

Documentation of statistics for International organisation and outsourcing 2016



1 Introduction

This survey uncovers important trends in globalization concerning the enterprises global organization and the extent of international sourcing of business functions for the period 2014-2016. Also the statistics describes motives and barriers to international outsourcing, and the types of functions and number of jobs having been moved to Denmark as a result of changes in the international organization of enterprises. Also covered is the organization of business functions in Denmark and the national outsourcing. The statistics has been collected also for the periods 2009-2011 and 2001-2006. The survey is part of an international survey co-financed by Eurostat, the statistical office of EU.

2 Statistical presentation

The survey on international sourcing has been carried out three times since 2007. The purpose of the survey is to establish data on the engagement of enterprises in global value chains and international outsourcing. Besides questions on international sourcing, the survey also includes questions on the distribution of employed persons on different business functions, motives and barriers concerning international sourcing and relocation of activities from abroad to Denmark.

2.1 Data description

The survey of international organization and outsourcing of Danish enterprises covers all enterprises with 50 or more employees, in all 3.200 enterprises. The survey is part of a European project, partly financed by Eurostat. The purpose of the survey is to establish data on the engagement of enterprises in global value chains and international outsourcing. The survey is to some extent a repetition of earlier surveys carried out in 2007 and 2012. Besides questions on international sourcing the survey also includes questions on the distribution of employed persons on different business functions, motives and barriers concerning international sourcing and relocation of activities from abroad to Denmark.

2.2 Classification system

Industry (NACE rev.2).

2.3 Sector coverage

The statistics covers the non-agricultural private sector, the economic activities of DB07: 05-09, 10-33, 35, 36-39, 41-43, 45-47, 49-53, 55-56, 58-63, 64-66, 68, 69-75 and 77-82.



2.4 Statistical concepts and definitions

Moving business functions from abroad to Denmark: • Covers the total or partial movement to Denmark of activity (core or support) being carried out outside of Denmark. • Activity may be moved from affiliated or non-affiliated enterprises outside of Denmark. • Activity may be moved to an enterprise in Denmark or to other affiliated or non-affiliated enterprises in Denmark. • The movement of activity to Denmark may involve backsourcing (see below), but is not limited to this type of relocation. • Does not include the expansion of activities that does not result from such a movement of activity by the enterprise.

Core function: The core business function of your enterprise is the production of goods or services intended for the market, and which constitutes the enterprise's primary function. The core function in most cases corresponds to the enterprise's industry or main activity

Support functions: Support functions (ancillary activities) are carried out in support of your enterprise's core activity. The output of the support functions are intended directly for the market/for third parties. Support functions are defined as follows in the survey:

• Distribution and logistics: Transportation activities, warehousing and order processing functions. • Marketing, sales and after sales services, incl. help desks and call centres: Sales, marketing and market research, advertising, telemarketing and after sales services as well as call centre services such as help-desks and customer support services. • ICT services: ICT and telecommunications support services, including hardware and software support services, including adaptation of software, data treatment, database services, repair and maintenance, web-design, and other ICT or informational services. • Administrative and management functions: Administrative and management functions, including legal services, accounting and book-keeping, auditing, business management and consultancy support services, HR management including staff training, payroll management, corporate financial and insurance services. • Engineering and other technical services: Engineering and other technical services, technical consultancy, testing and certification as well as design services. • Research & development (R&D): Intramural research and experimental development, including software development (as a support function).

High-skill jobs: High-skill jobs are jobs requiring staff performing specialist functions. These are e.g. jobs requiring an academic background, management jobs or technical jobs. These jobs typically require a higher education.

Domestic sourcing: Covers the total or partial movement of activity (core or support functions) carried out in Denmark. Note that international sourcing may involve the movement of activity carried out within the enterprise in Denmark or of activity which the enterprise has previously outsourced to other enterprises within Denmark. Sourcing may involve movement of activity to other enterprises within the enterprise group or to other (external) enterprises outside of Denmark. Does not include the expansion of activities in other enterprises that does not result from such a movement of activity by the enterprise.

International sourcing: Covers the total or partial movement of activity (core or support functions) carried out in Denmark. Note that international sourcing may involve the movement of activity carried out within an enterprise in Denmark or of activity which the enterprise has previously outsourced to other enterprises within Denmark. Sourcing may involve movement of activity to other enterprises within the enterprise group or to other (external) enterprises outside of Denmark. Does not include the expansion of activities in other enterprises that does not result from such a movement of activity by the enterprise.

Backsourcing: • Backsourcing is the total or partial movement of activity back to Denmark, which an enterprise has previously moved out of Denmark.



2.5 Statistical unit

Legal units

2.6 Statistical population

The survey covers all enterprises with 50 or more persons employed in the private sector in the following economic activities of DBo7: 05-09, 10-33, 35, 36-39, 41-43, 45-47, 49-53, 55-56, 58-63, 64-66, 68, 69-75 and 77-82. The survey also covers all enterprises within manufacturing industry knowledge services with 20-49 persons employed.

2.7 Reference area

Denmark and for specific questions also the following countries/groups of countries: • EU-15 (excl. Denmark): Belgium, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, and the United Kingdom • EU-13: Croatia, the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovak Republic, Bulgaria, and Romania. • Other European countries: Switzerland, Norway, Turkey, Russia, Belo Russia, Ukraine and the Balkan states. • USA & Canada • South and Central America: Incl. Mexico. • China • India • Other Asian countries & Oceania: e.g. Japan, Korea, Vietnam etc. as well as Australia and New Zealand. • Rest of the world: countries not included elsewhere, e.g. Africa, Near- and Middle-East.

2.8 Time coverage

2014-2016 and status by the end of 2016

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

Number of jobs, number of persons employed, number of enterprises

2.11 Reference period

The survey covers the period 2014-2016 and for some questions the reference period is by the end of 2016.

2.12 Frequency of dissemination

The statistics has been collected three times, for the periods 2014-2016, 2009-2011 and 2001-2006

2.13 Legal acts and other agreements

No EU regulation. The survey is an ad hoc survey in cooperation with Eurostat.



2.14 Cost and burden

No measure of response burden is available.

2.15 Comment

More information can be obtained from Statistics Denmark.

3 Statistical processing

Data for this statistics are collected via questionnaires from a population of app. 3,200 respondents. The responses are checked electronically as well as manually. Missing values are imputed.

3.1 Source data

Data has been collected via an electronical survey, and has been supplied with background information from the Business Statistical Register.

3.2 Frequency of data collection

The statistics has been collected three times, for the periods 2014-2016, 2009-2011 and 2001-2006.

3.3 Data collection

Data has been collected via an electronical survey, and has been supplied with background information from the Business Statistical Register.

3.4 Data validation

Via checking of the data app. xxx enterprises have been contacted in order to obtain consistent and correct data. All responses from enterprises with xxx or more persons employed have been scrutinized, after which contact to the enterprise have been taken in order to obtain consistent and correct data. In the checking of data, data from the previous survey (2009-2011) has been included to some extent.

3.5 Data compilation

For the app. 200 unit non-responses donor imputation has been used, taking off-spring in the number of persons employed and the economic activity (DBo7) of the enterprise. Item non-response is also treated via donor imputation, following the same criteria as for non-respondents.

3.6 Adjustment

Not relevant for this statistics



4 Relevance

The purpose of the statistics is to shed light on the international outsourcing of business functions from Danish enterprises, and to measure the number of jobs being outsourced. The primary target groups of the statistics are ministries, researchers and business organizations, who need information on the influence and importance of globalization on the Danish business sector. The statistics can be used for research project and analyses where outsourcing is an issue.

4.1 User Needs

The primary target groups of the statistics are ministries, researchers and business organizations, who need information on the influence and importance of globalization on the Danish business sector, including the focus on whether highly qualified jobs are maintained in Denmark.

4.2 User Satisfaction

Users have expressed their satisfaction with the focus on aspects of globalization not previously addressed, namely the outsourcing of jobs. The statistics have been used for a number of research projects as well as for analyses from ministries and business organizations.

4.3 Data completeness rate

Not relevant for these statistics.

5 Accuracy and reliability

The statistics is estimated to have a high degree of precision for the main variables.

5.1 Overall accuracy

The statistics is estimated to have a high degree of precision for the main variables.

5.2 Sampling error

As the survey is exhaustive among the enterprises in the activities and size classes specified, no sampling errors occur.

5.3 Non-sampling error

Coverage errors are believed to be minimal. Measurement errors may occur, but guidelines for respondents as well as the checking and re-contact, is believed to have minimized these errors. There is no knowledge on other measurement errors in the statistics.



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

The statistics is considered relevant, as it describes a phenomenon of interest to the Danish economy and business sector, and it is expected that the statistic - like is the case for the previous survey - will be foundation for research projects as well as analyses. The quality and reliability is believed to be high, especially concerning central variables as share of enterprises with international outsourcing and number of jobs having been outsourced. due to the guidance of respondents and a comprehensive quality checking and re-contacting of the respondents in order to obtain correct responses.

For a range of the variables collected, these can be compared to corresponding variables in the previous survey, and the statistics may be compared internationally when results from the survey in which several other European countries participate, are published. Furthermore the statistics may be compared to statistics on Accounts for non-agricultural industries and General enterprise statistics, for the activities and size-classes of enterprises included in the survey.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

No revisions of the statistics has been carried out.

6 Timeliness and punctuality

These statistics are published app. 11 months after the end of the reference period. Publications are released on time, as stated in the release calendar.



6.1 Timeliness and time lag - final results

The statistics is published app. 11 months after the end of the reference period.

6.2 Punctuality

These statistics are published without delay, with reference to the announced time of publication in the release calendar.

7 Comparability

Data from the survey may be compared to the data collected in the surveys from 2007 and 2012. Furthermore it will be possible to compare the results of the Danish survey to those from a range of EU-countries carrying out a comparable survey during 2018. Data may also be compared to data from statistics on Accounts for non-agricultural industries and General enterprise statistics, for the activities and size-classes which are covered.

7.1 Comparability - geographical

A comparable survey is being carried out in a number of EU countries, and comparable results will be published by Eurostat in 2018.

7.2 Comparability over time

The statistics has previously been collected for the periods 2001-2006 and 2009-2011. As a range of data has been collected in all three surveys, these data may be compared.

7.3 Coherence - cross domain

The statistics is based on same population within the non-agricultural private sector as the statistics of Accounts for non-agricultural industries and General enterprise statistics, except for the cut-off of 50 or more employees. Data from the statistics for enterprises with 50 or more employees may therefore be compared to the statistics on international outsourcing.

7.4 Coherence - internal

The final statistical dataset has a high degree of internal consistency. Internal consistency has been a focal point throughout the work of data validation.

8 Accessibility and clarity

These statistics are published yearly in a Danish press release, at the same time as the tables are updated in the StatBank. In the StatBank, these statistics can be found under <u>Outsourcing</u>. Furthermore data can be made available to researchers.

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 Calender can be accessed on our English website: Release Calender.

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

These statistics are published in a Danish press release.

8.5 Publications

There are plans to carry out an in-depth analysis of the data from this survey and the two earlier surveys. The analysis is expected to be published in 2018.

8.6 On-line database

The statistics are published in the StatBank under **Outsourcing** in the following tables:

- ORGOUT1: International sourcing by population, functions, industry and sourcing
- ORGOUT10: International sourcing by population, functions, industry and unit
- ORGOUT20: Jobs sourced internationally by population, industry and type of job
- ORGOUT35: International sourcing of functions by population, functions, destination and unit
- ORGOUT40: Enterprise motivation factors for international sourcing by population, motives, industry and importance

8.7 Micro-data access

Researchers and other analysts from authorized research institutions, can be granted access to the underlying micro-data by contacting <u>Research Services</u>.

8.8 Other

The survey is part of a European project, and data will be delivered to Eurostat in 2018.

8.9 Confidentiality - policy

Data Confidentiality Policy at Statistics Denmark.

8.10 Confidentiality - data treatment

There has been no need to leave out table cells due to confidentiality. The normal practice concerning confidentiality will be followed if the need arises.

8.11 Documentation on methodology

Not relevant for these statistics.

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 these statistics is in the division of Business Dynamics. The person responsible is Helle Månsson, tel.: + 45 3917 3113, e-mail: hej@dst.dk.

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Business Dynamics, Business Statistics

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