

Documentation of statistics for Index of Production in Construction 2023



1 Introduction

The purpose of Index for Production in Construction (IPC) is to illustrate the business trends in the sector. These statistics have been compiled since autumn 2014, but is in its current form comparable from January 2000 and onwards.

2 Statistical presentation

IPC is a monthly measurement of the business trends in the sector stated in index. It is compiled on a national level

2.1 Data description

The *Index of production in construction* is a monthly statistic that contains an overall production index for the building and construction sector in total, as well as two sub-indices for construction and civil engineering respectively. The indices show the cyclical developments in the sector and are based on hours worked in the construction and civil engineering sector from the <u>Working Time</u> <u>Accounts (ATR)</u>.

The index for Total construction covers the entire section F, i.e. groups F41, F42 and F43.

The index for *Construction* covers the construction of buildings, i.e. implementation of construction projects, demolition and preparatory site works, electrical installation and plumbing, as well as other building installation activities, etc.

The index for *Civil engineering* covers construction work, i.e. construction of roads and railways and construction of cable networks, etc.

2.2 Classification system

These statistics follow the industrial groupings in NACE Rev. 2 which is a statistical classification that categorize enterprises by their most important economic activity.

2.3 Sector coverage

The statistic covers construction.

2.4 Statistical concepts and definitions

Construction: The sector consist of section F in NACE Rev. 2.

2.5 Statistical unit

The statistic covers hours worked in firm that produce construction services.

2.6 Statistical population

The population consist of firms in construction with employment.



2.7 Reference area

The statistic covers Denmark as a whole.

2.8 Time coverage

These statistics covers the time period from January 2000 and onwards.

2.9 Base period

The index is has 2015 as its base.

2.10 Unit of measure

The statistic is an index with 2015 as it's base year.

2.11 Reference period

The statistic references months.

2.12 Frequency of dissemination

The statistic is published monthly

2.13 Legal acts and other agreements

Section 8 of the Act on Statistics Denmark secures the legal ground for collecting the data.

The statistics fall under the following regulations:

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

<u>Regulation (EC) No 1893/2006</u> of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2.

2.14 Cost and burden

These statistics are based on administrative data. There is thus no direct response burden, in relation to the compilation of this statistic.

2.15 Comment

For further information contact Statistics Denmark.



3 Statistical processing

These statistics are based on hours worked in the construction sector from the Working Time Accounts (WTA).

3.1 Source data

The IPC is based on WTA, which are exclusively based on existing data sources, which are subsequently converted to the concepts used in the WTA.

3.2 Frequency of data collection

Data is complied on a monthly basis.

3.3 Data collection

The data is collected from the Working Time Accounts

3.4 Data validation

Input to this statistic comes from the WTA, where quality of data is insured.

3.5 Data compilation

The monthly data from WTA are divided into building, civil engineering and total for Construction, which is a sum of hours worked for building construction and civil engineering.

Then the figures are compiled into an index with 2015 as base year. Followed this the figures are seasonally adjusted.

3.6 Adjustment

The statistic is adjusted for seasonal and calendar effects

4 Relevance

The Index for Production in Construction illustrate the actual business conditions, which can be used to get a overview over the business trends in the sector.

4.1 User Needs

The objective with the statistic is to give interested users a quick overview of the cyclical trend in the construction sector.



4.2 User Satisfaction

The index is a requirement from Eurostat an has formerly only been send to Eurostat. After an improvement of the method is it decided to published it in Denmark. This decision has been discussed in the contact group for construction and dwelling statistics, which had approved the project.

4.3 Data completeness rate

The Index for Production in Construction complied with the recommendations and demands i Council Regulation (EU) no. 1165/98 of 19 May 1998 and no. 1893/2006 of 20 December 2006 regarding short-term-statistics.

5 Accuracy and reliability

The margins of statistical uncertainty associated with the IPC are related to the statistical uncertainty of WTA.

5.1 Overall accuracy

The margins of statistical uncertainty associated with the IPC are related to the statistical uncertainty of WTA.

In the long run (12 months), there is a good agreement with the National Accounts gross value added for the construction sector.

5.2 Sampling error

Not relevant for this statistics

5.3 Non-sampling error

The index is based on the WTA and has no independent uncertainty. See the <u>Documentation of the</u> <u>WTA</u>.

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 index is based in the WTA.

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

Since the Danish IPC is calculated on the basis of hours worked from the Working Time Accounts (WTA) statistics the revisions follow the same pattern. The first publications of the production in the first and second month of any quarter, is partly estimated, which means that for every publication of data for the third month in a quarter, when all data is actually available, the published figures for the first two months of that quarter is revised.

In addition to these quarterly revisions there are annual revisions on the hours worked from the WTA which also means revisions in the IPC. The structural data is first available more that 15 months after the year of reference, and the revisions will therefore cause revisions to the WTA and hence the IPC over two years back in time.

6 Timeliness and punctuality

Data is transmitted to Eurostat and published i Statbank within two months after the reference month.

6.1 Timeliness and time lag - final results

Monthly data is published approximately two months after the end of the reference month.

6.2 Punctuality

Data is transmitted to Eurostat and published i Statbank within two months after the reference month.



7 Comparability

Eurostat makes international comparisons. The statistics have figures that can be compared from 2000.

7.1 Comparability - geographical

All EU member states are obliged to provide the IPC under the guidelines in Council Regulation (EC) No 1165/98 of 19 May 1998 on short-term statistics. These statistics can thus be compared internationally through <u>Eurostat</u>, where indices from the various EU member states are disseminated. However, international comparison must be made with that in mind, that there are two different recommended methods for compiling the statistics, which the EU member states can choose from.

7.2 Comparability over time

Until autumn 2014 the IPC was calculated on basis of the quarterly gross value added in Construction from the National Account. There are no major breaks in the series from 2001 until 2014. From autumn 2014 the IPC has been calculated on the basis of working time account corrected for productivity. The time series is calculated back to January 2000 with the new method.

7.3 Coherence - cross domain

Since the indices are based on working hours from the Working Time Accounts (WTA), there is a high degree of coherence with these statistics.

In connection with the change of method there was a comparison with index for gross value added in Construction from National Account. In the long run (12 months), there is a good agreement with the National Accounts gross value added for the construction sector.

7.4 Coherence - internal

In the former method there has been few problems of coherence between CC1, CC2 and the total. These problems seems not existing in the new method.

8 Accessibility and clarity

The statistics are published in the StatBank under <u>Index of production in construction (IPC)</u>. For further information go to the <u>subject page</u>.

8.1 Release calendar

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

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.



8.2 Release calendar access

The Release Calender can be accessed on our English website: <u>Release Calender</u>.

8.4 News release

Not relevant for these statistics.

8.5 Publications

Not relevant for these statistics.

8.6 On-line database

The statistics are published in the StatBank under <u>Index of production in construction (IPC)</u> in the following table:

• <u>BYGPRO</u>: Index of production in Construction (IPC) by industry

8.7 Micro-data access

These statistics micro-data are not available.

8.8 Other

Data are transmitted to Eurostat monthly.

8.9 Confidentiality - policy

Data Confidentiality Policy at Statistics Denmark.

8.10 Confidentiality - data treatment

There is no need to apply confidentiality in the published figures since the IPC is based on aggregated data.

8.11 Documentation on methodology

There is no separate documentation on methodology 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 Statistics. The person responsible is Paul Lubson, tel.: +45 3917 3542, e-mail: pal@dst.dk.

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

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N/A