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Credit quality.
Handbook on the data published by the Bank of Italy

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1. Introduction

The Bank of Italy provides a lot of information on its website on credit quality for various kinds of intermediaries (banks, banking groups, financial companies), differentiated according to: (a) level of loan impairment; (b) underlying collateral; (c) debtor characteristics; and (d) purpose of the loan. This information is published at different frequencies and with different lags in relation to when the phenomenon occurred.

This note is a guide for users on how to choose the most appropriate statistical data for their analyses. Section 2 sets out the main categories of non-performing loans; Sections 3 and 4 refer to data and useful sources, respectively, for **two main types of analysis**: on the **riskiness of customers**, for the purposes of economic analysis and of financial stability, and on the **riskiness of loans in intermediaries' portfolios**, with a view to prudential supervision; Section 5 points out the differences between the sources available. Finally, there is a table that summarizes the entire note.

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2. Credit quality: main definitions

2.1 Non-performing loans

Banks' non-performing loans are exposures towards customers that are unable to fulfil their contractual obligations in part or in full because their economic and financial situation has deteriorated.

[a] Regulation and Macroprudential Analysis Directorate; [b] Statistical Data Collection and Processing Directorate; [c] Financial Stability Directorate.

There has been a **harmonized definition of non-performing loans** in the European legislation since 2014. Italian statistics on non-performing loans (NPLs) overall are comparable with those of other European countries[1].

The Bank of Italy sometimes provides **more detail in the Italian statistics** compared with the harmonized European definitions; it specifically highlights the subset of non-performing loans with more serious difficulties: bad loans. The Italian statistics divide non-performing loans (NPLs) into the following three categories[2]:

- **bad loans**: exposures towards insolvent subjects (even if this not declared legally) or in similar situations;
- **unlikely to pay**: exposures (other than those classified among bad loans) for which the bank deems it unlikely that the debtor will completely fulfil their contractual obligations without recourse to actions such as enforcement of guarantees, regardless of whether there are amounts (or instalments) overdue or unpaid. For this classification, there is therefore no need to wait for a clear anomaly in the credit relationship (e.g. a failure to repay); there just need to be elements that suggest a risk of default by the debtor;
- **non-performing past-due or overdrawn exposures**: exposures (other than those classified as bad loans or unlikely to pay) that have been past-due or have exceeded their overdraft limit by more than 90 days. These anomalous conditions must involve a share of a customer's debt that exceeds a reporting threshold.

The Italian classification of non-performing loans is useful for focusing on the degree of credit risk. Specifically, what it discovers is the seriousness of the loan quality conditions: with the same number of non-performing loans, an intermediary with a greater share of bad loans has a worse loan portfolio than one with a greater share of past-due loans.

It is important to point out that the unlikely to pay category adopted at Italian level is not the same as that considered in a harmonized European context. The former classifies exposures according to their riskiness and includes both those that are past-due and those not yet due; instead the latter excludes exposures that have been past-due for more than 90 days (which come under the harmonized category of past-due exposures).

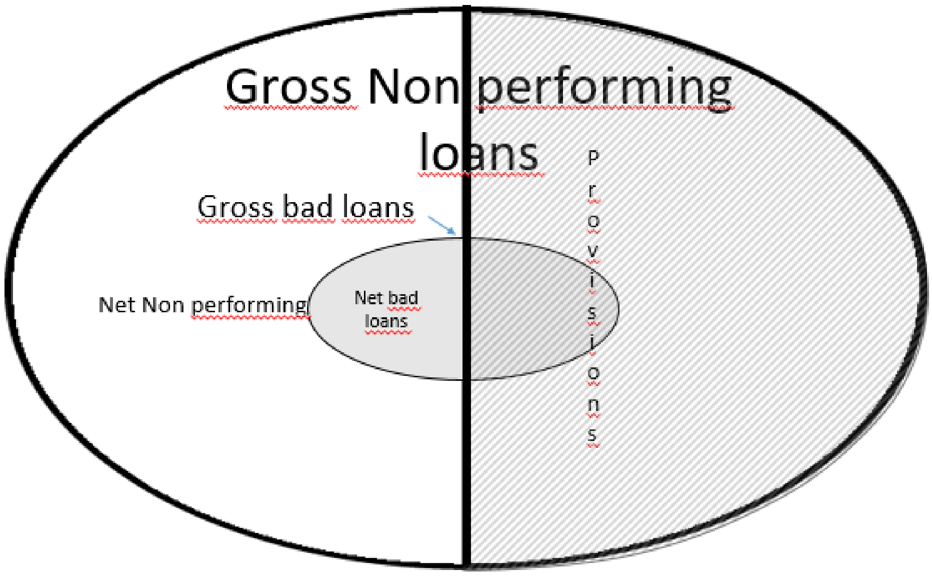
2.2 Gross and net non-performing loans

Another basic distinction is that between gross and net figures. The former are the amount that the debtor is obliged to repay to the bank, while the latter are an estimate of how much the bank actually expects to get back. The net figures are therefore equal to the difference between the gross figures and the loan loss provisions recorded in the accounts of intermediaries to cover expected losses. As a result, net exposures are the right indicator for the potential (however uncertain) losses that the bank might incur in the future, in the event of worse than expected scenarios, which may differ significantly from gross exposures (Figure 1).

[1] The definition of non-performing loan is in Article 47 bis of Regulation (EU) 575/2013 of the European Parliament and of the Council of 26 June 2013 (as amended). The classifications and quantification of the risk of non-performing loans are set out in Article 178 of the same regulation.

[2] For further details, see the section on credit quality in Bank of Italy circular No 272 of 30 July 2008.

Figure 1: Gross and net bad and non-performing loans



2.3 Which aggregate should we consider?

When carrying out analyses on credit quality, the aggregate to be considered is the total volume of non-performing loans, because an increase or decrease in one of the aggregate's components could give imprecise indications: credit ratings can actually 'migrate' between categories (bad loans, unlikely to pay, and non-performing past-due or overdrawn exposures). For example, an increase in bad loans could simply be due to unlikely to pay loans being reclassified as bad loans, with no impact on non-performing loans overall.

2.4 Stocks and flows

It is also useful to distinguish between data on stocks and on flows. To make things simpler, we could say that data on stocks are comparable to a set of photos taken at different times, which don't tell us anything about what happened between photos. If you want to know what happens between photos you need to look at data on flows, which tell us about the reasons for the differences between the various pictures.

Drawing conclusions about trends in customers' riskiness based only on data on stocks could therefore make the answers to some questions misleading. A fall in the stock of non-performing loans on banks' balance sheets could in fact be due to events (e.g. sales of NPLs) that are independent of debtors' riskiness. In this case it is more appropriate to rely on flow indicators such as the non-performing loan ratio, which reports exposures that have become non-performing over a certain period of time.

On the other hand, data on stocks are suitable for assessing the riskiness of banks: if they fall, regardless of the reason why, this indicates that banks are less exposed to the risk of incurring losses other than those expected.

3. Data and sources for analysing the riskiness of bank customers

3.1 Gross non-performing loans

Mainly for statistical purposes, when analysing the riskiness of bank customers, it is preferable to refer to data on stocks at gross value, which do not take account of any provisions intended to cover expected losses. The latter are instead more useful for analysing the stability of banks (see Section 4).

For gross bad loans, the main reference is the tables in the quarterly statistical report 'Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area', Banca d'Italia, Statistics Series, Methods and Sources: Methodological Notes, 31 December 2020, especially Tables TRI30266 and TRI30267, available online in the statistical database (BDS). They contain statistics on **stocks of non-performing loans, subdivided by type of default** (bad loans, unlikely to pay and non-performing past-due or overdrawn exposures).

These are data taken from the supervisory reports that Italian banks send to the Bank of Italy. These reports: (a) refer to all banks resident in Italy; this therefore excludes financial companies, and intermediaries under Article 106 of the Consolidated Law on Banking (TUB)[3], but includes Cassa Depositi e Prestiti; (b) supervisory reports also indicate loans for small amounts, as there is no minimum threshold; (c) they also include information by region of residence, by the debtor's sector of economic activity and – for loans to consumer households – by loan purpose, with a distinction made between lending for house purchase and for consumer credit.

3.2 The non-performing loan ratio and the Central Credit Register

As noted previously, the data on stocks make it possible to record certain situations on a certain date, while the **data on flows** are better for understanding the dynamics of customers' riskiness. As part of the latter data, the **non-performing loan ratio** indicates the loans that have recorded a worsening in quality in a given period as a share of total loans. The annual non-performing loan ratio is in the quarterly statistical report, with various details: customer sector, size category of the global overdraft used,[4] and debtor's region of residence (Tables TRI30601 and TRI30602). There are other tables on this topic that also reflect quarterly trends, and they are only found in the online BDS.

The **Central Credit Register** (CR) is the source of the data on flows. All Italian financial intermediaries, banks and financial companies are part of the CR, which is run by the Bank of Italy. This participation is important because it neutralizes any statistical distortions caused by sales of loans between national intermediaries[5].

However, CR data only include loans for more than €30,000[6] e and therefore do not

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[3] D Legislative Decree 385/1993 (Consolidated Law on Banking TUB).

[4] This is the amount of credit borrowed overall by a debtor from the entire Italian banking system.

[5] For example, in the case of a bank selling non-performing loans to a special-purpose securitization vehicle resident in Italy, only taking account of banking data could lead to the mistaken conclusion that non-performing loans have decreased. The fact that CR statistics are collected from all Italian financial intermediaries (bank and non-bank) makes it possible to neutralize this effect, since the loans sold by a bank are reported by the transferee (the special-purpose securitization vehicle) rather than by the transferor bank, with no impact on the overall aggregates.

[6] The reporting threshold was equal to €75,000 up until 31 December 2008. Bad loans are reported if they are for more than €250.

adequately reflect changes in the quality of small loans (e.g. consumer credit or loans to very small firms). The granularity of CR data, namely the subdivision of exposures by individual customer, also makes it possible to publish additional information referring to specific characteristics of customers and/or of the bank/customer relationship, differentiating the statistics, for example by type of debtor (Table TRI30290), by loan size (Table TRI30226) and by type of collateral (Table TRI30033).

4. Data and sources for analysing the riskiness of loans for intermediaries

The quantity and evolution of non-performing loans also provide indications on the riskiness of the assets on banks' balance sheets, as well as on the situation of debtors (see Section 3). The information on non-performing loans taken from **banks' consolidated balance sheets** is the most suitable for assessing the stability of banking groups, e.g. for micro and macroprudential purposes. Consolidated balance sheets are the main source for the analyses published by the Bank in the chapters on banks in the *Annual Report* and the *Financial Stability Report*.

The data on credit quality, aggregated by individual banking group, are collected according to a **European harmonized system: Financial reporting** (Finrep). Specifically, amongst other things, data can be extracted from Finrep on: (a) stocks of non-performing loans that can be used to calculate their share of total loans and the coverage ratios[7]; (b) amount of loans backed by guarantees, including public ones; and (c) stocks of loans in forbearance [8].

For further details, the data published in the text and in the Statistical Appendix respectively of the *Financial Stability Report* are a useful reference, especially:

a) **non-performing loans** (share of total loans): the figure provides information on the evolution in time series of the shares of non-performing loans, also compared with significant banks (i.e. more important and under the direct supervision of the European Central Bank) in the euro area:

b) **Italian banks' NPL rates and coverage ratios by business model**: the table provides information on the credit quality of Italian banks divided according to their business model.[9] This classification allows, for example, a comparison to be made between the NPL coverage ratios of significant banks with those of less significant banks that do not specialize in managing NPLs.[10]

The Bank of Italy also uses granular databases for targeted investigations in its analyses of the riskiness of loans for intermediaries. AnaCredit is one of these databases and it originated in a European System of Central Banks project to set up a database just for loans granted by the euro-area banking system to legal entities.[11] One use of granular databases

[7] Coverage ratios measure the share of gross value that has been adjusted because the bank considers that it can no longer be recovered. Coverage ratios for non-performing loans are usually significantly higher than those for performing loans, and the more serious the impairment of non-performing loans, the higher the coverage.

[8] Article 47-ter of Regulation (EU) No 575/2013 (Capital Requirements Regulation or CRR) defines 'forbearance' as a measure of concession (referring to the terms and conditions or the total or partial refinancing of a debt obligation) by an institution towards a debtor that is experiencing or is likely to experience difficulties in meeting its financial commitments.

[9] Specifically, less significant banks are classified as a) traditional, b) specialized in managing NPLs and c) other specialized banks.

[10] The European Single Supervisory Mechanism distinguishes between significant institutions (SIs), i.e. bigger banks, and less significant institutions (LSIs), i.e. smaller banks, which are not usually directly supervised by the ECB.

[11] The census threshold for collecting data on exposures in AnaCredit was set at €25,000.

involved climate risk, specifically the effects of hydrogeological risk on intermediaries' portfolios.[12]

5. How to navigate the information available on the Bank of Italy's website

The diversity in the sources and characteristics of the surveys mean that there may be gaps in the data for the same phenomena; this could create ambiguities in interpreting them for users. There are some useful indications in the methodological documentation accompanying some publications (see *Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area*, Banca d'Italia, Statistics Series, Methods and Sources: Methodological Notes, 31 December 2020).

Some apparently similar items may have different values in the Bank of Italy's statistics, which mainly depends on two factors:

- **The perimeter of reporting intermediaries**. The biggest differences in amounts generally stem from the different perimeter of intermediaries that make the reports from which the statistics published by the Bank of Italy are drawn. For example, unlike individual reports, consolidated ones can include foreign banks and financial intermediaries belonging to Italian banking groups in their analysis, but they do not include financial intermediaries not belonging to groups. In addition, while the statistics taken from Supervisory Reports only concern banks, those from the Central Credit Register also refer to the loans of non-bank financial companies.
- **The content of items in the sources used**. The content of reports on the same phenomenon taken from different sources may be inconsistent because of differences relating to: (a) survey methods; (b) assessment criteria. The former concerns the methodological differences in CR, AnaCredit and supervisory reports. In CR reports, for example, loans sold legally but not removed from balance sheets are no longer counted as being the transferor's but rather the transferee's. On the other hand, only those loans sold that pass a specific derecognition test are not reported in main supervisory reports. Moreover, the various sources adopt assessment criteria that do not always coincide, which means it is not possible to compare the measurements of variables of different origins.

Table 1 summarizes the main information contained in this note, suggesting the most appropriate type of data for each purpose of analysis, their frequency and the reference hyperlink. Given the ample availability of information provided by the Bank of Italy on these topics, the indications in the table **can't be considered as comprehensive compared with analyses that may potentially be interesting**.

[12] For the analyses cited, see *Financial Stability Report*, 1, 2022.

Table 1 Summary Purpose of analysis, type of data and useful links

Purpose	Most appropriate type of data	Frequency	Some useful links
Analysis of the riskiness of bank customers (static analysis)	Data on stocks	Quarterly	TRI30266 and TRI30267
Analysis of the riskiness of bank customers (dynamic analysis)	Data on flows (NPL ratio)	Quarterly	TRI30601 and TRI30602
Analysis of the riskiness of loans	Balance sheet data (consolidated)	Six-monthly	Data for the graphs in the *Financial Stability Report*

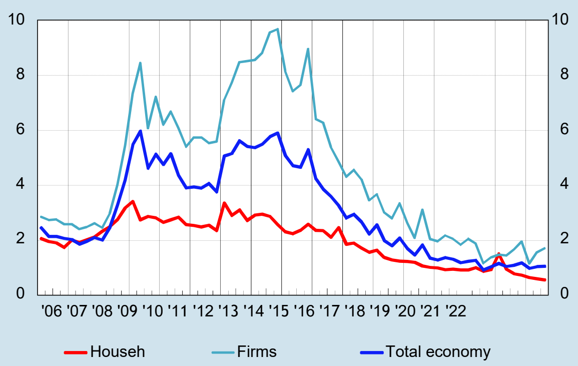
Here are some examples, taken from the *Financial Stability Report,* of the various possible uses of statistics on credit quality.

Examples taken from Financial Stability Report, 2, 2022

Data on flows	Data on stocks

Figure 2.2

Credit quality indicators (1)
(quarterly data; per cent)



Source: Central Credit Register.

(1) Annualized quarterly flows of adjusted NPLs in relation to the stock of loans at the end of the previous quarter net of adjusted NPLs. Data seasonally adjusted, where necessary
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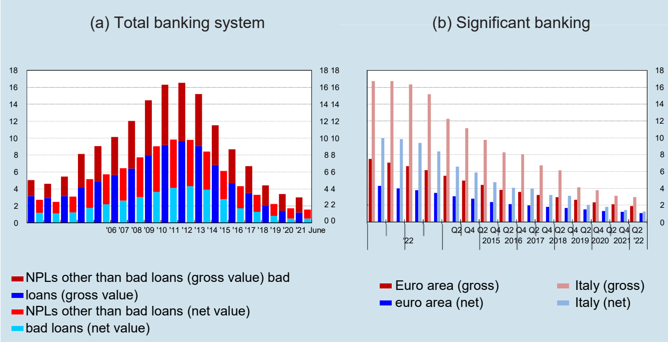
Figure 2.4

Non-performing loans: share of total loans (1)
(per cent)



Sources: Consolidated supervisory reports for Italian banking groups and individual supervisory reports for the rest of the system. ECB, Supervisory Banking Statistics for the euro area.
(1) Includes loans to customers, credit intermediaries and central banks. Includes banking groups and subsidiaries of foreign banks; excludes branches of foreign banks. Ratios are calculated net and gross of provisions. The data for June 2022 are provisional. – (2) The perimeter of significant banks and less significant banks differs between the dates in the figure: in June 2019, with the reform of the cooperative banking sector, Cassa Centrale Banca became the 12th banking group classified as significant for supervisory purposes; 143 cooperative credit banks (BCCs) have joined the ICCREA group, which was already classified as significant before the reform. Mediolanum and FinecoBank have been included among the significant banks since June 2022.

Figure 2.2 identifies a flow indicator that makes it possible to assess the **performance over time of customers' credit quality for various institutional categories** (households and non-financial corporations).
The source is the Central Credit Register, which collects information from all national financial intermediaries, and not exclusively from banks.

Figure 2.4 shows data on **stocks of non-performing loans, in terms of the share of total loans**, and highlights the exposures of banking groups and/or of individual banks.
The figure reports **exposures net and gross of provisions**.
While the statistics for Italy make it possible to distinguish between bad loans and 'other non-performing loans', comparative analysis in the euro area of the data for significant banking groups is carried out for non-performing loans as a whole.