



FSO Quality Report

06 Industry and services

Neuchâtel, November 2021

Industry Production, Orders and Turnover Statistics Quality Report 2020

The Federal Statistical Office (FSO) publishes on its website quality reports providing information about the methodology and the definitions used as well as on the quality of the statistical results, thus facilitating interpretation and understanding. The reports are produced first and foremost in order to meet the requirements of Eurostat. For this reason they are only compiled for a limited number of statistics.

The concept of the quality reports is based on the European Statistics System's (ESS) concept of quality contained in the [European Statistics Code of Practice](#).

Statistical presentation

Data description

The Industry Production, Orders and Turnover Statistics (INDPAU) is a short-term economic statistic describing the monthly evolution of production, orders and turnover in the industry.

Classification system

NACE Rev. 2

Sector coverage

Activities covered: Division 5-35

Size classes covered: enterprises with more than 2 employees

Statistical concepts and definitions

Monthly production in industry by NACE Rev. 2. Production is approximated by deflated turnover.

Statistical unit

Reporting unit: Enterprise

Observation unit: economic activity

Statistical population

All active enterprises in divisions 5-35 of NACE Rev. 2. with more than 2 employees.

Reference area

Switzerland

Time coverage

From January 1999

Base period

2015=100

Unit of measure

Definition

The unit in which the data values are measured.

Indices

Reference period

Definition

The period of time or point in time to which the measured observation is intended to refer.

Month

Institutional mandate

Definition

Set of rules or other formal set of instructions assigning responsibility as well as the authority to an organisation for the collection, processing, and dissemination of statistics.

Legal acts and other agreements

Legal basis:

Federal Law on Statistics of 9 October 1992

Bundesstatistikgesetz (BstatG) vom 9. Oktober 1992

Loi fédérale du 9 octobre 1992 sur la statistique fédérale (LSF)

Ordinance of 30 June 1993 on the Implementation of Statistical Surveys

Verordnung vom 30. Juni 1993 über die Durchführung von statistischen Erhebungen des Bundes

Ordonnance du 30 juin 1993 concernant l'exécution des relevés statistiques fédéraux

Bilateral agreement with the European Union

Data sharing

Eurostat, Swiss National Bank (SNB), State Secretariat for Economic Affairs (SECO)

Confidentiality

Definition

A property of data indicating the extent to which their unauthorised disclosure could be prejudicial or harmful to the interest of the source or other relevant parties.

Confidentiality - policy

The compilation and publication of the data are governed by the Federal Law on Statistics (10/9/92), the Ordinance on the Execution of Statistical Surveys (06/30/93) and the Federal Law on Data Protection (06/19/92). The Federal Law on Data Protection specifies that the Swiss Federal Statistical Office cannot publish, or otherwise make available to any individual or organisation, statistics that would enable the identification of data for any individual person or entity.

Confidentiality - data treatment

All individual data are treated as confidential and rendered anonymous. Tabular data should not permit the disclosure of individual enterprises. Data are only published down to an activity level at which it is not confidential.

Release policy

Definition

Rules for disseminating statistical data to interested parties.

Release calendar

An advance release calendar with the precise date is disseminated on the FSO Website under the page <https://www.bfs.admin.ch/bfs/en/home/news/agenda.html>.

Release calendar access

<https://www.bfs.admin.ch/bfs/en/home/news/agenda.html>

User access

The data are released simultaneously to all interested parties.

Internal government access to the data prior (5 days) to their release to the public is limited to the Ministry of Economy and the Swiss National Bank.

Data are transmitted to Eurostat under embargo.

Frequency of dissemination

Definition

The time interval at which the statistics are disseminated over a given time period.

Quarterly

Accessibility and clarity

Definition

The conditions and modalities by which users can obtain, use and interpret data.

News release

Standardised quarterly news release by the FSO covering production and turnover in secondary sector

Publications

no publication available

On-line database

Monthly and quarterly turnover and production indices at the 2-digit NACE level and above; gross, calendar and seasonally adjusted

data.

<https://www.bfs.admin.ch/bfs/en/home/statistics/industry-services/production-orders-turnover/secondary-sector.html>

<https://www.pxweb.bfs.admin.ch/>

Micro-data access

No microdata access in conformity with the Federal Law on Data Protection (06/19/92).

Other

Data sent to Eurostat

Documentation on methodology

not available

Quality documentation

not available

Quality management

Definition

Systems and frameworks in place within an organisation to manage the quality of statistical products and processes.

Quality assurance

Code of Practice: <https://www.bfs.admin.ch/bfs/en/home/fso/quality-commitment.html>

Quality assessment

Fulfilled according to international regulations.

Relevance

Definition

The degree to which statistical information meet current and potential needs of the users.

User needs

The data is used by the Swiss National Bank, the State Secretariat for Economic Affairs and many other users

User satisfaction

not available

Completeness

all required time series are available

Accuracy and reliability

Definition

Closeness of computations or estimates to the unknown exact or true values that the statistics were intended to measure.
Reliability of the data, defined as the closeness of the initial estimated value to the subsequent estimated value.

Overall accuracy

The sampling and non-sampling errors in the data are small, the first estimates are not biased. Revisions from the first to the final estimate are less than 1 percentage point, results are considered final after 3 months. The most significant sources of error are coverage errors, classification changes and data processing errors.

Sampling error

The sample method is stratified random sampling. The coefficient of variance is less than 5%.

Non-sampling error

The secondary sector production, orders and turnover statistics includes enterprises that have their main activity in Divisions 5-35 (NACE Rev. 2). But the frame is constructed using a "frozen" version of the business register, so enterprises entering into the business register after this freezing moment or enterprises wrongly classified outside of retail trade represent undercoverage. Enterprises exiting the frame (closures, wrongly classified) after this moment are excluded from the survey, so overcoverage should be minimal.

Unit nonresponse (September 2020): 25%

Item nonresponse: 0%

Timeliness and punctuality

Timeliness

Timeliness: First estimate at t+2 months, final results at t+5 months

Timetable of data collection: The questionnaires are sent out during the last week of the reference quarter. The deadline for replies is 2 weeks after the end of the reference period. A reminder is sent after the deadline. Selective phone reminders are used by necessity.

Punctuality

Deadlines are respected and data are published on time.

Coherence and comparability

Definition

Adequacy of statistics to be reliably combined in different ways and for various uses and the extent to which differences between statistics can be attributed to differences between the true values of the statistical characteristics.

Comparability - geographical

In line with ESS/international concepts and definitions.

Comparability - over time

Comparable quarterly time series since 1999Q1, monthly time series since October 2010.

Coherence - cross domain

SBS and STS data are coherent to a limited extent only. The reason is, among others, different methods of compiling the respective statistics due to different purposes of SBS and STS statistics. However, these limitations have no impact on the validity of the statistics themselves. Basically, the quarterly statistics present the economic development in trade whereas the annual survey delivers information on the structure of the enterprises, their economic situation and their earnings.

Coherence - internal

The internal coherence is assured.

Cost and burden

Definition

Cost associated with the collection and production of a statistical product and burden on respondents.

Global cost estimation for the FSO is about 2.5 full-time equivalent. Burden estimates for respondents is on average 30 minutes per form.

Data revision

Definition

Any change in a value of a statistic released to the public.

Data revision - policy

First estimate at t+2 month, revision at t+5 months.

Change of base year and weights every 5 years, in the years X0 and X5.

Major methodological changes and revisions are announced in advance.

The revision policy for data published nationally and for data sent to Eurostat is the same.

Data revision - practice

According to Eurostat guidelines on Quality Indicators MAR (Mean Absolute Revision) and MR (Mean Revision) are calculated for the last 36 months (Jan 2018 - Dec 2020):

Growth rates for calendar adjusted data (YoY):

MR: -0.26

MAR: 0.57

Growth rates for seasonally adjusted data (MoM):

MR: -0.13

MAR: 0.83

Statistical processing

Source data

Type of source: statistical survey

Frame on which the source is based: Swiss Business register of enterprises and establishments (REE)

Sample or census: stratified sample

Criteria for stratification: turnover and activity

Threshold values and percentages: small: 10%; medium: 100%; large: 100%

Frequency of updating the sample: 5 years

Frequency of data collection

Small and medium enterprises: quarterly collection of monthly data

Big enterprises: quarterly collection of monthly data

Data collection

Quarterly questionnaire for all enterprises, postal and online survey.

Data validation

Data are checked across months and against the sampling frame

Data compilation

Treatment of non-response: non-response is treated by weighting

Method for calculation of production: deflated turnover

Method for grossing-up: production is grossed-up to the 2-digit level of the Nace to calculate a rate of change compared to the same period of the previous year.

Type of index: Laspeyres. The existing index is extended one period at a time by calculating the rate of change in the latest period compared to the same period of the previous year.

Method of weighting and chaining: The index is weighted by the quarterly values of the underlying strata.

Adjustment

The turnover index is deflated using the producer price index (Produzentenpreisindex, PPI).

For seasonal and calendar adjustment X13-ARIMA is used. NACE aggregates are calculated by using the direct method. The calendar adjustment is based on a country-specific calendar and is performed within the RegARIMA part of the program, including regressors for easter effects and leap year.

Models/Filters are selected automatically, if the automatic choice is not considered adequate it is corrected manually; models are fixed for at least one year, parameters are estimated every time a new value becomes available; the whole series is revised every time a new value becomes available.

Comment**Definition**

Supplementary descriptive text which can be attached to data or metadata.

no comment

Metadata update**Definition**

The date on which the metadata element was inserted or modified in the database.

Metadata last certified

23/03/2021

Metadata last posted

23/03/2021

Metadata last update

23/03/2021

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