

PRODUCTION OF THE STATISTICS

Producer and Import Price Index

Subject area

Prices and economic trends

Statistical area

Price Statistics

Product code

PR0301

Reference time

2025, month, quarter, and year

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1 Context of the statistics

The statistical product and survey *Producer and Import Price Index* (PPI) aims to measure and present the average development for producer and import prices, in total and for different product groups. The prices are measured when the products are delivered from Swedish producers (domestic market and export/exit) ¹ and the first stage of purchase when the products enter Sweden (import/entry). “Products” refer to both goods and services.

This document contains a description of the plan and implementation of the surveys that form the basis for the statistics on the Producer and Import Price Index. Read about the quality of the statistics in the quality declaration, which is available at www.scb.se/PR0301, under the heading *Documentation*.

2 Survey design

2.1 Target characteristics

The target characteristic is the price index for product groups on various markets. Sales at the production stage on the Swedish market is referred to as the domestic market. Sales at the production stage outside Sweden is referred to as the export market. Import/entry to Sweden from abroad is referred to as the import market.

The target population is defined as all the transactions related to sales at the production stage and the import/entry to Sweden from abroad, respectively of products under product groups in Sections A to E, G to N, R, and S according to SPIN 2015 (see Table 1).

Table 1. Overview of sections* of product codes, defined in SPIN2015.

Section	Description
A	Agriculture, forestry and fishing
B	Mining and quarrying
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply, sewerage, waste management and remediation services
G	Wholesale and retail trade
H	Transportation and storage services

¹“Export” refers to products that are sent to countries outside the EU. “Exit” refers to products that are sent to countries within the EU.

I	Hotels and restaurants
J	Information and communication services
K	Financial and insurance services
L	Real estate services
M	Professional, scientific and technical services
N	Rental and leasing services and travel agency and tour operator services
R	Arts, entertainment and recreation services
S	Other services

**Each section includes main groups, each of which consist of subgroups, consisting of detail groups. The lowest aggregation level of product codes within each section is seven digit groups.*

2.2 Frame procedure

The frame population is based on other surveys at Statistics Sweden: Production of commodities and industrial services (Prodcum), Structural Business Statistics (SBS), Foreign trade - exports and imports of goods (FTG), and Foreign trade in services (FTS). These surveys contain information at the product level. The sample frame is created by summing up all transactions during a year related to sales in the production stage, and import/entry to Sweden from abroad respectively, per market, product group and enterprise. Any given annual transaction is a frame element.

The reason for the use of several surveys as a basis for the sample frame is that the different markets affect each other, since the domestic market is defined as production minus export/exit. Import/entry that only passes through Sweden, so called re-export, is removed from both the export and import side.

Channels of communication are primarily directed to existing respondents in the survey. New data sources (i.e. enterprises) are contacted via letter, in which the respondent is encouraged to choose a representative product within a selected product group.

The observation unit consists of the price of a transaction for a certain product, referred to as a product offering, within a given product group for each survey period. A product offering is the combination of enterprise and product to be priced. A data source can submit information on several observation units.

2.3 Procedures for sampling and exclusion

2.3.1 Sampling procedure

Frame elements are divided into strata that consist of one or more product groups according to SPIN. A frame element can have two different types of status, drawn by certainty or by probability. Units with large transaction values are drawn by certainty, i.e. with the probability of 1, and then removed from the frame. Next, a probability sample, known as a PPS sample, is drawn from the remaining units. Sample uncertainty can thus be calculated. A coordinated sample is not carried out. A PPS sample is drawn ahead of each new year for each stratum and market.

The allocation method used is a Neyman allocation, in which the cost function is set uniformly for all strata in a market. The allocation provides the number of observations to be drawn in each stratum.

2.3.2 Exclusion from sampling (cut-off)

A cut-off limit of no less than SEK 10 million in turnover per frame element is applied in each stratum. Contributions from enterprises below the cut-off are not estimated, but are assumed to have the same price development as the data collected.

2.4 The collection procedure

2.4.1 Data collection methods

Prices on transactions in the producer and import stage are often not publicly available. For this reason, prices for the Producer and Import Price Index are mainly collected directly from enterprises. In the absolute majority of cases, electronic collection is used, via www.insamling.scb.se. Some collection is done via e-mail, web sites and other surveys at Statistics Sweden.

The collection period begins on the first workday in the period after the end of the reference period. At that time, respondents receive login details via e-mail or letter.

2.4.2 Measurement

The average transaction price during the period for a particular product is reported. In addition, respondents can state whether some characteristic of the product has changes, such as terms of delivery, customer, price data or anything else that may affect comparability with previous periods. If a transaction price cannot be reported, a list price or hourly rate is also accepted.

The questionnaire contains built-in controls (see Section 2.6.1.). See Appendix 1 for the questionnaire.

For more information on variables, see
<http://www.metadata.scb.se/?produkt=PR0301>

2.4.3 Follow-up of non-response

The weighted percentual non-response is measured at the end of every period. Two reminders via e-mail are made during the period to keep the non-response rate as low as possible.

2.5 Processing

The index is calculated based on prices recalculated to Swedish kronor. Prices are to be reported in the currency of trade and then recalculated to Swedish kronor by Statistics Sweden.

Missing information, irrespective of whether due to non-response or if there was no transaction during the period, is imputed. The imputation method used is a mean value imputation with the price development of products within the same product group that have been reported during the period. Price data that cannot be verified by the respondent can also be imputed.

2.6 Editing

The data material is processed and continuously edited, if needed, to maintain a high level of quality of the statistics. By continuously validating micro and macro data during the period, Statistics Sweden ensures that the statistics maintain a high level of quality. During the validation process product or price changes are detected. The price development shall not include changes in the price that are a consequence of changed quality. In principle, only strict price changes, which are reflected in the pricing of comparable transactions, are to affect the price development.

2.6.1 Editing during collection

When reporting price changes on individual product offerings greater than +/- 10 percent compared with the previous period, respondents are obliged to submit a comment in the web form.

2.6.2 Editing of microdata and collected statistical values

Price changes on individual product offerings greater than +/- 10 percent compared with the previously reported price are validated. When necessary, the respondent is contacted for a more detailed explanation to the price change if it has not already been submitted in the web form.

2.6.3 Editing of macro data

Editing of macro data begins when sufficient data has been received during the period. A meeting is held about three days before data

collection ends, by which time normally about 90 percent of the data has been collected. Preliminary results are validated and explanations for major price differences and changes that have a large impact on the total change compared with the previous period are examined.

2.6.4 Review of accounts

After making the calculations, the result is reconciled with the preliminary result and three to five people edit the most important events that have happened during the period.

2.7 Estimation procedure

2.7.1 Principles and assumptions

A Laspeyre-type chain index is created by calculating the average price development for product groups according to SPIN at different levels and then aggregating to higher SPIN group levels and in total within each market.

Uncertainties in the data during the estimation procedure include that the weights are from a previous period than the price base period. This is adjusted with a price update so that the weights correspond to the value quantity in the product basket at the same price level as for the price base period.

In order to eliminate the effect that arises in the event of quality differences during product changes, various types of quality adjustments are made, some of which are based on model assumptions.

In some cases, transaction prices cannot be reported by the respondents. In such cases, list prices or hourly rates may be reported, assuming that their price development follows the price development for the actual transactions in the longer term.

Contributions from enterprises below the cut-off are not estimated, but are assumed to have the same development as the data collected.

2.7.2 Estimation procedure for target characteristics

For all measurements in the sample, a price relative is calculated. The price relative is the price change for the current product offering between the comparison period and the price base period. For PPI the price base period is the last period of the previous year.

$$\text{Price relative} = \frac{p_{i,a}^t}{p_{i,a}^b},$$

where

$p_{i,a}^t$: price in period t for product i from company a .

$p_{i,a}^b$: price in base period b for product i from company a .

The price relatives are weighed together for different aggregates, product groups according to SPIN 2015, markets and in total.

The index is calculated with the current period t year y as the comparison period and with the last period in the previous year as the price base period. An index link with December as price base period can be written as

$$I_{y-1,dec;g}^{y,t} = \sum_s \frac{V_s^*}{\sum_u V_u^*} \times \frac{p_{y,t;s}}{p_{y-1,dec;s}},$$

for product offerings s included in product group g , where p_s are prices for the selected specification. The first factor is the value weight, the value of the transaction volume in year $y - 2$ that the specification s represents of the total transaction volume for group g converted with a price index to the price level in the last period of the previous year (below noted as dec).

$$V_s^* = V_{y-2;s} \times I_{y-2;s}^{y-1,dec}, s \in g.$$

A chain index with base year 2020 is calculated for period t year y as

$$I_{2020}^{y,t} = \frac{100}{\frac{1}{12} \sum_{t=1}^{dec} I_{2019,dec}^{2020,t}} \times \prod_{Y=2020}^{y-1} I_{Y-1,dec}^{Y,dec} \times I_{y-1,dec}^{y,t}$$

The first factor after the equals sign indicates the price situation as a percentage of the average price situation in 2020 (the base year is set at 100). The second factor is the chain price development from 2019 to year $y - 1$ and is a product of annual links. Finally, the last factor indicates the price development from the base period year $y - 1$ to period t year y .

2.7.3 Estimation procedure for accuracy

Uncertainty measures are not calculated as non-sample uncertainty is not directly measurable.

2.7.4 Disclosure control

Disclosure control is carried out annually when weights have been determined. Minimum requirements are set for the number of enterprises that submit information within a product group in order for data to be published. Requirements are also set so that one or more enterprise are not too dominant within the product group for publication to be made.

3 Implementation

3.1 Quantitative information

Prices on about 6 000 product offerings are collected on a monthly basis. Prices on about 5 000 product offerings are collected quarterly. Indexes are calculated for just over 400 detailed groups according to SPIN 2015. The weighted non-response is between 7 and 29 percent per collection period. The weighted proportion of imputations is between 19 and 31 percent per collection period. In total, the sample covers just over 42 percent of the frame population in terms of value (see Section 2.2 above).


3.2 Deviations from the survey design

There have been no deviations from the survey design.

The same target values and methods, which were used before 2024, have also been used in 2024.

Appendix 1

Questionnaire for Sections A-E



PI09_PPI_PROD
Januari 2024 Januari 2024
STATISTISKA CENTRALBYRÅN

PI09_PPI_PROD_ENG
ES/PR_SCB

[Logout](#)
Print

Submit information
Instructions
Contact Us

Answer

Submit

Confirmation

Export market

SCB ID	Product	CN-number
20003497	Test Exportmarknad	99937000

1. Is the product above still representative and typical for your, export of domestically produced goods within the specified CN-number?
Verify so that the pricing basis and terms of delivery are correctly specified.

Yes

No. Specify a new product within the same CN. [Search CN](#)

Please write a comment as to why the product is no longer representative and/or available. Continue to question 2 to provide information about the new product.

2. Specify the price of the export product for the period of interest. VAT, customs fees or any other taxes should be excluded from the price. If the price has changed, please specify the reason.

- Incidentally if there has not been any export of the product, please check the box "No transaction".
- If a new product has been specified, please write the price for the previous month for the new product in the comment field "Reason behind any price change" and describe how the old and new products differ.

Month	Price	Currency	Units of sale ⁱ	Pricing basis ⁱ	Terms of delivery	Exported to	Comment ⁱ
December 2023	2,05	EUR	m3	Transferpris/ I	Delivered At T	FINLAND	
Januari 2024		EUR	m3	Transferpris/ I	Delivered At T	FINLAND	Reason behind any price change

Amend/correct v v v v v


No transaction

◀ Back

Save

Save and continue

Questionnaire for Sections G-N, and S



P109_TPI_PROD
4:e kvartalet 2023 4:e kvartalet 2023
ES/PR SCB

Producer Price Index for services
00000001

[Logout](#)
Print

Submit information
Instructions
Contact Us

Answer
Submit
Confirmation

Swedish customers

SCB ID	Product	SPIN	Service area
10021533	Test	47.001	Detaljhandel med frukt, grönsaker, kött, fisk mm

1 Is the above product still representative and typical of your supply of services to Swedish customers within the specified service area?

Yes
 No. Specify a new product within the same service area. Comment if further attributes should be added (see question 2).
[Search SPIN](#)

Please write a comment on why the product is no longer representative and/or available. Continue with question 2 and 3 to provide information about the new product.

2 Check if the descriptions for below attributes are still valid. If any attribute has changed description, comment this in the field "New description".

Attribute	Description	New description

3 Specify the product's basic price to Swedish customers in the period of interest. VAT or any other taxes should be excluded from the price. If the price has changed, please specify the reason.

- Incidentally if there has not been any sale of the product to Swedish customers, please check the box "No transaction".
- In case of a new product, if applicable, please write the price for the previous quarter for the new product in the comment field "Reason behind any price change" and describe how the old and new product differ.

Quarter	Price	Currency	Unit of measure	Pricing basis ?	Comment ?
Kvartal 3 2023	1,50	SEK			
Kvartal 4 2023		SEK			Reason behind any price change
Amend/correct ?					

No transaction