

New Issue Rating Report

AEBG SA – Compartment 2

CMBS/Structured Finance



Rating

Instrument	Rating	Notional (EUR m)	Notional (% of loans)	CE (% of loans)	Coupon	Final maturity
Namensschuldverschreibung	BBB _{SF}	52.0	6.0	0.7	3-month Euribor + 4.9%	25 March 2052
Total reference portfolio		865.4	100.0			

The transaction closed on 9 November 2016. The ratings are based on the preliminary portfolio, as of 31 August 2016, provided by the originator. Scope's *SF Rating Definitions* are available at www.scoperatings.com.

Rated issuer		Transaction profile
Purpose	Balance sheet/risk transfer	<p>AEBG SA is a single-tranche synthetic securitisation exposed to a EUR 865.4m portfolio of commercial real estate loans originated by Deutsche Hypothekbank to finance German, French and Dutch properties. AEBG SA, a bankruptcy-remote special purpose vehicle under Luxembourg law, has issued a EUR 52m registered bond and sells risk protection to Deutsche Hypothekbank under a guarantee contract.</p> <p>The transaction incorporates a ramp-up of the portfolio, subject to eligibility criteria and a rating confirmation from Scope.</p>
Issuer	Ärztliche Beteiligungsgesellschaft SA – Compartment 2 (AEBG SA)	
Originator	Deutsche Hypothekbank (Aktien-Gesellschaft) (private rating)	
Asset class	CMBS	
Country of assets	Germany, France, Netherlands	
Closing date	9 November 2016	
Scheduled maturity	25 March 2050	
Legal final maturity	25 March 2052	
Payment frequency	Quarterly	
Payment dates	25 Mar, 25 Jun, 25 Sep, 25 Dec	
		Analysts
		Sebastian Dietzsch Lead analyst s.dietzsch@scoperatings.com +49-30-27-891-252
		Philipp Wass Real estate specialist analyst p.wass@scoperatings.com +49-30-27-891-253

Rating rationale (summary)

The rating reflects the legal and financial structure of the transaction; the credit quality of the reference portfolio; the expertise of the originator and servicer, Deutsche Hypothekbank; and the counterparty risk exposure to the bank.

The Namensschuldverschreibung (registered bond) benefits from the structural credit enhancement of 0.7% from subordination and 0.12% of annual portfolio excess spread. In addition, the bond benefits from the low loan-to-value of the reference commercial real estate portfolio (52%).

The rating is driven by Scope's stable outlook on the commercial real estate business environment in Germany, France and the Netherlands, which reflect positively on property market values and refinancing conditions.

The rating considers the pro rata amortisation mechanism implemented in the transaction. This mechanism reduces the outstanding bond notional at risk, but also reduces the credit enhancement available to the bond over time, exposing it to increasing portfolio concentration and single-asset risk. The risk from portfolio concentration is mitigated by the high credit quality of the largest exposures and those with the longest maturities. Credit enhancement more than offsets the expected-loss contribution of the five assets with weaker credit quality, which partially mitigates the exposure to single-asset risk.

The rating is linked to the credit quality of Deutsche Hypothekbank. The bank holds the bond's entire collateral in cash without risk-substitution triggers. In addition, the bank is the payer of the guarantee premium under an insurance agreement with AEBG SA – Compartment 2. The issuer uses the premium to fund taxes, senior costs and the interest payments on the bond. In order to analyse counterparty risks. Scope has relied on a private monitored rating on Deutsche Hypothekbank.

Rating drivers and mitigants

Positive rating drivers

High portfolio credit quality. Scope assumes that the portfolio's credit quality is commensurate with a BBB+, with a low weighted average loan-to-value ratio at 52%. Loans in the portfolio exhibit low probabilities of failure to refinance and high expected recoveries upon default.

Positive business environment. Scope's outlook on the commercial real estate business environment in Germany, France and the Netherlands is stable to positive, in particular for property operations, financing, sale and loan work out in 'A' locations.

Strong originator. Deutsche Hypothekbank has good experience and expertise in commercial real estate loan origination. Originator and investor interests are well aligned. Deutsche Hypothekbank retains the junior and senior exposures to the loans.

Strong liquidity coverage. Deutsche Hypothekbank pays all taxes, costs and interest on the bond, which eliminates liquidity risk for the transaction.

Negative rating drivers and mitigants

Asset concentration risk. The pro rata amortisation of the structure prevents the reference tranche to benefit from credit enhancement build-up through the portfolio's amortisation. This is partially mitigated by the good credit quality of the assets with the longest maturities.

Counterparty risk. The transaction is directly exposed to Deutsche Hypothekbank's credit quality as collateral account bank, without any replacement mechanisms. Scope has assigned a private rating to the bank.

Limited property information. The information available to Scope on the individual properties was limited. Related uncertainties about property grades and the average credit quality of tenants have been taken into account in Scope's assumptions.

Positive rating-change drivers

Prepayment of the largest and worst-quality assets in the portfolio would affect the rating positively.

Negative rating-change drivers

The rating can be negatively affected if the prepayment of the best assets in the portfolio leave the bond exposed to the remaining low-quality assets without sufficient credit protection.

A negative migration of the portfolio credit quality or higher-than-anticipated portfolio losses will affect the rating negatively.

A deterioration of Deutsche Hypothekbank's credit quality below BBB would have a direct negative impact on the rating of the registered bond.

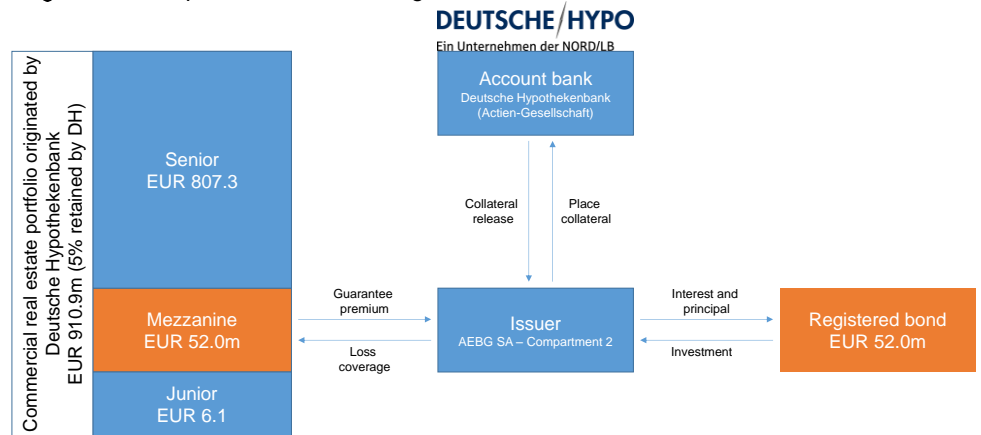
1 Transaction summary

Related reports

General Structured Finance Rating Methodology, dated August 2016.

Rating Methodology for Counterparty Risk in Structured Finance Transactions, dated August 2016.

Figure 1. Simplified transaction diagram



Source: Transaction documents and Scope.

Ärztliche Beteiligungsgesellschaft SA – Compartment 2 (AEBG SA) is a single-tranche synthetic securitisation exposed to a EUR 865.4m portfolio of commercial real estate loans, granted to 50 obligors in Germany, France and the Netherlands by Deutsche Hypothekenbank.

AEBG SA, a bankruptcy-remote special purpose vehicle incorporated in Luxembourg, has issued a EUR 52m registered bond and sells protection to Deutsche Hypothekenbank that covers the EUR 52m mezzanine tranche of the commercial real estate portfolio. The transaction incorporates a further ramp-up of the portfolio, subject to eligibility criteria and a rating confirmation from Scope.

2 Originator, seller and servicer

Deutsche Hypothekenbank (Actien-Gesellschaft) (Deutsche Hypo or the bank) is the commercial real estate arm of Norddeutsche Landesbank – Girozentrale (Nord/LB), acting as a centre of competence, with a European focus. The bank is responsible for the issuance of mortgage covered bonds within the group and its business model is based on the German Covered Bond Act. The bank benefits from its membership in the savings-banks liability-sharing scheme. On 14 July 2016, Scope analysts met Deutsche Hypo executives in Hannover to understand more about underwriting and servicing aspects that are relevant to the analysis. Scope has confirmed with the originator that the processes and strategies presented back then remain in place.

The bank has managed to keep new origination volumes stable since 2014, and is benefiting from improving risk measures, as a result of the stable business environment in central Europe and the low interest rate environment.

Origination and underwriting

The loan portfolio referenced in this transaction was originated in Deutsche Hypo's normal course of business, and the bank fully retains the assets on its balance sheet, owing to the transaction's synthetic nature.

We consider Deutsche Hypo's workflows for approving and executing credit applications to be effective, which limits risk in accordance with the originator's risk appetite. Real estate specialists from front and back office are always involved in this process, both at the inception of the credit approval process and during the final execution stages. The processes are standard for commercial banks in Germany, and involve a strong separation of approval authority (i.e. between sales, front-office credit assessment, property valuation and back-office credit assessment) and the separation of business and risk approval powers. Deutsche Hypo uses local in-house experts for its core markets, and supervision of obligors is additionally provided by its membership in the Nord/LB combination.

Underwriting involves a three-stage process where loans are i) pre-assessed and filtered, ii) analysed in detail, and iii) approved, but only when due diligence output and agreed loan terms are closed.

Contents

Rating	1
Rating drivers and mitigants	2
1 Transaction summary	3
2 Originator, seller and servicer	3
3 Asset analysis	4
4 Financial structure	10
5 Portfolio modelling	12
6 Ratings	13
7 Rating stability	14
8 Counterparty risk	14
9 Legal structure	15
10 Monitoring	15
11 Applied methodology and data adequacy	15
Appendix I Summary of portfolio characteristics	16
Appendix II Commercial real estate loan analysis	17
Appendix III Regulatory and legal disclosures	24

The loan-approval process requires the involvement of a special lending-commitment-committee, involving up to the board of directors, when an obligor is granted facilities totalling more than EUR 70m, and these are high-risk exposures.

The bank employs 21 commercial real estate specialists who have insight in the bank's core markets for the valuation of properties. Deutsche Hypo consults with external sources for special commercial real estate projects such as hotels or leisure-related properties. The bank employs about 400 people in total and has access to additional resources from Nord/LB.

Servicing and recovery

The originator's monitoring processes set a proactive framework that allows the anticipation of performance issues and a reduction in the risk of obligor default and severity upon default. During monitoring, the following information is tracked: i) project financials and interim accounts; ii) covenant compliance; iii) days past due; iv) market environment and business sector; v) interaction with the originator; and vi) updates on real estate asset values.

Deutsche Hypo maintains an early-warning list that identifies potential problem loans during the monitoring process. The eligibility criteria for this transaction explicitly exclude loans on this early-warning list.

We believe the recovery strategy suits the long-term relationship strategy of the originator with its obligors. The recovery function is performed by a special credit-management unit. This cooperative approach aims to identify solutions that would help the stressed or distressed obligor to be performing again and reduce losses for the bank. This also shows in the low loan-loss reserves, under 1% of gross loans since 2010. Deutsche Hypo only seeks an exit solution or a liquidation strategy when a cure is not possible.

Alignment of interests

The incentives of Deutsche Hypo in the transaction result in a strong alignment of interests between the bank and investors. Deutsche Hypo retains the risk below the 0.7% attachment point and above the 6.7% detachment point of the rated instrument. In addition, the bank retains a 5% pari passu exposure in each loan and benefits from unused excess spread.

The transaction is consistent with Deutsche Hypo's strategy to become the partner of choice, both for obligors and investors in commercial real estate projects in central Europe and the UK. The transaction will result in an effective risk transfer, which enables the bank to not only increase their lending capacity, but also participate in large transactions with exposure sizes beyond their defined risk appetite.

3 Asset analysis

Scope has applied its analytical framework for commercial real estate loans (Appendix II) to the assets in the initial portfolio. Scope considers that the sole source for servicing a loan is the cash flow generated by the properties, e.g. rental cash flows and sale proceeds. The cash flow modelling for each property is driven by the tenants' credit quality, the property's quality and value, the length of the lease contracts and vacancy assumptions. We sequentially analyse the tenancy base and mortgaged properties before analysing the loan itself.

Preliminary portfolio characteristics

The reference portfolio amounts to EUR 865.4m and consists of 92 loans granted to 50 obligors to finance commercial real estate properties in Germany, France and the Netherlands (Figure 2). The portfolio is well diversified across the different property usage types (Figure 3). The average loan-to-value of the assets is low at 52% and the average debt-service coverage ratio is moderate at 2.2x (Figure 4 and Figure 5).

Pro-active servicing and cooperative work-out

Strong alignment of interests between Deutsche Hypo and investors

Well diversified low-LTV portfolio

Figure 2. Regions – portfolio distribution

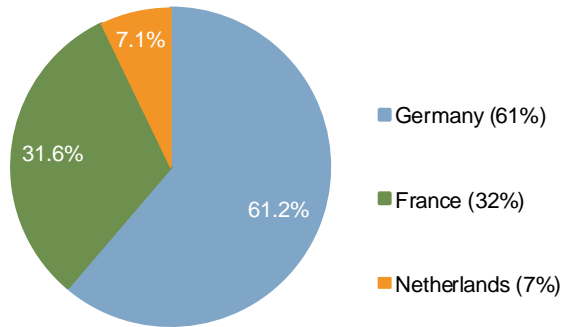


Figure 3. Usage type – portfolio distribution

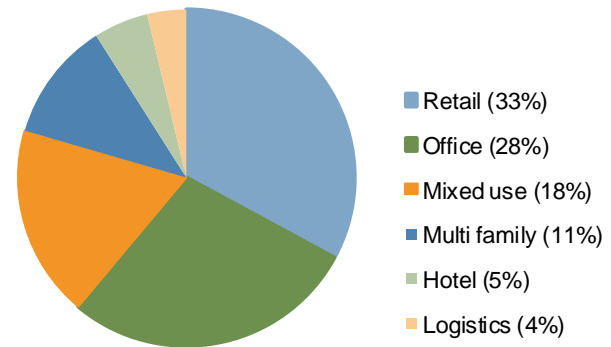


Figure 4. Loan-to-value – portfolio distribution

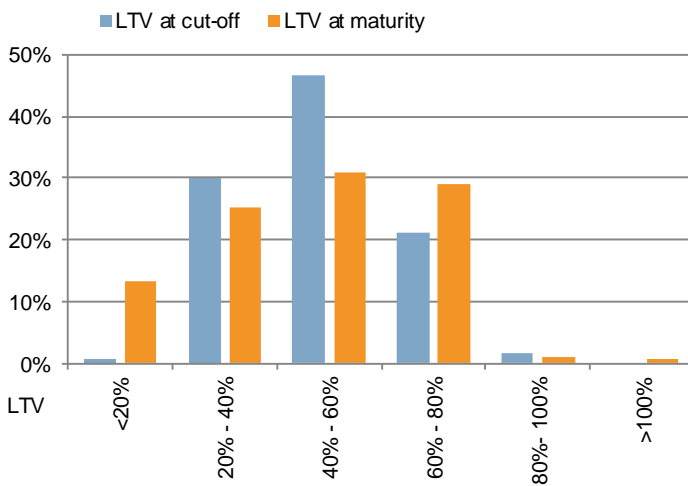
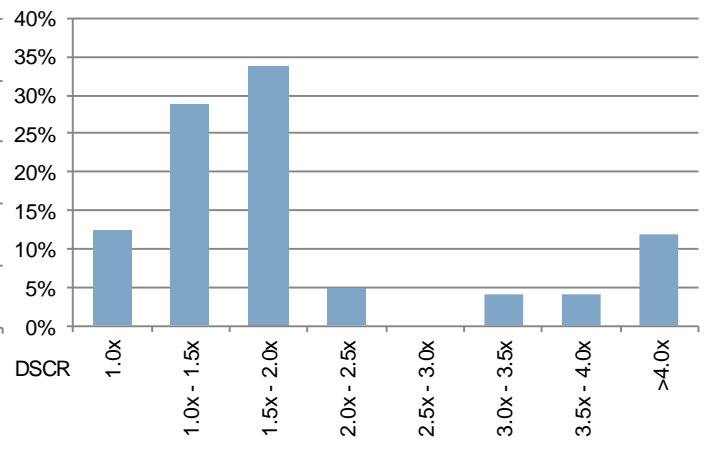


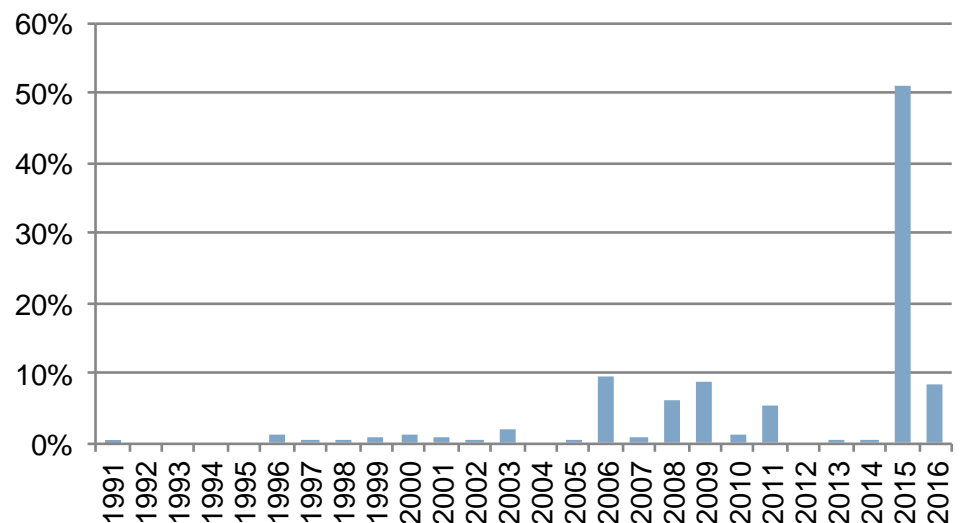
Figure 5. Debt-service coverage ratio – portfolio distribution



Scope considers the portfolio as young, with 75.8% of the portfolio originated under post-crisis financing conditions after 2008 (Figure 6).

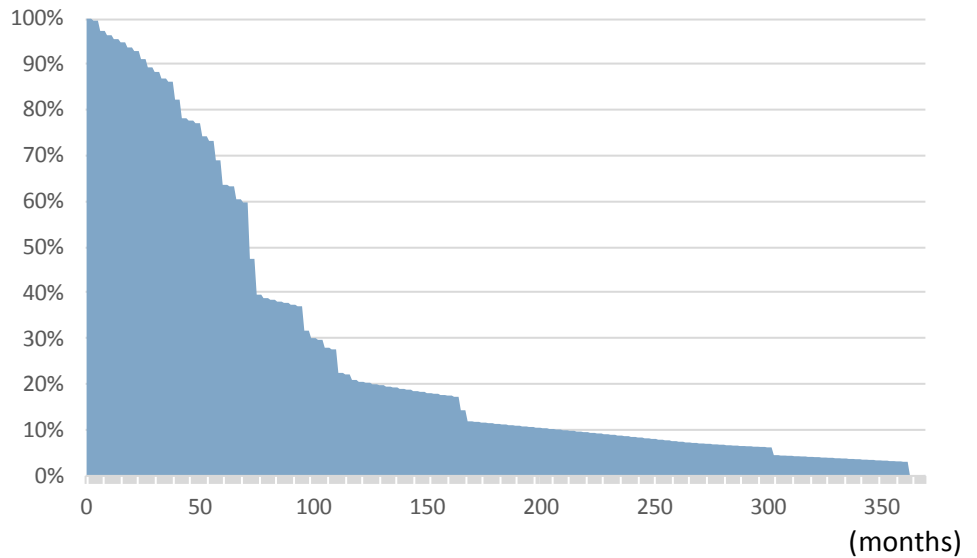
Figure 6. Portfolio origination profile

Low-seasoned portfolio with large share of bullet exposures



The portfolio's weighted average life is 8.2 years and the weighted average remaining term is 11.6 years. A large share of the portfolio's assets have a large payment at maturity. In total 80% of the portfolio balance will be repaid as either bullets (48.4%) or semi-bullets (31.6%), i.e. little amortisation over the loan term and a large payment at maturity.

Figure 7. Portfolio amortisation profile



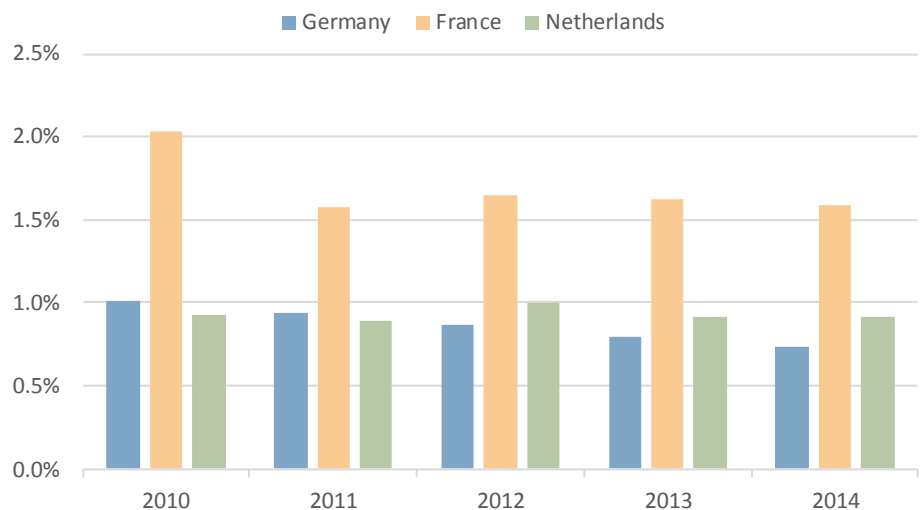
Tenancy analysis

Scope has assumed an average tenant quality of BB, which reflects the average frequency of corporate default observed in Germany, France and the Netherlands¹, stressed by the equivalent of one rating notch. The insolvency statistics for households, which applies to tenants in multi-family properties, shows default frequencies commensurate with BBB-. However, Scope has applied a more conservative assumption to tenants in multi-family properties (BB risk) if the tenancy information provided by the originator is limited.

Granular tenant base

The generic approach is adequate, because the tenant base of this portfolio is relatively granular, with more than 3,300 tenants. Tenant concentration risk is captured by Scope's analysis at individual loan level and by the assumption considered for each tenant's default risk.

Figure 8. Annual corporate insolvency frequencies by country



Source: EUROSTAT, national statistics offices and Scope.

¹ Statistical offices of Germany, France and the Netherlands; and EUROSTAT.

Property analysis

Scope has assumed rental-contract lengths of five to ten years and a structural vacancy of 10% to 20%², to address the potential vacancy after a tenant defaults or does not renew the contract. The approach is in line with standards observed in Germany, France and the Netherlands. In general, we believe re-letting is possible, regardless of property quality. However, our assumptions include structural market vacancies, which are used to derive stressed cash flow projections.

The portfolio benefits overall from the security over properties that have an average grade of PG3, expressed on a scale from PG1 (best) to PG5 (see 'Scope's property grade (PG1 to PG5)' on page 18.). The property grade reflects i) the property's micro and macro location, ii) the property condition and quality and iii) the vacancy rate and probability of remarketing, but also accounts for the current iv) lease terms and break options, and v) the tenants' credit quality. The portfolio is exposed mostly to 'A' locations³ (62% of the current portfolio; see Figure 9; 'A' locations highlighted) and properties with low vacancy rates (most are fully let). However, the weighted average unexpired lease term is only 4.4 years (Figure 10), and the assumed average tenant credit quality is commensurate with BB, aspects which reflect negatively on the property grade.

Loans benefit from security over properties with on average PG3 quality

Figure 9. Location of portfolio exposure

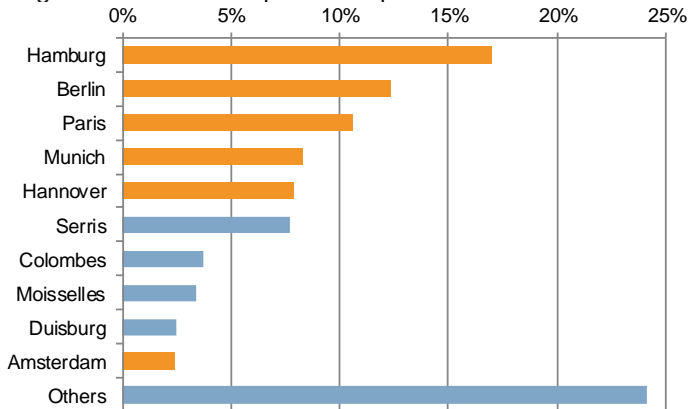
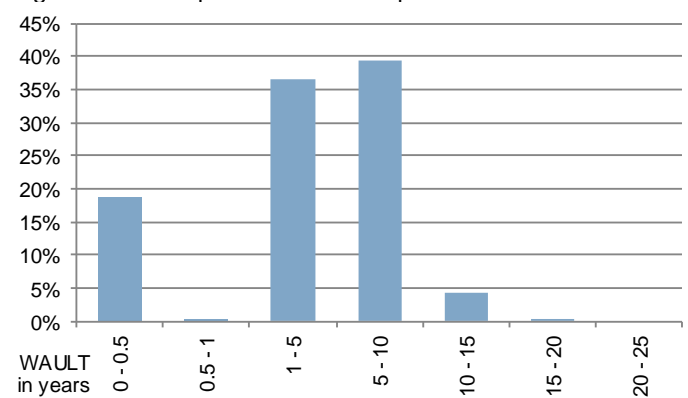


Figure 10. Unexpired lease term – portfolio distribution

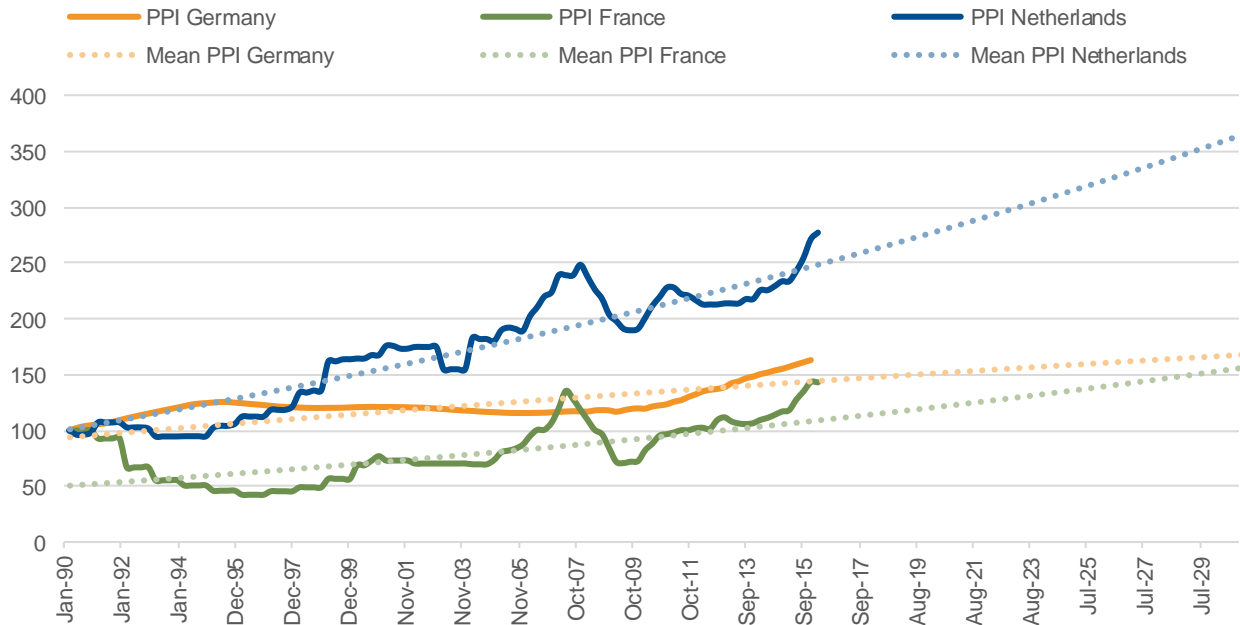


Scope believes the sustainable property value of the portfolio is less than current market values. Current values reflect the positive environment for commercial real estate in Germany, France and the Netherlands, which is indicated by the countries' property price indices exceeding the long-term averages (Figure 11). The low interest rates have been a major contributing factor.

² Ranges are derived from CBRE, Savills & Cushman & Wakefield research.

³ For the definition of an 'A' location, see Scope's property grade (PG1 to PG5) on page 18.

Figure 11. Property price indices in Germany, France and the Netherlands



Source: Scope Ratings/Feri EuroRating Services AG

Scope has assigned credit estimates to each loan in the portfolio

Loan analysis

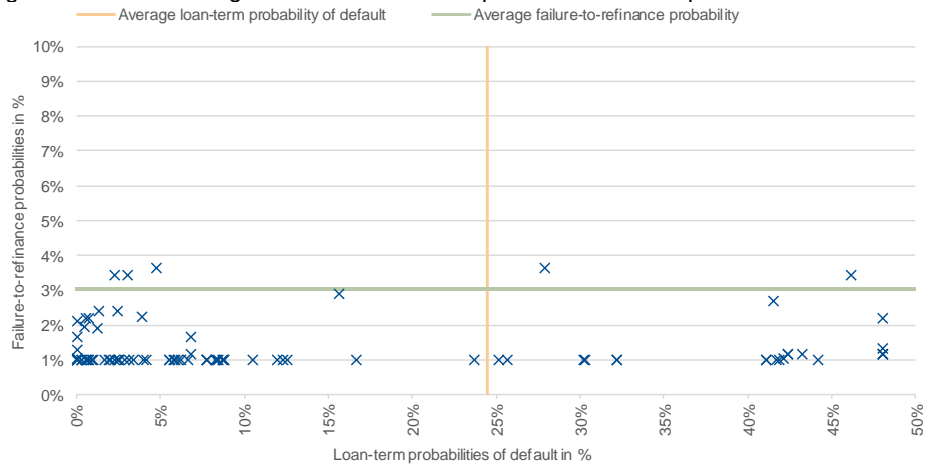
Scope has assigned a credit estimate for every loan in the portfolio, applying the analytical considerations described in Appendix II: Commercial real estate loan analysis on page 17. Credit estimates reflect the probability of default over a loan's term, the probability of failure to refinance at maturity, and the recovery upon default. Scope's loan-by-loan credit estimates, based on information from June 2016, suggest an average credit quality of BBB+ in the portfolio, considering default probabilities and expected recoveries.

The probability of default accounts for the property quality, as represented by the property grade; the tenants' loan-servicing ability, which is driven by their credit quality; and the loan-to-value at default, which is a driver of the probability of failure to refinance. The recovery rate is driven by the loan-to-value at default, the property grade and the costs of liquidating the property.

Scope derived a portfolio average probability of default over a life of 8.2 years of 26.6%, which is composed of a 24.5% probability of loans defaulting over their term (Figure 12), and a 3.0% average probability of a failure to refinance. The high default probability assumption during the term of the loans partly reflects uncertainties about tenants' quality and property grade, due to the limited amount of information available to Scope regarding the properties securing the loans. The low loans' refinancing risk is attributed to their low loan-to-value ratios.

Loan-term default probability drives the portfolio average default rate

Figure 12. Refinancing and loan-term default probabilities assumptions of loans

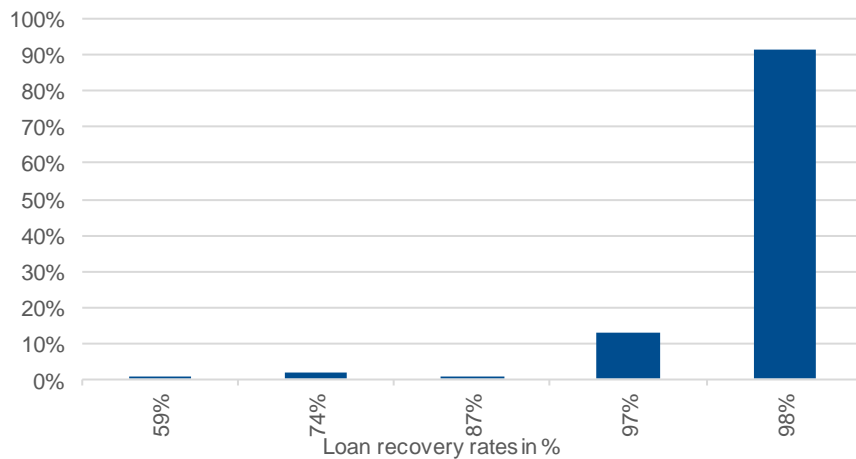


Note: There are three loans in the portfolio, which are not displayed in the chart, with failure to refinance probabilities of 17.3%, 52.6% and 100%, respectively.
There are two loans in the portfolio, which are not displayed in the chart, with loan-term probabilities of default of 79.2% and 81.4%.

Scope derived a portfolio average recovery rate of 96.5%, which is also due to the low loan-to-values (Figure 4 and Figure 13). A single loan's recovery upon default is driven by the outstanding balance at default and the market value of the corresponding property, net of recovery costs (Figure 14). Scope analysed in detail the market value declines for each loan, depending on the development of the relevant regional market and the loan's time to maturity. Scope's market-value-decline assumptions range from 13% to 41%, reflecting the current states and expected long-term developments of property markets in the relevant country. This approach is based on comparing a mean reversion of current property prices with the development of long-term historical prices (Figure 11).

Low LTV of 52% is the main driver of the high loan recovery rates

Figure 13. Distribution of assumed recovery rate



Scope has applied a maximum recovery rate of 98% to all loans in the portfolio.

Figure 14. Recovery-cost assumptions

Property-liquidation assumptions	Property grade 1	Property grade 2	Property grade 3	Property grade 4	Property grade 5
Distressed sale discount	10%	15%	20%	22.5%	25%
Liquidation costs	7.5% - 10%	10% - 12.5%	12.5% - 15%	15% - 17.5%	17.5% - 20%
Fixed (% age of outstanding loan)	7.5%	10%	12.5%	15%	17.5%
Variable (% age of property/market value)	2.5%	2.5%	2.5%	2.5%	2.5%

Scope particularly examined the three loans with the weakest credit qualities (Figure 15). However, these exposures benefit from their good locations and the stability of the

commercial real estate business environment over their short weighted average life of 2.1 years. In addition, their expected-loss contribution is covered by the credit enhancement from subordination and the cash reserve.

Figure 15. Weakest assets by credit quality

	Exposure in EUR m	Default probability	Recovery assumption	Weighted average life	Loan-to-value	Expected-loss contribution in EUR m
Asset 1	5.4	100.0%	59%	0.5	96.0%	2.22
Asset 2	8.9	50.5%	74%	2.0	84.1%	1.15
Asset 3	11.2	16.6%	87%	2.2	71.6%	0.25

Portfolio composition can change adversely during the ramp-up

Portfolio ramp-up

The portfolio will be ramped up until 25 December 2018 to a maximum of EUR 2bn (notional sum of all assets assigned to the portfolio during the ramp-up phase and at closing). The ramp-up will result in an increase of the guarantee, which then requires an increase of the collateral amount that has to be funded from further investor contributions by means of a tap issuance.

The eligibility criteria applicable for the ramp-up are weaker than the current portfolio criteria (Figure 16). However, the ramp-up will be blocked if i) investors do not consent to the portfolio additions and ii) Scope does not confirm the bond's investment grade rating as a result of the new assets' addition and increase of the guarantee notional.

Figure 16. Ramp-up criteria

Single-asset criteria	Criteria	Current portfolio
Contract type and status	All contracts are mortgages that are legally valid, binding and enforceable.	All contracts are mortgages that are legally valid binding and enforceable.
Property location	Germany, France or the Netherlands	Germany, France or the Netherlands
Valuation report available	Yes	Yes
Maximum loan-to-value	85%	96%
Arrears status	Not in arrears, and no collection reminder has been sent during the mortgage term	Not in arrears
Minimum internal rating (best: 1; worst: 18)	10	8: lowest internal rating of an asset
Maximum exposure size	EUR 150m	EUR 46.8m
Maximum maturity	25 March 2050	31 December 2049
Portfolio criteria		
Average loan-to value	70%	52%
Average exposure size	EUR 40m	EUR 9.9m

4 Financial structure

Capital structure

Guarantee creates synthetic exposure for the bond to the commercial real estate portfolio

AEBG SA – Compartment 2 has issued a EUR 52m registered bond and sells protection to Deutsche Hypothekbank covering the EUR 52m mezzanine tranche of the commercial real estate portfolio, i.e. the reference portfolio. The mezzanine tranche attaches 0.7% and detaches at 6.7%.

The rated bond benefits from the 0.7% subordination provided by the junior tranche and the 0.12% annual portfolio excess spread.

The bond pays a quarterly coupon of three-month Euribor plus 4.90% and amortises at the same rate as the mezzanine tranche. The mezzanine tranche amortisation is a trigger to release funds from the collateral account, which are passed-through to the investors to redeem bond principal. The interest is paid from the guarantee premium collected from Deutsche Hypo, which is sized and adjusted to pay the bond interest, as well as all senior liabilities and taxes.

Payments under the guarantee to Deutsche Hypothekbank that would impair repayment of the registered bond are due only if losses from the portfolio exceed the available excess spread and the junior tranche size.

Credit event definition allows early trapping of synthetic excess spread

Definition of credit events, expected loss and realised loss

Deutsche Hypo can declare credit events and receive payments under the guarantee entered into with ABEG, for any portfolio losses in excess of the credit enhancement.

We believe the guarantee employs a prudent definition of credit events for commercial real estate loans, i.e. the default under the guarantee is triggered early, which helps to preserve the value of the financed properties, allows more synthetic excess spread to be trapped and stops the junior tranche amortisation earlier.

Credit events under the guarantee include situations in which the obligor i) files for insolvency, or faces insolvency claims; or ii) is in arrears for more than 30 days. A trustee will always confirm the validity of credit events ('Role of the trustee').

Deutsche Hypo will allocate an expected loss to a loss ledger, which, if confirmed by the trustee, prevents the amortisation of the registered bond for the amount exceeding the 0.7% credit enhancement and the available excess spread. However, the investor will only face a loss, if realised losses – determined at the end of the work-out period or after two years, whichever is earlier – exceed the credit enhancement.

Loan recovery proceeds that occur after the two-year period following a credit event will reduce the loss allocated to the loss ledger. The two-year period is set to allow for a timely loss allocation, which is required under a financial guarantee.

Role of the trustee

Trustee verifies validity of loss claims from Deutsche Hypo

Scope believes there is adequate external supervision on the validity of loss claims from Deutsche Hypo under the guarantee.

BBWP GmbH Wirtschaftsprüfungsgesellschaft, the trustee, will review all loss claims from Deutsche Hypo under the guarantee. A claim can only be allocated to the transaction if the trustee has confirmed its validity. The review will be based on all documentation available at Deutsche Hypo and the process has to be within the bank's normal course of business.

Loss claims which are not validated by the trustee are rejected and have to be borne by Deutsche Hypo.

Issuer and obligor events of transaction termination

The bond is protected by standard events of default, which are effective at terminating the transaction. The events of default are a trigger to terminate the guarantee and the repayment of the outstanding collateral to the bond investor, net of loss claims.

Deutsche Hypo can terminate the guarantee if: i) the issuer does not pay due claims within three business days, ii) the issuer is insolvent, iii) the bond is repaid early, or iv) the transaction's economic benefit ceases, v) the reference portfolio's outstanding balance is less than 10% of the portfolio balance at the end of the ramp-up period, vi) the weighted average portfolio life has ended; or vii) the guarantee becomes subject to taxation.

The issuer can terminate the guarantee if Deutsche Hypo either fails to pay due claims within three business days or is insolvent.

Excess spread

Synthetic excess spread provides first layer of loss protection

Annual excess spread of 0.12% on the outstanding portfolio balance will be available to cover portfolio losses, before the junior tranche and afterwards higher seniority tranches become attached. Idle spread after each December payment date will be released to Deutsche Hypo.

The absolute amount of excess spread is capped at five times 0.12% times the maximum portfolio balance (sum of asset notional assigned to the reference portfolio during the ramp-up period and at closing).

Tax and expense coverage

Taxes and expenses are fully covered over the life of the transaction. Deutsche Hypo pays a guarantee premium equal to all of the issuer's tax and service expenses, plus the interest due under the registered bond. All payments are generally paid to the recipients intra-day.

Amortisation and provisioning

The bond amortises in line with the mezzanine tranche. Amortisation of the mezzanine tranche is a trigger to release funds from the collateral account to the investor, which will reduce the outstanding notional of the bond.

The principal amortisation collected from the portfolio is first allocated to the three tranches pro-rata. This then changes to semi-pro-rata, (the junior tranche stops amortising and all funds are allocated to the senior and mezzanine tranches) after either two credit events have occurred (one after the ramp-up phase), or the outstanding junior tranche has reduced to 50% of its maximum value (the maximum value is influenced by the ramp-up).

The determination of realised losses for commercial real estate loans can be a lengthy process. The amortisation of the attached tranches will therefore be blocked for the expected loss allocated to the tranche. If the actual loss is determined, it will be allocated and the outstanding tranches will be adjusted accordingly.

This mechanism to allocate losses seeks to prevent credit enhancement from being eroded by amortisation.

Pro-rata amortisation and portfolio concentrations

Pro-rata amortisation of the structure is credit-negative for the bond rating because credit enhancement in nominal terms erodes as the concentration of the reference portfolio increases. The negative effect from lower absolute credit enhancement of the bond is even more pronounced if there are high prepayments of assets with above BBB+ credit quality.

Scope reviewed the expected development of concentrations over time under the scheduled amortisation plan. The ten largest exposures in the portfolio at any payment date after the fourth year, have a higher credit quality than the rated bond. Until the fourth year, two assets are of lower credit quality, albeit still investment grade. Concentrations significantly increase after the two lower-quality loans have been repaid in the third and fourth year.

5 Portfolio modelling

Scope modelled the default distribution of the reference portfolio loan by loan using a Monte Carlo simulation. For each loan, Scope modelled a default probability (taking into account the default over the loan's term and at refinancing), a recovery upon default and asset correlations between the loans.

The default distribution and the expected recoveries were then used for cash flow analysis to compute the expected loss and expected life of the rated instrument, reflecting the impact of pro-rata amortisation in the transaction.

Scope derived for the portfolio an average default probability of 26.6% over a weighted average life of 8.2 years. Scope considered for the portfolio an average recovery rate of 96.5%, based on detailed assumptions on the properties' market value declines. This rate accounts for recovery costs of between 10% and 22.5%, depending on the property jurisdiction, and incorporates the absolute recovery-rate cap of 98% for each loan, to address the idiosyncratic recovery risk.

Scope applied pairwise asset correlations between the loans, ranging from 45% to 65%, which consider the property type and location, as well as the exposure size (Figure 17). Scope also assumed perfect correlation for loans belonging to the same obligor group.

Figure 17. Correlation framework

Factor category	Factor values	Correlation
Global	N/A	15%
Location	Germany; France; Netherlands	10%
Property type	Industrial; Office; Residential; Retail; Other	20%
Top loan (>5%)	Top loan	20%

Scope assumed a 0% constant prepayment rate because the portfolio reflects current financing conditions, which reduces incentives to prepay.

Pro-rata amortisation erodes absolute credit enhancement, but also reduces risk exposure

Pro-rata amortisation and synthetic excess spread require cash flow modelling

6 Ratings

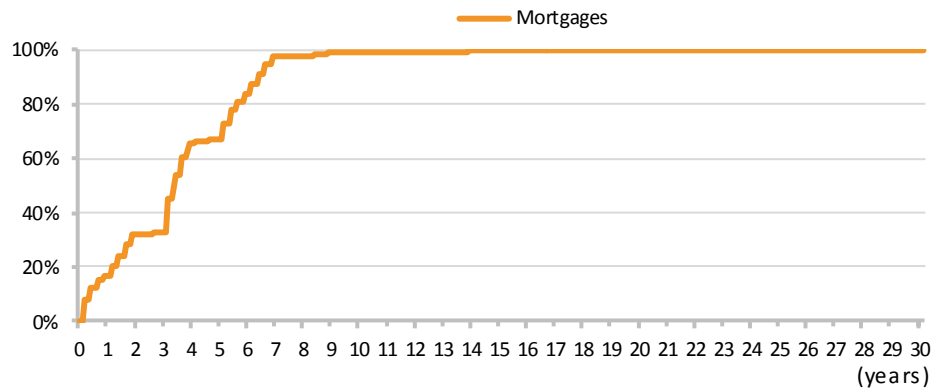
Scope assigned a BBB_{SF} rating to the registered bond, based on the portfolio quality in the context of the transaction mechanisms and the available credit enhancement. We ran a cash flow analysis under a non-parametric portfolio-default-rate distribution, which reflects the default characteristics in terms of magnitude and timing of the assets. We expect a weighted average life of 6.3 years for the bond not considering the extension of the risk horizon from the ramp-up.

Scope used a bespoke cash flow tool to analyse the transaction. The model implements the main structural features of the transaction including the pro-rata amortisation of the structure and the limited use of excess spread.

The cash flow tool was combined with the probability distribution of portfolio default rates to calculate the probability-weighted loss (i.e. expected loss) for the bond. The cash flow tool also produces the expected weighted average life of each of the rated tranches.

Figure 18 shows the expected default timing that results from the Monte Carlo simulation of portfolio defaults.

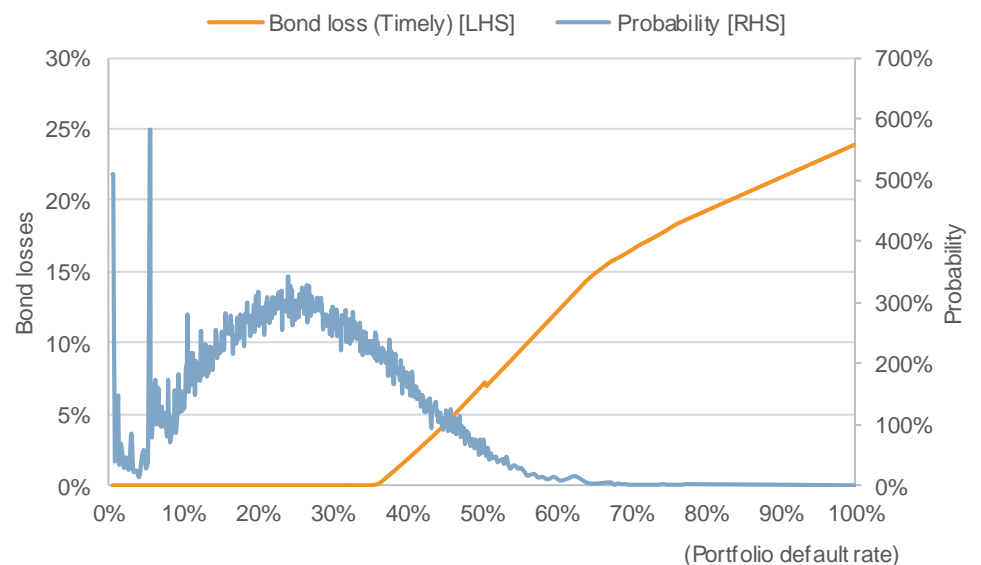
Figure 18. Cumulative default timing from simulation



BBB_{SF} bond rating accounts for the probability-weighted loss from all possible default rate scenarios

Figure 19 shows the losses of the bond under all default rate scenarios from 0% to 100%. The chart displays the benefit that the bond receives from the credit enhancement and the high portfolio recovery rate, which allows it to sustain portfolio defaults beyond the 0.7% subordination.

Figure 19. Bond losses from portfolio default rate scenarios of 0 to 100%



7 Rating stability

Scope tested the resilience of the rating against deviations from main modelling parameters including tenant quality, average recovery rates, and prepayments. This analysis has the sole purpose of illustrating the sensitivity of the rating to input assumptions and is not indicative of expected or likely scenarios.

The rating would decrease by two notches if the average tenant quality is decreased to B.

The rating would decrease by nine notches if the recovery rate assumption on the portfolio is reduced by 50%.

The rating would decrease by two notches if the assets with the best credit quality (17 loans accounting for 25.8% of the current reference portfolio) were prepaid immediately.

8 Counterparty risk

Scope applied Scope's '*Methodology for Counterparty Risk in Structured Finance*' (August 2016, available on www.scooperatings.com).

The issuer has two accounts, a collateral account and an account to collect the guarantee premium from Deutsche Hypothekenbank. The collateral account is held with Deutsche Hypothekenbank. The guarantee-premium collection account is held at Banque Internationale à Luxembourg.

Commingling risk from collateral account bank

Scope considers the risk of commingling losses from the account bank Deutsche Hypothekenbank (Actien-Gesellschaft) to be excessive. Therefore the bond's rating cannot exceed the rating commensurate with the credit quality of the bank. Scope has performed a private rating on the bank.

Deutsche Hypo holds all the funds available for bond-principal repayment over the life of the transaction. This amount is only reduced by portfolio amortisation allocated to the mezzanine tranche, which would trigger a release of the corresponding amount from the collateral account. In addition, the bank is also the payer of the guarantee premium, which is the only source for bond interest payments. There are no counterparty replacement triggers to protect the transaction from a deterioration of Deutsche Hypo's credit quality.

Scope will monitor the credit quality of the account bank, which we will update and incorporate in our rating during the life of the transaction.

Commingling risk from issuer account bank

Scope considers the commingling risk from the issuer account bank to be negligible as the exposure (the periodic guarantee premium) is only intra-day. In addition, the bank has a higher credit quality than the rated bond, as indicated by external ratings.

Banque Internationale à Luxembourg SA receives the guarantee premium from Deutsche Hypo on the payment date and forwards the respective amounts on the same day to tax authorities, senior-ranking service providers and investors.

Other counterparties

Scope assumes there is no further counterparty credit risk from Sanne Fiduciary Services Limited, Sanne Group SA and BBWP GmbH Wirtschaftsprüfungsgesellschaft. These counterparties perform the account administration and provide corporate services and trustee services, without commingling any funds from the transaction.

Operational and commingling risk from servicer

The transaction does not face operational or servicer commingling risk, due to the synthetic nature of the transaction and the guarantee-termination trigger linked to the solvency of Deutsche Hypo.

A default of Deutsche Hypo leads to a termination of the guarantee and a release of all collateral funds from the collateral account to the investors.

Exposure of the transaction to Deutsche Hypo is excessive

Only intra-day exposure of the transaction to Banque Internationale à Luxembourg

Restructuring takes place through amendment, leaving all non-amended duties in effect

9 Legal structure

Legal framework

This securitisation is governed by the laws of Germany and Luxembourg. The special purpose vehicle is bankruptcy-remote, is established under Luxembourg law, and is represented by its board of directors.

The contracts that govern the transaction are under German law, but reference the 2004 Luxembourg securitisation law.

The issuer

AEBG SA – Compartment 2 is the special purpose vehicle that was already used for the transaction before this restructuring. The restructuring takes place through an amendment agreement, which introduces a portfolio ramp-up, the excess-spread mechanism and a restructuring of the attachment and detachment points of the mezzanine tranche. The amendment agreement does not change Deutsche Hypothekenbank's duties to cover all the tax and servicer costs of the issuer. Therefore Scope expects the bank to cover all obligations that might arise from the transaction before the restructuring.

Use of legal and tax opinions

Scope reviewed the legal opinion produced by Clifford Chance LLP, the legal advisers of the originator.

The transaction conforms to international securitisation standards and supports the general legal analytical assumptions of Scope (see '*Legal Risks in Structured Finance – Analytical Considerations*', dated January 2015 and available in www.scoperatings.com).

Tax opinions are not required, as Deutsche Hypo is obliged to pay all tax claims that relate to the issuer.

10 Monitoring

Scope will monitor this transaction on the basis of performance reports produced by the servicer and any other information received from the originator. The rating will be monitored continuously and reviewed at least once a year, or earlier if warranted by events.

Scope analysts are available to discuss the rating analysis in detail, the risks to which this transaction is exposed, and ongoing monitoring of the transaction.

11 Applied methodology and data adequacy

For the analysis of this transaction, Scope applied its '*General Structured Finance Rating Methodology*', (August 2016) and its '*Methodology for Counterparty Risk in Structured Finance*' (August 2016), both available on our website www.scoperatings.com.

Scope considers the quality of the available information on the underlying portfolio to be generally satisfactory. However, information for some properties was limited, which Scope reflected in its modelling assumptions.

APPENDIX I SUMMARY OF PORTFOLIO CHARACTERISTICS

Figure 20 is a summary of the portfolio characteristics considered in Scope's analysis.

Figure 20. Preliminary portfolio characteristics⁴

Key features	Preliminary portfolio as of 31 Aug 2016
Originator (% of balance)	Deutsche Hypothekenbank (Actien-Gesellschaft)
Closing date	9 November 2016
Reference portfolio balance (EUR m)	865.4*
Number of assets	92
Number of obligors	50
Average asset size (EUR)	9,406,530*
Maximum asset size (EUR)	44,416,090*
Corporate obligors	100.0%
Largest obligor	5.1%
Top 10 obligors	43.8%
Largest city	17.0%
Top 3 cities	40.0%
Largest commercial real estate sector (% of balance)	Retail (32.9%)
Top 3 commercial real estate sectors	79.5%
Weighted average life (0% default rate and 0% constant prepayment rate) (years)	8.2
Weighted average internal 1-year PD	0.21%
Portfolio loan-to-value	52.0%
Maximum asset loan-to-value	96.0%
Amortising loans	20.0%
Semi-bullet loans ⁵	31.6%
Bullet loans	48.4%
Mortgages	100.0%

* Figures refer to the reference portfolio and are net of the 5% of every single exposure retained by Deutsche Hypo.

⁴ Portfolio characteristics show the starting portfolio as of 31 August 2016. The portfolio will be subject to a ramp-up.

⁵ Semi-bullet loans have a large balloon payment at maturity.

APPENDIX II COMMERCIAL REAL ESTATE LOAN ANALYSIS

Scope has used the following framework to analyse the commercial real estate loans in this transaction and to produce assumptions to model the credit quality of each loan in the portfolio. Scope has generated two assumptions for each loan: the loan's default probability, both over its term and at maturity, and the recovery rate upon default (Figure 21).

Our fundamental analysis of risk is performed in the following order: i) tenants and tenancy contracts, ii) properties, and iii) the loan characteristics. Each phase of the analysis builds on the results from the previous phase, i.e. bottom-up approach. This analysis takes into account the originator's strategic positioning in the market, the consistency of this positioning with its risk appetite, and the characteristics of the credit products it originates.

Our analysis is based on the available cash generated by rent (net of operating expenses) and by potential workout proceeds. The cash available to repay both the loan and the market value of underlying properties is stressed under rating-conditional scenarios (i.e. the higher the target rating scenario, the higher the stress applied). We derive the level of rating-conditional stress from previous commercial real estate cycles observed in Europe generally, with a focus on Germany, France and the Netherlands.

Stressed cash flows over a loan's life influence the probability of a loan defaulting before its maturity, i.e. the 'term default probability'; while the property's market value drives refinancing risk and the probability of a loan defaulting at maturity, i.e. the 'refinancing default probability', as well as the severity of default. Refinancing risk plays a vital role because commercial real estate loans typically do not fully amortise.

Figure 21. Analytical framework for commercial real estate loans

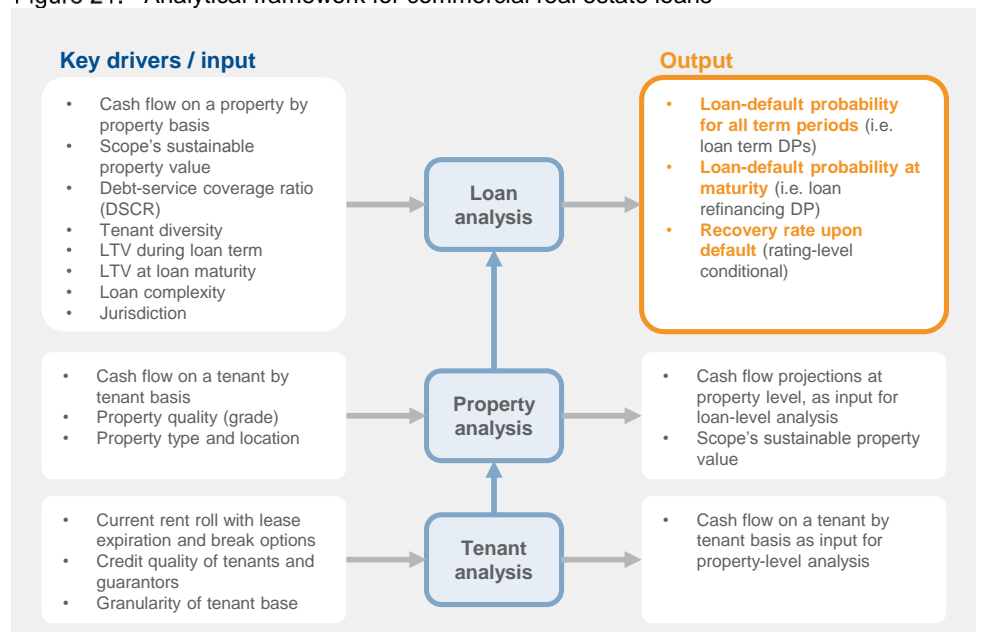


Figure 21 also shows the analytical steps Scope has used to derive the expected loss on each loan. Scope forecasts the cash flow that is available to service a loan.

Rental income is the main factor used to derive a loan's default probability and recovery rate, as it drives both the ability to service a loan (term default probability) and the property's sustainable value. The sustainable value is used to derive refinancing default probability and loss given default.

Tenancy analysis

Scope has analysed the current rent roll for all properties that secure a given loan. We then used the assumptions derived from the rent-roll analysis to forecast the cash flow available to service future debt instalments. Scope has analysed the quality of tenants in a given property by considering their financial strength, creditworthiness, business sectors and geographic diversification. Tenant quality drives the term default probability.

The second-most-important factor driving property values and loan default is the likelihood of a tenant exercising break options on a lease. Break options also worsen the risk of property vacancies during a market downturn. Scope's analysis also considers the likelihood of a lease's renewal upon its expiry.

Creditworthiness of tenants

Due to the limited availability of tenant information in the context of this transaction, Scope has made generic assumptions on the creditworthiness of corporate tenants and households, which were inferred from default frequencies observed in Germany, France and the Netherlands (see 'Tenancy analysis' on page 6).

Our cash flow projections on a property have incorporated the default of tenants, the corresponding vacancy periods, and corrections in rent after a lease contract's termination.

Lease expiries and break options

Scope has also analysed the factors that would affect a tenant's decision to either remain in a property or exercise a break option. Such factors are: the level of competition on the local market (i.e. supply versus demand for the property's type and location); contractual rental levels compared to the average on the local market; and characteristics of the tenant's line of business.

Scope believes a property's risk of vacancy increases when the region of its location also has a high rate of vacancy. This risk also increases when the nature of a tenant's business allows the option to vacate a property when the lease expires, e.g. law firms or consultancy firms.

If the tenant-base is granular, Scope derives its assumptions in relation to tenants' behaviour – at lease contract expiry or break option – by comparing contractual rent with the current level on the market, i.e. the estimated rental value (ERV). For example, we assume a lease will be terminated if a tenant's rent is 10% higher than the estimated rental value. Conversely, we assume a tenant is more likely to extend a lease if the rent is fairly priced or under the average local rate.

Property analysis

Scope's property analysis looks at a property's characteristics and quality – which results in a property grade – and the local property market's characteristics and condition. These factors influence our cash flow projections and view on a property's sustainable value.

Scope's property grade (PG1 to PG5)

Scope has not assigned property grades to the properties underlying the mortgages in this portfolio because of a lack of information other than location. Instead, Scope took a conservative assumption (i.e. property grade PG3) which understates the average quality of the properties. Scope's property grades give its view on the quality of a property and reflect assumptions used to model cash flows a property can generate sustainably. This is also used to derive the property's sustainable value.

The property grades take into account a property's distinct characteristics i.e. type, location and attributes. Property grades reflect the properties' condition and attractiveness to the market by examining: i) maintenance costs and capex (historical and expected); ii) vacancy rates (historical and expected); iii) micro and macro location; iv) age; and v) the expiry profile of lease contracts. The information used for the analysis is sourced from: i) on-site visits; ii) valuation reports from established industry experts; and iii) market studies from reputable sources.

The highest property grade is PG1, e.g. a prime landmark building in a micro/macro location ideal for its usage type. The lowest is PG5, e.g. a property in poor condition in a degraded or undeveloped/unconsolidated location.

The property grade has a significant impact on the estimated sustainable property value. This is because property grade affects projected cash flows and sustainable yield, which are factors used to determine the level and volatility of the sustainable property value. High property-grade properties have a more stable sustainable value.

Market environment

The market attractiveness for a type of property influences: (i) the volatility of market and rental values, (ii) property yields, (iii) take-up, and, (iv) rental levels.⁶

Rental-level development. Scope has adjusted rental levels upon the expiry of a lease if these deviate from the estimated rental value. The estimated rental value is based on Scope's experience, as well as market research from reputable public sources such as the Investment Property Database (IPD) for Germany, France and the Netherlands.

Duration of vacancy periods. The duration of a vacancy after a lease is terminated is a function of both the average lease length in a specific market and the peak vacancy rate observed in the last cycle. This base assumption applies to property grade PG3, the grade level relevant to this transaction. The property-specific assumption results from upward adjustments for lower-quality properties, i.e. PG4 or PG5, and vice versa for PG 1 or PG 2.

Figure 22. Calculation of vacancy periods for property grade PG3

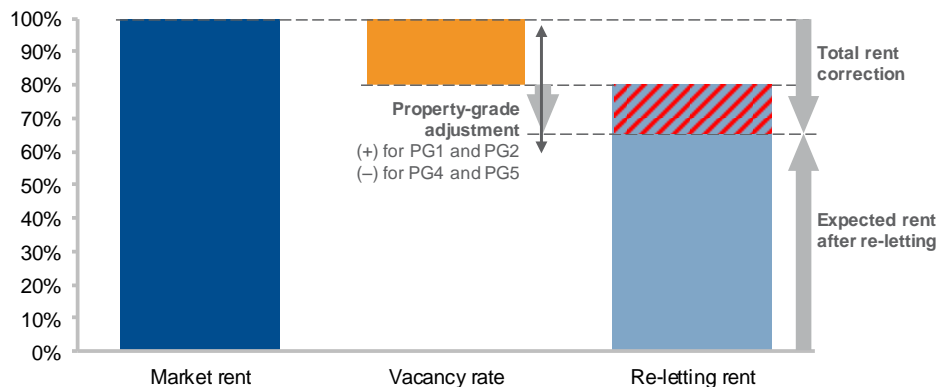
Deutsche Hypo CRE portfolio	
Average lease duration (months)	120
Structural vacancy rate	18%
Vacancy period for a PG3 property (months)	21.6
Adjustment for property quality	Analytical judgment

Re-letting likelihood. We have assumed that re-letting after a lease's termination is generally possible. However, this likelihood can be limited by i) the lease terms; ii) market vacancy rates; and iii) the property's quality. This is illustrated in Figure 24.

Scope has generally assumed that when a lease expires, the contract is terminated and the tenant vacates the property. Before re-letting, Scope has considered a vacancy period, subject to a rental-level haircut that equals the vacancy rate. These adjustments reflect the impact market vacancies have on the likelihood of re-letting and the terms of new contracts.

Scope has adjusted the applicable vacancy rate in line with the specific property grade, which reflects the property quality, if information is available on a specific property. We believe higher property grades increase the likelihood of re-letting as well as raise the expected rental value after re-letting. See Figure 23.

Figure 23. Derivation of re-letting rent level



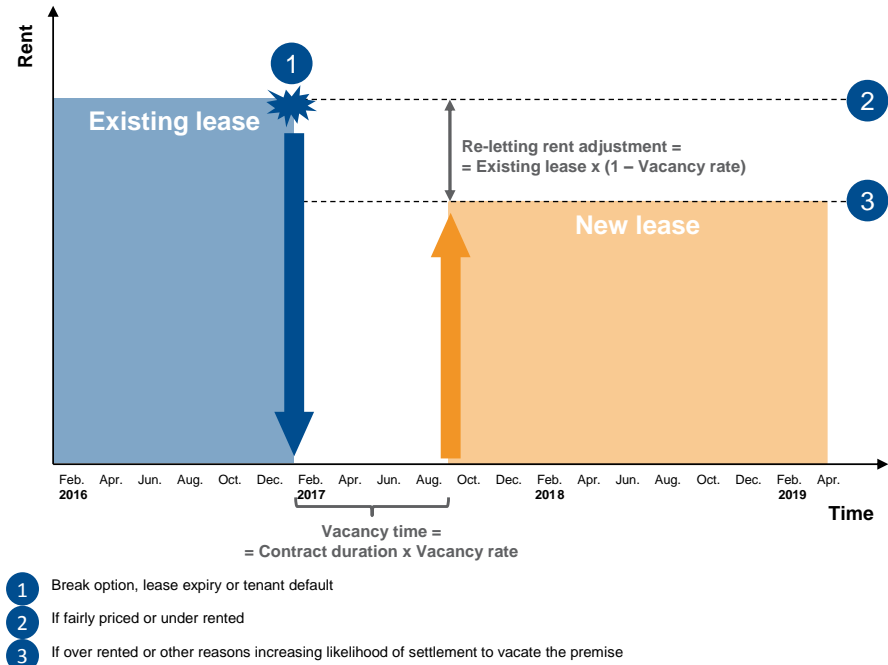
Property cash flow projections

Scope has built its expectation of sustainable cash flow for each property for every year over the life of the loan. We started with the current rent roll and then generated a projected cash flow based on assumptions resulting from the tenancy analysis, market environment and Scope's property grade. Sustainable cash flow was then used to determine the property's sustainable value (which drives the refinancing default probability and the recovery rate after default). We have also calculated the debt-service coverage ratio by using sustainable cash flow, rather than actual cash flow.

⁶ Newly rented space, typically in square metres, for a given property market or submarket in a given period of time.

Figure 24 shows an example of events that might affect a property’s cash flow over the life of a loan.

Figure 24. Example: sustainable cash flow of a property



Scope’s sustainable property value

Scope has based its opinion on the property yield on reputable sources of market research relevant for Germany, France and the Netherlands (Figure 11). The property’s yield reflects the return on investment, i.e. the relationship between rental income and property value. Scope values a property by using the current yields of comparable properties and locations.

Scope’s yield assumption and key assumptions for cash flow development have determined the sustainable property values in the quantitative analysis, both through the cycle during the loan’s life and at the loan’s maturity. Scope’s assumption of sustainable property value is defined to ensure its midpoint falls between boom and bust market cycles. This assumption is the main factor in the loan-to-value ratios that Scope derives, which drive the loan’s recovery rate and refinancing default probability. The derivation of default probability at maturity is described in more detail in the ‘Loan analysis’ section below.

Scope’s yield assumption is the discount applied to a property valuation for a property’s type and market, in the middle of a real estate cycle. The yield assumption also incorporates information from on-site visits and/or valuation reports.

The sustainable cash flow is discounted at Scope’s yield assumption for ten years; the tenth year is discounted for perpetuity. This provides the sustainable market value Scope uses to assess the loan’s refinancing risk and loss given default. Scope may adjust the assumption for sustainable market value during rating monitoring if there are significant shifts in cash flow and/or market yield. Scope also models fluctuations in the sustainable market value.

Loan analysis

Scope has calculated the default term structure (i.e. the time distribution of default probabilities) in the loan-analysis phase. The default term structure of the loan reflects: i) default probabilities for every period over the life of the loan (term default probabilities); and ii) the default probability at the loan’s maturity (refinancing default probability).

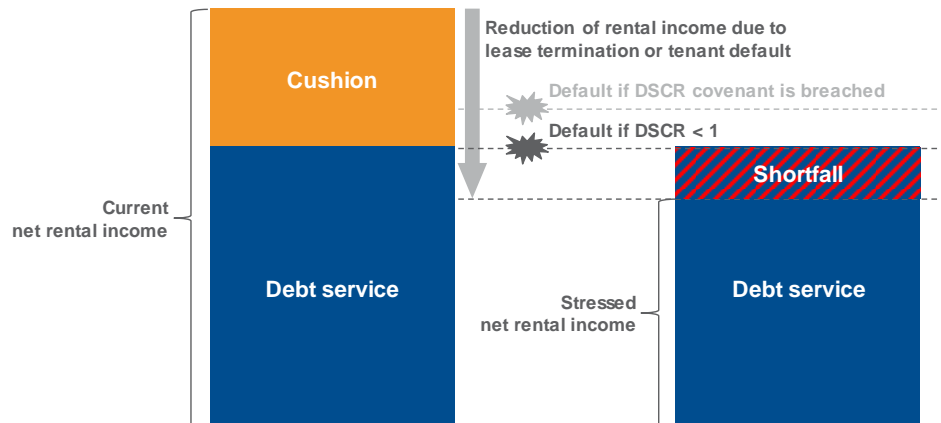
Scope also estimates the severity of loan defaults during the loan-analysis phase. Expected loss upon default is driven by the asset’s loan-to-value ratio.

Default probability during the life of the loan

The aggregated sustainable cash flows for each property represent the amount available for the interest and principal payments due on a given loan. This is reflected in the debt-service coverage ratio (DSCR) expectations or the interest coverage ratio.

Scope has accounted for loan characteristics such as strong covenants, cash-trapping mechanisms, cash reserves, and hedging. Scope considers a loan as defaulted if cash flows are insufficient to service debt, or when loan-level DSCR covenants are breached. We have simulated the probability of default for every period over the life of the loan, which captures tenant defaults, vacancy periods and adjustment to rent after a property is re-let. In general, a higher DSCR provides a better cushion against deteriorating cash flows, which could ultimately lead to a default of a loan.

Figure 25. Tenant defaults and lease termination drive term default probability



Refinancing default probability

The risk of the failure to refinance outstanding debt at the scheduled maturity increases the default probability at the end of the contract. Generally, the larger the balloon component of any partially amortising loan, the greater the risk. This risk is highest for bullet loans.

The main driver of the refinancing default probability is the expected loan-to-value at maturity, (exit-LTV). Other factors also contribute: loan features, property type, property grade, and market conditions at refinancing.

Scope's expectation of the exit-LTV reflects expected contractual amortisation during the life of the loan. The expected exit-LTV is the total outstanding loan amount expected at maturity divided by Scope's assumption on expected sustainable property value.

At maturity, Scope deems a loan as defaulted when the property's value is lower than the loan's outstanding balance (i.e. when the exit-LTV is above one). The actual value of the property when a loan matures is a random variable that may deviate from the expected sustainable property value.

Refinancing default probability is higher for properties with low property grades, all else being equal and equates to the probability that the loan's outstanding balance at maturity exceeds the sustainable property value. This effectively uses the Merton approach to analyse default at the moment of refinancing. The volatility of the sustainable exit property value is a function of the property grade.

Figure 26 illustrates the country-specific refinancing default probabilities at different exit-LTV levels and property grades. Scope has assumed that for an average property of property grade PG3, a lender would be indifferent about refinancing the loan if the exit-LTV is 90% (i.e. equality of likelihood of default and successful refinancing). This loan-to-value threshold is the indifference exit-LTV for property grade PG3. The indifference exit-LTV is linked to the break-even property value shown in Figure 27 (red line). Scope uses similar curves to derive the market-specific tables that indicate the refinancing default probability for a given exit-LTV and property-grade pairs.

Under an alternative view, defaults occur when a borrower cannot provide sufficient equity for the loan. Equity contribution is essential for commercial real estate financing. Lenders

require more equity on loans when these are used to finance lower-quality properties. The maximum loan amount that can be refinanced depends on the property grade.

We have modelled the volatility of property values with a random process⁷ that captures adverse-value paths over the life of the loan. Scope's forecast of a property's value, or the expected exit value, equates to its sustainable value (see 'Scope's sustainable property value'). The longer the life of the loan, the higher the chance of adverse-value paths, and the more dispersed the probability distribution of exit values becomes. In the context of this transaction, Scope has considered the following refinancing default probabilities for the commercial real estate markets in Germany, France and the Netherlands (Figure 26).

Figure 26. Refinancing default probabilities for Germany, France and the Netherlands

LTV at maturity	Germany					France					Netherlands				
	Property grade					Property grade					Property grade				
	PG1	PG2	PG3	PG4	PG5	PG1	PG2	PG3	PG4	PG5	PG1	PG2	PG3	PG4	PG5
40%	0.5%	0.5%	1.0%	2.0%	2.0%	0.5%	0.5%	1.0%	2.0%	2.0%	0.5%	0.5%	1.0%	2.0%	2.0%
50%	0.5%	0.5%	1.0%	2.1%	2.1%	1.1%	1.1%	2.0%	3.7%	3.7%	1.0%	1.0%	1.9%	3.5%	3.5%
60%	0.5%	0.5%	1.2%	2.6%	3.6%	2.6%	2.7%	4.3%	7.0%	7.1%	2.3%	2.3%	3.9%	6.4%	6.5%
70%	0.7%	0.9%	2.4%	7.0%	14.8%	6.4%	6.4%	9.3%	13.5%	13.7%	5.5%	5.6%	8.3%	12.3%	12.6%
80%	2.0%	3.6%	11.3%	31.5%	58.7%	15.7%	15.9%	20.4%	26.3%	26.7%	13.9%	14.2%	18.6%	24.5%	25.2%
90%	14.5%	26.1%	51.7%	79.6%	94.4%	39.5%	39.8%	45.2%	51.4%	52.1%	36.8%	37.3%	43.0%	49.6%	50.5%
100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 27 illustrates the derivation of a loan's refinancing default probability using the cumulative probability distribution of property values at maturity as well as relevant value thresholds. The default probability is the probability that a property's value falls below the break-even value, which is derived from rental cash flow analysis. The break-even value is calculated using the loan's outstanding balance at maturity and the indifference exit-LTV of lenders for the corresponding property grade. This is represented by the following expressions:

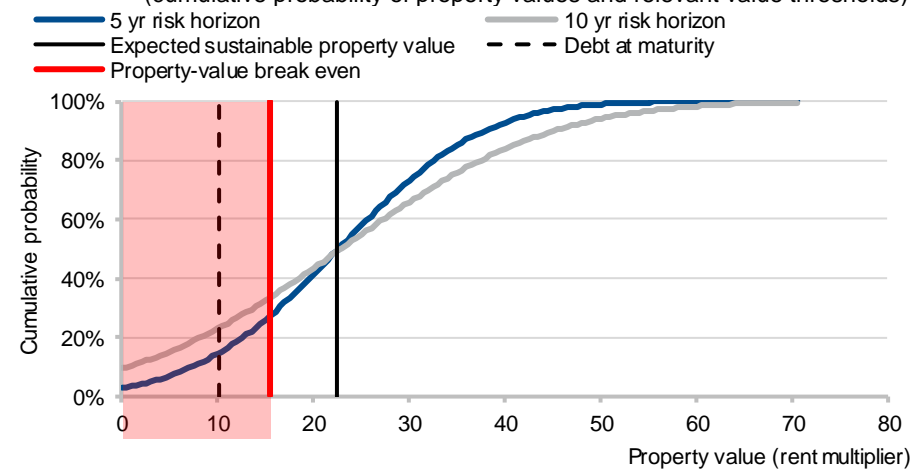
$$\text{Refinancing DP} = \text{probability}\{\text{property values} < \text{Break-even value}\}$$

where

$$\text{Break-even value} = \text{Balance}_{\text{maturity}} \times \text{Indifference exit LTV}_{\text{property grade}}$$

A property value below the break-even line (red-shaded area in Figure 27) would result in a loan defaulting at maturity because it is impossible to refinance outstanding debt at the maturity date. Figure 27 also shows that the refinancing default probability increases when the risk horizon is longer (i.e. increasing the risk horizon from five years to 10 years increases the probability that property values will fall below the break-even threshold).

Figure 27. Example of derivation of refinancing default probability (cumulative probability of property values and relevant value thresholds)



Finally, high exit yields make it more likely that a lender will refinance a loan. The exit yield equals the sustainable cash flow divided by the loan's expected balance at maturity. The

⁷ Ornstein-Uhlenbeck model with drift.



AEBG SA – Compartment 2

New Issue Rating Report

exit yield is the maximum interest rate that the sustainable cash flow can support. For example, a loan with an exit yield of 8% can only support refinancing at an interest rate of up to 8%; a higher interest rate would result in interest coverage ratios of below one.

Recovery rate

Scope has determined its loan-by-loan recovery assumptions, accounting for the sustainable property value upon default and the outstanding balance of the respective loan, as well as foreclosure costs applicable for the respective market (see Figure 13 and Figure 14).

We have assumed property foreclosure will occur during a recovery process, even when refinancing into a new loan contract after default is often the more likely option. Consequently, the money recovered after default is the net amount received after the enforcement of the mortgaged security. The recovered amount is net of enforcement costs and any claims that rank senior to the loan being analysed.

APPENDIX III REGULATORY AND LEGAL DISCLOSURES

Important information

Information pursuant to Regulation (EC) No 1060/2009 on credit rating agencies, as amended by Regulations (EU) No. 513/2011 and (EU) No. 462/2013.

Responsibility

The party responsible for the dissemination of the financial analysis is Scope Ratings AG, Berlin, District Court for Berlin (Charlottenburg) HRB 161306 B, Executive Board: Torsten Hinrichs (CEO), Dr Stefan Bund, Dr Sven Janssen.

The rating analysis has been prepared by Sebastian Dietzsch, Lead Analyst. Guillaume Jolivet, Committee Chair, is the analyst responsible for approving the rating.

Rating history

The rating concerns newly issued financial instruments, which were evaluated for the first time by Scope Ratings AG. Scope had already performed a preliminary rating for the same rated instrument in accordance with Regulation (EC) No 1060/2009 on rating agencies, as amended by Regulations (EU) No 513/2011 and (EU) No 462/2013.

Instrument ISIN	Date	Rating action	Rating
Namenschuldverschreibung	10.10.2016	new	(P)BBB _{SF}

Information on interests and conflicts of interest

The rating was prepared independently by Scope Ratings but for a fee based on a mandate of the issuer of the investment, represented by the management company.

As of the time of the analysis, neither Scope Ratings AG nor companies affiliated with it hold any interests in the rated entity or in companies directly or indirectly affiliated to it. Likewise, neither the rated entity nor companies directly or indirectly affiliated with it hold any interests in Scope Ratings AG nor any companies affiliated to it. Neither the rating agency, the rating analysts who participated in this rating, nor any other persons who participated in the provision of the rating and/or its approval hold, either directly or indirectly, any shares in the rated entity or in third parties affiliated to it. Notwithstanding this, it is permitted for the above-mentioned persons to hold interests through shares in diversified undertakings for collective investment, including managed funds such as pension funds or life insurance companies, pursuant to EU Rating Regulation (EC) No 1060/2009. Neither Scope Ratings nor companies affiliated with it are involved in the brokering or distribution of capital investment products. In principle, there is a possibility that family relationships may exist between the personnel of Scope Ratings and that of the rated entity. However, no persons for whom a conflict of interests could exist due to family relationships or other close relationships will participate in the preparation or approval of a rating.

Key sources of Information for the rating

Offering circular and transaction-related contracts; management due diligence presentation provided by the originator; fundamental property and tenant information provided by the originator; loan-by-loan portfolio information, and legal opinions.

Scope Ratings considers the quality of the available information on the evaluated entity to be satisfactory. Scope ensured as far as possible that the sources are reliable before drawing upon them, but did not verify each item of information specified in the sources independently.

Examination of the rating by the rated entity prior to publication

Prior to publication, the rated entity was given the opportunity to examine the rating and the rating drivers, including the principal grounds on which the credit rating or rating outlook is based. The rated entity was subsequently provided with at least one full working day, to point out any factual errors, or to appeal the rating decision and deliver additional material information. Following that examination, the rating was not modified.

Methodology

The methodology applicable for this rating is “*General Structured Finance Rating Methodology*”, dated August 2016, and “*Methodology for Counterparty Risk in Structured Finance*”, dated August 2016. Both files are available on www.scooperatings.com. The historical default rates of Scope Ratings can be viewed on the central platform (CEREP) of the European Securities and Markets Authority (ESMA): <http://cerp.esma.europa.eu/cerp-web/statistics/defaults.xhtml>. A comprehensive clarification of Scope’s default rating, definitions of rating notations and further information on the analysis components of a rating can be found in the documents on methodologies on the rating agency’s website.

Conditions of use / exclusion of liability

© 2016 Scope Corporation AG and all its subsidiaries including Scope Ratings AG, Scope Analysis, Scope Investor Services GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope’s ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope cannot, however, independently verify the reliability and accuracy of the information and data. Scope’s ratings, rating reports, rating opinions, or related research and credit opinions are provided “as is” without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or otherwise damages, expenses of any kind, or losses arising from any use of Scope’s ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party, as opinions on relative credit risk and not as a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope’s credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings AG at Lennéstraße 5 D-10785 Berlin.

Rating issued by

Scope Ratings AG, Lennéstraße 5, 10785 Berlin.