more details about tourism single purpose consumer durables for TSA in Iceland the reader should consult Frent (2014a, pp. 22-24).

remembered that this category was included in the TSA:RMF table 4 only to facilitate the linkages with the related National Accounts aggregate (i.e. Intermediate consumption).

Data regarding summer houses (imputed rentals) were provided by the National Accounts department within Statistics Iceland.⁸ These data were compiled by Statistics Iceland using the so-called user cost method which is based on data from Registers Iceland and other data (i.e. price indexes). More details about the methodology of imputed rentals for housing in case of vacation homes are provided by Statistics Iceland (2011, p. 81 and p. 127).

In order to estimate Employers' expenses for business trips of their employees a combination of data sources has been used. However, a separate approach has been employed to distinguish between government employees and the employees from the business sector. Employers' expenses for business trips of their employees included only expenses related to accommodation, food and beverage, transportation, car rentals and the intermediation of travel agencies.

The main data source for government employees travel related expenditures is the Financial Management Authority (is. Fjársýsla Ríkisins). The cost of travel inside Iceland was included as well as the domestic part of trips abroad (cost of airfare with Icelandic airlines). In order to create the product breakdown required by TSA, additional data were used. These were from the Household Expenditure Survey, ISAVIA's data on the number of passengers for calculating the market share of Icelandic airlines, some data from the 2007-2008 Travel survey and data from the Directorate of Internal Revenue.

For the business sector data from Enterprise Accounts Register, Travel expenses (is. Ferðakostnaður) item (part of Intermediate consumption within National Accounts) were used as well as the same data sources as mentioned above in order to create the product breakdown of TSA. In this process some assumptions have inevitably been made (i.e. using some breakdowns taken from the governmental sector: transportation costs domestic vs. transportation cost abroad, share of cost of airfares abroad in total costs abroad).

Both for the business and government sector, data on travel allowances were taken from National Accounts (Disposable income of household sector) and not from EAR and the Financial Management Authority. This is because of the exhaustiveness of the National Accounts. Also, in both cases the data regarding travel agencies were netted using the data requests from Icelandic airlines (more precisely commissions paid by the Icelandic airlines to domestic travel agents) as well as other data sources.

Where necessary, a separation between domestic business trips and abroad business trips was based on data from the 2007-2008 Travel survey through a ratio based on the number of such trips. One might argue that these data are rather old but this was the only data available. Evidently, the need of more updated data is very clear.

⁸ Special thanks are due to Birna Rún Björnsdóttir from Statistics Iceland, who provided the data.

3.2.4. TSA:RMF table 5

As already mentioned, the entire TSA:RMF table 5 is based on the Production accounts data provided by Statistics Iceland. However, some small adjustments have been made in the case of water passenger transportation and air passenger transportation in order to account for subsidies in these industries. Also, corrections have been made to disaggregate one industry from Production accounts (i.e. 91. Libraries, archives, museums and other cultural services) to allocate it properly to the cultural industry and also to account for both market and non-market activities.

The most important aspect of this table is the lack of product breakdown. In other words, the output is not broken down by products as it is in the TSA:RMF 2008 standard. As mentioned before, this is due to the lack of Supply and Use table for Iceland for the time being. Under these conditions, the data are aggregated at industry level where tourism industries are separately identified. In order to facilitate a better visualisation of this table in the Icelandic context, its format was transposed (see Annex 1, pp. 73-77). Therefore, there are output, intermediate consumption, gross value added and its components by industries (with special focus on tourism industries). Following the TSA:RMF 2008 standard the valuation of output is made at basic prices, the valuation of intermediate consumption is made at purchasers' prices and, consequently, the valuation of gross value added is at basic prices.

A special remark has to be made regarding the components of gross value added by industries. Even if the TSA:RMF 2008 standard recommends three components of GVA (namely Compensation of employees, Taxes less subsidies on production and Gross Operating Surplus), the Icelandic National Accounts do not have data on Taxes less subsidies on production for each industry. Therefore, GVA is broken down only by Compensation of employees and Gross Operating surplus. This is also one of the reasons why an additional item can be seen in the Icelandic TSA table 5 named "Correction item, taxes and subsidies on products". In fact, this correction item is characteristic of the GDP calculation approach in Iceland, so TSA in Iceland cannot follow the National Accounts rules in Iceland.

Following the TSA:RMF 2008 standard, the Icelandic TSA table also includes the net evaluation of package tours. This has consequences if one wants to compare the values from this TSA table with the ones from Production accounts; some differences will normally occur but the totals will remain unchanged. For instance, the values for Accommodation industry increase with the corresponding values included in package tours (taken from Travel agency industry) while the value from Travel agencies are decreased to reflect only the commissions earned. In this endeavour a modelled approach has been employed, based on a combination of data sources (see 3.3).

3.2.5. TSA:RMF table 6

Although it largely follows the standards of TSA:RMF 2008, the Icelandic TSA table 6 has its own specificities. This, however, does not affect the international comparability of data. The specificities emerge as a consequence of the statistical data Iceland has (mainly the lack of SUT).

In the TSA table 6, for instance, there is no column for trade and transportation margins but this does not mean that goods were not given the same treatment as stipulated in the TSA:RMF 2008 standard. Hence, only the retail trade margin was considered. For the same reason the production matrix (and the related tourism share values) was not included. Instead, only the total column referring to total output was part of the Icelandic table. Further, the lack of a production matrix did not allow for a presentation of gross value added by its components but this was part of the Icelandic TSA:RMF table 5.

Following the international recommendations, the reconciliation of supply and demand data from TSA were taken in TSA table 6. So, the conversion from basic prices to purchasers' prices was made in the Icelandic table by introducing two more columns: Imports (excluding the direct purchases of residents abroad) and Taxes less subsidies on products. Finally, Domestic supply (at purchasers' prices) (calculated as a sum between Output of domestic producers at basic price, Imports and Taxes less subsidies on products) can be compared with Internal tourism consumption in order to allow the calculation of the tourism ratios.

One can see that in the Icelandic TSA table 6 tourism ratios are calculated at the industry level and not at the product level and this is again due to the lack of SUT for Iceland. Having the tourism ratio at industry level, in addition to what international standards foresee (in order to facilitate a better visualisation of data), three more columns were introduced, namely Gross Value Added (taken from TSA table 5), Tourism Direct Gross Value Added (which is in fact the GVA of each industry adjusted with tourism ratios) and Tourism Taxes less subsidies (Taxes from each industry adjusted with tourism ratios). The sum of total elements of TDGVA gives the aggregate of TDGVA which is directly comparable with the aggregate of total Gross Value Added from the Icelandic economy. Also, in a similar manner the aggregate of Tourism Direct Gross Domestic Product (TDGDP), which was calculated as the sum between TDGVA and total tourism taxes less subsidies, can be related to the Icelandic GDP.

As can be seen in the format of the Icelandic table 6 (see Annex 1, pp. 78-82) there are some important specifications to the columns referring to Imports and Taxes less subsidies on products.

As mentioned previously Imports excludes direct purchases of residents abroad (and this is in line with the TSA:RMF 2008 standard). One can see from Annex 1, that data on imports by industries are lacking and this is once again due to the lack of SUT for Iceland (such data would be part of "Rest of the World" account following Eurostat (2009) recommendations). In the case of services, imports would in Iceland refer only to air passenger transportation (more precisely airfares purchased from foreign airlines). It is important to mention that from the

demand side, in TSA table 4, the airfares purchased from foreign airlines by employers have also been excluded (as they are not considered within internal tourism consumption but outbound tourism consumption).

Even if subsidies were taken into account, taxes included only Value Added Tax (VAT). These taxes were estimated for each industry from EAR. EAR includes different VAT brackets applied for each industry and consequently VAT was calculated. Other taxes (applied to tourism products), such as excise tax on petrol, tobacco and alcohol, could not be estimated from the existing data sources (the most detailed data sources referred only to total economy and there is nothing else). Here further research is needed.

Overall, the compilation of TSA table 6 was strictly dependent on the development of National Accounts in Iceland which is mostly constrained by the lack of a Supply and Use table. So one might say that TSA cannot be better than the National Accounts are.

3.2.6. TSA:RMF table 10

In the compilation of table 10 one should differentiate between three different types of tables referring to non-monetary indicators according to TSA:RMF 2008 standards:

- Number of trips and overnights by forms of tourism and classes of visitors (TSA:RMF table 10a)
- International arrivals by modes of transport (TSA:RMF table 10b)
- Number of establishments and capacity by types of accommodation (TSA:RMF table 10c)

Due to lack of data table 10d of the TSA:RMF 2008 standard, i.e. Number of establishments in tourism industries classified according with average number of jobs, was not approached. For the time being there is no data source that captures tourism establishments as a statistical unit. However, in Iceland data exists on the number of enterprises and organizations and it has been calculated that in Iceland more than 6% of enterprises and organizations are active in tourism industries (see Annex 5).

In the **TSA table 10a** the lack of a demand side survey amongst Icelanders made it impossible to complete data specifically in the case of domestic tourism. There is no official data on how many trips Icelanders made inside their country and abroad and moreover how many of them were day trips. At the same time, due to its geography as an island in the middle of the Northern Atlantic, outbound day trips might be negligible. From this perspective, inbound day trips were assimilated only with cruise arrivals.

Regarding cruise arrivals, what is counted refers to each arrival registered in different Icelandic ports of call. So, practically one foreign visitor can have more than one arrival during a trip in Iceland if the cruise ship is calling at more than one Icelandic port. The existing data did not

allow for a separation of ships calling at different ports and thus accurately calculate the real figure for cruise visitors in Iceland (see: Frent, 2013, pp. 25-26).

Regarding the number of overnight trips, it is reasonable to say that for inbound tourism they are well captured by the Icelandic Tourist Board's counting of foreign visitors assuming that the number of inbound trips are equal to the number of foreign visitors in Iceland. Also, to some extent this can be applied to outbound tourism by calculating the departures of Icelanders abroad. Departures of Icelanders abroad were computed as a sum between the number of departures of Icelanders from Keflavík airport (ITB counts), the number of departures of Icelanders using Smyrill line (data provided directly by Smyrill line company⁹) and the number of departures of Icelanders from other airports (separately estimated using ITB counts and ISAVIA's data on number of departures of passengers in international traffic).

An important non-monetary indicator is represented by the number of overnights. Here data from accommodation statistics was partially used. In other words, only tourists staying in accommodation establishments captured by Statistics Iceland were included, leaving aside accommodation in Trade Union establishments (popular amongst Icelanders), accommodation at friends and relatives and other forms of accommodation (e.g. Airbnb). Only continuous demand-side surveys both for foreigners and Icelanders (which are currently lacking) would provide such data.

The Icelandic **TSA table 10b** is more aggregated and restricted than its TSA:RMF counterpart. The breakdown of international arrivals in Iceland by means of transport is aggregated to only a few categories, once again due to the country's geography as an island in the middle of the North Atlantic (so there are only arrivals by air and waterway). Moreover, there is no number of overnight stays by these means of transportation (and again this is due to the lack of continuous survey among foreign visitors).

ISAVIA's data were used to divide the total air arrivals/departures of foreign visitors by scheduled and unscheduled (charter) flights. The number of departing passengers from Keflavík airport (with breakdown by charter and scheduled flights) were used. It is important to say that Keflavík airport accounted for 97-99% of total departures of foreign visitors by air (calculated from ITB counts).

Once again it should be noted that the total arrivals in table 10b is not strictly equal with the total number of foreigners arriving in Iceland due to cruise arrivals which can cover more than one arrival in the country during the same trip of a foreign visitor. Nevertheless, referring strictly to the arrivals indicator, one might say that the Icelandic TSA table 10b provides a complete picture.

⁹ Thanks are also due to Sófus Jóhannsson, who provided the data for the earlier TSA studies (see: Frent, 2013; 2014a).

In the Icelandic **TSA table 10c** data is mostly calculated from accommodation statistics except for the number of summerhouses, which were provided by Registers Iceland. However, in the case of camping no data exists on the capacity (i.e. number of places for tents and caravans) as well as occupancy for the time being. Only the number of campings is known. The concept of “pitches” proposed by Eurostat is not yet implemented by Iceland (Frent, 2013).

Another important remark is the fact that the number of establishments, the number of beds and the number of rooms are the ones existing in the month of July each year. These were taken directly from published data from Statistics Iceland. However, one must admit that future work should be done for the capacity data to refer to the whole year and not only the month of July. This is in accordance with Eurostat practices.

As regards occupancy, bed occupancy was calculated separately in order to include all types of accommodation establishments which are covered by accommodation statistics. The published data of Statistics Iceland for bed occupancy refer only to hotels and guesthouses, which was not considered sufficient. So, data on the occupancy of bed places were recalculated to also include apartments, private homes, hostels, huts in the wilderness and sleeping-bag accommodation. For this, monthly data on capacities and overnight stays have been used; more precisely, bed night occupancy was calculated as a ratio between the total number of overnight stays and a calculated number of “bed-places days” provided to tourists (which were based on monthly capacity data).

3.3. Problematic issues

Several problematic issues have been dealt with in the new TSA compilation for Iceland for the period 2009-2013. These include:

- The absence of a Supply and Use Table (SUT)
- Estimating the net valuation for the services of travel agencies and tour operators
- Lack of separate estimates for domestic day visitors
- No identification of other country-specific tourism (characteristic and connected) products
- The absence of other elements of imputed tourism consumption (excepting vacation homes imputed rentals)

The absence of a Supply and Use Table (SUT)

The absence of a Supply and Use Table (SUT) has been frequently mentioned in this report. SUT are requested from EU member states every year. However, the European regulation 549/2013 which establishes the European System of National and Regional Accounts (which include also SUT) has EEA relevance which Iceland should comply with. The lack of a SUT for Iceland had the following consequences:

- Production data could not be decomposed by TSA products in TSA table 5 and 6

- Product classification from TSA was in fact rather an industry classification assuming a sort of homogeneity between activities (industries) and the products they produce (a symmetrical approach between industries and TSA products)
- No data on trade and transportation margins for TSA table 6
- No breakdowns by products/industries for data referring to imports and taxes less subsidies on products

The consequence is that complete integration of TSA data into National Accounts was restricted due to lack of SUT even though the total macroeconomic aggregates for the Icelandic economy were included in the TSA compilation.

Net valuation for the services of travel agencies and tour operators

According to the TSA:RMF 2008 standard the services provided by travel agencies and tour operators have to be valued net, considering only the commissions earned in the intermediation of travel services, separated from the provided services (accommodation, transportation, restaurant services etc.). This is a specific feature of TSA and this treatment is different from National Accounts. So, both consumption estimates (from TSA tables 1-4) and production estimates (TSA tables 5 and 6) should follow this rule. Practically, for travel agencies and tour operators only the commission earned is recorded in these tables, while the rest of the provided services will be allocated to the corresponding products (accommodation, restaurants etc.).

The Icelandic TSA for the period 2009-2013 complies with this requirement but some explanations are needed on how conformity was reached. The point of departure is the structure of inbound package tours. There are no data on the structure of package tours involving Icelandic tourists but it can be assumed that for Icelanders package tours are rather specific for outbound tourism only. Moreover, the structure of outbound package tours does not “affect” the Icelandic economy since most of the services are provided abroad (except international transportation and commissions of Icelandic travel agencies, which were already captured in the data requests from Icelandic airlines).

Under these conditions, the structure used to reallocate the components of package tours relied on data coming from ITB’s commissioned survey on foreign visitors, more precisely shares from the calculated number of answers regarding types of services included in package tours (see table 6). In the end, weighted averages calculated for the whole period (summer 2011, winter 2011-2012, winter 2013-2014, summer 2014) were used.

One can see that in this structure cultural and recreational services are lacking. This is because the ITB’s commissioned survey for foreign visitors did not include these services among the answer options. Moreover, one can assume that in the Icelandic case these might be provided by travel agencies/tour operators or they are not very relevant (at least in the case of cultural services).

Table 6: The standard structure of package tours used in the net valuation approach in Iceland.

TSA products	Shares
Accommodation	27.6%
Air transport	23.0%
Travel agencies	20.3%
F&B serving services	11.5%
Road passenger transportation	9.7%
Water passenger transportation	0.5%
Transport equipment rental	4.1%
Other services	3.4%
Total	100%

The same structure was used for both expenditure estimates (excepting cruise visitors¹⁰) as well as for the production accounts. There are no other data sources available in Iceland to provide these data (only a survey among travel agencies would provide more reliable data). It is important to mention that for the compilation of TSA table 1, as a result of a special data request, a separate estimate regarding the amounts coming from package tours was provided by BoP compilers from Statistics Iceland¹¹.

Annex 4 presents a model to estimate the components of package tours following a survey among Icelandic travel agencies and tour operators. It is believed that this approach would provide more reliable data than the approach used above.

Lack of separate estimates for domestic day visitors

This issue is specific to TSA:RMF table 2. As mentioned before, the fact that estimates on domestic day visitors are not separately presented does not mean that they are not incorporated in the total domestic tourism expenditure figures.

Mainly due to a lack of a continuous official survey on travel patterns amongst Icelanders this data is missing. However, one must admit that some data on day trips do exist in the ITB commissioned survey for Icelanders but these do not include precise expenditure data (see table 7).

Table 7: Some data indicating day trips in Iceland, 2012-2014.

Source: Icelandic Tourist Board, 2015a

	2012	2013	2014
Share of people going on day trips* (%)	66.8	62.4	65.3
Average number of day trips* (how many times went to day trips) in a year	8	7.9	8.1

* defined as recreational trip lasting at least 5 hours and spent away from the home without staying overnight.

¹⁰ An exception is the case of cruise visitors, where the disaggregation of package tours was made using a combination of data from the G.P. Wild study (i.e. average expenditure by a passenger going ashore on tours) and data provided by ITRC regarding cruise industry in Iceland.

¹¹ The author wants to once again thank Vésteinn Ingibergsson and Sigrún S. Valdimarsdóttir from Statistics Iceland, External Trade in Service Statistics, for their very precious assistance.

Expanding this data roughly to the Icelandic population one can estimate over one million domestic day trips per year. Nevertheless, it was considered premature to use this figure in the estimation of tourism expenditure since no other monetary and non-monetary data exist for the time being in Iceland. Moreover, there are some variations between years which cannot be explained. The year 2013 posted lower figures compared with the rest of the years. Therefore, caution is needed in interpreting these data.

What the existing data has shown is that Icelanders are undertaking day trips and these are an important segment of the tourism economy in Iceland. It is time to start quantifying their economic importance. Needless to say, according to new EU regulation on tourism statistics the EU countries have to provide to Eurostat data on day trips (same-day visits) on a regular basis.

No identification of other country-specific tourism (characteristic and connected) products

In the classification of products and the related activities, the TSA:RMF 2008 standard recommends that countries establish their own classification of “country-specific characteristic products” by applying the criteria from IRTS (2008).¹² If a particular tourism product is considered important for a country but the IRTS (2008) criteria are not fulfilled, then this product is called a tourism connected product. These products are additional to the ones proposed for international comparability.

In the TSA compilation for Iceland for the period 2009-2013 only the products/industries for international comparability were included. This was because there is no data source to indicate clearly what other products (besides those used for international comparability) can be considered specific to Iceland.

In an earlier TSA publication, Frent (2013) proposed three types of products to be considered by default country specific: Retail sale of automobile fuel, Handicrafts and souvenirs and Activities of sports clubs (p. 69). However, in this TSA compilation it was not possible to apply the criteria from IRTS (2008) to clearly check this proposal, due to lack of data sources. More precisely, applying share-of-expenditure condition would involve a detailed expenditure survey for inbound visitors (which is lacking) while applying the share-of-supply condition would require the existence of both a SUT and a detailed expenditure survey.

The existing ITB’s commissioned survey for inbound visitors is not detailed enough to provide a good insight on this issue (see table 8). For instance, it cannot be concluded that groceries (5% and 5.6%) and liquor shop purchases (3.3% and 2.7%) are clearly meeting the share of demand condition. At the same time, there are signs that the cost of fuel (aggregated within the

¹² One or both of the criteria should be met: “Tourism expenditure of the product should represent a significant share of total tourism expenditure (share-of-expenditure/demand condition); Tourism expenditure of the product should represent a significant share of the supply of the product in the economy (share-of-supply condition). This criterion implies that the supply of a tourism characteristic product would cease to exist in a meaningful quantity in the absence of visitors” (IRTS, 2008, p. 40).

category Other transport costs) might happen to meet these criteria since 7-8% might be considered an important share.

Table 8: Types of expenditure from ITB's commissioned survey for inbound visitors and their correspondence with the TSA classification of products/industries, 2011-2014.

Source: compiled upon Icelandic Tourist Board, 2015b

Types of expenditure	Corresponding TSA products/industries	Share from total expenditure in Iceland	
		2011-2012	2013-2014
Accommodation	Accommodation services	22.6%	22.3%
Internal transport (bus / ferry / airfares, car rental)	Road passenger transportation Water passenger transportation Air passenger transportation Transport equipment rental	16.3%	4.5%
Other transport costs (fuel, maintenance)	Other services	8.5%	7.8%
Restaurants/bar/cafes	Food-and beverage-serving services	11.5%	12.1%
Groceries	Goods purchased from trade activities	5.8%	5.0%
Liquor shops	Goods purchased from trade activities	3.3%	2.7%
Recreation/entertainment	Cultural services Sport and recreational services	9.0%	10.2%
Shopping	Goods purchased from trade activities	8.3%	8.1%
Other	Other services	14.8%	8.8%
Local car rental	Transport equipment rental	...	18.4%

Note: 2011-2012 represents aggregated data from summer 2011 and winter 2011-2012 while 2013-2014 represents aggregated data from winter 2013-2014 and summer 2014. The shares are based on a calculation of simple averages.

... - data not available (in the period 2011-2012, car rental was part of the Internal transport category).

What is needed is an improved structure of expenditures to be better correlated to the TSA products. It is important to mention that the shares used in table 8 were not used in the compilation of TSA table 1 (see 3.2.1). There were particular reasons for this decision (i.e. too high aggregation for some categories, discontinuity of the inbound survey). Nevertheless, the ITB commissioned survey clearly shows the importance of other products, other than the ones used for international comparability, and this aspect should be foreseen in the future TSA compilation for Iceland.

The absence of other elements of imputed tourism consumption (excepting vacation homes imputed rentals)

One might consider this issue as being not very important since there was no evidence of the existence of imputed consumption in Iceland except in the case of vacation homes. However, it has to be said that the case of air tickets supplied free of charge or at a reduced price to employees has been approached. More precisely, through the data request to Icelandic airlines, a separate question queried this aspect (see table 3 within 2.3.1). Nevertheless, no data from the Icelandic airlines were obtained, apart from one airline and there the data seemed trivial. Therefore, it was decided not to take this issue into consideration.

Unlike in other European countries, there is no governmental expenditure related to health cures of tourists in spa resorts in Iceland. This would fall into the category of “social transfers in kind”. According to SNA 2008 social transfers in kind are defined as “goods and services provided by general government and Non-profit institutions serving households (NPISHs) that are delivered to individual households” (SNA, 2008, p. 47). Other examples with relevance for tourism would refer to free or reduced bus fares for pensioners or free or reduced admission fees to swimming pools, art courses etc. (assuming that these can be used also in tourism trips). However, Icelandic National accounts do not treat these as being social transfers in kind because “the producing units in question do not receive any special compensation from government. In other words, there are no money flows from government and therefore this type of price reduction should not be classed as Social Transfer in Kind.” (Statistics Iceland, 2011, p. 115).

TSA:RMF 2008 also proposed other forms of imputed consumption (e.g. temporary exchange of dwellings for vacation purposes, net costs for hosting visitors in terms of increasing expenditure on food, transport etc., imputed values for fish, mushrooms, berries produced on own account from the vacation homes or resulting from recreational activities outside the usual environment). Regarding the latter example, the Icelandic National Accounts do not include it:

Goods produced by households for own consumption are of minor importance in Iceland and normally not covered in household final consumption. Apart from housing services produced by owner occupiers the major exception is the own consumption of milk and meat of farmers and other members of the households on the farm. (Statistics Iceland, 2011, p. 111)

So, one might consider that even in future TSA compilations the estimation of other elements of imputed tourism consumption can hardly be made in the case of Iceland.

3.4. Recommendations for future compilations

This section complements section 2.4 regarding data sources. The following enhancements in data sources have been proposed:

- Improve the procedure of counting foreign visitors at Keflavík airport (in order to distinguish tourists from other types of travellers with a non-tourist purpose of trip).
- Carry out continuous surveys from demand side for inbound visitors (on the one hand) and for Icelandic residents (on the other hand) in order to capture tourism expenditure and other tourism specific variables.
- Produce Supply and Use Tables by National Accounts on a regular basis in order for TSA to be fully integrated with them.
- Initiate a new supply-side survey among Icelandic travel agencies that produce package tours in order to calculate more accurately the distribution of the package tours components.

However, besides new and improved data sources, some guidelines for the future TSA compilation are needed as regards the methodological framework. The assumption is that the above recommendations regarding data sources will be implemented in order to proceed with other recommendations envisaging specific methodological issues.

First of all, a **new (enhanced) product classification** is necessary which (in addition to the TSA:RMF 2008 requirements) should be compatible with the classification of products used by the future Supply and Use Tables for Iceland. Consequently, the future TSA for Iceland will be fully integrated in the SUT and National Accounts. Nevertheless, this new product classification compatible with the future SUT should not be restricted only to tourism characteristic products for international comparability (as it has been done in the present TSA compilation). It should also be enlarged to include the country-specific tourism products, be it tourism characteristic products (if the IRTS (2008) criteria are fulfilled) or tourism connected products (if the IRTS (2008) criteria are not fulfilled). As already mentioned, some preliminaries for establishing country-specific tourism services and goods for Iceland have already been proposed (see: Frent, 2013, pp. 69 – 73) and might be followed.

The TSA compilation for the period 2009-2013 presented the data only in current prices. However, **TSA estimates in constant prices** are needed in future compilations and this can be done by calculating some aggregated price indexes specific for tourism consumption. The TSA data comparability from year to year would be more accurate by using constant prices.

Following the results of the survey on travel agencies a **new approach for the net valuation of services of travel agencies** and tour operators should be employed. Data gathered from Icelandic travel agencies which produce package tours will provide a different tool for this assessment (see proposal in Annex 4). Without any doubt, the proposed new approach will be better than the one used in this TSA compilation where some assumptions (not coming from the “market” (i.e. travel agencies)) have been made.

An important part of any TSA deals with data on employment which were not included in this TSA compilation. However, this does not mean that some data on employment do not exist in Iceland.¹³ It is important to mention that for this TSA compilation process it was agreed that

¹³ Data on employment for some tourism industries are already published by Statistics Iceland and are available at <http://www.hagstofa.is/en/statistics/business-sectors/tourism/short-term-indicators-in-tourism/>. These were

employment data will be compiled within Statistics Iceland. In any case, the future TSA in Iceland should include **employment table(s)**. The classification of tourism industries used in this TSA compilation (see table 5) should be envisaged in order to assure the international comparability of data on employment in tourism industries. If possible (and available), National Accounts employment data should be used with priority. Also the compilation of employment data derived from tourism consumption (using tourism ratios) might be optional and would refer to indicators such as Full-time equivalent jobs and Number of hours worked.

It is necessary to have **more accurate numbers for foreign visitors** as well as **data for domestic trips of Icelanders**. These are essential in deriving average expenditure indicators and producing reliable TSA estimates by facilitating the analysis of monetary information. Especially, data on domestic day trips are a must. In addition, data on the number of establishments in tourism industries is needed (TSA:RMF table 10d), but this was not available for Iceland for the time being. This supply-side information should also be considered.

If possible, the future TSA compilation in Iceland should pay particular attention to some **payments in kind to employees** as forms of imputed tourism consumption which are part of the aggregate Internal tourism consumption. These would refer to accommodation provided free of charge or at a reduced price (i.e. in summer houses) as a result of benefits from employers or Trade Unions and business cars used for leisure trips outside the usual environment.

The future **development of National Accounts** in Iceland should also **consider the needs of TSA**, while TSA can also support some data from National Accounts. Referring to the latter, as an illustrative example, TSA estimates can be used in order to disaggregate items within Household Final Consumption Expenditure (e.g. Non-resident consumption for accommodation). Particularly, more research should be done in order to find a way to identify other taxes (besides Value Added Tax) which are included in the value of tourism consumption in Iceland (e.g. airport and harbour fees, excise tax on petrol, tobacco and alcohol).

In this compilation exercise the TSA:RMF table referring to outbound tourism expenditure (part of imports) was not included as it had no impact on the calculations for the Icelandic economy. However, the future TSA for Iceland might approach this table since an analytical interest exists. Many Icelanders are travelling abroad for tourism purposes and their expenses should

labelled as “Number of employees in activities related to tourism” and the data source is PAYE register. The following industries/categories are included: 51.10 Passenger air transport, 55. Accommodation, 56. Food and beverage activities, 79. Travel agency, tour operator and other reservation service and related activities, Other activities linked to tourism (which aggregates the following industries: 49.39.0 Other passenger land transport; 50.10.0 Sea and coastal passenger water transport; 50.30.0 Inland passenger water transport; 77.1 Renting and leasing of motor vehicles; and 77.21.0 Renting and leasing of recreational and sports goods). However, it has to be admitted that only three tourism industries are separately identified here (51.1, 55, 79) while 56.21 (embedded also in 56) are not part of Food and beverage-serving industry according to international standards. In other words, Water passenger transportation, Transport equipment rental, a part of Road passenger transportation and a part from Sports and recreational industry are all aggregated into ‘Other activities linked to tourism’. Overall, what is lacking are employment data coming from 90, 91, 92 and 93 (excepting 91.01 and 93.12 which are not part of tourism industries) as well as 49.32 Taxi operation. According to Labour Force Survey number of employed persons in main and second job for total 90, 91, 92 and 93 (section R – Arts, entertainment and recreation) increased from 6,600 in 2009 to 7,800 in 2013 (Statistics Iceland, 2015a).

be seen in a comparative and balanced way with their tourism expenses inside Iceland. Therefore, a future compilation might envisage the **compilation of TSA:RMF table 3** Outbound tourism expenditure by products. One can reasonably assume that outbound day trips are rather negligible for Iceland due to its geography.

Moreover, considering the previous TSA study for Iceland (see: Frent, 2014b) the compilation of **TSA:RMF tables 8 and 9** can also be continued and/or improved. These tables provide valuable data on investments for the tourism sector (i.e. Tourism Gross Fixed Capital Formation) and governmental expenditures for providing some collective services (i.e. Tourism Collective Consumption).

International standards are very clear: TSA measures only the direct effects of tourism consumption. But these are only a part of the economic consequences of tourism. There are also the so-called **indirect effects** generated by the increased demand from the suppliers of tourism industries. For a full picture of the economic importance of tourism in the Icelandic economy the last recommendation is to expand the future TSA to also include an assessment of these indirect effects. Yet, estimating the indirect effects is conditioned by the existence of SUT and Input–Output table, which one would hope will exist in the future.

4. Analysing the TSA results

This chapter aims to present the interpretation of the main TSA results compiled for Iceland for the reference period 2009-2013. Different perspectives are envisaged in this endeavour from the analysis of the aggregated results to their breakdowns by products/industries and from inter-sectorial comparisons to international comparability with various countries, mostly European ones.

4.1. The key results: the TSA aggregates

In full accordance with the TSA:RMF standard, all the TSA aggregates proposed for international comparability were calculated for Iceland for the reference period 2009-2013. They were calculated in current prices only so the comparability between years should be taken with caution.

Compared with the figures published by Statistics Iceland, a small difference can be seen in this report in the calculation of the aggregate Internal tourism expenditure that included also here the category of “Employers expenses for business trips of their employees”. In TSA table 4, published by Statistics Iceland in 2015, the above category was separately presented as “Other components of tourism consumption”. Nevertheless, this was not a departure from international standards but rather just a separate presentation in order to facilitate the comparison with the related National Accounts aggregates (see 4.2, table 10). The category of “Employers expenses for business trips of their employees” is mostly¹⁴ part of the Intermediate consumption from National Accounts and not part of Household Final Consumption Expenditure as it is in the case of Domestic tourism expenditure.

Overall for all TSA aggregates one can see an evident upward trend, especially in the period 2011-2013 following the veritable explosion in tourism arrivals in the wake of the 2010 Eyjafjallajökull eruption (see table 9). In the short term the eruption did produce a marked impact on Icelandic airlines but also on some tourism operators (in this regard one can see the decrease of TDGVA and TDGDP in 2010 compared with 2009).

Even if the TSA aggregates are expressed in current prices, the trend of these aggregates can be well observed when they are expressed in relative terms (as a share of the corresponding National Accounts aggregates). This is the case of Gross Value Added in Tourism Industries (GVATI), Tourism Direct Gross Value Added (TDGVA) and Tourism Direct Gross Domestic Product (TDGDP). GVATI and TDGVA are expressed as a share of total Gross Value Added

¹⁴ However, according to Eurostat (2009), *per diems* covering meals and drinks should be treated as compensation of employees, so they are part of Household Final Consumption Expenditure.

in the Icelandic economy while TDGDP is part of Gross Domestic Product in Iceland. Naturally, the share of GVATI in total gross value added in Iceland is higher than the share of TDGVA, considering that GVATI is not derived only from tourism consumption (as is the case of TDGVA). GVATI is a result both of tourism and non-tourism consumption (e.g. value added resulted from restaurants serving locals). This is the reason why GVATI is not very relevant for tourism analysis. Anyway, its share can be used at least as a benchmark to see the “highest value” in terms of contribution to gross value added (which is derived both from tourism and non-tourism consumption).

Table 9: The TSA aggregates for Iceland, 2009-2013 (mil. ISK), current prices.

Source: processed from Statistics Iceland, 2015b

	2009	2010	2011	2012	2013
Internal tourism expenditure*	165,515.3	171,729.1	205,780.4	242,142.2	272,806.1
Internal tourism consumption	167,699.2	173,974.2	208,355.3	245,024.7	275,870.7
Gross Value Added of Tourism Industries (GVATI)	83,738.0	84,631.1	85,390.1	100,100.5	118,680.3
<i>GVATI as a share of total GVA (%)</i>	5.9%	5.8%	5.6%	6.3%	7.1%
Tourism Direct Gross Value Added (TDGVA)	49,724.6	47,113.6	52,764.9	64,096.2	76,464.3
<i>TDGVA as a share of total GVA (%)</i>	3.5%	3.2%	3.5%	4.0%	4.6%
Tourism Direct Gross Domestic Product (TDGDP)	56,328.7	54,066.6	61,352.3	74,750.1	87,333.6
<i>TDGDP as a share of total GDP (%)</i>	3.6%	3.3%	3.6%	4.2%	4.6%
Tourism ratio on domestic supply	4.6%	4.5%	4.9%	5.4%	6.0%

* includes business trips

Even if the TSA:RMF 2008 standards does not consider the so-called “Tourism ratio on domestic supply” to be an aggregate it is worth including it in table 9 above. Tourism ratio on domestic supply is calculated as a ratio between internal tourism consumption and Domestic supply (at purchasers’ prices). This ratio was also part of the Eurostat collection of TSA (Eurostat, 2013). In a simple manner this tourism ratio shows the proportion of products supplied in the Icelandic economy that are consumed by tourists. Thus, the economic importance of tourism in a country is also shown by the tourism ratio on domestic supply. In Iceland this ratio has increased from 4.5% in 2010 to 6.0% in 2013.

It is important to mention that these TSA aggregates measure only the direct economic effect of tourism, leaving aside other secondary effects (such as indirect or induced effects) generated by tourism consumption as well as the economic effects of investments and governmental consumption for collective services in the tourism sector.

4.2. An overview of tourism consumption

Tourism is a demand-side phenomenon and consequently what matters in its assessment are acquisitions of goods and services by visitors (be it day visitors or tourists - overnight visitors). Moreover, the supply-side TSA aggregates (TDGVA and TDGDP) are also a consequence of

tourism consumption as they are derived from it. So, tourism consumption is the major key element in the TSA compilation.

First of all, it is important to see the main components of tourism consumption (see figure 1). Most of tourism consumption comes from inbound visitors who have constantly increased their share from 52% in 2010 to 60% in 2013. At the opposite end, and with a decreasing share, is the consumption of resident households; from 39% in 2010 to 33% in 2013. At the same time, smaller variations can be noticed in the case of business trips paid by employers.

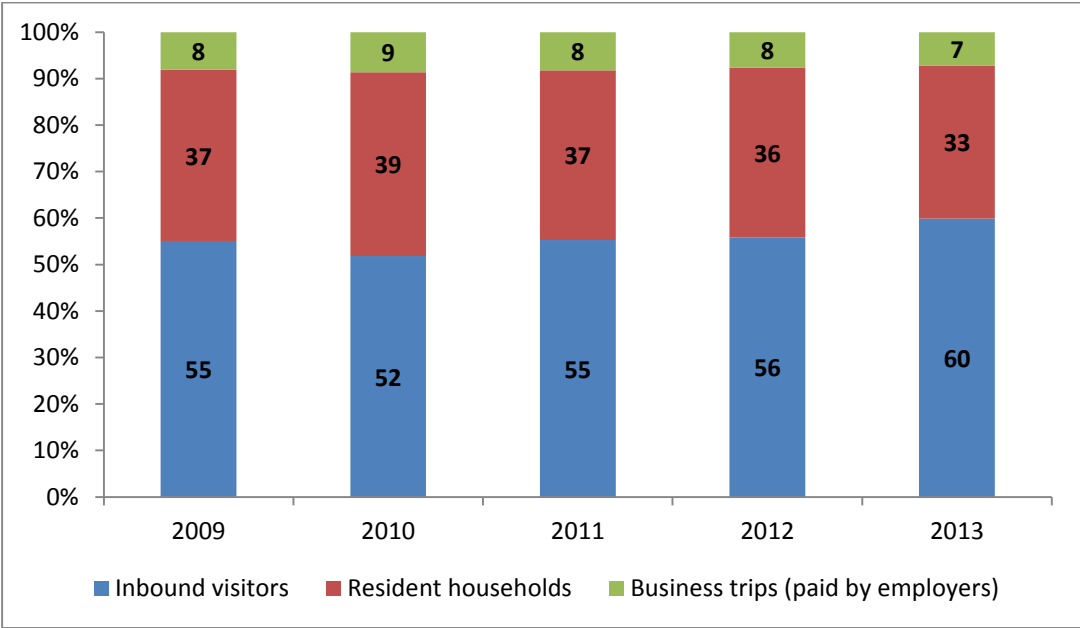


Figure 1: Major components of internal tourism consumption in Iceland, 2009-2013. *Source:* processed from Statistics Iceland (2015b)

From a different perspective one can say that even if the tourism sector in Iceland is largely dependent on foreign visitors, the domestic market is also significant. It should not be forgotten that Icelanders are also travelling in the country and when travelling abroad they use Icelandic airlines. This all counts into the domestic tourist consumption for Iceland. From this point of view, TSA has also confirmed the important role of domestic tourism for the economy of Iceland. This was most obvious in the crisis years when Icelanders stayed in Iceland and travelled there.

Another point is to see the share of tourism consumption in the related macroeconomic aggregates. It should be clearly stated that internal tourism consumption should never be expressed as a part of GDP since it contains one element which is not part of GDP (that is the case of the category “Employers’ expenses for business trips”). In fact, the components of the aggregate Internal tourism consumption relate to three different macroeconomic aggregates:

- Inbound tourism expenditure is part of total export of goods and services
- Domestic tourism expenditure/consumption is part of Household final consumption expenditure (adjusted for direct purchases of residents abroad which are in fact imports)

- Employers expenses for business trips of their employees is mostly ¹⁵ part of Intermediate consumption

One can see that the share of inbound tourism expenditure in the total exports of goods and services has increased constantly from 10.4% in 2010 to 15.8% in 2013 (see table 10). A more moderate trend can be observed in the case of domestic tourism consumption. Its share (in household final consumption expenditure) has increased from 9.1% in 2010 to 10.3% in 2013. A relatively stable share can be noticed in the case of employers' expenses for business trips, which represent roughly 1% of total intermediate consumption in the Icelandic economy.

Table 10: Components of Internal tourism consumption and their share in the related macroeconomic aggregates, 2009-2013.

Source: compiled from Statistics Iceland (2015b, c, d)

	2009	2010	2011	2012	2013
Inbound tourism expenditure (ITE)	92,323.2	90,123	115,116.5	136,840.0	165,133.5
Total exports of goods and services	791,658.3	865,627.9	960,364.0	1,012,182.0	1,045,937.2
<i>ITE as a share of total exports (%)</i>	<i>11.7%</i>	<i>10.4%</i>	<i>12.0%</i>	<i>13.5%</i>	<i>15.8%</i>
Domestic tourism consumption* (DTC)	61,751.6	68,868.7	76,120.7	89,359.2	90,842.4
Household final consumption expenditure ** (HFCE)	745,919	754,215	791,776	848115	881582
<i>DTC as a share of total HFCE (%)</i>	<i>8.3%</i>	<i>9.1%</i>	<i>9.6%</i>	<i>10.5%</i>	<i>10.3%</i>
Employers' expenses for business trips (EEBT)	13,624.4	14,982.6	17,118.2	18,825.5	19,894.8
Intermediate consumption (IC)	1,492,561	1,634,149	1,795,289	1,935,955	1,960,840
<i>EEBT as a share of IC (%)</i>	<i>0.9%</i>	<i>0.9%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>

* - calculated as a sum between domestic tourism expenditure and imputed rentals for summer houses; it excludes employers' expenses for business trips

** - it excludes direct purchases of residents abroad

A particular point refers to the importance of tourism for Icelanders. In 2013, 10.3% from household final consumption was made for tourism in Iceland (including international transportation using Icelandic airlines). This reveals the significance of tourism domestically.

4.3. The contribution of different tourism industries

It is important to analyse different breakdowns of TSA aggregates in order to see what products/industries contribute the most. This is very valuable information for policy-making.

Regarding internal tourism consumption in Iceland this aggregate is highly concentrated within a few products/industries. Sixty percent of the total internal consumption belongs to three items/industries: Air passenger transportation (23.6%), Accommodation (19.7%) and Goods purchased from trade activities (16.8%). At the same time, over one quarter of internal tourism consumption in Iceland is combined from Travel agencies (11.1%), Food and beverage service

¹⁵ See footnote 14.

(7.8%) and Transport equipment rental (7,8%). The rest of the products/industries account for less than 15% of the total internal tourism consumption in Iceland (see figure 2).

One should be aware that this breakdown includes international air passenger transportation to and from Iceland performed by Icelandic airlines so in the case of air passenger transportation for foreign visitors it also includes consumption made before coming to Iceland. Another important point is that goods are assessed at their total prices of purchasing (at purchasers' prices) and not at their retail margin (as in the case of Tourism Direct Gross Value Added).

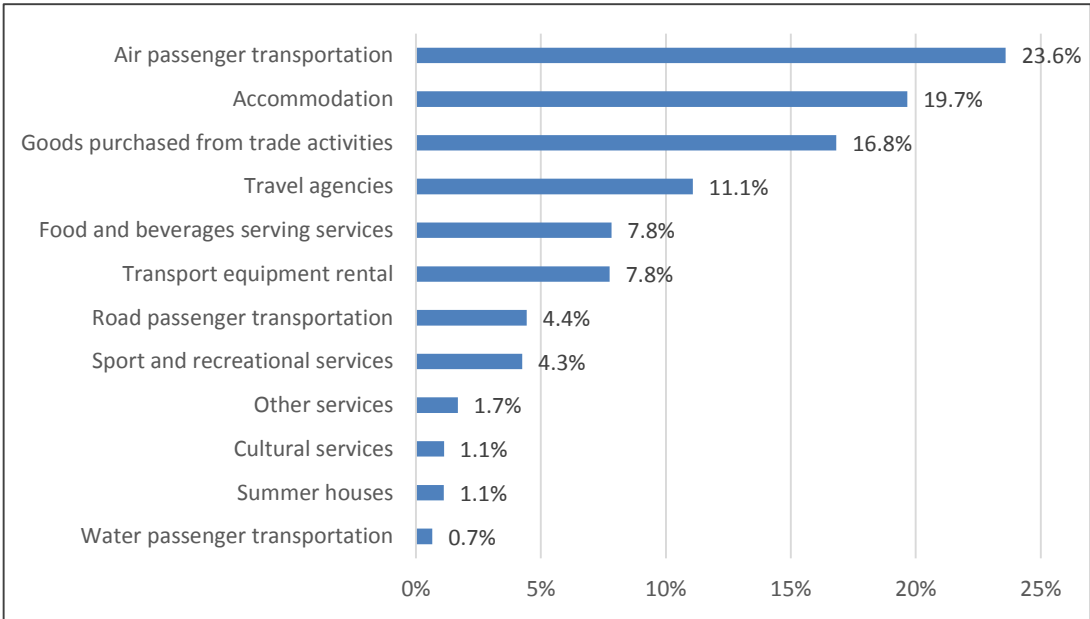


Figure 2: Internal tourism consumption in Iceland by products/industries, 2013.
Source: processed from Statistics Iceland (2015b)

Tourism Direct Gross Value Added (TDGVA) is maybe a more relevant aggregate than Internal Tourism Consumption in a tourism economy. There are three tourism industries that together account for more than a half of the total TDGVA in Iceland in 2013: Accommodation (30.8%), Transport equipment rental (12.5%) and Air passenger transportation (11.7%) (see figure 3). At the opposite end there are tourism industries that contribute very little to TDGVA, such as Cultural services (1.8%) and Water passenger transportation (1.0%).

One can also notice that 89.2% of the total TDGVA came from tourism products/industries used for international comparability while 10.8% is from the rest of products/industries (Good purchased from trade activities and All other consumption products). Some TSA experts might consider this fact a weakness of this TSA compilation but this is a result of the availability of statistical data in Iceland.

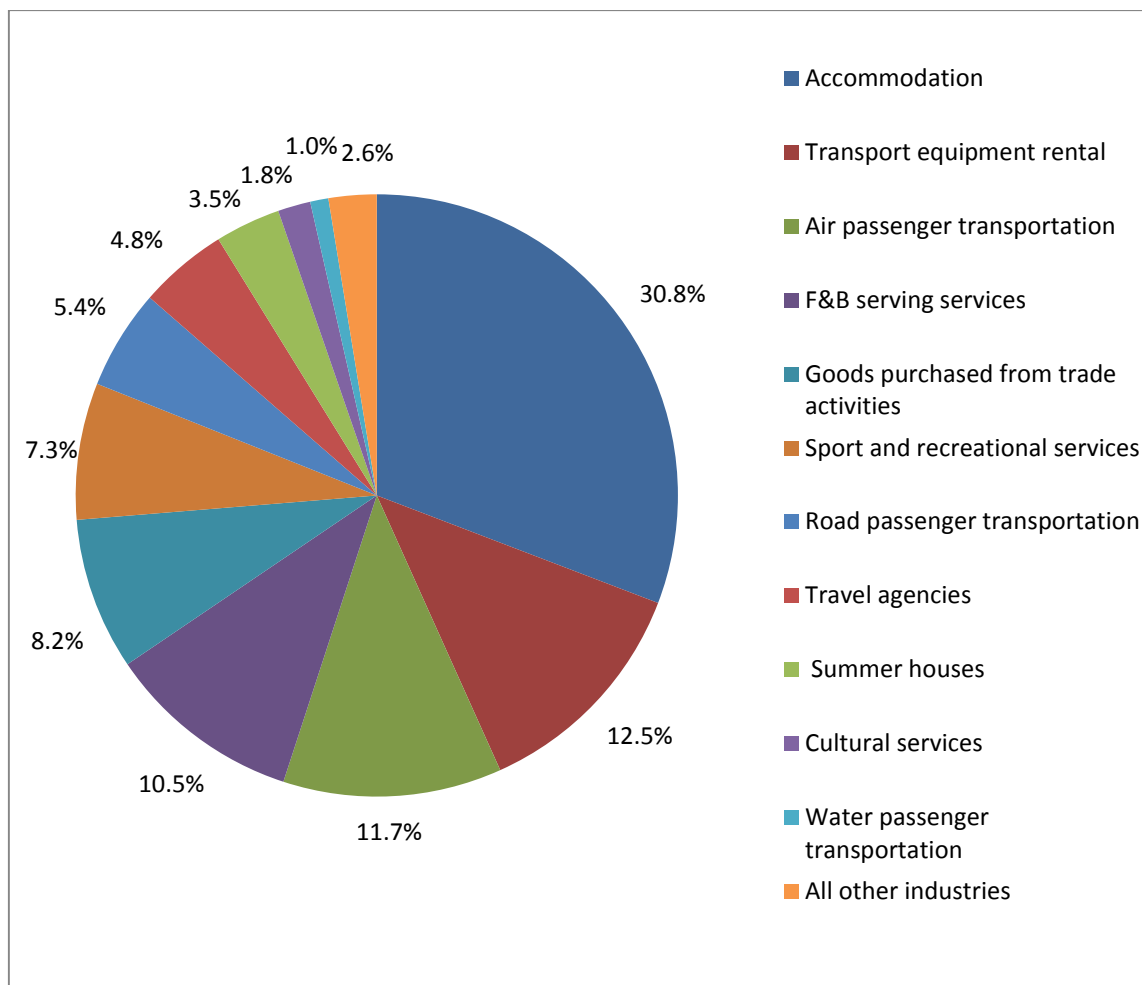


Figure 3: Tourism Direct Gross Value Added in Iceland by industries, 2013.

Source: processed from Statistics Iceland (2015b)

It is important to mention that in line with the TSA:RMF 2008 standard travel agencies are valued on net basis (only through the commissions earned) while the purchasing of goods is based only on the retail trade margin in figure 3.

Figures 2 and 3 provide an important comparison. It should be remembered that TDGVA is a Gross Value Added generated by Internal Tourism Consumption; in other words, it is the tourism consumption that is responsible for the creation of direct gross value added, and this is how TSA works. In this regard one can assess the contribution of each industry in both aggregates, Internal Tourism Consumption and TDGVA.

This comparison is very important from a policy perspective, meaning that what matters is rather the industries that contribute the most to the creation of value added and not products/industries that contribute to the creation of internal tourism consumption. In the TSA compilation process two different situations can be observed: on the one hand there are industries that contribute in a higher proportion to the creation of value added compared with the contribution to total internal consumption and on the other hand there are industries where the contribution to the creation of value added is lower than the contribution to the internal

tourism consumption. Most of the tourism industries fall under the former (the most remarkable situation is for the Accommodation sector) while in the latter case there are Air passenger transportation, Travel agencies and the acquisition of goods.

Figure 4 provides a comparison of figure 2 and 3 only in relative terms (as percentages in total aggregates) and does not take into consideration the absolute values for each tourism industry. The purpose was only to illustrate which tourism industries “performs better” as a benchmarking approach.

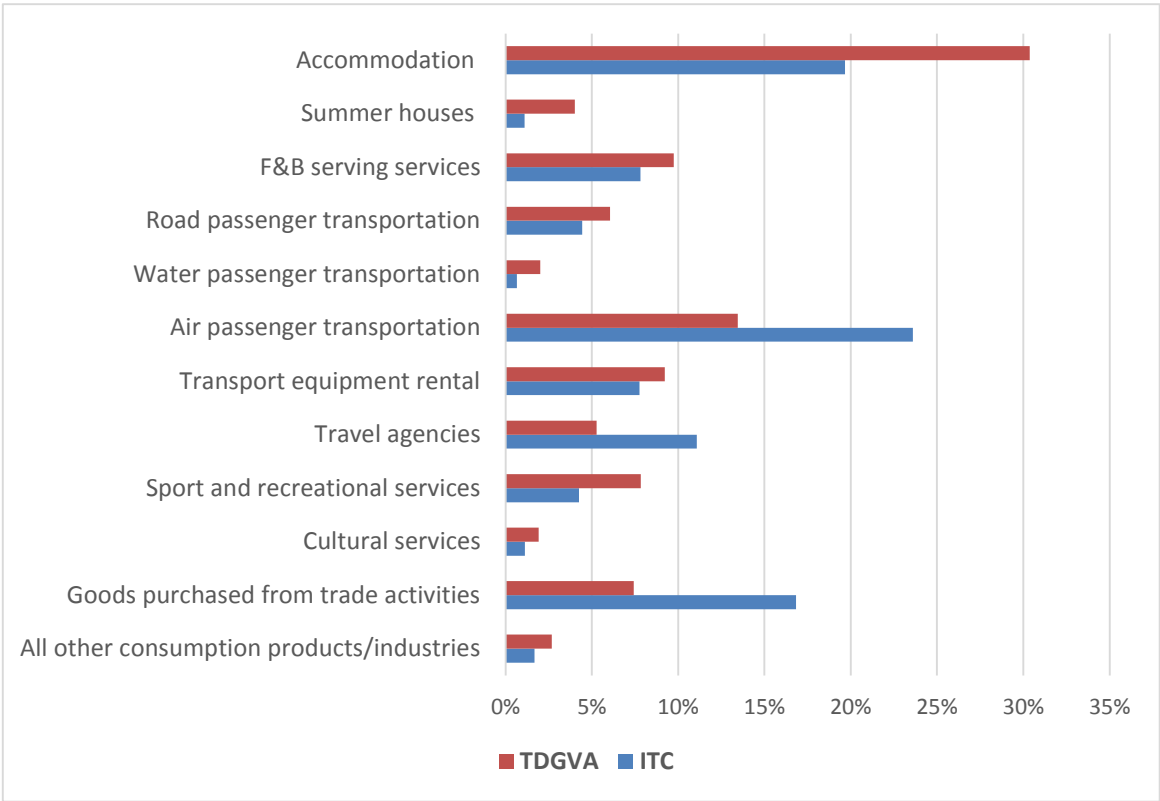


Figure 4: Breakdown of industries in TDGVA and Internal Tourism Consumption (%), 2013. *Source:* processed from Statistics Iceland (2015b)

From a different perspective, a cross-classification between products/industries and the three main categories of internal tourism consumption (called here types of customers) reveals very useful information (figure 5). This analysis refers only to the structure of tourism consumption leaving aside the so-called non-tourism consumption which occurs in the case of each product/industry.

One can see from figure 5 that the tourism consumption in Food and beverage services and Road passenger transportation industries are more dependent on inbound visitors compared with the tourism consumption which occurs in Accommodation industry. The opposite is true for Cultural services and Other services where the dependence on inbound visitors is lower than it is at the total products/industry level (60%).

Referring to tourism consumption made by resident households, theirs seems to be lower in the case of Food and beverage services, Road passenger transportation and Air passenger transportation. This is a result of the tourism behaviour of Icelanders (usage of personal cars and less consumption in restaurants when travelling domestically for personal purposes). Opposite to the above three categories, there are Cultural services and Recreation services (where tourism consumption of resident households is higher) but one should consider that in these categories there are technically no payments made by employers for business trips of their employees. A special case is represented by Travel agencies which are valued at the commission earned according to the TSA:RMF 2008 standard and thus cover also the commission earned from the outbound trips of Icelanders, so that is why an important part of its consumption is represented by resident households (around 40%).

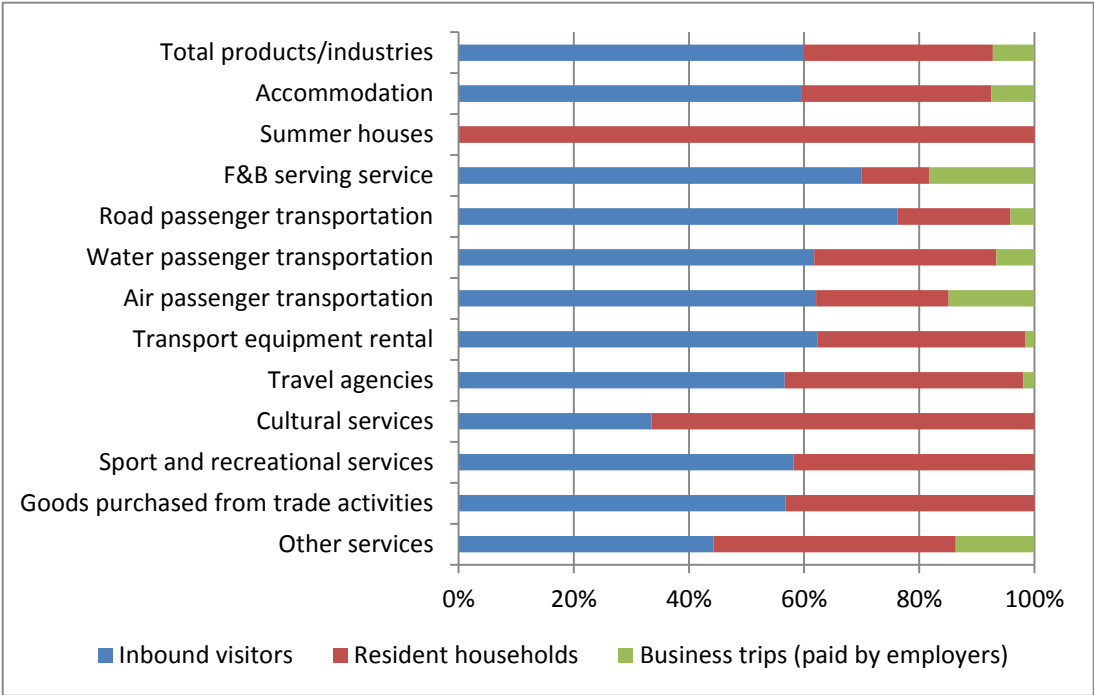


Figure 5: Internal tourism consumption in Iceland by products and types of visitors, 2013. *Source:* processed from Statistics Iceland (2015b)

It is also important to see the tourism ratio for each industry (figure 6). Thus, for Travel agencies and Summer houses, a 100% tourism ratio is noticed meaning that all the production serves tourism consumption.

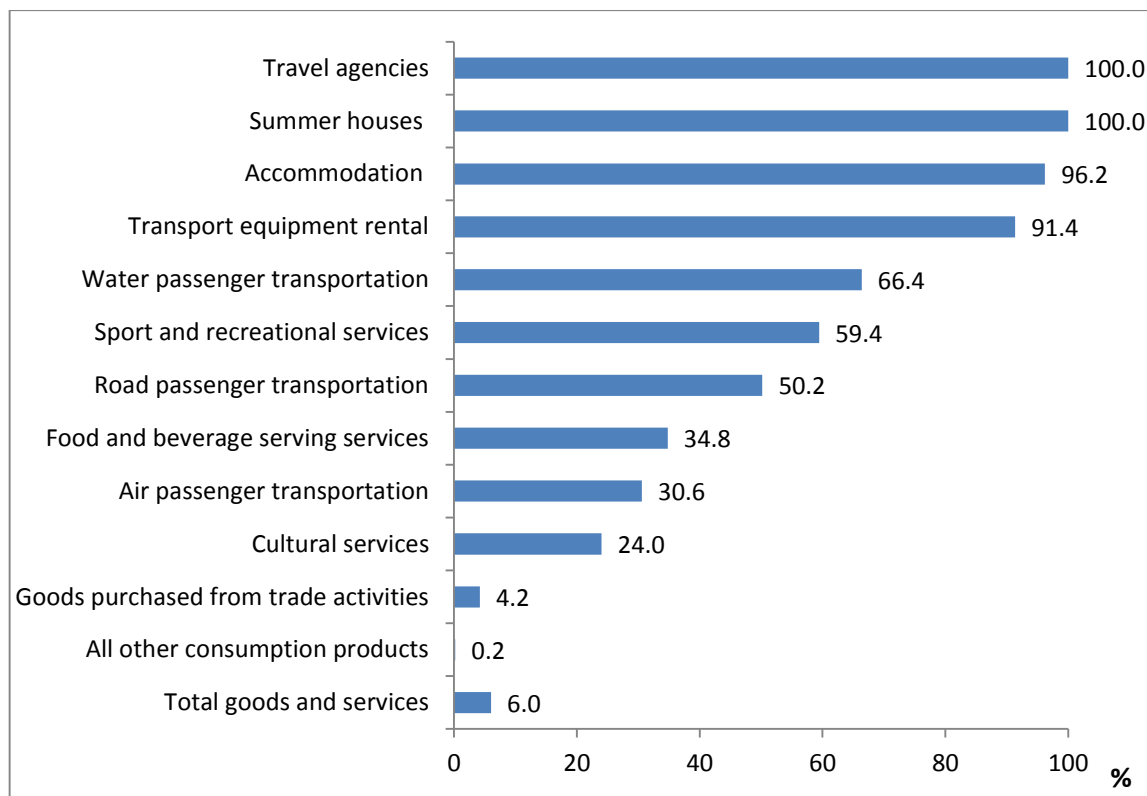


Figure 6: Tourism ratios of different industries/products, 2013.

Source: processed from Statistics Iceland (2015b)

Naturally, higher values were also observed for Accommodation (96.2%) and Transport equipment rental (91.4%). Moreover, Water passenger transportation and Sport and recreational services are industries that are highly dependent on tourism. At the opposite end, there are the acquisition of goods (4.2%) and cultural services (24%).

In sum, what is interesting to see is that from the total goods and services provided in the Icelandic economy 6% are due to tourism consumption. This is an important figure that also reflects the importance of tourism in the Icelandic economy. Maybe this figure is more important than the tourism direct contribution to GDP. The EU average for the same indicator was calculated to be 3.9%. Switzerland posted the highest value, 7.7%, while Spain ranked second with 5.7% in 2008 (Eurostat, 2013).

4.4. Comparability with other economic sectors

The TSA results allow tourism to be compared with other economic sectors. In this endeavour the main economic sectors have been chosen, ones that do not include any tourism industries among their components. This was done in order to avoid a sort of “sectorial overlap” (for instance in case of transportation or retail trade, which are partly related to tourism also).

Nevertheless, caution should be taken as the GDP contribution of tourism from the TSA follows a particular method of calculation (GDP is generated by the internal tourism consumption) and it is not derived purely in a single National Accounts approach as the rest of the benchmarking sectors are. In fact, TSA:RMF (2008) is very clear in this sense:

TDGVA and TDGDP can provide measures of the direct economic contribution of tourism in the economy of reference in the same sense as GVA of any industry does and can be expressed as shares of total GVA or of total GDP of such economy. However, they do not refer to tourism as an industry comparable to other industries in the System of National Accounts 2008. There is no such tourism industry for which value added and GDP would be respectively Tourism direct gross value added and Tourism direct gross domestic product. They are indicators emanating from a reconciliation of tourism consumption and supply, and their values will depend on the scope of measurement of tourism consumption that a country adopts. (TSA:RMF, 2008, p. 48)

However, even if there is no “tourism” as an individual industry in the National Accounts (remember that tourism is defined rather from demand-side as a consequence of visitor’s consumption!) the comparability among different economic sectors is possible, especially for the benchmarking purposes.

Twelve economic sectors have been chosen in the comparison (see table 11), which is not a ranking but rather a way to analyse the sectorial importance viewed through their contribution to GDP. One can see that in Iceland the tourism sector (4.6%) has almost the same size as the construction sector (4.7%) and the electricity sector (4.8%) in terms of contribution to GDP.

Table 11: Contributions to the Icelandic GDP by economic sectors, 2013.

Source: Statistics Iceland, 2015b; e

<i>Sectors (industrial groupings)</i>	Share in GDP (%)
Real estate activities	10.0
Fishing (including fish processing*)	9.4
Financial and insurance activities	8.9
Manufacture industry (except fish processing*)	8.8
Education	6.1
Electricity	4.8
Construction	4.7
Tourism	4.6
Professional, scientific and technical activities	4.4
Computer programming, consultancy and related activities; information service activities	2.3
Telecommunication	1.5
Agriculture (without fishing)	1.3

* - fish processing represents 3.9%

Tourism is clearly lower than Real estate activities (10.0%), Fishing (including fish manufacturing) (9.4%) or Financial and insurance activities (8.9%) or Manufacture industry

(except fish processing) (8.9%). Meanwhile, tourism is higher than IT&C industries, such as Computer industry (2.3%) or Telecommunication (1.5%), or Agriculture (excepting fishing) (1.3%).

At the same time, one can notice that tourism is the most dynamic among the economic sectors in the Icelandic economy, having the highest growth rate in the period 2009-2013 in terms of evolution of the relative contribution to GDP (see figure 7). No other economic sector shows such a vigorous growth.

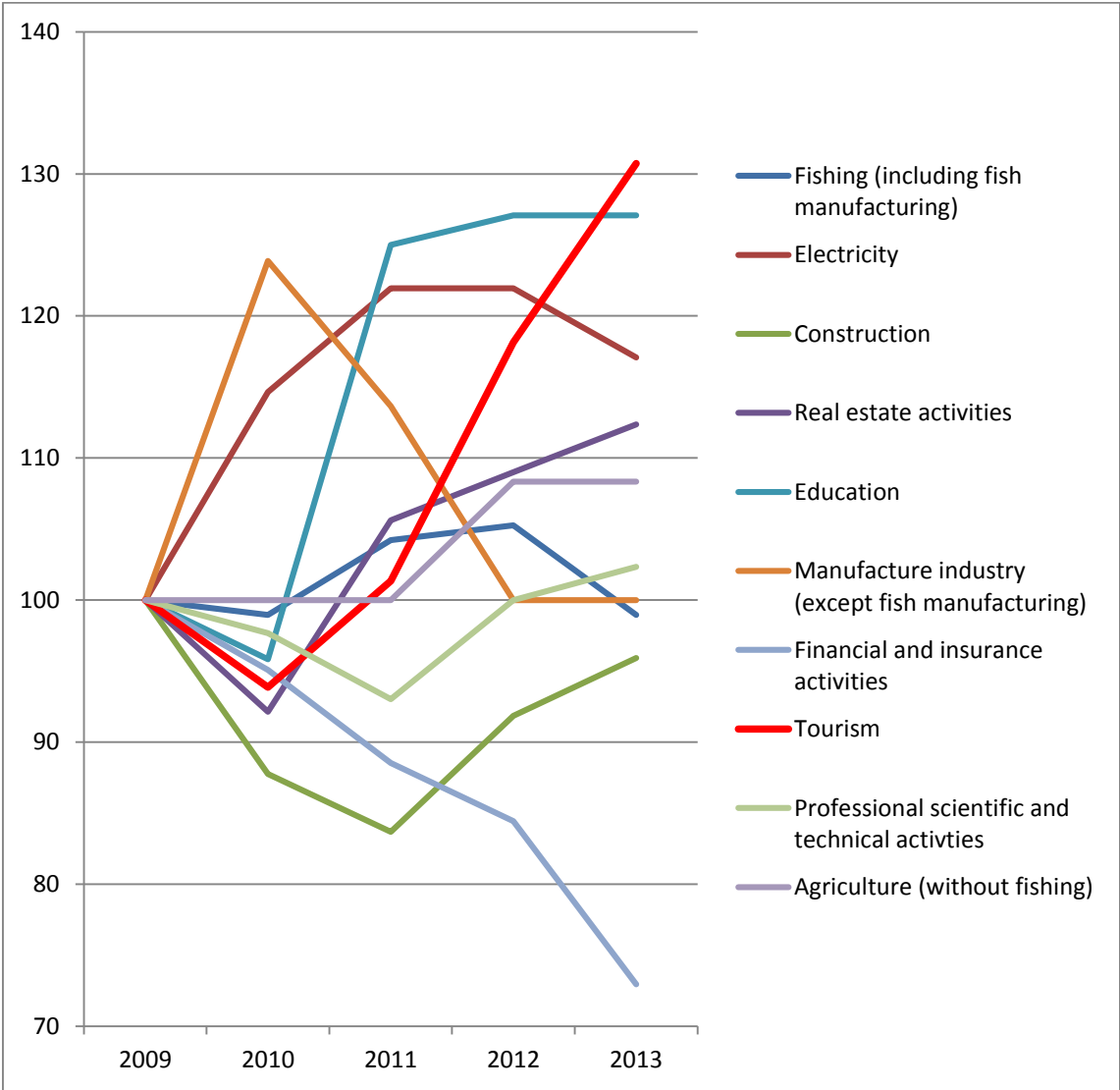


Figure 7: The evolution of the relative contribution to GDP for some economic sectors in Iceland, 2009=100.

Source: processed from Statistics Iceland (2015b; e)

4.5. International comparability

One of the main aims of TSA was to facilitate international comparability of data. In this regard, TSA data for Iceland can be compared with the results of other countries even if this comparison can be in some cases rather problematic (see: UNWTO, 2010 and Libreros, Massieu & Meis, 2006). Nevertheless, for Iceland it is very important to have this international benchmark.

Iceland has a higher direct contribution to GDP than many of the countries that compile TSA results in the last five years (see figure 8). However, two countries showed a higher direct contribution to GDP than Iceland, that is Italy (6.5%) and Austria (5.6%). At the same time one can see that comparability should consider the existence of different reference years for which the calculation has been made. For instance, Italy’s calculated contribution refers to 2010 while Japan and the Czech Republic refer to 2011. Only Austria had available TSA data for the same year as Iceland, i.e. 2013. Nevertheless, practical experience at international level has shown that the variations between years are not very significant, so one can assume that comparability is not too much affected by this issue.

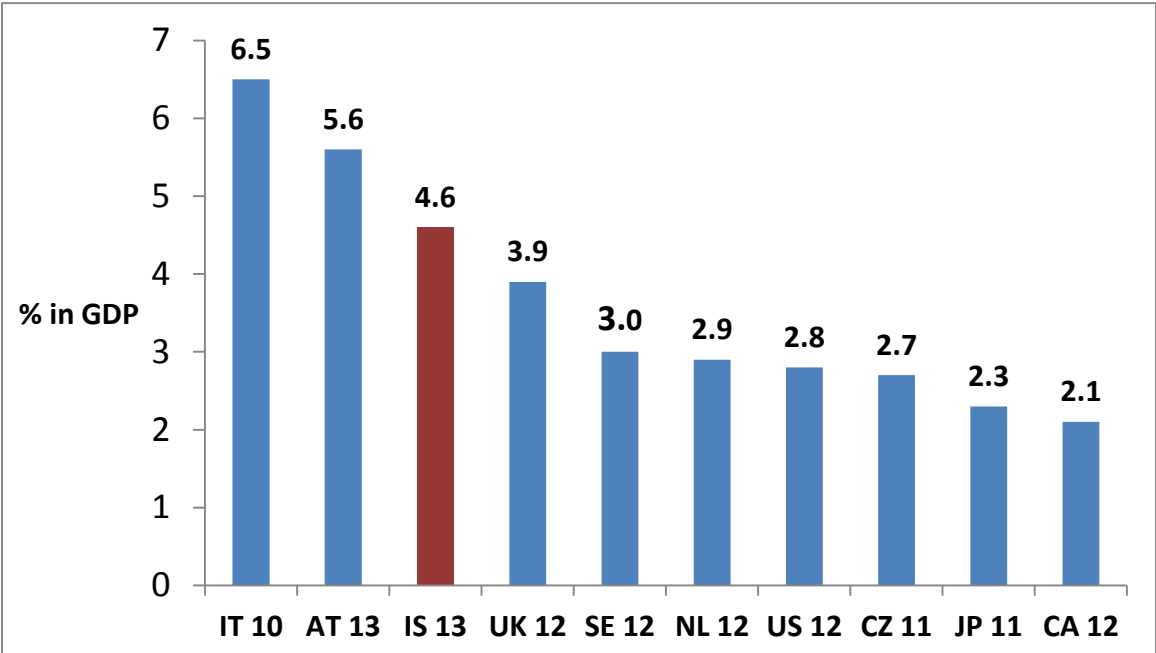


Figure 8: Tourism’s direct contribution to GDP in Iceland and other countries.

Source: Statistics Iceland, 2015b and various data sources for countries

Note: different reference years stand next to the abbreviation of each country’s name.

Another comparison issue refers to the share of inbound tourism expenditure in total internal consumption (see figure 9). This reflects the contribution of foreign tourists to the creation of tourism consumption in a reference country. Iceland ranks first among several countries that have compiled TSA results in the last years. Other countries in which inbound tourism accounts for more than half of internal tourism consumption are Portugal (55%), the Czech Republic (55%) and Austria (53%). At the opposite end are countries where inbound tourism

consumption accounts for less than 30% of tourism consumption: Norway (27%), the United Kingdom (17%) and Germany (13%). Also in this case one can see different reference years for these TSA findings.

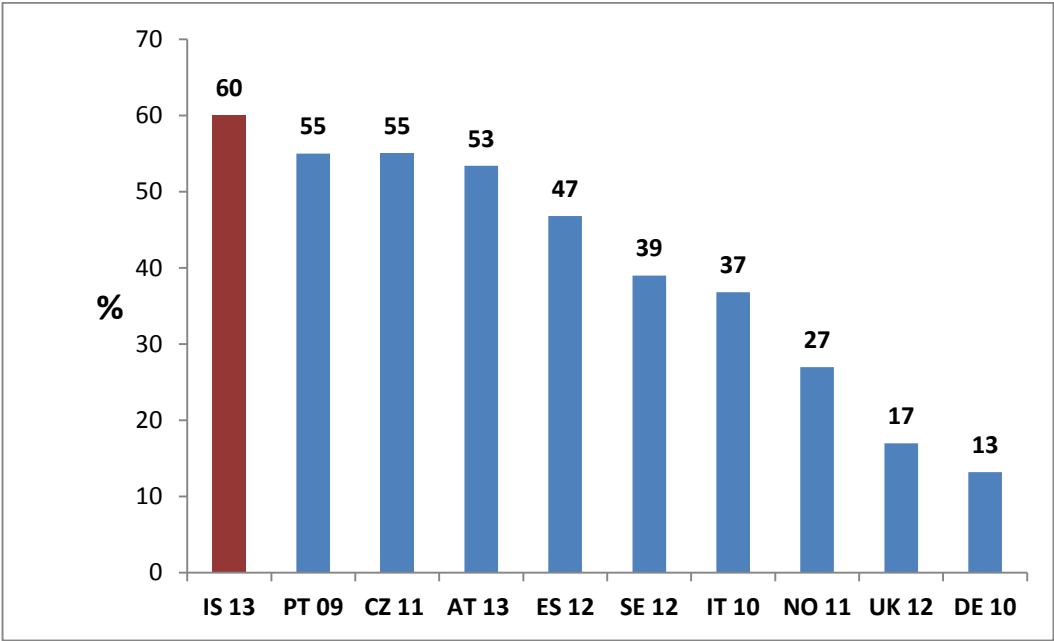


Figure 9: Share of inbound tourism expenditure in total internal tourism consumption in Iceland and other countries.

Source: Statistics Iceland, 2015b and various data sources for countries
Note: different reference years stand next to the abbreviation of each country’s name.

Average inbound tourism expenditure per trip (overnight trip) from Iceland can also be compared with other countries. Cruises are excluded in this exercise as they are assimilated with day visits and consequently do not involve an overnight trip on land in Iceland. In this benchmarking endeavour the latest TSA data from Eurostat (2013) has been used. Figure 10 shows that Iceland has by far the highest inbound tourism expenditure per trip (1,245 EUR), which is almost double the similar indicator in countries like Italy (616 EUR) and Netherlands (630), and significantly higher than in Spain (903 EUR). If this figure is compared with some Eastern European countries, it is three or four times higher (see figure10).

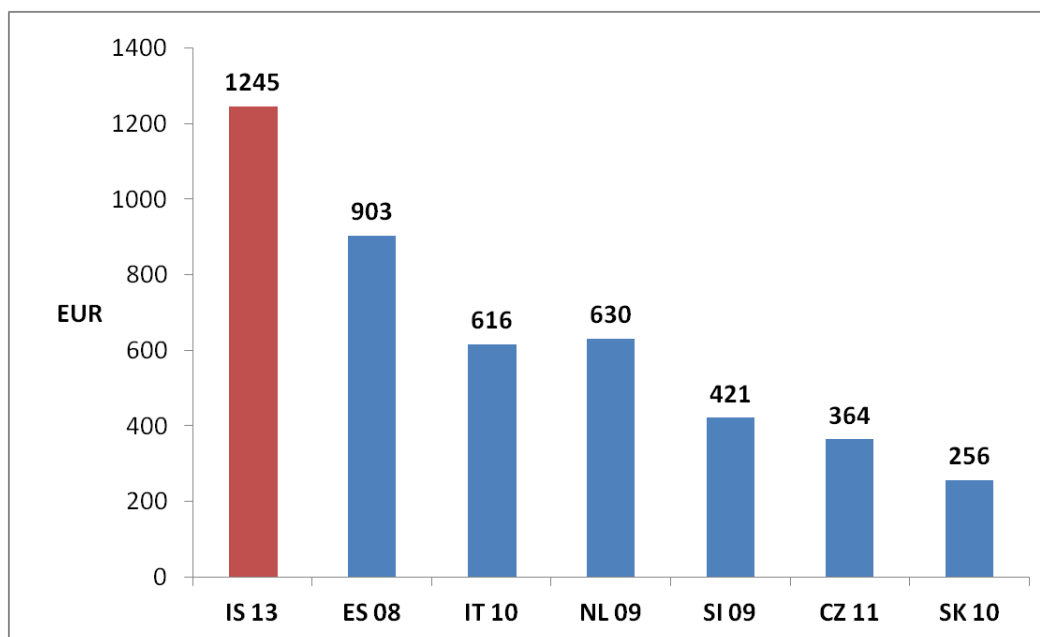


Figure 10: Average expenditure per inbound overnight trip in Iceland and other European countries, in nominal prices.

Source: Statistics Iceland (2015b) and Eurostat (2013)

Note: different reference years stand next to the abbreviation of each country's name.

It is important to mention that the expenditure in figure 10 does not take into account the effects of different prices in the countries analysed. In other words, this is a comparison of nominal prices in each country. In addition, the following factors should be considered in determining the ranking of Iceland in figure 10:

- Iceland is an island and consequently an important share of visitors' expenditure is due to air transportation (23.6% in 2013, see figure 2); to visit the country it is almost impossible to come as a day visitor (excepting cruises), so overnight stays will mostly occur.
- Compared with the rest of the European countries, the prices in Iceland are much higher.
- Icelandic airlines dominate the market which makes most foreign visitors who come to Iceland use Icelandic airlines (and this counts in TSA). According to the internal calculation the market shares of Icelandic airlines operating in Iceland (considering the number of passengers) was above 80% in the period 2009-2013.

Another international comparison is the so-called tourism ratio in domestic supply. As already mentioned, this ratio shows the proportion of products supplied by the Icelandic economy consumed by tourists. As already stated, this ratio may be more or at least equally important as the direct contribution to GDP. The international comparison in figure 11 shows that Iceland performs well compared with other European countries. Iceland ranks second after Switzerland. One can see that in other Nordic countries this ratio is much lower: 3.1% for Sweden and 2.1% for Norway respectively.

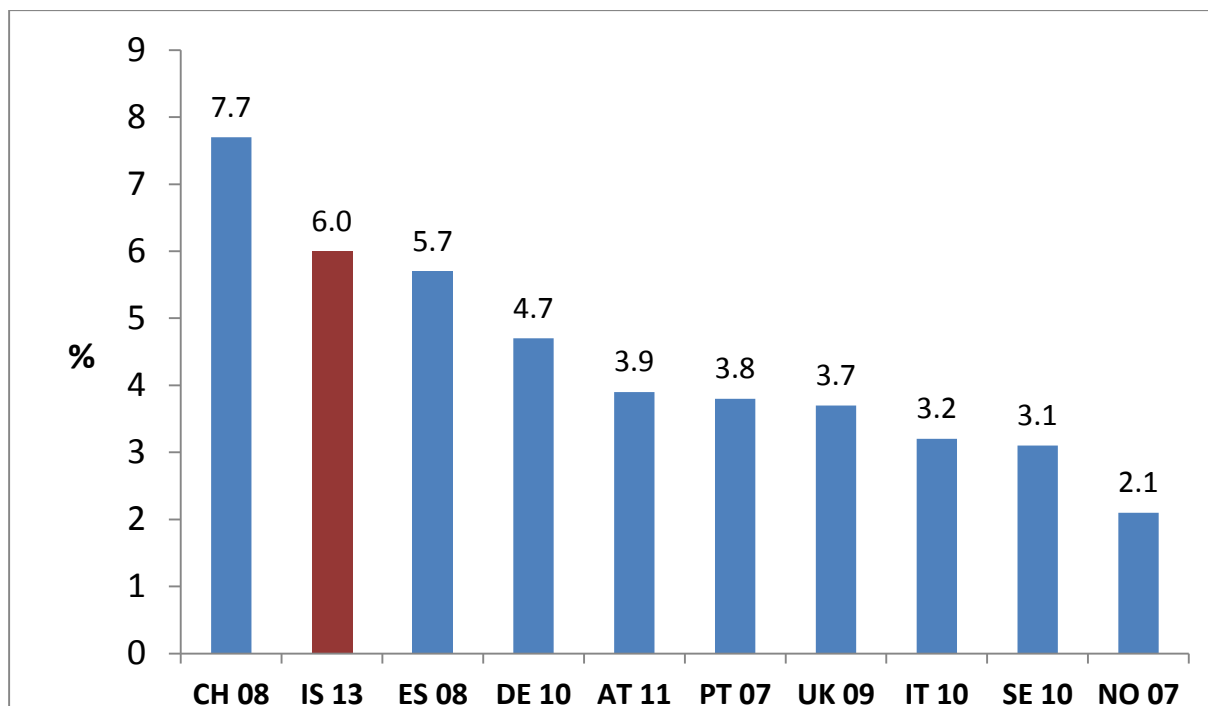


Figure 11: Tourism ratio in domestic supply in Iceland and other European countries.

Source: Statistics Iceland (2015b) and Eurostat (2013)

Note: different reference years stand next to the abbreviation of each country's name.

The analysis in this chapter has illustrated several ways of using the TSA results in Iceland. The examples provided in this chapter were made in order to illustrate some important insights that TSA can provide for (i.e. sectorial and international comparability) but also to reveal some important characteristics of tourism as an economic activity in Iceland and its contribution to the major national aggregates (GDP, value added etc.).

5. Conclusions

It is beyond doubt that tourism has significantly increased in Iceland in the years following the collapse of Iceland's financial sector. Its growth has had a lot of consequences on the economy. Therefore, understanding tourism from an economic point of view is more than necessary. The Tourism Satellite Account (TSA) provides a statistical tool, officially standardized at international level, to quantify in a very comprehensive way the economic size of the tourism sector allowing comparisons with other economic sectors (i.e. agriculture, manufacturing, constructions etc.) and comparisons with other countries compiling TSAs as well (according to Eurostat (2013), 17 member states posted voluntary TSA results). Hence, there is no doubt about the need of TSA for Iceland.

It should be remembered that ever since 2008, Statistics Iceland, as the official producer of statistical data in Iceland, has started to embrace the TSA system and developed TSA data up to 2011. Later on, in the period 2013-2014, it was the Icelandic Tourism Research Centre that made its own contribution to the TSA in Iceland and delivered three TSA related studies: the first two studies (in fact two parts of the same study) detailed an in-depth analysis of the conformity with international standards for the TSAs produced previously by Statistics Iceland. In these reports 55 recommendations have been issued in order to improve future compilations (see: Frent, 2013; 2014a). The third study researched ways in which TSA compilation in Iceland could be enhanced through producing new TSA aggregates of Tourism Gross Fixed Capital Formation (TGFCF) and Tourism Collective Consumption (TCC) (Frent, 2014b).

Starting with 2015, on a contractual basis with Statistics Iceland, the Icelandic Tourism Research Centre has been responsible for producing new TSA data for Statistics Iceland. This report was about the methodology and analysis of the main results. The TSA results are published at the greatest level of detail on Statistics Iceland's webpage at <http://www.hagstofa.is/en/statistics/business-sectors/tourism/tourism-satellite-accounts/>; Two press releases from June and August 2015 were also posted on the website. The reference period for the TSA data was 2009-2013.

It has to be underlined that the new TSA compilation for the period 2009-2013 is different from the previous ones published by Statistics Iceland for the reference period 2000-2009. The reason is mainly that different approaches were used. In this regard, it is important to mention that the TSA compilation for the period 2009-2013 has adopted (to the extent possible) the recommendations from the analysis of the former TSA in order to make Icelandic TSA more compliant with international standards. However, one should be aware that new surveys have not been carried out for this TSA compilation, which has created major constraints in fulfilling those recommendations as outlined in chapter 3.

However, compared with the previous TSA compilation for Iceland, this new TSA compilation observed a new classification of tourism products/industries and a new format of the TSA tables in full accordance with the TSA:RMF 2008 standard. At the same time, one can note a more restrictive approach (or perhaps a more conservative one) in clearly identifying the inbound

tourism expenditure (i.e. with adjustments made for cruise crew, long-term foreign students and transit passengers at Keflavík airport). Not the least, some improvements in the official data sources produced by Statistics Iceland (i.e. BoP) have also to be added.

At the same time, this study has revealed that there is an urgent need to have new and/or improved data sources to support future TSA compilations. Without these new or improved data sources, Icelandic TSA (based only on existing data) cannot be improved and there is no progress. In addition, there are possibilities to boost the future Icelandic TSA in order to also incorporate estimates referring to outbound tourism consumption, employment, investments and governmental consumption for collective services related to tourism. The last two have already been approached (see: Frent, 2014b) and any future developments in this area should start from what was recommended in that study.

Nevertheless, despite data limitations, the TSA compilation for the period 2009-2013 has shown that the tourism sector is important for the Icelandic economy. Furthermore, the Icelandic TSA has facilitated an international comparison with countries that disseminate TSA data and one can see that (considering the TSA main results) Iceland performs well compared with other countries, mainly European ones.

It should be acknowledged that TSA is far from being a perfect system and there are some limitations that have to be recognised and constantly worked on to overcome them. So, a continuous development is needed for the Icelandic TSA to clearly prove that it is a powerful instrument (and the only one!) to really reveal the economic size of tourism.

It is strongly recommended that work should continue to produce TSA estimates also for the years not covered yet (at least 2014) when National Accounts data will be available in 2016. What is of greatest importance, however, is that both the public and the private sector should prioritize the regular production of TSA in Iceland and allocate more resources for this purpose (i.e. to cover the costs of new surveys) in the near future. It is the only way Iceland should go if a better understanding of the economic importance of tourism is to be sought.

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Note:

“Various data sources for countries” denotes an aggregated reference comprising OECD (2014) and the following countries and related data sources:

Austria:

http://www.statistik.at/web_en/statistics/Economy/tourism/tourism_satellite_accounts/value_added/index.html

Norway:

<https://www.ssb.no/en/nasjonalregnskap-og-konjunkturer/statistikker/turismesat/aar/2014-10-29>

United Kingdom:

<http://www.ons.gov.uk/ons/rel/tourism/tourism-satellite-account/the-economic-importance-of-tourism--uk-tourism-satellite-account-2012/stb-tsa2012.html#tab-Introduction>

Italy:

<http://www.istat.it/en/archive/71012> - full tex pdf

Spain:

http://www.ine.es/en/prensa/np829_en.pdf

Portugal:

https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_contas_nacionais&contexto=cs&selTab=tab3&perfil=104012510&INST=116634832

Annex 1. TSA tables for Iceland, 2009-2013

Table 1. Inbound tourism expenditure in Iceland by consumption products and classes of visitors, 2009-2013, current prices (ISK mil.)

	2009			2010			2011		
	Same-day visitors (cruise arrivals)	Tourists (overnight visitors)	Visitors	Same-day visitors (cruise arrivals)	Tourists (overnight visitors)	Visitors	Same-day visitors (cruise arrivals)	Tourists (overnight visitors)	Visitors
A.1. Tourism characteristic products (for international comparability)									
1. Accommodation	931.4	73,352.1	74,283.4	871.2	71,889.4	72,760.6	828.8	94,726.6	95,555.3
2. F&B serving services	x	17,272.6	17,272.6	x	16,641.8	16,641.8	x	23,121.1	23,121.1
3. Road passenger transportation	373.2	7,472.0	7,845.2	349.1	7,629.7	7,978.8	332.1	9,187.4	9,519.5
4. Water passenger transportation	459.4	3,878.3	4,337.8	429.7	3,857.2	4,287.0	408.8	5,073.3	5,482.1
5. Air passenger transportation	...	533.3	533.3	...	657.1	657.1	...	831.3	831.3
6. Transport equipment rental	...	26,831.2	26,831.2	...	25,396.7	25,396.7	...	32,791.7	32,791.7
7. Travel agencies	...	6,984.6	6,984.6	...	7,034.2	7,034.2	...	8,491.7	8,491.7
8. Cultural services	75.5	7,105.3	7,180.8	70.7	6,910.9	6,981.6	67.2	10,280.8	10,348.0
9. Sport and recreational services	22.4	472.4	494.8	21.0	519.2	540.2	19.9	682.7	702.6
A.2. Other consumption products	0.8	2,802.4	2,803.2	0.7	3,242.5	3,243.2	0.7	4,266.6	4,267.3
Goods purchased from trade activities	600.1	17,439.6	18,039.7	561.3	16,801.1	17,362.4	534.0	19,027.2	19,561.2
Other services	454.7	16,377.4	16,832.0	425.3	15,761.2	16,186.5	404.6	17,765.8	18,170.4
	145.4	1,062.3	1,207.7	136.0	1,039.9	1,176.0	129.4	1,261.4	1,390.8
Total consumption products	1,531.4	90,791.7	92,323.2	1,432.5	88,690.5	90,123.0	1,362.7	113,753.8	115,116.5

Notes:

x - does not apply

... - no data available

Sometimes it might happen that totals do not match due to rounding.

Table 1 (cont.) Inbound tourism expenditure in Iceland by consumption products and classes of visitors, 2009-2013, current prices (ISK mil.)

	2012			2013		
	Same-day visitors (cruise arrivals)	Tourists (overnight visitors)	Visitors	Same-day visitors (cruise arrivals)	Tourists (overnight visitors)	Visitors
A.1. Tourism characteristic products (for international comparability)	1,104.3	110,785.0	111,889.3	1,202.2	135,545.9	136,748.1
1. Accommodation	x	25,809.2	25,809.2	x	32,270.4	32,270.4
2. F&B serving services	442.5	11,688.5	12,131.0	481.7	14,604.9	15,086.6
3. Road passenger transportation	544.7	6,707.2	7,251.9	593.0	8,740.1	9,333.1
4. Water passenger transportation	...	916.2	916.2	...	1,119.9	1,119.9
5. Air passenger transportation	...	34,716.9	34,716.9	...	40,414.9	40,414.9
6. Transport equipment rental	...	10,939.7	10,939.7	...	13,345.7	13,345.7
7. Travel agencies	89.6	13,446.3	13,535.9	97.5	17,209.6	17,307.1
8. Cultural services	26.6	808.9	835.5	28.9	1,011.3	1,040.2
9. Sport and recreational services	0.9	5,752.1	5,753.0	1.0	6,829.2	6,830.3
A.2. Other consumption products	711.5	24,239.2	24,950.7	774.6	27,610.9	28,385.4
Goods purchased from trade activities	539.1	22,660.3	23,199.4	586.9	25,745.1	26,332.0
Other services	172.4	1,578.9	1,751.3	187.7	1,865.8	2,053.5
Total consumption products	1,815.7	135,024.2	136,840.0	1,976.8	163,156.7	165,133.5

Notes:

x - does not apply

... - no data available

Sometimes it might happen that totals do not match due to rounding.

Table 2. Domestic tourism expenditure in Iceland by products, 2009-2013, current prices (ISK mil.)

	2009	2010	2011	2012	2013
A.1. Tourism characteristic products (for international comparability)	42,893.7	48,215.8	53,365.9	64,606.9	65,753.0
1. Accommodation	10,472.3	11,843.0	11,196.5	17,963.1	17,904.6
2. F&B serving services	3,370.5	3,135.1	3,174.4	2,914.1	2,550.6
3. Road passenger transportation	2,328.4	2,260.2	1,847.3	2,163.7	2,395.9
4. Water passenger transportation	363.5	365.9	423.8	511.8	573.4
5. Air passenger transportation	10,489.5	12,605.7	15,246.0	15,805.1	14,974.3
6. Transport equipment rental	2,879.3	3,543.1	5,111.3	6,498.5	7,721.3
7. Travel agencies	9,163.5	10,087.4	11,227.8	12,627.5	12,665.8
8. Cultural services	1,066.4	1,222.0	1,479.6	1,888.4	2,061.8
9. Sport and recreational services	2,760.2	3,153.5	3,659.3	4,234.7	4,905.4
A.2. Other consumption products	16,674.1	18,407.7	20,179.8	21,869.9	22,024.8
Goods purchased from trade activities	14,842.0	16,617.0	18,255.2	19,880.9	20,074.6
Other services	1,832.1	1,790.7	1,924.5	1,989.0	1,950.2
Total consumption products	59,567.7	66,623.5	73,545.7	86,476.7	87,777.8

Note:

Sometimes it might happen that totals do not match due to rounding.

Table 4. Internal tourism consumption in Iceland by products, 2009-2013, current prices (ISK mil.)

		2009						
	Inbound tourism expenditure	Domestic tourism expenditure	Internal tourism expenditure	Other components of tourism consumption, of which →	Summer houses (imputed rental)	Employers' expenses for business trips of their employees	Total internal tourism consumption	
A.1. Tourism characteristic products (for international comparability)			117,177.1	15,694.0	2,183.9	13,510.1	132,871.1	
1. Accommodation	74,283.4	42,893.7	117,177.1	15,694.0	2,183.9	13,510.1	132,871.1	
2. Summer houses	17,272.6	10,472.3	27,744.9	3,172.0	x	3,172.0	30,916.9	
3. F&B serving services	...	...	...	2,183.9	2,183.9	x	2,183.9
4. Road passenger transportation	7,845.2	3,370.5	11,215.7	2,747.6	x	2,747.6	13,963.3	
5. Water passenger transportation	4,337.8	2,328.4	6,666.2	337.4	x	337.4	7,003.5	
6. Air passenger transportation	533.3	363.5	896.9	79.4	x	79.4	976.2	
7. Transport equipment rental	26,831.2	10,489.5	37,320.8	6,658.9	x	6,658.9	43,979.6	
8. Travel agencies	6,984.6	2,879.3	9,863.9	178.1	x	178.1	10,042.0	
9. Cultural services	7,180.8	9,163.5	16,344.3	336.7	x	336.7	16,681.1	
10. Sport and recreational services	494.8	1,066.4	1,561.2	x	x	x	1,561.2	
A.2. Other consumption products	2,803.2	2,760.2	5,563.3	x	x	x	5,563.3	
Goods purchased from trade activities	18,039.7	16,674.1	34,713.8	114.3	x	114.3	34,828.1	
Other services	16,832.0	14,842.0	31,674.1	...	x	...	31,674.1	
	1,207.7	1,832.1	3,039.7	114.3	x	114.3	3,154.1	
Total consumption products	92,323.2	59,567.7	151,890.9	15,808.3	2,183.9	13,624.4	167,699.2	

Notes: Sometimes it might happen that totals do not match due to rounding.

x - does not apply

... - no data available

Table 4. (cont.) Internal tourism consumption in Iceland by products, 2009-2013, current prices (ISK mil.)

		2010						
	Inbound tourism expenditure	Domestic tourism expenditure	Internal tourism expenditure	Other components of tourism consumption, of which →	Summer houses (imputed rental)	Employers' expenses for business trips of their employees	Total internal tourism consumption	
A.1. Tourism characteristic products (for international comparability)			120,976.4	16,732.5	2,245.2	14,487.4	137,708.9	
1. Accommodation	72,760.6	48,215.8	28,484.8	3,086.1	x	3,086.1	31,570.9	
2. Summer houses	...	...	...	2,245.2	2,245.2	x	2,245.2
3. F&B serving services	7,978.8	3,135.1	11,113.9	3,024.7	x	3,024.7	14,138.7	
4. Road passenger transportation	4,287.0	2,260.2	6,547.1	341.9	x	341.9	6,889.0	
5. Water passenger transportation	657.1	365.9	1,023.0	80.4	x	80.4	1,103.4	
6. Air passenger transportation	25,396.7	12,605.7	38,002.4	7,360.2	x	7,360.2	45,362.5	
7. Transport equipment rental	7,034.2	3,543.1	10,577.3	173.0	x	173.0	10,750.3	
8. Travel agencies	6,981.6	10,087.4	17,068.9	421.1	x	421.1	17,490.0	
9. Cultural services	540.2	1,222.0	1,762.2	x	x	x	1,762.2	
10. Sport and recreational services	3,243.2	3,153.5	6,396.7	x	x	x	6,396.7	
A.2. Other consumption products	17,362.4	18,407.7	35,770.1	495.2	x	495.2	36,265.3	
Goods purchased from trade activities	16,186.5	16,617.0	32,803.5	...	x	...	32,803.5	
Other services	1,176.0	1,790.7	2,966.6	495.2	x	495.2	3,461.8	
Total consumption products	90,123.0	66,623.5	156,746.5	17,227.7	2,245.2	14,982.6	173,974.2	

Notes: Sometimes it might happen that totals do not match due to rounding

x - does not apply

... - no data available

Table 4. (cont.) Internal tourism consumption in Iceland by products, 2009-2013, current prices (ISK mil.)

		2011						
	Inbound tourism expenditure	Domestic tourism expenditure	Internal tourism expenditure	Other components of tourism consumption, of which →	Summer houses (imputed rental)	Employers' expenses for business trips of their employees	Total internal tourism consumption	
A.1. Tourism characteristic products (for international comparability)	95,555.3	53,365.9	148,921.3	19,116.3	2,575.0	16,541.4	168,037.6	
1. Accommodation	23,121.1	11,196.5	34,317.6	3,359.4	x	3,359.4	37,677.0	
2. Summer houses	...	...	...	2,575.0	2,575.0	x	2,575.0
3. F&B serving services	9,519.5	3,174.4	12,693.8	3,430.3	x	3,430.3	16,124.1	
4. Road passenger transportation	5,482.1	1,847.3	7,329.4	399.1	x	399.1	7,728.5	
5. Water passenger transportation	831.3	423.8	1,255.1	93.9	x	93.9	1,349.0	
6. Air passenger transportation	32,791.7	15,246.0	48,037.7	8,508.8	x	8,508.8	56,546.5	
7. Transport equipment rental	8,491.7	5,111.3	13,603.0	196.6	x	196.6	13,799.6	
8. Travel agencies	10,348.0	11,227.8	21,575.9	553.2	x	553.2	22,129.1	
9. Cultural services	702.6	1,479.6	2,182.2	x	x	x	2,182.2	
10. Sport and recreational services	4,267.3	3,659.3	7,926.6	x	x	x	7,926.6	
A.2. Other consumption products	19,561.2	20,179.8	39,740.9	576.8	x	576.8	40,317.7	
Goods purchased from trade activities	18,170.4	18,255.2	36,425.7	...	x	...	36,425.7	
Other services	1,390.8	1,924.5	3,315.3	576.8	x	576.8	3,892.1	
Total consumption products	115,116.5	73,545.7	188,662.2	19,693.1	2,575.0	17,118.2	208,355.3	

Notes: Sometimes it might happen that totals do not match due to rounding

x - does not apply

... - no data available

Table 4. (cont.) Internal tourism consumption in Iceland by products, 2009-2013, current prices (ISK mil.)

2012							
	Inbound tourism expenditure	Domestic tourism expenditure	Internal tourism expenditure	Other components of tourism consumption, of which →	Summer houses (imputed rental)	Employers' expenses for business trips of their employees	Total internal tourism consumption
A.1. Tourism characteristic products (for international comparability)	111,889.3	64,606.9	176,496.1	21,004.9	2,882.5	18,122.5	197,501.1
1. Accommodation	25,809.2	17,963.1	43,772.3	3,768.0	x	3,768.0	47,540.3
2. Summer houses	...	...	...	2,882.5	2,882.5	x	2,882.5
3. F&B serving services	12,131.0	2,914.1	15,045.1	3,631.2	x	3,631.2	18,676.3
4. Road passenger transportation	7,251.9	2,163.7	9,415.6	473.4	x	473.4	9,889.0
5. Water passenger transportation	916.2	511.8	1,427.9	111.4	x	111.4	1,539.3
6. Air passenger transportation	34,716.9	15,805.1	50,522.0	9,368.6	x	9,368.6	59,890.6
7. Transport equipment rental	10,939.7	6,498.5	17,438.2	192.1	x	192.1	17,630.4
8. Travel agencies	13,535.9	12,627.5	26,163.3	577.7	x	577.7	26,741.1
9. Cultural services	835.5	1,888.4	2,723.9	x	x	x	2,723.9
10. Sport and recreational services	5,753.0	4,234.7	9,987.7	x	x	x	9,987.7
A.2. Other consumption products	24,950.7	21,869.9	46,820.6	703.1	x	703.1	47,523.7
Goods purchased from trade activities	23,199.4	19,880.9	43,080.3	...	x	...	43,080.3
Other services	1,751.3	1,989.0	3,740.3	703.1	x	703.1	4,443.4
Total consumption products	136,840.0	86,476.7	223,316.7	21,708.0	2,882.5	18,825.5	245,024.7

Notes: Sometimes it might happen that totals do not match due to rounding

x - does not apply

... - no data available

Table 4. (cont.) Internal tourism consumption in Iceland by products, 2009-2013, current prices (ISK mil.)

		2013						
	Inbound tourism expenditure	Domestic tourism expenditure	Internal tourism expenditure	Other components of tourism consumption, of which →	Summer houses (imputed rental)	Employers' expenses for business trips of their employees	Total internal tourism consumption	
A.1. Tourism characteristic products (for international comparability)	136,748.1	65,753.0	202,501.1	22,324.2	3,064.6	19,259.6	224,825.3	
1. Accommodation	32,270.4	17,904.6	50,175.0	4,060.3	x	4,060.3	54,235.4	
2. Summer houses	...	...	...	3,064.6	3,064.6	x	3,064.6
3. F&B serving services	15,086.6	2,550.6	17,637.2	3,941.5	x	3,941.5	21,578.7	
4. Road passenger transportation	9,333.1	2,395.9	11,729.0	508.6	x	508.6	12,237.6	
5. Water passenger transportation	1,119.9	573.4	1,693.3	119.7	x	119.7	1,813.0	
6. Air passenger transportation	40,414.9	14,974.3	55,389.2	9,708.4	x	9,708.4	65,097.5	
7. Transport equipment rental	13,345.7	7,721.3	21,067.0	326.9	x	326.9	21,393.9	
8. Travel agencies	17,307.1	12,665.8	29,972.9	594.2	x	594.2	30,567.0	
9. Cultural services	1,040.2	2,061.8	3,101.9	x	x	x	3,101.9	
10. Sport and recreational services	6,830.3	4,905.4	11,735.6	x	x	x	11,735.6	
A.2. Other consumption products	28,385.4	22,024.8	50,410.2	635.2	x	635.2	51,045.4	
Goods purchased from trade activities	26,332.0	20,074.6	46,406.6	...	x	...	46,406.6	
Other services	2,053.5	1,950.2	4,003.7	635.2	x	635.2	4,638.9	
Total consumption products	165,133.5	87,777.8	252,911.4	22,959.4	3,064.6	19,894.8	275,870.7	

Notes: Sometimes it might happen that totals do not match due to rounding

x - does not apply

... - no data available

Table 5. Production accounts of tourism industries and other industries in Iceland (at basic prices - net approach), 2009-2013, current prices (ISK mil.)

	2009					
	Total output (at basic prices)	Total intermediate consumption (at purchasers' prices)	Total gross value added (at basic prices), out of which →	Compensation of employees	Taxes less subsidies on production	Gross operating surplus
1. Accommodation	29,838.4	16,932.1	12,906.4	8,363.6	*	4,542.8
2. Food & Beverage serving industry	37,957.5	23,031.0	14,926.5	11,790.6	*	3,135.9
3. Road passenger transportation	13,393.8	6,742.0	6,651.8	2,807.6	*	3,844.2
4. Water passenger transportation	2,425.4	757.8	1,667.6	729.6	*	937.9
5. Air passenger transportation	140,975.1	112,183.6	28,791.6	19,516.9	*	9,274.6
6. Transport equipment rental	8,984.8	5,262.6	3,722.2	1,362.1	*	2,360.1
7. Travel agencies	16,605.3	12,737.9	3,867.5	1,528.8	*	2,338.7
8. Cultural services	8,893.4	4,049.0	4,844.4	2,584.7	*	2,259.7
9. Sport and recreational services	12,069.7	5,709.5	6,360.2	2,270.1	*	4,090.1
Total tourism industries (1+2+...+9)	271,143.4	187,405.4	83,738.0	50,953.9	*	32,784.1
Retail trade (including wholesale and except of motor vehicles and motorcycles)	213,670.2	97,191.0	116,479.3	74,031.5	*	42,447.8
Other industries	2,433,286.6	1,221,933.5	1,211,353.1	630,237.7	8,796.0	572,319.4
Correction item, taxes and subsidies on product	x	-13,969.3	13,969.3	x	13,969.3	x
Total output of domestic producers (at basic prices)	2,918,100.3	1,492,560.6	1,425,539.6	755,223.1	22,765.2	647,551.3

Notes:

x - does not apply

* - it means that this item was not estimated by Statistics Iceland (National Accounts department) in the Production accounts
Sometimes it might happen that totals do not match due to rounding.

Table 5. (cont.) Production accounts of tourism industries and other industries in Iceland (at basic prices - net approach), 2009-2013, current prices (ISK mil.)

	2010					Gross operating surplus
	Total output (at basic prices)	Total intermediate consumption (at purchasers' prices)	Total gross value added (at basic prices), out of which →	Compensation of employees	Taxes less subsidies on production	
1. Accommodation	30,632.0	18,462.2	12,169.8	9,850.0	*	2,319.7
2. Food & Beverage serving industry	42,055.3	26,390.6	15,664.7	13,847.7	*	1,816.9
3. Road passenger transportation	15,585.7	8,739.2	6,846.5	3,441.9	*	3,404.6
4. Water passenger transportation	2,410.0	893.2	1,516.8	1,000.2	*	516.6
5. Air passenger transportation	157,642.3	128,508.8	29,133.6	22,195.9	*	6,937.6
6. Transport equipment rental	9,923.9	5,709.3	4,214.6	1,566.9	*	2,647.6
7. Travel agencies	17,402.8	14,432.4	2,970.4	1,841.2	*	1,129.2
8. Cultural services	9,845.0	4,587.3	5,257.6	2,747.1	*	2,510.6
9. Sport and recreational services	13,798.0	6,940.8	6,857.2	2,900.3	*	3,956.9
Total tourism industries (1+2+...+9)	299,295.1	214,663.9	84,631.1	59,391.4	*	25,239.7
Retail trade (including wholesale and except of motor vehicles and motorcycles)	223,993.1	118,337.4	105,655.7	79,590.8	*	26,064.9
Other industries	2,562,434.1	1,315,852.8	1,246,581.3	643,473.7	9,021.3	594,086.4
Correction item, taxes and subsidies on product	x	-14,705.1	14,705.1	x	14,705.1	x
Total output of domestic producers (at basic prices)	3,085,722.3	1,634,149.0	1,451,573.3	782,455.9	23,726.4	645,391.0

Notes:

x - does not apply

* - it means that this item was not estimated by Statistics Iceland (National Accounts department) in the Production accounts
Sometimes it might happen that totals do not match due to rounding.

Table 5. (cont.) Production accounts of tourism industries and other industries in Iceland (at basic prices - net approach), 2009-2013, current prices (ISK mil.)

	2011					
	Total output (at basic prices)	Total intermediate consumption (at purchasers' prices)	Total gross value added (at basic prices), out of which →	Compensation of employees	Taxes less subsidies on production	Gross operating surplus
1. Accommodation	36,154.1	21,193.8	14,960.3	11,876.7	*	3,083.6
2. Food & Beverage serving industry	45,591.9	29,341.7	16,250.2	15,285.4	*	964.8
3. Road passenger transportation	16,980.6	10,439.6	6,541.0	3,821.9	*	2,719.1
4. Water passenger transportation	3,054.3	1,104.8	1,949.5	1,305.1	*	644.4
5. Air passenger transportation	174,626.6	149,517.9	25,108.7	25,147.2	*	-38.5
6. Transport equipment rental	12,000.6	8,138.7	3,861.9	1,815.2	*	2,046.8
7. Travel agencies	22,031.3	18,769.8	3,261.5	2,233.3	*	1,028.2
8. Cultural services	10,822.1	5,069.3	5,752.7	2,848.0	*	2,904.7
9. Sport and recreational services	15,812.0	8,107.8	7,704.2	3,392.1	*	4,312.1
Total tourism industries (1+2+...+9)	337,073.5	251,683.4	85,390.1	67,725.0	*	17,665.2
Retail trade (including wholesale and except of motor vehicles and motorcycles)	236,516.6	110,505.0	126,011.5	87,471.2	*	38,540.3
Other industries	2,744,191.6	1,446,050.8	1,298,140.8	696,226.3	9,718.9	592,195.5
Correction item, taxes and subsidies on product	x	-12,950.5	12,950.5	x	12,950.5	x
Total output of domestic producers (at basic prices)	3,317,781.6	1,795,288.7	1,522,492.9	851,422.5	22,669.4	648,401.0

Notes:

x - does not apply

* - it means that this item was not estimated by Statistics Iceland (National Accounts department) in the Production accounts
Sometimes it might happen that totals do not match due to rounding.

Table 5. (cont.) Production accounts of tourism industries and other industries in Iceland, 2009-2013 (at basic prices - net approach), 2009-2013, current prices (ISK mil.)

	2012					
	Total output (at basic prices)	Total intermediate consumption (at purchasers' prices)	Total gross value added (at basic prices), out of which →	Compensation of employees	Taxes less subsidies on production	Gross operating surplus
1. Accommodation	46,181.7	25,547.6	20,634.2	15,319.4	*	5,314.7
2. Food & Beverage serving industry	49,887.4	31,710.3	18,177.1	16,687.6	*	1,489.5
3. Road passenger transportation	19,913.5	12,323.5	7,590.0	4,415.0	*	3,175.0
4. Water passenger transportation	3,400.0	1,334.7	2,065.3	1,390.6	*	674.7
5. Air passenger transportation	195,634.6	166,853.3	28,781.4	28,304.1	*	477.2
6. Transport equipment rental	15,340.2	9,783.0	5,557.2	2,187.8	*	3,369.4
7. Travel agencies	26,610.9	23,116.0	3,494.8	2,838.4	*	656.4
8. Cultural services	11,032.9	5,636.9	5,396.0	3,035.7	*	2,360.2
9. Sport and recreational services	17,265.6	8,861.0	8,404.6	3,747.6	*	4,657.0
Total tourism industries (1+2+...+9)	385,266.8	285,166.3	100,100.5	77,926.4	*	22,174.2
Retail trade (including wholesale and except of motor vehicles and motorcycles)	244,943.8	113,464.9	131,478.9	87,241.5	*	44,237.4
Other industries	2,889,622.6	1,553,683.1	1,335,939.5	745,676.6	10,754.0	579,508.9
Correction item, taxes and subsidies on product	x	-16,359.1	16,359.1	x	16,359.1	x
Total output of domestic producers (at basic prices)	3,519,833.3	1,935,955.3	1,583,878.0	910,844.5	27,113.1	645,920.5

Notes:

x - does not apply

* - it means that this item was not estimated by Statistics Iceland (National Accounts department) in the Production accounts
Sometimes it might happen that totals do not match due to rounding.

Table 5. (cont.) Production accounts of tourism industries and other industries in Iceland, 2009-2013 (at basic prices - net approach), 2009-2013, current prices (ISK mil.)

	2013					
	Total output (at basic prices)	Total intermediate consumption (at purchasers' prices)	Total gross value added (at basic prices), out of which →	Compensation of employees	Taxes less subsidies on production	Gross operating surplus
1. Accommodation	52,537.8	28,404.4	24,133.4	17,917.5	*	6,215.8
2. Food & Beverage serving industry	57,074.9	35,663.4	21,411.5	19,837.4	*	1,574.1
3. Road passenger transportation	24,267.6	15,049.8	9,217.7	5,382.9	*	3,834.8
4. Water passenger transportation	3,772.5	1,446.5	2,326.0	1,589.8	*	736.2
5. Air passenger transportation	212,968.3	179,340.5	33,627.8	30,028.4	*	3,599.5
6. Transport equipment rental	19,228.8	11,500.6	7,728.2	2,951.2	*	4,777.0
7. Travel agencies	30,427.1	26,395.3	4,031.7	3,435.3	*	596.5
8. Cultural services	12,654.4	6,534.8	6,119.6	3,371.4	*	2,748.2
9. Sport and recreational services	19,049.6	8,965.3	10,084.3	4,288.0	*	5,796.2
Total tourism industries (1+2+...+9)	431,980.9	313,300.6	118,680.3	88,802.0	*	29,878.3
Retail trade (including wholesale and except of motor vehicles and motorcycles)	250,147.2	114,586.4	135,560.8	91,140.1	*	44,420.7
Other industries	2,953,959.8	1,552,401.2	1,401,558.5	764,469.4	10,922.3	626,166.9
Correction item, taxes and subsidies on product	x	-19,448.3	19,448.3	x	19,448.3	x
Total output of domestic producers (at basic prices)	3,636,087.9	1,960,839.9	1,675,248.0	944,411.5	30,370.6	700,465.9

Notes:

x - does not apply

* - it means that this item was not estimated by Statistics Iceland (National Accounts department) in the Production accounts
Sometimes it might happen that totals do not match due to rounding.

Table 6. Total domestic supply and internal tourism consumption in Iceland (at purchasers' prices), 2009-2013, current prices

	2009									
	Output of domestic producers (at basic prices)	Imports*	Taxes** less subsidies on products	Domestic supply (at purchasers' prices)	Internal tourism consumption	Tourism ratio (%)	Gross value added of the related industry (at basic prices)	Tourism gross value added (at basic prices)	Tourism taxes less subsidies	
I. Tourism characteristic products (for international comparability)	273,327.3	...	7,990.0	281,317.3	132,871.1	47.2%	85,921.9	43,843.7	5,338.2	
1. Accommodation	29,838.4	...	2,328.4	32,166.9	30,916.9	96.1%	12,906.4	12,404.8	2,237.9	
2. Summer houses	2,183.9	...	x	2,183.9	2,183.9	100.0%	2,183.9	2,183.9	x	
3. F&B serving services	37,957.5	...	3,554.0	41,511.5	13,963.3	33.6%	14,926.5	5,020.9	1,195.5	
4. Road passenger transportation	13,393.8	...	56.8	13,450.6	7,003.5	52.1%	6,651.8	3,463.5	29.6	
5. Water passenger transportation	2,425.4	...	-621.8	1,803.5	976.2	54.1%	1,667.6	902.6	-336.6	
6. Air passenger transportation	140,975.1	...	-208.3	140,766.8	43,979.6	31.2%	28,791.6	8,995.3	-65.1	
7. Transport equipment rental	8,984.8	...	2,211.1	11,195.9	10,042.0	89.7%	3,722.2	3,338.6	1,983.2	
8. Travel agencies	16,605.3	...	75.7	16,681.1	16,681.1	100.0%	3,867.5	3,867.5	75.7	
9. Cultural services	8,893.4	...	170.6	9,063.9	1,561.2	17.2%	4,844.4	834.4	29.4	
10. Sport and recreational services	12,069.7	...	423.6	12,493.3	5,563.3	44.5%	6,360.2	2,832.2	188.6	
II. Other consumption and non-consumption products	2,644,773.0	578,288.1	151,986.9	3,375,047.9	34,828.1	1.0%	1,339,617.7	5,881.0	1,265.8	
Goods*** purchased from trade activities	213,670.2	...	29,804.3	243,474.5	31,674.1	3.8%	116,479.3	4,407.6	1,127.8	
All other consumption products	1,885,643.3	...	86,277.4	1,971,920.7	3,154.1	0.2%	921,167.5	1,473.4	138.0	
Non-consumption products****	545,459.4	578,288.1	35,905.2	1,159,652.7	0.0	0.0%	301,971.0	0.0	0.0	
Total	2,918,100.3	578,288.1	159,976.9	3,656,365.3	167,699.2	4.6%	1,425,539.6	49,724.6	6,604.0	

Notes: Sometimes it might happen that totals do not match due to rounding.

* - Imports excludes direct purchases of Icelandic residents abroad.

** - Only Value Added Tax was considered for tourism purchases due to lack of data.

*** - For goods, tourism share is established on the retail trade margin only.

**** - These do not generate tourism shares.

Table 6. (cont.) Total domestic supply and internal tourism consumption in Iceland (at purchasers' prices), 2009-2013, current prices

	2010								
	Output of domestic producers (at basic prices)	Imports*	Taxes** less subsidies on products	Domestic supply (at purchasers' prices)	Internal tourism consumption	Tourism ratio (%)	Gross value added of the related industry (at basic prices)	Tourism gross value added (at basic prices)	Tourism taxes less subsidies
I. Tourism characteristic products (for international comparability)	301,540.2	...	8,933.7	310,473.9	137,708.9	44.4%	86,876.3	41,646.0	5,619.9
1. Accommodation	30,632.0	...	2,352.5	32,984.5	31,570.9	95.7%	12,169.8	11,648.2	2,251.7
2. Summer houses	2,245.2	...	x	2,245.2	2,245.2	100.0%	2,245.2	2,245.2	x
3. F&B serving services	42,055.3	...	3,949.4	46,004.7	14,138.7	30.7%	15,664.7	4,814.2	1,213.8
4. Road passenger transportation	15,585.7	...	88.3	15,674.0	6,889.0	44.0%	6,846.5	3,009.2	38.8
5. Water passenger transportation	2,410.0	...	-672.1	1,737.9	1,103.4	63.5%	1,516.8	963.0	-426.7
6. Air passenger transportation	157,642.3	...	-172.8	157,469.6	45,362.5	28.8%	29,133.6	8,392.6	-49.8
7. Transport equipment rental	9,923.9	...	2,650.3	12,574.2	10,750.3	85.5%	4,214.6	3,603.2	2,265.8
8. Travel agencies	17,402.8	...	87.2	17,490.0	17,490.0	100.0%	2,970.4	2,970.4	87.2
9. Cultural services	9,845.0	...	193.8	10,038.8	1,762.2	17.6%	5,257.6	922.9	34.0
10. Sport and recreational services	13,798.0	...	457.0	14,255.0	6,396.7	44.9%	6,857.2	3,077.1	205.1
II. Other consumption and non-consumption products	2,784,182.0	623,535.2	160,542.4	3,568,259.6	36,265.3	1.0%	1,364,697.0	5,467.7	1,333.0
Goods*** purchased from trade activities	223,993.1	...	31,929.4	255,922.5	32,803.5	3.7%	105,655.7	3,910.3	1,181.7
All other consumption products	1,988,980.9	...	90,876.6	2,079,857.5	3,461.8	0.2%	935,648.6	1,557.3	151.3
Non-consumption products****	571,208.0	623,535.2	37,736.4	1,232,479.6	0.0	0.0%	323,392.7	0.0	0.0
Total	3,085,722.3	623,535.2	169,476.1	3,878,733.6	173,974.2	4.5%	1,451,573.3	47,113.6	6,952.9

Notes: Sometimes it might happen that totals do not match due to rounding.

* - Imports excludes direct purchases of Icelandic residents abroad.

** - Only Value Added Tax was considered for tourism purchases due to lack of data.

*** - For goods, tourism share is established on the retail trade margin only.

**** - These do not generate tourism shares.

Table 6. (cont.) Total domestic supply and internal tourism consumption in Iceland (at purchasers' prices), 2009-2013, current prices

	2011								
	Output of domestic producers (at basic prices)	Imports*	Taxes** less subsidies on products	Domestic supply (at purchasers' prices)	Internal tourism consumption	Tourism ratio (%)	Gross value added of the related industry (at basic prices)	Tourism gross value added (at basic prices)	Tourism taxes less subsidies
I. Tourism characteristic products (for international comparability)	339,648.4	...	10,785.1	350,433.6	168,037.6	48.0%	87,965.1	46,200.1	7,153.0
1. Accommodation	36,154.1	...	2,859.3	39,013.4	37,677.0	96.6%	14,960.3	14,447.8	2,761.4
2. Summer houses	2,575.0	...	x	2,575.0	2,575.0	100.0%	2,575.0	2,575.0	x
3. F&B serving services	45,591.9	...	4,335.7	49,927.6	16,124.1	32.3%	16,250.2	5,248.0	1,400.2
4. Road passenger transportation	16,980.6	...	91.8	17,072.4	7,728.5	45.3%	6,541.0	2,961.1	41.6
5. Water passenger transportation	3,054.3	...	-1,055.6	1,998.8	1,349.0	67.5%	1,949.5	1,315.8	-712.4
6. Air passenger transportation	174,626.6	...	-29.2	174,597.4	56,546.5	32.4%	25,108.7	8,131.9	-9.5
7. Transport equipment rental	12,000.6	...	3,712.0	15,712.5	13,799.6	87.8%	3,861.9	3,391.8	3,260.0
8. Travel agencies	22,031.3	...	97.8	22,129.1	22,129.1	100.0%	3,261.5	3,261.5	97.8
9. Cultural services	10,822.1	...	211.1	11,033.2	2,182.2	19.8%	5,752.7	1,137.8	41.8
10. Sport and recreational services	15,812.0	...	562.3	16,374.3	7,926.6	48.4%	7,704.2	3,729.5	272.2
II. Other consumption and non-consumption products	2,978,133.2	734,170.9	169,872.9	3,882,176.9	40,317.7	1.0%	1,434,527.8	6,564.8	1,434.4
Goods*** purchased from trade activities	236,516.6	...	32,918.0	269,434.6	36,425.7	3.9%	126,011.5	4,855.0	1,268.3
All other consumption products	2,139,847.9	...	95,406.0	2,235,253.9	3,892.1	0.2%	981,952.3	1,709.8	166.1
Non-consumption products****	601,768.8	734,170.9	41,548.8	1,377,488.5	0.0	0.0%	326,564.0	0.0	0.0
Total	3,317,781.6	734,170.9	180,658.0	4,232,610.5	208,355.3	4.9%	1,522,492.9	52,764.9	8,587.4

Notes: Sometimes it might happen that totals do not match due to rounding.

* - Imports excludes direct purchases of Icelandic residents abroad.

** - Only Value Added Tax was considered for tourism purchases due to lack of data.

*** - For goods, tourism share is established on the retail trade margin only.

**** - These do not generate tourism shares.

Table 6. (cont.) Total domestic supply and internal tourism consumption in Iceland (at purchasers' prices), 2009-2013, current prices

	2012								
	Output of domestic producers (at basic prices)	Imports*	Taxes** less subsidies on products	Domestic supply (at purchasers' prices)	Internal tourism consumption	Tourism ratio (%)	Gross value added of the related industry (at basic prices)	Tourism gross value added (at basic prices)	Tourism taxes less subsidies
I. Tourism characteristic products (for international comparability)	388,149.3	...	13,180.2	401,329.5	197,501.1	49.2%	102,983.0	57,067.9	9,143.6
1. Accommodation	46,181.7	...	3,502.7	49,684.4	47,540.3	95.7%	20,634.2	19,743.7	3,351.5
2. Summer houses	2,882.5	...	x	2,882.5	2,882.5	100.0%	2,882.5	2,882.5	x
3. F&B serving services	49,887.4	...	4,753.2	54,640.6	18,676.3	34.2%	18,177.1	6,213.0	1,624.7
4. Road passenger transportation	19,913.5	...	145.8	20,059.3	9,889.0	49.3%	7,590.0	3,741.8	71.9
5. Water passenger transportation	3,400.0	...	-1,018.2	2,381.8	1,539.3	64.6%	2,065.3	1,334.8	-658.0
6. Air passenger transportation	195,634.6	...	-65.0	195,569.7	59,890.6	30.6%	28,781.4	8,813.9	-19.9
7. Transport equipment rental	15,340.2	...	4,797.0	20,137.2	17,630.4	87.6%	5,557.2	4,865.4	4,199.8
8. Travel agencies	26,610.9	...	130.2	26,741.1	26,741.1	100.0%	3,494.8	3,494.8	130.2
9. Cultural services	11,032.9	...	242.7	11,275.5	2,723.9	24.2%	5,396.0	1,303.5	58.6
10. Sport and recreational services	17,265.6	...	691.8	17,957.4	9,987.7	55.6%	8,404.6	4,674.5	384.8
II. Other consumption and non-consumption products	3,131,684.0	801,681.8	183,187.0	4,116,552.8	47,523.7	1.2%	1,480,895.0	7,028.3	1,510.3
Goods*** purchased from trade activities	244,943.8	...	33,853.1	278,797.0	43,080.3	3.9%	131,478.9	5,115.7	1,317.2
All other consumption products	2,277,665.9	...	103,495.8	2,381,161.7	4,443.4	0.2%	1,024,919.3	1,912.6	193.1
Non-consumption products****	609,074.3	801,681.8	45,838.0	1,456,594.1	0.0	0.0%	324,496.9	0.0	0.0
Total	3,519,833.3	801,681.8	196,367.2	4,517,882.3	245,024.7	5.4%	1,583,878.0	64,096.2	10,653.9

Notes: Sometimes it might happen that totals do not match due to rounding.

* - Imports excludes direct purchases of Icelandic residents abroad.

** - Only Value Added Tax was considered for tourism purchases due to lack of data.

*** - For goods, tourism share is established on the retail trade margin only.

**** - These do not generate tourism shares.

Table 6. (cont.) Total domestic supply and internal tourism consumption in Iceland (at purchasers' prices), 2009-2013, current prices

		2013								
	Output of domestic producers (at basic prices)	Imports*	Taxes** less subsidies on products	Domestic supply (at purchasers' prices)	Internal tourism consumption	Tourism ratio (%)	Gross value added of the related industry (at basic prices)	Tourism gross value added (at basic prices)	Tourism taxes less subsidies	
I. Tourism characteristic products (for international comparability)										
1.	Accommodation	435,045.5	...	13,085.0	448,130.5	224,825.3	50.2%	121,744.9	68,737.5	9,203.7
2.	Summer houses	52,537.8	...	3,834.7	56,372.4	54,235.4	96.2%	24,133.4	23,218.5	3,689.3
3.	F&B serving services	3,064.6	...	x	3,064.6	3,064.6	100.0%	3,064.6	3,064.6	x
4.	Road passenger transportation	57,074.9	...	4,974.7	62,049.6	21,578.7	34.8%	21,411.5	7,446.2	1,730.0
5.	Water passenger transportation	24,267.6	...	116.3	24,383.9	12,237.6	50.2%	9,217.7	4,626.1	58.4
6.	Air passenger transportation	3,772.5	...	-1,040.6	2,731.9	1,813.0	66.4%	2,326.0	1,543.7	-690.6
7.	Transport equipment rental	212,968.3	...	-87.9	212,880.4	65,097.5	30.6%	33,627.8	10,283.2	-26.9
8.	Travel agencies	19,228.8	...	4,189.2	23,418.0	21,393.9	91.4%	7,728.2	7,060.2	3,827.2
9.	Cultural services	30,427.1	...	140.0	30,567.0	30,567.0	100.0%	4,031.7	4,031.7	140.0
10.	Sport and recreational services	12,654.4	...	263.6	12,918.0	3,101.9	24.0%	6,119.6	1,469.5	63.3
	II. Other consumption and non-consumption products	19,049.6	...	695.0	19,744.6	11,735.6	59.4%	10,084.3	5,993.8	413.1
	Goods*** purchased from trade activities	3,201,042.4	786,978.4	192,560.5	4,180,581.3	51,045.4	1.2%	1,553,503.1	7,726.8	1,665.6
	All other consumption products	250,147.2	...	34,804.8	284,952.1	46,406.6	4.2%	135,560.8	5,684.5	1,459.5
	Non-consumption products****	2,295,948.2	...	106,747.5	2,402,695.7	4,638.9	0.2%	1,057,807.9	2,042.3	206.1
		654,947.0	786,978.4	51,008.1	1,492,933.5	0.0	0.0%	360,134.3	0.0	0.0
Total		3,636,087.9	786,978.4	205,645.5	4,628,711.8	275,870.7	6.0%	1,675,248.0	76,464.3	10,869.3

Notes: Sometimes it might happen that totals do not match due to rounding.

* - Imports excludes direct purchases of Icelandic residents abroad.

** - Only Value Added Tax was considered for tourism purchases due to lack of data.

*** - For goods, tourism share is established on the retail trade margin only.

**** - These do not generate tourism shares.

Table 10a. Non-monetary indicators: Number of trips and overnights by forms of tourism and classes of visitors

	2009											
	Inbound tourism				Domestic tourism				Outbound tourism			
	Tourists (overnight visitors) – Arrivals / Departures of foreigners	Excursionists (same-day visitors) – Arrivals of cruise visitors only	Foreign visitors – Total arrivals	Tourists (overnight visitors)	Excursionists (same-day visitors)	Icelandic visitors domestic	Tourists (overnight visitors) – Departures of Icelanders abroad	Excursionists (same-day visitors)	Icelandic visitors abroad – Total departures			
Number of trips	493,940	157,384	651,324	...	...	...	261,263	*	261,263
Number of overnights**	2,134,245	N/A	2,134,245	870,384	N/A	870,384	...	N/A	...			

	2010											
	Inbound tourism				Domestic tourism				Outbound tourism			
	Tourists (overnight visitors) – Arrivals / Departures of foreigners	Excursionists (same-day visitors) – Arrivals of cruise visitors only	Foreign visitors – Total arrivals	Tourists (overnight visitors)	Excursionists (same-day visitors)	Icelandic visitors domestic	Tourists (overnight visitors) – Departures of Icelanders abroad	Excursionists (same-day visitors)	Icelandic visitors abroad – Total departures			
Number of trips	485,016	167,449	652,465	...	...	...	312,553	*	312,553
Number of overnights**	2,144,318	N/A	2,144,318	854,707	N/A	854,707	...	N/A	...			

Notes:

* - Insignificant and/or negligible in the case of Iceland

** - For inbound and domestic tourism only overnights registered in accommodation establishments

... - Lack of data

N/A - Not applicable

Table 10a. (cont.) Non-monetary indicators: Number of trips and overnights by forms of tourism and classes of visitors

		2011								
		Inbound tourism		Domestic tourism		Outbound tourism				
		Tourists (overnight visitors) – Arrivals / Departures of foreigners	Excursionists (same-day visitors) – Arrivals of cruise visitors only	Foreign visitors – Total arrivals	Tourists (overnight visitors)	Excursionists (same-day visitors)	Icelandic visitors domestic	Tourists (overnight visitors) – Departures of Icelanders abroad	Excursionists (same-day visitors)	Icelandic visitors abroad – Total departures
Number of trips		565,611	152,271	717,882	...	...	...	357,579	*	357,579
Number of overnights**		2,444,245	N/A	2,444,245	804,715	N/A	804,715	...	N/A	...

		2012								
		Inbound tourism		Domestic tourism		Outbound tourism				
		Tourists (overnight visitors) – Arrivals / Departures of foreigners	Excursionists (same-day visitors) – Arrivals of cruise visitors only	Foreign visitors – Total arrivals	Tourists (overnight visitors)	Excursionists (same-day visitors)	Icelandic visitors domestic	Tourists (overnight visitors) – Departures of Icelanders abroad	Excursionists (same-day visitors)	Icelandic visitors abroad – Total departures
Number of trips		672,773	212,231	885,004	...	...	...	373,940	*	373,940
Number of overnights**		2,898,011	N/A	2,898,011	853,502	N/A	853,502	...	N/A	...

Notes:

* - Insignificant and/or negligible in the case of Iceland

** - For inbound and domestic tourism only overnights registered in accommodation establishments

... - Lack of data

N/A - Not applicable

Table 10a. (cont.) Non-monetary indicators: Number of trips and overnights by forms of tourism and classes of visitors

	2013														
	Inbound tourism					Domestic tourism					Outbound tourism				
	Tourists (overnight visitors) – <i>Arrivals / Departures of foreigners</i>	Excursionists (same-day visitors) – <i>Arrivals of cruise visitors only</i>	Foreign visitors – <i>Total arrivals</i>	Tourists (overnight visitors)	Excursionists (same-day visitors)	Icelandic visitors domestic	Tourists (overnight visitors) – <i>Departures of Icelanders abroad</i>	Excursionists (same-day visitors)	Icelandic visitors abroad – <i>Total departures</i>						
Number of trips	807,349	226,820	1,034,169	...	...	...	381,675	*	381,675			
Number of overnights:**	3,521,824	N/A	3,521,824	1,024,559	N/A	1,024,559	...	N/A	...						

Notes:

* - Insignificant and/or negligible in the case of Iceland

** - For inbound and domestic tourism only overnights registered in accommodation establishments

... - Lack of data

N/A - Not applicable

Table 10b. Non-monetary indicators: International arrivals by modes of transport

	2009	2010	2011	2012	2013
Air (I)	480,074	469,519	553,106	659,993	790,712
Scheduled flights (estimates)	458,311	445,232	528,149	623,628	754,140
Unscheduled flights (estimates)	21,763	24,287	24,957	36,365	36,572
Waterway (II)	171,250	182,946	164,776	225,011	243,457
Ferry	13,866	15,497	12,505	12,780	16,637
Cruise ship	157,384	167,449	152,271	212,231	226,820
Total (I) + (II)	651,324	652,465	717,882	885,004	1,034,169

Table 10c. Number of establishments and capacity by types of accommodation

	2009			2010		
	Short-term accommodation activities (ISAT 55.1 + 55.2)	Camping grounds, recreational vehicle parks and trailer parks (ISAT 55.3)	Vacation homes (Summer houses)	Short-term accommodation activities (ISAT 55.1 + 55.2)	Camping grounds, recreational vehicle parks and trailer parks (ISAT 55.3)	Vacation homes (Summer houses)
Number of establishments	842	142	11,835	869	149	12,079
Number of beds*	26,721	...	...	28,183	...	...
Number of rooms	10,267	N/A	...	10,837	N/A	...
Room occupancy** (%)	46.1	N/A	...	43.5	N/A	...
Bed* occupancy (%)	36.4	...	...	35.0	...	...

Notes:

* - In the case of camping these would be places for tents and caravans but these data are not available for this kind of establishments

** - Room occupancy refers only to hotel and guesthouses

... - Lack of data

N/A - Not applicable

Table 10c. (cont.) Number of establishments and capacity by types of accommodation

	2011			2012			2013		
	Short-term accommodation activities (ISAT 55.1 + 55.2)	Camping grounds, recreational vehicle parks and trailer parks (ISAT 55.3)	Vacation homes (Summer houses)	Short-term accommodation activities (ISAT 55.1 + 55.2)	Camping grounds, recreational vehicle parks and trailer parks (ISAT 55.3)	Vacation homes (Summer houses)	Short-term accommodation activities (ISAT 55.1 + 55.2)	Camping grounds, recreational vehicle parks and trailer parks (ISAT 55.3)	Vacation homes (Summer houses)
Number of establishments	959	157	12,225	1,008	164	12,401	1,119	197	12,574
Number of beds*	30,161	...	...	31,750	...	...	34,265	...	...
Number of rooms	11,650	N/A	...	12,725	N/A	...	14,155	N/A	...
Room occupancy** (%)	45.9	N/A	...	49.9	N/A	...	54	N/A	...
Bed* occupancy (%)	36.3	...	...	38.9	...	...	43.3	...	...

Notes:

* - In the case of camping these would be places for tents and caravans but these data are not available for this kind of establishments

** - Room occupancy refers only to hotel and guesthouses

... - Lack of data

N/A - Not applicable

Annex 2. List of Statistics Iceland contributors to the TSA project

No	Name	Function and/or Department	Expertise provided	Tel.	Email
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Annex 3. Long-term foreign students and exchange foreign students at Icelandic universities, 2009-2013

Name of university	Types of foreign students	2009	2010	2011	2012	2013
University of Akureyri	LT	36	41	34	37	26
	ES	49	55	52	51	54
University of Iceland	LT	713	613	465	685	779
	ES	379	403	420	467	457
University of Reykjavik	LT	42	36	37	55	90
	ES	142	108	142	173	148
Iceland Academy of the Arts	LT	20	24	21	17	17
	ES	30	32	36	35	50
Hólar University College	LT	16	16	23	29	21
	ES	2	5	0	6	5
University of Bifröst	LT	0	0	0	0	0
	ES	42	47	28	27	41
Agricultural University of Iceland	LT	0	0	1	1	2
	ES	2	2	1	2	1
Total Iceland	LT	827	730	581	824	935
	ES	646	652	679	761	756

Source: own data collection from each university in the period January-April, 2015

LT – long-term foreign students, ES – exchange students

Annex 4. Model of the questionnaire proposed for the future survey on package tours (PT) from Icelandic travel agencies and tour-operators

1. Please estimate the structure of your total revenues according to: (%)	
Inbound (Foreign tourists travelling in Iceland)	
Domestic (Icelanders travelling in Iceland)	
Outbound (Icelanders travelling abroad)	
Total	100%
2. Please estimate the structure of your total revenues according to: (%)	
Package tours (PT)	
Individual services not included in package tours (gross revenue)	
Commissions for intermediation of individual services (package tour not included)	
Other (please mention)	
Total	100%
3. Only for individual services not included in package tour please estimate the structure of revenues according to (%)	
Accommodation	
Food and beverage services	
Road passenger transportation (transfer included)	
Air passenger transportation	
out of which with foreign carriers	
Water transport	
Car rental	
Tourist guides and information	
Cultural services (e.g. entrance to museums, historical sites, theatre, concerts)	
Recreational services	
Other (please mention)	
Total	100%
4. Did you produce your own package tours ? - please mark with x in the right cell (if not, go to question 8)	
5. Please estimate the share of your own produced package tours in total revenue coming from PT%
6. Please estimate the structure of expenditure for services included in package tours produced by your own travel agency (%)	
Accommodation	
Food and beverage services	
Road passenger transportation (transfer included)	
Air passenger transportation	
out of which with foreign carriers	
Water transport	
Car rental	
Tourist guides and information	
Cultural services (e.g. entrance to museums, historical sites, theatre, concerts)	
Recreational services	
Commission paid between agencies	
Other (please mention)	
Total	100%
7. Please estimate the share of expenditure for your own produced package tours in total expenditure of your travel agency (%)	
%
8. Please provide the expenditure for package tours which were produced by other travel agencies ?	
ISK mil. out of which	
National companies (%)	
Foreign companies (%)	
Total	100%
9. Please provide the expenditure for other individual services not included in package tours? ISK mil.	

Note: the shaded area is designed only for travel agencies that produce their own package tours.

Annex 5. Number of enterprises and organizations activating in tourism industries in Iceland, 2009-2014

Tourism industries	2009	2010	2011	2012	2013	2014
1. Accommodation	433	449	463	481	531	579
2. Food & Beverage serving industry	921	931	927	922	959	978
3. Road passenger transportation	142	141	145	152	165	178
4. Water passenger transportation	23	26	29	32	34	33
5. Air passenger transportation	37	40	45	50	47	46
6. Transport equipment rental	95	113	119	134	155	165
7. Travel agencies	387	462	517	594	690	806
8. Cultural services	1,234	1,264	1,293	1,310	1,339	1,373
9. Sport and recreational services	330	346	353	370	376	384
Total tourism industries (1+2+...+9)	3,602	3,772	3,891	4,045	4,296	4,542
Total Iceland	59,753	60,945	61,734	62,961	64,625	66,504
Share of tourism industries in total Iceland	6.0%	6.2%	6.3%	6.4%	6.6%	6.8%

Source: Statistics Iceland, 2015f.

Note: Water passenger transportation data were adjusted to include two more companies (Eimskip and Samskip) that perform ferries.



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