

Notes on Financial Stability and Supervision

No. 43
December 2024

Table of contents

1. Introduction and main conclusions	1
2. Bad loan recovery rates	3
3. Closed bad loan positions: amounts and time to recovery ..	8

Box

The prices of NPL sales in 2023	5
--	---

*The papers published in the
Notes on Financial Stability
and Supervision series
reflect the views of the authors
and do not involve
the responsibility
of the Bank of Italy*

Bad loan recovery rates in 2023

*A.L. Fischetto – I. Guida – A. Rendina – G. Santini**

1. Introduction and main conclusions

This note:

- updates to 2023 the estimated bad loan recovery rates already published in previous issues of the *Notes on Financial Stability and Supervision* starting from 2017;¹
- illustrates the results of the yearly survey on NPL sales, conducted by the Bank of Italy starting from 2016.

The analysis reached the following main conclusions.

Closing of bad loans and unlikely-to-pay loans

- **In 2023, bad loan positions amounting to around €9 billion were closed (i.e. derecognized from banks' financial statements).** This amount, which is around 1.6 times higher than that of newly-classified bad loans, is lower than the one recorded in 2022 both in absolute terms (€22 billion) and as a percentage of bad loans outstanding at the end of the previous year (44 per cent, against 64 per cent).
- **The decrease compared with 2022 is mainly attributable to sales on the market** (from €18 billion to €5 billion) and explained by the progressively lower stock of bad loans, which reduced the need for massive disposals and allowed for the adoption of strategies for

¹ The data, together with some detailed breakdowns that are commented on but not reproduced in this text, are available in digital format.

* Directorate General for Financial Supervision and Regulation.

managing non-performing loans based on a more balanced contribution from other management levers, such as internal recovery.

- **The improvement underway since 2015 in the time to close bad loan positions has continued**, benefiting from both the reduction in the stock of bad loans due to lower inflows and the progress achieved by banks in the management of these loans. The latest data indicate that the share **of positions closed within three years of their classification as bad loans is 88 per cent**, the highest value observed so far.
- Compared with previous years, **securitizations as a share of total sales were limited**, partly owing to the fact that, as of 14 June 2022, the guarantees on the securitization of bad loans (GACS) are no longer available.
- **The amount of unlikely-to-pay loans sold on the market was €4 billion**, down by €3 billion compared with 2022.

Recovery rates of bad loans closed

- **Compared with 2022, the average recovery rate increased (from 34 to 36 per cent) due to the lower share of bad loans sold on the market (from 81 to 60 per cent)**; the rate however decreased on **the positions sold on the market** (from 32 to 30 per cent) **as well as on those closed using standard recovery procedures** (from 47 to 45 per cent).
- **The average recovery rate for bad loans secured by collateral increased to 41 per cent** (from 40 per cent); the reduction in the recovery rate on bad loans sold to third parties (from 38 to 35 per cent) was counterbalanced by the higher share of bad loans closed using standard recovery procedures, whose recovery rate is substantially stable (50 per cent). **The same trend was observed for the unsecured positions**, whose recovery rate increased by around 1 percentage point (to 28 per cent), despite a reduction in the recovery rates both on bad loans closed using standard recovery procedures and on those sold to third parties.

Sale prices of non-performing loans

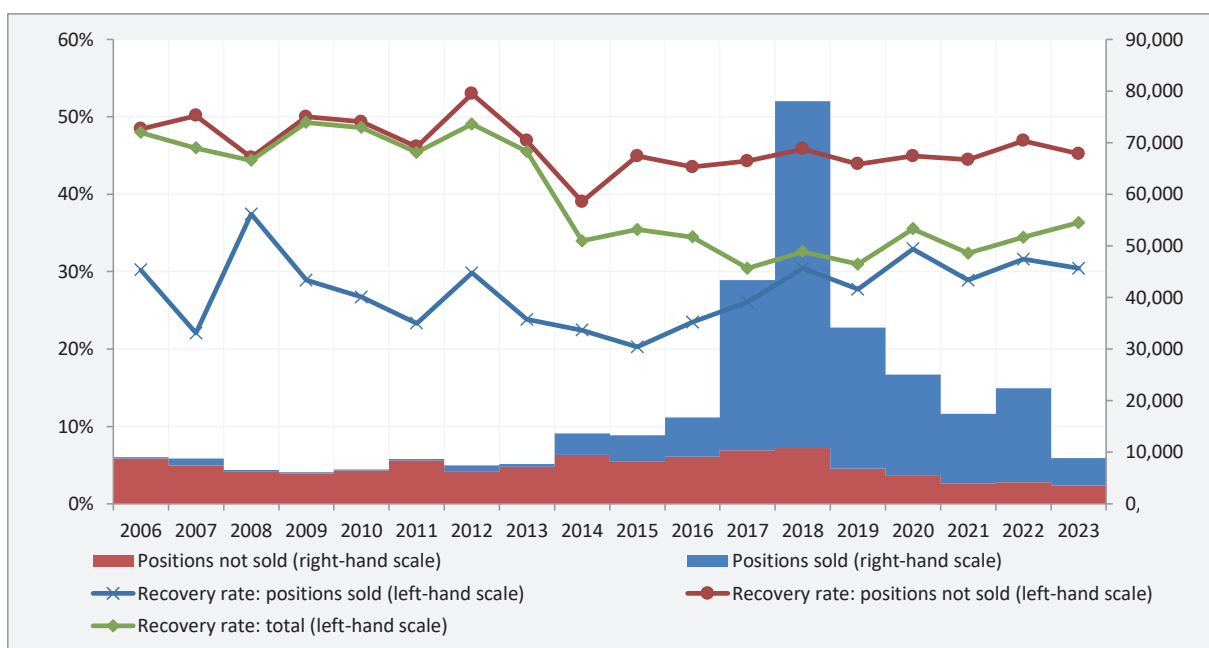
- **The price of bad loans sold in 2023**, calculated on the basis of the annual survey conducted since 2016 on a very large sample of transactions, **was equal to 22 per cent of the gross book value at the time of sale, substantially stable compared with 2022** (21 per cent). The price increased for bad loans secured by collateral (by 2.5 percentage points to 34 per cent), while it remained stable for unsecured positions, at 12 per cent.
- **The sale price of non-performing loans other than bad loans** varied greatly across transactions and **averaged 47 per cent**, 13 percentage points higher than the value observed in 2022; the increase concerned both the secured and the unsecured component.

2. Bad loan recovery rates²

In 2023, the total amount of bad loans closed decreases significantly owing to lower sales on the market

In 2023, the total amount of closed bad loan positions decreased significantly compared with the previous year (from €22 billion to €9 billion), mainly due to a lower recourse to sales on the market (from €18 billion to €5 billion; Figure 1, Table 1 and Table A1 in the Appendix available online); exposures closed using standard recovery procedures also decreased although to a less significant extent (by €620 million to €4 billion). The share of disposals over total closed positions was 60 per cent, strongly decreasing compared with what was observed from 2017 to 2022 (80 per cent on average).

Figure 1 – Bad loan recovery rate and value by year and type of closure
(per cent and amounts in millions of euros)



Source: Based on Central Credit Register data.

The decrease in the amount of bad loans sold regarded both the exposures to firms (from €16 billion to €4 billion; Table A6) and those to households (from €2 billion to €1 billion; Table A5). Conversely, bad loans closed using standard recovery procedures were substantially unchanged for exposures to households (€0.7 billion) and slightly down for those to firms (€3 billion). The share of positions closed secured by collateral increased to 62 per cent (59 per cent in 2022; Table A3).

² Only reports from individual banks and from banking and financial institutions belonging to banking groups participating in the Central Credit Register are used in this note. Foreign bank subsidiaries, financial companies and banks specialized in leasing or in recovery activities are not included, together with those under resolution or in comparable situations. The yearly figures for closed bad loans shown in the tables may not correspond to the figures reported in other Bank of Italy publications. The recovery rate is calculated at individual debtor level, and the aggregate values shown are calculated as weighted averages and are discounted. To facilitate comparison with the recovery rates observed in past years, recovered amounts are discounted using a constant interest rate over the years. For more details on the methodology used, please refer to the Methodological Appendix to 'Bad loan recovery rates', Banca d'Italia, Notes on Financial Stability and Supervision, No. 7, January 2017.

In 2023, the recovery rate for positions sold on the market decreased by around 1 percentage point compared with the previous year (to 30 per cent). The decrease concerned both the secured-by-collateral component (from 38 to 35 per cent; Table A2) and the unsecured component (from 24 to 22 per cent) and can be observed both in the household sector (from 42 to 36 per cent; Table A9) and in the business sector (from 30 to 29 per cent; Table A10).

Compared with previous years, a significant contraction in the average value of the exposures sold has been observed (€82 thousand, compared with an average value of €140 thousand recorded between 2017 and 2022).

Table 1 – Recovery rate by type of closure: standard procedures or sales on the market
(number of positions, millions of euros and per cent)

Year of closure	TOTAL			of which: positions that were not sold			of which: positions sold to third parties		
	Recovery rate (%)	Positions closed		Recovery rate (%)	Positions closed		Recovery rate (%)	Positions closed	
		Amount (€/mln)	Number		Amount (€/mln)	Number		Amount (€/mln)	Number
2006	48.0	9,039	198,588	48.4	8,803	183,345	30.2	236	15,243
2007	46.0	8,742	161,209	50.1	7,443	135,983	22.1	1,299	25,226
2008	44.4	6,580	123,615	44.8	6,225	110,509	37.4	355	13,106
2009	49.3	6,109	133,976	50.0	5,893	117,707	28.9	216	16,269
2010	48.6	6,667	128,168	49.3	6,454	108,591	26.7	213	19,577
2011	45.4	8,718	145,538	46.1	8,442	127,922	23.3	276	17,616
2012	49.0	7,472	128,653	53.0	6,207	102,510	29.8	1,266	26,143
2013	45.5	7,683	112,331	46.9	7,229	96,714	23.8	454	15,617
2014	34.0	13,613	287,685	39.0	9,463	241,056	22.4	4,150	46,629
2015	35.4	13,258	257,965	44.9	8,157	180,898	20.3	5,101	77,067
2016	34.5	16,712	278,584	43.5	9,155	99,925	23.5	7,557	178,659
2017	30.4	43,360	370,741	44.3	10,349	110,205	26.1	33,011	260,536
2018	32.6	78,017	441,621	45.9	10,794	92,919	30.4	67,223	348,702
2019	31.0	34,123	281,630	43.9	6,849	62,203	27.7	27,275	219,427
2020	35.5	25,022	212,617	44.9	5,408	67,176	32.9	19,614	145,441
2021	32.4	17,484	206,963	44.5	3,919	59,139	28.9	13,565	147,824
2022	34.4	22,417	141,049	46.9	4,158	34,476	31.6	18,259	106,573
2023	36.3	8,851	108,937	45.2	3,531	44,178	30.4	5,320	64,759
Total		333,867	3,719,870		128,480	1,975,456		205,388	1,744,414
Average	35.5	18,548	206,659	46.0	7,138	109,748	28.9	11,410	96,912

Source: Based on Central Credit Register data.

In the context of the yearly survey on NPL sales conducted by the Bank of Italy (see the box “The prices of NPL sales in 2023”), in 2023 the sale price of bad loans was equal to 22 per cent, substantially stable compared with 2022. The different dynamics compared with what was observed for the corresponding recovery rates are mainly attributable to the different calculation method and, specifically, to the closure of substantial

transactions characterized by a significant amount of write-offs and partial losses booked by the banks before the disposal.³

The recovery rate for positions closed using standard recovery procedures decreased to 45 per cent (from 47 per cent in 2022), due to the reduction observed for unsecured positions (from 42 to 37 per cent;⁴ Table A2) against a substantial stability for secured positions (50 per cent).

The gap between the recovery rates recorded respectively for positions closed using standard procedures and positions sold was slightly lower than 15 percentage points, unchanged compared with 2022.

THE PRICES OF NPL SALES IN 2023

In order to collect information on the sale prices of bad loans, the Bank of Italy has been conducting an annual survey on a representative sample of banks since 2016. In the latest survey, the participating banks accounted overall for around 87 per cent of the gross book value of NPLs in the Italian banking system at the end of 2022.

In 2023, the average price of bad loans sold was equal to 22 per cent of the gross book value at the time of sale, largely unchanged from 2022 (21 per cent); the price increased for bad loans secured by collateral (by 2.5 percentage points to 34 per cent), while it remained stable for unsecured loans (12 per cent; Table A).

Table A – The sale prices of bad loans by type of guarantee
(per cent)

	TOTAL	Positions secured by collateral	Unsecured positions
2016	14.9	30.5	9.1
2017	16.5 (*)	26.2 (*)	9.9 (*)
2018	23.1	33.8	10.0
2019	23.3	31.2	11.8
2020	23.5	35.2	10.4
2021	20.1	29.1	11.2
2022	21.4	31.5	12.0
2023	21.6	34.0	12.5

(*) Net of the FINO operation, the average prices of positions secured by collateral and of unsecured positions were equal to 33 and 9.2 per cent, respectively, of the gross book value; the overall average price was 20.4 per cent.

³ The recovery rates for positions sold on the market differ from sale prices, because recovery rates (which are higher) also take account of the cash flows ('partial' recoveries) collected in the period prior to the closure of the position. The information available in the Central Credit Register does not allow us to distinguish between the recoveries made during the life of the loan and the actual sale price. Moreover, the sale price is expressed as a percentage of the gross book value at the time of sale (net of any write-offs), while the recovery rate is calculated as a percentage of the original exposure at the time of entry into default (gross of any subsequent write-offs).

⁴ In 2022, the recovery rate on unsecured positions benefitted from the closing of significant positions backed by public guarantees. The 2023 rate is in line with what was observed in the years before 2022.

The average vintage of bad loans sold¹ was 4.3 years, down from 2022 (4.8 years).

Table B - Sale prices for secured and unsecured positions by vintage cluster
(per cent)

Vintage (years)	Total positions			Positions secured by collateral			Unsecured positions		
	0-2 years	3-5 years	>5 years	0-2 years	3-5 years	> 5 years	0-2 years	3-5 years	>5 years
2017	32.3	16.1	11.3	61.1 ^(*)	24.8	21.9	17.6	9.8	6.8
2018	29.6	26.4	19.5	35.9	33.9	33.5	17.9	14.0	7.5
2019	17.0	26.0	17.7	36.3	32.3	25.1	12.4	12.9	8.9
2020	18.5	24.9	16.2	28.5	36.7	26.5	13.9	10.4	7.9
2021	22.8	19.3	21.4	34.5	31.2	22.4	13.4	9.2	14.3
2021	27.0	22.1	16.7	32.0	34.5	25.8	22.5	11.7	6.4
2022	27.0	22.1	16.7	32.0	34.5	25.8	22.5	11.7	6.4
2023	24.2	25.2	13.6	36.1	38.7	23.5	15.2	15.3	6.1

(*) The higher price recorded in 2017 for positions with a vintage of 0-2 years was due to the disposal of some luxury real estate properties.

The amount of bad loan sales concluded through securitizations was equal to €1 billion (23 per cent of the €5 billion bad loans sold). The expiration of GACS, no longer available since 14 June 2022, has strongly reduced the use of securitizations since the second half of 2022.

In 2023, non-performing loans other than bad loans sold on the market were €4 billion, down by €3 billion compared with 2022, of which 75 per cent were portfolio sales. The average sale price of this type of loan was 47 per cent, 13 percentage points higher than the value achieved in 2022; the growth concerned both the secured-by-collateral component (52 per cent in 2023, compared with 43 per cent in 2022) and the unsecured one (37 per cent in 2023, from 28 per cent in 2022). The average vintage of these positions (computed from the time of classification as non-performing) was 4.6 years, slightly lower than in 2022 (4.7 years).

¹ The vintage is calculated here on the basis of the average vintage, weighted by exposure, of each portfolio sold, and does not consider the vintage of each position sold.

The recovery rates for bad loans secured by collateral remain significantly higher than those for the other positions

2.1 Positions secured by collateral versus other positions. – The average recovery rate for bad loans secured by collateral increased to 41 per cent (40 per cent in 2022; Table A3). The reduction in the recovery rate obtained for the positions sold on the market (from 38 to 35 per cent) was offset by the higher share of secured positions closed using standard recovery procedures, whose recovery rate was largely unchanged (50 per cent; Table A2). The same trend was observed for unsecured positions, whose recovery rate increased by around 1 percentage point overall (from 27 to 28 per cent), despite a reduction in the recovery rates of both positions closed through ordinary procedures and positions sold.

The recovery rates for bad loans closed using standard recovery procedures decrease as the vintage increases

2.2 Loans to firms and households. – In 2023, the recovery rate of bad loans to firms increased to 34 per cent (33 per cent in 2022; Table A4) due to the lower share of sales on the market; however, recovery rates decreased both on the positions sold (from 30 to 29 per cent; Table A10) and on those closed using standard recovery procedures (from 44 to 42 per cent; Table A8). The recovery rate on exposures to households slightly decreased (from 46 to 45 per cent; Tables A4, A7 and A9).

2.3 Recovery rate by vintage of bad loans. – In line with what has already been highlighted for the selling prices, the recovery rates for positions closed using standard recovery procedures generally decrease as the average vintage of bad loans rises (Table 2).⁵ The average recovery rate for positions closed using standard recovery procedures, secured by collateral and classified as bad loans for up to 2 years, was 23 percentage points higher than the recovery rate recorded for positions with a vintage of over 5 years (25 percentage points in 2022). In the case of unsecured positions, the gap in recovery rates based on vintage was 26 percentage points, up by 5 percentage points compared with the previous year. The share of positions closed using standard recovery procedures with a vintage higher than 5 years (secured by collateral or not) remained particularly high and equal to around 56 per cent (55 per cent in 2022).

Table 2 – Recovery rate for positions not sold by vintage of bad loans and by type of guarantee
(millions of euros and per cent)

Year of closure	Vintage ¹	Positions secured by collateral		Unsecured positions	
		Amount (€/mln)	Recovery rate (%)	Amount (€/mln)	Recovery rate (%)
2023	0-2 years	434	65.1	431	51.2
	3-5 years	419	59.8	277	42.0
	>5 years	1,353	42.2	618	25.3
	Total	2,206	50.0	1,326	37.2
2022	0-2 years	459	67.4	427	54.5
	3-5 years	653	55.3	325	43.1
	>5 years	1,497	42.6	798	34.0
	Total	2,609	50.1	1,549	41.5
2021	0-2 years	539	64.8	413	40.0
	3-5 years	630	57.7	302	41.2
	>5 years	1,308	40.7	727	28.6
	Total	2,477	50.3	1,442	34.5

Source: Based on Central Credit Register data.

(1) The distribution of closed positions by vintage cluster is determined by rounding the values of the recovery time (time taken to close the position) to the nearest integer year, e.g. the '3-5 years' cluster includes all the positions whose recovery time was between 2.5 and 5.5 years.

⁵ This phenomenon also takes account of the impact of discounting the amounts recovered. In this regard, it can be observed that the tables do not represent real recovery curves as a function of the vintage of the position. The Central Credit Register provides information about how much is recovered on average on positions closed after a certain number of years, but not about the timeline of the recoveries. It is worth recalling that the recovery rates by vintage cluster are, in any event, comparable because they are all discounted.

3. Closed bad loan positions: amounts and time to recovery

The lower overall value of closed positions recorded in 2023 mostly reflected the lower recourse to sales on the market (-71 per cent); bad loans closed using standard recovery procedures decreased by €600 million (-15 per cent). The number of positions closed instead decreased⁶ to a less significant extent (from 141,000 to 109,000; Table 3), as a consequence of the reduction in the average amount of closed positions, especially for those sold on the market (Table 1).

Table 3 – Number and amount of closed and outstanding bad loan positions
(annual data; numbers, amounts in millions of euros and per cent)

Year	Positions closed (by year of closure)		New positions (by year of classification)		Positions outstanding at the end of the previous year		Positions closed/ outstanding at the end of the previous year	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
2006	198,588	9,039	196,212	10,482	580,568	46,922	34.2%	19.3%
2007	161,209	8,742	202,515	8,649	578,192	48,365	27.9%	18.1%
2008	123,615	6,580	185,319	12,593	619,498	48,273	20.0%	13.6%
2009	133,976	6,109	240,441	21,668	681,202	54,285	19.7%	11.3%
2010	128,168	6,667	257,067	22,096	787,667	69,844	16.3%	9.5%
2011	145,538	8,718	228,639	24,531	916,566	85,273	15.9%	10.2%
2012	128,653	7,472	246,428	25,029	999,667	101,086	12.9%	7.4%
2013	112,331	7,683	229,739	31,831	1,117,442	118,642	10.1%	6.5%
2014	287,685	13,613	283,987	34,322	1,234,850	142,789	23.3%	9.5%
2015	257,965	13,258	307,554	31,146	1,231,152	163,499	21.0%	8.1%
2016	278,584	16,712	273,338	27,019	1,280,741	181,387	21.8%	9.2%
2017	370,741	43,360	254,228	23,495	1,275,495	191,694	29.1%	22.6%
2018	441,621	78,017	238,709	19,004	874,140 ¹	157,721 ¹	50.5%	49.5%
2019	281,630	34,123	177,628	12,459	630,490	98,052	44.7%	34.8%
2020	212,617	25,022	112,585	7,915	495,330	65,420	42.9%	38.2%
2021	206,963	17,484	120,078	7,248	367,774	41,986	56.3%	41.6%
2022	141,049	22,417	88,086	5,588	254,855	35,121	55.3%	63.8%
2023	108,937	8,851	122,275	5,528	193,121	20,248	56.4%	43.7%
Total	3,719,870	333,867	3,764,828	330,603				
Average	206,659	18,548	209,157	18,367	784,375	92,445	31.0%	24.0%

Source: Based on Central Credit Register data.

(1) The data for 2018 are impacted by the transfer of bad loans to publicly owned companies.

⁶ The number of positions is calculated as the number of debtors at banking group level, which are no longer reported to the Central Credit Register after the closing of the position. Consequently, this number does not represent the number of credit lines opened or closed during the period.

The amount of positions that were newly classified as bad loans remained at the very low levels observed last year (€6 billion) and below the amount of bad loans closed (€9 billion).

The share of positions that are closed each year, calculated as the ratio of the amount of positions closed to the total outstanding at the beginning of the period, was 44 per cent, down from 64 per cent in 2022.

The improvements observed since 2015 in the time taken to close bad loan positions are continuing, notwithstanding the significant reduction in sales on the market. For the positions classified as bad loans in 2017, the number of positions closed within six years was equal to 97 per cent of the total (Table 4), the highest value recorded in the survey period. With reference to the number of positions closed within three years from being classified as bad loans (positions classified as bad loans in 2020), their share rose by 3 percentage points, to 88 per cent.

Table 4 – Share of positions closed within 1, 2 ... 6 years of classification as a bad loan
(per cent; by number of positions)

Year of classification	within 1 year ¹	within 2 years	within 3 years	within 4 years	within 5 years	within 6 years
2006	47	59	66	71	73	76
2007	41	53	58	65	66	69
2008	32	39	49	54	56	60
2009	30	41	50	56	65	72
2010	24	34	40	54	62	65
2011	24	39	48	56	60	76
2012	20	34	43	47	66	79
2013	21	38	42	64	80	89
2014	26	32	65	79	87	93
2015	38	58	74	81	89	94
2016	38	67	77	86	92	96
2017	47	64	82	92	95	97
2018	42	63	84	91	95	
2019	46	71	85	91		
2020	61	80	88			
2021	65	81				
2022	56					

Source: Based on Central Credit Register data.

(1) The distribution of the positions closed within 1, 2 ... 6 years of classification as a bad loan by vintage cluster is calculated by converting the recovery time needed to close the position into the nearest integer year (e.g. cluster 'within 1 year' includes all the positions that have been closed within 1.5 years of classification as a bad loan; the cluster 'within 2 years' includes all the positions that have been closed within 2.5 years of classification as a bad loan).