



# QUALITY REPORT FOR STATISTICAL SURVEY Monthly Survey on Industrial Turnover (IND-2/KPS/M form) for year 2016

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# 0. Basic information

• Purpose, goal, and subject of the survey

The result of the research is the value of industrial turnover at the level of industrial activity groups of the NKD 2007., with a breakdown of a turnover generated in the sale on: a1) the domestic market and a2) the non-domestic market, with the following further breakdown: in the euro area/outside the euro area, for the industrial activities B and C according to the NKD 2007.

The study provides the production of a turnover industrial index on month-on-month and yearon-year chain basis. The industry turnover index may be used as an indicator of development of the market of industrial products and services produced within industry. Industrial turnover indices on the domestic market serve to measure monthly movements of the industrial turnover/production sold realised by industrial enterprises/industrial local units on the territory of the Republic of Croatia, while, on the other hand, industrial turnover indices on the nondomestic market serve to measure monthly movements of the turnover/production sold realised by industrial local units on the non-domestic market, that is, outside the territory of the Republic of Croatia. Industrial turnover indices are chain indices calculated according to value data of the industrial turnover/sale at the level of the main activity of industrial local units defined by the Croatian Bureau of Statistics. Indices are calculated from aggregated data on industrial turnover/sale value in a reporting month.

Reference period

Month

• Legal acts and other agreements

Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics Regulation (EC) No 1158/2005 of the European Parliament and of the Council of 6 July 2005 amending Council Regulation (EC) No 1165/98 of 19 May 1998 concerning short-term statistics

Commission Regulation (EC) No 588/2001 of 26 March 2001 implementing Council Regulation (EC) No 1165/98 concerning short-term statistics as regards the definition of variables

Regulation (EC) No 656/2007 of 14 July 2007 amending Regulation (EC) No 586/2001 on implementing Council Regulation (EC) No 1165/98 concerning short-term statistics as regards the definition of main industrial groupings (MIGS)

Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains

Regulation (EC) No 451/2008 of the European Parliament and of the Council of 23 April 2008 establishing a new statistical classification of products by activity (CPA) and repealing Council Regulation (EEC) No 3696/93

Recommendations for publishing of STS data, Eurostat, 2009

Methodology of Short-Term Business Statistics, Eurostat, ISSN 1725-0099, European Communities, 2006

Classification system

National Classification of Activities 2007 (NKD 2007.) (OG, Nos 58/07 and 72/07) NKD 2007. is harmonised with the NACE Rev. 2 of the European Union.

## • Concepts and definitions

Industrial turnover indices are chain indices calculated according to value data of the industrial turnover/sale at the level of the main activity of industrial local units defined by the Croatian Bureau of Statistics.

Indices are calculated from aggregated data on industrial turnover/sale value in a reporting month.

The value of total industrial turnover, i.e. income from sales, is the invoiced value generated by industrial local units on the basis of products and services sold during the reference month.

Statistical units

The Survey covers enterprises and parts thereof employing 20 or more persons and performing one or several industrial activities. Exceptionally, enterprises employing less than 20 persons if the coverage of value added does not reach 90% without them (according to the NKD 2007., at the three-digit level) and enterprises engaged in specific activities (such as printing offices and bakeries)

Statistical population

The total set consists of all enterprises and parts thereof employing 20 or more persons (the so-called 'cut-off' sample) and performing one or several industrial activities listed in the NKD 2007. sections B Mining and quarrying and C Manufacturing, and their divisions 05 - 33.

The coverage can be extended to those employing less than 20 persons if they are engaged in a specific industrial production important for the final research results.

The IND-2/KPS/M survey for 2016 covers 3 019 enterprises (legal entities and tradesmen.

# 1. Relevance

## 1.1. Data users

Internal users:

- National Accounts Department

External national users:

- Ministries and government bodies,
- Croatian Economic Chamber,
- Business entities on request
- Non-national users:
- Eurostat
- 1.1.1 User needs

Users demand detailed data for economic analyses, estimation of movements of short-term industry indicators for business monitoring and decision-making purposes (business entities) as well as for research and writing academic papers purposes (students).

## 1.1.2 User satisfaction

The first user satisfaction survey in the Croatian Bureau of Statistics was carried out in 2013: <u>https://www.dzs.hr/Eng/international/Quality\_Report/Quality\_Report\_Documents/Quality\_</u>\_Report\_Satisfaction\_Survey.pdf

# 1.2. Completeness

The data are 100% complete according to corresponding regulations/guidelines.

Concepts and definitions used in the IND-2/KPS/M survey are harmonised with concepts and definitions as determined in the EU Methodology of Short-Term Business Statistics (Theme 4, ISSN 1725-0099; European Communities, 2006) and in the Commission Regulation (EC) No 1503/2006 as regards definitions of variables, list of variables and frequency of data compilation.

## 1.2.1 Data completeness rate

Data completeness rate is: 100%

# 2. Accuracy and reliability

## 2.1. Sampling error

The survey is based on a cut-off sample.

## 2.1.1 Sampling error indicators

Indicator for this survey is not applicable.

## 2.1.2 Bias due to sample selection process

Indicator for this survey is not applicable.

## 2.2. Non-sampling error

Errors in estimations that cannot be linked to the sample selection is the unit non-response (unit non-response rate is approximately 0.5%). In that case, data are estimated but have no impact on key results.

## 2.2.1 Coverage error

A slight non-coverage of the target population may occur due to the fact that it is impossible to collect data from enterprises included in the survey at the beginning of the year. The overcoverage rate is also very low.

Target population are all enterprises and parts thereof employing 20 or more persons and performing one or several industrial activities and, in exceptional cases, enterprises employing less than 20 persons when 90% of gross value added of each NKD 2007. industry group is not covered without them (particularly small industries like bakeries, printing offices, wineries, etc.).

## 2.2.2 Over-coverage rate

Indicator for this survey is not applicable.

## 2.2.3 Measurement errors

Data verification is incorporated in the application (for example oscillation +/- sales income) and it indicates the possibility of incorrect data and possible need for checking data together with the reporting unit.

### 2.2.4 Non-response errors

Non-response rate is approximately 0.5% (impossibility to contact a reporting unit) The non-response rate for key variables -0

#### 2.2.5 Unit non-response rate

Unweighted non-response rate is:

														%
Domain	Domain value	Jan.	Feb.	Mar.	Apr.	Мау	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	On average
Croatia	Croatia	0	0.8	0.8	0.5	0.5	1.5	1.3	1.5	1.9	2.4	2.4	2.9	1.4

#### 2.2.6 Item non-response-rate

Unweighted item non-response rate:

	70														70
Variable	Domain	Domain value	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	On average
Non-response rate for all variables	Croatia	Croatia	0	0.8	0.8	0.5	0.5	1.5	1.3	1.5	1.9	2.4	2.4	2.9	1.4

#### 2.2.7 Processing errors

Breakdown according to the NKD classification (NACE Rev. 2) is taken over from the annual PRODCOM survey. Prior to the data editing for the first month, the NKD activity is checked if it is pertinent to the production type of the enterprise.

#### 2.2.8 Imputation rate

Indicator is not applicable.

2.2.9 Editing rate

Indicator for this survey is not computed.

#### 2.2.10 Hit rate

Indicator for this survey is not computed.

2.2.11 Model assumption error

The estimate calculation model is not applied.

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## 2.3. Data revision

### 2.3.1 Data revision - policy

Data are disseminated as final and as such they are not subject to any revision.

The users of statistical data are informed about revisions (provisional, final data) on the website of the Croatian Bureau of Statistics.

### 2.3.2 Data revision – practice

In this survey, data are not published as provisional but as final ones, which is why regular revisions are not planned.

#### 2.3.3 Data revision - average size

Indicator for this survey is not applicable.

## 2.4. Seasonal adjustment

Seasonal and working-day adjustment has been done by using the X13 ARIMA method on the monthly index series, which starts with the January 2000 index for the total industry and for the MIGs 2009. according to specific groupings in respect of the NKD 2007. activity coverage of each indicator. The effect of a random component in the seasonal adjustment process of time series of indices has been excluded.

## 3. Timeliness and Punctuality

## 3.1. Timeliness

3.1.1 Time lag - first results

Timeliness for first results is: T + 57 days

3.1.2 Timeliness – final results:

Time lag for final results is: T + 57 days

First results are at the same time final results.

## 3.2. Punctuality

3.2.1 Punctuality – delivery and publication

Punctuality is: 0

Punctuality of first and final results is calculated as a difference between the publishing date as defined in the Calendar of Statistical Data Issues and the releasing date on the internet.

# 4. Accessibility and clarity

Monthly publications – First Release, annual statistical report on industry,

Statistical Yearbook of the Republic of Croatia. Paper and electronic versions are available on the CBS website.

# 4.1. News release

First Release No. 2.1.4. (a monthly release): Industrial Turnover Index

# 4.2. Other publications

Short-Term Indicators of Industry (annual report) Statistical Yearbook of the Republic of Croatia Statistical Information

## 4.3. Online database

On the Central Bureau of Statistics website under the section Statistics in Line (http://www.dzs.hr/Eng/publication/StatisticsInLine.htm) and in PC-Axis database under the column Industry (https://www.dzs.hr/Eng/DBHomepages/Industry/Industry.htm).

## 4.4. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Use of Statistical Data for Scientific Purposes (OG, Nos 103/03, 75/09 and 59/12).

## 4.5. Documentation on methodology

Description of the methodology and data sources can be found in every First Release. Monthly First Release No. 2.1.4 – Industrial Turnover Index

Annual report – Short-Term Indicators of Industry

The Nomenclature and statistical standards for industrial production survey as well as methodological notes for industry turnover index are available on the CBS web pages.

# 5. Comparability

# 5.1. Asymmetry for mirror flows statistics

Indicator is not applicable.

## 5.2. Comparability over time

5.2.1 Length of comparable time series

Length of comparable time series is: 204 months (01/2000 - 12/2016)

## 5.2.2 Reasons for break in time series

Main revisions are planned to be carried out every five years in relation to the change of the reference year due to the change of the National Classification of Activities (NKD). The year 2010 is currently used as a base year without need for any major revision in relation to the previous base year, 2005.

# 6. Coherence

## 6.1. Coherence – short-term and structural data

Data from the monthly survey in industrial turnover are displayed in the relative form (indices), while structural business statistics are presented in the absolute form (currency: HRK) and are therefore not comparable.

## 6.2. Coherence – national accounts

Indicator for this survey is not applicable.

## 6.3. Coherence – administrative sources

95.7% of data on enterprises included in the coverage are taken over from administrative sources, while the remaining 4.3% are collected through an online survey.

# 7. Cost and burden

## 7.1. Cost

Data collection is based on administrative source (Tax Administration) and online survey, therefore costs are minimal accordingly.

# 7.2. Burden

Response burden does not exist for 97.7% of reporting units due to the fact that data are collected through the administrative source, while only 2.3% of data are collected through direct collection method, mostly from large sized enterprises, who are surveyed through a web-based application (the so-called CAWI method), in which the response burden has been reduced to minimum.