

**Documentation of statistics for  
Purchases and sales by enterprises 2020**

## 1 Introduction

The purpose of the statistics is to monitor business trends and economic activity in Denmark through information on purchases and sales as reported by firms covered by the Danish VAT system. The statistics contain information on domestic sales, total sales, domestic purchases and total purchases.

## 2 Statistical presentation

The statistics Purchases and sales by firms is calculated from firms VAT reports and shows the development in most standard industrial groupings in Denmark. Purchases and sales are calculated for the branches in "Dansk Branchekode DBo7".

Covid-19: In March 2020, the calculation for missing values was supplemented with already published figures for e.g. retail turnover and industry production and revenue, as well as new experimental data sources such as companies' electricity consumption.

### 2.1 Data description

The values Sales total and Purchases total are a measure for the turnover. Data for the calculation are based on the VAT report made by the firms. The statistics contains information on Domestic sales, Total sales, Domestic purchases and Total purchases.

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January 2001 the statistics became monthly, and its title changed to Purchases and Sales by Firms. 2012 the statistics was changed, and there are new series from January 2009. There are adjustments and changes in calculation methods and distributions. Now we have quarterly data for the detailed industry groups. Monthly data are published for the 19-, 36- and 127-groupings, and also for the 'NYT'-grouping, which is the 10-grouping supplemented with more detailed information about the largest industry groups. For industry groupings please refer to "[Dansk Branchekode](#)" (DBo7).

### 2.2 Classification system

The standard industry groupings are based on [Danish Industrial Classifications, Dansk Branchekode 2007](#). 'Dansk Branchekode' is the National version of the EU nomenclature [NACE rev. 2](#).

### 2.3 Sector coverage

The statistics covers all Standard industrial groupings but lacks information on purchases and sales in those industrial groups and activities there are free of VAT duty.

### 2.4 Statistical concepts and definitions

Enterprise: Legal business unit with commercial purpose.

## **2.5 Statistical unit**

Firms.

## **2.6 Statistical population**

Enterprises with annual turnover of more than DKK 50.000 or enterprises who have voluntarily been registered for VAT.

## **2.7 Reference area**

Denmark excluding Faroe Islands and Greenland. The statistics also covers firms without a Danish address if the Danish tax authority "SKAT" gave the firm an "SE"-number.

## **2.8 Time coverage**

2009-

## **2.9 Base period**

Not relevant for this statistics.

## **2.10 Unit of measure**

Mio. DKK.

## **2.11 Reference period**

Calendar month.

## **2.12 Frequency of dissemination**

Monthly.

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

Section 6 of the Act on Statistics Denmark, as subsequently amended by Act no. 599 of 22 June 2000.

Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics.

## 2.14 Cost and burden

There is no response burden as the data are supplied by the Customs and Tax Authorities.

However in the period 2001 to 2011 Statistics Denmark occasionally carried out an annual survey among some 260 joint declarers (units reporting for two or more corporations) in order to ascertain the percentage share of each corporation covered by a joint declaration, but participation in this survey is voluntary. From 2012 this split up is made on basis of administrative information, and the cost of burden is 0.

## 2.15 Comment

For detailed information on concepts and definitions relating to the Danish VAT system please refer to the homepage of the Danish tax authority [SKAT](#).

## 3 Statistical processing

Data are loaded and recalculated to the unit 1000 DKK. Data for missing/expected declarations are imputed. All purchase and sale of a firm is included in the main industry of that firm. Hence purchase and sale not belonging to the main industry of the firm are included in the main industry of that firm. Quarterly and semi-annual data are distributed over the relevant 3 or 6 months. Data on individual firms are aggregates into industries defined in (DB07) [<https://www.dst.dk/pubfile/11119/helepubl>].

### 3.1 Source data

VAT declarations, i.e., monthly, quarterly or semi-annual reports (forms) submitted to the Central Customs and Tax Administration in connection with the payment of VAT.

Background information from the Danish Business Register is also used.

### 3.2 Frequency of data collection

Monthly, quarterly or semi-annually.

The yearly turnover of a firm determines its VAT declaration frequency. The frequency is monthly if the amount exceeds DKK 50 million, quarterly in the interval between DKK 5 million and DKK 50 million, and half-yearly if it is less than DKK 5 million.

COVID-19: The tax return deadlines have been postponed, for more [Information](#)

### 3.3 Data collection

Data comes from VAT declarations submitted to the Central Customs and Tax Administration.

### 3.4 Data validation

Error detections are made at the industry and enterprise level.

### 3.5 Data compilation

The VAT is reported to the Danish Tax Agency on the level of SE-numbers and the turnover is published for each corresponding CVR number(s). In this connection, a redistribution of jointly reported units is made to the relevant firms.

Reports that were not received by Statistics Denmark at the date of publication are imputed. This typically occurs if the firm does not yet have a reporting deadline, because it reports quarterly or half-yearly.

Imputed amounts are based on the average of the growth rates from last to current month in the current years and the last 2 years for each 19-standard group to which the firm belongs, as well as on the firm's reporting for last month. The firm's latest report is multiplied by the industry group's rate of increase. Firms whose latest reporting was negative are imputed with the value of DKK 0 to avoid large negative values. For quarterly / half-year reporters, a missing month is imputed by first imputating the entire quarter / half year and then distributing to months. A quarter / half-year is imputed just like the monthly reports on the basis of the latest reporting and the average of current and last 2 years' growth rates from last to current quarter / half-year. The distribution of a quarterly / half-yearly report to months takes place according to a distribution key based on the distribution of monthly reports over the months in the relevant period. Here we assume that the distribution of quarterly / half-yearly reports is the same as for the monthly reports. The distribution of quarterly and half-yearly reports to months is based on monthly reports in the firms's 127-standard group and thus not on the 19-standard group as the imputations. Once Statistics Denmark has received the reports from monthly and quarterly reports they are distributed according to the distribution of monthly reports in the relevant 127-standard group.

For distribution forwards in time, a distribution key is calculated for each 127-standard group based on the ratio between the current month and last month in the previous quarter / half year from the monthly reporters. For example, the distribution key for quarterly reports in October in a given 127-standard group is: (total sales for the monthly reports in October) / (total sales for the monthly reports in September). This ratio is multiplied by the September sale of the firm to get the imputed sales for October of the firm.

In cases where a firm has not reported 2 months in a row, the latest imputation is based on the previous imputation. For all types of reporting a max of 2 successive reports are imputed. In the case of 3 successive missing reports, all the missing reports are set to DKK 0.

Post-declarations, i.e. corrections made by firms for earlier periods are distributed over the relevant months. In connection with a publication, data is aggregated to the official industry groups and the sales in the 19-standard group are seasonally adjusted.

COVID-19: The estimate of the Companies' purchases and sales for March 2020 and the coming months contain greater uncertainty than usual. Due to COVID-19 both a VAT declaration and a VAT payment have been postponed. Many companies have nevertheless chose to use the opportunity to declare VAT at the ordinary deadline. In March 2020, the tax return covers 70 per cent. of the companies' total sales, against 85 per cent. in March 2019. The remaining 30 per cent. of the total sales, it is primarily in medium-sized companies that specify VAT on a quarterly basis and in small companies that specify VAT on a whole-year basis. The VAT returns from these companies will be available in a few months. For those companies are available in the coming month and the imputation based on historical VAT returns. As the database is smaller, the imputations extraordinarily expands with supplementary indicators, including already published figures for retail sales and industry production and revenue, as well as new experimental data sources such as companies' electricity consumption.

### **3.6 Adjustment**

There are not made any corrections of data except for what is already described under data validation and data compilation. Seasonally adjustments are made for the expanded DBO7 10-grouping and the DBO7 19-grouping. Further reading on seasonal adjustment can be found at [seasonal adjustment](#).

### **4 Relevance**

- Users: government departments, business organizations, private businesses, embassies, researchers, students and other private individuals.
- Applications: Analysis of business trends, market research, feasibility studies etc.

The primary data are also used by Statistics Denmark as a supplementary source in the compilation of other statistics such as external trade statistics, enterprise statistics, the retail trade index and the national accounts.

### **4.1 User Needs**

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### **4.2 User Satisfaction**

The statistics is discussed with a number of primary users in [Kontaktudvalg for industristatistik](#), who meet twice a year.

### **4.3 Data completeness rate**

There are data for all industries, but we lack information about turn over for industries that are not liable to VAT.

## **5 Accuracy and reliability**

The statistics are based on the VAT reporting of the firms to Skattestyrelsen, the Danish tax agency, which controls VAT-related purchases and sales. The amounts can be revised three and a half years back, but usually major revisions occur in later periods. The reliability of statistics thus increases as firms update their VAT reports to the Danish tax agency. There are no uncertainty calculations.

### **5.1 Overall accuracy**

The statistics provide complete coverage of all Danish VAT declarations, and the primary data are clearly defined on the basis of a detailed set of rules and established practices with systematic administrative controls.

The VAT information regarding domestic purchases of firms, the category purchases total and the domestic sale of firms are regarded high quality, since these information has an influence on the VAT payments of companies, which can be inspected by "SKAT". On the other hand VAT information regarding export and sales not payable to VAT and thereby also the category sales total is expected to be more uncertain.

There are no calculations of uncertainty.

### **5.2 Sampling error**

Not relevant for these statistics.

### 5.3 Non-sampling error

*Estimation:* It is normally the yearly turnover of a firm that determines its VAT declaration frequency, which is monthly if the amount exceeds DKK 50 million, quarterly in the interval between DKK 5 million and DKK 50 million, and half-yearly if it is less than DKK 5 million.

Given that results must be published for the total population of units - both big and small firms - it is necessary to estimate (impute) figures for the quarterly and half-yearly declarers (and for the monthly declarers not yet received). Once the quarterly and half-yearly VAT declarations are received, the reported figures replace the estimated ones, but the breakdown into months of the

*Joint registration:* Another problem is joint registration of legal units, which means that one VAT declaration covers two or more legal units, for instance two firms in different kind-of-activity groups or different locations.

Statistics Denmark has no way of knowing exactly how to allocate these monthly reported amounts among the individual legal units of a joint registration. The method used is to apply standard distribution percentages to each amount of a joint declaration.

In these instances we have chosen to distribute purchases and sales to the individual units proportionate to their latest information about employment and the turnover per employed in the industry, so as to make the turn over of the industry more exact. This mechanical update of the distribution plan is a methodological change, that can influence the distribution of turn over on industries.

*Exporting units:* Conversely, in some cases a legal unit may cover two or more (partial) registration units. Ordinarily, the VAT declarations concerned can be simply added up to represent the legal unit, but not if one of the partial units is an exporting unit. In order to claim an early refund of VAT paid on raw materials and other inputs forming part of products intended for export, some major business enterprises have opted for separate exporting units which make fictitious purchases of the products from the other partial units before exporting them. In order to avoid double counting in such cases, Statistics Denmark consolidates the exporting units with the other partial units to form the entire legal unit, but in practice it is not always possible to do this exactly correct.

*Administrative checks:* The VAT system has some inherent checks and balances as regards domestic purchases and sales because the VAT received by one business is the VAT paid (and deductible) by another in a chain reaching right down to the final consumer. However, in the case of exports no or very little VAT is collected, so the administrative checks may not be very thorough because they are not so important from a financial point of view.

### 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 provide complete coverage of all Danish VAT declarations, and the primary data are defined on the basis of a detailed set of rules and established practices with systematic administrative controls. The VAT information regarding domestic purchases of firms, the category purchases total and the domestic sale of firms are regarded high quality, since these information has an influence on the VAT payments of companies, which can be inspected by SKAT. On the other hand VAT information regarding export and sales not payable to VAT and thereby also the category sales total is expected to be more uncertain.

There are no calculations of uncertainty.

## 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

When firms update their tax declaration the data in the statistics is updated and is hence provisional in all periods. The tax declaration can be revised three and a half year back, but will usually primarily be revised in the latest periods. In special cases a firm can be allowed to change its tax declaration several years back but this happens rarely and does not significantly affect the statistics.

The tables FIKS11, FIKS22 and FIKS33 in "StatBank Denmark" are monthly tables, and they are made when data from "Skattestyrelsen" arrives.

The table FIKS44 with the most detailed industry divisions is also updated every month with the latest data from "Skattestyrelsen", but a new period in the table is only published when the firms that declare quarterly have declared the VAT.

There can be revisions, which cover more years.

## 6 Timeliness and punctuality

The statistics is published ca. 40 days after the reference period ends. The statistics is made public with a very high degree of punctuality.

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

Main results: preliminary figures for purchases and sales are published at the 10-grouping level some 40 days after the end of a new month, both in a seasonally adjusted and in a non adjusted version.

Detailed industry data are published three months after the end of the reference period.

The month of June is published simultaneously with data on July because Danish firms have a longer VAT declaration period during the holiday season. This means that data on June often are revised more than data on other months.

## **6.2 Punctuality**

During the past year the statistics have been published according to schedule every month.

## **7 Comparability**

From the year 2010 all information in the statistics are comparable over time. The statistics can be compared to general enterprise statistics, account statistics, International trade in goods, Production and turnover in manufacturing industries and Retail trade index. There are differences in definitions regarding these statistics which influence the reported figures. These definitions include which types of sale/turnover which is included and the minimum size of included firms.

### **7.1 Comparability - geographical**

The statistics is made on the basis of Eurostat guidelines and is hence comparable to statistics from other EU countries under same regulation. The groupings 4-8 of the 10-standard-grouping are published as a national index on the [Eurostat homepage](#).

## 7.2 Comparability over time

VAT (value added tax) was introduced in Denmark in 1967, and the administrative information on the tax system was primarily used as a source for compiling quarterly statistics on VAT and turnover in non-agricultural industries, which were published for the first time as from the first quarter of 1968. After 1982 the VAT amounts were dropped from the statistics, which were consequently renamed Turnover in non-agricultural industries.

Starting with January 2001 the statistics became monthly, the statistical reference unit was changed from the VAT-reporting unit to the legal unit (corporation/enterprise/firm), and the agricultural sector was included, hence the title Purchases and Sales by Firms.

In the statistics there has not been information on purchases total and sale total for the period January 2010 to April 2012. This means that the statistics has only included domestic purchases and domestic sales - and not the import and export. The background for this to be left out was that total sales during 2010 had a development that could not be found in other statistics. The development of export etc. based on the VAT declarations deviant from the export from the balance of payments, which led to purchases total and sales total not to be published can also be found in the current data. It must primarily be ascribed to a change in the content of the spaces of the VAT form, and a change in the behavior of firms.

The current monthly statistics for purchases and sales of firms start with data for January 2009. The new published data from 2009 are primarily based on a mechanical computation of the business's VAT declarations. Very large errors are corrected - often after having been in contact with the firm.

Break in series between 2009 and 2010: From 1. January 2010 export of services is reverse charge (excl. VAT), while this was payable to VAT in Denmark prior to this, and thereby it was part of domestic sales; equivalently for import of services. This results in a break in series in the VAT from 2009 to 2010.

## 7.3 Coherence - cross domain

Figures from the General enterprise statistics, Account statistics, International trade in goods, Production and turnover in manufacturing industries and Retail trade index can be compared to the figures of this statistics. There are differences in definitions regarding these statistics which influence the reported figures. These definitions include which types of sale/turnover which is included and the minimum size of included firms.

## 7.4 Coherence - internal

Data is collected from a single source: The Danish tax authorities "SKAT". Hence no data integration is performed from different sources/registries and the sources of the statistics are therefore consistent. Units and groups in the statistics are treated in the same way both at "SKAT" and Statistics Denmark, and the data set is thus consistent. A given unit/grouping will appear in the same way in all published tables so that output data is also consistent.

## 8 Accessibility and clarity

These statistics are published monthly in a Danish press release, at the same time as the tables are updated in the StatBank, which can be found under [Purchases and sales by enterprises](#). For further information go to [subject page](#).

## 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

These statistics are published monthly in a Danish press release.

## 8.5 Publications

Until 2017, Purchases and sales by enterprises featured in the [Statistical Yearbook](#).

## 8.6 On-line database

The statistics are published in the StatBank under the subject [Purchases and sales by enterprises](#) in the following tables:

- [FIKS11](#): Purchases and sales by industry (DB07), amount and seasonal adjustment
- [FIKS22](#): Purchases and sales (19-grouping) by industry (DB07), amount and seasonal adjustment
- [FIKS33](#): Purchases and sales (36 and 127-grouping) by industry (DB07) and amount
- [FIKS44](#): Purchases and sales (detailed) by industry (DB07) and amount
- [FIKS55](#): Purchases and sales by industry (DB07), amount and time
- [FIKS9](#): Purchases and sales historic summary by amount

## 8.7 Micro-data access

For each month a complete survey file exists, comprising all amounts and background data for each legal unit (corporation/enterprise/firm) in the VAT statistics. It is thus possible to compile more detailed tabulations than those published or to combine the data with other information with the same kind of basic unit (the CVR number). Historic data with annual results from 1974 to 2000 are available, but they refer to the reporting unit (the SE number) which may not be identical with the CVR number.

It is possible to gain access to Micro-data through researcher's access to [Micro-data at Statistics Denmark](#).

## **8.8 Other**

It is possible to buy more detailed/special data.

[website for Customer service](#).

Quarterly deliveries for the National Accounts and Eurostat.

## **8.9 Confidentiality - policy**

[Data confidentiality policy](#) at Statistics Denmark.

## **8.10 Confidentiality - data treatment**

If some cells in data cannot be shown due to discretion, then they are left out of the statistics, and a secondary discretion is carried out.

## **8.11 Documentation on methodology**

The variables used are described in Statistics Denmark's documentation system called Times.  
[Times](#).

<https://www.dst.dk/en/Statistik/dokumentation/metode/saesonkorrektion>

## **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 statistics is administratively placed in the Office for Short Term Statistics. The person responsible for the statistics is Lina Pedersen tel. 39 17 36 75 e-mail: [lip@dst.dk](mailto:lip@dst.dk)

### **9.1 Contact organisation**

Statistics Denmark

### **9.2 Contact organisation unit**

Short Term Statistics, Business Statistics

### **9.3 Contact name**

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