

Price and Volume indices for External Trade in Goods

0. Registration entry for subjects

0.1 Name

Price and Volume indices for External Trade in Goods

0.2 Subject area

External Trade in Goods

0.3 Responsible authority; office, division, person etc.

Statistics Iceland

National Accounts and Public Finance

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0.4 Purpose and history

External trade in goods indices measure the quarterly change in prices on goods related to imports and exports of goods. They measure quarterly changes in prices in foreign trade and have been used for adjustments in national accounts, i.e. to calculate the trade figures between Iceland and abroad, and generally, to analyse foreign trade data

0.5 Users and application

These indices are most useful for those working in public and private finance as well as non-financial corporations, and they are used for a number of purposes such as economic and market based research.

0.6 Sources

Trade in goods data have been compiled mostly from reports on imports and exports gathered from the Directorate of Customs. The information is regularly updated after securing more detailed data from importers and exporters.

Information regarding external trade in goods is gathered from a wider net of sources than just Customs' data, i.e. Icelandic Transport Authority (Samgöngustofa) provides information on sale and purchase of planes and ships. Surveys are also used to gather information on import and export of capital goods and oil.

0.7 Legal basis for official statistics

Act on Statistics Iceland and official statistics, no. 163/2007, Act on the Protection of Privacy as regards the Processing of Personal Data, No. 77/2000, Fundamental Principles of Official Statistics (UN).

0.8 Response burden

Each importer and exporter is legally required to submit Customs declarations to Customs Authority regarding their activities. Additionally, Statistics Iceland requests information from corporations, however, often these results are limited in response.

0.9 EEA and EU obligations

See regulation 471/2009, 92/2010 and 113/2010 with amendments and addenda.

1. Contents

1.1 Description of content

The external trade in goods indices comply with the guidelines laid out in International Monetary Fund: Export and Import Price Index Manual – Theory and Practice (2009).

The Fisher index is used to measure change in unit price on imports and exports from one quarter to another. The Fisher index is calculated by taking the geometric mean of the Laspeyres and Paasche indices, the difference between the two being the weights used. A Laspeyres index uses past weights while Paasche uses current weights. Preliminary figures are always Laspeyres indices since past weights are the only ones available, but once external trade in goods data for a whole year are available the indices are recalculated as Fisher indices.

The indices are then chain-linked using the annual overlap method to get a continuous time series.

1.2 Statistical concepts

Price index: A measure of change in prices of a given basket of goods from one period to another.

Laspeyres index: An index that uses past weights.

Paasche index: An index that uses current weights.

Fisher index: Geometric mean of a Laspeyres and Paasche index.

2. Time

2.1 Reference periods

External trade in goods indices will be published and available on a quarterly basis.

2.2 Process Time

Process time is 1-2 days in each quarter, in addition to any corrections in the data regarding foreign trade that may come up.

2.3 Punctuality

The publication is promptly up on Statistics Iceland website at 9 am on the allocated day. The annual data is published on the Statistics Iceland website in October every year.

2.4 Frequency of release

External trade in goods indices are published on a quarterly basis.

3. Reliability and security

3.1 Accuracy and reliability

Accuracy of the indices is based on the underlying data sourced from External Trade division. See more information in the External trade in goods metadata section.

3.2 Sources of errors

The main source of error in external trade indices is a change in the composition of a given HS-number. E.g. if a HS-number sees a change from relatively inexpensive goods to relatively expensive, a price index will measure a price increase between periods, even if the prices of all goods that the HS-number composes of stay the same.

3.3 Measures on confidence limits/accuracy

No figures for confidence limits or accuracy have been calculated.

4. Comparison

4.1 Comparison between periods

External trade in goods indices are only comparable in like for like time period, with the exception of 2013 when the commodity oil bought abroad was reclassified from 'services' to 'goods'. The average of 'goods' data is, therefore, considered reliable only from 2013 onwards. The revised version of SITC (4th rev.) classification was undertaken in 2008.

4.2 Comparison with other statistics

The sector '0 Food and Animal Husbandry' in export price index is somehow similar to the export price index of 'Fisheries' due to 'fish' comprising the primary component in both indices.

Methodologically speaking, there is a difference in the two indices due to the fact that the unit price of the commodities is taken from different sources. For e.g., the former sector takes its unit price for fish from the Directorate of Customs while the latter gets the unit price from the exporters of fish directly.

4.3 Coherence between preliminary and final statistics

Differences may exist due to preliminary data calculated using Laspeyre's Index and the final data, which is calculated using Fisher index. Also, underlying import and exports data may change due to revisions. If the estimated corrections are significantly large with a tendency to influence the index, then the quarterly data is re-calculated.

5. Access to information

5.1 Forms of dissemination

- Statistics, categorized statistical web tables

5.2 Basic data; storage and usability

Source data is stored at Statistics Iceland. Access to more detailed data than has already been published is granted on an individual basis. In these cases the main principle is to uphold the confidentiality of the data in guidance with Statistics Iceland Rules of Procedure for Treating Confidential Data, which can be accessed on Statistics Iceland's website.

5.3 Reports

Methodology and classification of foreign trade data is published on Statistics Iceland's website.

5.4 Other information

For more information on external trade in goods indices, contact Haukur Viðar Guðjónsson,
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