# Banking data ancillary tables (BANCI)

Database handbook

Reference period for the data: from January 2003 to December 2022

Updated in: November 2023

Keywords: bank, merger, acquisition, banking group



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#### **General information**

The analysis of banking data must take into account extraordinary operations, such as mergers and acquisitions between credit institutions<sup>1</sup>, and whether they belong to any groups. Information on the size class or entity category for each bank is also relevant.

This database is made available to researchers to manage structural changes within the banking system and combine other information relevant to the use of the banking data database (IBBaSS) made available by the Bank of Italy to researchers outside the Bank.

## **Reference population**

The database includes banks operating in Italy (including foreign branches and subsidiaries) and, as of October 2007, Cassa Depositi e Prestiti (CDP).

The bank identification code has been modified to preserve data confidentiality, while ensuring consistency with IBBaSS, made available to researchers outside the Bank of Italy.

# Availability period and frequency of the data

The data are available from January 2003 to December 2022, reporting at monthly frequency.

The database is updated annually, in June.

## Data collection and regulatory references

Mergers and acquisitions are entered manually using the administrative data held by the Bank of Italy for the calendar year in which they occurred.

<sup>&</sup>lt;sup>1</sup> There are also spin-offs or transfers of assets and liabilities within the banking system, which cause discontinuities in the time series.

Banking groups are defined as per Section 1 (Articles 60-64) of the Consolidated Law on Banking (TUB).

### Aggregated statistics and reference publications

Information on the structure of the banking system is available on the Bank of Italy's website through the application Supervisory registers and lists.<sup>2</sup>

For more details on the classifications used in the database, see the statistical publication 'Banks and Financial Institutions: Branch Network'.

#### **Databases structure and characteristics**

The database consists of two separate tables (csv files) that can be used for statistical processing but cannot be downloaded:

- 1) mergers and acquisitions (fui);
- 2) affiliation to banking groups and other information on the bank (grucla).

Table 1) for mergers and acquisitions contains:

- a) idba\_ps: identification code of the bank recorded in the banking data databases;
- b) a variable for each year (e.g. cve22 for 2022), since 2003, with information, where relevant, on the bank merging into or being acquired by another credit institution. In particular, for banks that have been acquired, the cveYY variable contains the identification code of the acquiring credit institution for the year of reference.<sup>3</sup> This table can be used to get a list of

<sup>&</sup>lt;sup>2</sup>This contains information on the banks entered in the supervisory registers, as well as historical data on groups (banking, financial, securities investment firms), subsidiaries and branches.

<sup>&</sup>lt;sup>3</sup> Assuming that YY refers to the year 2022 and that, over the years, Bank 'C' was acquired by Bank 'B' in 2007 and Bank 'B' was subsequently acquired by Bank 'A' in 2020:

<sup>•</sup> Variables cve03 to cve06 take the value 'C';

<sup>•</sup> Variables cve07 to cve19 take the value 'B';

<sup>•</sup> Variables cve20 to cve22 take the value 'A'.

all operating banks, obtain continuous time series and deal with any loss of data regarding the acquired bank (see Example 1 in the Appendix).

If the bank has not been involved in any such operations, the identification code remains unchanged from the previous year.

Table 2) for banking groups and other information contains:

- a) idba\_ps: identification code of the bank recorded in the banking data databases;
- b) data: date of reference (monthly, in the format YYYYMMDD, where the day is always the last day of the month);
- c) *idba\_capogruppo\_ps*: identification code of the parent credit institution if the bank belongs to a group,<sup>4</sup> or identification code of the bank itself when there is no group affiliation.
- d) cla\_dim: size class and identification of Italian branches of foreign banks as a separate class;
- e) *flag\_bcc*: category of the bank, distinguishing, in particular, cooperative credit banks from other types of institutions.

# Methodology and imputation of missing data

The mergers and acquisitions table does not give the exact month in which the merger or acquisition took place; it 'aggregates' operations up to a given year.

The size classification in the banking groups table is based on consolidated total assets, if the bank belongs to a group, or on individual total assets for stand-alone banks. The size classes identified on the basis of these criteria have been aggregated (see the section 'Variables description and characteristics') to ensure confidentiality, given the particular nature of the data processed.

The variable indicating parent credit institution in the banking groups table is not perfectly aligned with the map of groups as defined by the TUB. Specifically, in the event of an acquisition, the sold bank (the acquiring bank and the sold bank often belong to the same banking group) disappears from the map of the groups but continues to submit reports, thus its amounts are still recorded in

<sup>&</sup>lt;sup>4</sup> For parent credit institutions, the code is the same as the identification code of the bank itself.

the database. Any discrepancies and time mismatch between the administrative data and the amounts reported by the banks as a result of this event, are treated as follows: reported amounts are attributed to the missing parent bank by replicating the identification code of the parent company in the map as defined for TUB purposes (see Example 2 in the Appendix). Finally, when a null value still occurs because the bank does not belong to a group, the field is filled with the identification code of the bank itself.

## Variables description and characteristics

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

Variables description and characteristics codes/domains)

file (format of the variables and

#### How to cite the database

Banca d'Italia (2023): Banking data ancillary tables, September 2023 (from January 2003 to December 2022).

# Appendix

**Example 1: Mergers and acquisitions** 

Bank C is acquired by B, which in turn is acquired by A (amounts).

|            | BANK C | BANK B | BANK A | $\rightarrow$ | BANK A | BANK A | BANK A | $\rightarrow$ | BANK A |
|------------|--------|--------|--------|---------------|--------|--------|--------|---------------|--------|
| 2003-01-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-02-28 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-03-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-04-30 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-05-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-06-30 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-07-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-08-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-09-30 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-10-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-11-30 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2003-12-31 | 100    | 200    | 300    |               | 100    | 200    | 300    |               | 600    |
| 2004-01-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-02-28 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-03-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-04-30 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-05-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-06-30 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-07-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-08-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-09-30 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-10-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-11-30 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2004-12-31 |        | 300    | 300    |               |        | 300    | 300    |               | 600    |
| 2005-01-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-02-28 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-03-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-04-30 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-05-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-06-30 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-07-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-08-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-09-30 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-10-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-11-30 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-12-31 |        |        | 600    |               |        |        | 600    |               | 600    |
| 2005-12-31 |        |        | 600    |               |        |        | 600    |               | 600    |
|            |        |        |        |               |        |        |        |               |        |

#### Example 2: Imputation of parent bank code with null value

Bank A, belonging to the banking group whose parent bank is PB is acquired by Bank B in 2021. The records in the tables for mergers and acquisitions (fui), and for group affiliation (grucla) would be as follows:

• fui

| data     | idba_ps | cve21 |
|----------|---------|-------|
| 20210531 | Α       | В     |

grucla

| data     | idba_ps | idba_capogruppo_ps |
|----------|---------|--------------------|
| 20210531 | А       | PB                 |
| 20210531 | В       | PB                 |
| 20210630 | В       | PB                 |

Having obtained an extension for reporting purposes from the Bank of Italy, the acquired Bank A continues to report amounts with its old identification code.

#### • IBBaSS

| data     | idba_ps | Amount |
|----------|---------|--------|
| 20210531 | А       | 100    |
| 20210630 | А       | 100    |
| 20210731 | А       | 100    |
| 20210831 | А       | 100    |

In this scenario, however, the table obtained by merging the banking data with data from the group affiliation table would show some missing values after 31 May 2021.

| data     | idba_ps | Amount | idba_capogruppo_ps |
|----------|---------|--------|--------------------|
| 20210531 | А       | 100    | PB                 |
| 20210630 | А       | 100    | NULL               |
| 20210731 | A       | 100    | NULL               |
| 20210831 | A       | 100    | NULL               |

The anomaly is caused by the exclusion of Bank A from the tables that contain the list of all operating banks, since after this date Bank A is shown as merged into Bank B.

Thus, since the reported amounts are matched to fields where the parent bank identification code is missing, the system assigns the last non null value for the parent bank.

| data     | idba_ps | Amount | idba_capogruppo_ps |
|----------|---------|--------|--------------------|
| 20210531 | А       | 100    | РВ                 |
| 20210630 | А       | 100    | РВ                 |
| 20210731 | А       | 100    | PB                 |
| 20210831 | А       | 100    | PB                 |