



REPUBLIC OF CROATIA  
CROATIAN BUREAU OF STATISTICS



## **QUALITY REPORT FOR STATISTICAL SURVEY**

### **Monthly Survey on Industrial Turnover (IND-2/KPS/M) For 2021**

Organisational unit: Industrial Short-Term Business Statistics Unit

Prepared by: Jurica Javor and Slavica Peraić

March 2024

## 0. Basic information

- Purpose, goal, and subject of the survey

The result of the survey is the value of industrial turnover at the level of industrial activity groups of the NKD 2007., with a breakdown of turnover generated from 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 survey enables the production of the industrial turnover index on month-on-month and year-on-year chain basis. The industrial 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 non-domestic market serve to measure monthly movements of the turnover/production sold realised by industrial enterprises/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 the 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 aggregate data on industrial turnover/sale value in a reporting month.

- Reference period

Month

- Legal acts and other agreements

The legal basis at the national level is the Official Statistics Act (NN, No. 25/20), which defines the responsibilities for the collection, processing and dissemination of data. The Croatian Bureau of Statistics is the main producer, disseminator and coordinator of the official statistics system in the Republic of Croatia. The goals of official statistics are defined by the Official Statistics Act (NN, No. 25/20). Producers of official statistics have the right to collect data from all available sources. The concepts and terms are harmonised with the concepts and terms of the EU, especially with Regulation (EU) 2019/2152 of the European Parliament and of the Council and Commission Implementing Regulation (EU) 2020/1197. Statistical Activities are defined by the Programme of Statistical Activities of the Republic of Croatia 2021 and the Development Strategy of Official Statistics of the Republic of Croatia 2021 – 2030.

- Classification system

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

- Statistical concepts and definitions

Industrial turnover indices are chain indices calculated according to the 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 aggregate 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 2021 covers 3 360 enterprises (legal entities and tradesmen).

## **1. Relevance**

### **1.1. Data users**

Internal users: National Accounts Department

External national users: ministries and state administration bodies, Croatian Chamber of Economy

#### 1.1.1. User needs

Users require 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 of the Croatian Bureau of Statistics was conducted in 2013, the second one in 2015. The survey results can be checked on the website of the Croatian Bureau of Statistics <https://dzs.gov.hr/highlighted-themes/quality/user-satisfaction-surveys/686>.

### **1.2. Completeness**

The data are 100% complete according to corresponding regulations/guidelines. The concepts and definitions used in the IND-2/KPS/M survey are in line with Eurostat's concepts and definitions for short-term statistics.

#### 1.2.1. Data completeness rate

Data completeness rate is 100%.

## **2. Accuracy and reliability**

### **2.1. Sampling error**

Cut-off sample

#### 2.1.1. Sampling error indicators

The indicator 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 over-coverage 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

The indicator is not applicable.

### 2.2.3. Measurement error

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% (unable to contact a reporting unit).

The non-response rate for key variables is 0.

### 2.2.5. Unit non-response rate

%

Unweighted non-response rate: domain	Domain value	Comment	January	February	March	April	May	June	July	August	September	October	November	December	Average
Croatia	Croatia		1	1.9	0.9	0.9	1	1.4	1.2	1	1.1	1.1	1.5	1.4	1.2

### 2.2.6. Item non-response rate

%

Unweighted non-response rate for certain variables: Variable	Domain	Domain value	Comment	January	February	March	April	May	June	July	August	Sep	Oct	Nov	Dec	Average
Non-response rate for all variables	Croatia	Croatia		1	1.9	0.9	0.9	1	1.4	1.2	1	1.1	1.1	1.5	1.4	1.2

### 2.2.7. Processing errors

The classification according to the NKD is taken over from the annual PRODCOM survey. Prior to the data editing for the first month, the NKD activity is checked for being pertinent to the production type of the enterprise.

### 2.2.8. Imputation rate

The indicator is not applicable.

### 2.2.9. Model assumption error

The estimate calculation model is not applied.

## 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 on the website of the Croatian Bureau of Statistics, on the link – [General Revision Policy of the CBS](#).

### 2.3.2. Data revision – practice

Provisional data are not published in the survey; therefore, there are no data revisions and data are published as final.

### 2.3.3. Data revision – average size

The indicator 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

Data publishing: T + 57; refers to days.

#### 3.1.1. Timeliness – first results

Time lag – first results is T + 57.

#### 3.1.2. Timeliness – final results

Time lag – final results is T + 57.

### 3.2. Punctuality

All First Releases are published as announced in the Calendar of Statistical Data Issues.

#### 3.2.1. Punctuality – delivery and publication

Delivery and publication is 0.

## 4. Accessibility and clarity

Monthly First Releases, Statistics in Line, annual Statistical Report “Short-Term Indicators of Industry”

Data are available in electronic form on the website of the Croatian Bureau of Statistics.

### 4.1. News releases

Monthly First Release IND-2021-4-1 Industrial Turnover Index

### 4.2. Online database

On the website of the Croatian Bureau of Statistics under the Data section: PC Axis Database [https://web.dzs.hr/PXWeb/Menu.aspx?px\\_language=en&px\\_type=PX&px\\_db=Industrija](https://web.dzs.hr/PXWeb/Menu.aspx?px_language=en&px_type=PX&px_db=Industrija), STS Database <https://stsbaza.dzs.hr/>.

### 4.3. Micro-data access

The conditions under which certain users can access microdata are regulated by the Ordinance on the Conditions and Manner of Using Confidential Statistical Data for Scientific Purposes (NN, No. 137/13).

### 4.4. Documentation on methodology

Description of the methodology and data sources can be found in every First Release: monthly First Release

IND-2021-4-1 Industrial Turnover Index

Annual Statistical Report "Short-Term Indicators of Industry"

On the website of the Croatian Bureau of Statistics, there are the Nomenclature of Industrial Products for the Monthly Survey on Industry (NIPUM) and statistical standards for the survey on industrial production and Industrial Turnover Index – Notes on methodology.

## 5. Coherence and comparability

### 5.1. Asymmetry for mirror flows statistics

The indicator is not applicable.

### 5.2. Comparability over time

Completely comparable since 2000.

#### 5.2.1. Length of comparable time series

Length of comparable time series is 264 months (January 2000 – December 2021).

Length of comparable time series is: domain	Domain value	Comment	January	February	March	April	May	June	July	August	September	October	November	December
Croatia	Croatia		253	254	255	256	257	258	259	260	261	262	263	264

#### 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. Currently, 2015 is applied as the base year with no major needs for revision compared to the penultimate base year 2010.

### 5.3. Coherence – sub-annual and annual statistics

The indicator is not computed.

### 5.4. Coherence – national accounts

The indicator is not applicable.

### 5.5. Coherence – administrative sources

The indicator is not applicable.

## **6. Cost and burden**

### **6.1. Cost**

Data collection is based on an administrative source (tax administration) and an online survey, so the costs are minimal accordingly.

### **6.2. Burden**

Data are collected from an administrative source (98.1% of units) and only 1.9% of data are obtained by direct collection, mostly from large enterprises using the reporting method via a web-based application (the so-called CAWI), where the response burden is reduced to minimum.