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# Survey on international services transactions of non-financial and insurance companies (direct reporting)

Database handbook

Reference period for the data: from January 2013 to December 2022

Updated in: December 2023

Keywords: non-financial transactions, insurance companies, insurers, balance sheet

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## **General information**

This database contains the data on international trade in services reported by non-financial and insurance companies and gathered through the questionnaire on non-financial quarterly transactions (Transazioni Trimestrali Non Finanziarie, TTN), as part of the Bank of Italy's sample survey called Direct Reporting. The purpose of direct reporting is to compile Italy's balance of payments and net international investment position. In fact, the survey and sample design have been constructed specifically with a view to preparing the statistics for the total of the item 'Other services' in the Balance of Payments. The accuracy of the information gathered to fill in the variables in the database (especially information obtained from a limited number of observations)<sup>1</sup> may therefore be affected by the precision limits inherent to the sampling approach.

## **Reference population**

The reference population for direct reporting is made up of Italian non-financial and insurance companies, which correspond to the total of limited companies registered with the Italian Chambers of Commerce (around one million companies in 2015). The list of units selected in the sample of non-financial transactions only includes limited companies with a turnover of more than ten million euros. It excludes smaller firms and firms that are not required to prepare a financial statement, such as sole proprietorships, whose cross-border flows have been historically low.

For information on the criteria used to select the firms in the sample, see Section 3.1.1 of the manual 'Balance of Payments and International Investment Position' ([only in Italian](#)).

Until 2022, the sample for the survey of non-financial transactions was made up of 3,500 units and was extracted every two years; as of 2023, the number of selected firms was increased to 5,000 and the sample has a validity of three years. The firms that cease to operate during the period in which they are present in the sample are replaced.

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<sup>1</sup> For a detailed list of the variables, see the document [Database description](#).

To preserve data confidentiality, the company ID code has been anonymized, while keeping the time series intact.

## **Availability period and frequency of the data**

The data for the survey on international trade in services, which cover all the years since 2013, are collected quarterly; the firms in the sample are required to report the information contained in the TTN questionnaire by the end of the month following the reference quarter. The transactions must be recorded in the period in which the service is provided following the accrual basis of accounting.

The database is updated annually in October; the relevant amounts are obtained by adding the values reported for the four quarters of the previous year. The time series may be revised after new reports are submitted by the firms.

## **Data collection and regulatory references**

The Bank of Italy is responsible for compiling Italy's Balance of Payments and International Investment Position statistics pursuant to Article 11(1) of Legislative Decree 195/2008 (published in the Official Journal of the Italian Republic No. 291 of 13.12.2008). Compiling external statistics enables Italy to meet its statistical obligations vis-à-vis the European Central Bank, the European Commission, the International Monetary Fund and other international organizations. For this purpose, the Bank uses a composite set of sources, including a data collection system centred around business surveys (direct reporting) and the survey on the reporting of financial and non-financial transactions carried out by general government vis-à-vis non-resident entities. Direct reporting is regulated by the Bank of Italy measure issued on 16 February 2016 (published in the Official Journal of the Italian Republic – General Series No. 50 of 1 March 2016) as amended (Bank of Italy measure published in the Official Journal of the Italian Republic No. 152 of 1 July 2019).

## **Aggregate statistics and reference publications**

The aggregate data drawn from the database are only partially comparable with those of the balance of payments flow as the database only contains data referring to the firms.

The balance of payments statistics are published monthly by the Bank of Italy and adopt the methodological conventions laid out in the sixth edition of the IMF's manual (BPM6). The data are made available through the Bank of Italy's statistical publications and on its website in the Statistical Database section (BDS).

## **Databases structure and characteristics**

The database consists of one CSV file that can be used for statistical processing but cannot be downloaded. The dataset does not contain all the types of transactions covered by the TTN questionnaire but only a subset referring to some types of services covered by the balance of payments, as detailed in Table 1 of the Appendix.<sup>2</sup>

The TTN questionnaire is divided into four sections, designed to collect data on:

- Reporting agent's basic company information;
- Business (e.g. ATECO code, sector of economic activity) and balance sheet data;
- Contact information;
- Data on transactions in services, intangible assets, unilateral transfers, wages and salaries.

In addition to the transaction amounts, the database contains variables relating to the reporting agent's business and balance sheet data, such as balance sheet assets, turnover, net equity and number of employees. To preserve confidentiality, these variables are provided in the form of size classes (see the section 'Variables description and characteristics'). Firms are classified by geographical macro-area (North-East, North-West, Centre, South and Islands) rather than by the municipality in which they are headquartered.

The amounts are in euros.

## **Methodology and imputation of missing data**

The aggregates relating to the whole population are calculated with a separate ratio estimator, using turnover ( $X$ ) as an auxiliary variable, whose expression is given by:

$$\hat{Y}_{qs} = \sum_{h=1}^L \frac{\hat{Y}_h}{\hat{X}_h} \cdot X_h$$

where:

$\hat{Y}_{qs}$  is the separate ratio estimator of total non-financial transactions;

$X_h$  is the total turnover in the population for the H stratum;

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<sup>2</sup> More specifically, cross-border transactions in construction, intangible assets, unilateral transfers, wages and salaries are excluded.

$\hat{X}_h$  is the total turnover in the sample for the H stratum.

The variance of the estimator is given by:

$$v(\hat{Y}_{qs}) = \sum_{h=1}^L N_h^2 \cdot \frac{1-f_h}{n_h} \cdot \frac{\sum_{i=1}^{n_h} (y_{hi} - \hat{R}_h \cdot x_{hi})^2}{n_h - 1}$$

where:

$y_{hi}$  is total non-financial transactions reported by the firm in the H stratum;

$$\hat{R}_h = \frac{\hat{Y}_h}{\hat{X}_h};$$

$X_{hi}$  is the turnover value for the firm in the H stratum.

Each firm in the sample is assigned a grossing-up coefficient that indicates the number of firms in the population represented by that firm. The weights are recalculated quarterly at each round of the survey based on the number of firms that actually transmitted the data in the reference period.

Please note that each firm in the database is uniquely identified by an identification code. The code, generated randomly, cannot be selected or viewed by the researcher.

## **Variables description and characteristics**

The description of the variables and the domain of the relevant attributes are contained in this excel file.

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**Variables description and characteristics** [file](#)

## **How to cite the database**

Banca d'Italia (2022): Survey on international services transactions of non-financial and insurance companies, October 2023 (from January 2013 to December 2022).



## Appendix

**Table 1**

**TYPES OF TRANSACTIONS IN THE DATABASE**

TELECOMMUNICATIONS AND POSTAL SERVICES
INSURANCE PREMIUMS
INSURANCE CLAIMS
AUXILIARY INSURANCE SERVICES
FINANCIAL SERVICES
COMPUTER AND INFORMATION SERVICES
CHARGES FOR THE USE OF INTELLECTUAL PROPERTY N.I.E
TRADE-RELATED AND OPERATIONAL LEASING SERVICES
PROFESSIONAL AND MANAGEMENT CONSULTING SERVICES
RESEARCH AND DEVELOPMENT SERVICES
ARCHITECTURAL, ENGINEERING, SCIENTIFIC AND OTHER TECHNICAL SERVICES
WASTE TREATMENT AND DE-POLLUTION, AGRICULTURAL AND MINING SERVICES
OTHER BUSINESS SERVICES N.I.E
PERSONAL, CULTURAL AND RECREATIONAL SERVICES
GOVERNMENT GOODS AND SERVICES N.I.E