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CREDIT OPINION
19 October 2023

New Issue

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RevoCar 2023-2 UG (haftungsbeschränkt)

New-Issue – Bank11 issues thirteenth auto loan transaction in Germany

Capital structure

Exhibit 1
Definitive ratings

Series	Rating	Amount (million)		% of assets	Legal final maturity	Coupon	Subordination[1]	Reserve fund[2]	Total credit enhancement[3]
Class A	Aaa (sf)	€	441.00	88.20%	Sep-36	1mE + 0.62%	11.80%	1.20%	11.80%
Class B	Aa2 (sf)	€	33.00	6.60%	Sep-36	1mE + 2.75%	5.20%	0.00%	5.20%
Class C	A3 (sf)	€	9.00	1.80%	Sep-36	1mE + 3.75%	3.40%	0.00%	3.40%
Class D	Ba1 (sf)	€	11.00	2.20%	Sep-36	1mE + 6.50%	1.20%	0.00%	1.20%
Class E	NR	€	6.00	1.20%	Sep-36	1mE + 10.50%	0.00%	0.00%	0.00%
Total		€	500.00	100.00%					

(1) At close.
(2) A liquidity reserve fund is available to cover the Class A notes interest, senior expenses and swap payments. This liquidity reserve is fully funded at closing at EUR 6.0 million. Since the liquidity reserve fund is not be available to cover losses, it does not provide credit support.
(3) No benefit is attributed to excess spread.
Sources: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

Summary

RevoCar 2023-2 UG is a static cash securitisation of auto loan receivables that is extended by Bank11 für Privatkunden und Handel GmbH (Bank11) mainly to private obligors residing in Germany.

Our analysis focuses, among other factors, on (1) an evaluation of the underlying portfolio of receivables; (2) historical portfolio performance data on defaults and recoveries from March 2016 to July 2023; (3) the credit enhancement provided by subordination; (4) the liquidity support available in the transaction by way of principal to pay interest, the cash reserve for Class A notes, and excess spread; and (5) the legal and structural aspects of the transaction.

Our cumulative default expectation for the asset pool is 1.5%, the recovery rate is 35.0% and portfolio credit enhancement (PCE) is 8.0%.

Closing date
19 October 2023

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Credit strengths

» ***Granular portfolio composition:*** The securitised portfolio is highly granular, with the largest borrower representing 0.03% of the portfolio value and the 10 largest borrowers representing 0.26%. It also benefits from good geographical diversification. (See "Asset description - Asset as of the cut-off date")

» ***Static structure:*** The structure does not include a revolving or pre-funding period during which additional portfolios may be sold to the issuer. This feature limits portfolio performance volatility caused by the purchase of additional receivables in revolving securitisation structures.

» ***Performance of previous transactions:***The eight transactions from the same originator previously rated by Moody's have performed generally in line with expectations. (See "Asset analysis - Comparables - Prior transactions of the seller/servicer")

» ***Experienced originator and servicer:*** Bank11 acts as originator and servicer in the transaction and has a number of years securitisation experience in originating and servicing auto loans in Germany. (See "Asset description - Originator and servicer").

» ***Interest rate swap:*** 100.0% of the loans in the pool pay a fixed rate, whereas the notes are be linked to one-month Euribor. The issuer has entered into an interest swap agreement with DZ Bank AG (Aa2/P-1; Aa2(cr)/P-1(cr)) to mitigate this risk, under which, the issuer pays a fixed rate and DZ Bank pays one-month Euribor.

Credit challenges

» ***Operational risk:*** Bank11 is an unrated entity which acts as both originator and servicer in the transaction. There are mitigants in place such as a back-up servicer facilitator, a liquidity reserve fund that is available to cover Class A notes interest, senior expenses and swap payments, and servicing fee reserve funded at closing. The servicing fee reserve is introduced to cover higher servicing fees following a servicer termination event. (See "Securitisation structure description - Detailed description of the structure").

» ***High LTVs***: The pool has a relatively high weighted average loan-to-value (LTV) ratio of 86.5%. 85.7% of loans have an LTV of higher than 70.0% and 70.8% of the loans have an LTV of higher than 80.0%. (See "Asset description - Asset as of the cut-off date")

» ***Clean-up call option:*** The originator will be able to exercise its clean-up call option when the aggregate principal balance is less than 10.0% of the initial aggregate principal balance as of the cut-off date. Performing receivables will be repurchased at par, whereas both delinquent and defaulted receivables will be repurchased at a price estimated by an independent appraiser. Additional portfolio losses may occur if delinquent loans are repurchased below the outstanding balance. (See "Securitisation structure analysis - Additional structural analysis - Repurchase of non-performing assets").

ESG considerations

We consider overall environmental, social, and governance (ESG) risk to be moderate for securitisations backed by auto loans. Our credit analysis of the transaction, which considers ESG risk, includes the risks to vehicles' recovery values from changes in carbon emissions regulations, the social and demographic trends that affect the obligors in ABS backed by auto loans, and the low exposure to severe weather events or other environmental factors. In addition, governance risk is largely mitigated by the structure of the transaction and our consideration of the transaction parties. Please refer to our Cross-Sector Rating Methodology: General Principles for Assessing Environmental, Social and Governance Risks, 28 September 2023, which explains our general principles for assessing ESG risks in our credit analysis globally.

» ***Environmental:*** This transaction has moderate exposure to meaningful environmental risks. Vehicles are subject to carbon and air pollution regulations, and changes in emissions regulations can affect their recovery value. Risks are mitigated, however, by the typical long lead times for changes in regulations and the short tenor of the assets of the transactions.(See "Asset analysis - Additional asset analysis - ESG - Environmental considerations")

» ***Social:*** The social risk is generally low in auto ABS transactions. Technological obsolescence, shifting demand patterns and changes in government policy mean that some segments will experience greater volatility in auto sales, recovery levels, and residual values, but the short tenor of the transaction mitigates the risk from long term trends. In addition, the geographical and demographical diversity of the obligors in loan pools should help protect the transaction from the risk of any one region or industry downturn.(See "Asset analysis - Additional asset analysis - ESG - Social considerations")

» ***Governance:*** Governance risks for this transaction are low based on the presence of transaction features such as risk retention, comprehensive agreed upon procedures (AUPs) report, servicing oversight, and R&W enforcement. (See "Securitisation structure analysis - Additional structural analysis - ESG - Governance considerations")

Key characteristics

The exhibit below describes the main asset characteristics of the securitised portfolio. WA and WAL stand for weighted average and weighted average life, respectively.

Exhibit 2

Asset characteristics

Cut-off date as of 30 September 2023

Seller/originator:	Bank11 für Privatkunden und Handel GmbH (Bank 11)
Servicer:	Bank11 für Privatkunden und Handel GmbH (Bank 11)
Receivables:	Loans granted mainly to private individuals residing in Germany to finance the purchase of new and used vehicles
Total amount:	€ 499,999,692.8
Length of revolving period in years:	Static
Number of obligors:	24,169
Number of loans:	24,346
New vehicle (as % of total pool):	30.6%
Used vehicle (as % of total pool):	69.4%
Private borrower (as % of total pool):	94.3%
Balloon loans (as % of total pool) :	73.9%
Average size of balloon payment (as % of initial pool balance):	47.2%
WA remaining term in years:	4.0
WA seasoning in months:	4.8
WAL of portfolio in years (excl. prepayments):	2.9
WA portfolio interest rate p.a.:	5.8%
Delinquency status:	No delinquent loans
Cumulative default rate observed:	Whole book cumulative average vintage value between March 2016-July 2023: approx. 1.2%
Recovery rate observed:	Whole book cumulative average vintage value between March 2016-July 2023: approx. 45.4%
Delinquencies:	Average monthly delinquencies between March 2016 - July 2023: 0.2% (31-60 days)
Cumulative default rate (modelled):	1.5%, in line with the peer group in the EMEA Auto ABS market
Recovery rate (modelled):	35.0%, in line with the peer group in the EMEA Auto ABS market
Aaa portfolio credit enhancement (PCE):	8.0%, is in line with the peer group in the EMEA Auto ABS market (equals a coefficient of variation of 66.9%)

Sources: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

The exhibit below shows the counterparties associated with the transaction. N/A stands for those counterparties that do not apply to the transaction.

Exhibit 3
Securitisation structure characteristics

Transaction parties	At closing
Issuer:	RevoCar 2023-2 UG (haftungsbeschränkt)
Back-up servicer(s):	N/A
Back-up servicer facilitator(s):	Intertrust (Deutschland) GmbH (Intertrust)
Cash manager:	Citibank Europe plc (Aa3/P-1, deposit ratings; Aa3(cr)/P-1(cr)), acting through it's Germany branch
Back-up cash manager:	N/A
Calculation agent/computational agent:	Citibank Europe plc (Aa3/P-1, deposit ratings; Aa3(cr)/P-1(cr)), acting through it's Germany branch
Back-up calculation/computational agent:	N/A
Swap counterparty:	DZ Bank AG (Aa2/P-1; Aa2(cr),P-1(cr))
Issuer account bank:	Citibank Europe plc (Aa3/P-1, deposit ratings; Aa3(cr)/P-1(cr)), acting through it's Germany branch
Collection account bank:	Citibank Europe plc (Aa3/P-1, deposit ratings; Aa3(cr)/P-1(cr)), acting through it's Germany branch
Paying agent:	Citibank Europe plc (Aa3/P-1, deposit ratings; Aa3(cr)/P-1(cr)), acting through it's Germany branch
Trustee/ data trustee:	Intertrust Trustees GmbH
Issuer administrator/corporate servicer provider:	Intertrust (Deutschland) GmbH (Intertrust)
Arranger:	UniCredit Bank AG (A2/P-1, deposit rating; A1(cr)/P-1(cr))
Lead manager(s):	UniCredit Bank AG (A2/P-1, deposit rating; A1(cr)/P-1(cr)) Banco Santander S.A (A2/P-1; A3(cr)/P-2(cr))
Custodian:	N/A
Liabilities, credit enhancement and liquidity	
Annualised excess spread at closing:	0.8% (weighted average stressed asset yield minus stressed senior costs, and coupons on Classes A-E notes)
Credit enhancement/reserves:	Subordination of notes; Excess spread
Form of liquidity:	Excess spread, liquidity reserve for class A, principal to pay interest mechanism
Number of months liquidity based on Moody's assumptions:	Approx. 3.4 months for Class A notes. The cash reserve is not available for the remaining tranches.
Interest payments:	Monthly in arrears on each payment date
Principal payments:	Pass-through on each payment date
Payment dates:	21st calendar day of each month First payment date: 21st November 2023
Hedging arrangements:	Fixed-floating interest rate swap

Sources: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

Asset description

The securitised assets are made up of monthly paying auto loans that Bank11 has granted mainly to private individuals (94.3%) or commercial borrowers (5.7%), resident or registered (as the case may be) in Germany.

The loan products consist of classical fully amortising loans (EvoClassic) at 26.1% of the pool balance and balloon loans (EvoSmart) at 73.9% of the pool balance.

Assets as of the cut-off date

Pool characteristics

The securitised portfolio balance amounts to € 499,999,692.8 for a total of 24,346 loans. The portfolio is collateralised by 30.6% new cars and 69.4% used cars. The securitised portfolio is very granular, with the largest and 10 largest obligor concentrations accounting for 0.03% and 0.26% of the portfolio balance, respectively.

As is common for German auto loan contracts, the seller, as the lender, assigns the security title registration of the vehicle to the issuer, but the vehicle is registered under the name of the borrower. Further characteristics can be summarised as follows:

» The loan agreement provides for the payment of fixed and equal monthly instalments (except for the last instalment as the case may be).

» Prepayments are possible for loans; a prepayment penalty will be applied.

The exhibit below summarises additional information about the securitised portfolio.

Exhibit 4

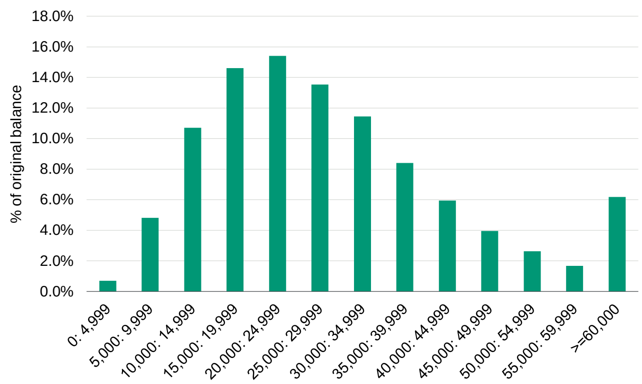
Additional information on asset characteristics

Average outstanding loan principal balance	€ 20,537.24
Number of dealers	3,959
Geographic concentration	
Largest region	North Rhine-Westphalia (21.0%)
2nd largest region	Bavaria (19.3%)
3rd largest region	Baden-Württemberg (13.9%)
Manufacturer distribution	
1st largest manufacturer	11.5%
2nd largest manufacturer	9.7%
3rd largest manufacturer	9.6%
Obligor concentration	
Single obligor (group) concentration	0.03%
Top 5 obligor (group) concentration	0.14%
Top 10 obligor (group) concentration	0.26%

Source: Bank11

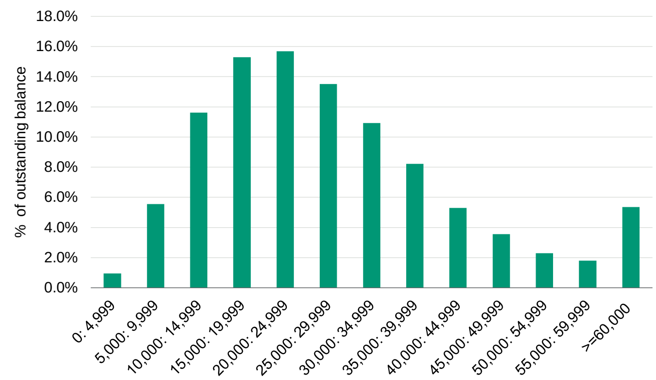
The exhibits below describe the distribution of the securitised portfolio based on the following characteristics:

Exhibit 5
Portfolio breakdown by original balance (in Euros)



Source: Bank11

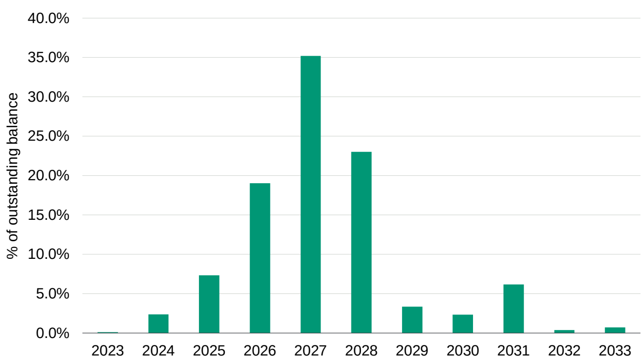
Exhibit 6
Portfolio breakdown by outstanding balance (in Euros)



Source: Bank11

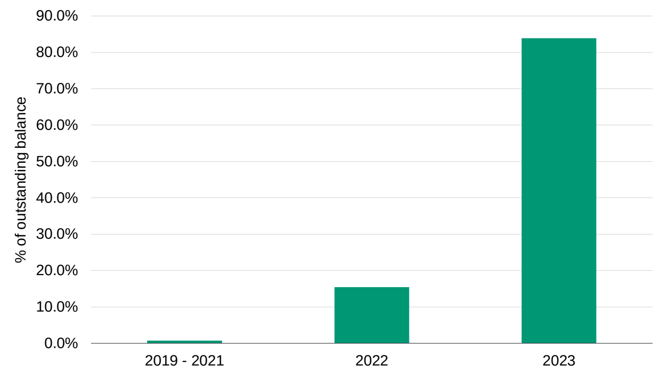
The exhibits below show the breakdown by maturity and origination year.

Exhibit 7
Portfolio breakdown by maturity year



Source: Bank11

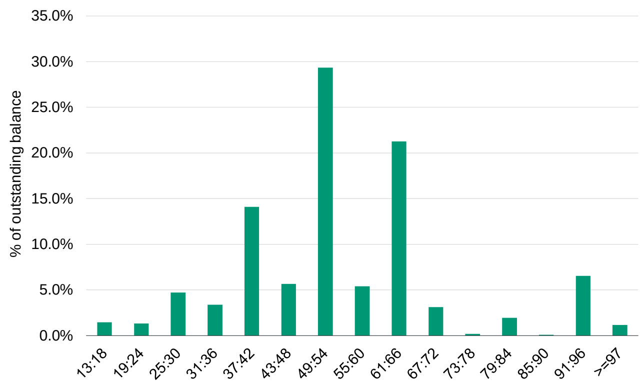
Exhibit 8
Portfolio breakdown by origination year



Source: Bank11

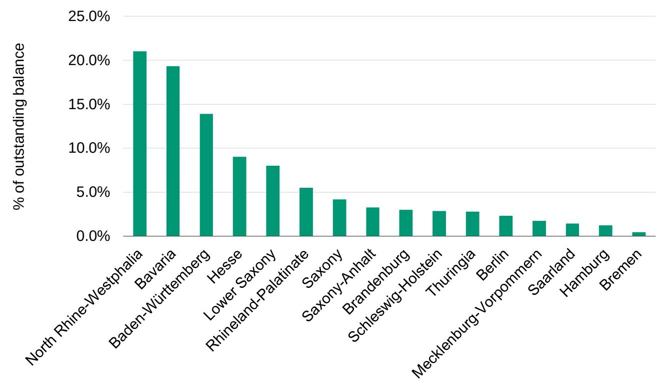
The exhibits below show the securitised portfolio breakdown by original term and regional concentration.

Exhibit 9
Portfolio breakdown by original term (in months)



Source: Bank11

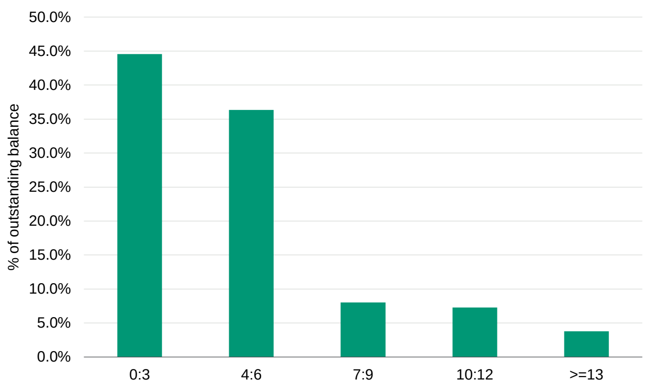
Exhibit 10
Portfolio breakdown by regional concentration



Source: Bank11

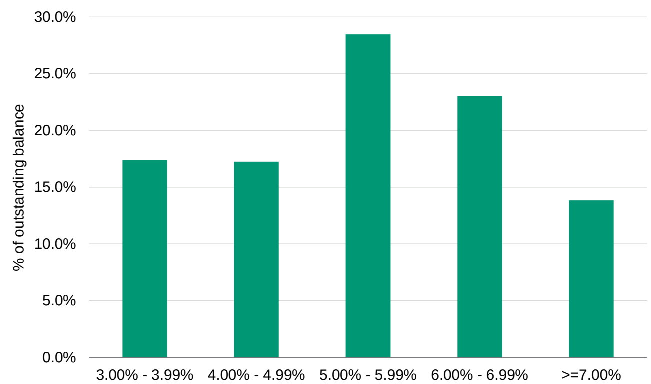
The exhibits below show the breakdown by seasoning in months and interest rate.

Exhibit 11
Portfolio breakdown by seasoning (in months)



Source: Bank11

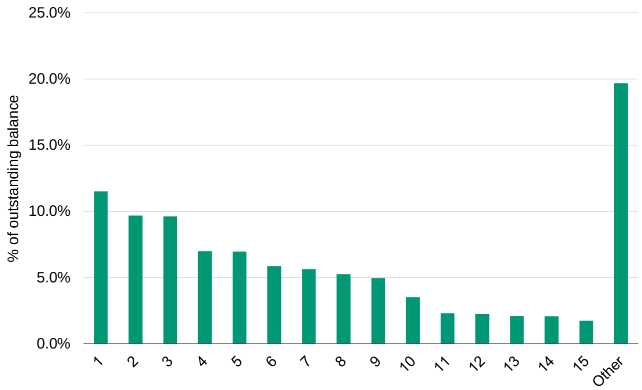
Exhibit 12
Portfolio breakdown by interest rate



Source: Bank11

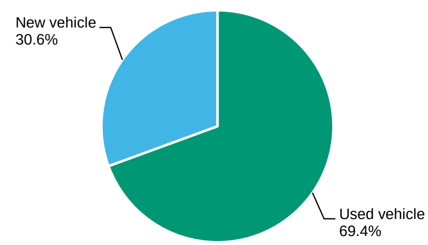
The exhibits below show the breakdown of the securitised portfolio by brand name and type of vehicle. The brand name corresponding to each bucket has not been disclosed.

Exhibit 13
Portfolio breakdown by vehicle brand concentration



Source: Bank11

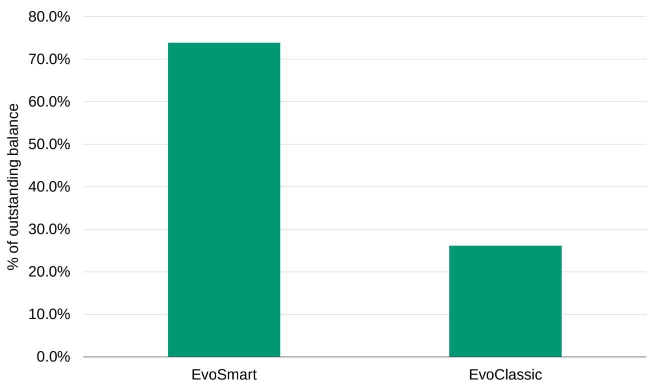
Exhibit 14
Portfolio breakdown by vehicle type



Source: Bank11

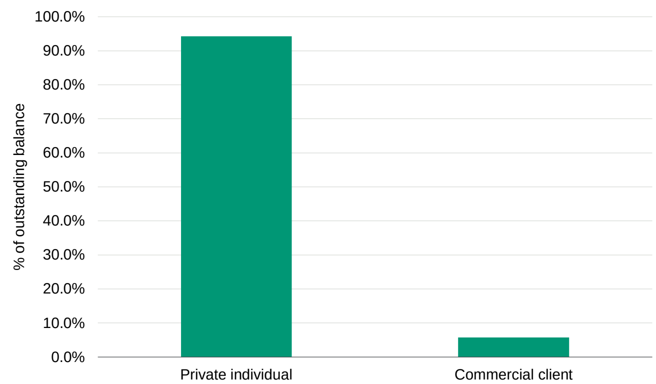
The exhibits below show the portfolio breakdown by loan and borrower type.

Exhibit 15
Portfolio breakdown by loan contract type



Source: Bank11

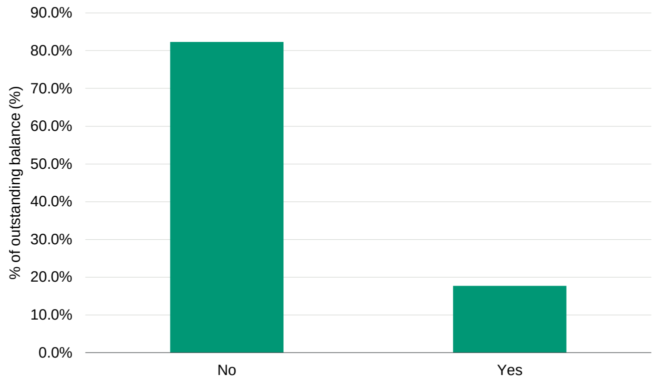
Exhibit 16
Portfolio breakdown by borrower type



Source: Bank11

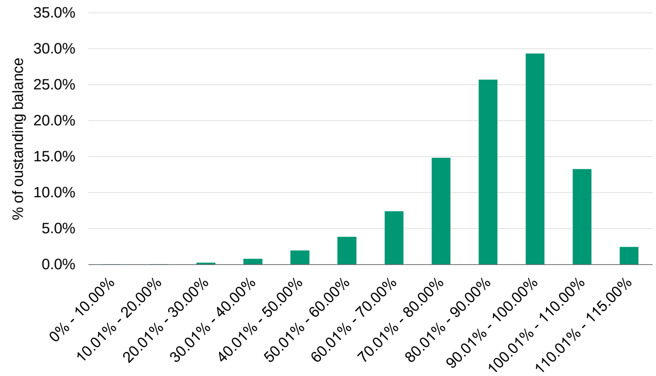
The exhibits below show the portfolio breakdown by payment protection insurance (PPI) and original loan to car value (LTV).

Exhibit 17
Portfolio breakdown by PPI



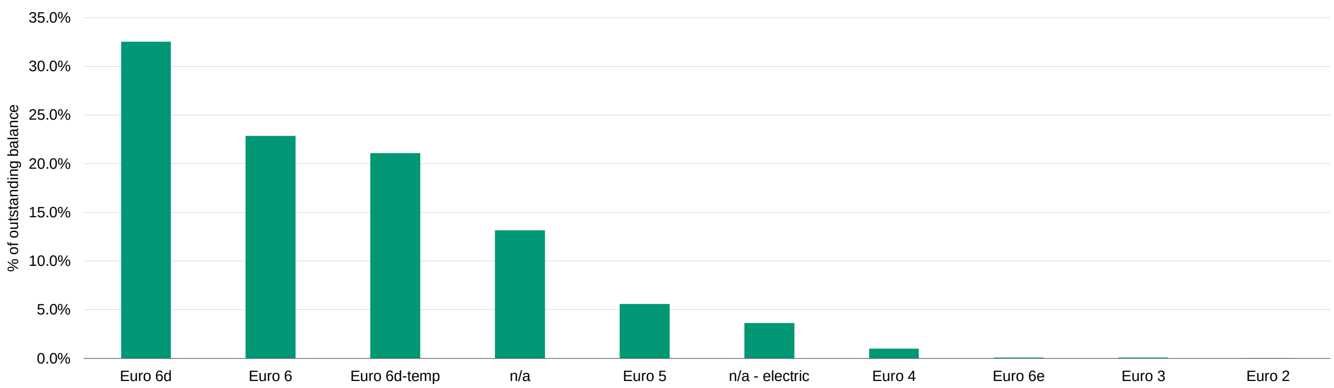
Source: Bank11

Exhibit 18
Portfolio breakdown by original LTV



Source: Bank11

Exhibit 19
Portfolio breakdown by EU emission standard



Source: Bank11

Eligibility criteria

The key eligibility criteria are as follows:

1. The receivable provides for an original term not more than 120 months in case of the fully amortising loan and not more than 61 months in case of the loan with a balloon payment;
2. The receivable is fully disbursed and has not been terminated;
3. The receivable is not a subordinated loan or syndicated loan or leveraged loan;
4. The receivable is denominated and payable in euros;
5. The receivable gives rise to monthly instalment payments;
6. It is not subject to any right of revocation or counterclaim of the debtors (other than defences related to statutory revocation rights instructions);
7. The receivable is not delinquent;
8. The receivable provides for a remaining term of at least 2 months;
9. At least one instalment has been paid;
10. The receivable has been created in compliance with applicable German law, rules and regulations;
11. It is due from a non-insolvent debtor and no proceedings for the commencement of insolvency proceedings are pending in any jurisdiction;
12. The debtor is not an employee of the originator;
13. All loan instalments are SEPA direct debit mandate;
14. The monthly instalment payment is above or equal to €20.0;
15. The outstanding principal amount is at least €300.0;
16. The balloon payment is not more than 90.0% of the vehicle sale price;
17. It is loan agreement for which the LTV does not exceed 115.0%;
18. Maximum exposure to a single borrower is either (i) €150,000 or (ii) 0.03% of the aggregate principal balance;
19. Borrower is not a public entity;
20. The borrower does not hold a deposit with Bank11.

Originator and servicer

In February 2023, we met with Bank11 für Privatkunden und Handel GmbH (Bank11), a wholly owned subsidiary of Wilh. Werhahn KG. Bank11 acts as both the originator and servicer in this transaction.

Bank11 has a banking licence under the German regulatory framework and has recorded rapid growth in the German non-captive car financing market since its operations started in early 2011. In its first year, Bank11 reported a loan origination volume of €117 million and 20,000 clients. As of year-end 2022, Bank11 had 346,000 clients and a new origination volume of €3.8 billion.

The products offered are mainly car loans marketed through a network of 17,900 German car dealers to private individuals. Bank11 provides car dealers with financing products to support the dealers' business and, in return, originates retail car loans. Bank11 also offers protection plan insurance, GAP insurance and warranty products in combination with the loan contracts.

The origination process is highly automated for private and commercial loans.

Different scoring systems are in place for each borrower type (private/commercial) to assess the borrower's credit risk, which takes into consideration, among other things, (1) credit bureau information; (2) income and employment information (for private borrowers only); (3) the customer's debt history; and (4) fraud information. The underwriting process is in line with the market standard.

Bank11 has a total of 408 employees in Germany, with around 19 of them in the collections management team.

Collection management is organised centrally from an internal collection centre. The collection process and early arrears management are highly automated, with reminder letters sent automatically by the system. Separate collection activities such as telephone calls and individual letters start in parallel. If a customer is not able to pay, the car will be repossessed and sold after termination by Bank11's car management department.

Vehicle repossessions are outsourced to two external agencies and litigations are processed by external lawyers. In addition, collection of titled claims is done by external agencies.

The historical performance between March 2016 and July 2023 compares favourably with its peer group of German auto loan ABS transactions: an average of 0.5% for 1-30 days missed instalments, 0.2% for 31-60 days missed instalments and 0.1% for 61-90 days missed instalments. The observed cumulative default and recovery rates are around 1.2% and 45.4%, respectively.

The exhibit below summarises the main characteristics of the originator's background.

Exhibit 20

Originator profile, servicer profile and operating risks

Date of operations review:	30-Jun-23
Originator background	**Bank11 für Privatkunden und Handel GmbH (Bank11)**
Rating:	Not rated
Financial institution group outlook for sector:	Stable
Ownership structure:	Fully owned by Wilh. Werhahn KG
Asset size:	Approx. EUR 7.3bn
% of total book securitised:	53%
Transaction as % of total book:	7%
% of transaction retained:	At least 5.0% as required by article 6(3)(c) of the Securitisation Regulation
Servicer background	**Bank11 für Privatkunden und Handel GmbH (Bank11)**
Rating:	Not rated
Regulated by:	Bafin (German Bank Regulator)
Total number of auto loans serviced:	Approx. 372,000 as of June 2023
Number of staff:	408

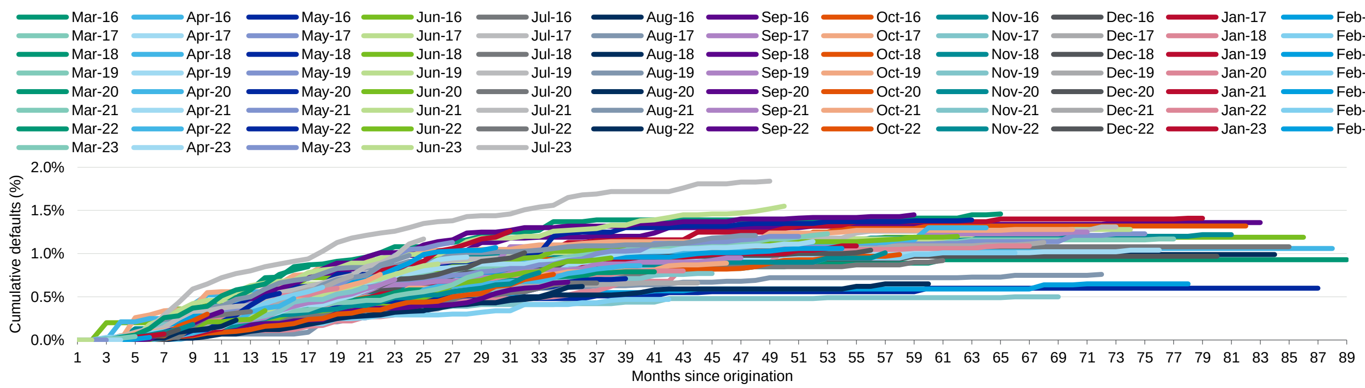
Source: Bank11

The originator provided us with performance data on its whole auto loan portfolio. Default data and recovery data covers the period from March 2016 to July 2023. Dynamic delinquency data was also provided for the same period. In our view, the quantity and quality of data received is adequate compared with transactions that have achieved high-investment-grade ratings in this sector in other European countries. The WA original contractual term of the securitised loans is about 4.4 years, with a maximum of 10 years. Of the securitised pool, 7.8% has an original term of more than seven years.

The exhibits below show cumulative defaults since loan origination and cumulative recoveries since loan default for loans granted to private and commercial borrowers.

Exhibit 21

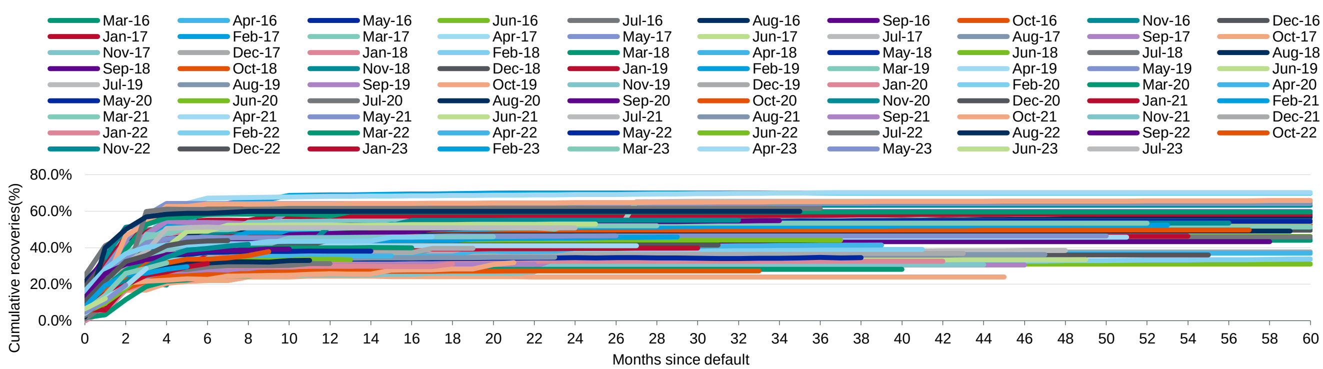
Total book vintage default data for the period from March 2016 to July 2023 (below representative number of monthly observations)



Source: Bank11

Exhibit 22

Total book vintage recovery data for the period from March 2016 to July 2023 (below representative number of monthly observations)



Source: Bank11

Asset analysis

Primary asset analysis

Our analysis of the credit quality of the assets includes an examination of the loan default distribution of the securitised pool, based on our assumptions and historical data.

Loan default distribution

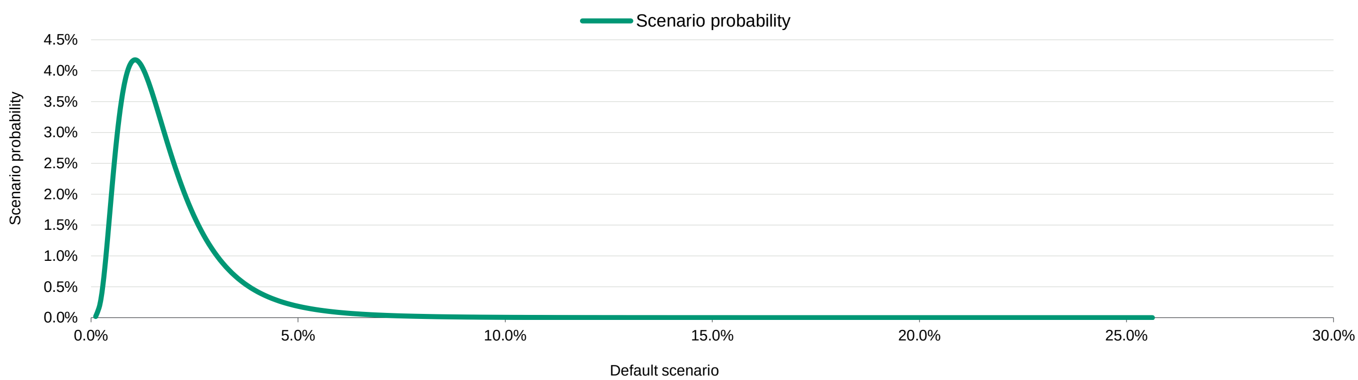
The first step in the analysis was to define a default distribution of the securitised pool of loans. Because of the large number of loans, we used a continuous distribution to approximate the default distribution: the lognormal distribution. The probability default distribution associates a probability with each potential future default scenario for the portfolio. This distribution has hence been applied to numerous default scenarios on the asset side to derive the level of losses on the notes.

Two main parameters determine the shape of the default distribution: the mean default and the PCE. The expected default captures our expectations of performance considering the current economic outlook, while PCE captures the loss we expect the portfolio to suffer in the event of a severe recession scenario. We generally derive these parameters from the historical data; we may make adjustments based on further analytical elements such as performance trends, differences in portfolio composition or changes in servicing practices among others.

The exhibit below shows the lognormal default distribution of the portfolio.

Exhibit 23

Lognormal default probability distribution



Source: Moody's Investors Service

Derivation of loan default rate expectation

Portfolio expected default of 1.5% is in line with the EMEA auto loan ABS average and is based on our assessment of the lifetime expectation for the pool.

We primarily based our analysis on the historical cohort performance data that the originator provided for a portfolio that is representative of the securitised portfolio. We also evaluated (1) other European market trends, (2) benchmark auto loan transactions, and (3) other qualitative considerations with respect to the originator's experience in the asset class.

Derivation of recovery rate assumption

Portfolio expected recoveries of 35.0% are in line with the EMEA auto loan ABS average and are based on our assessment of the average lifetime recovery rate expectation for the pool.

We have made assumptions for recoveries on the basis of (1) historical recovery vintages received for this transaction, and (2) benchmarking with other transactions on the German auto loan market.

Derivation of portfolio credit enhancement

The PCE of 8.0% is in line with the EMEA auto loan average. The PCE has been defined following analysis of the data variability, as well as by benchmarking this portfolio with past and similar transactions. Factors that affect the potential variability of a pool's credit losses are (1) historical data variability, (2) quantity, quality and relevance of historical performance data, (3) originator quality and servicer quality, (4) certain pool characteristics, such as asset concentration, and (5) certain structural features.

Commingling risk

All scheduled payments under the loans in the portfolio are collected by way of direct debit. Collections received via direct debit are transferred on the same business day. If the servicer enters into insolvency proceedings, a certain proportion of one month's collections could be lost.

Set-off risk

Bank11 sells, along with loan contracts, various types of insurance acting as a broker. Rheinland Versicherungensgruppe predominantly underwrites the insurance contracts. Around 17.7% of loan contracts in the securitised portfolio benefit from PPI insurance contracts, and 31.1% of the loans in the pool benefit from Gap insurance. Under German law, the borrower has the right to set off any unsatisfied claims he/she has under a connected contract against his/her loan agreement and to reclaim any unused premium if the insurer becomes insolvent. The risk to the issuer of unmitigated set-off could occur when both the originator and the insurance provider become simultaneously insolvent.

At close, the securitised pool bears no deposit set-off risk, because the obligors in the pool do not hold any deposits at Bank11. Employee contracts of the seller are also excluded from the portfolio.

Comparables

Prior transactions

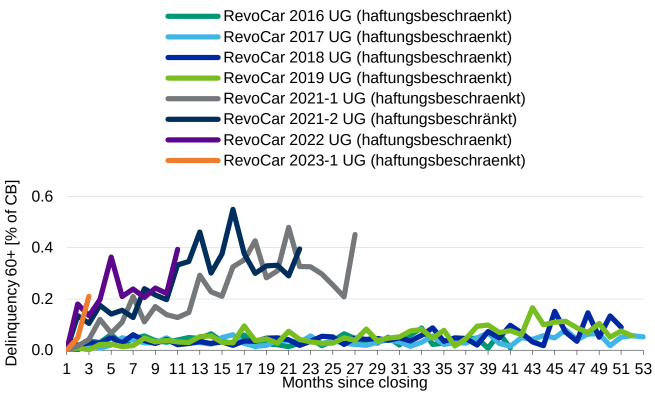
Precedent transactions' performance

The performance of the originator's precedent transactions in this sector are within Moody's expectations.

The exhibits below show the performance of the precedent transactions originated by Bank11 on a standalone basis.

Exhibit 24

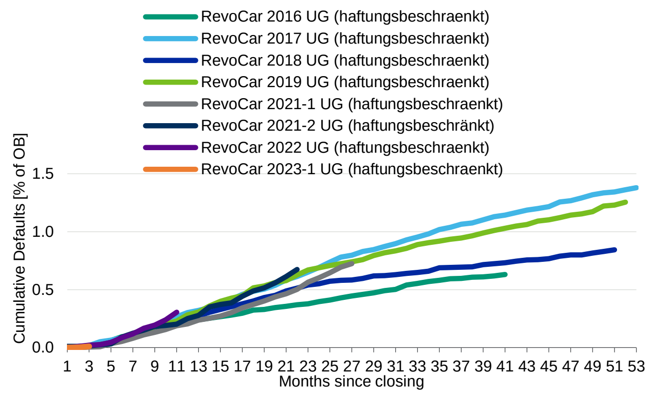
Bank11's precedent German auto loan transactions' performance (60 days delinquencies as a percentage of current balance)



Sources: Moody's Investors Service, periodic investor/servicer reports

Exhibit 25

Bank11's precedent German auto loan transactions' performance (cumulative defaults as a percentage of original balance)



Sources: Moody's Investors Service, periodic investor/servicer reports

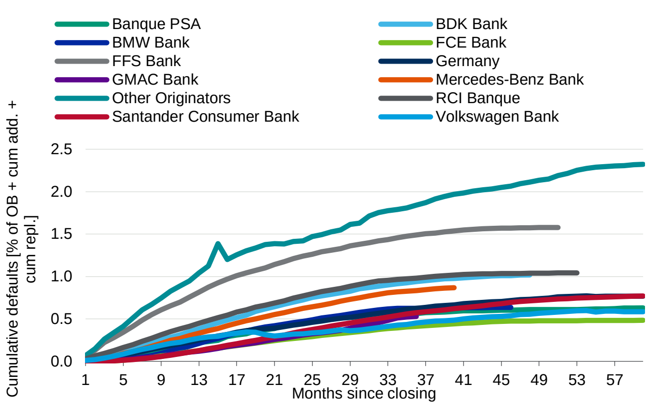
Transactions of other seller/servicers

For benchmarking purposes, the charts below include cumulative defaults in German auto loan ABS that we rate. Please note, however, that the performance shown can be affected by several factors, such as the seasoning of the loans, the age of the transaction, pool-specific characteristics and the length of the revolving period.

The exhibits below show the performance of comparable transactions among originators in Germany.

Exhibit 26

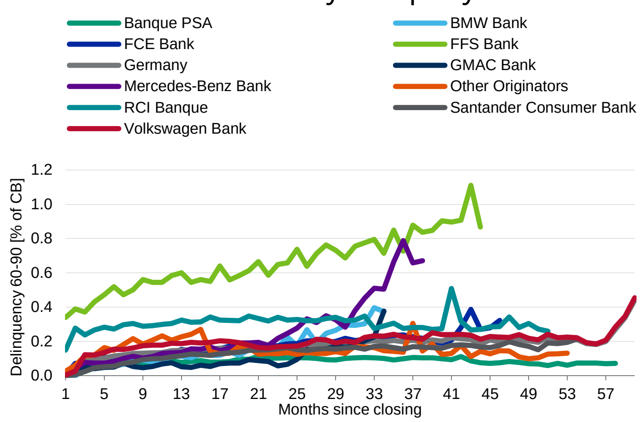
German auto loan ABS cumulative defaults



Sources: Moody's Investors Service, periodic investor/servicer reports

Exhibit 27

German auto loan ABS 60-90 days delinquency



Sources: Moody's Investors Service, periodic investor/servicer reports

The exhibits below show a benchmark table including portfolio characteristics of comparable transactions in Germany.

Exhibit 28

Comparable transactions - Asset characteristics

Deal name	RevoCar 2023-2 UG	RevoCar 2023-1 UG	RevoCar 2022 UG	RevoCar 2021-2 UG2	RevoCar 2021-1 UG	Red & Black Auto Germany 6 UG (haftungsbeschränkt)
Country	Germany	Germany	Germany	Germany	Germany	Germany
Closing date or rating review date (dd/mm/yyyy)	19/10/2023	17/05/2023	29/09/2022	21/10/2021	05/11/2021	21/11/2019
Currency of rated issuance	EUR	EUR	EUR	EUR	EUR	EUR
Rated notes volume (excluding NR and equity)	494,000,000	491,100,000.0	484,900,000.0	497,500,000.0	690,900,000.0	995,000,000.0
Originator/servicer	Bank11 für Privatkunden und Handel GmbH (Bank 11)	Bank11 für Privatkunden und Handel GmbH	Bank11 fuer Privatkunden und Handel GmbH	Bank11 fuer Privatkunden und Handel GmbH	Bank11 fuer Privatkunden und Handel GmbH	Bank Deutsches Kraftfahrzeuggewerb e GmbH
Captive finance company?	No	No	No	No	No	No
Long-term rating	NR	NR	NR	NR	NR	NR
Short-term rating	NR	NR	NR	NR	NR	NR
Securitised pool balance (total pool)	499,999,692.8	499,999,689.4	499,998,234.1	500,000,000.0	700,000,000.0	1,000,000,000.0
Average principal balance	20,537.2	18,135.6	16,137.8	15,933.2	15,196.6	11,300.0
WA loan to value (LTV)	86.5%	87.7%	88.2%	88.2%	88.5%	88.8%
Share of total pool >90% LTV	45.1%	49.6%*	51.6%	49.7%	50.9%	55.9%
Auto loan receivables %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Auto lease receivables %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RV receivables %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Portion of (fully) amortising contracts %	26.1%	35.1%	35.4%	40.1%	40.9%	40.8%
Portion of bullet / balloon contracts %	73.9%	64.9%	64.6%	59.9%	59.1%	59.2%
Portion of pure bullet / balloon loans %	63.9%	62.4%	61.5%	35.3%	56.9%	47.4%
Average size of balloon payment (as % of initial pool balance)	47.2%	40.5%	39.7%	35.3%	56.9%	28.0%
Direct debit (minimum payment)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WA initial yield (total pool)	5.8%	5.0%	3.7%	3.1%	3.0%	3.6%
Minimum yield for additional portfolios p.a.	N/A	N/A	N/A	Min. 2.85% (combined pool)	0.0	N/A
WAL of total pool initially (in years)	2.9	1.9	2.7	2.8	2.8	2.4
WA original term (in years)	4.4	4.5	4.6	4.8	4.9	4.9
WA seasoning (in years)	0.4	0.4	0.6	0.5	0.6	1.1
WA remaining term (in years)	4.0	4.1	4.0	4.3	4.3	3.8
No. of contracts	24,346	27,570	30,983	31,381	46,063	88,492
No. of obligors	24,169	N/A	N/A	N/A	N/A	87,749
Single obligor (group) concentration %	0.03%	0.03%	0.03%	0.03%	0.02%	0.01%
Top 5 obligor (group) concentration %	0.14%	0.13%	0.12%	0.11%	0.08%	0.06%
Top 10 obligor (group) concentration %	0.26%	0.25%	0.23%	0.21%	0.15%	0.10%
Top 20 obligor (group) concentration %	N/A	N/A	N/A	N/A	N/A	0.2%
Private obligors %	94.3%	94.5%	95.4%	97.1%	96.9%	88.8%
Name largest manufacturer / brand	N/A	N/A	N/A	N/A	N/A	FORD
2nd largest manufacturer / brand	N/A	N/A	N/A	N/A	N/A	HYUNDAI
3rd largest manufacturer / brand	N/A	N/A	N/A	N/A	N/A	OPEL
Size % largest manufacturer / brand	11.5%	11.9%	11.3%	10.9%	10.2%	28.1%
2nd largest manufacturer / brand	9.7%	10.9%	9.9%	9.2%	9.6%	20.2%
3rd largest manufacturer / brand	9.6%	10.2%	8.6%	7.2%	7.5%	19.5%
New vehicles %	30.6%	19.5%	25.0%	37.2%	40.0%	19.3%
Name largest region	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	North Rhine-Westphalia	Nordrhein-Westfalen
2nd largest region	Bavaria	Bavaria	Bavaria	Bavaria	Bavaria	Bayern
3rd largest region	Baden-Württemberg	Baden-Württemberg	Baden-Württemberg	Baden-Württemberg	Baden-Württemberg	Baden-Wuerttemberg
Size % largest region	21.0%	22.2%	21.3%	21.0%	21.0%	16.7%
2nd largest region	19.3%	17.7%	17.3%	17.2%	16.5%	16.6%
3rd largest region	13.9%	13.7%	13.9%	13.2%	13.3%	12.9%

Source: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

Exhibit 29
Comparable transactions - Asset assumptions

Deal name	RevoCar 2023-2 UG	RevoCar 2023-1 UG	RevoCar 2022 UG	RevoCar 2021-2 UG2	RevoCar 2021-1 UG	Red & Black Auto Germany 6 UG (haftungsbeschränkt)
Gross default / net loss definition in this deal	3 months	3 months	3 months	3 months	3 months	4 months
Data available for each subpool?	Yes	Yes	Yes	Yes	Yes	Yes
Period covered by vintage data (in years)	7.4	6.9	6.4	5.3	5.0	7.0
Type of default / loss distribution	Lognormal	Lognormal	Lognormal	Lognormal	Lognormal	Lognormal
Model running on defaults/losses	Default	Default	Default	Default	Default	Default
Mean gross default/net loss rate - initial pool	1.5%	1.5%	1.7%	1.7%	1.7%	2.2%
Mean gross default/net loss rate - replenished pool	N/A	N/A	N/A	1.7%	1.7%	N/A
Mean net loss rate (calculated or modelled)	1.0%	1.0%	1.1%	1.2%	1.3%	1.3%
CoV (implied)	66.4%	66.1%	61.3%	62.8%	60.2%	60.7%
Default timing curve	Sine (3-16-47)	Sine (3-16-47)	Sine (3-16-48)	Sine (3-17-50)	Sine (3-18-51)	Sine (4-15-46)
Mean recovery rate	35.0%	35.0%	35.0%	30.0%	25.0%	40.0%
Recovery lag	WA recovery lag of 19 months	WA recovery lag of 19 months	WA recovery lag of 19 months	WA recovery lag of 19 months	WA recovery lag of 19 months	WA recovery lag of 19 months
Aaa PCE	8.0%	8.0%	8.0%	9.0%	9.0%	10.0%
Prepayment rate	10.0% first 18 months; 15.0% thereafter	10.0% first 18 months; 15.0% thereafter	10.0% first 18 months; 15.0% thereafter	7.5% first 18 months; 12.5% thereafter	7.5% first 18 months; 12.5% thereafter	10% first 18 months; 15% thereafter
Seasoning as modelled (in months)	N/A	N/A	N/A	N/A	N/A	N/A
Stressed fees modelled	0.5%	0.2%	1.0%	1.0%	1.0%	1.0%
Assumed portfolio yield p.a. - initial pool	5.5%	4.6%	3.5%	3.0%	2.8%	3.4%
Assumed portfolio yield p.a. - additional pool	N/A	N/A	N/A	2.9%	2.6%	N/A
Index rate assumed in 1st period	4.0%	3.5%	0.5%	0.0%	0.0%	0.0%
RV risk modelled?	No	No	No	No	No	No
RV haircut (Aaa (sf))	N/A	N/A	N/A	N/A	N/A	N/A

Sources: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

Origination/servicing quality

The main strengths of the originator and servicer in this transaction are Bank11's experienced management team and its fully licensed bank in Germany. The main challenges are the young operational track history and its small market share in the auto loan market.

Bank11 is an unrated entity. An independent cash manager and a back-up servicer facilitator that are appointed at closing are mitigants to this arrangement. The back-up servicer facilitator will use reasonable commercial endeavours to find a back-up servicer in case of a servicer insolvency or another servicer termination event. (See “Securitisation structure description - Detailed description of the structure” for additional information.)

Additional asset analysis

ESG - Environmental considerations

The environmental risk for ABS backed by auto loans is moderate. Our analysis of the transaction, which considers ESG risk, includes the risks to vehicles' recovery values from changes in carbon and air pollution regulations and changes in emissions regulations. The risk is somewhat mitigated, however, by the short tenor of the transaction

ESG - Social considerations

Social risk is generally low in Auto ABS transactions. Technological obsolescence, shifting demand patterns and changes in government policy mean that some segments will experience greater volatility in auto sales, recovery levels, and residual values, but the short tenor of the transaction mitigates the risk from long term trends. In addition, the geographical and demographical borrower diversification of the pool should mitigate the risk of any one region’s or industry’s economic decline.

Securitisation structure description

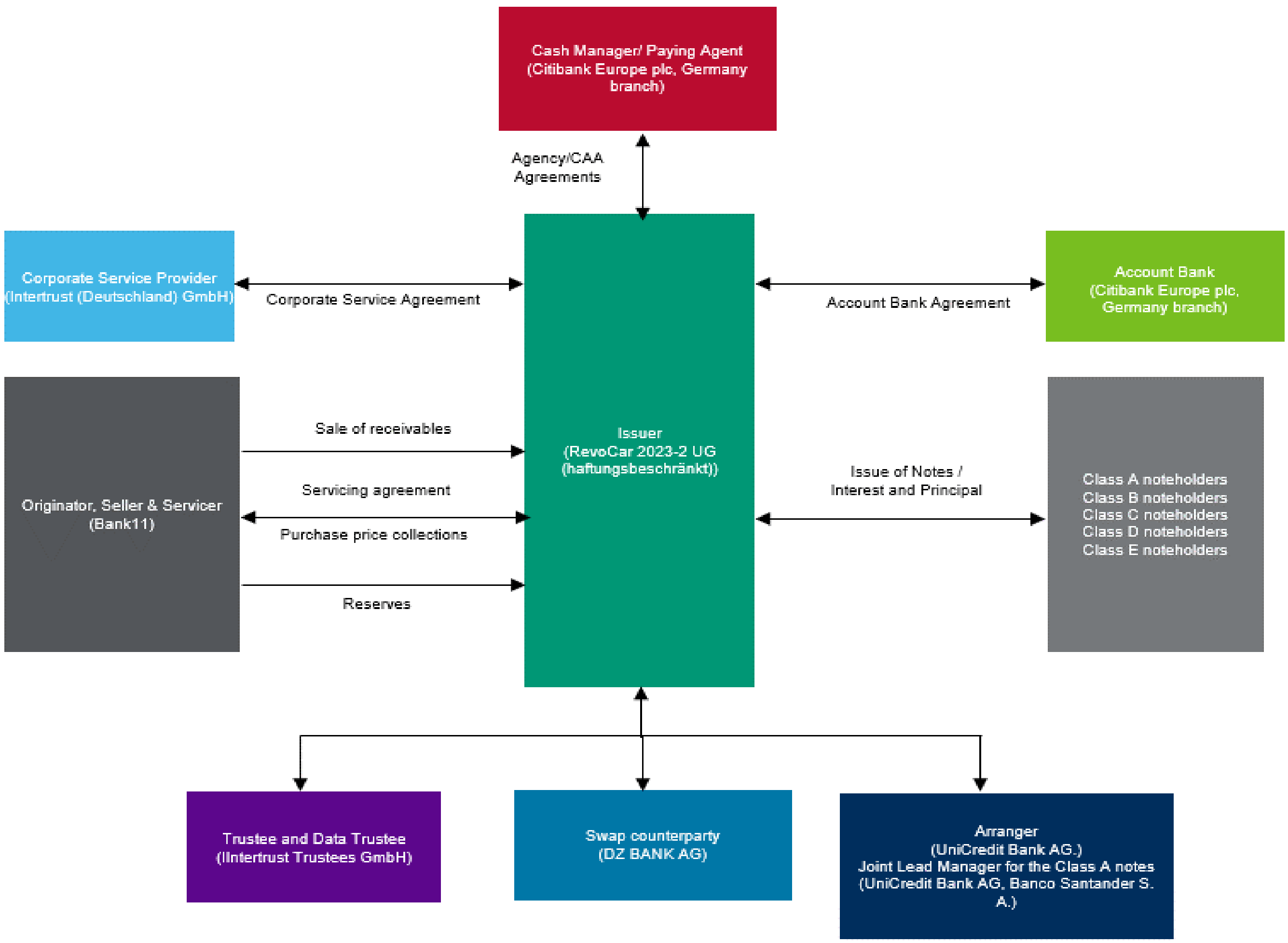
RevoCar 2023-2 UG is a static cash securitisation. Our analysis of the structural characteristics of the transaction include a review of the excess spread, reserve fund and principal to pay interest to note holders. The issuer is an SPV incorporated under the laws of Germany. Interest on the notes is paid monthly.

Structural diagram

Below is a structural diagram for the transaction, illustrating the relationship between the issuer, RevoCar 2023-2 UG, and the other transaction parties.

Exhibit 30

Transaction structure



Source: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus

Detailed description of the structure

The transaction structure is a senior subordinated structure with interest deferral triggers linked to principal deficiency events.

Credit enhancement

Credit enhancement in the transaction includes excess spread and subordination of the notes.

Allocation of payments/waterfall

On each payment date, the issuer's available funds (that is, collections and recoveries received, payments from the swap counterparty and the reserve fund, if applicable, upon the occurrence of a servicer termination event) is applied in the following simplified order of priority:

1. Senior expenses including the servicing fee;
2. Payment to swap counterparty;
3. Interest on Class A notes;
4. Interest on Class B notes, if no Class B notes principal deficiency event is occurring;
5. Interest on Class C notes, if no Class C notes principal deficiency event is occurring;
6. Interest on Class D notes, if no Class D notes principal deficiency event is occurring;
7. Interest on Class E notes, if no Class E notes principal deficiency event is occurring;
8. Prior to the occurrence of a sequential payment trigger event, redemption of Classes A-D notes on a pro rata and pari passu basis (with Class E Notes being paid down sequentially and, subject to availability of sufficient funds, via the Class E Turbo Principal Redemption Amount)
9. After the occurrence of a sequential payment trigger event :
    a. Redemption of Class A notes;
    b. Interest on Class B notes, if Class B notes principal deficiency event is occurring;
    c. Redemption of Class B notes;
    d. Interest on Class C notes, if Class C notes principal deficiency event is occurring;
    e. Redemption of Class C notes;
    f. Interest on Class D notes, if Class B notes principal deficiency event is occurring;
    g. Redemption of Class D notes;
    h. Interest on Class E notes, if Class E notes principal deficiency event is occurring;
10. Principal redemption on Class E notes until it is reduced to zero ;
11. Replenishment of the commingling reserve;
12. Swap subordinated payments;
13. Payment of any Class E turbo amortisation amount due and payable to the Class E notes;
14. Additional servicing fees to the servicer;
15. Transaction gain to the issuer.

Allocation of payments/PDL-like mechanism: The definition of the notes required amortisation amount ensures that excess spread and recoveries are applied towards reducing defaults of the period and previous periods.

Liquidity reserve

» At close: EUR 6.0 million, which is 1.2% of the securitised portfolio balance;

» On any other payment date after closing is the higher of (i) 1.2% of the outstanding portfolio balance and (ii) EUR 800,000;

» The reserve is only be available for Class A notes interest payments, swap payments and the senior expenses in the waterfall;

» All amortised amounts are paid to the originator and therefore the reserve does not provide any credit enhancement to the rated notes.

Commingling reserve

The commingling reserve is funded at closing at EUR 5.0 million and is adjusted each month in accordance with the expected collections. On any payment date, as long as the Class D notes are not fully redeemed, the commingling reserve covers 1.0% of the scheduled interest and principal collections. The commingling reserve will be used for liquidity after a servicer termination event.

Servicing fee reserve:

The servicing fee in the transaction is set at a low level by the servicer. To mitigate the risk that the transaction would have to pay a higher fee following a servicer termination event, a servicing fee reserve is funded at closing.

» As long as Bank11 acts as servicer, the servicing fee is 0.4%;

» At closing, Bank11 has posted a servicing fee reserve in an amount equal to 1.7% of the initial aggregate principal balance;

» On each payment date, the servicing fee reserve amounts to 0.6% of the aggregate principal balance multiplied by the remaining weighted average life of the portfolio;

» Any excess is paid to Bank11 outside of the priority of payments

Sequential payment trigger event:

The redemption of the notes will switch from pro rata to sequential if any of the below events occur:

» The cumulative loss ratio is greater than i) 0.5% from the first payment date in November 2023 until the payment date in October 2024 ii) 1.0% after the payment date in October 2024

» Class E PDL event occurs;

» Servicer termination event;

» Issuer event of default;

» Clean-up call event

Cumulative loss ratio: The ratio of: i) The sum of a) aggregate outstanding balance of receivables that have become defaulted during the collection period b) aggregate outstanding balance of receivables that have become defaulted during previous collection periods and ii) the initial pool balance.

Principal deficiency events:

On the relevant payment date, the aggregate principal amount of all notes, if no principal deficiency event occurs on such date, exceed the aggregate principal balance on such determination date immediately preceding such payment date by at least as mentioned below:

» Class B principal deficiency event: EUR 34,250,000

» Class C principal deficiency event: EUR 19,250,000

» Class D principal deficiency event: EUR 8,750,000

» Class E principal deficiency event: EUR 2,500,000

Originator/servicer/cash manager-related triggers

The appointment of the servicer will be terminated if the following events occur:

» Insolvency of the servicer;

» Failure to perform material obligations, not remedied within 20 business days;

» Failure to make payments due, not remedied within 5 business days;

» Any breach of representations and warranties, not remedied within 30 business days;

» Revocation or restriction of the banking or encashment service license, as applicable.

The appointment of the cash manager will be terminated if the following events occur:

» Insolvency of the cash manager;

» Failure to perform material obligations that is not remedied within the grace period

Other counterparty rating triggers
The issuer account bank will be replaced if its short-term bank deposit rating falls below P-1 or if the long-term deposit rating falls below A2.

Excess spread
All assigned receivables have been purchased at par. The WA portfolio interest rate of the securitised portfolio is 5.8%. After considering multiple default and prepayment scenarios and deducting stressed senior fees and coupon payments on all classes from a stressed portfolio yield, we model an annualised stressed excess spread of 0.8%. This represents the first layer of credit enhancement as well as a limited liquidity buffer to the transaction. Such excess spread, however, varies depending on final costs, portfolio amortisation, prepayment rates and default levels as well as on a potential portfolio rate compression as the underlying loan contracts redeem/ prepay.

Interest rate mismatch
All the assets backing the transactions are fixed-rate (WA rate of 5.8%) auto loans and all the notes also bear a floating interest rate linked to one-month Euribor. As a result, the issuer is subject to a fixed-floating interest rate mismatch and has entered into hedging arrangements with DZ Bank AG(Aa2/P-1; Aa2(cr)/P-1(cr)).

Under the swap agreement:

» The issuer pays the swap rate of 3.2% p.a.;

» The swap counterparty pays one-month Euribor;

» The swap notional amount is EUR 500 million at closing and is equal to the outstanding balance of notes for every calculation period;

» The swap collateral posting and replacement triggers are set at a loss of A3(cr) and Baa3(cr) respectively.

Asset transfer/true sale/bankruptcy remoteness
The purchase of the asset portfolio is financed by the issuance of the notes. The purchase is a true sale of the loan receivables under German law, vehicles and ancillary rights to the issuer for the benefit of the noteholders.

The issuer is a special purpose vehicle incorporated under the laws of Germany as a UG (a company with limited liability).

Cash manager
Citibank Europe plc (Aa3/P-1 deposit ratings; Aa3(cr)/P-1(cr)) acting through it's Germany branch, acts as the independent cash manager in the transaction. The cash manager's main responsibilities are the preparation and publication of the investor report, calculating amounts due and instructing respective payments according to the waterfall and drawing on the cash reserve and other sources of liquidity. The cash manager makes cash flow calculations on each monthly payment date. Events that could lead to termination of the cash manager include insolvency and a failure to perform that the cash manager does not remedy within the grace period.

There is no back-up cash manager appointed at closing.

Replacement of the servicer

At closing, the transaction has appointed a back-up servicer facilitator, Intertrust (Deutschland) GmbH. The back-up servicer facilitator will use reasonable commercial endeavours to find a back-up servicer in case of a servicer insolvency or another servicer termination event. The servicing fee reserve will be available to cover the replacement servicer's fees. In the event of servicer insolvency or another event, the transaction will have available the principal to pay interest, the cash reserve and excess spread.

Securitisation structure analysis

Primary structural analysis

We base our primary analysis of the transaction structure on the default distribution of the portfolio to derive our cash flow model.

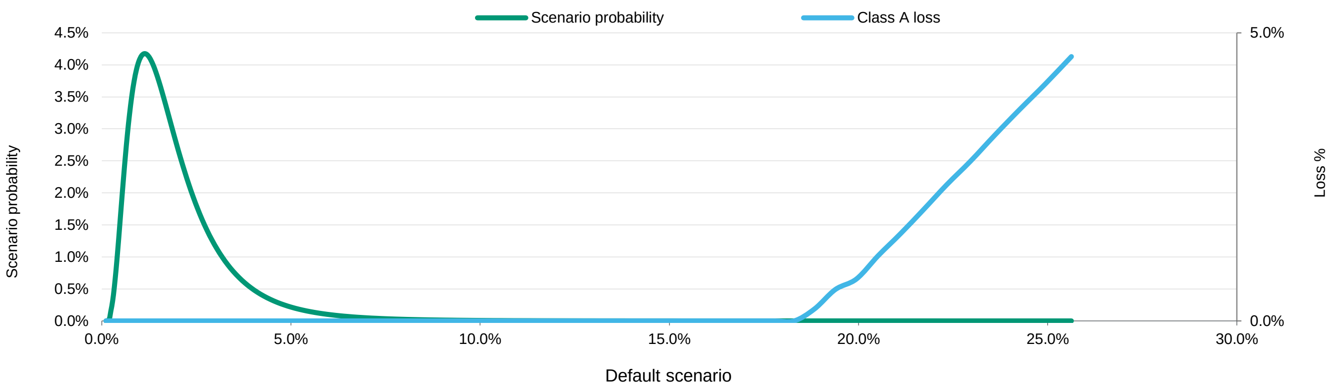
Tranching of the notes

We used a lognormal distribution to describe the default distribution of the portfolio. We used this distribution in the cash flow model to ultimately derive the level of losses on the notes under each default scenario.

The chart below presents the default distribution (green line) that we used in modelling loan defaults.

Exhibit 31

Lognormal loan default probability distribution including Class A losses and PDL as a percentage of the initial notes amount



Source: Moody's Investors Service

We considered the allocation to each of the parties within the transaction of the cash flows that the collateral generates and the extent to which the structural features of the transaction might themselves provide additional credit protection to investors, or alternatively act as a further source of risk in addition to the intrinsic risk of the loan assets. For example, we analysed the strength of early amortisation triggers.

As a first step towards determining the theoretical rating of the notes, we used an expected- loss methodology that reflects the probability of default for the notes multiplied by the severity of the loss expected for the notes.

To allocate losses to the notes in accordance with their priority of payment and relative size, we used a cash-flow model (ABSROM) that reproduces most of the deal-specific characteristics.

We have already described above the main input parameters of the model. The result of weighting the loss severity and the average life of the notes in each loss scenario output (the result of inputting each default scenario into ABSROM) with its probability of occurrence is the expected loss and the expected average life of the notes, respectively.

We then compare both values to Moody's idealised expected loss table.

Timing of defaults

We have tested different timings for the default curve to assess the robustness of the ratings. In the base-case scenario, the timing of defaults curve assumed is a sine, with the first default occurring with a three-month lag (according to the transaction definition), the peak at month 16 and the last default at month 47.

Default definition

A loan is defaulted if the loan contract is terminated by the servicer in accordance with its credit and collection policy. Normally, the servicer will terminate a contract if it is more than three instalments overdue.

Exhibit 32
Comparable transactions - Structural features

Deal name	RevoCar 2023-2 UG	RevoCar 2023-1 UG	RevoCar 2022 UG	RevoCar 2021-2 UG2	RevoCar 2021-1 UG	Red & Black Auto Germany 6 UG (haftungsbeschränkt)
Revolving period (in years)	Static	Static	Static	2.0	4.0	Static
Size of credit RF ongoing (as % of rated notes)	1.20%	1.0%	0.9%	0.5%	0.3%	0.5%
RF amortisation floor (as % of initial total pool)	0.2%	0.2%	0.2%	N/A	N/A	0.0
Set-off risk?	No	No	No	Yes	Yes	Yes
Set-off mitigant	N/A	N/A	N/A	Reserve funded at	Reserve funded at	Set-off modelled
Commingling risk?	Yes	Yes	Yes	Yes	Yes	No
Commingling mitigant	Reserve funded at closing	Reserve funded at closing	Reserve funded at closing	Reserve funded at closing	Reserve funded at closing	Reserve funded upon rating trigger
Back-up servicer appointed if servicer rated below	N/A	N/A	N/A	N/A	N/A	Baa3
Back-up servicer name	N/A	N/A	N/A	N/A	N/A	N/A
Back-up servicer facilitator	Intertrust (Deutschland) GmbH (Intertrust)	Intertrust (Deutschland) GmbH	Intertrust (Deutschland) GmbH	Wilmington Trust SP Services (Frankfurt) GmbH	Wilmington Trust SP Services (Frankfurt) GmbH	Wilmington Trust SP Services (Frankfurt) GmbH
Swap in place?	Yes	Yes	Yes	Yes	No	Yes
Swap counterparty long-term rating	Aa2	A2	A2	A2	N/A	Aa2
Swap counterparty short-term rating	P-1	P-1	P-1	P-1	N/A	P-1
Type of swap	Fixed-floating	Fixed-floating	Fixed-floating	Fixed-floating	Other	Fixed-floating
Size of Aaa(sf) rated class	88.20%	91.00%	90.48%	92.14%	91.81%	93.00%
Aa1(sf) rated class	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Aa2(sf) rated class	6.60%	0.00%	0.00%	0.00%	4.64%	0.00%
Aa3(sf) rated class	0.00%	4.28%	0.00%	5.10%	0.00%	0.00%
A(sf) rated class	1.80%	0.00%	4.20%	0.00%	1.20%	4.00%
Baa(sf) rated class	0.00%	1.32%	1.00%	1.50%	1.04%	1.50%
Ba(sf) rated class	2.20%	1.62%	1.30%	0.76%	0.00%	1.00%
B(sf) rated class	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NR class	1.20%	1.78%	0.00%	0.50%	1.30%	0.50%
Initial over-collateralisation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Reserve fund as % of inital total pool	1.20%	1.00%	0.90%	0.00%	0.00%	0.50%
Annualised net excess spread as modelled	0.80%	0.20%	0.35%	1.50%	1.70%	2.00%

Sources: RevoCar 2023-2 UG (haftungsbeschränkt) prospectus, Moody's Investors Service

Additional structural analysis

Asset transfer, true sale and bankruptcy remoteness

We consider the purchase of the loan receivables an effective true sale under German law and the issuer a bankruptcy-remote entity. Our assessment is based on the analysis of the transaction documentation and takes into account the legal opinion provided by the transaction counsel.

Clean-up call and repurchase of non-performing assets

The originator can exercise its clean-up call when the aggregate principal balance is less than 10.0% of the initial aggregate principal balance as of the cut-off date. The originator can repurchase all (but not only some) of the purchased receivables at the repurchase price, provided that all payment obligations under the Class A notes are thereby fulfilled. Such repurchase of the purchased receivables causes an early redemption of the notes, subject to and in accordance with the pre-enforcement priority of payments. The repurchase price does not need to be sufficient to repay all classes of notes.

Performing receivables are repurchased at par, whereas both delinquent and defaulted receivables are repurchased at a price estimated by an independent appraiser. Additional portfolio losses may occur if delinquent loans are repurchased below the outstanding balance.

Delinquent receivable means a receivable that is overdue by more than 30 calendar days but is not a defaulted receivable.

Commingling risk

Commingling risk is mitigated by:

- The automatic termination of the collection authority upon the insolvency of the originator;
- A daily transfer of received SEPA collections to the issuer account and
- A commingling reserve that is funded at closing at EUR 5.0 million, adjusted monthly to cover 1.0% of the scheduled interest and principal collections.

Insurance set-off risk

Insurance set-off risk is mitigated by:

- The originator is obliged to buy back any receivables where the debtor has declared set-off or compensate the issuer for the set-off amount.

Deposit set-off risk

Set-off risk is mitigated by the below:

- Eligibility criteria excludes Bank11 deposit holders.
- Deposits are covered by German deposit protection scheme up to an amount of EUR 100,000, in case of an insolvency event in relation to Bank11.
- If Bank11 fails to pay the set-off exposure coverage via the deemed collection mechanism, a borrower notification event is triggered.

ESG - Governance considerations

This securitisation's governance risk is low and is typical of other auto ABS in the market. Strong ABS governance relates to transaction features that promote the integrity of the operations of the transaction for the benefit of investors as well as the data provided to investors. The following are some of the governance considerations related to the transaction:

- ***Risk retention:*** This transaction is subject to the European risk retention requirements, which require the sponsor to hold at least 5.0% of the credit risk of the transaction.
- ***Agreed upon procedures (AUPs):*** An independent due diligence firm reviewed a sample of the portfolio and provided an agreed upon procedures (AUP) report for data integrity matters. The sample analyzed is small when benchmarking with past and similar transactions. However, since it is a repeat issuer, this increases our confidence that the data that we and investors relied on is accurate.
- ***Servicing oversight:*** The servicer is a fully regulated bank under the supervision of the national bank regulator and has to adhere to certain standards in terms of independent control and audit functions as well as internal credit policies and servicing procedures in relation to the granting of auto loans.
- ***Bankruptcy remoteness:*** We received legal opinion to the effect that in the event of a bankruptcy or insolvency proceeding with respect to key transaction parties, the securitised auto loans would not be treated as part of the estate of such party. Also, the SPV is a special purpose entity and is independently owned and managed. SPV directors are not incentivized by applicable bankruptcy law to file for bankruptcy.

Methodology and monitoring

We will monitor the transaction on an ongoing basis to ensure that it continues to perform in the manner expected, including checking all supporting ratings and reviewing periodic servicing reports. Any subsequent changes in the rating will be publicly announced and disseminated through Moody's client service desk.

Data quality: The issuer will provide a finalised investor report and discuss it with us. This report will include all necessary information for us to monitor the transaction.

Data availability: The transaction documentation has set out a timeline for the investor report. The investor report will be published monthly and the frequency of the interest payment date is monthly. Investor reports will be publicly available on a website.

Modelling assumptions

Sensitivity to variation in some of the modelling assumptions may have been considered in the analysis.

Exhibit 33
Modelling assumptions

Expected default rate:	1.5%
PCE:	8.0%
Coefficient of variation (CoV):	66.4%
Timing of defaults/losses:	Sine (3-16-47)
Recovery rate:	35.0%
Recovery lag:	5% after 3 months; 15% after 6 months; 20% after 12 months; 20% after 18 months; 20% after 24 months; 20% after 36 months
Conditional prepayment rate (CPR):	10.0% first 18 months; 15.0% thereafter
Fees (as modelled):	0.45% with a floor of EUR 150,000
PDL definition:	Defaults
Amortisation profile:	Scheduled amortisation of the assets
Country ceiling:	Aaa
Margin compression:	CPR applied to 50% of the highest yielding loans
Interest on cash:	Index - 0.50%
Commingling risk modelled?	Yes
Excess spread (model output)*:	0.8%

* Annualised excess spread in a zero default scenario based upon the first payment period value using Moody's stressed asset yield and fees assumptions.
Source: Moody's Investors Service

Appendix 1: Summary of the originator's underwriting policies and procedures

Exhibit 34

Originator Ability	At closing
Sales and Marketing Practices	
Origination Channels:	Approx. 80% Point of Sale business, approx. 20% Cooperation
Origination Volumes:	As per 2022: 3.8 bn € (including Auto Loans, Dealer Floorplan and Direct Loans)
Average Length of Relationship Between Dealer and Originator:	Not disclosed
Underwriting Procedures	
% of Loans Automatically Underwritten:	Not disclosed
% of Loans Manually Underwritten:	Not disclosed
Ratio of Loans Underwritten per FTE* per Day:	Not disclosed
Average Experience in Underwriting or Tenure with Company:	Not disclosed
Approval Rate:	Not disclosed
Percentage of Exceptions to Underwriting Policies:	Not disclosed
Underwriting Policies	
Source of Credit History Checks:	Core Banking System (Bank11), Schufa Holding AG (Bureau Information)
Methods Used to Assess Borrowers' Repayments Capabilities:	Internal and external debts, Debt/Income, Disposible Income (Budget Calculation)
Income Taken into Account in Affordability Calculations:	Net monthly income and other sources like rental income or pension payments after verification
Other Borrower's Exposures (i.e. other debts) Taken in Account in Affordability Calculations:	All outstanding and information received from credit agencies with respect to external repayment obligations
Method Used for Income Verification:	Copy of salary slips of last 2 month or access to look at customer's current account (with exceptions for customers with excellent score and positive bureau information)
Maximum Loan Size:	Covered by credit competency scheme
Average Deposit Required:	Not disclosed
Credit Risk Management	
Reporting Line of Chief Risk Officer:	The CRO is a member of the executive board
FTE: Full Time Employee	
Originator Stability:	**At closing**
Quality Controls and Audits:	
Responsibility of Quality Assurance:	Risk management validates scoring system, budget calculation and efficiency of policy rules on a regular
Number of Files per Underwriter per Month Being Monitored:	Not disclosed
Management Strength and Staff Quality	
Average Turnover of Underwriters:	Not disclosed
Training of New Hires and Existing Staff:	Standard training course, fraud prevention trainings and ongoing training on the job
Technology	
Frequency of Disaster Recovery Plan Test:	Not disclosed

Originator Stability:	At closing
Quality Controls and Audits:	
Responsibility of Quality Assurance:	Risk management validates scoring system, budget calculation and efficiency of policy rules on a regular basis
Number of Files per Underwriter per Month Being Monitored:	Not disclosed
Management Strength and Staff Quality	
Average Turnover of Underwriters:	Not disclosed
Training of New Hires and Existing Staff:	Standard training course, fraud prevention trainings and ongoing training on the job
Technology	
Frequency of Disaster Recovery Plan Test:	Not disclosed

Source: Bank11

Appendix 2: Summary of the servicer's collection procedures

Exhibit 35

Servicer Ability	At closing
Loan Administration	
Entities Involved in Loan Administration:	Centralised at the head office
Early Stage Arrears Practices	
Entities involved in Early Stage Arrears:	Inbound Call Center / Dedicated collection staff at head office
Definition of Arrears	
7-10 days past due:	Special direct debit will be drawn
14 days past due:	Dunning letter
15 - 30 days past due:	Contact Call
85 days past due:	Face to face visits by external field agents
	Repossesion of the vehicle if necessary
	Legal dunning letter
	Threat of termination
Data Enhancement in Case Borrower is Not Contactable:	Use of credit bureaus, electronic phone books, investigation agencies, Information given by neighbours/landlords
Loss Mitigation and Asset Management Practices	
Transfer of a Loan to the Late Stage Arrears Team:	After 90 days past due or in case of customer insolvency
Entities Involved in Late Stage Arrears:	Legal, field agents outsourced to third parties; staff at centralised head office
Ratio of Loans per Collector (FTE):	Not disclosed
Time from First Default to Litigation /Sale:	Approx. 4-5 months from first default to litigation
Average Recovery Rate (on Vehicle):	Not disclosed
Channel Used to Sell Repossessed Vehicles:	External vehicle auction company
Average Total Recovery Rate (after vehicle sale):	Not disclosed
Servicer Stability	**At closing**
Management and Staff	
Average Experience in Servicing or Tenure with Company:	Senior servicing staff has more than 22 years of experience; average tenure is 7.5 years
Training of New Hires Specific to the Servicing Function (i.e. excluding the company induction training):	Work with experienced collector/servicer as a mentor/mentee system, learning on the job
Quality Control and Audit	
Responsibility of Quality Assurance:	Internal control system by department head
IT and Reporting	
Frequency of Disaster Recovery Plan Test:	Not disclosed

Source: Bank11

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