



Foreign trade statistics quality report 2022

The Federal Office for Customs and Border Security (FOCBS) publishes a quality report on its website 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 report is produced first and foremost in order to meet the requirements of the common quality framework of the European Statistics System (ESS).

The concept of the quality report is based on the European Statistics System's concept of quality contained in the European Statistics Code of Practice.

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2 Metadata		
2	Metadata	Detailed information about metadata is available on the website of the Swiss Federal Office for Customs and Border Security.

3 Statistical presentation		
3.1	Data description	<p>Swiss foreign trade statistics measure the value and quantity of goods traded between Switzerland and foreign countries. «Goods» means all movable property including electricity.</p> <ul style="list-style-type: none"> • Statistical dimensions: • reporting country, • partner country, • economic sectors, • mode of transport, • invoice currency, • enterprise characteristics, • reference period, • trade flow and • product. <p>Besides these dimensions, specific datasets contain information on the statistical procedure (normal trade versus trade for processing activities) or on price evolution (unit value indices).</p>
3.2	Classification system	<p><i>Swiss customs tariff</i></p> <p>For collecting detailed data about the traded goods, Swiss foreign trade statistics is using the customs tariff which is based on the Harmonized Commodity Description and Coding System (HS, managed by the World Customs Organization (WCO)). The customs tariff corresponds to the HS; a further breakdown at eight-digit level meets the Swiss trading needs. It includes over 9100 eight-digit codes and is subject to annual revisions that ensure it is kept up to date in the light of changes in technology or patterns of international trade in goods.</p> <p><i>Other product nomenclatures</i></p> <p>If applicable, a further breakdown of the Swiss customs tariff are statistical keys (three supplementary digit numbers), which are disseminated on national level.</p> <p>Data are also disseminated at national level by:</p> <ul style="list-style-type: none"> • Nature of goods (national concept), developed in cooperation with industry associations • Broad economic categories (national concept), as used in the national accounts • the UN's SITC System • NST and the NST/R nomenclature (only for statistics broken down by means of transport) • Statistical classification of products by activity CPA (European version of the UN nomenclature CPC)

		<p><i>Economic activities</i></p> <p>Imports and exports are disseminated by activities according to the General classification of economic activities NOGA (national concept, equivalent to NACE up to level 4)</p> <p><i>Country classification</i></p> <p>Swiss data is disseminated on EU-level according to the «European Business Statistics (EBS) Geonomenclature» whereas a Swiss nomenclature of countries and territories is used on national level. It should be noted that the Swiss nomenclature is based on the EU Geonomenclature and therefore compatible with it. The country-codification is based on the ISO alpha-2 standard (ISO 3166), which is the international standard for country codes. It matches with the ISO 3166 standard for most countries.</p>
3.3	Scope	<p><i>Transactions coverage</i></p> <p>Swiss foreign trade statistics cover the imports and exports of goods.</p> <p>Import of goods covers:</p> <ul style="list-style-type: none"> • direct imports of goods; • imports from duty-free warehouses with a final customs declaration; • re-imports of Swiss goods; • electricity; • the purchase of ships (outside the Swiss customs territory) by persons with domicile or firms with headquarter in Switzerland; • goods for processing (with or without change of ownership); this refers to goods imported temporarily for the purpose of being processed or the re-imports of Swiss goods processed abroad; • returned goods, i.e., goods which owing to non-acceptance, contract termination or non-saleability are returned to the sender in Switzerland in unaltered condition; • border zone traffic, i.e., the movement of goods within a range of ten kilometres on either side of the border. <p>Export of goods covers:</p> <ul style="list-style-type: none"> • direct exports of Swiss goods; • exports to a duty-free warehouse with a final customs declaration; • re-exports of nationalised goods, i.e., previously imported goods which, (with or without processing) are being re-exported; • electricity; • the sale of ships (outside the Swiss customs territory) to persons with domicile or firms with headquarter abroad;

		<ul style="list-style-type: none"> • goods for processing. This refers to goods exported temporarily for the purpose of being processed or goods to be re-exported after being processed in Switzerland; • foreign returned goods, i.e., goods which owing to non-acceptance, contract termination or non-saleability are returned to the sender abroad in unaltered condition; • border zone traffic, i.e., the movement of goods within a range of ten kilometres on either side of the border. <p><i>Exceptions to coverage</i></p> <p>The complete list of all excluded goods is published in the national regulation R-25: https://www.bazg.admin.ch/bazg/de/home/dokumentation/richtlinien/d-25-aussenhandelsstatistik.html (chapter 2.4.4).</p> <p>The basis is the Commission Implementing Regulation (EU) 2020/1197, Annex V/Appendix.</p> <p><i>Unrecorded activity</i></p> <p>The following quantities are estimated to complement the data measured in order to fulfil balance of payments requirements: smuggling; letter post; small quantities in border zone traffic; consignments small enough to be exempt from recording.</p>
3.4	Statistical concepts and definitions	<p>Swiss foreign trade applies the special trade system. Imports include merchandise for which an according customs declaration has been lodged and which thus may freely circulate. Exports are merchandise goods leaving Switzerland customs territory (cf. 3.7).</p> <p>Imports are disseminated by country of origin (i.e. the country where the good is wholly produced (obtained) or predominantly produced). Exports are sorted by country of destination (i.e. the country where the good is exported or processed).</p> <p>The Swiss foreign trade statistics are established in accordance with international recommendations (with a few exceptions):</p> <ul style="list-style-type: none"> • UN guidelines on «International Merchandise Trade Statistics (IMTS)» • EU guidelines on «International Trade in Goods Statistics (ITGS)» • IMF «Balance of Payments Manual (BPM)» <p>For further information see also https://www.bazg.admin.ch/bazg/en/home/topics/swiss-foreign-trade-statistics/methoden-metadaten/methoden/erhebung.html</p>
3.5	Statistical unit	Information collected from enterprises or individuals through customs declarations.
3.6	Statistical population	All enterprises and individuals that import or export goods to and from Switzerland (as defined in cf. 3.3).
3.7	Reference area	Geographically, the customs territory includes the Principality of Liechtenstein as well as the enclave of Büsingen and excludes the exclaves of Samnaun and Sampuoir. Up until 2019 the enclave of

		Campione d'Italia had been part of Swiss customs territory as well. Then it was reintegrated into Italian customs territory.
3.8	Time coverage	Data are electronically available from the online database Swiss-Impex from 1988 onwards. Data further back are available in other forms, such as files published on the website or a physical archive.
3.9	Base period	Base year for trade chain index is 1997.

4 Statistical processing		
4.1	Source data	<p>Data are collected from the electronic customs applications e-dec (import/export) and NCTS (export) and – as soon as the customs declaration has been accepted – transmitted overnight to the database of foreign trade statistics (DDB).</p> <p><i>Exceptions</i></p> <ul style="list-style-type: none"> • Electricity: Monthly reports/declarations by the electricity traders for the import/exports. • Ships: Monthly reports/declarations by the Swiss Maritime Navigation Office and the Land Registry and Surveying Office (shipping register).
4.2	Frequency of data collection	daily
4.3	Data collection	Data are collected from customs declarations, with the exception of electricity as well as ships where special procedures apply (cf. 4.1). All declarations are made electronically as of January 1st, 2013.
4.4	Data validation	<p>Source data are submitted to several steps of plausibility tests, including risk-oriented sample checks. An error list is generated by plausibility tests.</p> <p>Statistical procedures are in place to carry out risk-adjusted checks on declaration data, as well as on aggregates.</p> <p>Reported discrepancies are checked and corrected if necessary. For definitive results, corrections are performed only in case of major errors.</p> <p>Mirror analyses with selected partners are carried out periodically.</p>
4.5	Data compilation	The compilation and production of the data contained in the Swiss foreign trade statistics follow the recommendations on data sources and methods issued by various international organisations (cf. 3.4). Temporarily missing flows are estimated by ARIMA models (short term electricity's flows for instance).
4.6	Adjustment	Statistical procedures also apply for unit value index calculation as well as working day and seasonal adjustment (for detailed information please refer to methodological manuals).

5 Unit of measure		
5	Unit of measure	<p>Measurement units:</p> <ul style="list-style-type: none"> • trade value in Swiss franc (CHF); • quantity in kilogram (kg; net mass); • quantity in supplementary units, according to the recommendation of the WCO related to the HS code (e.g. m, m², pieces/items) wherever relevant.

6 Reference period		
6	Reference period	<p>Theoretically, the reference period for the information on international trade in goods transactions should be the calendar month of export or import of the goods. However, in practice the reference period for Swiss extra-trade is generally the calendar month during which the customs declaration is accepted by customs authorities.</p>

7 Institutional mandate		
7.1	Legal acts and other agreements	<p>Swiss foreign trade statistics are collected and published by the Swiss Federal Customs Administration, based on the Ordinance on International Trade Statistics (SR 632.14), which stipulates the publication of relevant statistics. Importers and exporters are obliged by law to disclose all required information to customs agencies.</p> <p>General statistical legislation:</p> <ul style="list-style-type: none"> • Regulation (EC) No 223/2009 of the European Parliament and of the Council on European statistics <p>Extra-EU trade (or Extrastat)</p> <ul style="list-style-type: none"> • EU regulation 471/2009 on European statistics relating to trade with non-EU countries (extra-EU trade) • EU implementing regulation 92/2010 on European statistics relating to extra-EU trade, as regards data exchange between customs authorities and national statistical authorities, compilation of statistics and quality assessment • EU implementing regulation 113/2010 on European statistics relating to extra-EU trade, as regards trade coverage, definition of the data, compilation of statistics on trade by business characteristics and by invoicing currency, and specific goods or movements <p>Further agreements:</p> <ul style="list-style-type: none"> • «International Convention on the Harmonized Commodity Description and Coding System» • «Convention on Simplification of Formalities in Trade in Goods»

		<ul style="list-style-type: none"> • «Convention on a Common Transit Procedure» • Statistical agreement with the European Community (in force since 2006, revised in 2009)
7.2	Data sharing	Data sharing takes place with the Swiss Federal Statistical Office FSO (national accounts and price statistics) and the Swiss National Bank SNB (balance of payments statistics).

8 Confidentiality		
8.1	Policy	Individual reporters' data are strictly confidential and are treated according to the Federal Act on Data Protection (FADP, SR 235.1) . The Swiss foreign trade statistics apply passive confidentiality on aggregated data. Data are disseminated publically up to 8-digit tariff heading level. Upon request by affected corporations or government agencies, measures to increase confidentiality can be taken.
8.2	Data treatment	Data for several tariff-headings among the same chapter is pooled together and published in a special heading at the end of the chapter (for example 6599.9999 in chapter 65, translated into 65SSS999 in Eurostat dissemination).

9 Release policy		
9.1	Calendar	The Calendar is published six months in advance for publications, announced on the internet on DSBB (IMF) . On the release dates, data are available through the Swiss-Impex database at 08:00 AM (local time). At the same time, a press release describing the latest developments is published.
9.2	Calendar access	The scheduled publication dates are available on DSBB (IMF) as well as on the website of the Swiss Federal Office for Customs and Border Security: https://www.bazg.admin.ch/bazg/en/home/top-ics/swiss-foreign-trade-statistics/publications.html
9.3	User access	Advance access to Swiss foreign trade statistics data is in accordance with the principles of the Charter of Swiss Official Statistics , the European Statistics Code of Practice and the Fundamental Principles of Official Statistics of the UN. These establish the basis that guarantees the independence, integrity and accountability of national authorities. Privileged access is limited, embargoed and published on the website of the Swiss Federal Office for Customs and Border Security ("Advance access to data").

10 Frequency of dissemination		
10	Frequency of dissemination	Datasets are updated monthly.

11 Accessibility and clarity		
11.1	News release	monthly press release
11.2	Publications	<p>Monthly press releases on short terms evolutions by products and countries.</p> <p>All publications are available online through the website of the Federal Office for Customs and Border Security:</p> <ul style="list-style-type: none"> • monthly press releases, • annual reports, • articles and studies and • data of the month. <p>Requests for specific statistical evaluations should be sent to stat@bazg.admin.ch.</p>
11.3	Online data-base	<p>The database Swiss-Impex includes data on imports and exports back to 1988 broken down by</p> <ul style="list-style-type: none"> • trading partner (country or country groups), • goods (classifications are mentioned under point 3.2), • mean of transport at border crossing and • customs duties.
11.4	Micro-data access	The micro data set is available under the rule of the data protection policy.
11.5	Other	<p>Additional data available through our website include:</p> <ul style="list-style-type: none"> • data on trade by enterprise characteristics (TEC) • data by economic activities (according to the General classification of economic activities NOGA (equivalent to NACE up to level 4)) • data on re-exports and re-imports • data by Canton (administrative divisions of Switzerland) • data on trade of gold, silver and coins prior to 2012, as well as gold imports by gold type from 2021 onwards • data on transit of goods <p>Dissemination is also made by means of file downloads.</p>
11.6	Documentation on methodology	The methodological rules and national reference metadata are available on the website of the Swiss Federal Office for Customs and Border Security.
11.7	Quality documentation	The national quality report is available on the website of the Swiss Federal Office for Customs and Border Security.

12 Quality management		
12.1	Quality assurance	<p>Quality assurance is based on the UN «Fundamental Principles of Official Statistics». Based on these principles, the European Union built up the Code of Practice, which also applies to the Swiss foreign trade statistics.</p> <p>The Data Policy of the Swiss Federal Office for Customs and Border Security determines the basis for data treatment. With this Data Policy, the Swiss Federal Office for Customs and Border Security commits itself, amongst other things, to ensure a defined data quality (the Data Policy will be sent upon request to the interested parties: stat@bazg.admin.ch).</p>
12.2	Quality assessment	<p>Measurable quality indicators are defined for quality assessment (monitoring) at every step from data collection to publication. If necessary, measures are taken and processes are adapted based on the regular evaluation of quality indicators.</p>

13 Relevance		
13.1	User needs	<p>Large scale user surveys on Swiss foreign trade statistics are carried out every three to four years and cover all products offered. Moreover, main users are surveyed periodically in order to identify their specific needs. User feedbacks can be sent at any time to stat@bazg.admin.ch.</p>
13.2	User satisfaction	<p>User satisfaction is monitored by measurable quality indicators (cf. 12.2) which are based on user feedback.</p>
13.3	Completeness	<p>All mandatory statistics are produced.</p>

14 Accuracy and reliability		
14.1	Overall accuracy	<p>The Swiss foreign trade statistics benefit from well-established data collection systems supported by effective validation and compilation tools.</p> <p>Because basic data consist of millions of records produced every month, a complete accuracy is unachievable. Like anywhere, the balance between the devoted resources for checking and the likely benefit of it has to be kept. Therefore, users should be aware of the margin of inaccuracy in the data applied, especially at the most detailed level of data.</p>
14.2	Sampling error	Swiss foreign trade in goods statistics are not collected via samples. For this reason, they are not impacted by sampling errors.
14.3	Non-sampling error	<p>Errors often arise while trying to capture movements of goods or trade activities beyond with poor information or which are inherently complex to measure, such as:</p> <ul style="list-style-type: none"> • Goods that by their nature are difficult to classify – Errors may arise in the product code allocated due to the complexity of the classification, for instance for chemical or pharmaceutical products. • Processing trade valuation – Errors arise when the processing costs are reported rather than the trade value corresponding to the total amount which would be invoiced if the goods were sold or bought. • Products enclosing services – Errors arise when the total amount of the contract (transaction including the supply of goods and services) is reported instead the value of the goods only.

15 Timeliness and punctuality		
15.1	Timeliness	<p>The time of recording is determined by the date of import and export of the goods (physical border crossing) irrespective of the date of clearance.</p> <p>Monthly data are published within a maximum of 30 days after the completion of each month.</p>
15.2	Punctuality	Punctuality is monitored by measurable quality indicators (cf. 12.2). Data deliveries are made within the deadline fixed by the EU legislation.

16 Coherence and comparability		
16.1	Comparability – geographical	<p>Besides the trade system and errors such as product or partner misclassification, the most common reasons for asymmetries are:</p> <ul style="list-style-type: none"> • Methodological differences: trade coverage (e.g., data collection thresholds, treatment of specific goods or movements of goods), definition of partner country (e.g., country of re-export vs. country of origin), different valuation principles (e.g., FOB valuation for exports and CIF valuation for imports); • Time lag: the same operation is recorded for a different reference period; • Different practices in the treatment of revisions; and <p>Problems of currency conversion.</p>
16.2	Comparability – over time	<p>The following methodological changes led to breaks in Swiss foreign trade time series:</p> <p>Since 2002: including electricity, returned goods and goods for processing without change of ownership.</p> <p>Since 2012 (imports): country of origin instead of country of production.</p> <p>Since 2012: including non-monetary gold and silver bullions as well as coins in the general total (total 2).</p> <p>Since 2013: electricity flows calculated according to a new method.</p>
16.3	Coherence – cross domain	<p>Gross domestic product (GDP) GDP and balance of payment (BoP) data are consistent with trade in goods data to the best extent possible, i.e., within the limits of the respective methodological concepts.</p>
16.4	Coherence – internal	<p>Internal coherence is ensured between index data and absolute data as well as between all products classifications respectively country groups classifications.</p> <p>According to international recommendations, the aggregation consistency is not guaranteed for seasonally adjusted data.</p>

17 Cost and burden		
17	Cost and burden	5.1 million CHF (aggregated amount for compiling, consultancy and communication)

18 Data revision		
18.1	Data revision – policy	Provisional data are revised monthly. Final data are available in May of the following year. Exceptional revisions remain reserved in case of very severe errors.
18.2	Data revision – practice	<p>Annual data are provisional when first released. Final data are available in May of the following year. Preliminary results are displayed in the database Swiss-Impex with the status «provisional data».</p> <p>Major revisions are communicated to users as appropriate.</p> <p>Revision studies are carried out monthly in order to monitor statistical quality and reliability. The results are reported to Eurostat, if the impact of the correction is higher than the limit, yearly reported by Eurostat.</p>

Report updated on March 15th 2023.