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Bad loan recovery rates in 2018

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1. Introduction and main conclusions

This note updates to 2018 the estimated bad loan recovery rates already published for the period 2006-2017.[1] Moreover, the note illustrates the results of the yearly survey on NPL sales, conducted by Bank of Italy starting from 2016. The data, together with some detailed breakdowns that are commented on but not reproduced in this text, are available in digital format.

The analysis reached the following main conclusions:

- **In 2018 the overall amount of bad loan positions derecognized from the banks financial statements** (hereinafter referred to as 'closed') **rose further,** reaching €78 billion (€43 billion in 2017, €17 billion in 2016). The increase is entirely attributable to sales on the market, which rose from 33 to 67 billion,[2] while the bad loan positions that were closed using standard recovery procedures remained substantially stable at around €11 billion. Overall, the value of closed positions was higher than that of newly-classified bad loans (€19 billion), partly as a result of the reduction of the latter.

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1 F. Ciocchetta, F.M. Conti, R. De Luca, I. Guida, A. Rendina and G. Santini, 'Bad loan recovery rates', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 7, January 2017, F. M. Conti, I. Guida, A. Rendina and G. Santini, 'Bad loan recovery rates in 2016', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 11, November 2017, and A.L. Fischetto, I. Guida, A. Rendina, G. Santini and M. Scotto di Carlo, 'Bad loan recovery rates in 2017', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 13, December 2018.

2 The date marking the closure and sale of bad loans is the date of accounting derecognition. Therefore the total value of bad loans sold, as reported in this note, differs from that presented in other Bank of Italy publications, in which it is calculated on the basis of when the transaction is concluded, which is not always the date of derecognition.

- **Increases were recorded in the recovery rates of bad loan positions both for those sold on the market** (from 26 to 30 per cent) **and for those closed using standard recovery procedures** (from 44 to 46 per cent); the gap in the recovery rates obtained through standard procedures and sales remained high. Despite the significant increase in the share of sales on the market (86 per cent of the total, compared with 76 per cent in 2017), **the average recovery rate rose to 33 per cent** (30 per cent in 2017).

- **The average recovery rate for bad loans secured by collateral was 38 per cent**, increasing for the positions that were sold (from 33 to 35 per cent) while falling for positions that were closed using standard recovery procedures (from 55 to 52 per cent).

- **For the unsecured positions, the average recovery rate was 22 per cent.** This rate rose for bad loans either sold to third parties (from 18 to 19 per cent) or closed using standard recovery procedures (from 31 to 36 per cent).

- **The speed of disposal of bad loans grew significantly.** The ratio of the value of bad loans closed each year to the stock outstanding at the start of the period, which in 2013 had reached a low of 6 per cent, rose to 50 per cent in 2018 (23 per cent in 2017).

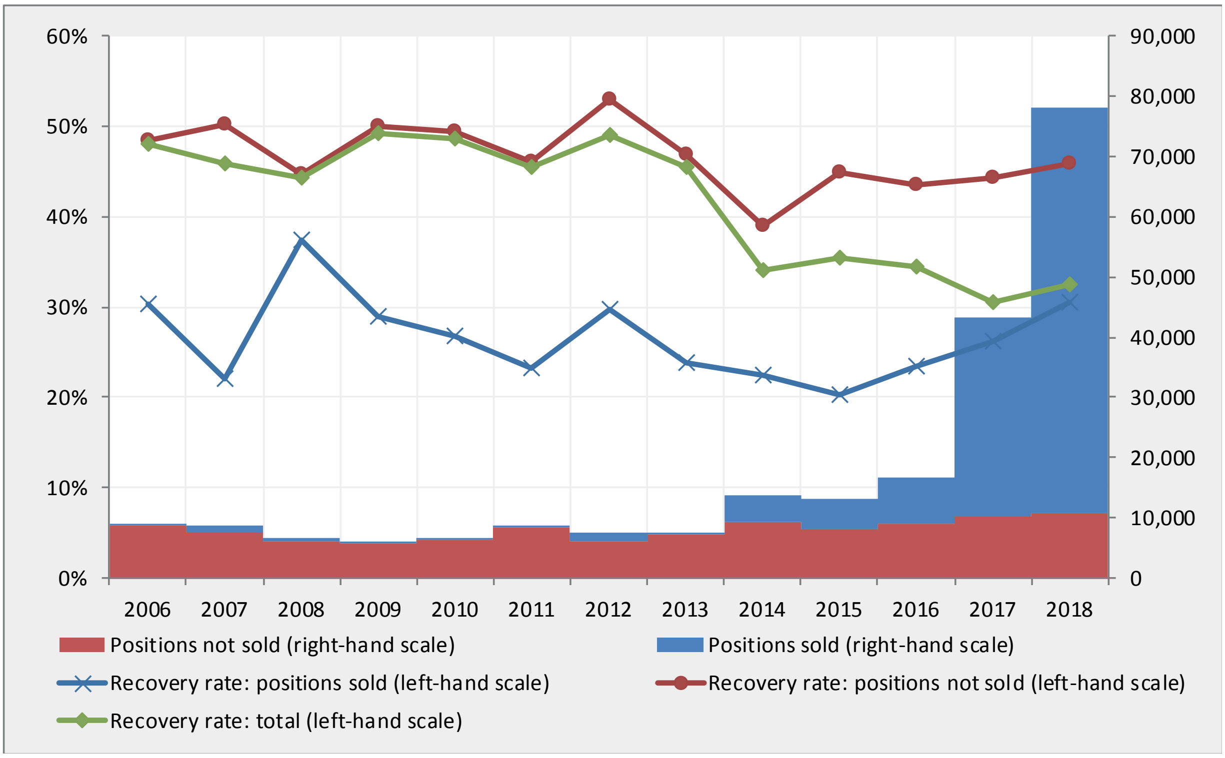
- **The price of the bad loans sold in 2018**, calculated on the basis of the annual survey conducted from 2016 on a very large sample of transactions, **increased to 23 per cent of the gross book value at the time of the sale** (17 per cent in 2017). The price averaged 34 per cent for bad loans secured by collateral and 10 per cent for the others. It is worth recalling that part of the difference between the recovery rates and sale prices stems from the fact that recovery rates (which are higher) take account of the cash flows ('partial' recoveries) collected in the period prior to the closure of the position. Overall, the indications arising from this survey are in line with the results obtained through the Central Credit Register data, as described above.

2. Bad loan recovery rates[3]

In 2018 there was a significant increase in the amount of closed bad loan positions as a result of the growth of disposals

In 2018 the total amount of closed bad loan positions reached a new peak[4] (€78 billion), 1.8 times higher than what recorded in 2017 (€43 billion). The increase involved both significant and less significant banks, and was almost exclusively driven by sales on the market, that amounted to approximately €67 billion and were twice the value observed in 2017 (€33 billion). The share of sold positions on total closed bad loans grew significantly and reached 86 per cent (Figure 1 and Table 1; Table A1 in the Digital Appendix).

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



Source: Based on Central Credit Register data.

Banks increased the use of securitization transactions, in most cases combined with recourse to GACS (a state guarantee scheme to securitize bad loans), which attracted a larger number of investors and, by this means, increased the size of the transactions. In the course of 2018, the highest-value sales were concluded by two banking groups – Monte dei Paschi di Siena and Intesa Sanpaolo – for a total amount of €35 billion; in 2017 the most important transaction was finalized by UniCredit, and its value was around €18 billion.

The value of the positions closed using standard recovery procedures was about €11 billion, similar to that recorded in 2017.

3 The yearly values of closed bad loans shown in the tables may not correspond to 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.

4 The year 2006 is the first year in which we have data available for calculating the bad loan recovery rates.

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
Total		**225,970**	**2,768,674**		**104,614**	**1,708,284**		**121,356**	**1,060,390**
Average	**36.4**	**17,382**	**212,975**	**46.2**	**8,047**	**131,406**	**28.0**	**9,335**	**81,568**

Source: Based on Central Credit Register data.

Differently from previous years, the value of positions secured by collateral[5] grew considerably in 2018, accounting for 68 per cent of total closed positions, compared with 53 per cent in 2017 and 47 per cent in 2016 (Table A1). This increase was more marked in the case of sales to third parties, where the share of positions secured by collateral was 70 per cent in 2018 (52 per cent in 2017). With regard to the distinction between firms and households, the 2018 results were in line with those recorded in previous years: more than 80 per cent of closed bad loans were loans to firms (Table A4 in the Digital Appendix).

The increased recovery rate applies to both the bad loan positions sold on the market and those closed using standard recovery procedures

In 2018 the recovery rate for positions sold to third parties rose by 4 percentage points compared with the previous year (from 26 to 30 per cent), even though the volume of sold positions doubled. The increase related both to positions secured by collateral and to unsecured positions.

On the basis of the yearly survey on NPL sales conducted by the Bank of Italy on a representative sample of Italian banks, in 2018 the price, expressed as a percentage of the gross book value at the time of sale, was 23 per cent, higher than previous years (see the box *The prices of bad loan sales in 2018*).[6]

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

[6] The recovery rate 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.

The recovery rate for positions closed using standard recovery procedures rose from 44 to 46 per cent. This increase was due either to the higher share of closed positions secured by collateral or to the higher recovery rate on unsecured positions.

The gap between the recovery rate recorded, respectively, on positions closed using standard procedures and positions sold has declined considerably in the last few years, falling from 25 percentage points in 2015 to 15 points in 2018. This reduction is mostly driven by the increased recovery rate on sold positions (both secured by collateral and unsecured).

The average recovery rate was 33 per cent

The average recovery rate for all bad loan positions closed in 2018 stood at 33 per cent, around 2 percentage points higher than in 2017. The higher share of sales on the market, characterized by lower recovery rates, was more than counterbalanced by the increase in recovery rates, both on positions sold and those closed using standard recovery procedures. If the share of positions sold on the market had been analogous to that of 2017, the increase in the average recovery rate would have been around 4 percentage points.

As highlighted in previous analyses[7] recovery rates continue to differ significantly from bank to bank, confirming that many intermediaries should strengthen their NPL management and recovery processes.

THE PRICE OF BAD LOAN SALES IN 2018

In order to collect information on the sale prices of bad loans, since 2016 the Bank of Italy has conducted an annual survey on a representative sample of banks. In 2018 participating banks together accounted for around 98 per cent of the gross book value of NPLs in the Italian banking system at the end of that year.

In 2018 the average price of the bad loans sold was 23 per cent of the gross book value at the time of sale, a higher value than in previous years, as a result of the increase in the price of bad loans secured by collateral (from 26 to 34 per cent; Table A). The sale prices of the remaining positions were stable at 10 per cent.

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

(*) Net of the FINO operation concluded by UniCredit, the average price 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.

The average vintage of bad loans sold was slightly over 5 years, increasing both on secured by collateral and on unsecured positions.

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

As the vintage of bad loans rises, sale prices fall: for loans with a vintage of more than 5 years, which accounted for around 50 per cent of the total value of positions closed, the price averaged 20 per cent, while for those with a vintage of below 2 years it was 30 per cent (Table B). In 2018 a contraction of the the price gap between the vintage clusters was recorded as a result of the increased average sale price of the positions with a vintage of over than 2 years' classification as bad loans.

The average sale prices for bad loans secured by collateral were 36 per cent for exposures with a vintage of under 2 years and 34 per cent for those with a vintage of over 3 years. For unsecured exposures, the price was 18 per cent for those with a vintage of under 2 years, 14 per cent for those with a vintage of between 3 and 5 years, and 8 per cent for exposures with a vintage of over 5 years.

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

	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

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

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 declined slightly to 38 per cent (39 per cent in 2017; Table A3), affected by the higher share of sales on the market; such sales, however, increased their recovery rates compared with the previous year (36 per cent in 2018, from 33 per cent in 2016; Table A2). The recovery rate for positions closed using standard recovery procedures fell by 2 percentage points (52 per cent).

For the unsecured positions, the recovery rates increased by almost 1 percentage point, to 22 per cent (Table A3), attributable to the higher value observed for positions closed using standard procedures (36 per cent in 2018, from 31 per cent in 2017; Table A2).

2.2 Loans to firms and households. – In 2018 the recovery rate of bad loans towards non-financial firms increased slightly to 30 per cent (29 per cent in 2017).[8] The recovery rate of positions connected to households also increased (from 38 to 43 per cent), and was ascribable to the higher recovery rate of positions sold to third parties (secured and unsecured).

8 The recovery rates grew either on positions sold or on the other positions. In the case of positions sold, the increase affected both those secured by collateral and unsecured exposures. In the case of positions closed using standard recovery procedures, the increase in the recovery rate only concerned the positions secured by collateral (Tables A8 and A10).

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 was already highlighted for previous years, the longer the bad loans remain on banks' balance sheets, the lower the recovery rate (Table 2).[9] This phenomenon is more marked for positions secured by collateral.

In 2018 the average recovery rate of 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 21 percentage points higher than the recovery rate recorded for positions with a vintage of over 5 years (respectively 63 and 42 per cent). In the case of unsecured positions, the gap on recovery rates based on the vintage was 15 percentage points (45 against 30 per cent). Similar indications emerge from the analysis of recovery rates in 2017 and 2016.

In 2018 more than 40 per cent of the overall value of positions (secured by collateral or not) that were closed using standard recovery procedures had a vintage higher than 5 years; the remaining share was fairly distributed between the clusters with lower vintages (0-2 years and 3-5 years). A comparison between the different years of analysis shows that the distribution of the value of positions closed by vintage and the respective recovery rates are relatively stable (Table 2).

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: Amount (€/mln)	Positions secured by collateral: Recovery rate (%)	Unsecured positions: Amount (€/mln)	Unsecured positions: Recovery rate (%)
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**
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**
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**

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.

[9] This phenomenon also reflects the impact of the discounting of 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, in fact, provides information about how much, on average, is recovered on positions closed after a certain number of years, but not 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 times to recovery

In 2018 the value of positions newly classified as bad loans was 4 times lower than those closed

In 2018 the number of positions closed rose further,[10] standing at around 442,000, against an annual average of around 193,000 in the period 2006-17 (Table 3). The number of positions that were newly classified as bad loans was 4 times lower than those closed and the related value reached its minimum level since 2009 (€19 billion).[11]

Important signals emerge from the trend in the share of positions that are closed each year, calculated as the ratio of the value of positions closed to the total outstanding at the beginning of the period. This share, which had gradually declined to 6 per cent in 2013, reached 50 per cent in 2018 (23 per cent in 2017; Table 3). This growth is attributable to the considerable progress of the banks in closing bad loan positions, which has also been reflected in a contraction of the outstanding positions. The reduction of the outstanding stock was partly explained by the transfer of bad loan positions held by banks under resolution or those subject to rescue operations on the part of publicly owned companies, outside the perimeter of this analysis.

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	188,466	19,004	874,140(1)	157,721(1)	50.5%	49.5%
Total	**2,768,674**	**225,970**	**3,093,933**	**291,865**				
Average	**212,975**	**17,382**	**237,995**	**22,451**	**936,706**	**108,445**	**23.3%**	**15.0%**

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

[10] 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 open or closed during the period.

[11] 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 credit recovery activities are not included, together with those under resolution or in comparable situations.

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 of sales in the market. In particular, for the positions classified as bad loans in 2016, the last year for which the two-year closing rate can be estimated, the number of positions closed within two years was equal to 67 per cent of the total, considerably higher than the levels recorded in the previous year (Table 4).

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	
2014	26	32	65	79		
2015	38	58	74			
2016	38	67				
2017	47					

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