BANCA D'ITALIA
EUROSISTEMA

Notes on Financial Stability and Supervision

No. 35
December 2023

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ISSN 2284-4198 (online)

Bad loan recovery rates in 2022

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1. Introduction and main conclusions

This note:

- updates to 2022 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.

<u>The reduction in the stock of bad loan positions</u>

- **In 2022, bad loan positions amounting to around €22 billion were closed (i.e. derecognized from banks' financial statements)**. This amount, which is around four times higher than that of newly-classified bad loans, exceeds that recorded in 2021 both in absolute terms (€17 billion) and as a percentage of bad loans outstanding at the end of the previous year (64 per cent, against 42 per cent).
- **The increase compared with 2021 is mainly attributable to sales on the market** (from €14 billion to €18 billion), while the amount of bad loans closed through standard procedures remained stable compared with the previous year (€4 billion).

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

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- **The improvements underway since 2015 in the time necessary to dispose of bad loans are continuing**, benefiting from both the reduction in the stock of bad loans due to lower inflows and the progress achieved by the banks in the management of these loans. The share of the number of positions closed within one year of their classification as bad loans increased progressively (from 38 per cent for the positions entered in 2015 to 65 per cent for those entered in 2021). Moreover, the latest data indicate that **85 per cent of the positions are closed within three years of their classification as bad loans**.

- Compared with previous years, **recourse to securitizations in relation to total sales decreased**, also owing to the fact that the guarantees on the securitization of bad loans (GACS) are no longer available since 14 June 2022. **The GACS assisted all the main securitization transactions** (€5.4 billion, i.e. 82 per cent of securitized bad loans).[2]

- **The amount of loans classified as unlikely-to-pay sold on the market was €7 billion** (€5.7 billion in 2021).

<u>Recovery rates of bad loans closed</u>

- **Compared with 2021, the average recovery rate increased for the positions sold on the market** (from 29 to 32 per cent) **as well as for those closed using standard recovery procedures** (from 45 to 47 per cent).

- **The average recovery rate for bad loans secured by collateral was equal to 40 per cent**, higher compared with 2021 (38 per cent) due to disposals, whose recovery rate moved from 34 to 38 per cent. **For the unsecured positions, the average recovery rate was 27 per cent**, increasing compared with the previous year (25 per cent), both on bad loans sold to third parties (from 22 to 24 per cent) and on those closed using standard recovery procedures (from 35 to 42 per cent).

<u>Disposal prices of non-performing loans</u>

- **The price of the bad loans sold in 2022**, calculated on the basis of the annual survey conducted since 2016 on a very large sample of transactions, **was equal to 21 per cent of the gross book value at the time of the sale, slightly higher than 20 per cent recorded in 2020**. The increase, as already highlighted for the corresponding recovery rate, is attributable to both bad loans secured by collateral, for which the price increased to 32 per cent (29 per cent in 2021), and unsecured positions, whose price increased to 12 per cent (11 per cent in 2021).

- **The sale price of non-performing loans other than bad loans was equal to 34 per cent**, 6 percentage points down from the value observed in 2021, due to the lower share attributable to the secured component.

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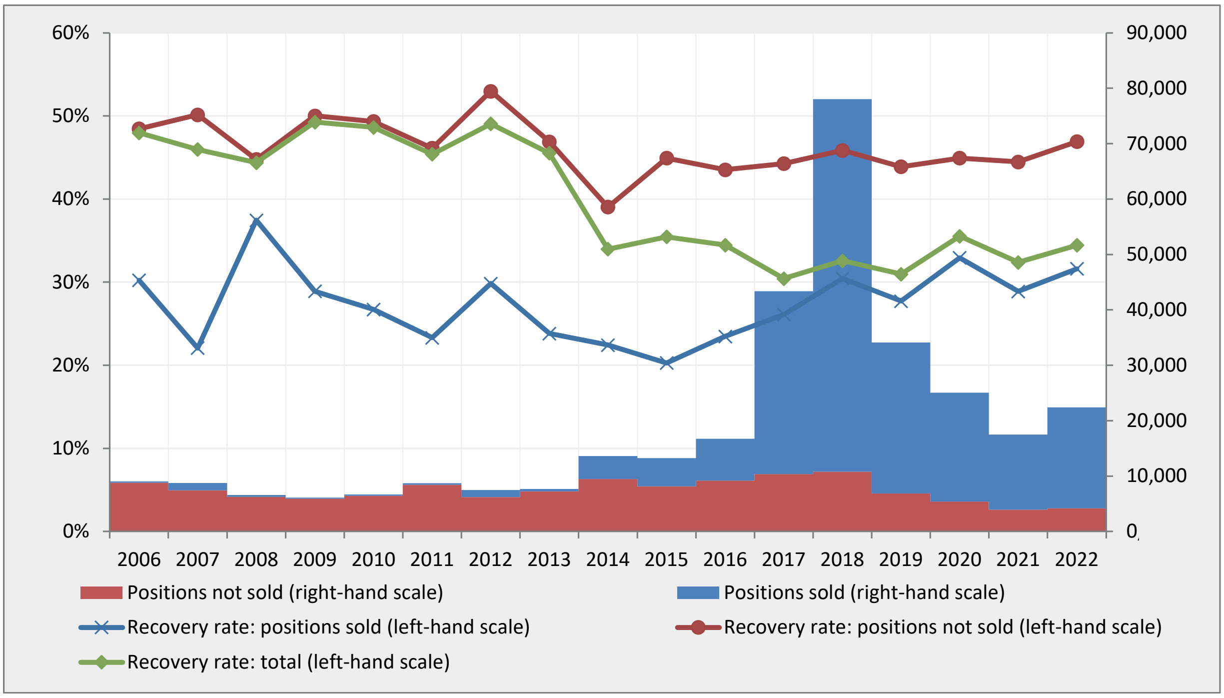
[2] The amount refers to the gross book value at the time of the sale, based on information drawn from the yearly survey of NPL sales conducted by the Bank of Italy. Disposals also include leasing and factoring receivables, which are excluded from recovery rate estimates.

2. Bad loan recovery rates [3]

In 2022, the total amount of bad loans closed increases mostly owing to greater sales on the market

In 2022 the total amount of closed bad loan positions increased compared to the previous year (from 17 billion to 12 billion), mainly due to the growth in the sales on the market (from 14 billion to 18 billion; Figure 1 and Table 1). Disposals continue to account for the highest share of total closed positions, in line with what was observed in previous years (81 per cent; Figure 1, Table 1 and Table A1 in the appendix available online).

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



Source: Based on Central Credit Register data.

The increase in the amount of bad loans sold was attributable exclusively to positions towards enterprises (from 11 billion to 16 billion), which represent 86 per cent of the total sales, while positions towards households recorded a decrease compared with the

3 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. 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.

previous year (from 3 billion to 2 billion). The share of positions secured by collateral[4] closed went down to 59 per cent (60 per cent in 2021; Table A3).

In 2022, the recovery rate for positions sold on the market increased by almost 3 percentage points compared with the previous year (from 29 to 32 per cent). The increase concerned both the secured-by-collateral component (from 34 to 38 per cent; Table A2) and the unsecured component (from 22 to 24 per cent) and can be observed both in the household sector (from 32 to 42 per cent; Table A9) and in the firms sector (which went from 28 to 30 per cent; Table A10).

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
Total		**325,016**	**3,610,933**		**124,949**	**1,931,278**		**200,068**	**1,679,655**
Average	**35.4**	**19,119**	**212,408**	**46.0**	**7,350**	**113,605**	**28.8**	**11,769**	**98,803**

Source: Based on Central Credit Register data.

4 Loans secured by collateral are those secured – in full or in part – by the following forms of collateral recorded in the Central Credit Register: pledges, mortgages and liens. Other loans include those secured by personal guarantees or those without guarantees.

Similar evidence was observed in the context of the yearly survey on NPL sales conducted by the Bank of Italy (see the box 'The prices of bad loan sales in 2022')[5]: in 2022, the price, expressed as a percentage of the gross book value at the time of sale, was equal to 21 per cent, with an increase of 1 percentage point compared with 2021.

The recovery rate for positions closed using standard recovery procedures increased to 47 per cent (from 45 per cent in 2021), due to the higher rate observed on unsecured positions (from 35 to 42 per cent; Table A2).

The gap between the recovery rates recorded respectively for positions closed using standard procedures and positions sold was 15 percentage points, largely unchanged compared with 2021.

THE PRICES OF BAD LOAN SALES IN 2022

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 88 per cent of the gross book value of NPLs in the Italian banking system at the end of 2021.

In 2022, the average price of the bad loans sold was equal to 21 per cent of the gross book value at the time of sale, slightly higher than in 2021 (20 per cent) but lower than the average figure for the previous three years (23 per cent); the price increased both on bad loans secured by collateral (from 29 to 39 per cent) and on unsecured loans (from 11 to 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

(*) Net of the FINO operation concluded by UniCredit, the average prices of positions secured by collateral and unsecured were respectively equal to 33 and 9 per cent of the gross book value; the average price overall was 20.4 per cent.

5 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. Overall, the indications emerging from this survey are in line with the results obtained through the Central Credit Register data.

The average vintage of bad loans sold[1] was 4.8 years, slightly higher than that observed in 2021 and 2020 (4.3 and 4.5 years respectively). As in previous years, the sale price decreases as the average vintage of the positions rises, and depends on whether or not the position is secured by collateral.

Table B - Sale prices between 2017 and 2020 for secured and unsecured positions by vintage
(per cent)

	Total positions			Positions secured by collateral			Unsecured positions		
Vintage (years)	**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
2022	27.0	22.1	16.7	32.0	34.5	25.8	22.5	11.7	6.4

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

The GACS assisted most of the bad loan sales concluded through securitizations (5.4 billion, 82 per cent of the securitized bad loans). Compared with the previous years, the use of securitizations in relation to total bad loan sales was lower, also due to the fact that GACS are no longer available since 14 June 2022.

In 2022, non-performing loans other than bad loans sold on the market amounted to €7.0 billion (€5.7 billion in 2021), of which 72 per cent represented by portfolio sales, while the remaining part was related to single name sales attributable to a growing number of intermediaries.[2]

The average sale price of this type of loan was 34 per cent, 6 percentage points lower than the value achieved in 2021, mainly owing to a lower weight of the secured-by-collateral component (41 per cent in 2022, compared with 63 per cent in 2021). The average vintage of these positions (computed from the time of classification as non-performing) was 4.7 years, slightly higher than in 2021 (4.6 years). Exposures secured by collateral reported a sale price about 14 percentage points higher than that of unsecured exposures.

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.

2 Single name sales are characterized by very heterogeneous amounts, and in the case of transactions for significant amounts, it is common to use companies specialized in the management of unlikely-to-pay loans.

2.1 Positions secured by collateral versus other positions – The average recovery rate for bad loans secured by collateral increased to 40 per cent (38 per cent in 2021; Table A3), mainly due to the increase in the recovery rate obtained for the sales component (38 per

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

cent in 2022, from 34 per cent in 2021; Table A2). An increase was also observed in the recovery rate for the unsecured positions, equal to around 2 percentage points (from 25 to 27 per cent).[6]

2.2 Loans to firms and households. – In 2022, the recovery rate of bad loans towards firms increased to 33 per cent (31 per cent in 2021; Table A4); the improvement concerned both the positions sold (from 28 to 30 per cent; Table A10) and those closed using standard recovery procedures (from 42 to 44 per cent; Table A8). The recovery rate of positions towards households increased significantly (from 36 to 46 per cent; Table A4), growing both on positions sold on the market and on those closed using standard recovery procedures (Table A7 and A9).

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

2.3 Recovery rate by vintage of bad loans. – In line with what has already been highlighted for the selling prices, also for positions closed using standard recovery procedures, the recovery rate generally decreases as the average vintage of classification as a bad loan rises (Table 2).[7] The average recovery rate for positions closed using standard recovery procedures, secured by collateral and with a vintage of classification as a bad loan of up to 2 years, was 25 percentage points higher than the recovery rate recorded for

Table 2 - Recovery rate for positions not sold by vintage of classification as a bad loan 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 (%)**
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**
2020	0-2 years	741	64.0	473	50.2
	3-5 years	895	51.8	442	46.2
	>5 years	1.937	41.0	921	27.9
	Total	**3,572**	**48.5**	**1,836**	**38.0**

Source: Based on Central Credit Register data.
(1) The distribution of the 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.

6 The increase in the recovery rate is particularly high (from 35 to 42 per cent) on unsecured bad loans closed using ordinary procedures, owing to the recoveries achieved on some significant positions backed by public guarantee.

7 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.

positions with a vintage of over 5 years. In the case of unsecured positions, the gap in recovery rates based on the vintage was 20 percentage points. 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 55 per cent (52 per cent in 2021).

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

In 2022, the reduction in positions newly classified as bad loans continues

The higher overall value of closed positions recorded in 2022 was determined by the increase in the average amount of closed positions, higher than 2021 both for standard closures and for sales. The number of positions closed instead decreased[8] (from 207,000 to 141,000; Table 3).

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	191,69[4]	29.1%	22.6%
2018	441,621	78,017	238,709	19,004	874,1401	157,7211	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	212,617	25,022	112,585	7,915	495,330	65,420	42.9%	38.2%
2022	141,049	22,417	88,086	5,588	254,855	35,121	55.3%	63.8%
Total	**3,610,933**	**325,016**	**3,642,553**	**325,075**				
Average	**212,408**	**19,119**	**214,268**	**19,122**	**819,155**	**97,080**	**29.5%**	**22.0%**

Source: Based on Central Credit Register data.
(1) The data for 2018 are impacted by the transfer of bad loans to publicly owned companies.

8 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 reached a new minimum (€6 billion) and remains significantly below the amount of bad loans closed (€22 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, increased by more than 20 percentage points, to 64 per cent.

The length of time taken to dispose of bad loans continues to improve

The improvements observed since 2015 in the time taken to dispose of bad loans are continuing, mainly due to the sales in the market. For the positions classified as bad loans in 2016, the number of positions closed within six years was equal to 96 per cent of the total (Table 4), the highest value recorded in the survey period. Particularly relevant was the increase in the number of positions closed within one or two years from their entry into bad loans (positions classified as bad loans in 2020 and 2021), whose share rose respectively by 4 percentage points, to 65 per cent, and by 9 percentage points, to 80 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	
2018	42	63	84	91		
2019	46	71	85			
2020	61	80				
2021	65					

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).