RELATIONSHIP BETWEEN FOREIGN TRADE IN GOODS STATISTICS AND GOODS STATISTICS IN THE BALANCE OF PAYMENTS

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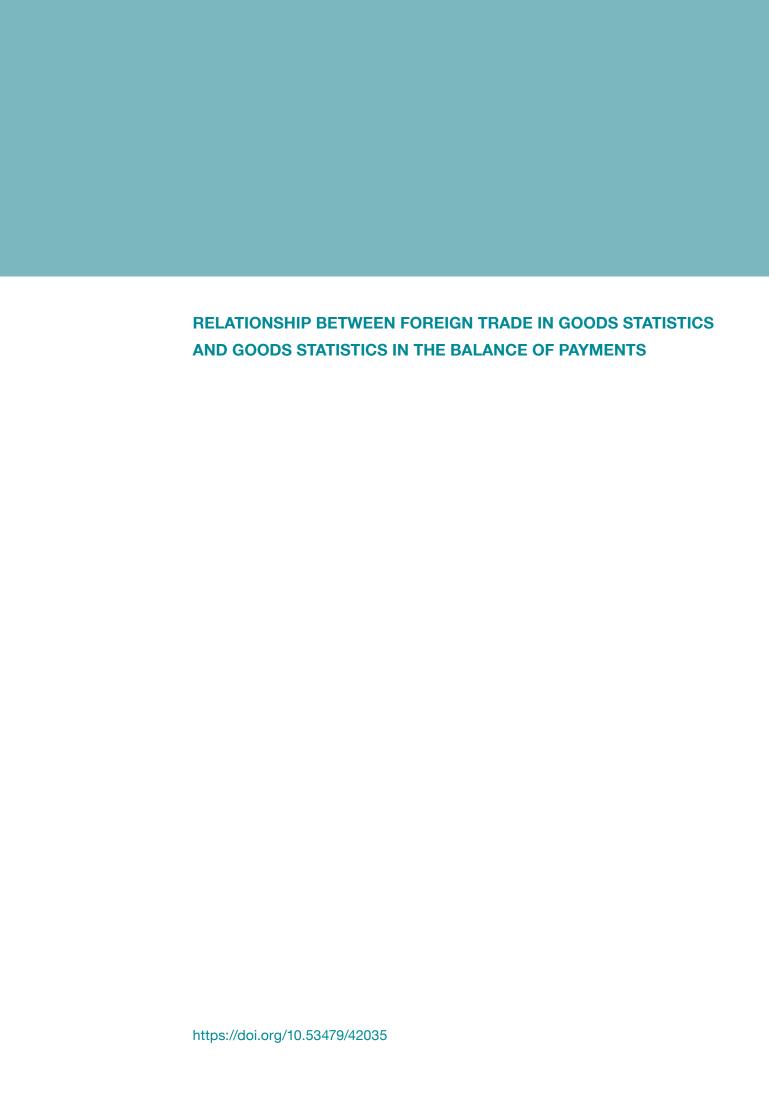
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ABSTRACT

In Spain, the data on exports and imports of goods are recorded both in the foreign trade in goods statistics published by the State Secretariat for Trade and the Spanish Tax Agency (AEAT) and under the goods heading in the balance of payments (BoP) published by the Banco de España. However, although both statistics are based on information declared to the AEAT Customs and Excise Department, there are methodological differences between them. This note explains the nature of such differences and the complementary information and adjustments applied to compile the BoP data. It also explains the method followed to estimate a breakdown by product of the BoP's goods data, based on the United Nations' Standard International Trade Classification (SITC Rev.4).

Keywords: foreign trade in goods, Balance of Payments, UN Standard International Trade Classification (SITC Rev.4).

JEL classification: F10, C82.

RESUMEN

En España, los datos de exportaciones e importaciones de bienes se registran tanto en las estadísticas de comercio exterior de bienes que publican la Secretaría de Estado de Comercio y la Agencia Tributaria (AEAT) como en la rúbrica de bienes de la Balanza de Pagos (BP) que publica el Banco de España. No obstante, aunque ambas estadísticas se basan en la información declarada al Departamento de Aduanas de la AEAT, existen diferencias metodológicas entre ellas. En esta nota se explica la naturaleza de dichas diferencias, así como la información complementaria y los ajustes que se aplican para elaborar los datos de la BP. Finalmente, se expone el método seguido para estimar un desglose por producto de los datos de bienes de la BP, basado en la Clasificación Uniforme para el Comercio Internacional de Naciones Unidas (CUCI Rev4).

Palabras clave: comercio exterior de bienes, Balanza de Pagos, Clasificación Uniforme para el Comercio Internacional de Naciones Unidas (CUCI Rev4).

Códigos JEL: F10, C82.

RELATIONSHIP BETWEEN FOREIGN TRADE IN GOODS STATISTICS AND GOODS STATISTICS IN THE BALANCE OF PAYMENTS

1 Introduction

The data on goods imports and exports are recorded in both primary foreign trade in goods statistics (International Trade in Goods Statistics (ITGS) in the European context and foreign trade statistics in Spain) and the balance of payments (BoP). However, the BoP figures differ from those in primary foreign trade in goods statistics, as the methodology used at international level is different.

The breakdown of the figures is also different. In particular, the breakdown by product in foreign trade statistics has not been available in the BoP data until now. In recent years, issues such as supply problems in global value chains,² energy price developments and heightened protectionist tensions have increased interest in the type of products exported and imported. Having this breakdown also in the BoP data could therefore be useful. This has led to the publication of an estimate of the breakdown by product of the goods heading in the BoP since November 2025. The new edition of the BoP manual published in 2025 recommends that this breakdown be disseminated as complementary information.³ In 2024 the ECB began to provide it for euro area data.

Section 2 of this note provides a brief overview of the available information. Section 3 describes the differences in the way the above-mentioned statistics are compiled. The last section explains the method followed to estimate the breakdown by product of the goods import and export data in the BoP.

2 Information available in foreign trade in goods statistics and goods statistics in the balance of payments

In Spain, both the State Secretariat for Trade in the Ministry of the Economy, Trade and Business and the Tax Agency (AEAT) in the Ministry of Finance publish foreign trade statistics, including, among other aspects, the type of product exported or imported.

¹ The National Accounts also reflect this information, with the same figures as the BoP. The "goods" and "current and capital accounts" headings in the BoP are compiled in coordination with the National Statistics Institute (INE by its Spanish acronym) to ensure that the results are consistent.

² Global value chains relate to cross-border production and the international distribution of products. They typically comprise various processes, from the purchase of the raw materials to the delivery of the finished goods to the consumer. In other words, they include all the activities from the product concept, design and marketing to after-sale service.

³ See Annexes 5 and 14 in Integrated Balance of Payments and International Investment Positions Manual, Seventh Edition (BPM7).

In both cases, the source of the data are the declarations that operators must submit to the AEAT Customs and Excise Department to comply with their statistical and fiscal obligations.

- The data relating to the trading of goods between European Union (EU) countries are from Intrastat.
- In the case of extra-EU trade, the source is the Single Administrative Document (SAD).

However, the statistics of the State Secretariat for Trade and those of the AEAT differ as follows:

- The former are compiled exclusively based on declared data.
- In the latter, in addition to the declared data, the AEAT includes an estimation of undeclared intra-EU trade for total trade but not for the breakdown by country or type of product where the lack of declaration is due either to the operation falling under the minimum threshold for mandatory declaration or to other reasons.
- In addition, the AEAT adjusts the reference date of declarations submitted before or after the border crossing and its publications draw a distinction between data on the date of submitting the declaration and data on the date of the transaction (when it actually takes place). In the Banco de España's BoP statistics, goods export and import data are currently published monthly aggregated with services data and quarterly on their own.

As in the case of foreign trade statistics, the main source for compiling the goods data in the BoP is the information declared to the AEAT Customs and Excise Department. However, due to the methodological differences between them (as the former are primary statistics and the latter are macroeconomic statistics), in order to estimate goods in the BoP, information not included in customs data needs to be added and certain adjustments need to be made.

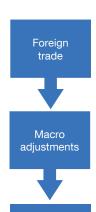
3 Differences between foreign trade statistics and the goods heading in the balance of payments

The methodological differences between foreign trade data and the goods data in the BoP, and the adjustments made in each of them, are summarised in Figure 1.

The main difference is that, while foreign trade statistics focus on goods that *physically cross* the border, the BoP records the value of the goods whose *economic ownership* is transferred between a resident and a non-resident, regardless of whether the goods actually cross the

Figure 1

Correspondence of foreign trade data and goods statistics in the BoP



- · Records goods that cross the border.
- · Valuation includes the related insurance and freight services (cost, insurance and freight, CIF).
- · Excludes illegal activities.
- · Goods that cross the border with no change of ownership (for processing or repair) are subtracted.
- · Goods whose ownership changes without crossing the border (triangular transactions or merchanting) are added.

Balance of payments

- · Records the goods when ownership changes.
- · Valuation excludes the related insurance and freight services (free on board, FOB).
- · Includes illegal activities.

SOURCE: Banco de España.

border of the compiling country.⁴ This means that, in order to prepare the BoP statistics, the Banco de España must:

- Subtract from customs data the goods that cross the border without changing ownership.
 These are mainly goods that are sent or received from abroad to be transformed or repaired. Detailed customs data on the nature of the transactions⁵ and data on processing and repair services from the INE's International Trade in Services Survey (ITSS) are used for this calculation.
- Add the goods that change ownership, even if they do not cross the border. This
 primarily includes triangular or merchanting transactions (goods that are purchased
 abroad and sold abroad without entering or leaving Spain).⁶ The source for these
 transactions is the ITSS. An estimate of imports of goods that do not cross the border,
 such as supplies abroad to means of transport, is also added.

Furthermore, customs foreign trade data value imports at cost, insurance and freight (CIF), while the BoP uses their free-on-board (FOB) value. This means that to calculate the BoP goods heading using customs data, the estimated value of the associated freight and insurance must be subtracted (CIF/FOB adjustment). More specifically, the freight and insurance associated with transporting the goods from the exporting country's border to that of the importing country must be subtracted. The INE makes this estimation in the National Accounts and provides it to the Banco de España.

⁴ Provided that the transactions are not purchases relating to travel, construction projects or government enclaves. If they are, they would be recorded under the relevant services headings.

⁵ The nature of a transaction refers to the way goods are exchanged between two operators.

⁶ Since 2023, for data from 2016 onwards, merchanting includes certain operations related to factoryless goods production.

Lastly, the BoP goods data, unlike foreign trade data, include an estimation of goods whose ownership is transferred and shipped across a border illegally (illegal trade). This estimation is also provided by the INE.

4 Estimation of the breakdown by product in the balance of payments

In recent years, international conflicts and trade policy shifts have increased interest in the type of products exported and/or imported. Such information could generally be found in foreign trade in goods statistics, but in November 2025 it began to be published under the framework of Spain's BoP as well.

It should be noted that the ECB began to publish such a breakdown for the euro area in 2024. The ECB estimates it applying the ITGS structure to the BoP data by product type in line with the SITC Rev.4. For data in Spain, a slightly different estimation method has been applied, accounting for the particular characteristics of each of the components added or adjusted in order to map customs foreign trade data to BoP data. In addition, slightly more detailed results are obtained than those published by the ECB. To be specific, the groups shown in Table 1 are used.

One of the reasons for choosing the SITC over alternative classification systems (such as the statistical classification of products by activity, CPA) is that the SITC is tailored to the international goods trade, whereas the CPA covers both goods and services. Furthermore, the SITC is a globally recognised classification system widely used by international trade analysts, whereas the CPA is European in scope. Lastly, both the ECB (Table 1 in "Euro area quarterly balance of payments and international investment position: first quarter of 2024") and Eurostat ("International trade in goods by type of good") publish data using the SITC.

The following outlines how the breakdown has been calculated using the SITC for each of the components.

4.1 Declared trade

In this case, customs data provided to the Banco de España (whether originating in Intrastat or the SAD) include integrated tariff of the European Communities (TARIC) code⁸ data, which allows for the equivalent SITC product type to be estimated. To map the customs TARIC code to the SITC used in the BoP, a mapping table is used showing correspondence between the

^{7 &}quot;Products" are understood to be the outputs of economic activities, whether goods or services (see Article 1 of Regulation (EC) No 451/2008). The INE uses the CPA to prepare the supply and use tables.

⁸ The TARIC is useful for understanding the trade policy applicable to each type of merchandise (customs duties, value-added tax on imports and export subsidies) and for statistical purposes. It is linked to the World Customs Organization's Harmonized System and to the CN, which is tailored to EU needs.

Table 1

BoP goods heading by type of product

| Food, beverages and tobacco Raw materials | 0 1 | Food and live animals Beverages and tobacco | | |
|--|--------|---|--|--|
| Raw materials | 1 | Beverages and tobacco | | |
| Raw materials | | | | |
| | 2 | Crude materials, inedible, except fuels | | |
| | 4 | Animal and vegetable oils, fats and waxes | | |
| Energy | 3 | Mineral fuels, lubricants and related materials | | |
| Chemicals | 5 | Chemicals and related products | | |
| Pharmaceuticals | 541 | Medicinal and pharmaceutical products other than medicaments of group 542 | | |
| | 542 | Medicaments (including veterinary medicaments) | | |
| Machinery and transport equipment 7 | | Machinery and transport equipment | | |
| Automotive | 781 | Motor cars and other motor vehicles principally designed for the transport of persons | | |
| | 784 | Parts and accessories of the motor vehicles | | |
| | 785 | Motor cycles and cycles | | |
| | 713 | Internal combustion piston engines and parts thereof | | |
| Other manufactured products | 6 | Manufactured goods classified chiefly by material | | |
| | 8 | Miscellaneous manufactured articles | | |
| Other | 9 | Commodities and transactions not classified elsewhere in the SITC | | |

Combined Nomenclature (CN) (the first eight digits of the TARIC code) and the five-digit SITC codes (basic headings) prepared by the Customs and Excise Department itself.⁹ At a later stage, the values for the Table 1 groups can be calculated by aggregating amounts under the five-digit SITC codes.¹⁰ Here, the main product groups are machinery and other manufactured products (exports and imports), food (exports) and chemicals (imports).

4.2 Estimations of undeclared trade

These estimations, which the Customs and Excise Department also provides to the Banco de España, do not include any information on product type. To calculate the new BoP breakdown, the same SITC group structure is used as for the data on declared trade.

⁹ Nevertheless, there are some codes – beginning with 98 ("industrial plant" in Regulation (EC) No 840/96) and 99 ("special combined nomenclature codes") – which, generally speaking, cannot be matched to a single SITC group. Such cases are assigned to "Other". The following codes are considered exceptions: 9930 27 00 (goods of CN chapter 27 (i.e. fuels, raw materials and mineral products) delivered to vessels and aircraft), which is assigned to energy; 9930 24 00 (goods of CN chapters 1-24 (i.e. food, drink and tobacco) delivered to vessels and aircraft), which is assigned to food, drink and tobacco; and 9880 85 00 (goods of CN chapter 85 (i.e. industrial equipment), which is assigned to machinery.

^{10 &}quot;Pharmaceuticals" and "automotive" map to the "medications" and "automotive" economic sectors published by the Ministry of the Economy, Trade and Business's State Secretariat for Trade. For more details, see the published mapping table.

4.3 Goods shipped abroad to be processed or repaired or with no transfer of ownership

As noted in Section 3, these goods can be identified in customs data on the basis of the nature of the declared transaction. For these goods, the breakdown by product type is obtained from the SITC group structure of declared transactions involving processing or repair.¹¹ In this case, product exports fall mainly under machinery and other manufactured products while product imports fall mainly under chemicals and machinery.¹²

4.4 Merchanting (triangular transactions)

The source used to record this type of transaction in the BoP (the INE's ITSS) does not provide information on the type of product being bought or sold. However, it does offer insight into the merchant's core business (via the code assigned according to the Spanish National Classification of Economic Activities (CNAE). To calculate the breakdown by product for the BoP, codes in the CNAE are mapped to SITC groups, assuming that firms classified under a certain code import/export goods directly related to their activity. For example, a firm registered under CNAE code 1013 (production of meat and poultry meat products) is associated with the SITC group of food, drink and tobacco under the assumption that its productive activity entails the export/import of meat products and not the marketing of other goods, such as machinery. In spite of its limitations (especially regarding imports), such an approximation has allowed activities to be operationally linked to products in most cases. For activities that could not be linked to a single SITC group or that are not associated with trade in goods, amounts have been assigned to "other". In the case of merchanting, products fall mainly under the "other manufactured products" group.

4.5 CIF/FOB adjustment

As noted in Section 3, this adjustment is needed to convert customs CIF-based data to the FOB valuation required under the BoP methodology. To break down by product type the (aggregate) estimation¹⁵ of this adjustment that the INE provides to the Banco de España, and given that the CIF/FOB adjustment accounts for a small share of BoP imports, it has been

¹¹ The BoP adjustment for goods shipped across the border with no ownership transfer also takes into account an estimated value for the goods after the processing or repair. This component can be calculated by adding the value of the declared transactions of this nature to an estimation of the value of the corresponding service calculated on the basis of the INE's ITSS data. The SITC structure for goods in this category is applied to the total of the BoP adjustment.

¹² Although of a much lower relative amount, goods for processing or repair account for a large share of the "other" category, which can, in certain periods, have some impact on developments in this aggregate.

¹³ This is the case, for example, of CNAE categories relating to intermediaries of unspecified products; to the wholesale or retail trade of various products; and to services, such as hospitality, IT, transportation, etc.

¹⁴ The amount assigned to the "other" category accounts for 4% on average over 2022-24 of the total merchanting amount.

¹⁵ It should be noted that in the National Accounts, as detailed in Articles 3.168 and 3.170(d) of Regulation (EU) No 549/2013 on the European system of national and regional accounts in the European Union, product group estimations are made on a CIF basis.

assumed that the distribution by product is the same as that for overall imports in customs data.

4.6 Illegal trade

Taking into account that the estimation provided by the INE corresponds to transactions associated with tobacco smuggling and drug trafficking, they are assigned to the food, drink and tobacco and chemicals headings.

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