

## NEW ISSUE REPORT

# Deutsche Bank, S.A.E. Mortgage Covered Bond Programme

Covered Bonds / Spain

### First Rating Assignment

2015

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### Definitive Ratings

Cover Pool (in € billion)	Cover Pool Assets	Covered Bonds (in € million)	Rating
8.644	Residential and Commercial Mortgage Assets	4,800	Aa2

The ratings address the expected loss posed to investors. Moody's ratings address only the credit risks associated with the transaction. Other non-credit risks have not been addressed, but may have a significant effect on yield to investors..

### Transaction Summary

We have assigned a definitive long-term rating of Aa2 to the mortgage covered bonds (*Cédulas Hipotecarias*, CHs) issued by Deutsche Bank, S.A.E. (the issuer, ratings not disclosed). Deutsche Bank, S.A.E. is a Spanish 99.8% owned subsidiary of Deutsche Bank AG (deposits A3 positive; adjusted baseline credit assessment baa3, counterparty risk assessment A2(cr)). CHs are secured by the issuer's entire mortgage book. CHs are mainly governed by the Spanish Mortgage Market Law, the Insolvency Law and the Law 11/2015<sup>1</sup> (together, "the Legislation") and are full-recourse direct corporate obligations of the issuing entity.

The rating takes into account:

- » The issuer's credit strength (issuer rating not published).
- » The robustness of the Spanish legal CHs framework. The framework's strengths include (1) CH holders' priority security claim over the bank's whole pool of mortgages<sup>2</sup> (the total cover pool); (2) the restriction on issuing CHs to a maximum of 80% of the portion of loans regarded as eligible mortgages (eligible cover pool), which provides for a minimum 25% over-collateralisation for issuance purposes; and (3) the fact that CHs do not have to be accelerated because of insolvency proceedings.
- » The cover pool's credit quality. The total cover pool comprises residential and commercial mortgage loans granted mostly to Spanish borrowers and secured on properties in Spain with a weighted average unindexed loan-to-value (WA LTV) of 51.3%. the bulk of the cover pool assets (93.5%) corresponds to residential mortgage loans that we consider less risky than commercial loans.
- » The level of over-collateralisation<sup>3</sup> required to maintain the current rating is 5% based on the total cover pool. The current level of over-collateralisation is 80.1% based on the total cover pool and 61.8% based on the eligible cover pool as of June 2015.

The reference point for Moody's expected loss (EL) analysis and timely payment indicator (TPI) framework for this covered bond programme is the covered bond (CB) anchor<sup>4</sup> of Deutsche Bank S.A.E. (Counterparty Risk (CR) assessment plus one notch - see CB anchor paragraph below). The CR Assessment for Deutsche Bank S.A.E. is unpublished. The TPI is "Probable".

As is the case with other covered bonds, the transaction is linked to the issuer's CB anchor, particularly from a default probability perspective. If the issuer's CB anchor were to deteriorate, all other variables being equal, we would expect the rating on the covered bonds to be negatively affected.

A multiple-notch downgrade of the covered bonds might occur under certain limited circumstances. Examples include (1) a sovereign downgrade negatively affecting the issuer's senior unsecured rating; (2) a multiple-notch downgrade of the issuer or a downgrade to low speculative-grade; or (3) a material reduction of the cover pool's value.

The principal methodology used in this rating was [Moody's Approach to Rating Covered Bonds](#), published in August 2015. Other methodologies and factors that may have been considered in the rating can also be found on our website. In addition, we publish a weekly summary of structured finance credit, ratings and methodologies, which is available to all registered users of our website at [www.moody.com/SFQuickCheck](http://www.moody.com/SFQuickCheck).

## Opinion

### Transaction Strengths

#### Issuer:

- » The covered bonds are full recourse to Deutsche Bank S.A.E.

#### The Spanish legal framework:

The Spanish legal framework explicitly protects CH holders' status. This legislation stipulates that:

- » CH holders have full recourse to the issuer.
- » CH holders benefit from a statutory priority claim over the issuer's entire mortgage loan book (total cover pool).
- » Covered bonds may only be issued against mortgage loans up to 80% of the eligible pool, providing for a minimum 25% over-collateralisation. If this limit is exceeded for any reason, the issuer must restore it within four months. A deposit in cash or public funds must be made within 10

working days following the day on which the imbalance occurs, provided that it has not been restored during said period.

- » CHs do not have to be terminated or accelerated solely because of insolvency proceedings.
- » CH issuances are controlled by the Spanish supervisory authorities.

The Legislation contains wide powers for the insolvency administrator – following issuer insolvency – to manage the cover pool's ongoing liquidity requirements. For example, the administrator, which has the ability to raise funds against the cover pool (any counterparty providing this funding will rank equally with any other CH holder), has the right to attempt to sell all or part of the cover pool as a package together with outstanding covered bonds, to another entity.

#### Credit quality of the cover pool:

- » Around 93.5% of the total cover pool is made up of residential mortgage loans and around 6.5% of commercial mortgage loans. The WA LTV of the total pool was 51.3% (on a non-indexed basis) as of June 2015.
- » Lower levels of residential arrears over 90 days (2.6%) than the Spanish banking system average (4.9%) as of end June 2015<sup>5</sup> despite the high level of arrears of the residential non-core operations, which mean 9.5% of the residential portfolio, and has around 15.5% NPL ratio. Excluding this part of the cover pool, the level of residential arrears is 1.3%.
- » Low exposure to real estate developers' loans (REDs) (0.6% over total cover pool).
- » The high level of over-collateralisation, over and above the required level to achieve the current rating (80.1% compared with 5%). This provides a replenishment cushion, (1) if further issuances are made; or (2) for the repayment of existing loans, if this is not accompanied by mortgage loan book growth.
- » Strict lending criteria. We highlight, amongst other features, a debt-to-income ratio (DTI) up to 35% (45% for self-employed) and an LTV up to 80%.

#### Refinancing risk:

The insolvency administrator:

- » Can separate cash flows stemming from the cover pool assets to meet payments under the CHs.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody.com](http://www.moody.com) for the most updated credit rating action information and rating history.

- » Can avoid a “fire sale” of the assets at a heavy discount, as it has the right to attempt to sell to another entity all or part of the cover pool as a package, together with outstanding covered bonds.

**Market Risk:** There is hardly currency risk, as 98.7% of the assets and all the outstanding CHs are denominated in euros.

## Weaknesses and Mitigants

### Issuer:

- » As with most covered bonds, until a CB anchor event, the issuer can materially change the nature of the programme. For example, new assets may be added to the cover pool, new covered bonds issued with varying promises and new hedging arrangements entered into. These changes could negatively affect the cover pool's credit quality, as well as overall refinancing and market risks.
- » **Mitigants:** (1) The covered bondholders have a direct claim on the issuer; and (2) we will monitor the cover pool to assess the evolution of the collateral's quality. If we determine that the collateral quality has deteriorated below a certain threshold, and the over-collateralisation is not consistent with the current rating, the issuer has the capability – but not the obligation – to increase the over-collateralisation in the cover pool. Failure to increase over-collateralisation levels following a deterioration of the collateral could be credit negative.

### Credit quality of the cover pool:

- » As of June 2015, around 11% of the cover pool is considered as non-core. This is a €0.96bn portfolio in run-off, comprised of 86% residential loans – sub-prime transactions and multicurrency loans – and 14% commercial loans – mostly Real Estate and related sectors. The NPL ratio in this portfolio rounds 15.5%.
- » **Mitigants:** Our collateral models take into account the level of arrears in the portfolio. Furthermore, the pool has reduced by almost 25% in the last 2.5 years and the issuer is no longer granting these type of loans for the last years. Issuer's strategy is to follow an active de-risking for this portfolio.

### Substitution risk:

- » As with most covered bonds in Europe, there are few restrictions on the future composition of the cover pool, leading to substitution risk.
- » **Mitigants:** Over time, the cover pool's quality will be protected by, among other things, the requirements of Spanish legislation. The Legislation sets out rules detailing the assets that qualify as cover assets for CHs. In addition, we will monitor the cover pool. If collateral quality deteriorates below a certain threshold, the issuer would

have the ability, but not the obligation, to increase over-collateralisation in the cover pool. Failure to increase the level of over-collateralisation following cover pool deterioration could lead to negative rating actions.

### Refinancing risk:

- » Following a CB anchor event, in order to achieve timely principal payment, covered bondholders may need to rely on proceeds being raised through the sale of, or borrowing against, cover pool assets. Following a CB anchor event, the market value of these assets may be subject to high levels of volatility.
- » **Mitigants:** (1) The issuer's credit strength. The stronger the issuer's credit strength, the lower the chance of being exposed to this risk; (2) the high level of over-collateralisation might offset the heavy discount at which assets would be transferred; (3) the ability of the insolvency administrator to sell and refinance assets, in part or whole, with or without liabilities attached, in order to raise liquidity against the cover pool and to sell substitute assets; and (4) the stressed refinancing margins used in our modelling.

### Market risk:

- » As with most European covered bonds, there is potential for exposure to interest-rate and currency mismatches. For example, following a CB anchor event, covered bond investors may be exposed to interest-rate risk, which could arise from the different durations and payment promises made on the cover pool and covered bonds.
- » **Mitigant:** The interest-rate risk exposure period is limited, until the pool is liquidated. Our model incorporates stressed interest-rate projections to levels close to zero in order to evaluate the level of over-collateralisation needed to compensate for various risks. Currency risk is very limited because only 1.3% of the assets are non-euro denominated.

### Time subordination:

- » After a CB anchor event, later-maturing covered bonds are subject to time subordination. Principal cash collections may be used on a first-come, first-served basis, paying earlier-maturing covered bonds before later-maturing ones. This could lead to over-collateralisation being eroded before any payments are made to later-paying covered bonds.
- » **Mitigant:** Following issuer default, the insolvency administrator must avoid any payment shortfall on the CHs, based on the interpretation of the law. However, if a funding agreement is not reached – or if the cover pool proceeds are insufficient – the enforcement process will commence. As a consequence, all CHs will rank *pari passu* with each other, irrespective of their maturity.

## Structure Summary

Issuer:	Deutsche Bank S.A.E. (issuer rating not published)
Sponsor Bank:	See issuer
Structure Type:	Mortgage covered bonds
Issued under Covered Bonds Law:	Yes
Applicable Covered Bonds Law:	Spanish
Seller/Originator:	Deutsche Bank S.A.E. (issuer rating not published)
Servicer:	Deutsche Bank S.A.E. (issuer rating not published)
Interest Rate Swap Provider:	N.A.
Asset Monitor:	N.A.
Representative of the Bondholders:	N.A.
Timely Payment Indicator:	Probable

## CB Anchor

Entity used in Moody's expected loss and TPI analysis:	Deutsche Bank S.A.E.
SUR	Not published
Adjusted BCA	Not published
Counterparty Risk Assessment	Not published
CB Anchor	Counterparty Risk Assessment + 1 notch
Senior unsecured claim	Yes

## Covered Bonds Summary

Total Covered Bonds Outstanding:	€4,800million
Currency of Covered Bonds:	Euro
Extended Refinance Period:	No
Principal Payment Type:	Bullet
Interest Rate Type:	100% Floating Rate

## Collateral Summary (as of 30 June 2015)

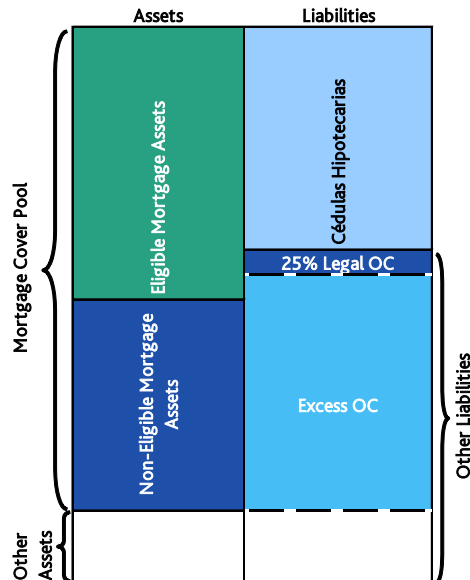
Size of Cover Pool:	€ 8,643,574,226
Main Collateral type in Cover Pool:	Spanish Residential and Commercial Mortgage Loans (100%)
Main Asset Location:	Spain
Loans Count:	82,649
Borrowers Count:	137,208
Currency:	Euro (98.7% of the cover pool)
Concentration of Top 10 borrowers:	1.2% (commercial loans)
WA Seasoning:	74.5 (months)
WA Remaining Term:	250.9 (months)
Interest-Rate Type:	99.7% Floating
"Committed" Over-Collateralisation:	25% on nominal basis (mandatory level over mortgage eligible cover pool according to legislation)
Current Over-Collateralisation:	80.1% on nominal basis over mortgage total cover pool
Collateral Score:	8.7%
Further Details:	See Appendix 1
Pool Cut-Off Date:	June 2015

## Structural and Legal Aspects

The transaction structure at a glance:

EXHIBIT 1

### Cédulas Hipotecarias Diagram



Deutsche Bank S.A.E.'s CHs are governed mainly by the Legislation and, as such, are full-recourse direct corporate obligations of the issuing entity.

### The cover pool

CHs are secured by the issuer's whole pool of mortgages (excluding securitised mortgages). The amount of CHs that can be issued is limited to 80% of the bank's "eligible mortgages" – providing for 25% (100/80-1) minimum over-collateralisation. According to the Legislation, if the 80% test is breached, the issuing bank must re-collateralise the CHs using any of the following actions:

- » Depositing cash or public funds into the Bank of Spain
- » Buying back the CHs
- » Starting early amortisation of the CHs
- » Adding in new mortgages, substituting assets or acquiring mortgage participations to restore the limit

The issuer must restore the 80% limit within four months. In the interim – and within 10 days of the breach – the issuer must cover the difference by depositing cash or public funds with the Bank of Spain.

In order to qualify as an "eligible mortgage", according to the Legislation, the loan or credit and the mortgage must comply with the following main requirements:

- » The loans must be guaranteed by a first mortgage and registered on Spain's Property Register. A valuation of the property by an official appraisal company (Sociedades de Tasación) is required by law. The methods for property valuation are performed pursuant to mandatory rules.
- » The loan must not exceed 60% of the property appraisal value for commercial loans (or 80% in respect of loans for construction, refurbishment or acquisition of residential property).

For loans backed by buildings under construction, only 50% of the land value and 50% of the constructed value can be taken into account for the eligible pool if:

- » The loan is to be used to finance the construction of the mortgaged property and the borrower is obliged to complete the construction.
- » The mortgaged property under construction can be used as a mortgage to guarantee credits that are suitable for the eligible portion of the cover pool.
- » The building or mortgaged property – once completed – will attain a value in line with that in the budget approved by the appraisal companies.

In addition, the Legislation stipulates that these loans should not exceed 20% of the eligible pool.

There are no requirements for property valuations to be periodically reviewed, updated, indexed or stress-tested. Hence

a decline in property value that might push a loan over the LTV threshold for eligibility may not be recognised or recorded.

The geographical scope of eligible mortgages may be extended to properties located in the EU on condition that the security is equivalent to that under Spanish law.

Under Spanish law, substitute assets are permitted for up to 5% of the outstanding CHs, with the aim of improving cover pool liquidity. Substitute assets may include CHs, ABS or RMBS with similar credit quality to Spain's government issued by entities not owned by the issuer's banking group (unlike in other jurisdictions), or any other lower-risk assets.

Financial derivatives linked to CHs are permitted, but uncommon. Legal subordination of derivatives counterparties means derivative contracts with external counterparties and linked to the cover pool may not be available after an issuer default.

At present, Deutsche Bank S.A.E. has excluded derivatives from the cover pool register.

#### Internal cover register

By law, all mortgage loans are registered in the property register in the name of the issuer.

The issuer must keep a special accounting register of the loans and credits that serve as collateral for CH issuance, any substitute assets that cover them, as well as the derivative financial instruments linked to each issue.

This special accounting register must also identify the eligible assets. The annual accounts of the issuing institution must contain the essential details of this register.

#### Supervision

The issuance of CHs and the issuer's compliance with the existing legislation are subject to administrative control by the Financial Inspectorate of the Ministry of Economy and Finance, and the Bank of Spain.

#### Resolution regime

Spanish covered bonds (CHs) will have less exposure to bank defaults and losses following the implementation of the EU Bank Recovery and Resolution Directive (BRRD) in Spanish law in June 2015.<sup>6</sup>

Unlike other debt instruments, such as senior unsecured debt or junior deposits, if the bank supporting the covered bonds fails and enters resolution proceedings, the covered bonds and covered bond swaps may not be written down to absorb losses and recapitalise the bank.<sup>7</sup> If a bank enters resolution, European bank supervisory authorities would likely take steps

to ensure the continuity of any covered bond payments, for the following reasons:

- » The BRRD encourages bank supervisory authorities to maintain the structure and integrity of covered bonds and structured finance arrangements following resolution. The BRRD protects against (among other things) the cancellation, modification or partial transfer of assets, as well as the rights and liabilities that form part of the covered bond (or structured finance) arrangement.<sup>8</sup>
- » The BRRD specifies that covered bond segregation and funding are to receive protection in resolution.<sup>9</sup> The BRRD's resolution tools provide for a failed bank to be resolved via bail-in or, alternatively, transferred to a third-party buyer or a bridge bank, thereby enabling covered bonds to remain in a going-concern entity.
- » The BRRD allows bank supervisory authorities to provide financial support in extraordinary circumstances if the liabilities (up to and including senior unsecured debt) are insufficient to absorb all of the losses of a bank in resolution. They can also provide support if a minimum of 8% of liabilities and own-funds have been bailed-in or written down.<sup>10</sup>

#### Issuer insolvency

The legal analysis included a review that materially addressed some of the questions listed in our legal checklist. We understand from legal and industry advisors that some of the key characteristics following issuer default include the following:

- » The Spanish Insolvency Law (InsLaw) includes provisions regarding contract continuance with the aim of ensuring that the rights, assets, affairs and contracts of the insolvent party are kept as an ongoing business, despite the insolvency declaration. An insolvency administrator can either sell the pool or transfer the cover pool assets and the CHs to another entity.
- » CHs cannot be terminated or accelerated merely because of the instigation of insolvency proceedings. Termination or acceleration must be declared by the judge hearing the insolvency proceedings.
- » The insolvency process and appointment of insolvency receivers must be declared by a judge. Unlike other jurisdictions, the same party would perform the dual roles of cover pool administrator and insolvency administrator. Although any conflict of interest between CH holders and unsecured creditors may not be disregarded, it would be limited as the InsLaw protect CH priority claims. CH holders will not be negatively affected or prejudiced by any creditor agreement, provided CH holders do not vote in the relevant creditors meeting.



- » The insolvency process and appointment of insolvency receivers must be presided over by a judge. Unlike other jurisdictions, the same party would perform the dual roles of cover pool administrator and insolvency administrator. Although any conflict of interest between CH holders and unsecured creditors may not be disregarded, it would be limited as the InsLaw protects CH priority claims. CH holders will not be affected negatively or prejudiced by any creditor agreement, provided CH holders do not vote in the relevant creditors meeting. Furthermore, the approved amendments oblige the administrator to defend the interests of CHs by providing timely payment if there is any shortfall, either by selling the substitute assets or by arranging funding alternatives against the cover pool.
- » CH holders are classified as "special-privileged creditors". As such, any obligations resulting from either special-privileged creditors failing to vote or joining the relevant creditor agreement must be fully discharged from the proceeds of the cover pool or its enforcement.
- » According to the Legislation, the effects of an issuer's insolvency are no longer subject to an undetermined retroactive date. Only transactions in the two years preceding the insolvency declaration can be annulled, and this only applies if they are prejudicial to the bankruptcy estate.
- » Notwithstanding the favourable treatment of CHs, there is no requirement to match the payments of the assets with the liabilities. Secondary regulation (Article 17.6) stipulates that CH issuers shall adopt the measures necessary in order to avoid an inappropriate imbalance between the flows from the cover pool and those deriving from the payments due for the CHs. However, we give no value to such a generic obligation, as there is no proof of its actual implementation. According to the Legislation, all cash flows stemming from the cover pool will be redirected to CH holders in an insolvency situation. Article 14 of the Mortgage Market Law stipulates that the insolvency administrator will have the obligation to avoid any payment shortfall on the CHs by selling the substituted assets and, if this is not sufficient, by entering into a funding agreement to ensure payment. Any counterparty providing funding will rank equally with any other CH holder. The insolvency administrator will therefore be more easily able to borrow funds against the cover pool in order to make payments under CHs, as the lender should benefit from the security provided by the cover pool.
- » If an agreement is not reached or the cover pool proceeds are insufficient, the enforcement process will commence and, as a consequence, all CHs will rank *pari passu* with each other, irrespective of maturity. However, the enforcement does not necessarily imply a fire sale of the assets, as the administrator may attempt to sell all or part

of the cover pool as a package together with outstanding CHs to another entity.

- » The enforcement actions may only be commenced 12 months after the date of the declaration of insolvency, or until such time as a repayment plan is agreed between the insolvent party and its creditors. Because of this uncertainty, we have modelled the scenarios applying high refinancing stresses under our methodology.
- » We consider set-off risk to be relatively low in this transaction. Debtors may only offset their deposits or credit rights against the issuer if their loan becomes due and payable before the issuer's insolvency. Only unpaid instalments before the declaration of insolvency might be offset against the deposits held by the debtors, as they would be regarded as fully due and payable before the insolvency. This is governed by Art. 1196 of the Spanish Civil Code and Art. 59 of Spain's Insolvency Law.

## Moody's Rating Methodology

Our covered bonds rating methodology details the approach used for rating covered bond transactions. We consider the effect of the issuer's credit strength, collateral quality and market risks below.

### Credit Strength of the Issuer

The covered bonds are full recourse to Deutsche Bank S.A.E. (rating not disclosed).

With total assets of more than €16.8 billion and around 250 branches, Deutsche Bank S.A.E. is primarily based in Madrid and Barcelona, but it also operates in all the other regions in Spain, with nationwide market shares of 0.9% in lending and 0.6% in deposits as of June 2015.

Deutsche Bank S.A.E. is 99.8% owned by the international bank Deutsche Bank AG.

In 2006 the brand BanCorreos was created following the agreement with the Spanish Post Office "Correos y Telégrafos" whereby it became a financial agent for Deutsche Bank S.A.E. in 1999. BanCorreos has more than 2,100 points of sale and represents 25% of the 670,000 Deutsche Bank S.A.E.'s customers.

Deutsche Bank S.A.E.'s loan book is mainly composed of residential mortgages, that account for more than 60% of the total loan book as of June 2015. The bank's exposure to the real estate and related sectors is very low, accounting for 4% of the total mortgage loan book.

## Credit Quality of the Cover Pool

Deutsche Bank S.A.E. is a commercial bank and its core business is mortgage lending.

Deutsche Bank S.A.E. offers standard mortgage loans, usually linked to an index with a fixed margin, together with cross-sold products. Deutsche Bank S.A.E.'s primary markets are Catalonia and Madrid.

### The initial portfolio

As of June 2015, Deutsche Bank S.A.E. reported a total cover pool of around €8.644 billion backing a total of €4,800 million outstanding covered bonds, making the level of over-collateralisation (cover pool size/outstanding CHs issuance, minus 100%) 80.1%. Regarding the eligible pool, Deutsche Bank S.A.E. has €7.767 billion eligible portfolio, which translates into 61.8% over-collateralisation. We consider 25% eligible over-collateralisation to be committed (legal requirement). Around 97.8% of the loans are linked to EURIBOR or IRPH (*Índice de Referencia de Préstamos Hipotecarios*) with a fixed margin and 99.7% are floating-rate. The weighted-average remaining term of the aggregate cover pool is 250.9 months.

All loans are domestic and 98.7% are denominated in euros.

The issuer uses three origination channels: (i) branches, (ii) BanCorreos, and (iii) agreements with other companies and intermediaries. Nevertheless, all the mortgage loans follow the same general underwriting process. All loans are serviced by Deutsche Bank S.A.E. following its current common practices.

There are 137,208 borrowers in the pool. The top 10 accounts for 0.3% of the residential pool and 18.5% of the commercial pool.

For further information on the cover pool composition, please refer to Appendix 1.

» We regard the following portfolio characteristics as credit positive:

- The restrictions imposed by the Legislation for loans to qualify as eligible (e.g., only first-lien mortgage loans can be included for residential loans up to 80% LTV; the valuation of the securing properties must be carried out by authorized appraisal companies).
- Around 93.5% of the pool is made up of residential loans. We believe that these loans are less risky than commercial loans. The weighted-average LTV of residential mortgages is 51.4% (non-indexed LTV) and the weighted-average LTV of commercial mortgages is 49% (non-indexed LTV). The loans have an average seasoning of 6.2 years.

- The cover pool is widely diversified, with high exposure to Catalonia (30%) and Madrid (25.4%).
  - Low exposure to REDs, which is 0.6% over the total mortgage pool.
  - WA DTI ratio lower than 25%.
- » We regard the following portfolio characteristics as credit negative:
- As of June 2015, around 11% of the cover pool is considered as non-core. This is a €0.96bn portfolio in run-off, comprised of 86% residential loans – sub-prime transactions and multicurrency loans – and 14% commercial loans – mostly Real Estate and related sectors. The NPL ratio in this portfolio rounds 15.5%. The portfolio volume has reduced by 25% in the last 2.5 years and it is expected to be reduced another 25% until 2017.
  - Cover pools backing CHs are dynamic. Consequently, any deterioration in the quality of future loans originated by a bank can affect the cover pool securing existing CHs. In addition, CHs do not contain the detailed provisions or arrears performance tests that are typically found in securitisations and that allow asset substitution.
  - There is no requirement for property valuations to be periodically reviewed, updated, indexed or stress-tested. As a result, a decline in property value that might push a loan over the LTV threshold for eligibility may not be recognised or recorded.

We calculate a collateral score<sup>11</sup> based on the characteristics of the mortgage pool. For this transaction, we calculated a collateral score of 8.7%, based on the information available for the cover pool.

## Underwriting

### Underwriting channels

Deutsche Bank S.A.E. originates its mortgage loans through three origination channels:

- » Branches
- » BanCorreos
- » Agreements with some companies and intermediaries

Regardless of the origination channel, all the mortgage loans follow the same underwriting process.

The loan origination decision starts in commercial branches. Branches can approve mortgage applications for loans amounts up to EUR 390,000, provided that the credit scoring system also approves them.



When branches are not empowered to approve a mortgage loan application, the operation is escalated to the next level (up to three different risk committees' levels, depending on the transaction amount and the expected loss).

### ***Underwriting criteria***

Deutsche Bank S.A.E. uses a scoring system developed and managed by Deutsche Bank group as an informative tool for the final rating decision.

To analyse the viability of the credit, the following documentation is required:

Loans to individuals (employed):

ID card.

Last personal income tax statement.

Last three monthly pay slips.

Loans to individuals (self-employed):

ID card.

Last personal income tax statement.

Other documents verifying the income, if needed.

In addition, the following documentation is analysed for any type of loan:

All specific documents related to the requested loan.

Bank of Spain's database regarding borrower's historical performance (CIRBE).

Details of all borrower's properties, as well as those of the guarantors.

The loan origination decision is mainly based on the borrower's repayment capability and the quality of the assets backing the loans.

The credit scoring system suggests decision on each credit request based on different rules, which are aligned to the entity's credit strategy. The decision engine, based on clients' information (i.e. credit bureau, financials and industry) calculates a default probability (DP) and an expected loss (EL) for every credit application. There are also several Business Rules that restrict an automatic approved decision:

- » LTV higher than 70%
- » DTI higher than 35%, or 45% in case of self-employed. For the purpose of calculating the DTI, interest rates are stressed by around 380 bps in addition to the reference interest rate index.
- » Lack of borrower's historical performance (CIRBE)
- » Restructured loan

- » Previously defaulted borrower
- » Negative Credit Bureau (depends on amount)
- » Annual net income lower than €15,000

If any of these exceptions occurs, the application is marked as "to be analysed" or "rejected". In these cases, risk committees are involved in order to analyse these applications.

### **Refinancing Risk**

Following a CB anchor event, where the "natural" amortisation of the cover pool assets alone cannot be relied on to repay the principal, we assume that funds must be raised against the cover pool at a discount if covered bondholders are to receive timely payment of principal. After a CB anchor event, the market value of these assets may be subject to substantial volatility.

Aspects specific to this programme that are refinancing positive include:

- » CHs do not accelerate automatically upon initiation of insolvency proceedings against the issuer.
- » The Legislation offers a variety of ways in which financing can be achieved against the cover pool, including the insolvency administrator's right to attempt to sell all or part of the cover pool as a package together with outstanding CHs, to another entity. This could avoid a fire sale of assets.
- » The very low exposure to commercial mortgage loans in the cover pool. This asset type may experience greater refinancing risk than standard residential mortgage loans.
- » Most of the assets in the cover pool bear a variable interest rate, which reduces the interest rate sensitivity if the assets are sold.

Aspects specific to this programme that are considered to be refinancing negative include:

- » All CHs issued under the programme are bullet bonds. Furthermore, the programme does not benefit from any contractual provisions to allow for an extension of a principal refinancing period.
- »

### **Sovereign risk**

On 14 February 2014, we upgraded the Spanish sovereign rating to Baa2 from Baa3 and changed the outlook to positive from stable.

Mitigating refinancing risk may depend on whether payments on covered bonds may be supported – either from other financial institutions or from the government – following a CB anchor event. The government's ability to provide this support – either directly or through support for financial institutions that could act as purchasers of the cover pool – will weaken as the sovereign's credit strength declines. The availability of liquidity to support this process is key, and we take into consideration the credit strength of the sovereign when determining whether this liquidity would be available following a CB anchor event.

Moody's Local Currency Country Risk Ceilings (the country ceiling) determine the maximum credit rating achievable in local currency for a debt issuer domiciled in that country or for a structured note whose cash flows are generated from domestic assets or residents. In this sense, Country ceilings cap the rating constellation in a given country. The purpose of the country ceilings is to allow our debt ratings to capture the risk of operating in a non-neutral (below Aaa) credit environment.

The country ceiling for Spain is set at Aa2.

## Market Risk

As with most European covered bonds, there is potential market risk. For example, following a CB anchor event, covered bondholders may be exposed to interest-rate risk arising from the different payment promises and durations made on the cover pool and covered bonds.

- » After a CB anchor event, our Covered Bond Model looks separately at the effect of increasing and decreasing interest rates on the expected loss of the covered bonds, taking the interest-rate projections that lead to the worst result. In this case, most of the assets are floating rate loans and all the outstanding CHs are also floating rate as of the time of this report. The interest-rate sensitivity if the assets are sold is reduced because most of the assets are floating rate. Nevertheless, they would be exposed to refinancing risk.
- » Swap agreements: Deutsche Bank S.A.E. had not registered any swaps in the cover pool special register as of the pool cut-off date.
- » Currency risk: As of the pool cut-off date, 98.7% cover pool assets and all CHs were denominated in euros. The rest of the loans were denominated in other currencies, such as British pounds, Swiss francs or Japanese yens.

## Linkage

All covered bonds are linked to the issuer. The covered bonds will therefore come under increasing rating stress if the issuer's credit strength deteriorates. Reasons for this include:

- » Refinancing risk: Following a CB anchor event, if principal receipts from collections of the cover pool are insufficient to meet the principal payment on a covered bond, funds may need to be raised against the cover pool. The fact that the issuer has defaulted may negatively affect the ability to raise funds against the cover pool.
- » The programme is exposed to the issuer's choices. For example, before a CB anchor event, the issuer may add new assets to the cover pool, or issue further bonds. Each of these actions could negatively affect the cover pool's value and credit quality.

More generally, the covered bonds will come under increasing rating stress following the incorporation of the strength of the issuer in accordance with our rating methodology.

As a result of this incorporation, the covered bonds' probability of default may be higher than expected for Aaa-rated senior unsecured debt and may constrain the final rating of the CHs. However, our primary rating target is the expected loss, which also takes into account loss severity, which in this transaction is consistent with the covered bond rating.

Our TPI assesses the likelihood that a timely payment will be made to covered bondholders following a CB anchor event. It therefore determines the maximum rating a covered bond programme can achieve with its current structure, while allowing for the addition of an adequate amount of over-collateralisation.

Aspects specific to this programme that are TPI-positive include:

- » Legislation: The level of support from Spanish legislation could mitigate delays of payments on CHs following a CB anchor event. These include:

The issuer's insolvency would not result in automatic acceleration of CHs. The collateral and the resulting proceeds will be reserved, by provision of law, for the settlement of special-privileged credit rights.

The high level of statutory over-collateralisation (25%) could enable the sale of the pool at high discounts, without affecting the redemption of CHs at par.

The insolvency administrator has the right to attempt to sell to another entity all or part of the cover pool as a package, together with outstanding covered bonds. This might avoid the fire sale of assets.

- » The pool composition: Most of the loans are residential loans and the over-collateralisation over total pool is 80.1%. This high level could also help to avoid a fire sale.

Aspects specific to this programme that are TPI-negative include:

- » All CHs issued under the programme are bullet bonds, without any extension period for the repayment of the bonds.
- » Unlike in other jurisdictions, the same party will act as the cover pool administrator and insolvency administrator. This could lead to some delay in the decisions and ultimately on the timely payment of the CHs.

Based on the considerations discussed above, we have assigned a TPI of "Probable" to this covered bond programme.

## Monitoring

We will monitor the transaction on an ongoing basis to ensure that it continues to perform commensurate with a Aa2 rating, including checking all supporting ratings and reviewing the assets on an ongoing basis. Any subsequent changes in the rating will be publicly announced and disseminated through our Client Service Desk.

## Moody's Related Research

For a more detailed explanation of our approach to this type of transaction as well as similar transactions, please refer to the following reports and our dedicated covered bonds webpage <http://www.moodys.com/coveredbonds>:

### Rating Methodology:

- » [Moody's Approach to Rating Covered Bonds, August 2015 \(SF412595\)](#)

### Outlook:

- » [2015 Outlook - Global Covered Bonds, December 2014 \(SF388771\)](#)

### Sector Comments:

- » [EU Bank Recovery and Resolution Regime Strengthens Spanish Covered Bonds and Improves Their Ratings July, 2015 \(1005954\)](#)
- » [Spain's New Securitisation Law Gives Originators More Flexibility and Improves the Management of Some Credit Risks, April 2015 \(1003227\)](#)
- » [Spain – Legal Framework for Covered Bonds June 2013 \(SF329408\)](#)
- » [Spanish Covered Bond Law Would Reduce Collateral, a Credit Negative, October 2014 \(SF385054\)](#)

### New Issue Reports:

- » [Caja Rural de Granada Mortgage Covered Bond Programme, July 2015 \(SF414201\)](#)
- » [Caja Rural de Castilla-La Mancha Mortgage Covered Bond Programme, October 2015 \(SF418205\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

## Appendix 1: Cover Pool Information – Residential Address

Overview		Specific Loan and Borrower characteristics	
Asset type:	Residential	Loans with an external guarantee in addition to a mortgage:	n/a
Asset balance:	8,080,704,099	Interest only Loans:	0.0%
Average loan balance:	100,480	Loans for second homes / Vacation:	9.9%
Number of loans:	80,421	Buy to let loans / Non owner occupied properties:	0.0%
Number of borrowers:	134,355	Limited income verified:	0.0%
Number of properties:	98,535	Adverse credit characteristics (**):	n/d
WA remaining term (in months):	260.5	Performance	
WA seasoning (in months):	75.1		
Details on LTV		Loans in arrears ( ≥ 2months - < 6months):	1.6%
WA unindexed LTV (*):	51.4%	Loans in arrears ( ≥ 6months - < 12months):	0.3%
WA indexed LTV:	n/d	Loans in arrears ( ≥ 12months):	1.7%
Valuation type:	Lending Value	Loans in a foreclosure procedure:	0.0%
LTV threshold:	n/a		
Junior ranks:	n/d	Multi-Family Properties	
Prior ranks:	n/d	Loans to tenants of tenant-owned Housing Cooperatives:	n/a
		Other type of Multi-Family loans (***):	n/a

n/d : information not disclosed by Issuer

n/a : information not applicable

EXHIBIT A

### Balance per LTV-band

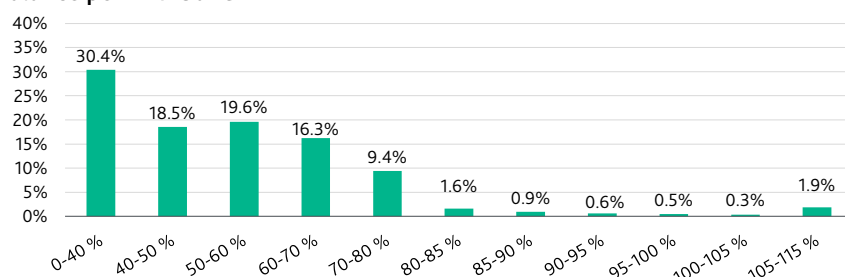


EXHIBIT B

### Percentage of Residential Assets

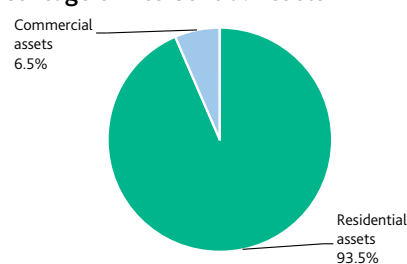


EXHIBIT C

### Time Evolution of Pool's LTV

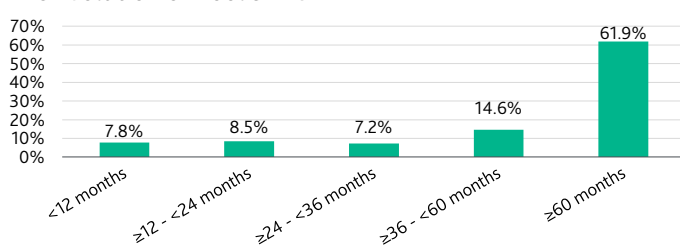


EXHIBIT D

### Interest Rate Type

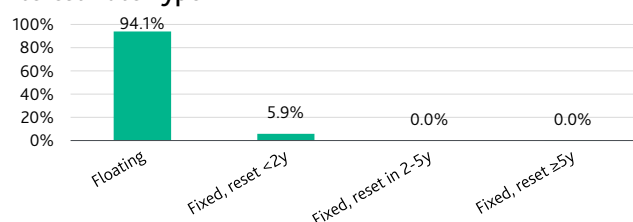
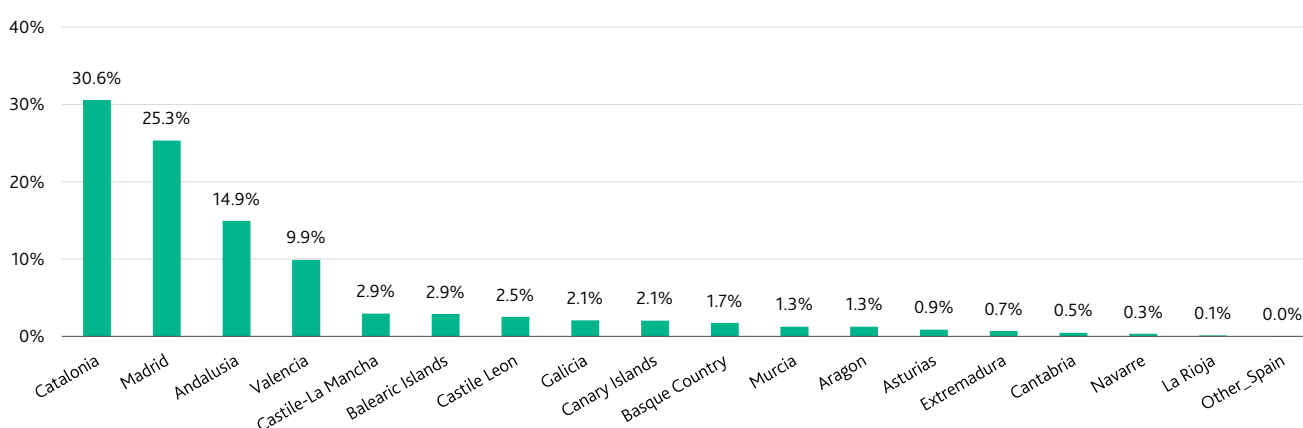


EXHIBIT E

### Main Country Regional Distribution







## Appendix 1: Cover Pool Information – Commercial Assets

Overview		Specific Loan and Borrower characteristics	
Asset type:	Commercial	Bullet loans:	n/d
Asset balance:	562,870,127	Loans in non-domestic currency:	0.3%
Average loan balance:	252,635	Percentage of fixed rate loans:	4.2%
Number of loans:	2,228	<b>Performance</b>	
Number of borrowers:	2,853	Loans in arrears $\geq$ 2 months:	31.1%
Number of properties:	n/d	Loans in a foreclosure procedure:	0.2%
Largest 10 loans:	13.8%	<b>Details on LTV</b>	
Largest 10 borrowers:	18.5%	WA current LTV (*):	49%
WA remaining term (in months):	112.5	WA indexed LTV:	n/d
WA seasoning (in months):	65.3	Valuation type:	Lending Value
Main countries:	Spain (100%)	LTV Threshold:	n/a
		Junior ranks:	n/d
		Prior and Equal ranks:	n/d

n/d : information not disclosed by Issuer

n/a : information not applicable

EXHIBIT A

### Balance per LTV-band

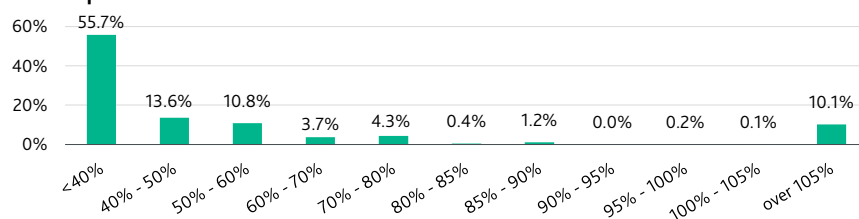


EXHIBIT B

### Percentage of Commercial Assets

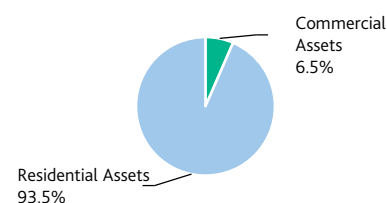


EXHIBIT C

### Borrower Concentration

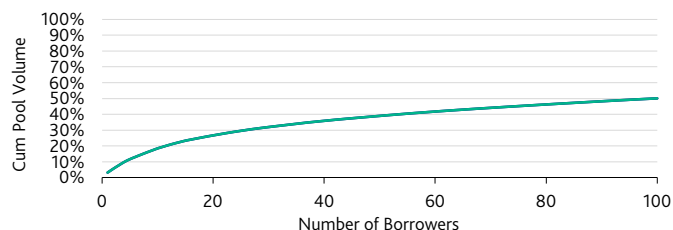


EXHIBIT D

### Property Type

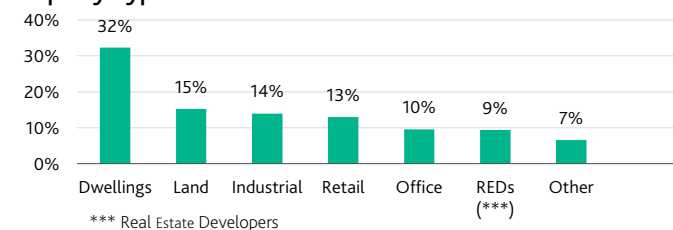


EXHIBIT E

### Main Country Regional Distribution

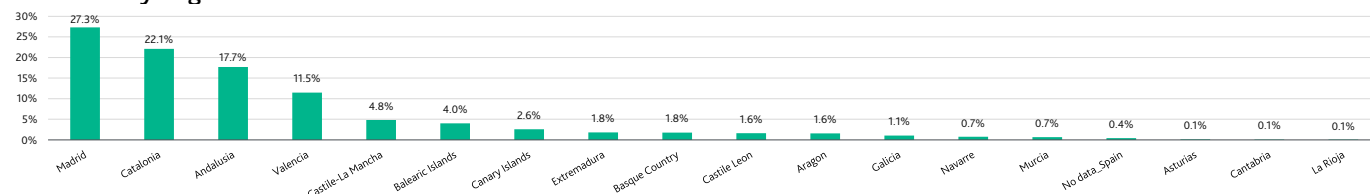


EXHIBIT F

### Remaining Term (in years)

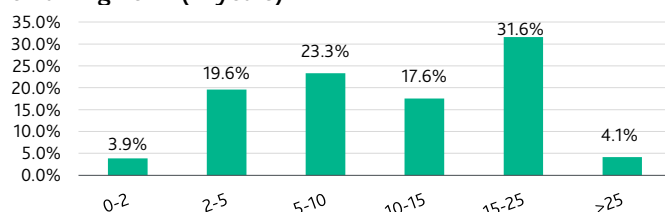
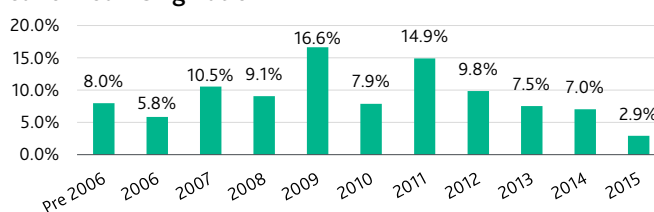


EXHIBIT G

### Year of Loan Origination



## Appendix 2: Income Underwriting and Valuation

### 1. Income Underwriting

1.1 Is income always checked?	Yes. The income and the personal details of a prospective borrower are always checked. When applying for a new loan residential borrowers must provide - among other things- last personal income tax statement and the last three monthly pay slips.
1.2 Does this check ever rely on income stated by borrower ("limited income verification")?	Income is always checked and the lender does not rely on the income stated by the borrower.
1.3 Percentage of loans in Cover Pool that have limited income verification	None
1.4 If limited income verification loans are in the Cover Pool, describe what requirements lender has in place for these loans.	Not applicable
1.5 Does income in all cases constrain the amount lent (for example through some form of Income Sufficiency Test (IST)?	Loans are analysed using a system that combines three factors: i) a payment evaluation system (PES or Debt-to-Income) ii) a maximum LTV criteria (80% for residential loans and iii) a scoring system. The income level will affect the PES and might determine maximum amount to be lent to a residential borrower. The maximum Debt-to-Income ratio is 45% for self-employed and 35% for the rest of residential loans.
1.6 If not, what percentage of cases are exceptions?	There might be some exceptions, depending on the decision of a Risk Committee.

#### For the purposes of any IST:

1.7 Is it confirmed that income after tax is sufficient to cover both interest and principal?	Yes
1.8 If so over what period is it assumed principal will be paid (typically on an annuity basis)? Any exceptions?	Over the life of the loan annually.
1.9 Does the age of the borrower constrain the period over which principal can be amortised?	Yes. (Age + Term of the loan) cannot exceed 75 years. For refinanced or restructured loans, (Age + Term of the loan) can't exceed 85 years, and this exception also depends on the decision of a Risk Committee.
1.10 Are any stresses made to interest rates when carrying out the IST? If so, when and for what type of products?	Yes. Interest rates are currently stressed by around 380 bps in addition to the reference interest rate index.
1.11 Are all other debts of the borrower taken into account at the point the loan is made?	Yes
1.12 How are living expenses of the borrower calculated?	Living expenses are not considered. Debt-to-income (DTI) ratio is calculated as: Total annual debt instalments / Net Income.

#### Other comments

### 2. Valuation

2.1 Are valuations based on market or lending values?	Lending values. LTV is always calculated based on the lower between the appraisal value and the purchase price of the property.
2.2 Are all or the majority of valuations carried out by external valuers (with no direct ownership link to any company in the Sponsor Bank group)?	Yes. Valuation of the properties by official appraisal companies (Sociedades de Tasación) is required by law and governed by the Ministerial Order of 27 March 2003 on appraisal of real estate goods and some rights for some financial entities.
2.3 How are valuations carried out where an external valuer is not used?	Not applicable
2.4 What qualifications are external valuers required to have?	Please see the Ministerial Order of 27 March 2003 on appraisal of real estate goods and some rights for some financial entities.
2.5 What qualifications are internal valuers required to have?	Not applicable
2.6 Do all external valuations include an internal inspection of a property?	Yes
2.7 What exceptions?	Not applicable
2.8 Do all internal valuations include an internal inspection of a property?	Not applicable
2.9 What exceptions?	Not applicable

#### Other comments

- 
- <sup>1</sup> Law 11/2015 on the recovery and resolution of credit institutions and investment firms, which transposes the Bank Recovery and Resolution Directive (BRRD) into Spanish Law.
- <sup>2</sup> Excluding securitised mortgages and mortgage loans backing Bonos Hipotecarios.
- <sup>3</sup> Over-collateralization is the amount by which the level of collateral exceeds the level of liabilities..
- <sup>4</sup> The CB anchor is the counterparty risk assessment plus one notch. For more details, see Rating Methodology: [Moody's Approach to Rating Covered Bonds](#).
- <sup>5</sup> "Asociación Hipotecaria Española"(Tasas de Dudosidad de crédito inmobiliario a los hogares)
- <sup>6</sup> [Directive 2014/59/EU](#) of the European Parliament and the Council establishing a framework for the recovery and resolution of credit institutions and investment firms, 15 May 2014. BRRD was transposed into Spanish law through [Ley 11/2015](#) , which came into force on 20 June 2015.
- <sup>7</sup> Article 44(2) of BRRD
- <sup>8</sup> Article 79 of BRRD
- <sup>9</sup> Article 44 of BRRD
- <sup>10</sup> Article 44(7) of BRRD
- <sup>11</sup> The collateral score measures the level of credit deterioration of the assets in the cover pool that is consistent with the theoretical highest rating achievable in the jurisdiction. The higher the credit quality of the cover pool, the lower the collateral score. For more details, see Rating Methodology: [Moody's Approach to Rating Covered Bonds](#).

» contacts continued from page 1

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