

**Documentation of statistics for  
International Trade in Services 2014**

## 1 Introduction

Foreign trade in services describes the trade in services (imports and exports) with other countries. The trade is described both in terms of type of services and in terms of partner country/area. The statistics were introduced in connection with the termination of the settlement statistics in Danmarks Nationalbank by new-year 2004/05, cf. Balance of payments.

## 2 Statistical presentation

The statistics show Denmark's imports and exports of services from/to other countries distributed on partner countries and approx. 60 service categories on an annual basis.

### 2.1 Data description

The statistics show Denmark's imports and exports of services from/to other countries distributed on partner countries and approx. 60 service categories on an annual basis. On a quarterly basis the statistics are published on a more aggregate level and on a monthly basis completely aggregated only.

### 2.2 Classification system

The statistics on international trade in services cover approx. 60 categories of services; in the quarterly publication these are aggregated to 18 main groups and subgroups:

- Manufacturing services;
- Repair services;
- Sea transport;
- Passenger sea transport;
- Freight transport by ship;
- Auxiliary sea transport services;
- Air transport;
- Other transport;
- Postal and courier services;
- Travel-related services;
- Construction services;
- Insurance services;
- Financial services;
- Royalties and licenses;
- Telecommunication services, computer services, and information services;
- Other business services;
- Cultural, personal, and recreational services;
- Public services n.i.e.

### 2.3 Sector coverage

Not relevant for these statistics.

## **2.4 Statistical concepts and definitions**

Resident business: A resident business enterprise is either a Danish enterprise in Denmark or a foreign enterprise which has been engaged or intends to be engaged in economic activities in Denmark. This means that branches or subsidiaries in Denmark of non-resident enterprises are regarded as resident enterprises, while branches or subsidiaries of resident Danish enterprises abroad are regarded as non-resident enterprises.

Resident person: A resident person is a Dane resident in Denmark or a foreign citizen who is resident in Denmark and who intends to be a resident in Denmark for at least one year. Students and patients remain residents of their home countries though. For the statistics on “Danish manufacturing companies’ international production” the merchanting transactions are recorded at gross values, while the statistics on balance of payments records Merchanting at net values. When the term “total sale” is used, including which the sales prices for merchanting goods, it is not identical to the definition of exports in the balance of payments.

## **2.5 Statistical unit**

In the statistics the units are delimited according to their legal registration number (cvr. number).

## **2.6 Statistical population**

The statistics cover trade in services performed by Danish residents with foreign residents. The statistical population for Survey on international trade in services is assumed to consist of approx. 40.000 units (cvr. numbers), which according to different assumptions are considered to be covering the total foreign trade in services. This population is delimited using the business register and some other sources.

## **2.7 Reference area**

The statistics cover trade in services performed by Danish residents with foreign residents.

## **2.8 Time coverage**

The statistics cover the period since new year 2004/2005.

## **2.9 Base period**

Not relevant for these statistics.

## **2.10 Unit of measure**

The statistics are compiled in DKK.

## **2.11 Reference period**

01-10-2014 - 31-12-2014

## **2.12 Frequency of dissemination**

The statistics are published quarterly, for main results, however, monthly with the balance of payment statistics.

## **2.13 Legal acts and other agreements**

Act on Statistics Denmark (§ 9a and § 10).

Parliament and Council regulation (EEC) No 184/2005 of 12 January 2005 on Community statistics concerning balance of payments, international trade in services and foreign direct investment (OJ L 310 08.02.05) and later Commission regulations.

## **2.14 Cost and burden**

The response burden has been estimated to DKK 8.1 million.

## **2.15 Comment**

International trade in services has a webpage [International trade in services](#)

## **3 Statistical processing**

Data is collected every month. The data is screened for obvious and likely errors. The completeness of the reports is checked. The data is used for compiling the statistics through a process of grossing up for the trade not covered. The statistics is accordingly to be considered to completely cover the Danish foreign trade in services.

### **3.1 Source data**

The most important source of the statistics is a combination of monthly reports from approx. 400 firms and annual reports from approx. 1300 firms. Another important source is interviews with travelers; the interviews with foreign travelers in Denmark are carried out in cooperation with VisitDenmark; the interviews with Danes travelling abroad are conducted in the context of Holiday and Business Journeys. Supplementary information from other sources on travel as well as on other items is used. Information on public services is provided through statistics on public finance.

### **3.2 Frequency of data collection**

Data is collected monthly and annually.

### **3.3 Data collection**

Data is collected mostly electronically through the system IDEP.

### **3.4 Data validation**

Data is compared with earlier reported data. If relevant, data is also compared with reports to other statistics.

### **3.5 Data compilation**

Data is grossed up to the total population, assumed to consist of about 40.000 units. The grossing-up routine is dynamic as the weights are recompiled when new data are available. The 400 monthly reporters are allotted with weight 1, while the 1300 annual reporters are allotted with weights larger than 1 (or 1). The routine is simple; a stratum weight is determined directly on the likelihood of choosing this unit.

### **3.6 Adjustment**

In the quarterly statistics adjustment for seasonality is performed.

## **4 Relevance**

The International trade in services statistics are constituting an essential part of the balance of payments statistics and of the rest-of-the-world account of national accounts. The statistics are occasionally commented upon in the public debate.

### **4.1 User Needs**

Foreign trade in services is an independent statistics and is used in the compilation of the Balance of payments. Important users are hence public authorities, private organisations, firms and private individuals.

### **4.2 User Satisfaction**

Measurements of user satisfaction are not available.

### **4.3 Data completeness rate**

The publication of data is compatible with the EU requirements on data reporting.

## **5 Accuracy and reliability**

In the first release of the figures for foreign trade in services there will be a certain degree of uncertainty as a minor part of the data has either not been reported yet or has errors to a degree that it cannot be included in the release. In these cases data will be supplemented by estimations. The reliability of the figures for a given quarter increases in later releases. The final figures are to be considered as fairly reliable, to a decreasing degree though the more detailed level that is applied.

## **5.1 Overall accuracy**

The statistics on foreign trade in services are basically compiled on partly a cut-off sample of Denmark's 400 largest firms engaged in this trade (monthly reports) and partly a stratified sample of about 1300 small and medium-sized firms (annual reports) by grossing up this sample information. This entails by its very nature some inaccuracy.

An important element of inaccuracy is attached to the frame from which the sample is drawn. The frame was first derived from the settlement statistics of Denmark's Nationalbank. Effective from 2009 a new frame has been taken into use. This frame has been delimited from a one-off investigation in 2008 - the "screening" - in which some 10.000 firms were requested to report summarily on their imports and exports of services in 2007. A similar investigation has been conducted in 2013, where 5.000-6.000 firms have been questioned.

Finally it must be considered that the concepts being employed in the statistics are rather complicated. Accordingly misunderstandings in the reports leading to inaccurate compilations are unavoidable. This problem is constantly addressed by contacting the reporters when suspicions of misunderstandings are raised. Special analyses have been conducted on the items sea transport, travel, insurance, merchanting, government services (n.i.e.), construction services, and services between affiliated enterprises (n.i.e.) and most lately on intellectual property services.

The travel item entails some difficulty. It is compiled using different information on consumption by Danes abroad, number of nights abroad, and transport abroad from statistics from other countries; but the risk of error is fairly big, particularly concerning small partner countries. This error margin can, however not be calculated.

With the implementation of the new international guidelines some additional questions have been included in the questionnaire on international trade in services. The new variables have made it possible to validate the information by comparing more directly vis-à-vis other statistical domains. Against that background, Statistics Denmark will map the foreign activities of selected larger Danish enterprises. Among others it is expected that the validation will affect the compilation of processing activities. The new information is expected to be included in the statistics in October 2015.

Measures on accuracy on final exports and imports of services are not calculated.

## **5.2 Sampling error**

Measurements are not yet available.

### **5.3 Non-sampling error**

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Trade on the internet is only partly covered; an example of undercoverage can be streaming services.

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### **5.4 Quality management**

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

### **5.5 Quality assurance**

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.

### **5.6 Quality assessment**

Compared to statistics in countries, which are comparable with respect to size and development, the Danish statistics on foreign trade in services is considered to be of good quality. Some reservation, however, has to be indicated with respect to the distribution on partner countries.

## **5.7 Data revision - policy**

Statistics Denmark revises published figures in accordance with the [Revision Policy for Statistics Denmark](#). The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

## **5.8 Data revision practice**

After the first publication of the international trade in services statistics it is continuously adjusted, as supplementary or adjusted statistical material appears. The supplementary information implies that the final calculation of the international trade in services is only prepared about 2-3 years after the expiry of the reference year. According to practice the data of the months of the previous year are locked by late September. Simultaneously the data of the preceding year are revised and locked again. The data of the latter year are revised again internally around January for being included in the final National Account compilations. These data are thus declared final the following September.

## **6 Timeliness and punctuality**

The statistics are published every quarter approx. 70 days after the end of the reference period; main results are published monthly approx. 40 days after the end of the particular month. The balance of payments statistics are normally published without delays as to the preannounced dates.

### **6.1 Timeliness and time lag - final results**

The statistics are published every quarter approx. 70 days after the end of the reference period. However, main results are published monthly approx. 40 days after the end of the particular month.

### **6.2 Punctuality**

The statistics are normally published without delays as to the preannounced dates.

## **7 Comparability**

The International trade in services statistics are compiled according to international standards. Accordingly they are comparable with the statistics of other developed countries.

### **7.1 Comparability - geographical**

The International trade in services statistics are compiled according to international standards. Accordingly they are comparable with the statistics of other developed countries. The partner countries' recording of the same transactions (the mirror transactions) are in principle comparable statistics. Such comparisons are, however, usually entailed with several problems.



## **7.2 Comparability over time**

Breaks in the time series are to be expected for trade in services as a result of the new sources and the new compilation method since 2005. This particularly applies for items at a low level of aggregation. It is, however, submitted that total trade in services, net, is compiled without any significant break. The new frame, effective from 2009, does not establish breaks in the usual sense of the word. The revisions are limited to those derived from the updating of the sample.

## **7.3 Coherence - cross domain**

The international trade in services statistics are included in the balance of payments statistics and in the rest of the world account of the national accounts without any adjustment.

## **7.4 Coherence - internal**

There is full internal coherence.

## **8 Accessibility and clarity**

News from Statistics Denmark (quarterly figures), National Accounts and Balance of Payments (Statistical News) ("Nationalregnskab og betalingsbalance") (quarterly and annual figures), and [StatBank Denmark](#)

### **8.1 Release calendar**

The publication date appears in the release calendar. The date is confirmed in the weeks before.

### **8.2 Release calendar access**

The Release Calendar can be accessed on our English website: [Release Calendar](#).

### **8.3 User access**

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

### **8.4 News release**

Quarterly figures are first published in News from Statistics Denmark.

### **8.5 Publications**

A more detailed publication is to be found in National Accounts and Balance of Payments (Statistical News). Annual publications: Udenrigsøkonomi (External Economy), Statistical Yearbook, and Statistical 10-year Review. The publications are in Danish.

## **8.6 On-line database**

Updated figures are to be found in the [StatBank tables](#) : Uhto2 (quarterly), Uhto3 (annual) and Uht4S1, Uht4S2 (seasonally adjusted).

## **8.7 Micro-data access**

In addition to the trade information the basic data will contain information on identity of the reporting firm, which will allow for linking data with other sources for statistical purposes.

## **8.8 Other**

The statistics are included in the compilation of the balance of payments and are submitted to the OECD and the EU.

## **8.9 Confidentiality - policy**

Some service categories are aggregated before publication due to confidentiality.

## **8.10 Confidentiality - data treatment**

Some service categories are aggregated before publication due to confidentiality.

## **8.11 Documentation on methodology**

For documentation see Balance of Payments.

## **8.12 Quality documentation**

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

## **9 Contact**

The administrative placement of this statistics is in the division of External Economy International Trade in Service. The person responsible is Casper Winther, tel.: +45 3917 3636, e-mail: [caw@dst.dk](mailto:caw@dst.dk)

### **9.1 Contact organisation**

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