

Special Report

European DataWarehouse Commentary on Italian Loan-Level Data

Summary

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European DataWarehouse (ED) carried out a survey at the end of 2016 to gather evidence about the market standards prevailing in the Italian Asset-Backed Securities (ABS) market with regards to the reporting of Loan-Level Data (LLD). This Commentary is the result of a study by the Working Group¹ (WG), on the output of a survey distributed to all Italian market operators involved in ABS transactions. This is the second of a series of studies: the first of which focused on the Spanish RMBS market².

The survey includes the complete range of assets reported in European DataWarehouse (ED) by Italian market operators: RMBS, SME, Consumer and Leasing ABS transactions. The survey was designed to gather evidence about reporting practices of market participants, to enhance a common understanding by data users of the Italian LLD.

Besides providing additional clarity on the different practices of reporting entities (Data Owners and Data Providers), the intelligence gathered in this process enables ED to produce more standardised data for the securitised portfolios, including performance statistics present in the repository.

ED intends to publish further similar commentaries on the other European ABS markets. This approach is consistent with the aim to improve data quality as wide as possible in the Euro Area³.

¹ The Working Group refers to a specific expert group created in order to carry out the survey. It was composed of ED staff with the authors of the report and two experts from Banca d'Italia, Anna Michelina Di Gioia and Edvige Iannicola, that contributed to the survey implementation and distribution, data analysis and text review. The views expressed in this report do not involve the responsibility of Banca d'Italia.

² The Spanish RMBS Loan-Level Data Special Report was conducted via a survey between 2015 and 2016 including telephone interviews with some specific issuers and trustees in order to better understand the specific reporting practices for residential mortgages. The full report is available at <https://eurodw.eu/wp-content/uploads/ED-Commentary-on-Spanish-RMBS-January-2016.pdf>

³ Other ED initiatives in this direction are the introduction of Data Quality Scores (DQS1 and DQS2) in early 2017. More information is available at <https://eurodw.eu/wp-content/uploads/DataQualityScores-July-2017-1.pdf>

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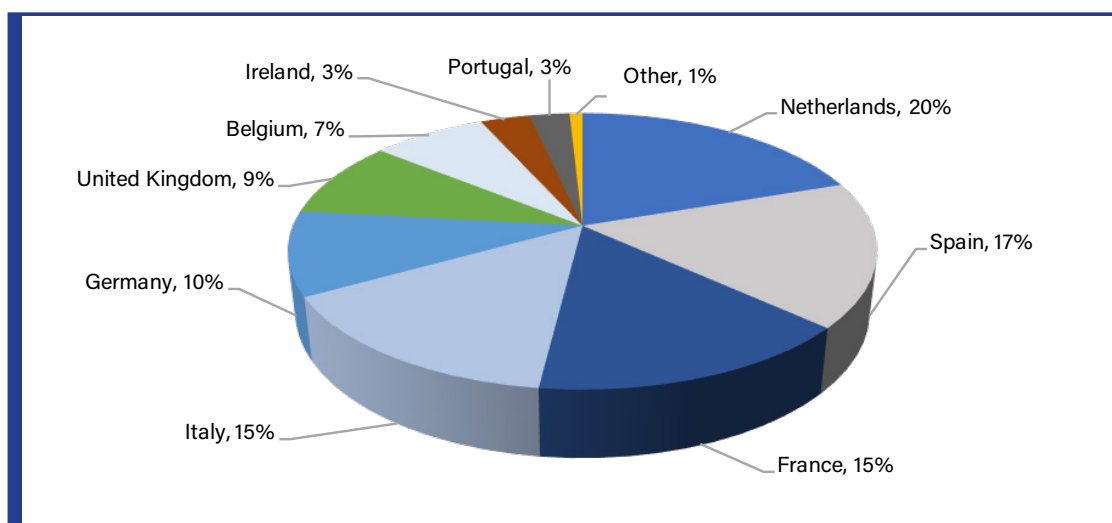
Executive Summary

Introduction

European DataWarehouse (ED) carried out a survey at the end of 2016 to gather evidence about the market standards prevailing in the Italian Asset-Backed Securities (ABS) market with regards to the reporting of Loan-Level Data (LLD). This commentary is the result of the study on the survey responses obtained. The survey was designed to get a better understanding of the reporting practices of market participants in order to enable data users to correctly interpret Italian ABS LLD. This survey is useful for all types of data users who have access to ED platform, among others institutional investors for the required due diligence, academic institutions for research and rating agencies for rating and monitoring purposes. The current reporting practices may vary mainly due to the flexibility of the ECB ABS taxonomies as well as the transaction specificities. The survey questions were carefully chosen to gather information on the reporting of some of the key mandatory fields included in the ECB's LLD templates⁴.

In terms of number of ABS transactions, ED currently includes data on 265 Italian deals (168 of them are currently active⁵). In terms of outstanding amounts, the Italian market present in ED is the fourth largest behind the Netherlands, Spain and France (see Figure 1).

Figure 1: Percentage of outstanding ABS deals in ED by country

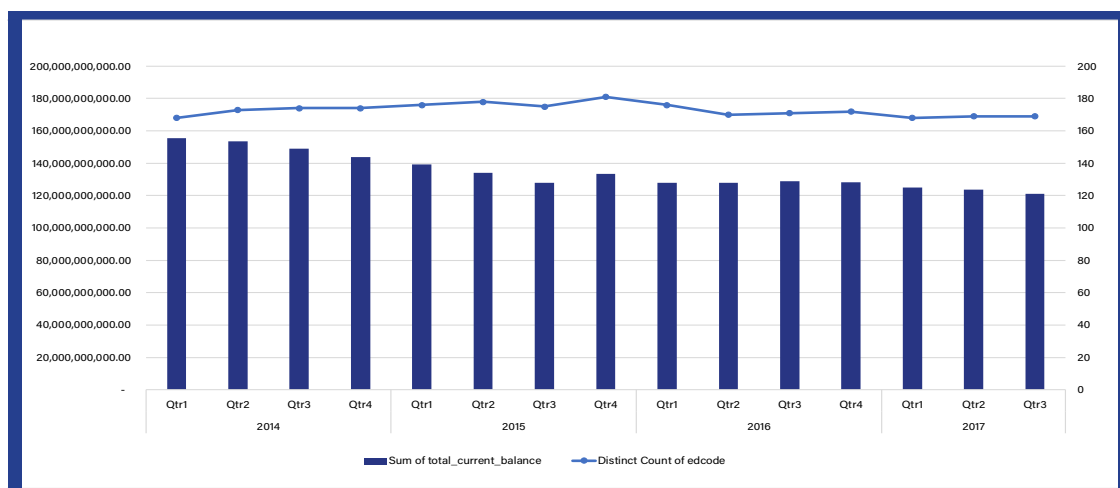


Source: European DataWarehouse data as of 9 January 2018

⁴ The ECB's LLD templates for each asset class are available from: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>. Each template contains a list of mandatory and optional fields. The questionnaire designed for the purposes of this study contains questions relating to seven of the mandatory fields

⁵ Active deals are transactions where the loan-level information and documentation is regularly updated. Deals are inactive when such regular updates are not occurring for a variety of reasons including early amortisation, full amortisation or redemption, buy back, go private, etc

Figure 2: Development of Italian ABS by outstanding volumes in Eur and by no. of transactions



Source: European DataWarehouse data as of 9 January 2018

At €172 billion loans outstanding, the Italian market accounts for about 15% of the total outstanding balance in EDwin⁶ (see Figure 2). The analysis, representing deals issued between 2006 and 2016, accounts for 93% of the outstanding Italian loan balance and 94% of all Italian deals present in EDwin. The Table 1 below shows the coverage of the EDwin database across the five main ABS asset classes, referred to all ED data providers in Q3 2016⁷.

Table 1: ED ABS LLD and documentation

ED Italian ABS market statistics				Euro Area
ABS Asset Class	No. Underlying Loans	Documents ⁸	Active Deals	Total Active Deals in ED
RMBS	1,802,688	519	99	436
Consumer Finance ABS	9,598,363	152	30	62
SME	313,716	83	18	63
Leasing ABS	403,011	63	12	18
Auto ABS	1,076,967	81	9	96
Total	13,194,745	898	168	675

Source: European DataWarehouse data as of 9 January 2018

⁶ EDwin is ED's bespoke, fully integrated software platform designed to collate ABS deal, bond and loan-level information into a single, centralised database.

⁷ Auto ABS has been included to give a complete information of the data set, but were not part of this analysis

⁸ Documents are referred to offering circulars, investor reports and other relevant transaction documents available in ED

Methodology

The survey was conducted through a multiple-choice questionnaire with the inclusion of some open response questions so that participants could provide details of additional interpretations or explanations⁹. Questionnaires were disseminated to all active Italian reporting entities at the end of 2016 and participation of data providers was voluntary.

The Working Group conducted a preliminary assessment of the Loan-Level Data submitted to ED by Italian reporting entities for the four asset classes that are included in the survey.

This analysis focused on the performance (i.e. arrears, defaults and recoveries) and income related fields. As a result, the Working Group (hereinafter referred to as “WG”) designed survey questions aimed at getting a better understanding of the reporting practices and detecting reporting patterns of Italian entities, keeping in mind the definitions in the ECB’s specific ABS reporting templates and taxonomies¹⁰. The ECB’s dedicated taxonomies, along with a series of Frequently Asked Questions¹¹, were created by the ECB to assist market participants in interpreting the exact data to be reported. However, as broadly seen in the European market, there may still be differences in data uniformity due to variations in transaction definitions that reflect internal collection and national reporting practices. ED will, therefore, continue to perform surveys, at country level, with the aim of understanding national reporting practices.

The following paragraphs summarise the analysis conducted over 7,000 replies on the ED survey of 33 multiple choice questions per asset class, addressed to market operators involved in ABS Loan-Level Data reporting. The survey performed on the Italian market contains seven sections in total, each one focusing on the following critical mandatory fields: primary income; arrears balance; number of months in arrears; litigation; default or foreclosure; loss on sale; and cumulative recoveries. A series of sub questions complement each section to get a better insight into the responses. The definitions for each of these fields, as specified in the taxonomies for each asset class, are displayed in Annex 1.

The Italian ABS market is diversified with issuance across the five major asset classes RMBS, SME, Consumer, Auto and Leasing transactions and across multiple issuers. The sector specialisation of Italian financial institutions can also explain part of the differences in the data collection practices.

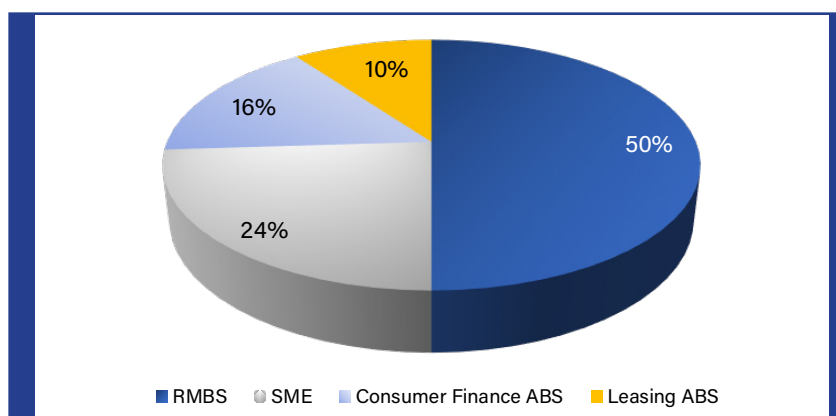
⁹ The full survey questionnaire is available [here](#)

¹⁰ The ECB ABS taxonomies are dedicated reporting manuals and are available per asset class from: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

¹¹ The FAQ published by the ECB are available from: <https://www.ecb.europa.eu/paym/coll/loanlevel/faq/html/index.en.html>. The ECB also maintains a dedicated hotline to assist reporting entities with any questions they may have

The overall survey response rate was very high (93%) despite being on a voluntary basis. In terms of represented asset classes, the breakdown of survey responses to each ABS category is reflective of the overall composition of the Italian ABS market in ED (Figure 3)¹². The responses to the various questions collated by the WG reveal specific reporting patterns for certain fields. These are discussed in detail in the subsequent sections.

Figure 3. Breakdown of responses by asset class



Source: European DataWarehouse data as of 30 September 2017

1. Primary Income

The first area of analysis refers to the reporting of primary borrower's income. Collection of primary income is one of the key elements in the credit-granting process; this information is the relevant not only for those entities reporting RMBS and Consumer Finance but also for the other ABS asset classes for which this data is not required in the respective template¹³.

ECB RMBS Taxonomy

Field AR26 - Primary Income:

Primary borrower underwritten gross annual income (not rent). If no data available use the following input ND

ECB Consumer Finance Taxonomy

Field AN17 - Primary Income:

Primary borrower underwritten gross annual income (not rent). Should be rounded to the nearest 1000 units. All 'No Data' options may be used in this field

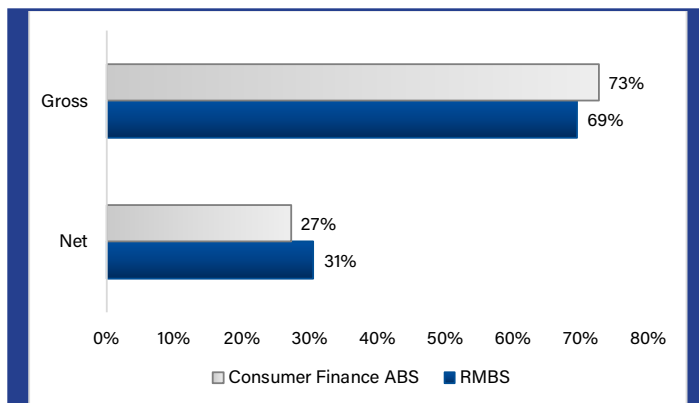
Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

¹² In some cases, participants provided answers for more than one asset class. RMBS is the largest Italian ABS asset class followed by SME, Consumer Finance and Leasing ABS. For this reason, the figure reflects the composition of the market

¹³ Primary income is not collected for certain ECB ABS templates and taxonomies as it has not been deemed relevant for those asset classes

Both the RMBS and Consumer Finance taxonomies define this field as “Primary borrower underwritten gross annual income (not rent)”¹⁴. The definitions are reiterated in the ECB FAQs. As can be seen from Figures 4.1 and 4.2 below, there is some variation among reporting entities as to the measure of income that they report.

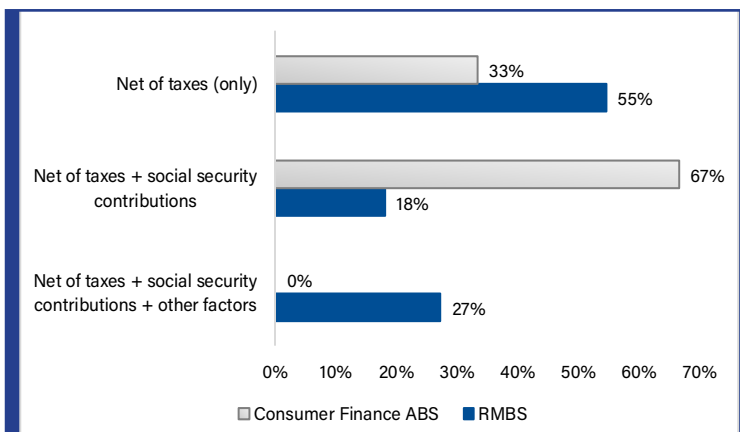
Figure 4.1. Reporting of Primary Income (AR26, AN17)



Source of the data: Survey responses

For RMBS transactions, 69% of the reported data refers to a gross value and, thus, corresponds exactly to the ECB taxonomy definition; the remaining 31% of income is reported on a net basis. Regarding Consumer Finance, evidence shows that the vast majority of market participants (73%) report gross income, also in this case in line with the ECB taxonomy.

Figure 4.2. Reporting of Net Income



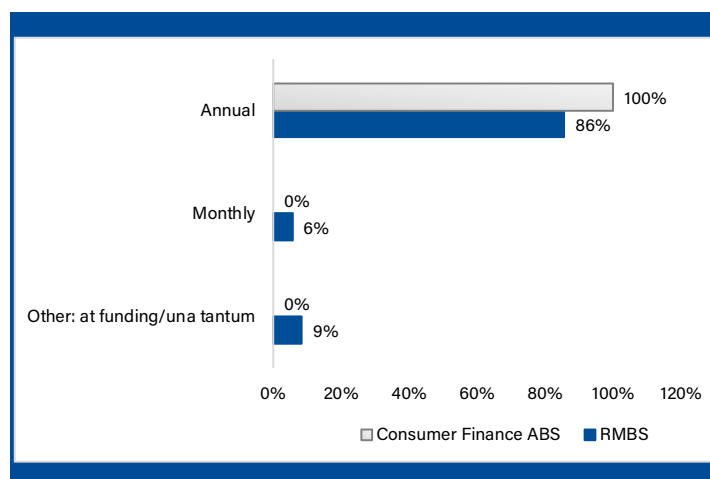
Source of the data: Survey responses

Within the net income data cluster of RMBS, 55% of the data is provided on a net of taxes basis (see Figure 4.2).

¹⁴ The WG deemed important to investigate income reporting practices because it is aware of the variations in the lending policies of reporting entities

Figure 4.3. Periodicity of Primary Income

The periodicity of the reported income (Figure 4.3) shows that 86% of the RMBS reported data are consistent with the ECB taxonomy definition, which requires “annual income”. In addition, 6% of the reporting entities provide monthly income; for Consumer Finance the clear majority of reporting entities provide annual income data (100%).



Source of the data: Survey responses

The components of primary income are fully explained for both asset classes considered (see Table 2). A closer look at each component shows that salary information has been reported on a stand-alone basis (47% of RMBS and 55% of Consumer Finance) or in combination with other sources of income. The “other” sources of income can vary substantially across reporting entities with social security payments considered the most recurrent source of additional income in 47% of the cases for RMBS, while the remaining 36% include rental income. The same figures for Consumer Finance are 45% and 9% respectively.

Table 2: Components of Primary Income

	RMBS	Consumer Finance ABS
Salary or self-employed income (Only)	47%	55%
Salary + Social security + Rent + Alimony (= Any income)	28%	9%
Salary + Social security	11%	36%
Salary + a combination of other types of income (Rent or Alimony or Social sec.)	14%	0%
<i>Total</i>	<i>100%</i>	<i>100%</i>
% Reporting salary (only or including other sources of Primary Income)	100%	100%
% reporting social security contributions	47%	45%
% reporting Rent	36%	9%

Source of the data: Survey responses

The ECB RMBS template states that primary income (AR26) should refer to income of the primary borrower while income of a second or multiple borrowers can be provided in a separate field (AR28) (see Annex 1). For Consumer Finance, the ECB taxonomy requests only the income of the primary borrower (AN17). As Table 3 shows, 47% of RMBS reporting entities report only the primary borrower income, in line with the ECB taxonomy in field AR26, whereas 44% report income of all borrowers and 9% report "other"¹⁵. For Consumer Finance, the vast majority of reporting entities report in line with the taxonomy while 18% provide income of all borrowers and 9% report "other".

ECB RMBS Taxonomy

Field AR26 - Primary Income:

Primary borrower underwritten gross annual income (not rent). If no data available use the following input ND

Field AR28 - Secondary Income:

Secondary borrower underwritten gross annual income (not rent - if single borrower then 0). When there are more than two borrowers indicate total annual combined income. If no data available use the following input ND

ECB Consumer Finance ABS Taxonomy

Field AN17 - Primary Income:

Primary borrower underwritten gross annual income (not rent). Should be rounded to the nearest 1000 units. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Table 3: Coverage of Primary Income

	RMBS	Consumer Finance ABS
Only first borrower	47%	73%
All borrowers	44%	18%
Other (e.g. secondary borrower or guarantor)	9%	9%
<i>Total</i>	<i>100%</i>	<i>100%</i>

Source of the data: Survey responses

¹⁵ Reporting entities who responded "other" to question 1.4 were asked to provide an explanation. In some cases, the reporting entity stated that in the absence of income data for the primary borrower, the income of the secondary borrower or the guarantor is reported. In other situations, where the income of the primary borrower is not known, a proxy is applied to calculate total income of all borrowers. In cases where there is ambiguity as to whom is the primary borrower, the highest income is generally used

In conclusion on the reporting of “Primary Income”, the WG understands that the variations in reported income are due, largely, to the differences in lending policies and reporting practices across financial institutions. In the assessment of loan applications, some reporting entities request that lenders provide net rather than gross income and monthly rather than annual. In some cases, to assess eligibility for a loan a rental income or combined household income are used; in terms of reporting practices this approach makes it difficult to assess and exclude later the sub-components of the income data so that it complies with the taxonomy. Finally, the income relevant for lenders when assessing loan applications can be the cumulative income, rather than the individual income of borrowers, thus implying that the former figure is the one available for LLD reporting.

2. Arrears Balance and Number of Months in Arrears

Due to its relevance for loan performance analysis, the concept of arrears was also investigated in the survey. The arrears balance refers to either overdue payments or payments expected within the end of a certain period¹⁶. Questions were asked, for instance, on different components that are included in the counterparties' arrears definition and the length of time that can pass before the loan reaches the status of arrears. The questions requesting information on the reporting of arrears are relevant for each of the four asset classes included in the survey.

ECB RMBS Taxonomy

Field AR169 - Arrears Balance:

Current balance of arrears. Arrears defined as: Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. If no data available use the following input ND.

ECB Consumer Finance ABS Taxonomy

Field AN49 - Arrears Balance:

Current balance of arrears, defined as the sum of minimum contractual payments due but unpaid by the borrower. If the loan is not in arrears enter 0. All 'No Data' options may be used in this field

Field AN59 - Arrears Balance Capitalised:

Sum of arrears capitalised to date. If no arrears capitalisation has occurred, enter 0.00. All 'No Data' options may be used in this field

¹⁶ An account is considered in arrears if one or more payments have been missed in transactions where regular payments are contractually required

ECB SME Taxonomy

Field AS117 - Principal Arrears Amount:

Current balance of principal arrears. Arrears defined as: Total principal payments due to date LESS Total principal payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. If not in arrears enter 0.

ECB Leasing ABS Taxonomy

Field AL98 - Arrears Balance:

Current balance of arrears. Arrears defined as: Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

In the RMBS, Consumer and Leasing taxonomies, arrears should be reported as the current balance of arrears while for SME ABS the taxonomy specifies that the data should relate to the current balance of principal arrears. For RMBS, Leasing and SME ABS, arrears are defined as “Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account.” In the case of Consumer Finance, arrears should be reported as “the sum of minimum contractual payments due but unpaid by the borrower. If the loan is not in arrears enter 0.”

When asked to provide information on how they define arrears, 100% of reporting entities stated that they report arrears on a past-due basis. As additional information, 44% of RMBS respondents report arrears regardless of the loan status, i.e. on both performing and non-performing loans while the figure for SME reporting entities is 30%.

Table 4: Components of Arrears (multiple replies allowed)

	RMBS	SME	Consumer Finance ABS	Leasing ABS
Past Due	100%	100%	100%	100%

Source of the data: Survey responses

With regard to the length of time that can pass before an institution defines an account as being “in arrears”, two main trends emerged. As can be seen from Table 5, most respondents in each asset class (between 53 to 60%) state that once the account reaches one day overdue, an arrears balance is reported. A second, smaller group of respondents in each asset class (between 18 and 36%) replied that loans are only reported to be in arrears once they exceed 30 days past due making it the second most common response in each asset class.

Table 5: Length of Time used to Define Arrears

	RMBS	SME	Consumer Finance ABS	Leasing ABS
1 day	60%	53%	55%	57%
10 days	3%	6%	0%	0%
15 days	0%	0%	9%	0%
20 days	3%	6%	0%	0%
25 days	3%	6%	0%	14%
30 days	23%	18%	36%	29%
90 days	6%	6%	0%	0%
Other¹⁷	3%	6%	0%	0%

Note: Figures may not add to 100 in all cases due to rounding

Source of the data: Survey responses

The survey provided further information on the reported events, that explain the variation in the reporting practices. For instance, the reference documents used to define the length of time that passes before an account is categorised as being in arrears are different for each asset class. The most common form of documentation referred to is the transaction documentation which, in some cases, is used in combination with other documents, such as the Banca d'Italia Regulation¹⁸, especially when the arrears concern a non-performing loan. More details on this regulation are presented in Annex 2.

Table 6: Reference Document used for Arrears Definition

	RMBS	SME	Consumer Finance ABS	Leasing ABS
Transaction documentation ¹⁹	56%	53%	78%	40%
Loan agreement or Regulation	19%	47%	22%	60%
Combination of documents ²⁰	25%	0%	0%	0%
Total	100%	100%	100%	100%

Source of the data: Survey responses

¹⁷ Other refers to those who responded "In accordance with the Transaction definition"

¹⁸ The Banca d'Italia Regulation is the "Matrice dei conti" Circular 272 published on 30.07.2008 and last updated on 28.12.2017. It is available here: <https://www.bancaditalia.it/compiti/vigilanza/normativa/archivio-norme/circolari/c272/index.html>

¹⁹ In some cases this was in combination with other documents, e.g. Banca d'Italia regulation

²⁰ Including other documents, e.g. contract for the sale of loans

To gain further insight into the arrears reporting practices, the questionnaire posed a further specific question to SME reporting entities. They were asked how they would report a case where “an SME borrower owes €1,000, was supposed to pay €100 on 1st January and has not paid on 10th January”. The responses, shown in Table 7, indicate that the majority of respondents would, in such a case, report the outstanding balance as €1,000, the overdue amount as €100 and classify the loan as being 10 days overdue. Hence, the majority of replies were in line with the ECB taxonomy.

Table 7: Reporting of Arrears for Overdue SME loans

	SME	
	Answers	%
Principal Arrears Amount reported (AS117) as €100	YES	93%
	NO ²¹	7%
Number of Days in Principal Arrears (AS118) is reported to be 10	YES	73%
	NO	27%
Current Balance (AS55) is reported as €1000	YES	93%
	NO	7%

Source of the data: Survey responses

The WG was also aware that there can be variations in the manner institutions calculate or report the number of months in arrears. In fact, the general evidence from the Loan-Level Data (all countries considered) is that some reporting entities round up, others round down and for many more it is somewhat ambiguous. Thus, the survey aimed to specifically address this issue. For RMBS, Consumer Finance and Leasing ABS transactions, reporting entities are requested to report the “number of months this loan is in arrears (at pool cut-off date) according to the definition of the issuer”. The ECB SME taxonomy requires the number of days rather than months in arrears, and is, thus, excluded from the analysis in this section. Table 8 shows among others that the large majority of respondents compute the number of months in arrears based on the days in delinquency rather than on the amounts in arrears relative to the scheduled payments. In terms of rounding, the table shows that for each of the three relevant asset classes, the tendency is to round down, i.e. if a loan is between 1 and 30 days in arrears, the number of months in arrears will be reported as 0. If a loan is between 31 and 60 days in arrears, it will be reported as 1 etc. This practice is used by 50%, 45% and 50% of RMBS, Consumer Finance and Leasing respondents respectively. 32% of RMBS respondents report that they round up i.e. if a loan is between 1 and 30

²¹ Respondents were simply asked to respond Yes if they report in this manner and No if not. Further explanations were not provided

days in arrears, the number of months in arrears will be reported as 1. This practice of rounding up is used to a lesser degree for Consumer Finance (18%) and Leasing (17%) transactions with higher proportions of these respondents stating that they divide the number of days in arrears by 30. 6% of RMBS respondents state that they calculate the number of months in arrears by dividing the arrears balance by the scheduled payment due and rounding to the nearest number; 9% of Consumer Finance respondents also generate this calculation but instead round down to the nearest whole number.

Table 8: Reporting Number of Months in Arrears²²

	RMBS	Consumer Finance ABS	Leasing ABS
Calculated as Arrears Balance (AR169)/Scheduled Payment Due (AR71): rounded to the nearest number (e.g. 0.4 is reported as 0; 1.6 is reported as 2)	6%	0%	0%
Calculated as Arrears Balance (AR169)/Scheduled Payment Due (AR71): rounded down to the previous number (e.g. 0.4 is reported as 0 and 1.6 is reported as 1)	0%	9%	0%
Calculated as Arrears Balance (AR169)/Scheduled Payment Due (AR71): rounded up to the next number (e.g. 0.4 is reported as 1; 1.6 is reported as 2)	0%	0%	0%
Based on days in delinquency: 1-30 (inclusive) is reported as 0; 31-60 is reported as 1	50%	45%	50%
Based on days in delinquency: 1-30 (inclusive) is reported as 1; 31-60 (inclusive) is reported as 2	32%	18%	17%
Other: Number of days in arrears/30	9%	27%	33%
Other	3%	0%	0%
<i>Total</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

Source of the data: Survey responses

3. Litigation

The interest in the field Litigation is related to the fact that it is up to the reporting entities themselves to determine the point at which a loan is categorised as being in such a status. Hence, this leads to a large variation in the reporting practices across institutions. The RMBS taxonomy states that respondents should respond with "Y" for yes if litigation proceedings are underway. If the account has recovered and is no longer being actively litigated this should be re-set to "N" for no. The results, shown in Table 9 represent a field that is present only in the ECB RMBS reporting template, and show that in 50% of cases, the account is said to be in litigation if the loan is categorised as "sofferenza" (i.e. a bad loan), which is the most serious state of default according to the Banca d'Italia Regulation.

²² For ease of writing, the data fields mentioned in this table are referring only to the ECB RMBS taxonomy

In 22% of the cases, reporting entities point to the generic definition of legal proceedings, while other respondents identify problematic situation when a legal procedure is actually launched (19% report litigation to be underway when the asset is seized by the lending institution). Finally, a minority (9%) report litigation at an earlier stage, i.e. when they categorise defaulted or non-performing loans as already being in litigation. This last approach draws attention to the possible forthcoming formal legal proceedings, when market operators register a critical event.

ECB RMBS Taxonomy

Field AR174 - Litigation:

Flag to indicate litigation proceedings underway (if account has recovered and is no longer being actively litigated this should be re-set to N). If no data available use the following input ND

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Table 9: RMBS Reporting of Loans in Litigation

	RMBS
At the time of the foreclosure's notification of the property	19%
"Sofferenze" (i.e. bad loans)	50%
Legal proceedings	22%
Default / Non-performing	9%
<i>Total</i>	<i>100%</i>

Source of the data: Survey responses

4. Default or Foreclosure

The LLD suggests at large (all countries considered) that the reporting of defaulted loans is subject to a large degree of reporting variation across market participants. Reporting entities determine their own definition of a defaulted asset and the point in time at which the asset reaches this status. Thus, it may not always be possible or practical for reporting entities to provide the information as required by the ECB taxonomies. The RMBS, Leasing and SME taxonomies state that the default amount to be reported should be the "Total default amount before the application of sale proceeds and recoveries" (further details are provided in Annex 1). For Consumer Finance transactions, reporting entities should report the "Gross default amount on this account. If not in default / foreclosure, use ND,5".

ECB RMBS Taxonomy

Field AR177 - Default or Foreclosure

Total default amount before the application of sale proceeds and recoveries. If no data available use the following input ND

ECB Consumer Finance ABS Taxonomy

Field AN52 - Gross Default Amount:

Gross default amount on this account. If not in default / foreclosure, use ND,5. All 'No Data' options may be used in this field

ECB SME Taxonomy

Field AS125 - Default Amount:

Total default amount (per the transaction default definition) before the application of sale proceeds and recoveries. If not in default, enter 0

ECB Leasing ABS Taxonomy

Field AL104 - Default or Foreclosure on the Lease:

Current balance of arrears. Arrears defined as: Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. All 'No Data' options may be used in this field

Field AL105 - Default or Foreclosure on the Lease per Basel III definition:

Whether there has been a default or foreclosure on the Lease per Basel III definition. If not relevant, enter ND,5. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Table 10 shows the different practices: in the majority of cases, across all asset classes, a loan is classified as being in default based on the prospectus definition (ranging from 73% in the case of Consumer to 86% in the case of Leasing ABS). 67% of RMBS and 71% SME respondents state that a performing loan is classified as being in default if the borrower has defaulted on other loans. This reporting practice is used less frequently by Consumer Finance reporting entities (36%), given that consumer loans are often granted by specialised companies which do not have information on other types of loans.

As a result of loan modifications or renegotiations, one quarter of RMBS respondents highlight that a defaulted loan can become performing once again; these figures for SME and Consumer ABS are even more conservative (18%) while for Leasing it is slightly higher (29%). In fact, the large majority of respondents, across the four asset classes, replied that a defaulted loan, that in reality becomes performing again, continues to be reported as "defaulted" in the LLD.

Table 10: Definition of Default or Foreclosure: overview of YES replies to a set of questions

	RMBS	SME	Consumer Finance	Leasing ABS
Do you report the 'default amount' as sum of: incaglio, sofferenza, ristrutturato, past-due?	25%	18%	0%	14%
Do you classify a loan as defaulted as per the prospectus definition?	81%	76%	73%	86%
Do you classify a performing loan as defaulted when its borrower has defaulted on another loan or is bankrupt?	67%	71%	36%	57%
Is the reporting of the LLD done in accordance with the default definition as per Article 177 of the CRR (also called 'Basel II definition of default')?	22%	24%	0%	0%
A loan classified as "incagliato" according to the transaction definition is also reported as defaulted?	42%	29%	27%	71%
Can a loan classified as defaulted in one period become performing thereafter as a result of a loan modification or renegotiation?	25%	18%	18%	29%

Note: the replies do not add to 100 because each of them refers to a different question

Source of the data: Survey responses

For most RBMS reporting entities (85%), the reported default amount includes loans in "sofferenza" status, of which a minority report loans in sofferenza only (21%), while the majority (64%) include also other states of default that are less serious than "sofferenze" such as e.g. past due, unlikely to pay, restructured. 50% of SME reporting entities report that defaulted loans are "other than sofferenze". Reporters of Consumer Finance ABS replied, with a clear majority (73%), that they use a "past due" definition. For Leasing, a clear majority (83%) uses a comprehensive definition including sofferenze, unlikely to pay, past due and restructured.

Table 11: Reporting of Default or Foreclosure

	RMBS	SME	Consumer Finance	Leasing ABS
Sofferenze (i.e. bad loans)	21%	31%	9%	0%
Sofferenze in combination with Past Due, Incagli Restructured	64%	19%	18%	83%
Other than Sofferenze (Past Due, Restructured, Incagli)	15%	50%	73%	17%

Note: Figures may not add to 100 in all cases

Source of the data: Survey responses

The WG also added a further question about the time at which a loan is categorised as being in default, in order to obtain valuable information about Italian ABS reporting practices that cannot be captured by the LLD. As shown in Table 12, some clear trends across asset classes emerge from the replies. It is quite common that a loan is considered as defaulted even if it becomes performing again or is restructured afterwards: this is the case for 65% and 67% of RMBS and SME reporting entities, 60% of Leasing and 50% of Consumer Finance respondents. Regarding the default amount reported, i.e. the amount recorded at the time of default, the large majority of RMBS and SME respondents (71% and 80%) state that this amount remains unchanged thereafter. Similarly, the majority of RMBS (91%), SME (93%) and Consumer Finance (80%) respondents state that the date of default never changes either.

Table 12: Timing and Amount of Default: overview of replies to a set of questions

	RMBS	SME	Consumer Finance	Leasing ABS
The loan will be considered as a default even if it becomes again performing or is restructured afterwards	65%	67%	50%	60%
You report the amount of the loan at the time of the default in AR177 (RMBS) and this amount will never change afterwards	71%	80%	30%	40%
You report the amount of the loan at the time of the default in AR177 (RMBS) and this amount may decrease if there are recoveries	18%	7%	10%	0%
You report the amount of the loan at the time of the default in AR177 (RMBS) and this amount may be increased to reflect the costs of recovering the collateral	24%	20%	0%	0%
You report the amount of the loan at the time of the default in AR177 (RMBS) and this amount may decrease once the loan is classified as "sofferenza" and will not change afterwards	18%	7%	0%	0%
You report the amount of the loan at the time of the default in AR177 (RMBS) and this amount only includes the principal amount	21%	27%	30%	0%
The date of default will never change	91%	93%	80%	40%
The date of default can change once when the loan is classified as "sofferenza" (i.e. bad loan)	6%	0%	0%	0%

Note: the replies do not add to 100 because each of them refers to a different question

Source of the data: Survey responses

5. Loss on Sale

The WG was interested to gain further insight into the practices used to report losses in the ABS LLD, due to the variation of internal reporting practices and definitions. The ECB RMBS taxonomy define this field as “Total loss net of fees, accrued interest etc. after application of sale proceeds (excluding prepayment charge if subordinate to principal recoveries). Show any gain on sale as a negative number”. SME and Leasing ABS reporting entities are asked simply to report “allocated losses” as “the allocated losses to date. If no losses to date, enter 0.” The WG wanted to investigate the components that are included in this field, the timing at which the loss is recorded and the processes that are followed when recoveries are made.

ECB RMBS Taxonomy

Field AR180 - Loss on Sale:

Total loss net of fees, accrued interest etc. after application of sale proceeds (excluding prepayment charge if subordinate to principal recoveries). Show any gain on sale as a negative number. If no data available use the following input ND

ECB SME Taxonomy

Field AS132 - Allocated Losses:

The allocated losses to date. If no losses to date, enter 0

ECB Leasing ABS Taxonomy

Field AL115 - Allocated Losses:

The allocated losses to date. If not defaulted or no losses have been allocated, enter 0. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Table 13 shows that most respondents across all relevant asset classes (ranging from 71% Leasing to 79% in RMBS) report in compliance with the ECB taxonomy. For these cases, loss on sale is reported as a default amount less recoveries upon completion of the work out process. A minority report the loss as an estimate amount that can change overtime.

Table 13: Defining Loss on Sale

	RMBS	SME	Leasing ABS
Default amount less recoveries upon completion of the work out process	79%	73%	71%
A loss estimate which can change overtime until final loss amount is reported	15%	13%	14%
Other	6%	13%	14%
Additional information from some of those who replied "Default amount less recoveries"			
After the Sale	15%	9%	0%
Loss Recognition	7%	27%	20%

Note: the replies do not add to 100 because each of them refers to a different question

Source of the data: Survey responses

An additional question was asked regarding the timing at which the loss is recorded. Most RMBS (75%) and SME (69%) respondents book the loss at the end of the work out process when no further recoveries are expected, but there are cases in which a loss is recorded as soon as an estimate of the loss can be made. To this question 15% of RMBS and SME respondents reported "other", which, for SME means that losses are reported only at the point of "loss recognition". For RMBS respondents this can either be at the point of loss recognition or after the sale of the asset.

Table 14: Loss Amount and Date of Loss

	RMBS	SME
At the end of the work out process when no further recoveries are expected	75%	69%
As soon as an estimate can be made	9%	15%
After a certain time has lapsed	0%	0%
Other	15%	15%
Other of which:		
After the Sale	60%	0%
Loss Recognition	40%	100%

Note: Figures may not add to 100 in all cases

Source of the data: Survey responses

As from the ABS LLD it is a challenge (all countries considered) to determine what happens to the reported loss amount when some recoveries have been made, the WG asked respondents to specify how they report such cases. Table 15 shows that reporting practices vary across institutions and asset classes. 41% of RMBS respondents would, in case of recoveries, report the loss as the principal plus unpaid interest plus the liquidation costs. This practice of reporting also the liquidation costs is used to a lesser degree by SME (29%) and is less commonly used among Leasing respondents (9%). Instead, reporters of Leasing LLD would report only the principal (45%) or else the principal plus unpaid interest (36%); the corresponding figures for SME are 36% and 29% respectively. The practice of reporting such a loss as the principal and unpaid interest is used to a lesser degree by RMBS respondents (16%). Some respondents, in each asset class, state that they would, in such a case, report no loss at all until completion of the workout process which is consistent with what is also reported in Table 14.

Table 15: Loss in the Case of Recoveries

	RMBS	SME	Leasing
Only Principal in full	34%	36%	45%
Principal in full + Unpaid interest	16%	29%	36%
Principal in full + Unpaid interest + Liquidation Costs	41%	29%	9%
Other	9%	7%	9%
Other of which:			
Nothing until completion of workout	67%	100%	100%
Only Unpaid interest	33%	0%	0%

Source of data: Survey responses

Regardless of recoveries, the pattern of reporting the components of the loss amount is somewhat similar across RMBS, SME and Leasing asset classes. In around 70% of the cases, both the interest and legal costs are included with the principal to give the total loss amount. Interest without the legal fees are reported at 14% and 15% of SME and RMBS respectively while 14% and 9% respectively report the principal only (see Table 16).

Table 16: Standard Components of the Loss Amount (regardless of recoveries)

	RMBS	SME	Leasing
Principal (only)	9%	14%	0%
Principal + Interest	15%	14%	33%
Principal + Interest + legal costs	73%	71%	67%
Other (only legal costs)	3%	0%	0%

Source of the data: Survey responses

6. Cumulative Recoveries

The WG designed a specific set of questions to better understand how and when an institution reports cumulative recoveries in the LLD. The RMBS taxonomy states that cumulative recoveries are “only relevant for cases with losses” but no further information is provided on what components should be included. The SME taxonomy defines this field as “Total recoveries including all sale proceeds. Only relevant for loans that have defaulted/foreclosed” while the Leasing taxonomy states that this field should be reported as “Cumulative recoveries on this account, net of costs. If not in default use ND,5 or if no recoveries, enter 0.” With the aim to provide valuable information on the recoveries the following points were also examined in the survey: i) the point in time at which cumulative recoveries are recorded as well as the ending of the recovery process; ii) the effect that recoveries have on the default and loan amounts in the case of liquidation; iii) the degree to which recovery processes are handled internally or by third parties; iv) and the steps that are taken when a restructured loan becomes performing again.

ECB RMBS Taxonomy

Field AR181 - Cumulative Recoveries:

Cumulative recoveries – only relevant for cases with losses. If no data available use the following input ND

ECB SME Taxonomy

Field AS128 - Cumulative Recoveries:

Total recoveries including all sale proceeds. Only relevant for loans that have defaulted/foreclosed. If No Data available enter ND

ECB Leasing ABS Taxonomy

Field AL111 - Cumulative Recoveries:

Cumulative recoveries on this account, net of costs. If not in default use ND,5 or if no recoveries, enter 0. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

The responses (see Table 17 below), show that almost all respondents report cumulative recoveries on an ongoing basis, as soon as an amount is collected. A minority, on the other hand, report the amount only at the end of the work out process.

Table 17: Reporting of Cumulative Recoveries in the LLD

	RMBS	SME	Leasing
Only at the end of the work out process "all at once"	12%	13%	0%
On an ongoing basis, as soon as an amount is collected	88%	87%	100%
Only upon the liquidation of the collateral	0%	0%	0%
Based on expected future recoveries	0%	0%	0%

Source of the data: Survey responses

In order to gain more insight into the variation in reporting practices across institutions, a case study type of question was added to understand how the reporting entities would report cases where "an amount of €1000 is recovered prior to the liquidation of the collateral on a defaulted loan". Table 18 shows that in such a scenario, most respondents, across all three asset classes, would increase the recovery and decrease the loan amount. One quarter of RMBS respondents would increase the recovery amount only, while this practice is used to a lesser extent by SME (15%) and Leasing (17%) respondents. A similar proportion of Leasing reporting entities would not increase the recovery amount but would reduce the default and/or loan amount; 13% of RMBS reporting entities also report in this manner whereas the figure for SME is only 8%. The practice among the remaining RMBS and SME respondents is to increase the recovery amount while decreasing both the loan and default amount.

Table 18: Reporting of Cumulative Recoveries prior to Liquidation

	RMBS	SME	Leasing
Increase the field "recovery" (only)	25%	15%	17%
Increase recovery & decrease loan amount	53%	69%	67%
Increase recovery & decrease loan amount & decrease default amount	9%	8%	0%
No increase in recovery but decrease default and/or loan amount	13%	8%	17%

Note: Figures may not add to 100 in all cases due to rounding

Source of the data: Survey responses

Across both RMBS and SME reporting entities, the recovery process tends to be handled internally with just under 30% stating some aspects of the recovery process are outsourced to a third party such as a special external master servicer whilst other tasks are handled internally. In the case of Leasing, half of the respondents state that the process is internal with one third reporting it as outsourcing only (see Table 19).

Table 19: Internal versus Outsourcing of the Recovery Process

	RMBS	SME	Leasing
Both internal and outsourcing	29%	27%	17%
Outsourcing (only) ²³	10%	7%	33%
Internal (only)	61%	67%	50%

Note: Figures may not add to 100 in all cases due to rounding

Source of the data: Survey responses

While most RMBS and SME respondents state that they deem the recovery process to be over when the cumulative default is equal to the recovery plus the loss, this practice is used by only one third of Leasing reporting institutions for which the majority instead state that the process has ended when no further recoveries are expected and the loan is closed. One quarter and one third of RMBS and SME respondents respectively consider the process as over when a loss is simply reported (see Table 20).

Table 20: Ending the Recovery Process

	RMBS	SME	Leasing
When cumulative default = recovery + loss	68%	60%	33%
When a loss is reported (without waiting until default = recoveries + loss)	24%	33%	0%
When no further recoveries are expected/loan closed	9%	7%	67%

Note: Figures may not add to 100 in all cases due to rounding

Source of the data: Survey responses

²³ E.g. Outsourced to a third party such as a special external master servicer

The survey also contained a specific question regarding the recovery process in the case of loans that are classified as defaulted but are restructured and become performing again. Answers were homogeneous across asset classes showing clear trends in the ABS LLD reporting. First, the most popular response, in each asset class, was that such restructured/re-performing loans would stay flagged as defaulted (69% RMBS, 86% SME, 50% Leasing). The answer is consistent with what respondents replied on defaulted loans in general. As seen above in Table 12, loans would be reported as defaulted in the ABS LLD even after they return to performing status. Second, a large majority of respondents in all asset classes (59% RMBS, 71% SME, 50% Leasing) state that the restructured/re-performing loan would not only be flagged as defaulted but it would still be reported with a default amount and default date. The third most popular method of reporting (56%, 71% and 33% of RMBS, SME and Leasing respondents respectively) is to treat amounts collected as a recovery and to increase the cumulative recovery field accordingly. This pairs with the answer provided by respondents on the treatment of recoveries from defaulted loans in general (not just restructured loans, see Table 12 above) which are reported increasing the recovery amount field in the ABS LLD.

Table 21: Restructured Loans that become Performing Again

	RMBS	SME	Leasing
It stays flagged as defaulted	69%	86%	50%
Any amount collected will be treated as a recovery and increase the "cumulative recovery" field	56%	71%	33%
The loan will still appear as a default with a default amount, a default date and a default status	59%	71%	50%
Will the loan ID be modified?	6%	7%	0%
Other	6%	7%	0%

Source of the data: Survey responses

7. Addendum

7.1. Initiatives to improve Standardisation and Comparability

Whilst, in general, the data submitted by the majority of Italian ABS reporting entities complies with the ECB reporting templates and, based on this survey, is largely homogeneous across counterparties, comparability for certain areas remains challenging to some extent. As highlighted also in the Spanish RMBS survey, even though comparability across jurisdictions and sometimes within jurisdictions can be challenging in some areas due to limited standardisation of some data fields, it is rather high for some more straightforward data fields. Several initiatives are underway to overcome these matters, some of which will be implemented by ED, while others will be driven by the regulators such as the European Banking Authority (EBA) as well as the European Securities and Markets Authority (ESMA), the market or Eurosystem initiatives.

7.2. European DataWarehouse Initiatives

Three main initiatives can be mentioned here. One is the country-level surveys: as stated above, following the survey on the Spanish and on the Italian ABS, ED plans to perform similar surveys at country level for other European markets. The other one is about EDvance, the ED's web-based solution designed specifically for investors, analysts and researchers, that was launched in August 2017. The new platform provides users with access to rich, seamless loan and bond level data, in an easy, convenient and interactive way. As well as allowing users to benchmark any given deal against other deals from the same issuer, vintage or country, EDvance includes also the ability to view historical trends, slice and dice stratification tables and generate monitoring reports. A unique feature will be the possibility to instantly compare Investor Report information with that submitted in the LLD. EDvance includes standardised performance metrics based on existing available data. Such calculated fields will contain recalculated or adjusted performance data, so as to make comparisons possible across deals and time series. Delinquency and default data, as well as various key performance indicators such as prepayment and default rates, will also be published in a standardised format.

Lastly, ED also plans to extend the number of deal commentaries that it currently publishes in its document repository. These deal commentaries, which result from the cooperation between ED and the reporting entities, enable data users to gain a deeper understanding of the data. The comments are particularly useful in cases where the LLD reports counterintuitive figures which are, in fact, correct.

7.3. European Central Bank Initiatives

The European Central Bank's Frequently Asked Questions (FAQ) section addresses potential ambiguities that are not clarified by the taxonomy. The FAQ are derived from answers the ECB provides to questions submitted by the reporting entities²⁴. These extra explanations enable reporting entities to provide ABS LLD that better respond to the taxonomy and are, therefore, more consistent. The ECB also maintains a hotline, which reporting entities can use for data queries that are not clarified in the taxonomies or FAQ.

In ED's experience, it is generally the case that reporting entities are willing to adapt their reporting practices when specific guidance is provided. Thus, the clarifications provided on the ECB website and via the ECB hotline will continue to be effective drivers of data quality improvements.

7.4. Other Regulatory and Industry Initiatives

Common definitions are an essential prerequisite to standardised reporting. Standardisation of the reporting for securitisation transactions (e.g. investor reports) is already under way in some jurisdictions, notably in the Netherlands under the auspices of the Dutch Securitisation Association. Other countries may follow this example as part of an effort to harmonise the securitisation markets.

The convergence in bank reporting standards will also contribute to better data. Current efforts underway at the Eurosystem, European Commission, EBA, ESMA and the International Organization of Securities Commissions (IOSCO) will result in more standardised reporting of information as banks will be obliged to fulfil regulatory requirements along with specific guidelines and definitions. For example, further improvements in this direction are expected as part of the upcoming regulation for simple, transparent and standardised securitisations as published in the Official Journal on 28 December 2017. This, in turn, is likely to have a positive effect on reporting standards at the loan level towards further consistency.

ED supports the development of standardised investor report templates and digitisation of investor reports²⁵ for a significant increase in transparency and comparability of data. Common investor reporting guidelines could enhance alignment between the LLD and the corresponding investor report. The Bank of England and some industry associations, such as the Dutch Securitisation Association (DSA) has made efforts to standardise the content and the format of investor reports²⁶.

²⁴ The FAQ published by the ECB are available from: <https://www.ecb.europa.eu/paym/coll/loanlevel/faq/html/index.en.html>. The ECB also maintains a dedicated hotline to assist reporting entities with any questions they may have

²⁵ ED published a report on this issue in 2016. "ABS Investor Reports: Standardisation and Digitisation". It is available here: <https://eu-rodw.eu/wp-content/uploads/ABS-IR-Standardisation-Digitisation.122016.pdf>

²⁶ For more information, please refer to the DSA website at <https://www.dutchsecuritisation.nl/investor-reporting>.

Annex 1: ECB Taxonomy Definitions of the Surveyed Topics

RMBS

Field Number	Priority	TAG	Field Name	Data Type / Format	Field Definition & Criteria
AR26	Mandatory	Static	Primary Income	9(11).99	Primary borrower underwritten gross annual income (not rent). If no data available use the following input ND
AR28	Optional	Static	Secondary Income	9(11).99	Secondary borrower underwritten gross annual income (not rent - if single borrower then 0). When there are more than two borrowers indicate total annual combined income. If no data available use the following input ND
AR166	Mandatory	Dynamic	Account Status	List	Current status of account: Performing (1) Arrears (2) Default or Foreclosure (3) Redeemed (4) Repurchased by Seller (5) Other (6) No Data (ND)
AR169	Mandatory	Dynamic	Arrears Balance	9(8).99	Current balance of arrears. Arrears defined as: Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. If no data available use the following input ND
AR170	Mandatory	Dynamic	Number Months in Arrears	Numeric	Number of months this loan is in arrears (at pool cut off date) according to the definition of the issuer. If no data available use the following input ND
AR174	Mandatory	Dynamic	Litigation	Y/N	Flag to indicate litigation proceedings underway (if account has recovered and is no longer being actively litigated this should be re-set to N). If no data available use the following input ND
AR177	Mandatory	Dynamic	Default or Foreclosure	9(8).99	Total default amount before the application of sale proceeds and recoveries. If no data available use the following input ND
AR180	Mandatory	Dynamic	Loss on Sale	9(11).99	Total loss net of fees, accrued interest etc. after application of sale proceeds (excluding prepayment charge if subordinate to principal recoveries). Show any gain on sale as a negative number. If no data available use the following input ND
AR181	Mandatory	Dynamic	Cumulative Recoveries	9(11).99	Cumulative recoveries - only relevant for cases with losses. If no data available use the following input ND

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Consumer Finance

Field Number	Priority	TAG	Field Name	Data Type / Format	Field Definition & Criteria
AN17	Mandatory	Static	Primary Income	9(11).99	Primary borrower underwritten gross annual income (not rent). Should be rounded to the nearest 1000 units. All 'No Data' options may be used in this field
AN49	Mandatory	Dynamic	Arrears Balance	9(11).99	Current balance of arrears, defined as the sum of minimum contractual payments due but unpaid by the borrower. If the loan is not in arrears enter 0. All 'No Data' options may be used in this field
AN50	Mandatory	Dynamic	Number of Months in Arrears	9(5).99	Number of months the loan is in arrears as of the pool cut-off date. Enter 0 if not in arrears. All 'No Data' options may be used in this field
AN52	Mandatory	Dynamic	Gross Default Amount	9(11).99	Gross default amount on this account. If not in default / foreclosure, use ND,5. All 'No Data' options may be used in this field
AN58	Mandatory	Dynamic	Account Status	List	Current status of account: Performing (1) Restructured - no arrears (2) Restructured - arrears (3) Defaulted (4) Arrears (5) Repurchased by Seller - breach of reps and warranties (6) Repurchased by Seller - restructure (7) Repurchased by Seller - special servicing (8) Redeemed (9) Other (10) All 'No Data' options may be used in this field
AN59	Mandatory	Dynamic	Arrears Balance Capitalised	9(11).99	Sum of arrears capitalised to date. If no arrears capitalisation has occurred, enter 0.00. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Leasing

Field Number	Priority	TAG	Field Name	Data Type / Format	Field Definition & Criteria
AL98	Mandatory	Dynamic	Arrears Balance	9(11).99	Current balance of arrears. Arrears defined as: Total payments due to date LESS Total payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. All 'No Data' options may be used in this field
AL99	Mandatory	Dynamic	Number of Months in Arrears	9(5).99	Number of months this Lease is in arrears (at pool cut-off date) according to the definition of the issuer. All 'No Data' options may be used in this field
AL104	Mandatory	Dynamic	Default or Foreclosure on the Lease	Y/N	Whether there has been a default or foreclosure on the lease per the transaction definition, or alternatively, per the lessor's usual definition. All 'No Data' options may be used in this field
AL108	Mandatory	Dynamic	Default Amount	9(11).99	Total default amount (per the transaction definition, or alternatively, per the lessor's usual definition) before the application of sale proceeds and recoveries. If not in default, enter 0. All 'No Data' options may be used in this field
AL128	Mandatory	Dynamic	Loss on Sale	9(11).99	Total loss net of fees, accrued interest etc. after application of sale proceeds (excluding prepayment charge if subordinate to principal recoveries). Show any gain on sale as a negative number. If not relevant, use ND,5. All 'No Data' options may be used in this field
AL111	Mandatory	Dynamic	Cumulative Recoveries	9(11).99	Cumulative recoveries on this account, net of costs. If not in default use ND,5 or if no recoveries, enter 0. All 'No Data' options may be used in this field

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

SME

Field Number	Priority	TAG	Field Name	Data Type / Format	Field Definition & Criteria
AS117	Mandatory	Dynamic	Principal Ar-rears Amount	9(11).99	Current balance of principal arrears. Arrears defined as: Total principal payments due to date LESS Total principal payments received to date LESS any amounts capitalised. This should not include any fees applied to the account. If not in arrears enter 0.
AS118	Mandatory	Dynamic	Number of Days in Principal Arrears	9(10)	Number of days this loan is in arrears (at pool cut off date) according to the definition of the issuer. If not in arrears enter 0.
AS125	Mandatory	Dynamic	Default Amount	9(11).99	Total default amount (per the transaction default definition) before the application of sale proceeds and recoveries. If not in default, enter 0.
AS128	Mandatory	Dynamic	Cumulative Recoveries	9(11).99	Total recoveries including all sale proceeds. Only relevant for loans that have defaulted/foreclosed. If No Data available enter ND
AS132	Mandatory	Dynamic	Allocated Losses	9(11).99	The allocated losses to date. If no losses to date, enter 0.

Source: <https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html>

Annex 2: "Matrice dei conti" Regulation and Classification for Arrears

The Banca d'Italia (BdI) classification of arrears is based on the Italian Regulation "Matrice dei conti" Circular 272 published on 30.07.2008 and last updated on 28.12.2017. It is available here: <https://www.bancaditalia.it/compiti/vigilanza/normativa/archivio-norme/circolari/c272/index.html>.

BdI's definition of non-performing loans (NPL) meet the European Banking Authority (EBA) standards published in 2013 for non-performing and forborne exposures ("Implementing Technical Standards on Supervisory Reporting", ITS)²⁷. BdI's definition in place before was already broadly in line with the EBA harmonised definition and included four categories of non-performing loans: Past due; "Incagli" (substandard), "Ristrutturati" (restructured) and "Sofferenze" (bad loans). Following the EBA's ITS, the categories of Incagli and Ristrutturati have been replaced by a new category, the "Unlikely to pay"²⁸

According to the above mentioned EBA's ITS, which have been introduced to harmonise financial reporting across Europe, "non-performing exposures are those that satisfy either or both of the following criteria:

1. material exposures which are more than 90 days past-due;
2. the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past-due amount or of the number of days past due."

This definition of non-performing exposures also includes the non-performing "forborne" exposures, i.e. restructured exposures which have not returned to the (forborne) performing status²⁹.

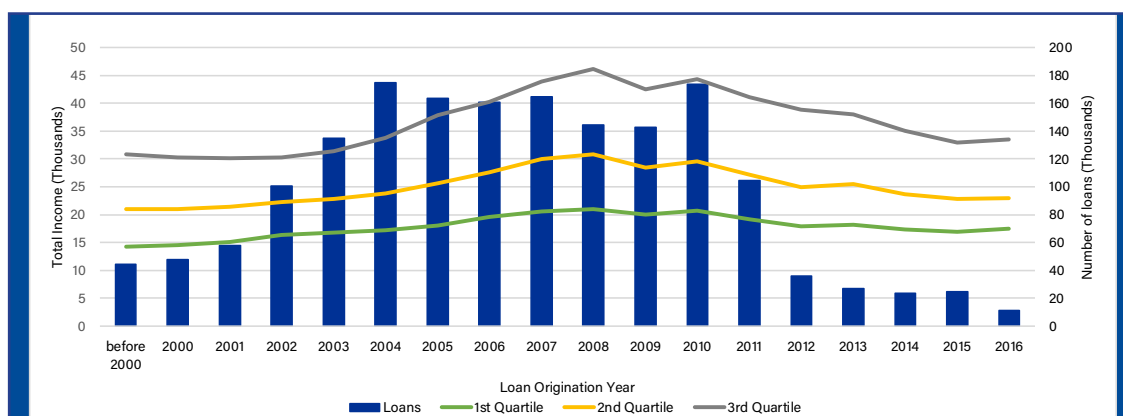
²⁷ See EBA, "Implementing Technical Standards on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of regulation (EU) No 575/2013", paragraph 145 of Annex V

²⁸ Restructured loans, performing or not, are now reported separately as "Forborne", as prescribed by the EBA's ITS

²⁹ EBA has in fact also introduced the category of "forbearance", which includes exposures on which concessions have been granted in view of the debtor's financial difficulties (e.g., restructured loans), and the sub-categories "performing" and "non-performing".

Annex 3. Primary Income Distribution for Italian RMBS

Figure 5. Total Income Quartiles of mortgage lenders by Loan Origination Year



Source of the data: ED calculations

Calculation methodology: loans with Borrower's Employment Status provided as 'No employment, borrower is legal entity' (AR21 = 6) are excluded from the calculations. Loan-Level Data submissions with a pool cut-off date before 2014-01-01 have not been considered as part of the query. Loans with no income information provided are taken out of calculations as well as loans with income equal to zero and/or dummy values.

1st Quartile refers to 25th percentile of the statistical sample

2nd Quartile refers to 50th percentile (median) of the statistical sample

3rd Quartile refers to the 75th percentile of the statistical sample

Annex 4. Glossary

ABS: Asset-Backed Securities

BdI: Banca d'Italia

CRR: Capital Requirements Regulation

EBA: European Banking Authority

ECB: European Central Bank

ED: European DataWarehouse

EDvance: ED web-based solution for data users

EDwin: ED proprietary software

ESMA: European Securities and Markets Authority

DSA: Dutch Securitisation Association

DQS: Data Quality Scores

FAQ (ECB): Frequently Asked Questions published by European Central Bank

ITS: Implementing Technical Standards on Supervisory Reporting

IOSCO: International Organization of Securities Commissions

LLD: Loan-Level Data

ND: No Data

NPL: Non-performing loans

RMBS: Residential Mortgage Backed Securities

SME ABS: Small-Medium Enterprise ABS

SPV: Special Purpose Vehicle

SSM: Single Supervisory Mechanism

WG: Working Group refers to a specific expert group created in order to carry out the survey. It is composed of ED staff with the authors of this report and two participants from the Bank of Italy Anna Michelina Di Gioia and Edvige Iannicola.

IMPORTANT DISCLOSURES:

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