

# Documentation of statistics for Stocks of Manufacturers and Wholesale 2019



# **1** Introduction

The primary purpose of the statistics stocks of manufacturers and wholesale is to deliver timely figures for changes in stocks for use in the quarterly national accounts statistics. The statistics were first published in 1987, but the current form started in 2001.

# **2** Statistical presentation

The statistics describe quarterly changes in the stocks of manufacturing and whole sale. For manufacturing, the stock changes are distributed to raw materials, semi-finished goods, manufactured goods and traded goods. The stocks of wholesale activities are not further distributed by type since it must be the case that it is primarily traded goods. Manufacturing is distributed to eight activity groups in published data, while whole sale is distributed to seven activity groups.

# 2.1 Data description

The primary purpose of the statistics is to deliver timely figures for changes in stocks for use in the quarterly national accounts statistics. The statistics describe quarterly changes in the stocks of manufacturing and whole sale. For manufacturing, the stock changes are distributed to raw materials, semi-finished goods, manufactured goods and traded goods. The stocks of wholesale activities are not further distributed by type.

# 2.2 Classification system

Industrial activity is classified according to <u>Dansk Branchekode 2007</u>, which is the Danish national classification based on NACE rev. 2.

Industrial groupings for manufacturing are:

- Manufacture of food products, beverages and tobacco
- Textiles and leather products
- Wood and paper products and printing
- Manufacture of chemicals, pharmaceuticals etc.
- Basic metals and fabricated metal products
- Manufacture of electronic components and electrical equipment
- Manufacture of machinery and transport equipment
- Manufacture of furniture and other manufacturing

Industrial groupings for wholesale are:

- Sale, repair and maintenance of motor vehicles etc.
- Cereals and feeding stuffs
- Food, beverages and tobacco
- Textiles and household goods
- IT-equipment
- Other machinery
- Other specialized wholesale



# 2.3 Sector coverage

Manufacturing and wholesale.

Manufacturing is NACE rev. 2 codes from 10.11 to 33.20. Wholesale is inclusive of trade in cars and other motor vehicles, except for retail trade when this can be separated. Wholesale is all NACE rev. 2 codes beginning with 45 and 46, except 45.11.20 (national activity code for retail), 45.20 and 45.32.

# 2.4 Statistical concepts and definitions

Stock Change: The difference in the stock at two different points in time. For this statistics, the stock change in the current quarter is the difference between the stock by the end of the current quarter and the stock by the end of the previous quarter.

# 2.5 Statistical unit

The reporting unit is the kind of activity unit. This is also the unit of statistical observation. A kind of activity unit consists of all local units belonging to the same enterprise and having the same activity code.

# 2.6 Statistical population

Kind of activity units with main activity in manufacturing and in wholesale.

# 2.7 Reference area

Stocks owned by Danish enterprises, regardless of their geographical location. Danish enterprises are enterprises with a Danish cvr-number (registration number in Danish business register).

# 2.8 Time coverage

2001-

# 2.9 Base period

Base year for calculations in fixed prices is 2015.

# 2.10 Unit of measure

Stocks are reported in 1000 DKK, current prices. Data are published in millions DKK, in current as well as fixed prices.

# 2.11 Reference period

Stock changes from last day of previous quarter to last day of reference quarter.



# 2.12 Frequency of dissemination

Quarterly.

# 2.13 Legal acts and other agreements

Section 8 of the Act on Statistics Denmark (Lov om Danmarks Statistik).

The statistics are not subject to any specific EU regulation.

#### 2.14 Cost and burden

The burden has been calculated at 535 hours in 2004 corresponding to 236,000 DKK. As of 4th quarter 2013, the response burden is halved, as there is no longer data collection from units in manufacturing for these statistics. Instead data are re-used from the collection for *Production and turnover in manufacturing industry*.

#### 2.15 Comment

The statistics have a subject page for <u>manufacturing industries</u> and one for <u>wholesale</u>.

# **3 Statistical processing**

Data on stocks by the end of each quarter is collected through a survey of approx. 500 units. The reported data are validated, before they are grossed up from the sample to the population. Selected series are seasonally adjusted.

#### 3.1 Source data

The statistics are compiled on the basis of a sample. For units in manufacturing, data are collected together with the survey on *Production and turnover in manufacturing industry*, while data from units in wholesale are collected through a separate survey.

The sample consists of approx. **250** units in manufacturing and **250** units in wholesale. The sample is stratified by size of stock and by activity. Information on size of stocks for selection of the sample comes from the statistics on industrial accounts.

For manufacturing, the strata are:

- stocks larger than 60 mill. DKK, all units are sampled
- stocks between 15 and 60 mill. DKK, a sample is drawn

The sample for manufacturing is a subset of the sample for the statistics *Production and turnover in manufacturing*.

For wholesale, the strata are:

- stocks larger than 40 mill. DKK, all units are sampled
- stocks between 15 and 40 mill. DKK, a sample is drawn



# 3.2 Frequency of data collection

Quarterly. However, data from units in manufacturing are collected monthly through the survey on *Production and turnover in manufacturing industry*.

# 3.3 Data collection

Data collection is conducted by means of electronic online survey forms at http://www.Virk.dk

Wholesale: <u>Instructions for respondents (in Danish</u>). Manufacturing: <u>Instructions for respondents</u> (in Danish).

# 3.4 Data validation

Data are validated through semi-automatic procedures, especially focusing on large changes in reported stocks.

# 3.5 Data compilation

Reported stocks by the end of each quarter from units in the sample are grossed up, through a direct estimate, to total stocks for each stratum. Based on this, change rates are calculated. From the <u>Accounts Statistics</u>, figures on stocks by the start of the year for the whole population are available. Through fixed-price calculations, stock changes are then calculated in fixed prices. Finally, the changes in fixed prices are inflated to have also changes in current prices.

Fixed price calculations are made using price indices specific to industries and types of goods, based on <u>Producer price index for commodities</u> and <u>Price index for domestic supply</u>.

# 3.6 Adjustment

Only four of the industry groups are seasonally adjusted: food, beverage and tobacco products, furniture and other industries, etc., wholesale of grain and feed and wholesale of textiles and household equipment. There are also seasonal fluctuations in some of the other industries, but they are not stable enough to be seasonally adjusted. For the same reason, seasonally adjusted figures for industry and wholesale are also not published.

# 4 Relevance

The statistics are important for the quarterly National Accounts. They are also used by ministries, banks, trade associations and others that want to include stock changes in assessments of the short-term economic situation.

# 4.1 User Needs

The statistics are important for Statistics Denmark's compilation of the quarterly national accounts. Other users are public and private institutions monitoring current economic trends.



# 4.2 User Satisfaction

Important large users of the statistics participate in bi-annual meetings of the <u>Contact Group for</u> <u>Manufacturing Statistics (link in Danish only)</u>.

# 4.3 Data completeness rate

Not relevant for these statistics.

# **5** Accuracy and reliability

The sample has not been updated in several years and the method of grossing up very basic. However, it is still believed that the statistics present a good indication of stock changes, as all the largest enterprises are included - and it is to a very large degree the large enterprises that account for the significant changes in stock.

# 5.1 Overall accuracy

The sample was last drawn in 2009. Such an old sample will negatively affect quality, as new enterprises are not represented. The method of grossing up through a direct estimate is very basic. However, it is still believed that the statistics present a good indication of stock changes, as all the largest enterprises are included - and it is to a very large degree the large enterprises that account for the significant changes in stock.

# 5.2 Sampling error

Sampling error has not been calculated.

# 5.3 Non-sampling error

The sample was last drawn in 2009. Such an old sample will negatively affect quality, as new enterprises are not represented. The sample however covers a significant part of the stock since they represent the largest enterprises. New enterprises in will normally be smaller enterprises and there stocks will usually have a low value. The quality will be affected if large enterprises enters the population but this is rarely the case. Normally, 5 percent of the respondents are missing in the first dissemination of the figures. For enterprises doing manufacturing the stocks are split into 4 categories. This could affect quality because the split may not be correctly reported.

# 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 sample is old and the method of grossing up very basic. However, it is still believed that the statistics present a good indication of stock changes, as all the largest enterprises are included - and it is to a very large degree the large enterprises that account for the significant changes in stock.

# 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

With the publication of each new quarter, the previous quarter is recalculated. This allows responses received after the deadline to be incorporated into the statistics. However, response rates are normally high so this recalculation will typically result in only minor changes.

Annual updates (normally with the release of 2nd quarter) of the total stocks figures from the Industrial Accounts Statistics may cause revisions of the previous 5 quarters.

# 6 Timeliness and punctuality

The statistics are published 55 days after the end of the quarter with high punctuality.

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

The statistics are always published approx. 55 days after the end of the reference quarter.

# 6.2 Punctuality

Over the latest 3 years, 100 pct. of announced publication dates have been met.

# 7 Comparability

Several countries produce statistics on stock changes, but there are no international or European regulations that ensure comparability.

The statistics measure only stock changes. For total stocks, see the accounts statistics.



# 7.1 Comparability - geographical

There are no EU regulations for statistics on stock changes.

# 7.2 Comparability over time

The survey was established in 1987.

From publication of 1st quarter 2009 the statistics are based on DB07. DB07 is the Danish version of NACE rev. 2. Data revised backwards in time according to DB07 are available from 2001 onwards. Previous years are available only according to previous activity classifications (DB03, DB93, DSE77).

As of 1st quarter 2013, all stocks of the covered enterprises are included - regardless of the physical location of the stocks. Previously, stocks physically located outside Denmark were not included. There is therefore a break in the series in the form of an extraordinary increase in stocks in 1st quarter 2013. The effect is an extraordinary increase in the stock value of 0,5 billion DKK for manufacturing enterprises and an increase of 3,0 billion DKK for the wholesale enterprises.

When 1st quarter 2019 was published, the weights for aggregating price indices had been updated. The updated weights were incorporated into the statistics with effect from 1st quarter 2015 onwards. At the same time base year has been changed to 2015. This has given revisions to all series.

#### 7.3 Coherence - cross domain

<u>Accounts statistics</u> have figures on stocks by end of the year. These figures are used for the selection of the sample for *Stocks of manufacturers and wholesalers*. The statistics are an important input to the calculation of the total changes in stocks in the quarterly national accounts. In the national accounts, further processing and adjustments take place, among other things to cover the whole economy - therefore, the figures do not necessarily show the same.

# 7.4 Coherence - internal

No sources for internal inconsistency.

# 8 Accessibility and clarity

These statistics are published yearly in a Danish press release and quarterly in the StatBank. In the StatBank, these statistics can be found under <u>Stocks of manufacturing industries</u> and <u>Stocks of wholesale</u>.

#### 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: <u>Release Calender</u>.



### 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

There is no longer published any press release.

#### 8.5 Publications

Not relevant for these statistics.

#### 8.6 On-line database

The statistics are published in the StatBank under <u>Stocks of manufacturing industries</u> and <u>Stocks of wholesale</u> in the following tables:

- <u>LAG7</u>: Stocks of manufacturers and wholesale by industry (DB07), type of stock goods, price unit and time
- <u>LAG5S</u>: Changes in stocks of manufacturers and wholesale by industry (DB07), seasonal adjustment and time

#### 8.7 Micro-data access

No access to micro-data.

# 8.8 Other

Not relevant for these statistics.

# 8.9 Confidentiality - policy

Data Confidentiality Policy at Statistics Denmark is followed.

#### 8.10 Confidentiality - data treatment

The published industrial groupings are so broad that there is no further need to ensure confidentiality of data from individual enterprises.

#### 8.11 Documentation on methodology

The variables are documented in TIMES.

# 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

These statistics are placed in the Division for Short Term Statistics. Responsible for the statistics is Mathias Bluhme, tel. +45 39 17 35 61 , e-mail: mdb@dst.dk

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