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Bad loan recovery rates in 2017

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1. Introduction and main conclusions

This note updates to 2017 the estimated bad loan recovery rates already published for the period 2006-16.[1)] The data, together with some detailed breakdowns that are commented on but not reproduced in this text, are available in digital format. Moreover, for the first time the note illustrates the results of the Bank of Italy's surveys on NPL sales that began in 2016, whose findings are in line with what can be inferred from the Central Credit Register.

Our analysis reached the following main conclusions.

- **In 2017 the overall amount of closed bad loan positions reached its highest level since 2006** (€43 billion, as against €17 billion in 2016), mainly owing to the increase in sales on the market. For the first time, this value was higher than that of newly classified bad loans, in part thanks to the gradual reduction of the latter.

- **Increases were recorded in the recovery rate of bad loan positions sold on the market** (from 23 to 26 per cent) **and of those closed using standard recovery procedures** (from 43 to 44 per cent). However, as a result of the significant increase in the share of sales on the market (76 per cent of the total, compared with 45 per cent in 2016), **the average recovery rate came to 30**

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1) Data are based on the Central Credit Register. See the notes by 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 and 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.

per cent, as against 34 per cent in 2016. If the proportion of positions sold on the market had been similar to that of 2016, the average recovery rate would have been 36 per cent.

- **The average recovery rate for bad loans secured by collateral came to 39 per cent.** For the positions sold the rate fell (from 37 to 33 per cent) while for positions closed using standard recovery procedures it rose (from 54 to 55 per cent).

- **For the unsecured positions the average recovery rate was 21 per cent.** This rose from 15 to 18 per cent for bad loans sold to third parties and declined slightly for positions closed using standard recovery procedures (from 32 to 31 per cent).

- **The gradual increase in the speed of disposal of bad loans has continued.** The ratio of the amount of bad loans closed each year to the stock outstanding at the beginning of the period, which in 2013 had reached a low of 6 per cent, came to 23 per cent in 2017 (as against 9 per cent in 2016). The amount of positions closed using standard recovery procedures exceeded €10 billion.

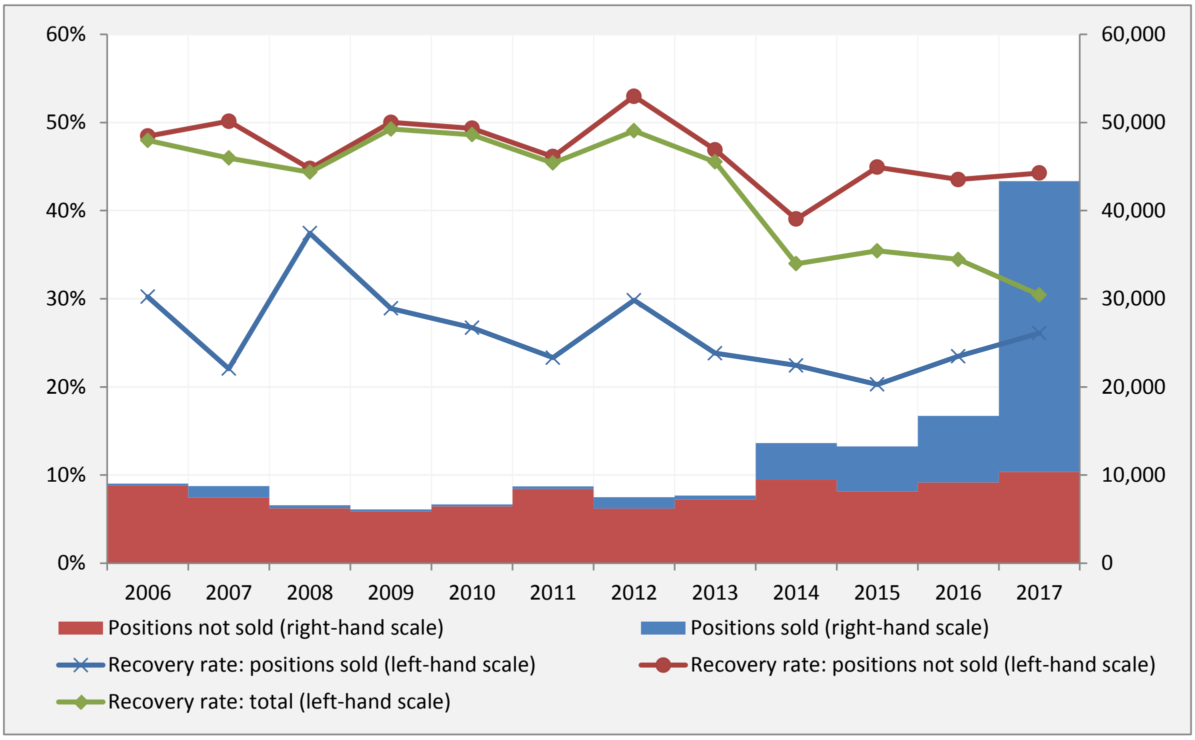
- **The price of the bad loans sold in 2017**, calculated based on the annual survey conducted starting in 2016 on a very large sample of operations, **was equal to 17 per cent of the gross book value at the time of sale (15 per cent in 2016)**. The price averaged 26 per cent for bad loans secured by 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 the former (which are higher) take account of the cash flows ('partial' recoveries) collected in the period prior to the closure of the position.

2. Bad loan recovery rates[2)]

In 2017 the total amount of bad loan positions closed reached its highest level since 2006

In 2017 the total amount of bad loan positions closed reached its highest level since 2006[3)] (€43 billion), 2.5 times the amount recorded in 2016. The increase involved both the positions closed using standard recovery procedures and sales on the market. The latter amounted to approximately €33 billion, 76 per cent of the total, against 45 per cent recorded in 2016 and 20 per cent on average in the period 2006-16 (Figure 1 and Table 1; Table A1 in the digital appendix). The highest-value sale was that concluded by UniCredit (FINO);[4)] even excluding this operation, the total value of the positions sold would have exceeded that recorded in previous years. The value of the positions closed using standard recovery procedures was about €1 billion higher than in 2016 and reached the highest level registered in the period considered; the increase was recorded by most banks.

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



Source: Based on Central Credit Register data.

2) The amounts of the 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.

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

4) A. Rafaniello, G. B. Sala and M. Scotto di Carlo, 'Project FINO: defining a framework to understand market prices and analysing the main drivers', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 9, June 2017.

Both the recovery rate of bad loan positions sold on the market and of those closed using standard recovery procedures increased

In 2017 the recovery rate for positions sold to third parties rose by 2.5 percentage points compared with the previous year (from 23 to 26 per cent), mainly owing to the higher proportion of positions secured by collateral, which tend to have a higher recovery rate.

The recovery rate for positions sold on the market differ from sale prices, because the former (which are higher) also take account of the cash flows ('partial' recoveries) collected in the period prior to the closure of the position.[5] In 2017, for a sample of Italian banks, the price, expressed as a percentage of the gross book value at the time of sale, came to 17 per cent (see the box: *The price of bad loan sales in 2017*).

The recovery rate for positions closed using the standard recovery procedures rose from 43 to 44 per cent; as highlighted in previous analyses[6] recovery rates continue to differ significantly from bank to bank, confirming that many intermediaries should strengthen NPL management and recovery procedures.

The average recovery rate came to 30 per cent

The average recovery rate for total bad loan positions closed in 2017 stood at 30 per cent, around 4 percentage points lower than in 2016. The reduction reflects greater recourse to sales on the market, characterized by lower recovery rates compared with those obtained in the case of standard recovery procedures. If the proportion of positions sold on the market had been similar to that of 2016, the average recovery rate would have been 36 per cent

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 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
Total		**147,953**	**2,327,053**		**93,820**	**1,615,365**		**54,133**	**711,688**
Average	**38.5**	**12,329**	**193,921**	**46.3**	**7,818**	**134,614**	**25.0**	**4,511**	**59,307**

Source: Based on Central Credit Register data.

5) The information available in the Central Credit Register does not enable us to distinguish between the recoveries made during the life of the loan from the actual sale price realized.

6) F. Ciocchetta, F. M. Conti, R. De Luca, I. Guida, A. Rendina and G. Santini, 'Bad loan recovery rates in 2016', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 7, 2017.

THE PRICE OF BAD LOAN SALES IN 2017

The information available in the Central Credit Register and in the other supervisory databases does not permit us to distinguish between the recoveries obtained during the life of the loan and the actual sale prices realized.[1] In order to obtain information on the sale prices of bad loans, in 2017 the Bank of Italy surveyed a representative sample of banks that together account for around 90 per cent of the gross book value of NPLs in the Italian banking system at end 2017.

In 2017 the average price of the bad loans sold came to 17 per cent of the gross book value at the time of sale, a higher value than in 2016 (15 per cent; Table A). The prices tend to vary considerably according to the presence or absence of collateral: the sale price averaged 26 per cent for bad loans secured by collateral and 10 per cent for the others. Net of the FINO operation completed by UniCredit,[2] which has distinctive characteristics reflected in the disposal value, the prices were equal to 33 and 9 per cent respectively (compared with 30 and 9 per cent in 2016).

Table A - The price of bad loans sold by type of guarantee
(per cent)

		Total	Positions secured by collateral	Unsecured positions
2016	Total sample	14.9	30.5	9.1
2017	Total (excluding FINO)	20.4	33.0	9.2
	Total sample (including FINO)	16.5	26.2	9.9

The average vintage of the bad loans sold was almost 5 years, a similar figure to 2016. For positions secured by collateral, net of FINO, the increase in sale prices occurred notwithstanding a slight increase in the average vintage of the loans.

As the vintage of bad loans rises, sale prices fall. For loans with more than 5 years of vintage, the price averaged 11 per cent, while for those with fewer than 2 years of vintage it was 32 per cent (Table B).

With reference to the sale of bad loans secured by collateral, the average prices were 61 per cent for exposures with fewer than 2 years of vintage, 25 per cent for those with between 3 and 5 years of vintage, and 22 per cent for exposures with more than 5 years of vintage. For unsecured exposures, the price was 18 per cent for those with fewer than 2 years of vintage; the average price was 7 per cent for exposures with more than 5 years of vintage.

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

	Total positions			Positions secured by collateral			Unsecured positions		
Vintage (years)	**0-2**	**3-5**	**>5**	**0-2**	**3-5**	**>5**	**0-2**	**3-5**	**>5**
Total sample	32.3	16.1	11.3	61.1	24.8	21.9	17.6	9.8	6.8

1) The recovery rates include cash collections and partial write-offs made by the bank before the sale to third parties. Moreover, unlike the sale prices, they are expressed as a share of the exposures gross of partial write-offs recorded after the credit is classified as a bad loan.

2) The analysis singles out the FINO operation concluded by UniCredit in July 2017, insofar as this was a unique case in the Italian NPL landscape. The price of the unsecured positions was higher than the average of the other transactions concluded; for positions secured by collateral, the price was instead lower. The recovery rates include cash collections and partial write-offs made by the bank before the sale to third parties. Moreover, unlike the sale prices, they are expressed as a share of the exposures gross of partial write-offs recorded after the credit is classified as a bad loan.

The recovery rates for bad loans secured by collateral are almost double those for the other positions

2.1 Positions secured by collateral versus other positions.[7)] – The average recovery rate for bad loans secured by collateral came to 39 per cent (Table A3), while it fell for positions sold (to 33 per cent, from 37 per cent in 2016; Table A2). The latter were affected by the FINO operation;[8)] net of this transaction, the recovery rate would have been 40 per cent. For the positions closed using standard recovery procedures, the average recovery rate rose from 54 to 55 per cent.

For the unsecured positions the recovery rates fell by 2 percentage points, to 21 per cent (Table A3). For these positions too, the reduction is attributable to the greater share of sales to third parties, despite the increase in the recovery rate for this component (from 15 to 18 per cent; Table A2).

The recovery rates for exposures to firms are below those to households

2.2 Loans to firms and households. – In 2017 the share of exposures to non-financial firms closed was greater than in previous years (86 per cent of the total value closed, compared with 78 per cent in 2016; Table A4). This increase is entirely ascribable to the FINO operation, which involved exposures to firms and which had distinctive characteristics.

All in all, the recovery rate for bad loan exposures to firms amounted to 29 per cent (34 per cent in 2016),[9)] once again below the rate recorded for households (38 per cent).

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 (Tables A11 and A12).[10)]

3. Closed bad loan positions: amounts, timeline and characteristics

In 2017 the number of positions closed was again higher than those opened

In 2017 the number of positions closed increased further, settling at around 371,000, against an annual average of around 178,000 in the period 2006-16 (Table 2), and exceeding the number of positions that were newly classified as bad loans (254,000). With reference to the amounts involved, for the first time in the period considered the value of newly classified bad loans was lower than that of the positions closed. Similar indications emerge from the trend in the share of positions classified as bad loans that are closed each year, calculated as the ratio of the amount of positions closed to the total positions outstanding at the beginning of the period. This share, which in 2013 gradually declined to 6 per cent, was 23 per cent in 2017 (9 per cent in 2016; Table 2).

7) Loans secured by collateral are secured - in whole or in part - by the following forms of collateral recorded by the Central Credit Register: pledges, mortgages and liens. Unsecured positions include those secured by personal guarantees and fully unsecured loans.

8) For the FINO operation, the price of the unsecured positions was higher than the average of other transactions; vice versa, the price of the positions secured by collateral was lower.

9) The reduction in the recovery rate of bad loan exposures to firms is attributable to the greater proportion of sales on the market compared with the positions closed using standard recovery procedures. The recovery rates have in any event increased both for the positions sold on the market and for those closed using standard recovery procedures (Tables A8, A10).

10) This phenomenon also reflects the impact of the discounting of the sums recovered. In this regard, it can be observed that the tables do not represent real recovery curves as a function of the position's vintage. From the Central Credit Register, in fact, it can be inferred 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 are in any event comparable, because they are all discounted.

Table 2 – Number and amount of closed and outstanding bad loan positions
(annual data; numbers, amounts in millions euros and per cent)

Year	Positions closed (by year of closure)		New positions (by year of classification)		Positions outstanding at the start of the year		Positions closed/ outstanding at the start of the 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%
Total	**2,327,053**	**147,953**	**2,905,467**	**272,861**				
Average	**193,921**	**12,329**	**242,122**	**22,738**	**941,920**	**104,338**	**21.0%**	**12.1%**

Source: Based on Central Credit Register data.

The speed of bad loan disposals has risen further

Signs of improvement in banks' ability to close bad loans are strengthening. In particular, for the positions classified as bad loans in 2015, the last year for which the two-year closure rate can be estimated (Table 3), the number of positions closed within two years was equal to 58 per cent of the total, considerably higher than the levels recorded in previous years. These improvements reflect the adoption by intermediaries of active policies for managing bad loans.

Table 3 - 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	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	
2013	21	38	42	64		
2014	26	32	65			
2015	38	58				
2016	38					

Source: Based on Central Credit Register data.

In line with what was already highlighted in previous analyses,[11] a comparison of the bad loan positions closed and those outstanding indicates that the recovery rates observed in recent years do not overestimate the recoveries that could be achieved in the next few years (Tables A13-A15). In particular, the vintage of closed bad loan positions, which is one of the characteristics of bad loans that affects sale prices the most, is greater than the outstanding stocks at end 2017: 56 per cent of closed bad loans have more than 5 years of vintage, while the share is 38 per cent for outstanding bad loans.

11) See 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.