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Bad loan recovery rates in 2020

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1. Introduction and main conclusions

This note:

- updates to 2020 the estimated bad loan recovery rates already published in the *Notes on Financial Stability and Supervision*, Nos. 7 and 11 of 2017, No. 13 of 2018, No. 18 of 2019 and No. 23 of 2020;
- illustrates the results of the yearly survey on NPL sales, conducted by Bank of Italy starting from 2016.¹

The analysis reached the following main conclusions.

The stock reduction of bad loan positions

- **In 2020, €25 billion of bad loan positions were closed (i.e. derecognized from the banks financial statements).**² This amount, lower than those recorded in the previous years (€34 billion in 2019, €78 billion in 2018 and €43 billion in 2017), is about 3 times higher than that of newly-classified bad loans (€8 billion) and, as a percentage of bad loans outstanding at the end of the previous year, is higher than the figure for 2019 (38 against 35 per cent).

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

² The amount does not consider, as it cannot be identified as a sale, the partial non-proportional spin-off of a business unit carried out by Monte dei Paschi di Siena in favour of AMCO (Hydra project), which involved an amount of bad loans for about €5 billion. Positions closed by financial companies and/or banks specialized in leasing or recovery activities are also excluded; in 2020, a major securitization was carried out, which involved approximately €1.5 billion in real estate leasing bad loans.

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- The reduction affected both bad loans sold on the market (from €27 to €20 billion) and those closed using standard recovery procedures (from €7 to €5 billion) and **reflects the contraction in the stock of these loans on banks' balance sheets** (from €192 to €65 billion between 2016 and 2019) as well as the reduction in their average vintage (and therefore in the amount of positions nearer to closing using the standard procedures).
- **The GACS assisted all the main transactions** (€12.6 billion realized by 29 banks, some through multioriginator transactions).
- **The amount of loans classified as unlikely to pay sold on the market was €6.7 billion³** (€8.5 billion in 2019 and €4.3 billion in 2018).
- **The recovery activity of intermediaries was affected by the closure of the courts following the restrictive measures taken to face the pandemic**, with greater effects on the procedures in their initial phase. This resulted in more recourse to out-of-court initiatives. It is not currently possible to know whether this setback will result in a postponement of the flows or even in a reduction in recovery rates.

Recovery rates of bad loans closed

- **Compared with 2019, the overall recovery rate increased to 36 per cent**, against 31 per cent in 2019 (the recovery rate moved from 28 to 33 per cent for the positions sold on the market and from 44 to 45 per cent for those closed using standard recovery procedures). The gap in recoveries between disposals and ordinary procedures fell to 12 percentage points, compared with the 16 percentage points of the past two years.
- **The average recovery rate for bad loans secured by collateral increased to 40 per cent** (35 per cent in 2019), mainly on the positions sold (from 32 to 38 per cent). **For unsecured positions, the average recovery rate was 26 per cent**; in this case too, the increase occurred both on bad loans sold to third parties (from 16 to 23 per cent) and, albeit to a lesser extent, on those closed using standard recovery procedures (from 35 to 38 per cent).

Disposal prices of non-performing loans

- **The price of the bad loans sold in 2020**, calculated on the basis of the annual survey conducted since 2016 on a very large sample of transactions, **was equal to 24 per cent of the gross book value at the time of the sale, essentially unchanged compared with 2019**, against a stable average vintage of the positions sold. The price averaged 35 per cent (31 per cent in 2019) for bad loans secured by collateral and 10 per cent (12 per cent in 2019) for the others.

³ In the calculation, as indicated in footnote 2, the partial non-proportional spin-off of a business unit carried out by Monte dei Paschi di Siena in favour of AMCO (Hydra project) is not considered, as it cannot be identified as a sale; it included an amount of non-performing loans other than bad loans of approximately €2.8 billion.

In 2020, the total amount of closed bad loans fell due to fewer sales on the market.

- **The disposal price of non-performing loans other than bad loans was equal to 41 per cent**, down by 12 percentage points compared with that achieved in 2019 – which had benefited from a significant transaction with high prices – but in line with the price obtained in 2018.

2. Bad loan recovery rates⁴

In 2020, the total amount of closed bad loan positions decreased compared with the previous year (from €34 to €25 billion). The decrease was due to both the sales on the market (from €27 to €20 billion) and the positions closed using the standard recovery procedures (from €7 to €5 billion; Figure 1 and Table 1).⁵ This trend reflects the contraction in outstanding bad loans on banks' balance sheets (from 2016 to 2019, bad loans went from €192 to €65 billion),⁶ as well as the reduction in their average vintage and therefore in the amount of positions nearer to ordinary closing.

In 2020, even though it is not included in the statistics reported therein (see footnote 2), the finalization of the partial non-proportional spin-off of a business unit carried out by Monte dei Paschi di Siena in favour of AMCO (Hydra project) should be pointed out, which involved bad loans amounting to approximately €5 billion. Although this cannot be considered as a sale, the inclusion of this transaction in the calculation of closed bad loans would bring the total value of closed positions in 2020 to almost €30 billion.

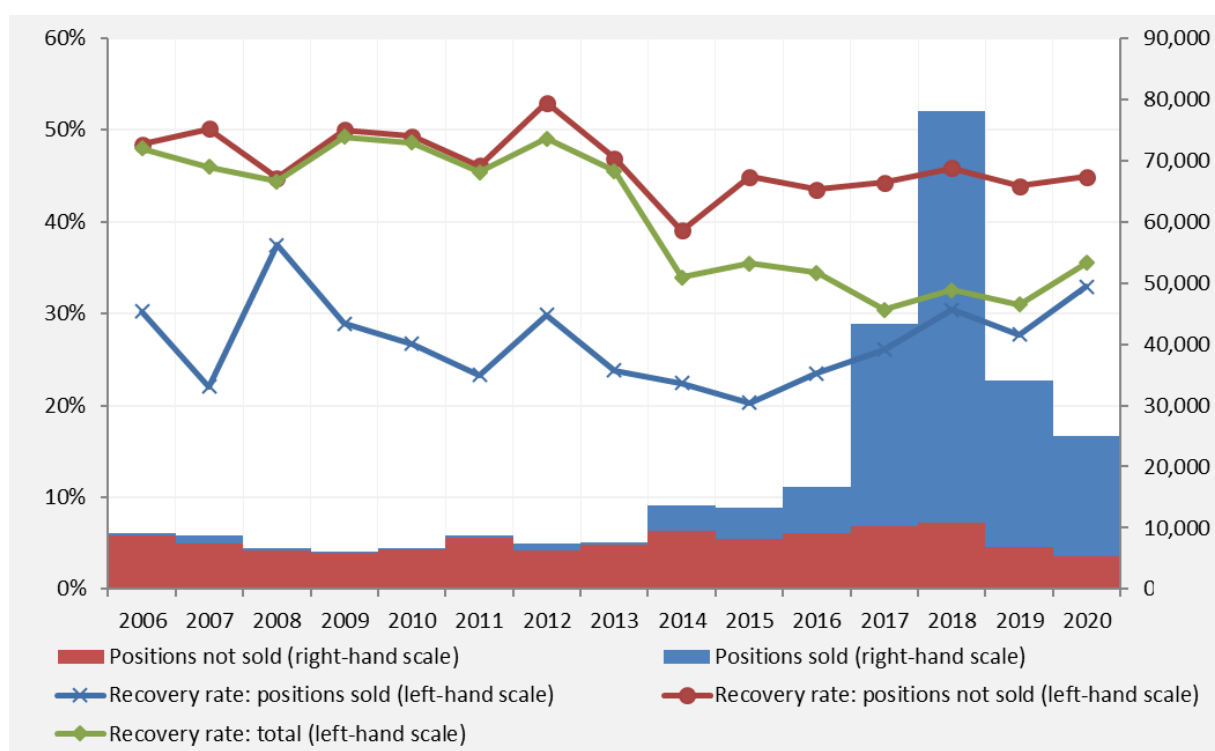
The weight of the disposals on total closed positions decreased slightly, but remains significant (from 80 to 78 per cent; Fig 1 and Table 1 and Table A1 in the electronic appendix). As in previous years, recourse to securitizations with GACS for larger transactions continued to be high in 2020.

⁴ The yearly figures for closed bad loans shown in the tables may not correspond to the figures reported in other Bank of Italy publications, as explained in the Methodological Appendix to 'Bad loan recovery rates', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 7, January 2017.

⁵ The amount of positions closed through ordinary procedures depends on various factors, including the size of the outstanding loans, their composition (i.e. a position with a higher average vintage is generally nearer to ordinary closure), the quantity and quality of the internal and external structures used by intermediaries for managing positions, as well as incentive mechanisms for the recovery performance of these structures. The latter can be oriented towards greater speed in closing positions (especially if there is a lot of stock to be disposed of) or to maximizing recoveries, which sometimes takes longer and can therefore be more easily pursued when stocks settle at low levels. In 2020, there was also the partial closure of the courts following the pandemic, with a consequent reduction in the positions closed via judicial proceedings.

⁶ In this context, the decrease in the value of transactions for significant amounts can be observed, which in previous years (especially in 2017 and 2018) had contributed to increasing the total of bad loans sold.

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 reduction in the amount of bad loans closed almost exclusively involved the positions towards households and secured by collateral. On the other hand, the reduction in the amount of bad loans closed through standard recovery procedures concerned all positions, regardless of the presence or absence of collateral⁷ and the economic sector of the debtor. The pandemic contributed to the reduction in the number of closed positions, especially those managed through judicial proceedings, following the closure of the courts. In particular, the positions that were in the initial stages of the judicial recovery process slowed down due to the restriction measures adopted. In contrast, positions with proceedings in the final distribution phase recorded minor impacts.

In 2020, there was also a change in the percentage composition by type of closed position, with a lower incidence of closed positions secured by collateral: ⁷ their weight on the total was 67 per cent, compared with 73 per cent in 2019 (Table A1). With regard to the composition between firms and households, in 2020, the weight of bad loans closed to households decreased (14 against 32 per cent observed in 2019; Table A4), due to the lower sales on the market concerning this type of debtor (Tables A5 and A9).

⁷ 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.

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
Total		285,115	3,262,921		116,871	1,837,663		168,245	1,425,258
Average	40.9	19,008	217,528	47.7	7,791	122,511	36.2	11,216	95,017

Source: Based on Central Credit Register data.

In 2020, the recovery rate for positions sold on the market increased by more than 5 percentage points compared with the previous year (from 28 to 33 per cent). The increase concerned both the secured by collateral component (from 32 to 38 per cent; Table A2) and the unsecured component (from 16 to 23 per cent) and can be observed both in the household sector (which went from 27 to 39 per cent; Table A9) and in the firms sector (which went from 28 to 32 per cent; Table A10).

On the basis of the yearly survey on NPL sales conducted by the Bank of Italy on a representative sample of Italian banks (see the box 'The prices of bad loan sales in 2020')⁸ in 2020, the price, expressed as a percentage of the gross book value at the time of sale, was slightly higher than in 2019 and equal to 24 per cent, with an average vintage of the positions sold that was almost unchanged (4.5 years).

⁸ 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 recovery rate for positions closed using standard recovery procedures increased from 44 to 45 per cent, especially in the unsecured component (from 35 to 38 per cent).

The gap between the recovery rate recorded respectively for positions closed using standard procedures and positions sold decreased to 12 percentage points, compared with the 16 percentage points recorded in the previous two years, and is mainly due to the higher recovery rate of the positions sold to third parties.

As highlighted in previous analyses,⁹ recovery rates continue to differ from bank to bank in 2020 as well; the different efficiency of the NPL management and recovery processes consequently affects the trend of the results observed at the aggregate level.

THE PRICES OF BAD LOAN SALES IN 2020

In order to collect information on the sale prices of bad loans, the Bank of Italy has conducted an annual survey on a representative sample of banks since 2016. In the latest survey, the participating banks accounted overall for around 96 per cent of the gross book value of NPLs in the Italian banking system at the end of 2019.

In 2020, the average price of the bad loans sold was 24 per cent of the gross book value at the time of sale, substantially unchanged from 2019; the price increased to 35 per cent on bad loans secured by collateral (31 per cent in 2019) and decreased to 10 per cent on unsecured positions (12 per cent in 2019; 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

(*) 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.

⁹ F. Ciochetta, F.M. Conti et. al., 'Bad loan recovery rates', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 7, 2017.

The average vintage of bad loans sold¹ was below 5 years (4.5 years), in line with 2019 (4.6 years). As in previous years, the sale price decreases as the average vintage of the positions rises: for loans with a vintage of more than 5 years, which accounted for around 9 per cent of the total value of positions closed in 2020, the price averaged 16 per cent, while it was 25 per cent for those with a vintage of between 3 and 5 years, that represented 82 per cent of bad loans disposed (Table B). For sales with less than 2 years of vintage, the average price was 18 per cent, but with a low incidence in terms of value sold (8 per cent of the total).

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

(*) 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. (**) For disposals with a vintage of less than 2 years, the price reduction is attributable to the different composition of the portfolios sold, with a greater weight for the exposures not backed by collateral.

In 2020, the amount of non-performing loans other than bad loans sold on the market was €6.7 billion (€8.5 billion in 2019; €4.3 billion in 2018). As described above for bad loans, this value does not take into account the transaction finalized by Monte dei Paschi di Siena – Hydra project – which involved, in addition to bad loans, an amount of other non-performing loans of approximately €2.8 billion. The inclusion of this transaction in the calculation of closed positions would bring the total value of the other non-performing loans closed in 2020 to almost €9.4 billion, a value higher than that recorded in 2019.

The average sale price of this type of loan was 41 per cent, down by 12 percentage points compared with that achieved in 2019 – which had benefited from a significant transaction with high prices – but in line with the prices achieved/obtained in 2018. The average vintage of these positions was approximately 4 years, in line with previous years. Exposures secured by collateral reported a transfer price about 15 percentage points higher than that of unsecured exposures.

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

As is known, this category of loans has a high level of heterogeneity, which the banks have countered using different strategies with respect to those envisaged for bad loans, which include not only the sale, but also the stipulation of partnership agreements with external servicers or the involvement of specialized funds. Unlike the non-performing loans market, the sales of other impaired loans are concentrated at a smaller number of banks, also due to the greater complexity and lesser experience of this type of transaction.

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 40 per cent (35 per cent in 2019; Table A3), mainly due to the recovery rate increase in the sales component (38 per cent in 2020, from 32 per cent in 2019; Table A2). For the unsecured positions, the increase in the recovery rate (to 26 per cent) was consistent both for positions closed in the ordinary way (from 35 to 38 per cent), and on positions sold on the market (from 16 to 23 per cent).

2.2 Loans to firms and households. – In 2020, the recovery rate of bad loans towards firms increased to 34 per cent (32 per cent in 2019; Table A4); the recovery rates increased both for the positions sold and those closed using standard recovery procedures (Table A6). The recovery rate of positions towards households significantly increased (from 30 to 44 per cent), mostly due to the growth that characterized the recoveries on positions sold on the market, largely attributable to a single transaction for a significant amount (Table A5).

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).¹⁰ 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 23 percentage points higher than the recovery rate recorded for positions with a vintage of over 5 years (64 against 41 per cent). In the case of unsecured positions, the gap in recovery rates based on the vintage reached 22 percentage points (50 against 28 per cent). 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 53 per cent; the remaining share was fairly equally distributed between the clusters with lower vintages (0-2 years and 3-5 years).

¹⁰ 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.

**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 (%)
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
2019	0-2 years	996	61.2	648	46.6
	3-5 years	1,506	52.6	512	33.3
	>5 years	2,174	38.8	1,014	28.4
	Total	4,675	48.0	2,173	35.0
2018	0-2 years	1,625	63.5	1,071	44.8
	3-5 years	1,963	57.9	974	40.4
	>5 years	2,844	42.4	2,317	30.3
	Total	6,432	52.4	4,363	36.1
2017	0-2 years	1,529	68.5	1,196	40.6
	3-5 years	1,546	59.3	1,108	31.7
	>5 years	2,760	44.2	2,210	25.4
	Total	5,834	54.6	4,515	31.0
2016	0-2 years	1,375	68.9	1,144	45.4
	3-5 years	1,271	54.5	1,044	34.6
	>5 years	2,193	43.5	2,127	24.0
	Total	4,840	53.6	4,315	32.2

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.

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

In 2020, the number of positions closed¹¹ decreased compared with 2019, standing at around 213,000, in line with the reduction of the amount (Table 3). The amount of positions that were newly classified as bad loans, which reached its lowest level since 2009 (€8 billion),¹² was approximately one third of those closed. The decrease in inflows of bad loans benefited from the measures introduced as a result of the pandemic.

¹¹ 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.

¹² It should be remembered that 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.

*In 2020,
the reduction
of positions
newly
classified
as bad loans
continued*

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 3 percentage points, to 38 per cent.

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%
Total	3,262,921	285,115	3,434,389	312,239				
Average	217,528	19,008	228,959	20,816	886,867	104,883	26.0%	17.9%

Source: Based on Central Credit Register data.

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

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 increase in sales in the market. In particular, for the positions classified as bad loans in 2014, the number of positions closed within six years was equal to 93 per cent of the total (Table 4), the highest value recorded in the survey period. The number of positions closed within two years (positions classified as bad loans in 2018) equalled 63 per cent, slightly lower than the level recorded in the previous two years.

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 ²
2014	26	32	65	79	87 ²	93
2015	38	58	74	81 ²	89	
2016	38	67	77 ²	86		
2017	47	64 ²	82			
2018	42 ²	63				
2019	46					

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). – (2) For positions closed in 2019, the updated figure is shown following the recalculation of the denominator.