

# Methods and Sources: Methodological Notes

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## Banks and Money: National Data

'Methods and Sources: Methodological Notes' forms an integral part of the report 'Banks and Money: National Data' and describes its content. The notes comprise five sections, divided into sub-sections. The first three sections refer to each of the three sections of the report: Section 1 regards statistics on banks' balance sheets; Section 2 regards statistics on bank interest rates; Section 3 refers to statistics on the Italian components of the single monetary policy. Section 4 provides further methodological information. The final section deals with revisions to the data.

Longer time series on Italian monetary aggregates, the official discount rate, the official reference rate, and additional information are available in the Statistics section of the Bank of Italy's website.

### **1. First section. Banking statistics: balance sheets and other information**

#### **1.1 Introduction**

The statistics presented in Section 1 refer to all resident banks in Italy, including branches of foreign banks and, from October 2007, the Cassa Depositi e Prestiti SpA (CDP). In order to avoid "indirect confidentiality" issues in banking data, some series, highlighted in the report by asterisks and footnotes, include money market funds data.

Most of the statistics are harmonized according to Eurosystem standards. Banks have been producing statistics harmonized at European level since June 1998. For the previous period the information has been partially estimated on the basis of data available in the Supervisory reports and foreign exchange reports. The statistics shown in Tables 1.15 (BSIB0900) – 1.16 (ATECO200) and 1.18 (TITD0100) – 1.19 (TITD0200) are not harmonized within the Eurosystem.

#### **1.2 Definition of the items and aggregates**

The collection and compilation of harmonized banking statistics is governed by Regulation of 22 January 2021 ECB/2021/2, Regulation ECB/2008/32 and Regulations ECB/2013/33-34-39 and Regulation ECB/2014/30 on the balance sheet of the monetary financial institutions (MFIs) sector,

and by the Guideline of the European Central Bank of 26 March 2021 on balance sheet item statistics and interest rate statistics of monetary financial institutions (ECB/2021/11). The statistics on banks' balance sheets are reported to the Bank of Italy according to the format of the Supervisory Reports. The submission of data is regulated by the Bank of Italy's secondary legislation: Supervisory reports (Circular No. 272/2008) and Supervisory Reports (Circular No. 154/1991).

The statistics cover monthly and annual end-of-period stocks, flows and growth rates. The banks' counterparties (debtors, depositors, holders of securities) are organized according to place of residence (Italy, euro area, rest of the world), institutional sector and economic activity. The institutional sectors correspond to those of the European System of National and Regional Accounts (ESA 2010). The MFIs include: the Bank of Italy, banks, money market funds, electronic money institutions and the Cassa Depositi e Prestiti SpA. General government includes central government and 'other general government', which in turn can be divided into local government and social security funds. 'Other residents' include insurance companies and pension funds, other financial institutions, including non-money market funds, non-financial corporations, households and non-profit institutions serving households. For more details on institutional sectors see the Glossary in the Statistical Appendix to the Annual Report.

The statistics on balance sheet items refer to end-of-period stocks, flows during the reference period and growth rates.

The time series of the 'flows' are calculated by adjusting the differences in stocks to take account of reclassifications, value adjustments, exchange rate fluctuations and any other changes that do not stem from financial transactions. Statistical reclassifications are due, for example, to changes in the reporting population or to the reassignment of balance sheet items; value adjustments are, for example, write-downs of loans or securities.

On the assets side, 'loans' include, besides performing loans, bad debts and reverse repos. 'Bad debts' are those whose full repayment is uncertain because the debtors are insolvent (even when this has not been judicially ascertained) or in a substantially similar situation. The item 'securities other than shares' includes unlisted debt securities and debt securities held to maturity. Listed own shares belonging to the trading portfolio are reported at the fair value of the last trading day of the month the report refers to; other own securities are indicated at their book value; before 2008 the series is partially estimated. The value of securities is given net of short sales. 'Equity holdings' are stated gross of the corresponding provisions for write-downs. The item 'fixed assets' includes movables, buildings, fixed assets to be leased prior to letting and intangible fixed assets, and starting from January 2019, due to the entry into force of the international accounting standard IFRS 16, the operational lease assets.

On the liabilities side, 'deposits' comprise overnight deposits, deposits with agreed maturity and redeemable at notice, and repurchase agreements. Overnight deposits include banker's drafts but not tied accounts. Deposits with agreed maturity include certificates of deposit, tied accounts and tied savings deposits; they also include the issue of subordinated loans. Deposits redeemable at notice include free savings deposits and, as of the data for October 2007, the various forms of CDP postal deposits. Since June 2010, pursuant to the convention introduced by Regulation ECB/2008/32, deposits include in the item 'deposits with agreed maturity of more than two years' those 'related to operations of loan sales', i.e. the proceeds of securitizations and other loan transfers used to fund 'assets that have been sold but are still recognized on the balance sheet'. Table 1.5 (code TSC20200) gives separate information for this series, and it is therefore possible to subtract it from total deposits. The 'debt securities issued' are recorded at face value; they include the issue of subordinated liabilities. From December 2000 onwards the time series includes reverse convertibles among the securities issued with maturity up to two years. As of December 2011, the item 'debt securities issued' include those issued with a state guarantee under Decree Law 201/2011. Up to November 2017, the item 'debt securities issued' included own debt securities issues bought back.

The item 'capital and reserves' comprises share capital, reserves and other instruments representing net equity other than capital and reserves. Since June 2010, this item includes loan loss provisions previously itemized in 'other liabilities'. Since June 2015, 'capital and reserves' includes profits (or losses) carried forward and profits (or losses) accumulating during the accounting period which were previously itemized in 'other assets' and 'other liabilities'. Since December 2017 the item also includes income and expenses directly recognized in equity, previously included in the items 'other assets' and 'other liabilities'.

The items 'other assets' and 'other liabilities' include the premiums on options and margins of variation of financial derivatives. As a rule, the latter are considered as off-balance-sheet positions.

The time series of the flows of 'securitizations and other sales' of loans derecognized from balance sheets are calculated from the differences in the stocks (delta stock) of securitized loans derecognized from the balance sheet, whether serviced by a bank or non-bank servicer, adjusted to take account of those items that do not stem from financial transactions and adding the flows of 'other loan transfers' apart from securitizations. From June 2014 onwards, an adjustment was made for loan sales between MFIs resident in the euro area and for value adjustments on securitized loans derecognized from banks' balance sheets.

The statistics on loans to producer households and non-financial corporations are divided into 25 branches of economic activity, defined on the basis of the ATECO 2007 classification, the Italian version of the European statistical classification NACE Rev. 2 adopted under Regulation (EC) No 1893/2006. The 25 branches correspond to the maximum level of aggregation of the ATECO 2007 classification ('sections'). For the 'Manufacturing' branch only (Section C in the ATECO 2007 classification), a further breakdown into 11 subgroups is provided. Data prior to March 2011 are quarterly and partly estimated on the basis of data available in ATECO 1981 and in the Central Risk Register. Previous time series, based on ATECO 1981 and available from June 1998 to May 2010, are available on the Bank of Italy's website.

Loans, and the detail relating to bad loans, are valued at nominal value, gross of provisions (write downs) and net of write-offs. These time series could differ from other series valued at the accounting principle which are available in other publications by the Bank of Italy (in particular in the report "Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area" tables TRI30266 e TRI30267). As for risk analysis on bad loans, it is preferable to use the series at the accounting principle since they are more related to the banking risk and can be evaluated considering the wider perimeter of non performing loans whose definition is harmonized at the European level.

Bad debts net of provisions are obtained by subtracting from bad debts both the provisions (entered in reporting banks' accounts), which serve to adjust the values of loans, and the cumulative amount of the write-downs made directly in the accounts (direct write-downs). The time series – available as of December 2008 – is obtained from the monthly reports submitted for statistical purposes and may differ in some periods from the data derived from banks' balance sheets owing to the different timing of the entries in the accounting records. Up until the data of May 2012 the time series is partially estimated.

'Securities of third parties in deposit' include those held: for custody or administration; in connection with the activity of the depositary bank; for portfolio management; and for other purposes. They do not include securities deposited by banks and central banks. Starting with the data of December 2013, securities of third parties held in deposit include data of Cassa Depositi e Prestiti SpA and overdue securities that have not yet been redeemed and were previously not counted. The time series of 'bank bonds' in deposit includes structured and covered bonds. The rest of the world includes the holdings of residents of other euro-area countries.

### **1.3 Content of the figures and tables**

Figures 1 and 2, printed on the first page of 'Banks and Money: National Data', show the twelve-month percentage change of bank loans by sector and of bank funding. As for the methodology underlying the calculation of the 12-month percentage changes see Section 4. The data refer to business activity with counterparties resident in Italy. The private sector includes households, non-profit institutions serving households, non-financial corporations, insurance companies, pension funds and other financial institutions; central counterparties are not included. The loan growth rates are calculated by including loans not reported on banks' balance sheets because they have been securitized or otherwise transferred. The flow of derecognized loans is calculated by adjusting the change in the stocks of securitized loans that have been taken off the books, whether serviced by a bank or a non-bank servicer, to take account of items that do not originate from financial transactions, and adding the flows of 'other sales' of non-securitized loans. Starting in June 2014, corrections are made to the data on loan sales between MFIs resident in the

euro area and value adjustments on securitized loans derecognized from banks' balance sheets. Loans derecognized from banks' balance sheets due to securitizations or to other loan transfers are partially estimated up until May 2010. The total deposit growth rate excludes transactions made with central counterparties and deposits related to securitizations and other loan sales (i.e. the deposits that Regulation ECB /2008/32 requires to be valued, against loans and/or other assets sold and/or securitized but not derecognized, in the item 'deposits', placing them in the maturity category of 'more than two years' and the deposits valued in order to offset the purchase of securities related to own securitizations of non-derecognized loans). Overnight deposits include those placed by 'other general government'.

Table 1.1 (BSIB0100, Assets) and Table 1.2 (BSIB0200, Liabilities) summarize the main asset and liability items of the balance sheet. Table 1.3 (BSIB0300) breaks down total deposits by customer sector. Table 1.4 (BSIB0400) provides information on flows of deposits and debt securities. Table 1.5 (BSIB0500) provides a breakdown of funding by instrument.

Table 1.6 (BSIB0600) disaggregates loans according to the sector that debtors belong to. Table 1.7 (BSIB0700) gives information on the flows of loans by institutional sector. Table 1.8 (BSIB0800) shows loans to households by purpose and original maturity, and loans to non-financial corporations by original maturity. Non-profit institutions are included with households. Table 1.9 (ATECO100) presents loans to producer households and non-financial corporations divided into branches of economic activity.

Table 1.10 (CARB0100) and Table 1.11 (CARB0200) give the stocks of securitized loans originating from banks resident in Italy, serviced by bank and non-bank servicers. The time series of Table 1.10 include all securitized loans, both those derecognized from banks' balance sheets (derecognition) and those that have not been taken off the books. The time series of Table 1.11 give the breakdown only for the amounts of the securitizations of loans that have been derecognized from the balance sheet. In both tables data are given for the securitizations of bad loans and the institutional sector to which the borrower of the securitized loan belongs. Table 1.12 (CARB0300) gives the time series of the flows of 'securitizations and other transfers' of loans derecognized from banks' balance sheets used in the computation of the growth rate of loans.

Tables 1.13 (BSID0100) and 1.14 (BSID0200) give the one-month percentage changes on an annual basis in bank funding, loans and holdings of securities. Both deposits and loans are net of loans sales and of transactions with central counterparties. The one-month rates of growth are calculated net of the changes due to reclassifications, exchange rate variations, value adjustments and other changes that do not originate from transactions. The one-month percentage changes are expressed on an annual basis and calculated on seasonally-adjusted data where appropriate.

Table 1.15 (BSIB0900) divides bad debts according to the institutional sector that debtors resident in Italy belong to. The times series of flows of bad debts are also calculated by adjusting the changes in stocks of total bad debts to take account of reclassifications, value adjustments, exchange rate variations and any other changes that do not originate from economic transactions. As in the case of loans, part of the flows of bad debts is attributable to 'securitizations and other loan transfers' and shown separately in the table. In calculating the flow, bad debts include the total amount of value adjustments reported on loans, both entered in the balance sheet and derecognized, and exclude intra-bank sales. Table 1.16 (ATECO200) gives the bad debts of producer households and non-financial corporations divided into branches of economic activity.

Table 1.17 (TITP0100) provides a breakdown by type of securities, other than shares, held in banks' portfolio. Tables 1.18 (TITD0100) and 1.19 (TITD0200) identify, respectively, the sectors that hold third parties' securities in deposit with the banks and the financial instruments. Table 1.18 refers only to debt securities (at face value), while Table 1.19 refers to debt securities and equity (at fair value).

## 1.4 Statistical breaks

In the statistics compiled according to the common Eurosystem methodology, the data on the flows and growth rates are calculated net of statistical breaks. The stock series can record statistical breaks.

The time series of the stocks of interbank deposits and loans, of 'capital and reserves' and 'equity issued by MFIs' record statistical breaks owing to the reorganization of banking groups. The other stock series record breaks owing to reclassifications such as, for example, changes in the reporting population or reassignments of balance sheet items. The most significant breaks in the stock series of banks' balance sheets are due to the events listed below.

- Since October 2007, Cassa Depositi e Prestiti SpA is included in the set of reporting banks.
- In October 2008, November 2010, December 2011, and January and February 2014, the time series of the stocks of deposits and of interbank lending with counterparties in Italy, and the time series 'capital and reserves' and 'shares and other equity issued by MFIs resident in Italy' show some discontinuities due to the effects of the reorganization of major banking groups; such transactions almost entirely explain the changes compared to previous months.
- In November 2008 the figures for loans with maturity up to one year and overnight deposits were influenced by the postponement to 1 December of the payment of the second installment on account of self-assessed taxes due to the fact that the deadline of 30 November fell on a Sunday. If this had not been the case, the rate of growth in loans would have been higher and that of deposits lower.
- The entry into force of the new Regulation ECB/2008/32 in June 2010 and some changes to the supervisory reports have produced some breaks in the time series on loans, deposits, and portfolio securities and, accordingly, in the series on total assets and total liabilities on banks' balance sheets. The overall impact of this break on the aggregate system-wide balance sheet is estimated at €147 billion. The impact on the main items involved has been as follows.
  - Since June 2010, time series on loans include securitized, or otherwise transferred, loans which do not satisfy the criteria for derecognition as established in the international accounting standards (IAS), in the same ways as balance sheets are drawn up. The adoption of these criteria implied the re-recognition of assets that had previously been removed from the balance sheet, with a corresponding increase in total loans for an amount equal to almost €66 billion, of which €6.5 billion to non-financial corporations and €59 billion to households (almost 4 billion of which in turn were owing to loans for 'consumer credit'; €49 billion for 'house purchase' and €5.6 billion for 'other loans').
  - Since June 2010, the item 'deposits with agreed maturity over two years' includes the proceeds of securitizations and other sales of loans used to fund 'assets sold and not derecognized' and the purchase of the securities arising from their own securitizations of loans that were not derecognized. The effect amounts to around €147 billion. This series is reported separately in Table 1.5 (BSIB0500).
  - Again since June 2010, holdings of securities include the asset-backed securities bought back by the same bank when the securitized loans have been 'transferred and not derecognized', which had previously been only partially included in the series. The effect amounts to around €81 billion. This series is reported separately in Table 1.7 (BSIB0700).
- In January 2011 and January 2014 bad debts and bad debts net of provisions were affected by breaks owing to the reorganization carried out by a number of banking groups. These operations explain most of the changes compared with the preceding months.
- Starting in December 2012, holdings of securities and deposits with agreed maturity over two years, and the related breakdowns, include securities bought back by banks in connection with securitizations of securities transferred and not derecognized.
- In January and July 2014, again owing to the reorganization of banking groups, a break was recorded in stocks of loans to non-financial corporations and to other financial institutions.
- In February 2014 there was a statistical break in the holdings of securities other than equity issued by other residents in other euro-area countries and the deposits placed by residents in other countries of the euro area.
- In January 2015 the entry into force of Regulation ECB/2013/33, following on the transposition of the ESA2010, resulted in the reclassification of holding companies from the 'non-financial corporations' sector to 'other financial institutions' sector. The amount of deposits reclassified overall between the two sectors at the accounting date of December 2014 is estimated at around €8 billion; that of loans at around €9 billion; and bad debts at around €1 billion.

- In June and October 2015 there is a statistical break in the time series of stocks of loans to households and to 'other financial institutions' as well as the deposits of 'other financial institutions' owing to the reorganization of leading banking groups.
- In November 2015 the increase in lending to the private sector and the fall in private-sector deposits could reflect the effects of the new deadlines for self-assessed taxes (30 November in 2015 and 1 December in 2014).
- In October 2016 the reduction in shares and holdings of debt securities issued by MFIs resident in the euro area as well as the increase in equity issued by institutions resident in the rest of the world are owing to the reorganization of banking groups. Similarly, the increase in lending to residents in the rest of the world can be attributed to the same phenomenon.
- In January 2017 a methodological break in the recording of bad debts by leading banking groups is reflected in the series on the outstanding amounts of 'gross bad debts'. Such methodological break does not concern the outstanding amounts of bad debts net of provisions.
- In February 2017 the time-series of 'capital and reserves', equity issued by MFIs, inter-MFI loans and deposits and intra-group positions reflect the effects of the reorganization of banking groups.
- In June 2017 the liquidation and reorganization of banks resident in Italy caused statistical breaks in the following time-series: loans to non-financial corporations and to households, holdings of debt securities issued by the private sector, 'capital and reserves', debt securities issued, 'gross' bad debts and bad debts net of provisions.
- Prior to December 2017, the time series of 'debt securities issued' on the liability side and 'securities other than shares' on the asset side included the repurchased bonds of own issue. In December 2017, the amount of repurchased bonds excluded for the first time from the time series came to approximately €144 billion in the 'debt securities issued over 2 years' component; around €3 billion in the 'up to 2 years' component; around €117 billion in the 'debt securities issued over 1 year at a variable rate' component; around €83 billion in the 'covered bond' component; and about €147 billion in the 'securities other than shares' and 'bonds held by banks' series. As a result, both total assets and total liabilities were affected by a break of about €147 billion.
- Starting in December 2017, the item 'capital and reserves' also includes income and expenses directly recognized in equity, previously included in the items 'other assets' and 'other liabilities'. In December 2017, the effect of these components on the item 'capital and reserves' was positive and equal to approximately €3.7 billion (negative for the items 'other assets' and 'other liabilities' for approximately €8.6 billion and €12.3 billion).
- Since January 2019, according to the entry into force of the international accounting standard IFRS 16, the items 'fixed assets' on the assets side and 'deposits with agreed maturity' on the liabilities side include the value of the operational lease assets. In January 2019, the effect of this change accounts for around 7 billion.
- Since June 2020, own securities issued involved in repo operations with other MFIs are no longer included in the instrument "securities issued" but in the "interbank deposits". In June 2020, the effect of this reclassification accounts for around 5 billion euro.
- Since November 2020, due to new clarifications related to Eurosystem harmonized statistics, the value of debts relating to operating leases is included in the item "Other liabilities" instead of in the item "Deposits with agreed maturity", partially deviating from IFRS 16. The effect of this change accounts for around 7.2 billion.
- Since January 2022, acquired loans are reported at the nominal value instead of the acquisition value. The associated increase in bank loans in January 2022 amounted to 5.2 billion euros, of which 2.8 billion euros are loans to non-financial corporations resident in Italy. Bad loans increase amounted to 2.7 billion euros; the same discontinuity affects bad debts net of provisions.
- In January 2022, the time-series of loans derecognized from balance sheets used in the computation of the growth rate of loans for the resident in Italy except MFIs and General Government (Table BSIB1010 of the online SDW) decreased by 155 billion euros (of which 111 billion euros relating to loans to non-financial corporations and 41 billion euros relating to loans to households; total bad loans decreased by 144 billion euros). The reduction is due to the new definition of derecognized loans that includes, with respect to the previous one, the "other sales"

of loans originating from banks and excludes securitized loans managed by financials servicers and/or loans subsequently sold by the securitization vehicle.

- Since March 2022, the corporations responsible for money market funds management allow data dissemination even in presence of confidentiality issues due to the limited number of the reporting agents. Therefore the time series in Tables 1.1, 1.2, 1.6, 1.17, marked by an asterisk in publications from September 2021 to February 2022, consider now only banking data.
- Starting from the report published on March 9, 2023 (referred to the accounting date of January 2023), the time series on the percentage changes net of the seasonal component shown in Tables 1.13 (BSID0100) and 1.14 (BSID0200) are estimated using the X-13ARIMA-SEATS software. The new approach replaces TRAMO-SEATS with the main objective of aligning the procedure to the methodology used by the European Central Bank. For previous months, the infra-annual dynamics of the new seasonally adjusted series does not change substantially. With reference to the (annualized) 1-month percentage changes of the seasonal adjusted series, the correlation coefficient between the new and the previous series is always equal to or greater than 0.9; some partial exceptions regard the 1-month percentage changes of the components of deposits and loans with non-financial corporations, which are more variable than previous estimates; nevertheless, for both phenomena in the period between February 2003 and December 2022, the correlation coefficient between the new and previous series of 1-month percentage change is close to 0.8.
- In January 2023 Croatia joined the Economic and Monetary Union. This event had an impact on Italian banks' balance sheet items: approximately, 800 million euros on deposits, 900 million euros on loans and 2 billion euros on holding of equities.

## 2. Second section. Bank interest rates

### 2.1 Introduction

This section contains information on the interest rates applied by Italian banks and – since October 2007 for ESCB harmonized statistics – by Cassa Depositi e Prestiti SpA. Since January 2003 the harmonized statistics on the interest rates have been derived from a monthly sample survey in accordance with Regulation ECB/2013/34 and ECB/2014/30, which include statistics on the interest rates applied to euro deposits and loans to households and non-financial corporations in the euro area. The interest rates refer to outstanding amounts and new business for the main forms of funding and lending. New business consists of loan contracts concluded during the reporting period or for which previously established terms and conditions have been renegotiated. Households include producer households and non-profit institutions serving households.

The transmission of the data is regulated by the secondary legislation issued by the Bank of Italy: Supervisory reports (Circular No. 272 of 30 July 2008) and Supervisory Reports (Circular No. 154 of 22 November 1991 and Circular No. 248 of 26 June 2002).

In November 2020 the Italian sample consisted of 66 banks, accounting for about the 85 per cent of both the loans and the deposits of Italy's banking system; at each reference date the sample reflects any mergers, acquisitions and spin-offs that have occurred.

For details on the method of data collection and the sample selection criteria, see 'The Harmonization of European Statistics on Bank Interest Rates and the Methodology Adopted by Italy', Bank of Italy, Supplements to the Statistical Bulletin – Methodological Notes and Statistical Information, October 2003. The accuracy of the sample survey is documented in 'The measurement of Sampling Error in Bank Interest Rate Statistics', Bank of Italy, Supplements to the Statistical Bulletin – Methodological Notes, June 2007 and in 'Quality Measures in Non-random Sampling MFI Interest Rate Statistics', ECB, Statistics Paper Series, 2013. For the harmonized rates describing the most important phenomena in the Italian banking system, the time series have been estimated for past periods, generally back to 1995. The methodology is described in 'Estimating Time-Series

## 2.2 Definition of the items and statistical breaks

The average harmonized interest rates are constructed as the weighted average of the rates on the different instruments by maturity and amount; the weights are given by the respective amounts of the instruments. With regard to the average rates on new business, the frequency of turnover of deposits and loans, which is higher for instruments with a shorter maturity, can influence the aggregate rate. In the case of new business the rates are weighted by the amount of the related disbursements. The data on 'new business' include both the disbursements determined by the stipulation of new contracts ('pure new loans') and 'renegotiations' of performing loans granted in the past.

In the case of stocks, the rates are weighted by the account balances at the end of the reference month. Overdrafts are not counted in new business for the purposes of reporting the harmonized rates; they are counted in the outstanding amounts of loans and in the interest rates obtained as a weighted average when these also include this segment. Advances against bills, other credit instruments and uncleared documents, and factoring advances are treated as overdrafts. The amount classes refer to the amount of the individual transaction and not to the bank's entire creditor position with respect to the borrower. The disaggregation by maturity refers to the initial period of interest rate fixation, i.e. the period of time during which no contractual provision is made for a change in the interest rate. The rates include those on subsidized loans, for which the overall interest rate applied to the transaction must be reported, regardless of how much the customer pays. By contrast, the rates on bad debts and restructured loans are excluded. Loans 'for other purposes' comprise repos, advances on invoices and other secured loans. The annual percentage rate of charge (APRC) includes ancillary expenses (administrative, application processing, insurance) provided for in Council Directive 87/102/EEC.

The 'composite cost-of-borrowing indicators' are synthetic measures calculated as the weighted average of the interest rates applied by the banks to the various categories of loan and are based on the Eurosystem's common methodology. For households only loans for house purchases are included. In each country the weighting reflects the relative importance of the different loan instruments. For further details, see <https://www.ecb.europa.eu/stats/pdf/MIR-Costofborrowingindicators-methodologicalnote.pdf>.

Data on the volumes of 'new business' and 'pure new loans' refer to all resident credit institutions and are estimated by applying expansion factors to the results of the sample of reporting agents for statistics on interest rates. Information on new business volumes is collected in order to assess Italy's importance in the euro-area average interest rates on new business. Consequently, taking into account the methods of collecting and aims of these statistics, data on new business are not suitable for analyzing monetary and credit developments in Italy.

Statistics on 'fully collateralized loans' are defined by Regulation ECB 2013/34. They include only loans with 'total guarantees/collaterals' (i.e., loans with a value less or equal to the value of the collateral/guarantee) whereas loans with 'partial guarantees/collaterals' (i.e., loans with a loan-to-value ratio greater than 100 per cent) are excluded. In this context, statistics on 'fully collateralized loans' understate the total value of available collaterals/guarantees. Therefore, they are useful to classify the interest rates in more homogeneous categories – including risk-based categories – but they cannot be used to compute indicators related to total guarantees or loans with collateral.

Since June 2010 the harmonized statistics on interest rates have been modified in accordance with Regulation ECB/2009/7; these changes and the revision of the sample of reporting banks caused some discontinuities in the time series. From this point onwards interest rates on loans generated by credit card use (i.e. loans other than convenience credit card credit, which entail a credit exposure on the part of the bank), previously included in new consumer credit business, are now part of 'extended credit card debt', an item calculated with respect to end-of-period stocks. From the same date, the interest rates on revolving loans are included in the aggregate 'Revolving loans and overdrafts', an item recorded with reference to end-of-period stocks. Accordingly, starting in June 2010, the interest rates on extended credit card debt and revolving loans are no longer included



in the reference period's transactions but in the aggregates on stocks. Revolving loans are loans whereby the borrower may use or withdraw funds to a pre-approved credit limit without giving prior notice, for which there is no obligation of regular repayment of funds, and the amount of available credit can increase or decrease as funds are borrowed and repaid. Again from June 2010, the interest rates on loans exclude, in addition to bad and restructured debts, also those for which payment is overdue or in breach of overdraft limits and substandard loans (non-performing loans).

In November 2010 there is a break in the time series on bank interest rates on new consumer credit business owing to corrections in the statistical reports of some banks.

In January 2015 Regulations ECB/2013/34 and ECB/2014/30 came into force. Since the accounting date of December 2014, both the interest rates and the volumes of new business have been calculated through a procedure for expanding the survey data at the stratum level, defined according to localization (the predominant geographical area of operation) and size of the reporting entity. For some phenomena this new methodology led to the recalculation of the entire time series.

In June 2016 there is a statistical break in the time series of interest rates on outstanding amounts of loans to households for 'consumer credit and other purposes' due to some changes in the banks' reporting framework in order to improve the identification of the contract maturity related to interest rates on overdrafts, revolving loans and extended credit card debt.

'Hot money' transactions, generally used to address liquidity needs or to finance firms' working capital, are included among overdrafts and revolving loans as of March 2017; this might have contributed to the development of interest rates in that month with respect to the aggregates that include overdrafts and revolving loans as well as large loans of over €1 million.

In June 2017 some interest rate times series – in particular the APRC on new consumer loans and the rates applied on outstanding loans to households for consumption and other purposes – show a break associated with the enlargement of the sample of reporting banks (as provided for in Regulation ECB 2013/34 and Guidelines ECB/2014/15). The break explains almost all of the increase in the APRC on new consumer loans compared with the previous month.

Since April 2018, the methodology for grossing up sample data on interest rates and new business volumes has been refined to take account of some information on banks' balance sheets that is available as census data. The methodological break has influenced the monthly development of the aggregates that include consumer credit and 'other loans' to households. For further details, see D. Liberati and M. Stacchini, '[Affinamento dello stimatore per la rilevazione campionaria dei tassi di interesse armonizzati nell'Eurozona](#)', Methods and Sources: Special Topics, Banca d'Italia, Statistics Series, 12 June 2018.

Since January 2019, due to the entry into force of the international accounting standard IFRS 16 and consistently with the treatment adopted in the banks' balance sheets statistics, the time series on the interest rates and the volumes of the 'new deposits with agreed maturity from non-financial corporations' include liabilities relating to operating leases. The gradual implementation of IFRS 16 in banking statistics by the reporting agents has affected the time series in the early months of the year.

The statistics reported in Table 2.9 (MID0100) are the only ones that are not harmonized at European level. The table contains the interest rates on bank bonds and the lowest rate on short-term loans; the data are taken from ten-day reports. The ten-day survey is based on a sample of intermediaries that is rendered consistent with the sample that reports the harmonized data. Since June 2010 the interest rates on bank bonds have been calculated excluding the issues intended for subscription by members of the reporting bank's group. Since January 2020 the minimum interest rate for loans up to 1 year has been calculated excluding all non-performing loans.

In November 2018 the time-series of 'Average interest rate on bond issues with initial period of rate fixation over 1 year' reflects the issuance of a subordinated debt security with a 13% interest rate; such transaction almost entirely explains the interest rate change on the previous month.

Since November 2020, due to new clarifications related to the harmonized banking statistics about the statistical treatment of the operational leases on the liabilities side and consistently with the treatment adopted in the banks' balance sheets statistics, the time series on the interest rates and the volumes of the 'new deposits with agreed maturity from non-financial corporations' exclude liabilities relating to operating leases.

### 3. Third section. Single monetary policy statistics: the Italian components

#### 3.1 Introduction

The statistics in this section describe the Italian components of the single monetary policy of the euro area. They refer to Monetary Financial Institutions (MFIs), which constitute the area's 'money-issuing sector'. In Italy this sector includes the Bank of Italy, banks, money market funds, electronic money institutions; and, as of September 2006, Cassa Depositi e Prestiti SpA. The term 'other MFIs' is used for MFIs other than central banks. Money market funds are collective investment undertakings that issue monetary liabilities; they are identified in accordance with the criteria laid down by Regulation ECB/2011/12. The ECB's website contains a list, which is updated monthly, of the MFIs of the monetary union.

The 'money-holding sector' consists of euro-area residents other than MFIs and central government; it accordingly comprises 'other general government' and 'other residents'.

Since September 2006 Cassa Depositi e Prestiti SpA has been subject to the Eurosystem's minimum reserve regime; since October 2007 the statistics have included its balance sheet data. The stocks' time series have been affected by the reclassification of this company from 'other financial institutions' to 'other MFIs'. Flows and growth rates are given net of this change.

For the definition of the statistics, reference can be made to Regulation of 22 January 2021 ECB/2021/2 and to Regulations ECB/2008/32 and ECB/2013/33-34-39. The statistics cover monthly and annual end-of-period stocks and flows. For the items obtained from MFIs' balance sheets, the flows are adjusted for fluctuations in prices and exchange rates and other factors, such as the manner of accounting for loan losses and changes in the reporting population. The adjustment for fluctuations in exchange rates is applied to instruments denominated in dollars, yen, Swiss francs and pounds sterling.

#### 3.2 Content of the tables

Tables 3.1a (AGGM0100, stocks) and 3.1b (AGGM0200, flows) and Tables 3.2a (AGGM0300, stocks) and 3.2b (AGGM0400, flows) show the breakdown of the Italian components of the monetary aggregates and their counterparts in the euro area. The Italian components of the euro-area monetary aggregates refer to the liabilities of MFIs resident in Italy and the postal funds raised from the 'money-holding sector' of the euro area. The counterparts include central government. The Italian contribution to the area aggregates is published excluding currency in circulation, seeing as how since the introduction of the euro it has no longer been possible to directly measure the quantity of banknotes and coins actually held in each country. Since January 2002, a convention has been adopted for the measurement of currency in circulation (notes and coins held by the public). Under this convention each euro-area country is assigned a share of euro banknotes proportional to the share of the ECB's capital paid up by its national central bank (Capital Share Mechanism or CSM). The euro-area countries' shares of the ECB's capital are equal to the average of each country's share in the total population and gross domestic product of the EU. This criterion for subdividing currency in circulation among the various countries is based on evidence showing that the demand for banknotes is influenced to a considerable extent by the size of the population and domestic GDP. Since January 2003 currency in circulation excludes the residual amount denominated in lire; the other NCBs have taken the same decision for their own national currencies. The construction of the statistics on counterparts reflects the changes made to the monetary aggregates. Starting with the data for October 2007 M2 includes fixed-term and indexed postal savings certificates, which had previously been excluded from the monetary aggregates. As of the same date the series of the stocks of the monetary components and counterparts have been affected by the reclassification of Cassa Depositi e Prestiti SpA from 'other financial institutions' to 'other MFIs'. Flows are given net of this change. Following the ECB Governing Council's decision of 5 July 2012, backdated to June 2010, the data on the M3 monetary aggregate excludes repos conducted by MFIs with central counterparties, which under the old definition appeared under repos with 'other financial institutions';

the aggregate of the money counterparts 'loans to other residents' excludes reverse repurchase agreements conducted by the MFIs with central counterparties, which under the old definition appeared under loans to 'other financial institutions', while the net balance on repos and reverse repos conducted by the MFIs with central counterparties is included in the money counterparts aggregate 'other counterparts'. The stock series have been affected by the reclassification on June 2010, while flows and growth rates are given net of this change.

Tables 3.3a (SPBI0100, assets) and 3.3b (SPBI0200, liabilities) show the statistical balance sheet of the Bank of Italy in accordance with the accounting framework adopted by the Eurosystem. Since 1 January 2008 the assets and liabilities of the Italian Foreign Exchange Office (UIC) have been included in the Bank's balance sheet. The flow series have been adjusted for the effects of this change. For further details on the accounting balance sheet, the statistical balance sheet and assessment criteria, see the Bank of Italy's 'Annual Accounts', the Statistical Appendix to the Annual Report, and the 'bridging tables' guidance of the European Central Bank of 4 April 2014 on monetary and financial statistics (recast) (ECB/2021/11), which is available for consultation at <http://www.ecb.europa.eu/pub/pdf/other/bridgingtables201607.en.pdf?b96fa0e08f91b66a21a0ec486b1dcaa6>.

Table 3.4 (TUFF0100) shows the interest rates set by the Eurosystem. Table 3.5 (OPM0100) contains data on the open-market operations carried out the Bank of Italy on behalf of the Eurosystem. Tables 3.6a (ROB0100) and 3.6b (BMON100) show the aggregates subject to the reserve requirement, the reserve maintenance and the rate of return of the reserve. The positive reserve coefficient was equal to 2 per cent until the maintenance period ending on 17 January 2012 and to 1 per cent afterwards. Starting in January 2015 the maintenance periods have been extended to about six weeks. Tables 3.7a (BSIO0100, assets) and 3.7b (BSIO0200, liabilities) show the balance sheet of the 'other MFIs' resident in Italy, i.e. the MFIs other than the Bank of Italy. As of February 2012, the number of money market funds and the amounts in the corresponding time series decreased significantly as an effect of Regulation ECB/2011/12, which adopted for statistical purposes the same definition of money market funds used by the European Securities and Markets Authority (ESMA).

## 4. Other information

### 4.1 Differences in respect of the consolidated balance sheets of banking groups

The statistics of 'Banks and Money: National Data' refer to all resident banks in Italy, including branches of foreign banks and, from October 2007, the Cassa Depositi e Prestiti SpA (CDP). Compared to the data in the consolidated balance sheets of banking groups, the statistics in the first section exclude the business activities, including banking activities, carried out via foreign branches and subsidiaries and exclude, including in Italy, non-bank components. Therefore as regards business abroad, these statistics refer to the activities carried out directly from Italy, without the involvement of branches and subsidiaries resident abroad. By contrast, as regards the non-bank components, the statistics refer to the 'banking perimeter' of banking groups and accordingly exclude business activities conducted through non-banking corporations, even when these belong to the same banking group. It follows that a loan granted by a bank to a financial corporation in the group is counted in these statistics but excluded from the consolidated bank balance sheets. At the same time, a loan transferred to a financial corporation in the group can be considered to have been 'derecognized' in these statistics, even if it is nonetheless not derecognized from the consolidated balance sheets.

## 4.2 Twelve-month percentage changes

The 12-month percentage changes are calculated for all the different items, according to the common methodology of the European System of Central Banks (ESCB), using the following formula

$$g_t = \left( \left( \prod_{i=0}^{11} X_{t-i} \right) - 1 \right) \cdot 100$$

where  $X_t = \frac{F_t}{S_{t-1}} + 1$ ,  $F_t$  is the flow in month  $t$ , and  $S_t$  is the stock at the end of month  $t$ .

The time series of 'flows'  $F_t$  are calculated by adjusting the changes in the stocks with all other variations that do not originate from financial transactions, with the following formula:

$$F_t = S_t - S_{t-1} + A_t$$

where the series  $A_t$  is a correction factor that takes account of exchange rate fluctuations, value adjustments, reclassifications, and all other variations that do not originate from financial transactions. Statistical reclassifications are due, for example, to changes in the reporting population or to the reassignment of balance sheet items; value adjustments are, for example, write-downs of loans or securities.

In the case of loans, changes that are not due to economic transactions are, typically, quite relevant. The statistical discontinuity due to loan disposals with derecognition from banks' balance sheets are neutralized by including these loans either in outstanding amounts ( $S_t$ ) or considering them in the flows through the correction component ( $A_t$ ). The series  $S_t$  includes loans in banks' balance sheets added with securitized loans derecognized managed by banking servicers and other derecognized loans serviced by the bank originator. The other disposed and derecognized loans are considered in the monthly correction component ( $A_t$ )<sup>1</sup>.

Table 1 allows the identification of the series of the outstanding amounts and of the flows, reported in Tables BSIB1010 and BSIB1110 of the on line Statistical Database, used to calculate each of the 12-month percentage changes published in Tables BSIB1000 and BSIB1100.

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<sup>1</sup> Correction methods varied during time depending on data availability and in accordance to methodologic revisions agreed in the ESCB.

From June 2010 to December 2021, the outstanding amounts ( $S_t$ ) included loans securitized and derecognized managed by both banking and non-banking servicers. Up to May 2010, the component of loans securitized or sold, derecognized from the balance sheets, was estimated on the basis of flows.

From June 2014, the correction component ( $A_t$ ) considers also the sales of loans between MFIs resident in the euro area and the revaluation adjustments of derecognized loans included in  $S_t$ .

Table 1

## Percentage changes - series codes in the Statistical Database

Description	12-month percentage rates	Outstanding amounts	Flows
12-month percentage changes: bank loans to domestic counterparties except MFIs and General Government (non adjusted)	BAM_BSIB.M.1070001.52000700.9.940.IT.S1P.1000.997	BAM_BSIB.M.1070001.52000700.9.101.IT.S1P.1000.997	BAM_BSIB.M.1070001.52000700.9.941.IT.S1P.1000.997
12-month percentage changes: bank loans to domestic counterparties except MFIs and General Government (adjusted in line with ESCB methodology)	BAM_BSIB.M.1070001.BA001C.9.940.IT.S1PC.1000.997	BAM_BSIB.M.1070001.BA0012A.9.101.IT.S1PC.1000.997 BAM_BSIB.M.1070001.BA0012B.9.101.IT.S1PC.1000.997	BAM_BSIB.M.1070001.BA001C.9.941.IT.S1PC.1000.997
12-month percentage changes: bank loans to domestic non-financial corporations (adjusted in line with ESCB methodology)	BAM_BSIB.M.1070001.BA002C.9.940.IT.S11.1000.997	BAM_BSIB.M.1070001.BA0012A.9.101.IT.S11.1000.997 BAM_BSIB.M.1070001.BA0012B.9.101.IT.S11.1000.997	BAM_BSIB.M.1070001.BA002C.9.941.IT.S11.1000.997
12-month percentage changes: bank loans to domestic households (adjusted in line with ESCB methodology)	BAM_BSIB.M.1070001.BA002C.9.940.IT.SBI71.1000.997	BAM_BSIB.M.1070001BA0012A.9.101.IT.SBI71.1000.997 BAM_BSIB.M.1070001.BA0012B.9.101.IT.SBI71.1000.997	BAM_BSIB.M.1070001.BA002C.9.941.IT.SBI71.1000.997
12-month percentage changes: bad debts in banks' balance sheets to domestic counterparties	BAM_BSIB.M.1070001.52000750.9.940.IT.SBI143.1000.997	BAM_BSIB.M.1070001.52000750.9.101.IT.SBI143.1000.997	BAM_BSIB.M.1070001.52000750.9.941.IT.SBI143.1000.997
12-month percentage changes: bank bad debts to domestic counterparties (include bad loans disposed and derecognized in line with the ESCB methodology on loans)	BAM_BSIB.M.1070001.52001439.9.940.IT.SBI143.1000.997	BAM_BSIB.M.1070001.52001439.9.101.IT.SBI143.1000.997	BAM_BSIB.M.1070001.52001439.9.941.IT.SBI143.1000.997
12-month percentage changes: overnight bank deposits of all domestic counterparties except MFIs and Central Government (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.52000102.9.940.IT.S1O.1000.997	BAM_BSIB.M.1070001.52000102.9.973.IT.S1O.1000.997	BAM_BSIB.M.1070001.52000102.9.941.IT.S1O.1000.997
12-month percentage changes: debt securities issued by banks, net of those held by banks resident in Italy (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.BA006.9.940.WRDBI2.S0.1000.997	BAM_BSIB.M.1070001.BA006.9.101.WRDBI2.S0.1000.997	BAM_BSIB.M.1070001.BA006.9.941.WRDBI2.S0.1000.997
12-month percentage changes: total bank deposits of domestic counterparties except MFIs and General Government (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.BA003C.9.940.IT.S1PC.1000.997	BAM_BSIB.M.1070001.BA003C.9.101.IT.S1PC.1000.997	BAM_BSIB.M.1070001.BA003C.9.941.IT.S1PC.1000.997
12-month percentage changes: total bank deposits of domestic counterparties except MFIs (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.BA003C.9.940.IT.SBI143.1000.997	BAM_BSIB.M.1070001.BA003C.9.101.IT.SBI143.1000.997	BAM_BSIB.M.1070001.BA003C.9.941.IT.SBI143.1000.997
12-month percentage changes: total bank deposits of non-domestic counterparties (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.52000100.9.940.WRDBI1.S0.1000.997	BAM_BSIB.M.1070001.52000100.9.101.WRDBI1.S0.1000.997	BAM_BSIB.M.1070001.52000100.9.941.WRDBI1.S0.1000.997
12-month percentage changes: total bank fund raised from all counterparties (aligned with ESCB adjustment methodology)	BAM_BSIB.M.1070001.BA004.9.940.WRDBI2.S0.1000.997	BAM_BSIB.M.1070001.BA004.9.101.WRDBI2.S0.1000.997	BAM_BSIB.M.1070001.BA004.9.941.WRDBI2.S0.1000.997

A numerical example of the calculation of 12-month percentage changes of loans to non-financial corporations is provided in Table 2.

Table 2

**Numerical example on how to calculate the twelve-month percentage changes for bank loans to non-financial corporations (NFC)**

		BSIB1010			BSIB1000		
		Outstanding amount		Flows		12-month percentage changes	
		Outstanding amounts of bank loans to domestic non financial corporations (adjusted in line with ESCB methodology)	Outstanding amounts of bank loans disposed and derecognised to domestic non financial corporations (adjusted in line with ESCB methodology)	Net flows of bank loans to domestic non-financial corporations (adjusted in line with ESCB methodology)		12-month percentage changes: bank loans to domestic non-financial corporations (adjusted in line with ESCB methodology)	
		BAM_BSIB.M.1070001.BA0012A.9.101.IT.S11.1000.997	BAM_BSIB.M.1070001.BA0012B.9.101.IT.S11.1000.997	BAM_BSIB.M.1070001.BA002C.9.941.1.T.S11.1000.997		BAM_BSIB.M.1070001.BA002C.9.940.IT.S11.1000.997	
Periodo	Data	(a)	(b)	$S_t = a + b$	$F_t$	$X_t = \frac{F_t}{S_{t-1}} + 1$	$g_t = \left( \prod_{i=0}^{11} X_{t-i} \right) - 1 \cdot 100$
$t_{-14}$	31/07/2019	661335	117048	778383	5998		
$t_{-13}$	31/08/2019	650122	117428	767550	-9332	0,9880	
$t_{-12}$	30/09/2019	647975	118023	765998	-275	0,9996	
$t_{-11}$	31/10/2019	643761	117580	761341	-2879	0,9962	
$t_{-10}$	30/11/2019	642842	119281	762124	2253	1,0030	
$t_{-9}$	31/12/2019	631206	121474	752680	-4068	0,9947	
$t_{-8}$	31/01/2020	638748	121002	759749	8402	1,0112	
$t_{-7}$	29/02/2020	635117	120755	755873	-2793	0,9963	
$t_{-6}$	31/03/2020	650601	120714	771315	16638	1,0220	
$t_{-5}$	30/04/2020	656372	120242	776615	5728	1,0074	
$t_{-4}$	31/05/2020	656886	120042	776928	1078	1,0014	
$t_{-3}$	30/06/2020	661804	120798	782602	7204	1,0093	
$t_{-2}$	31/07/2020	669652	122452	792104	12389	1,0158	4,53
$t_{-1}$	31/08/2020	671166	121978	793144	1627	1,0021	6,02
$t_0$	30/09/2020	677012	121607	798619	5853	1,0074	6,84

## 5. Revision of the data

In the tables possible discrepancies in totals are due to rounding. The data revision policy adopted in this publication follows the Guideline of the European Central Bank of 4 April 2014 on monetary and financial statistics, available at [www.ecb.int](http://www.ecb.int). The data for the last available month are provisional; revisions of these statistics are classified as ordinary revisions. Any revisions for periods other than the last month are classified as extraordinary revisions and are generally incorporated into the report upon transmission from the reporting institutions. When the impact of revisions on the aggregates are not negligible, the reasons for the revisions are specified.