Special Report

European DataWarehouse Commentary on Spanish RMBS Loan Level Data

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This first Commentary on Loan Level Data presents the results and conclusions of a study on data quality and comparability issues focused on the Spanish RMBS market, one of the largest covered by European DataWarehouse.

Besides providing additional clarity on the different practices of reporting entities (Data Owners and Data Providers), the intelligence gathered in this process will also enable European DataWarehouse to produce more standardised data for its securitised portfolios, including performance statistics.

European DataWarehouse intends to publish further similar commentaries on the other main European markets.

Executive summary

Loan Level Data (LLD) usage has become more widespread over the last three years for ABS monitoring, valuation and research as well as for the analysis of the underlying loan markets. Data quality efforts have focused on improving quality at the LLD level, allowing in-depth analysis on a deal by deal basis. Comparability of LLD across countries and sometimes within countries remains however challenging in some areas, primarily as a result of limited standardisation for some data fields which is particularly relevant for the Spanish RMBS market. Comparability on the other hand is high for more straightforward data fields such as current balance, maturity profile, interest rates, seasoning or postal codes.

This study on reporting standards focuses on Spanish RMBS. Leveraging its extensive database, European DataWarehouse (ED) conducted an initial examination of the LLD using a top-down approach, determining entities to be contacted, deals to be analysed and key data fields to be addressed. The performance related information (i.e. arrears, defaults and recoveries) is where most of the fragmentation in reporting tends to appear, hence both the most interesting and challenging for ED's study.

The absence of homogeneous definitions across European securitisation markets, differences in internal banking practices and company IT systems, as well as potential ambiguities on taxonomy details are the key factors affecting comparability for certain data fields which can also make comparisons with investor reports challenging. Additionally, lack of precise information at issuer level can force reporting entities to use proxies.

Convergence in reporting occurs when the issues mentioned above do not appear. LLD reporting may vary over submissions, mainly driven by ED data quality efforts as well as ECB taxonomy clarifications or IT related temporary issues, given that changes can occur frequently but are often not applied retroactively.

Several initiatives are underway to overcome the remaining LLD comparability issues. ED is increasing the number of deal commentaries available in a document repository to make the data more understandable. ED also intends to publish standardised performance metrics based on existing available data to improve comparability.

Other regulatory and industry initiatives aim to harmonise the reporting practices. The ECB already maintains a FAQ section online in order to address ambiguities regarding the taxonomy.[1] For the Dutch market, the Dutch Securitisation Association has harmonised investor reporting which also includes reconciliation efforts with the LLD. Common definitions and convergence in bank reporting standards are also an essential prerequisite towards more standardised reporting.

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[1] See ECB FAQ section https://www.ecb.europa.eu/paym/coll/loanlevel/faq/html/index.en.html

ED data is primarily used for monitoring, due diligence and research

LLD usage has consistently increased over the years and is now widely used in ABS monitoring, valuation and research as well as for the analysis of the underlying loan markets. LLD provides some key insights into the main drivers of credit performance as well as the credit risk inherent to the pools. It is worth noting that LLD provides significantly more detailed information for deal analysis and comparison relative to investor reports. Several studies were produced using ED data.[2] Recently, JP Morgan[3] conducted a loss and recovery analysis using the default information present in the LLD for a sample of Spanish RMBS deals. Another report by Bank of America Merrill Lynch (BAML) on European DataWarehouse highlighted its contribution over the past three years to transparency in the ABS market. Nevertheless, according to BAML, data comparability is the "most intractable issue" at present.[4]

Data quality improvements allow in-depth analysis at the deal level

Recent data related efforts have focused on improving quality at the LLD level. Over the last two years ED observed significant ongoing improvements with regard to data completeness and accuracy, that allow in-depth analysis on a deal by deal basis; however comparing deals across issuers and jurisdictions remains more challenging. Improvement is being made at a slower pace due to the higher complexity involved and the lack of harmonised bank reporting standards at a European level.

Improving comparability is the main challenge

At this stage, comparability remains challenging in certain LLD areas. ED observed differences not only across but also within jurisdictions. ED chose to focus its first data quality study on Spanish RMBS because this is one of its largest markets and it presents a high level of reporting fragmentation (particularly regarding the presentation of performance data). In the course of this study, ED identified several key factors hampering comparability:

- ➢ Lack of uniform definitions
- ➢ Lack of detailed guidance for some of the data fields
- ➢ Differences in internal banking practices
- ➢ Reporting entities follow different approaches
- ➢ Reporting entities sometimes use proxy data

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[2] See "A first look at loan-level data" - Deutsche Bank Global Markets Research, 16 May 2013; "Housing Equity Loan-level Analysis: In Spain Vintage Matters" - DBRS, June 2013.

[3] See J.P. Morgan, "In focus… Spanish RMBS", International ABS & CB Weekly, 6 Nov, 2015

[4] See Bank of America Merrill Lynch "Data comparability is in our view the most intractable issue related to loan by-loan reporting. The complexity of the issue stems from the different accounting and servicing standards applied by banks across countries and within countries, and is related to established practices and conventions, and IT systems' set up. This issue, however, goes well beyond reporting standards for securitised pools and encompasses the overall bank reporting standards. Hence, we think it is not in the power of ED to resolve, but rather a prerogative of the bank supervisory authorities (SSM, ECB, EBA, etc.) to mandate its resolution, thus facilitating their own supervisory work." Week of 1st June 2015: Data availability and comparability? p.17

Spanish RMBS: A case study on comparability issues

This study on reporting standards focuses on Spanish RMBS. By number of deals, this is the largest subset within Edwin (ED's main database software) and the reporting issues evident in the Spanish LLD are representative of those of the European securitisation market as a whole. The analysis covers 98.2% of the outstanding loan balance (i.e. EUR109 Billion as of 13th of August 2015) and 155 out of the 160 active Spanish RMBS deals present in Edwin at the cut-off date. The study covers 18 out of 20 reporting entities, with deals issued between 2002 and 2015.

ED conducted an initial examination of the LLD using a top-down approach, determining entities to be contacted, deals to be analysed and key data fields to be addressed. A complete understanding of the reporting standards was not possible only by examining the LLD and required additional input from the reporting entities. ED reached out to the individual issuers to investigate more in-depth the nature of the information reported (e.g. understanding of arrears definition, rounding of the number of months in arrears, etc). Temporary elements, such as IT or extraction related issues preventing the reporting entities to correctly report a certain data field, were not considered. All the information received was then transformed into statistics and used as input for both quantitative reporting outcomes and qualitative knowledge. The results not discussed in this section are displayed in Appendix 1.

Detailed taxonomy and guidance improve consistency

The LLD template reporting requirements, aiming to help the reporting entities to fill out the loan level templates, are compiled in a dedicated manual (taxonomy) and are available on the ECB website for each asset class.[5] Apart from the data format, the ECB taxonomy sets the requirements for the provision of standardised information. It includes detailed field definitions and criteria plus additional notes with regard to the content of the information. Data fields with clear guidance tend to show a higher level of convergence in reporting. Conversely, data fields that take into account any deal specificities, or for which there is room for interpretation, tend to be reported more inconsistently. This makes comparability across transactions and across jurisdictions challenging. The performance related taxonomy area is where most of the fragmentation in reporting tends to appear, hence the most interesting and challenging for ED's study.

Absence of standard uniform definitions

In the absence of homogeneous definitions across European securitisation markets, reporting entities tend to refer both to the transaction document specifications and to the National Central Bank (NCB) reporting recommendations. The recourse to transaction documentation and the existing differences in terms of definitions and transaction features lead to further differences in reporting. Lack of standards leads to different approaches in the reporting of performance information, more specifically for the arrears classification.

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[5] See https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html

When the field "Account Status" (AR166) is equal to "2" (Arrears), in 33.7% of the cases the status is used for 90+ days delinquent loans, until these loans become defaulted. In 16.6% of the cases, it is used from the first missed payment until the loans reach 90 days in arrears, when they will be treated as defaulted. Those two understandings of the taxonomy are radically different.

Exhibit 1: Account Status Arrears (AR166=2)

From the first missed payment until the loan becomes defaulted	47.9%
From 90+ days delinquent until the loan becomes defaulted	33.7%
From the first missed payment until the loan is 90+ days delinquent	16.6%
N/A	1.8%
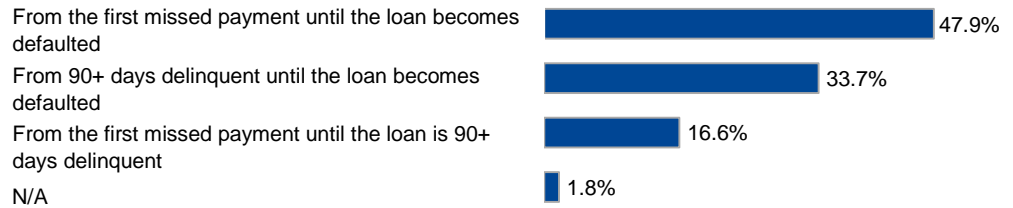
Ambiguities in definitions for certain fields

The lack of detailed taxonomy explanations is one of the factors affecting comparability for certain data fields. This issue affects mainly arrears information. Looking at the field "Number of Months in Arrears" (AR170) for loans classified in arrears, ED found that reporting entities do not count them in the same way. Thus, the starting point can be either (see Exhibit 2) number of months since the first missed payment (rounded up) in 44.6% of the cases or since the loan is 90+ days delinquent (rounded down) in 31.2% of the cases or since the first missed payment, rounded down (22.3%).

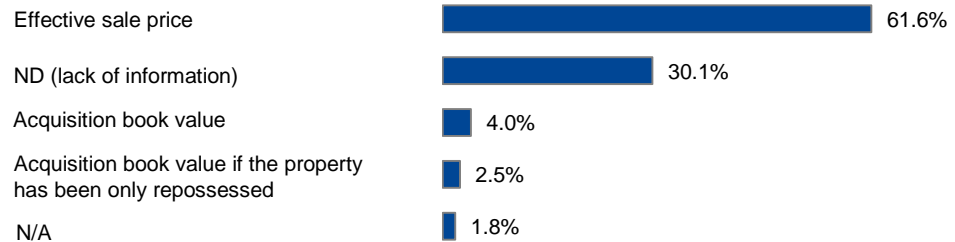**Exhibit 2: Number of Months in Arrears (AR170) for Account Status Arrears (AR166 =2)**

From the first missed payment, rounded up	44.6%
From 90+ days delinquent, rounded down	31.3%
From the first missed payment, rounded down	22.3%
N/A	1.8%
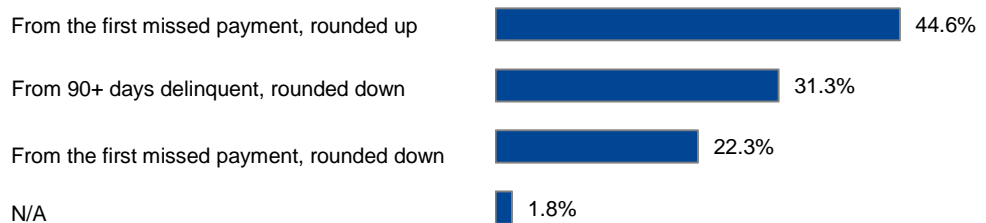
Differences in internal banking practices and procedures

Differences in internal banking practices and company IT systems, also lead to divergences in LLD reporting, mostly related to the default and foreclosure process data fields. IT infrastructure deficiencies at the issuer level may negatively affect the raw data gathering process. For instance, almost one third of the market is unable to report the field "Sale Price Lower Limit" (see Exhibit 3) as per the ECB taxonomy requirements. The recent mergers and acquisitions in the Spanish banking sector forced the integration of various IT systems and procedures and this also occasionally led to inconsistencies in the reporting at the LLD level. These issues, however, are expected to improve over time.

"Sale Price Lower Limit" (AR179) is usually populated with the effective sale price (61.6% of cases), whereas in 30.1% of the cases no data is provided even though the field is mandatory and in 6.6% of the cases the value reported can be an acquisition book value instead of the actual sale price.

Exhibit 3: Sale Price lower Limit (AR179)

Effective sale price	61.6%
ND (lack of information)	30.1%
Acquisition book value	4.0%
Acquisition book value if the property has been only repossessed	2.5%
N/A	1.8%

Use of Proxy Data

Lack of precise information can force reporting entities to use proxies. This can happen when the ECB taxonomy requirements are not in line with the historical information gathered by issuers during the loan origination process. This is typically the case for the field "Primary Income" (see Exhibit 4). Even though it is supposed to include the gross income of the primary borrower and only certain sources of income (excluding rent), ED's study shows that this is not always the case. Reporting entities sometimes provide the net instead of the gross income, and sometimes add to it the secondary income and other sources not considered in the taxonomy.

The field "Primary Income" (AR26) refers for 52.6% of the loans volume to a gross income, in 30.7% of the cases to a net income, and in 6.3% to a combination of gross and net income in the same pool.

Exhibit 4: Primary Income (AR26)

Gross Income	52.6%
Net Income	30.7%
Unknown	8.6%
Mixed	6.3%
N/A	1.8%
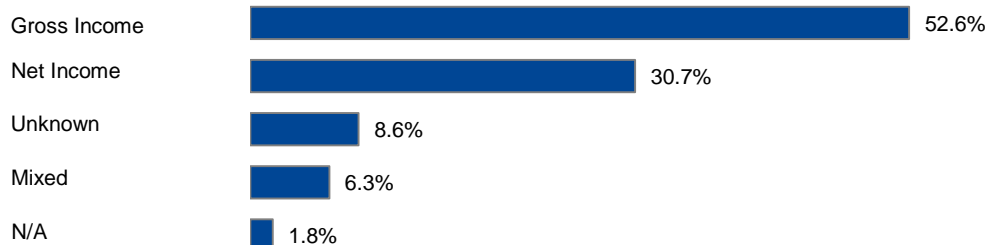
LLD and Investor Report reconciliation can be challenging

LLD reporting specificities can make comparisons with investor reports challenging. Investor reports may suffer from lack of completeness compared to the pool data, making full reconciliation implausible. Investor reports vary significantly, mainly due to different definitions and management company (gestora) practices. While in some countries such as the UK and the Netherlands the investor reports tend to display a higher level of consistency across servicers, in Italy and Spain the extent of variation is much higher due to different servicer practices and definitions across deals.[6] As a result, both additional work and input are necessary during the process.

When none of the above occurs, LLD reporting is generally homogeneous

Convergence in reporting occurs when the issues mentioned above do not appear. For instance (see Exhibit 5), the field "Current Balance" (AR67) refers for 95.7% of the loans volume to principal outstanding + principal unpaid, as per the ECB taxonomy. For 2.5% of the volume, however, the field only includes principal outstanding and the principal unpaid amount is shown separately in the field AR169.

Exhibit 5: Current Balance (AR67)

Principal Outstanding + Principal Unpaid	95.7%
Principal Outstanding	2.5%
N/A	1.8%

Most reporting entities are willing to cooperate not only by helping ED to gain better insight into the current standards, but also by aligning their LLD with the ECB taxonomy requirements. It appears that the information on certain fields provided by reporting entities who act both as Data Owner and Data Provider, show a higher level of consistency compared to the same information provided by only Data Providers acting on behalf of the issuers. Also, in terms of taxonomy interpretation, Data Owners tend to show a higher level of confidence about the accuracy of the content of the underlying data.

LLD reporting is dynamic

LLD reporting may vary over submissions, mainly driven by ED data quality efforts as well as ECB taxonomy clarifications and IT related temporary issues. Such a dynamic environment makes a complete understanding and in-depth comparison across portfolios not entirely possible by conducting a single LLD analysis. In some cases, deeper insight and continuous monitoring is needed. Also, the eventual loss of trends may be a handicap,

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[6] See " Further Consistency in Data Reporting Would Make European RMBS More Transparent and Comparable", Moody's Investors Service, 2 June 2015

given that changes in the LLD reporting can occur frequently but are often not applied retroactively.

Initiatives to improve standardisation and comparability

Several initiatives are underway to overcome the remaining LLD comparability issues. Some of these solutions will be implemented at the ED level, while others will be driven by the market or Eurosystem activity. Data user feedback is also helping data quality improvement.

European DataWarehouse initiatives

ED is increasing the number of deal commentaries available in a document repository to make the data more understandable. These comments, resulting from the cooperation between ED and the reporting entities, enable data users to gain a deeper understanding of the data. The comments are most helpful in cases where the LLD reports counterintuitive figures which are actually correct. As of 7th January 2016, there were in total 314 deal commentaries for 260 deals (of which 133 are Spanish RMBS deals), and ED expects to store in Edwin comments for almost all the active deals by the second half of 2016. Deal commentaries, amongst others, include details regarding investor report reconciliation.[7]

ED intends to publish standardised performance metrics based on existing available data. Such calculated fields would contain recalculated or adjusted performance data, so as to make comparisons possible across deals and time series. ED will provide delinquency and default data in a standardised way as well as various key performance indicators such as prepayment and default rates.

Other regulatory and industry initiatives

The European Central Bank (ECB) already maintains a FAQ section online in order to address potential ambiguities regarding the taxonomy.[8] It provides answers to questions submitted to the ECB team by market participants.[9] These extra explanations, when available, allow reporting entities to provide LLD that better respond to the taxonomy and are therefore more consistent.

Spanish reporting entities appeared willing to adapt their reporting if more specific guidance is provided. Thus, ED expects that clarifications of data requests, particularly via the ECB FAQ initiative, will continue to be a very effective driver of data quality improvement. Details will address, amongst others, how to count months in arrears, how the default related fields should be filled in, and how to calculate and allocate losses. ED also thinks that a good step for this converging process could be achieved by providing further details as well as general guidelines for investor reports (i.e. LLD information should match the investor reports and provide the necessary details for trigger calculations).

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[7] The document repository for a given deal can be found on Edwin
[8] See ECB FAQ section https://www.ecb.europa.eu/paym/coll/loanlevel/faq/html/index.en.html
[9] Questions must be submitted to Eligible-Assets.hotline@ecb.europa.eu

A potential revision of the ECB taxonomy at some point going forward could involve further clarifications. For instance, the duplication of data fields where one is reported using the transaction definition and the other is reported based on a standardised definition is also possible. This is already the case to some extent with the reporting of defaults "according to Basel definition" and defaults "according to transaction definition" in the SME template.

Common definitions are an essential prerequisite to standardised reporting. Standardisation of the reporting for securitisation transactions 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. The current efforts undertaken (Eurosystem, European Commission, European Banking Authority, European Securities and Markets Authority, International Organization of Securities Commissions), are likely to have a positive effect on the reporting standards at the loan level, as banks will be obliged to keep similar information to fulfil regulatory obligations.

Appendix 1: Additional findings

The tables below summarise other significant findings of our Spanish RMBS LLD study. For each field we looked at, we display the % of the loan balances affected, compared with the total amount of Spanish RMBS loan balances present in Edwin at the Pool cut-off date[10].

Account Status (AR166) for:

Exhibit 6 - Performing (AR166=1) loans

AR166 - Account Status	
Performing	**Sum of % CB**
No missed payments and missed payments up to 90 days	64.5%
Performing	33.7%
N/A	1.8%
Grand Total	100.0%

Exhibit 7 - Defaulted (AR166=3) loans

Defaulted	Sum of % CB
Timeline according to transaction documents or subjectively defined	42.1%
Timeline according to transaction documents	31.2%
From 91 days in arrears onwards	16.6%
Timeline according to issuer accountancy or subjectively defined	3.3%
Timeline according to issuer accountancy or subjectively defined. Historical field	2.6%
Subjectively defined	2.5%
N/A	1.8%
Grand Total	100.0%

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[10] Due to rounding, grand totals may not always add up to 100%

Arrears Balance (AR169) for:

Exhibit 8 - Performing (AR166=1) loans

AR169 - Arrears Balance	
Performing	**Sum of % CB**
Zero - only loans with no missed payments	64.5%
Zero - even in the case of loans with missed payments up to 90 days	31.2%
Principal unpaid + Interest unpaid	2.5%
N/A	1.8%
Grand Total	100.0%

Exhibit 9 - Arrears (AR166=2) loans

Arrears	Sum of % CB
Principal unpaid + Interest unpaid	89.6%
Principal unpaid	8.6%
N/A	1.8%
Grand Total	100.0%

Exhibit 10 - Defaulted (AR166=3) loans

Defaulted	Sum of % CB
If active: Principal unpaid + Interest unpaid. If inactive (property repossessed): zero	36.3%
Principal unpaid + Interest unpaid	21.0%
Zero	16.6%
Outstanding Principal + Principal unpaid + Interest unpaid	15.6%
Principal unpaid	8.6%
N/A	1.8%
Grand Total	100.0%

Number of Months in Arrears (AR170) for:

Exhibit 11 - Performing (AR166=1) loans

AR170 - Number of Months in Arrears	
Performing	**Sum of % CB**
Zero - only loans with no missed payments	47.9%
Zero - even in the case of loans with missed payments up to 90 days	31.2%
ND (lack of information)	16.6%
Since the first missed payment. Rounded down	2.5%
N/A	1.8%
Grand Total	100.0%

Exhibit 12 - Defaulted (AR166=3) loans

Defaulted	Sum of % CB
Since the first missed payment, rounded up	42.1%
Since 90+ days delinquent, rounded down	31.2%
Since the first missed payment. Rounded down	19.9%
Since the first missed payment, rounded down. If inactive (property repossessed): zero	5.0%
N/A	1.8%
Grand Total	100.0%

Exhibit 13 - Default or Foreclosure (AR177) for Defaulted (AR166=3) loans:

AR177 - Default or Foreclosure	
Defaulted	**Sum of % CB**
Static. Outstanding Balance + Principal Unpaid	47.1%
Static. Outstanding Balance + Principal Unpaid + Interest Unpaid	31.2%
Dynamic (recoveries). Outstanding Balance + Principal Unpaid + Interest	16.6%
Dynamic (repossession). Outstanding Balance + Principal Unpaid + Interest	3.3%
N/A	1.8%
Grand Total	100.0%

Exhibit 14 - <u>Loss on Sale (AR180) for Defaulted (AR166=3) loans</u>:

AR180 - Loss on Sale	
Defaulted	**Sum of % CB**
ND (lack of information)	34.2%
Effective Losses: default amount + property costs - sale price	31.2%
Effective Losses: acquisition book value + property costs - sale price	16.6%
Effective Losses: default amount - recoveries	13.7%
Expected losses if only repossessed. Effective losses if sold.	2.5%
N/A	1.8%
Grand Total	100.0%

Exhibit 15 - <u>Cumulative Recoveries (AR181) for Defaulted (AR166=3) loans:</u>

AR181 - Cumulative Recoveries	
Defaulted	**Sum of % CB**
Both cash and property's sale recoveries are considered	39.0%
Only cash (non property's sale) recoveries are considered	31.2%
ND (lack of information)	23.0%
ND (it would only include recoveries after repossession)	2.6%
Only cash (non property's sale) recoveries after repossession are considered	2.5%
N/A	1.8%
Grand Total	100.0%

Appendix 2: ED data quality management processes

For the provision of information to ED, reporting entities use the published standardised European Central Bank (ECB) Loan Level Data (LLD) templates which consist of a number of mandatory and optional data fields.[11] Initially, Edwin, ED's main database software, automatically validates the uploaded LLD files for compliance with the ECB taxonomy. A data completeness score is generated and assigned to each ABS transaction following the submission and processing of the LLD in the platform. This score assesses the completeness of the LLD files by computing the number of mandatory fields which are reported with any of the standardised "No Data" ("ND 1"-"ND 4") responses. The options "ND 5" -"ND 7" may be used if applicable to the relevant fields in the data templates and they do not form part of the scoring calculation[12]. The scores range from A1 to B2, with A1 reflecting no use of "No Data" ("ND 1 to ND 4") values in the mandatory fields. As of 7th January 2016, (counting also inactive deals), there were 757 transactions in ED with an A1 score and 189 deals with A2. The remaining 23 deals had lower scores, which indicates that they were missing some mandatory information.[13] While there is a first level of checks implemented in the ED platform, once the LLD files have been successfully uploaded to ED, an additional set of data consistency and accuracy checks are run on those files.

ED systematically performs data consistency and accuracy checks[14] on the LLD uploaded to its platform. Since 2013, ED has developed internally a set of SQL rules for each asset class based on the respective ECB templates and taxonomies that are run across the submitted LLD files. The aim of these checks is to ensure that the submitted LLD accurately reflects the underlying collateral. ED verifies data for completeness, accuracy and comparability issues. Regarding completeness, ED checks the unavailability of information, the inappropriate or excessive use of inputs such as "ND 5" -"ND 7" and dummy values or the option "Other", when available. In terms of accuracy, ED checks data errors such as unconventional values, incorrect reporting and interfield inconsistencies. Comparability, on the other hand, refers to more complex issues such as data that is correct but not in line with the ECB taxonomy, data compliant with the ECB taxonomy but resulting in interfield inconsistencies due to lack of uniform definitions and transaction specificities. Timeliness is typically another dimension of data quality. In the case of ED, the frequency of submissions is set by the Eurosystem. Every deal has to report at least on a quarterly basis and within one month from the payment of interest of the respective ABS. There are processes in place to monitor the timeliness of the provision of the information.

Any data quality findings identified during the DQ process are classified into "high", "medium", "low" priority or "clarification", based on the urgency for the reporting entity to address them. "High" typically refers to issues that require immediate amendment in the next submission. Issues classified as "medium" need to be addressed after issues classified as "high", while "low" refers to issues that require attention after any "high" and "medium" issues have been resolved. Clarification refers to more complex or unclear issues which seem to be potential inconsistencies and require further investigation. As part

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[11] See https://www.ecb.europa.eu/paym/coll/loanlevel/transmission/html/index.en.html
[12] See https://www.ecb.europa.eu/paym/coll/loanlevel/implementation/html/index.en.html
[13] We do not include 4 new deals created in Edwin with no LLD submission yet
[14] See ECB Guideline (EU) 2015/510

of the current DQM process and according to the Eurosystem requirements, any potential Data Quality (DQ) issues identified need to be addressed in the subsequent LLD submissions. However, in case of any critical issues, such as part of the portfolio missing or decimal point errors in cash flow relevant fields, the reporting entity is requested to take immediate action. In most cases this results into a re-upload of the existing submission with the corrected information. Lately, a number of automatic basic validation checks have been introduced in Edwin and are run following each LLD upload. Thus, in case there are significant deviations in key information compared to the previous submission, the reporting entity is notified by email directly after the LLD upload process.

ED continuously enhances the deal analysis process with additional checks, such as cash flow and loan ID consistency checks and IR reconciliation. Over the past year, the focus has been on Investor Report (IR) reconciliation. So far, there has been no systematic tracking in a quantifiable manner of the discrepancies between the values stated in the IR and the LLD. ED has thus created a database with a direct link to the ED Cloud to systematically track the findings from the IR reconciliation exercise. As part of this process, all the values of key fields stated in the IR are entered into the ED cloud database and compared against the respective values in the LLD. Deviations beyond a certain threshold are communicated to the reporting entity and require further explanations and/or amendments in the IR or the LLD. The analysis has shown that the IR vary significantly. Some IR disclose detailed information on the collateral part while others have limited information. The most significant deviations are in the performance related fields. In general the information on the number of loans, balances, interest rate information do not display substantial differences. As a general observation, in many cases, the IR format shows at first glance significant discrepancies which can however be reconciled through various adjustments to the LLD. This is mainly due to different definitions or calculations used in the IR and LLD.

As part of the continuous efforts to ensure the submission of high quality data in the platform, ED has developed ED Quality Checker (EDQC), a pre-screening tool allowing reporting entities to run the ED validation checks in the LLD files prior to uploading to Edwin. This tool has been widely used by the reporting entities and as a result there are less common data errors, as these are addressed at an early stage. There are plans for EDQC to be integrated into the Edwin platform. This will enable reporting entities to replicate ED's environment on their local computer by accessing certain modules, such as the ED SQL database, including access to the most up-to-date ED validation rules with the option to run them internally (requiring no new software installation). Additionally, reporting entities will have the ability to link and view the data in ED Cloud and would be able to compare it with previous submissions in Edwin.

Recently, ED has developed internally a user-friendly Data Quality Tracking System (DQTS) to optimise the DQ communication and resolution process. This platform allows for more direct communication and feedback with reporting entities on a data quality finding basis affecting one or more deals of the same reporting entity. There are future plans to open up the DQTS to the data users and make it more interactive.

IMPORTANT DISCLOSURES: