

European Data Warehouse: An initiative to improve transparency for European securitization markets

The significant setback of the development of an efficient European securitization market caused by the financial crisis has many reasons – one reason mentioned very frequently is the lack of transparency for investors. While the credit performance of European ABS is actually on average quite positive throughout the crisis years, market and liquidity risks have been heightened by the perception of securitizations as “opaque”. This notion typically describes the lack of detailed information on the underlying risks and the perception that certain parties to a transaction and in particular investors have not been given access to all relevant information.

Transparency and investor confidence

In this context European Data Warehouse (ED) was created as a new market initiative specifically aimed to increase transparency and restore investor confidence in the asset-backed securities (ABS) market. ED is the first European centralized and independent platform to upload and download ABS loan-level performance data on a real-time basis accessible to all ABS market participants, including loan originators, servicers, trustees and investors.

While transparency for structured finance transactions includes a number of different areas, the focus is specifically on loan level data of the underlying loans forming the securitized portfolio. This information was typically not available in the past and hence investors had to rely on aggregated data which was preconfigured by issuers and arrangers. A key development point for ED was to have a highly standardized format which would allow market participants to analyze underlying portfolios in a more efficient way and to be able to com-

pare portfolios on a systematic basis including performance trends. This aids investors as well as rating agencies in enhancing their due diligence efforts around ABS transactions.

The European Central Bank (ECB) was the key driver in this project and in the development of ED. The fragmentation of the ABS markets following 2008 resulted in many asset classes and/or countries effectively being closed to issuers as investors had limited or no appetite for certain ABS transactions. This resulted in a higher degree of some banks to rely on central bank funding and hence banks started securitiz-

ing loan portfolios primarily for the purpose of using them as collateral in refinancing operations with the Eurosystem. Given these developments it was felt that there is a clear need for transparent and timely information on the underlying loans and asset pools of ABS, including their performance, to restore lost investor confidence.

A central data portal

On 23 December 2009 the European Central Bank launched a public consultation on loan-by-loan information requirements for asset-backed securities in the Eurosystem collateral framework. A decision was made to create the concept of a fully transparent data handling infrastructure external to the Eurosystem which would process, verify and manage the data and facilitate the disclosure and timely access to ABS information. Moreover, there was the requirement to introduce the concept of standardized loan-level reporting that would eventually be accessed through a centralised database or portal. In December 2010, the Governing Council of the ECB announced its intentions to establish loan-by-loan data requirements for ABS in the Eurosystem collateral framework, with the aim of improving transparency and helping to restore investor confidence in the European securitization markets (the “ABS Loan-level Data Initiative”).

An important element of the initiative was to reach out to ABS market participants to ensure a broad consensus on what the format for loan level data should be in order to capture all relevant requirements for the development of data templates. Hence a number of Technical Working Groups (TWG) were formed to

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Vertrauen schaffen durch Transparenz: mit dieser Maßgabe versucht die hiesige Verbriefungsbranche seit Jahren die Erholung dieses Marktsegmentes zu unterstützen. Einen wichtigen Schritt in diese Richtung sehen die Autoren durch die Schaffung einer einschlägigen Datenplattform getan, auf der sich Investoren und sonstige Marktteilnehmer informieren können. Auf mittlere und längere Sicht sollen so möglichst vergleichbare Datengrundlagen geschaffen werden, auf denen eigene Entscheidungsprozesse beziehungsweise Analysen bauen können. Von der EZB ausdrücklich ermuntert und von der Branche initiiert, ist dieses Informationstool mit Beginn dieses Jahres für die Segmente RMBS und KMU-ABS gestartet und inzwischen um CMBS erweitert worden: Mit Beginn kommenden Jahres sollen dann die einschlägigen Daten zu Auto- und Leasing ABS hinzukommen. Die Autoren werten dieses Projekt als wichtigen Grundstein für eine Erholung des Verbriefungsmarktes. (Red.)

Table 1: ECB reporting templates

ECB Template	RMBS		CMBS		SME		Auto ABS		Consumer Finance ABS		Leasing ABS	
Type of field	Mandatory	Optional	Mandatory	Optional	Mandatory	Optional	Mandatory	Optional	Mandatory	Optional	Mandatory	Optional
Dynamic	37	46	209	39	39	58	39	12	40	12	53	33
Static	32	67	145	40	42	38	36	15	27	9	44	33
Total	182		433		177		102		88		126	

Source: ED calculations based on ECB ABS templates

advise and assist the ECB in formulating and finalising the specific ABS reporting templates for residential mortgage-backed securities (RMBS), small and medium-sized enterprises (SME) ABS, commercial mortgage-backed securities (CMBS), Auto ABS, Consumer Finance ABS and Leasing ABS. The TWG members were chosen from leading investors, originators, rating agencies, industry associations and five national central Banks.

A similar initiative was also launched by the Bank of England (BoE) for UK based ABS transactions and the resulting templates have a high overlap with the ECB developed ones. The BoE initiative also includes transaction documentation and cash flow analysis but no centralized portal has been developed to store all BoE loan-level data.

In 2012 European Data Warehouse GmbH was founded in Frankfurt as the central

data portal of the initiative and it started its operations officially on 3 January 2013. The company has in total 16 shareholders at present and is in principle as a market initiative open to new shareholders. A specific corporate governance structure has been created to ensure the nature as a "utility" whereby ED should follow a "costs-plus" approach rather than a profit orientation. To that effect, ED maintains an independent pricing committee that sets the fee structure for clients.

With the functional requirements and with the service being used by financial entities and banks, ED needed to be hosted from a central and independent data platform enabling the upload and download of data on a realtime basis. At its operational core lies the database system "Edwin" which has been specifically created for ED. Edwin is an integrated software platform with high performance data processing capabilities

specifically designed to collate ABS loan-level information into a single, centralized database. Edwin offers a standard interface to integrate with analytical applications of ED data users, enabling them to perform their own analysis and build their own transaction models for valuation purposes.

ECB loan-level requirements for asset-backed securities

The following outlines more specifically the loan level requirements of the ECB for asset-backed securities accepted as collateral in Eurosystem credit operations. ECB Loan-level reporting requirements for residential mortgage-backed securities and ABS backed by small and medium-sized enterprise loans are in place since 3 January 2013. For commercial mortgage backed securities, they started on 1 March 2013. Reporting requirements for the remaining relevant asset classes, i.e. for consumer ABS, auto loan ABS and leasing ABS will start on 1 January 2014. The reporting requirements apply to both existing and newly issued ABSs and as of the implementation date for each of the asset classes loan-level performance data (LLPD) must be provided in order to become or remain eligible for the Eurosystem monetary operations.

The ECB has published a series of reporting templates for each asset class defining a number of mandatory and optional data fields to be completed and reported at least on a quarterly basis, no later than one month following the due date for interest payments. The following table 1 shows the analysis of the number of mandatory versus optional fields across the ECB reporting templates. An important point is the anonymisation of data in line with the various data protection laws. A key concept is hence the absence of any personalized data such as name or address details.

Table 2: various "ND" options and their meaning

No Data Option	Explanation
ND 1	Data not collected as not required by the underwriting criteria
ND 2	Data collected at application but not loaded in the reporting system at completion
ND 3	Data collected at application but loaded in a separate system from the reporting one
ND 4	Data collected but will only be available from YYYY-MM
ND 5	Not relevant at the present time
ND 6	Not applicable for the jurisdiction
ND 7	Only for CMBS loans with a value less than EUR 500,000, i.e. the value of the whole commercial loan balance at origination

Source: ECB

Table 3: matrix indicating the range of possible scores

Scoring matrix		ND 1 fields			
		0	≤ 10%	≤ 30%	> 30%
ND 2	0	A1	B1	C1	D1
ND 3 or	≤ 20%	A2	B2	C2	D2
ND 4	≤ 40%	A3	B3	C3	D3
	> 40%	A4	B4	C4	D4

Source: ECB

The ECB templates need to be completed on a 'comply or explain' basis, therefore ECB has introduced seven pre-defined "no data" ("ND") fields which clarify the reasons for any unavailability of data for particular fields. Table 2 exhibits the various "ND" options and their meaning.

Reduction of haircuts and the lowering of current rating requirements

Loan-level performance data files uploaded to the ED platform are automatically validated for compliance with the ECB taxonomy by the ED software and a score is generated and assigned to each ABS transaction following the submission and processing of loan-level data. This score reflects the number of mandatory fields reported as "ND 1" and the total number of mandatory fields reported as "ND 2", "ND 3" or "ND 4" (relative, in both cases, to the total number of mandatory fields). The options "ND 5", "ND 6" and "ND 7" may, in this regard, only be used if applicable to the relevant fields in the data reporting template. The two thresholds are combined to produce a matrix indicating the range of possible scores for loan-level data (Table 3).

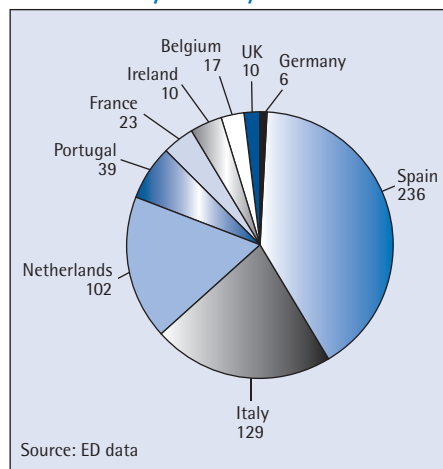
There is a 9 month phase-in period based on the implementation date of each of the respective asset classes, whereby each ABS is assessed with reference to the availability of information for mandatory fields in the loan-level template. Each quarter a higher score needs to be reached in order to retain ECB eligibility¹⁾.

In July 2013, as part of the revision of its risk control framework²⁾, the ECB has announced the reduction of haircuts and the lowering of current rating requirements for ABS transactions accepted as collateral in the Eurosystem monetary operations subject to compliance with the ECB loan-level reporting requirements reflecting their improved transparency and standardization, further strengthening the loan-level initiative.

Current status of implementation

Overall 584 RMBS, CMBS and SME deals³⁾ have been created and LLPD files have been uploaded in ED during the H1 2013 complying with Q1 and Q2 ECB loan-level reporting requirements. Figure 1 shows

Figure 1: RMBS, CMBS and SME deals in ED by Country



the breakdown of ABS deals in ED by jurisdiction. Figure 2 charts exhibit the breakdown of ABS deals in ED by asset class and by jurisdiction. ED has started preparatory work for the on-boarding of Auto, Consumer Finance and Leasing ABS transactions during the 4th quarter of 2013.

The splits by countries and asset classes are broadly representative of the underlying ABS markets. Some sectors such as the UK non-conforming RMBS market or more generally transactions in non-Eurozone countries are expected to be available over time. There is a focus at present on ECB eligible deals but increasingly voluntary reporting will become relevant, in line with the mission to be a market initiative benefiting issuers and investors.

Figure 2: RMBS and SME deals by country

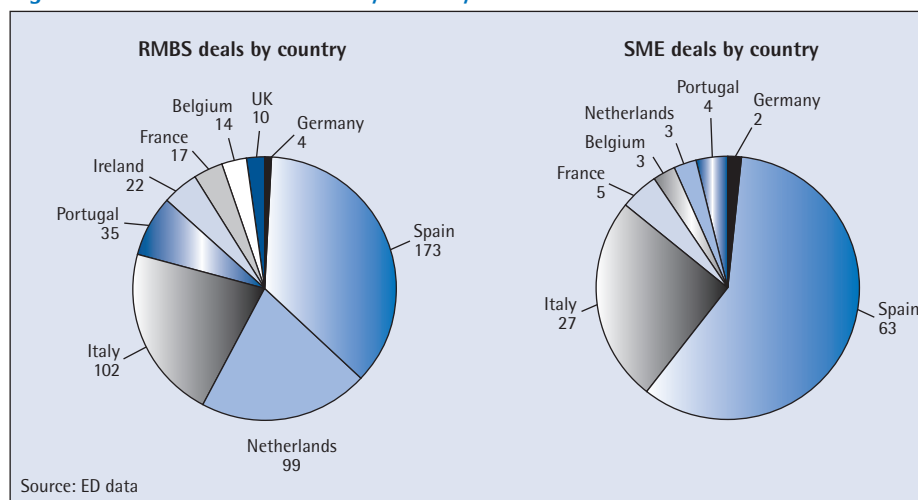


Figure 3 shows the split by loans or loan parts by country of the securitized loans uploaded to the database. The country split is significantly different to the transaction splits as in some countries the ABS market is characterized by relatively large transactions whereas transactions in for example Spain or Italy have typically a smaller transaction nominal amount.

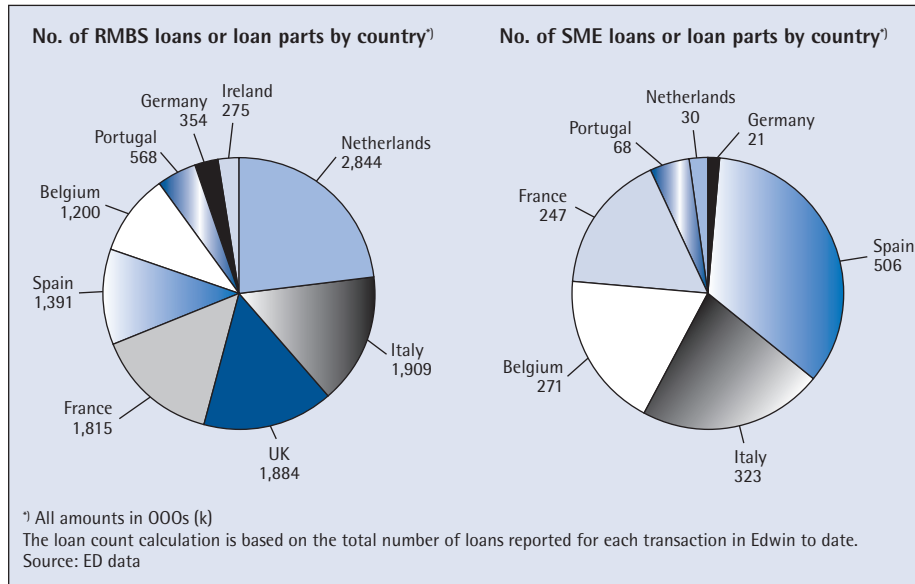
So far loan-level data uploaded to ED are validated in terms of completeness of mandatory fields and compliance with the specific published ECB taxonomy. ED also monitors timeliness and security aspects of the uploaded data and performs certain consistency checks.

No judgments on the quality of data

It is important to stress that ED does not make any judgments on the quality of the loan or portfolio quality but merely aims to make the loan-level data transparent and insofar provides the necessary infrastructure. Analysis of the uploaded data as well as rating or investment considerations are clearly performed at the data user level rather than by ED itself.

A first look at the loan-level data has shown that data quality can vary significantly between transactions at this stage. While there are many underlying reasons, a key issue remains the IT infrastructure of issuers and servicers in the ABS space. With the phase-in period as outlined above, issuers and servicers have been given time to address these issues and im-

Figure 3: RMBS and SME loans by country



prove the data completeness and ultimately quality where necessary. Looking at the experience of the US markets, where loan level data has been more prevalent, albeit in non-standardized format, data quality and timeliness issues have taken a relatively long time to result in high-quality loan level reporting. Over time, the building up of a historical loan-level performance database will also allow the analysis of credit performance trends on a detailed basis.

A closer look at benefits and limitations for ABS investors

In the absence of loan-level data the market has had to rely on rating agencies and market analytics companies to build so called "replines", i.e. group of loans within a portfolio with similar characteristics most commonly used in order to perform for example scenario analysis or to generate specific cashflow models. Disclosure of loan-level data allows investors to build their own transaction models necessary for their own valuation purposes.

Analysis of historical loan-level data available could reveal some key insights about the performance as well as the main drivers of the credit performance for specific ABS sectors, allowing the better assessment of credit risk inherent in the pools. Insofar investors have now largely the same information as for example rating agencies to evaluate an ABS transaction.

Standardization of the ECB loan-level templates has allowed the harmonization of reporting and provides greater consistency in a still fragmented ABS market. This will also greatly help the comparability of transactions and portfolios across markets and allows more systematic statistical analysis, particularly once more loan performance information is added over time through the upload of updated quarterly data.

Feedback from the market indicates that even without longer historical time series the loan data brings important transparency especially for hard to value sectors, examples include for example Spanish and Irish RMBS. It has been suggested that insofar the loan data has price relevant information to investors and traders.

According to for example a Deutsche Bank report⁴), an analysis of loan-level data from European Data Warehouse across Irish RMBS transactions has provided some key insights on the main drivers of credit performance as well as the credit risk inherent to the Irish RMBS pools. Another study conducted by DBRS⁵), analyzing housing market value declines and their impact on Spanish RMBS transactions using loan-level data from 164 out of 173 Spanish RMBS transactions available on ED platform has revealed some interesting findings for the risk of loans in Spanish RMBS pools, especially for recent vintages.

Limitations for investors should be however not omitted and broadly go in two directions: First, while the templates are standardized, the underlying loan market clearly is not harmonized and for example different default definitions across countries make a full "apple-to-apple" comparison not yet straightforward. Secondly, rating agencies and analytics companies will still be relevant in the assessment of ABS transactions in our view as they have built up considerable experience and time series which can be typically only replicated by larger institutional investors with a commitment to invest in systems and know-how.

Moreover, a rating allows for both a quick assessment and a second or third opinion about a particular ABS. Also analytics providers remain important as the "raw data" needs to be filtered, aggregated or otherwise be analyzed in order to distill the essence of the portfolios for investment decisions. ED is expecting that ABS analytics tools will be enhanced through the loan data as it allows for much more detailed analysis in terms of for example scenario tools or forecast models.

Increasing transparency of ABS loan-level information

Since the onset of the crisis, significant reform efforts have been undertaken to improve the disclosure and transparency of ABS loan-level information in a more standardized, systematic and sustainable way. ED as one of these market initiatives which has been developed and is owned by market participants, and which is endorsed by the Eurosystem, will continue to contribute to increasing transparency in the European ABS market. While transparency alone will not suffice, the authors believe that it will be one cornerstone to the recovery of the securitization market.

Footnotes

- ¹ Further information can be found on ECB website at the following link: <http://www.ecb.int/mopo/as-sets/loanlevel/implementation/html/index.en.html>
- ² See ECB press release for details: <http://www.ecb.europa.eu/press/pr/date/2013/html/pr130718.en.html>
- ³ Master trusts are counted as one transaction even if they include multiple series.
- ⁴ "A first look at loan-level data"- Deutsche Bank Global Markets Research , 16 May 2013.
- ⁵ "Housing Equity Loan-level Analysis: In Spain Vintage Matters"- DBRS, June 2013.