



# Methods and Sources: Special Topics

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For further information: [statistiche@bancaditalia.it](mailto:statistiche@bancaditalia.it)  
[www.bancaditalia.it/statistiche/index.html](http://www.bancaditalia.it/statistiche/index.html)

## Bank interest rates. Handbook on the data published by the Bank of Italy

by Elena Collina<sup>a</sup>, Danilo Liberati<sup>b</sup> and Pasquale Maddaloni<sup>b</sup>

### 1. Introduction

The Bank of Italy publishes data on the interest rates on bank loans and deposits. The information is collected through national or harmonized supranational statistical surveys, and is valuable for the following purposes: (a) analysing monetary policy transmission mechanisms; (b) analysing the actual borrowing costs incurred by bank customers and their impact on disposable income and wealth; (c) calculating the interest rates charged by financial intermediaries pursuant to the Italian law against usury.

This guide explains what the main differences are between the various common bank interest rate indicators, and how to use them.<sup>1</sup> Section 2 provides an overview of the main types of indicators; Sections 3, 4 and 5 illustrate the data and sources that are useful for the above-listed purposes; Section 6 contains a comparative review of the interest rates released by the Bank of Italy.

For further information, contact the Bank of Italy at:  
[statistiche.Bancaditalia@bancaditalia.it](mailto:statistiche.Bancaditalia@bancaditalia.it).

### 2. Key indicators

The Bank of Italy publishes both [lending and borrowing rates](#). The lending rate is the interest rate charged by financial intermediaries for lending money, while the borrowing rate is the return they pay as interest on customer deposits. These interest rates are expressed as a percentage of the loan or deposit, respectively, over a given period (usually one year). The main types of interest rate are illustrated below.

[Annualised agreed rate \(AAR, in Italian TAN\)](#). This is the nominal rate **agreed by the lender and the borrower, net of ancillary costs**. It is expressed as a percentage of the amount borrowed, usually on an annual basis. It allows banks to determine interest payments on home mortgage loans or returns on savings deposits.

<sup>a</sup> Economic Outlook and Monetary Policy Directorate; <sup>b</sup> Statistical Data Collection and Processing Directorate.

<sup>1</sup> See the Bank of Italy's portal [L'economia per tutti](#) [economics for everyone] for an outline of the financial instruments that can be used by borrowers, savers and investors.

In terms of funding, there are other indicators in addition to the AAR, which include different cost items and are calculated in different ways:

**Annual percentage rate of charge (APRC, in Italian TAEG).** It is the **total cost of borrowing**, including interest payments as well as any other costs for the borrower under the loan agreement.<sup>2</sup> It is a composite indicator of the cost of borrowing that can help ensure transparency in lending terms and conditions, as borrowers can easily compare the loan services offered by different banks.

**Average overall effective rate (AOER, in Italian TEGM).** Like the APRC, it is a composite indicator of the cost of borrowing. It is used as a **benchmark** to detect **potential cases of usury**, as defined by the Italian usury law (Law 108/1996).

Both the APRC and the AOER are calculated differently depending on the type of loan agreement, and the fees included in the calculation may not be the same.

**Effective annual rate (EAR, in Italian TAE).** This rate is used for **statistical purposes**, and calculated on the loans outstanding on a given date; it includes interest and any other costs<sup>3</sup> to be paid by the borrower. It must be closely tied to the instrument in question and cannot be used as a refund of the costs incurred by the intermediary.

All the interest rates published by the Bank of Italy on its website are calculated as averages of those recorded by the reporting entities for each type of transaction. Average rates may refer to **new business** only (i.e. the agreements entered into over the reference period, in terms of flows) or to **all outstanding amounts** (stocks) on a given date. In addition, the Bank of Italy publishes interest rates by type of loan agreement (e.g. fixed- or variable-rate loans, loans with different maturities) or customer (e.g. households, firms).

### 3. 3. Interest rates as tools for analysing the transmission of monetary policy

The interest rates banks charge their customers reflect monetary policy decisions, especially the changes in official interest rates on Eurosystem operations with banks. By looking at the trends across rates, it is possible to monitor the transmission of monetary policy to different economic sectors.

In accordance with [Regulation ECB/2013/34](#) (as amended) and Bank of Italy [Circular 248/2002](#) (only in Italian), the nominal lending and borrowing rates<sup>4</sup> for households and non-financial corporations are surveyed as part of the harmonizing of monetary and financial institutions interest rate (MIR) statistics. The data are collected in all euro-area countries by the respective national central banks and harmonized at European level.

[The Bank of Italy runs a sample survey](#), i.e. it uses the information collected from a representative sample, which is redesigned every three years at most. As at December 2021, it consisted of 62 banks, including all the largest institutions. This information is processed further to ensure it is representative of the whole banking system.

MIR rates are published in [Banks and Money: National Data](#), Banca d'Italia, Statistics Series, with different disaggregations (e.g. initial contract duration and loan amount bracket) and made available online in the Bank of Italy's Statistical Database ([BDS](#)) and the ECB's

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<sup>2</sup> E.g. processing fees, payment collection fees, brokerage fees, loan insurance fees, where insurance is required to secure a loan (generally or under the terms and conditions of the agreement). Default costs, if any, are not included.

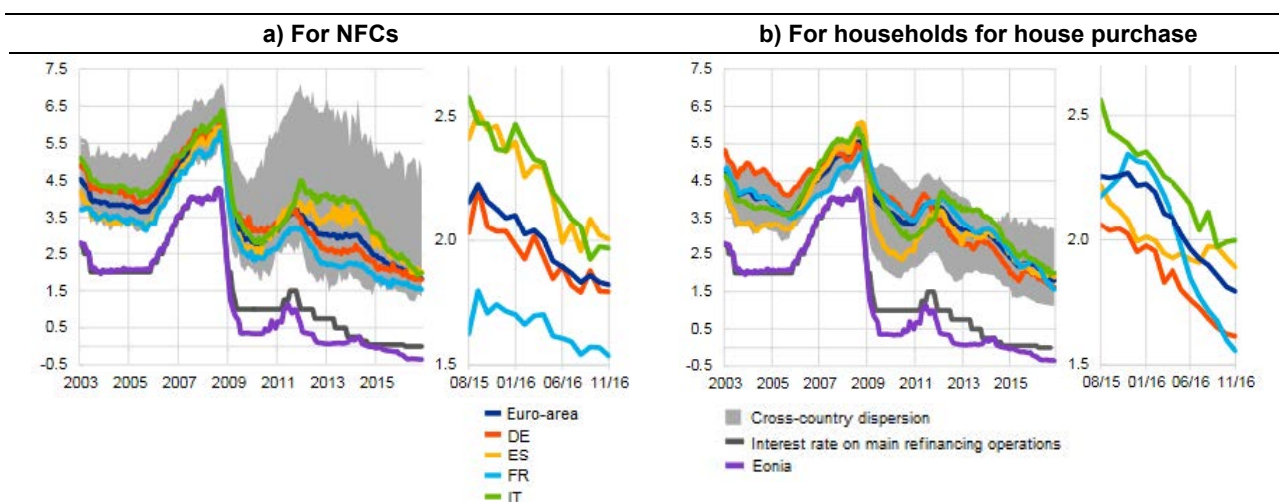
<sup>3</sup> For more information, see Bank of Italy [Circular 297/2017](#).

<sup>4</sup> The APRC is surveyed for consumer credit and home mortgages only.

Statistical Data Warehouse ([SDW](#)), where you can also find data for other euro-area countries.

Figure 1, taken from the European Central Bank's Economic Bulletin, 1, 2017, shows the trends in the composite indicators of the cost of bank borrowing for the main euro-area countries, based on MIR series (the data for Italy are also available in Table 2.1 of *Banks and Money: National Data*, op. cit.) and compared with key policy rates.<sup>5</sup>

**Figure 1: Composite indicator of the cost of borrowing for NFCs and for households for house purchase (1)**  
(annual percentages)



Sources: ECB and ECB calculations.

(1) The indicator of the total cost of lending is calculated by aggregating short- and long-term rates using a 24-month moving average of new business volumes. The cross-country dispersion displays the minimum and maximum range over a fixed sample of 12 euro-area countries. The latest observation is for November 2016.

In addition, the Bank of Italy collects other statistical indicators that are not harmonized at European level. They are reported on a voluntary basis by a sample of banks among those taking part in the MIR survey, in accordance with [Circular 136/1991](#) on ten-day statistical reports. Table 9 (MID0100) of the *Banks and Money: National Data* report (op. cit.) lists three monthly series taken from the ten-day statistical reports<sup>6</sup> that supplement the data from the MIR survey.

<sup>5</sup> As part of its efforts to maintain price stability in the euro area, the ECB sets three benchmark rates every six weeks: (a) the rate on main refinancing operations, i.e. the interest rate banks pay on one-week loans from the ECB; (b) the rate on the marginal lending facility, i.e. the interest rate banks pay on overnight loans from the ECB ('overnight' means that the borrower must repay the funds plus interest at the start of business the next day); (c) the rate on the deposit facility, i.e. the interest rate that banks receive on their overnight deposits with the ECB (see the Bank of Italy's website: [Key Eurosystem interest rates](#). This webpage shows both current rates and time series).

<sup>6</sup> These are: (a) a series for the minimum rate on short-term loans, i.e. the weighted average of the AARs applied to the first decile of the distribution of loans to firms with an initial maturity of up to one year; (b) two series for the AARs on bank bonds, i.e. the average rate on the stock of bonds and the average rate on new issues with an initial rate fixation period of more than one year. These series are produced based on the data that a sample of banks send to the Bank of Italy every ten days.

## 4. Interest rates as gauges of the fees charged to bank customers

In order to analyse the costs actually incurred by bank customers on loans, the Bank of Italy collects a variety of information on interest expense as well as on commissions and fees.

The Bank of Italy's quarterly survey of lending rates (**TAXIA**)<sup>7</sup> is the best suited for assessing **the cost of borrowing for individuals** (consumer households or sole proprietorships), with details from borrower profiles in terms of geographical location, risk profile and, for businesses, economic sector or size. The findings of this national statistical survey are published in *Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area*, Banca d'Italia, Statistics Series. Time series are made available in the Bank of Italy's **BDS**. More specifically, the Bank publishes the average EAR for all loans outstanding as at quarter end and the average APRC for term transactions entered into over the quarter.

For **non-individual customers** (e.g. non-financial corporations), the EAR and the APRC have been available since the second quarter of 2019 in the **AnaCredit**<sup>8</sup> database. They are published in *Banks and Financial Institutions: Credit Conditions and Risk by Sector and Geographical Area*, *op. cit.*,<sup>9</sup> time series are available in the Bank of Italy's **BDS**. This information is also included in the **Regional Economies** series, for both **regional analysis** (annual reports and cyclical indicators) and **macro-regional analysis**.

An example for comparing the rates charged to households and firms by region and geographical location of the borrower is shown in Table a6.2 from *The Economy of the Italian Regions. Short-term dynamics and structural features*, Banca d'Italia, Regional Economies, 22, 2020 (only in Italian). More specifically, the first seven series in the table cover firms and are taken from AnaCredit, while TAXIA is the source for the last series on households.

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<sup>7</sup> The TAXIA survey is governed by Chapter 2 of Circular 297/2017, which replaced Circular 251/2003.

<sup>8</sup> The information on ordinary customers up to the first quarter of 2019 is available in the TAXIA survey.

<sup>9</sup> Average rates resulting from data collection under Chapter 1 of Circular 297/2017, with details of individual loans granted to each customer.

Table a6.2

## Bank lending rates as at June 2022

(per cent)

REGIONS AND GEOGRAPHICAL AREAS	EAR on loans covering liquidity needs (1)						APRC on loans	APRC on new home mortgages
							covering investm ent needs (4)	(5)
	Total Firms (2)	of which: Manufacturin g	of which: Constructi on	of which: Servic es	of which: Medium- large firms	of which: Small firms (3)	Total Consumer firms (2)	Households
Piedmont	3.09	2.85	4.37	3.09	2.73	6.29	2.37	2.30
Valle d'Aosta	3.62	1.78	6.07	4.17	3.07	6.55	2.57	2.34
Lombardy	2.66	2.46	3.91	2.64	2.44	6.20	2.21	2.25
Liguria	3.29	2.63	4.38	3.44	2.86	7.19	3.00	2.29
<b>North-West</b>	<b>2.77</b>	<b>2.53</b>	<b>4.05</b>	<b>2.78</b>	<b>2.52</b>	<b>6.30</b>	<b>2.27</b>	<b>2.27</b>
Trentino-Alto Adige	2.52	2.06	3.17	2.86	2.21	4.77	2.06	2.05
Autonomous Province of Bolzano	2.48	2.02	2.98	3.04	2.23	4.46	1.90	2.02
Autonomous Province of Trento	2.57	2.09	3.79	2.63	2.18	5.21	2.19	2.07
Veneto	2.58	2.22	3.97	2.79	2.35	5.45	1.92	2.25
Friuli Venezia Giulia	2.85	2.13	4.26	3.60	2.57	6.02	1.84	2.21
Emilia-Romagna	2.71	2.51	3.50	2.72	2.43	5.54	1.83	2.16
<b>North-East</b>	<b>2.65</b>	<b>2.33</b>	<b>3.61</b>	<b>2.80</b>	<b>2.39</b>	<b>5.43</b>	<b>1.90</b>	<b>2.19</b>
Tuscany	3.23	2.74	4.83	3.37	2.89	6.89	2.21	2.28
Umbria	3.41	2.63	5.36	3.91	2.99	7.97	2.31	2.35
Marche	3.24	2.79	4.87	3.58	2.91	6.70	2.11	2.20
Lazio	3.51	3.04	4.13	3.58	3.37	7.11	2.47	2.27
<b>Centre</b>	<b>3.36</b>	<b>2.80</b>	<b>4.47</b>	<b>3.53</b>	<b>3.10</b>	<b>7.02</b>	<b>2.32</b>	<b>2.27</b>
<b>Centre and North</b>	<b>2.85</b>	<b>2.51</b>	<b>3.99</b>	<b>2.96</b>	<b>2.60</b>	<b>6.09</b>	<b>2.17</b>	<b>2.24</b>
Abruzzo	4.07	3.06	4.38	5.37	3.81	8.33	3.66	2.31
Molise	4.88	3.32	4.93	6.35	4.59	7.74	3.09	2.26
Campania	3.96	3.28	4.44	4.34	3.77	7.63	2.58	2.40
Puglia	4.06	3.28	5.74	4.33	3.79	7.98	2.88	2.29
Basilicata	3.97	3.42	4.80	3.86	3.66	8.30	2.85	2.24
Calabria	6.17	4.89	7.37	6.52	5.73	9.33	3.29	2.31
Sicily	4.65	3.46	5.66	4.93	4.34	8.33	3.00	2.22
Sardinia	4.97	3.68	5.26	5.43	4.48	9.25	2.70	2.30
<b>South and Islands</b>	<b>4.29</b>	<b>3.34</b>	<b>5.05</b>	<b>4.72</b>	<b>4.01</b>	<b>8.24</b>	<b>2.87</b>	<b>2.31</b>
<b>Italy</b>	<b>3.02</b>	<b>2.59</b>	<b>4.13</b>	<b>3.19</b>	<b>2.76</b>	<b>6.32</b>	<b>2.26</b>	<b>2.26</b>

Source: AnaCredit, lending rate survey; see the section 'Lending rates' in the Methodological Notes.

(1) E on the following types of loan: current account overdraft, factoring, revolving loans and import/export financing. – (2) Does not include sole proprietorships. – (3) Limited partnerships, general partnerships, simple partnerships and de facto companies with fewer than 20 workers. – (4) APRC on new transactions with at least a one-year maturity for the following types of funding: leasing, repos and non-revolving loans (e.g. mortgage loans). Does not include import/export financing. – (5) APRC on new transactions with at least a one-year maturity.

## 5. Calculation and circulation of usury rates

Pursuant to the Italian usury law (Law 108/1996), the Bank of Italy conducts the [AOER survey](#) on behalf of the Ministry of Economy and Finance (MEF) every three months, based on the intermediaries' reports on the rates charged for different types of banking and financial transactions in a given quarter. The AOER tables are published in the *Gazzetta Ufficiale* and on the [Bank of Italy](#) and [MEF](#) websites. As of 14 May 2011, the ceiling on interest rates, charging above which is deemed usury, is calculated by raising the AOER by one fourth and adding a margin of an additional 4 percentage points. The difference between the ceiling and the average rate cannot exceed 8 percentage points (see Treasury Department communication of 18 May 2011). The AOER, including fees, remuneration of any sort and expenses and **excluding taxes and duties**, refers to the annual interest rates charged by banks and financial intermediaries on the same kind of operations.



## 6. Overview of the interest rates published by the Bank of Italy and differences between data sources

Please find below an overview of the main characteristics of interest rate data sources.

	Data source				
	MIR	TAXIA	AnaCredit	10-day reports	Anti-usury <sup>10</sup>
Frequency of publication	Monthly	Quarterly	Quarterly	Monthly	Quarterly
Sample					
Sample survey of banks	Yes <sup>11</sup>	Yes	No <sup>12</sup>	Yes	No <sup>13</sup>
Rates available					
AAR	Yes	Yes	Yes	Yes	No
APRC	Yes (only two series)	Yes (individuals)	Yes (non-individuals)	Yes	No
AOER	No	No	No	No	Yes
EAR	No	Yes	Yes	No	No
Estimate of average rates	Yes	No <sup>14</sup>	Yes, for EAR	Yes	No
Distinction between fixed and variable rates	Yes, approximated <sup>15</sup>	No	No	Yes	Yes <sup>16</sup>
Rates on new business	Yes	Yes	Yes	Yes	Yes <sup>17</sup>
Rates on outstanding amounts	Yes	Yes	Yes	Yes	Yes <sup>18</sup>
Rates on (funding)	Yes	Yes	Yes	Yes	Yes
Lending rates (deposits)	Yes	Yes, until 2018	No	Yes	No
Harmonized at euro-area level	Yes	No	No	No	No

<sup>10</sup> Survey pursuant to the Italian usury law (Law 108/96). The AOER is published on the Bank of Italy's website for information purposes.

<sup>11</sup> Includes Cassa Depositi e Prestiti as well.

<sup>12</sup> However, some banks are not required to report their interest rates.

<sup>13</sup> This is a census survey of banks, financial companies and microcredit lenders.

<sup>14</sup> Sample averages are provided.

<sup>15</sup> The distinction between fixed and variable rates is approximated using the initial rate duration: when the duration is less than one year, the transaction is considered a variable-rate one, otherwise it is a fixed-rate transaction.

<sup>16</sup> For mortgage loans and real estate leases.

<sup>17</sup> Including renegotiations.

<sup>18</sup> For multi-purpose funding only, it includes all outstanding amounts in the quarter.