S&P Global
Ratings

Research

New Issue: RevoCar 2024-1 UG (haftungsbeschränkt)

Primary Credit Analyst:
Matthew Aitken, Frankfurt +49 69 3399 9153; matthew.aitken@spglobal.com

Secondary Contact:
Leslie Selamme, Paris +33 1 40 75 25 07; leslie.selamme@spglobal.com

Table Of Contents

Table Of Contents (cont.)

New Issue: RevoCar 2024-1 UG (haftungsbeschränkt)

Ratings Detail

Ratings

Class	Rating*	Amount (mil. €)	Note balance (%)	Available credit enhancement (%)	Interest (%)	Legal final maturity
A	AAA (sf)	586.3	90.2	9.8	One-month EURIBOR plus 0.56	February 2037
B-Dfrd	A (sf)	32.5	5.0	4.8	One-month EURIBOR plus 1.30	February 2037
C-Dfrd	BBB+ (sf)	14.3	2.2	2.6	One-month EURIBOR plus 2.30	February 2037
D-Dfrd	BB+ (sf)	10.4	1.6	1.0	One-month EURIBOR plus 4.10	February 2037
E-Dfrd	NR	6.5	1.0	N/A	One-month EURIBOR plus 9.00	February 2037

*Our rating on the class A notes addresses the timely payment of interest and ultimate payment of principal, while our ratings on the class B-Dfrd, C-Dfrd, and D-Dfrd notes address the ultimate payment of interest and principal no later than the legal final maturity date. NR--Not rated. N/A--Not applicable.

Supporting ratings

Institution/role	Rating	Replacement trigger	Collateral posting trigger
BNP Paribas, Germany Branch as the transaction accounts provider*	A+/Stable/A-1	A	N/A
BNP Paribas SA	A+/Stable/A-1	A	N/A
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main	A+/Stable/A-1	A-	A-

The replacement language in the documentation is in line with our counterparty criteria (see "Counterparty Risk Framework: Methodology And Assumptions," published on March 8, 2019). For a full list of transaction participants, please refer to the appendix. N/A--Not applicable *Based on the ratings on the parent company, BNP Paribas SA. N/A--Not applicable.

Transaction Summary

S&P Global Ratings has assigned its credit ratings to RevoCar 2024-1 UG (haftungsbeschränkt)'s asset-backed floating-rate class A, B-Dfrd, C-Dfrd, and D-Dfrd notes. At closing, RevoCar 2024-1 also issued unrated class E-Dfrd notes.

The cash flow results have improved since the preliminary ratings, driven by tighter liability margins and a higher weighted average loan interest rate, resulting in higher excess spread.

The pool in RevoCar 2024-1 comprises German auto loan receivables that Bank11 für Privatkunden und Handel GmbH (Bank11) originated and granted to private (94.4%) and commercial customers (5.6%) for the purchase of used

(65.6%) and new vehicles (34.4%), primarily cars. The portfolio also includes 3.0% of loans for motorbikes and leisure vehicles. This transaction is Bank11's fourteenth German public ABS securitization.

According to the transaction's terms and conditions, interest can be deferred on the class B-Dfrd to E-Dfrd notes if their respective undercollateralization levels exceed a certain threshold. Furthermore, there is no compensation mechanism in place that would accrue interest on deferred interest, and all previously deferred interest will not be due immediately when the class becomes the most senior.

Considering the abovementioned factors, we have assigned ratings that address the ultimate payment of interest and principal on the class B-Dfrd, C-Dfrd, and D-Dfrd notes. Our rating on the class A notes instead addresses the timely payment of interest and ultimate payment of principal.

Our ratings reflect our analysis of the transaction's payment structure, its exposure to counterparty and operational risks, and the results of our cash flow analysis to assess whether the rated notes would be repaid under stress scenarios.

A liquidity reserve provides liquidity support to senior fees, swap costs, and interest on the class A notes in the case of any shortfalls.

The transaction features a combined waterfall. The notes amortize pro rata unless a sequential payment trigger event occurs. From that moment, the transaction will switch permanently to sequential amortization.

The assets pay a monthly fixed interest rate, and the notes pay one-month Euro Interbank Offered Rate (EURIBOR) plus a class-specific margin subject to a floor of zero. Consequently, the rated notes benefit from an interest rate swap until the legal final maturity date.

Our sovereign, counterparty, and operational risk criteria do not constrain the assigned ratings (see "Related Criteria").

RevoCar 2024-1 issued unrated class E-Dfrd subordinated notes. The notes provide credit enhancement to the class A to D-Dfrd notes, given that the tranche ranks below the other classes for the payment of principal.

The pool comprises auto loans with equal fixed installments during the contract's life ("EvoClassic"), and auto loans with equal fixed installments during the contract's life with a balloon payment at the end ("EvoSmart"). Of the pool, 70% of the principal balance are EvoSmart contracts.

The Credit Story

Strengths, concerns, and mitigating factors

Strengths	Concerns and mitigating factors
This is the bank's fourteenth German publicly-rated ABS transaction, of which we've rated four, the last one was RevoCar 2020-1. The previous rated transactions have performed well and in line with our expectations.	There was no back-up servicer in place at closing. The combination of a borrower notification process, a liquidity reserve, a commingling reserve, and the general availability of substitute servicers mitigates servicer disruption risk.
The portfolio is highly granular and well-diversified across Germany's federal states and by vehicle brands. As of the cutoff date March 31, 2024, the largest single obligor represented about 0.02%, and the top 15 obligors comprised 0.31% of the portfolio.	As of the cutoff date, the pool comprised 70% EvoSmart receivables which entail a balloon component. The balloon payment at maturity could result in a payment shock to the borrower, compared with equally amortizing loans. We have sized the additional losses resulting from payment shock after considering the underlying vehicles' market value decline.
Bank11 has thirteen years of business experience and is one of Germany's largest non-captive car financing companies. In our view, Bank11 has established itself as an experienced originator and servicer in the German securitization markets.	We do not rate the seller and originator, Bank11, which also services the loans. Commingling risk could occur if Bank11 defaults, given that collections from the assets are channeled through Bank11's accounts. To mitigate this risk, an amortizing commingling cash reserve was funded at closing. We have considered the transaction's exposure to commingling risk and the amortizing commingling reserve in our cash flow analysis. The reserve mitigates commingling risk in our driving scenario.
The class A notes benefit from a non-replenishing liquidity reserve, which the originator fully funded at closing. The liquidity reserve provides liquidity support to senior fees, swap costs, and interest on the class A notes, if there is a shortfall in these amounts due.	The transaction allows pro rata redemption of all rated notes unless a sequential payment trigger is hit. Pro rata redemption of the junior notes would cause the available credit enhancement for the senior notes to reduce in absolute terms. The transaction features various performance triggers for principal deficiency events and cumulative loss ratios, mitigating the risk derived from pro rata amortization. Our cash flow model incorporates those triggers, testing how a change in the type of amortization would affect the notes. In addition, we ran several scenarios to test the effect of a sequential payment trigger being hit at different stages of the life of the transaction.
Given the difference between the assets' interest and the senior expenses, interest on the notes, and swap costs, the transaction benefits from excess spread to cure defaults.	
As of the cutoff date, the portfolio did not contain any delinquent or defaulted contracts.	

Environmental, Social, And Governance Factors

Our rating analysis considers a transaction's potential exposure to environmental, social, and governance (ESG) credit factors. For the auto ABS sector, we view the exposure to environmental credit factors as above average, social credit factors as average, and governance credit factors as below average (see "ESG Industry Report Card: Auto Asset-Backed Securities," published on March 31, 2021).

In our view, the transaction's exposure to ESG credit factors is in line with our sector benchmark. The transaction's above average exposure to environmental credit factors results from the collateral pool primarily comprising vehicles with internal combustion engines (ICE), which create emissions of pollutants including greenhouse gases. While the adoption of electric vehicles and future regulation could in time lower the value of ICE vehicles, we believe that our current approach to evaluating recovery and residual values adequately accounts for vehicle values over the transaction's relatively short expected life. As a result, we have not separately identified this as a material ESG credit factor in our analysis.

Asset Description

As of the cutoff date, the collateral pool comprised 32,427 loans, with a total current principal balance of €650 million. The portfolio comprises auto finance receivables granted for the purchase of used (65.6%) and new vehicles (34.4%), originated by Bank11 and mainly granted to its private clients (94.4%).

The securitized pool complied with the eligibility criteria and consists of two loan product types:

- The "EvoClassic" loans have an original term between 12 and 120 months and are fully amortizing. A borrower down payment can reduce their total loan volume; and

- The "EvoSmart" loans have an original term between 13 and 73 months and have a balloon component at the contract end. A down payment from the borrower can also reduce their total loan volume.

The largest single borrower concentration is 0.02%, the top 15 borrowers comprise 0.31% of the portfolio, and the average outstanding balance is approximately €20,045. As a noncaptive lender, Bank11 finances a variety of vehicle manufacturers. The three largest manufacturers in the portfolio represent only 30.0% of the pool's balance.

Table 2

Collateral key features

	RevoCar 2024-1	RevoCar 2020-1	RevoCar 2019-2	RevoCar 2016	RevoCar 2015
Originator	Bank11 für Privatkunden und Handel GmbH	Bank11 für Privatkunden und Handel GmbH	Bank11 für Privatkunden und Handel GmbH	Bank11 für Privatkunden und Handel GmbH	Bank11 für Privatkunden und Handel GmbH
Country	Germany	Germany	Germany	Germany	Germany
Type of assets	Auto loans	Auto loans	Auto loans	Auto loans	Auto loans
Pool cutoff date	March 31, 2024	May 31, 2020	Sept. 30, 2019	Feb. 27, 2016	Feb. 27, 2015
Aggregate discounted principal balance outstanding (mil. €)	650	800	500	550	346.2
Weighted-average customer interest rate (%)	6.10	3.10	3.12	3.17	4.37
Weighted-average original term (months)	56.9	57.1	54.9	55	41.6
Weighted-average remaining term (months)	51.2	47.5	45	47.1	31.6
Weighted-average seasoning (months)	5.7	9.6	9.8	7.9	10
Largest borrower (%)	0.02	0.02	0.03	0.02	0.05
Top 15 borrower concentration (%)	0.31	0.19	0.29	0.3	0.37
Geographic concentration (%)	20.77 (North Rhine Westfalia)	21.0 (North Rhine Westfalia)	20.9 (Bavaria)	21.7 (North Rhine Westfalia)	24.0 (North Rhine Westfalia)
Top 3 manufacturer concentration (%)	30	29	28.2	23	25.2
Vehicle type (%)					
Share of new vehicles	34.4	50	46	60.2	63.3
Share of used vehicles	65.6	50	54	39.8	36.7
Customer type (%)					
Private	94.4	97	96.4	96.2	97.3
Corporate	5.6	3	3.6	3.8	2.7
Product type (%)					
EvoClassic	30	35.5	25	35.8	61.6
(fully amortizing)					
EvoSmart (standard balloon)	70	8.5	0	7.4	38.4
EvoSupersmart	0	56	75	56.8	

Chart 1

Scheduled amortization of the securitized pool

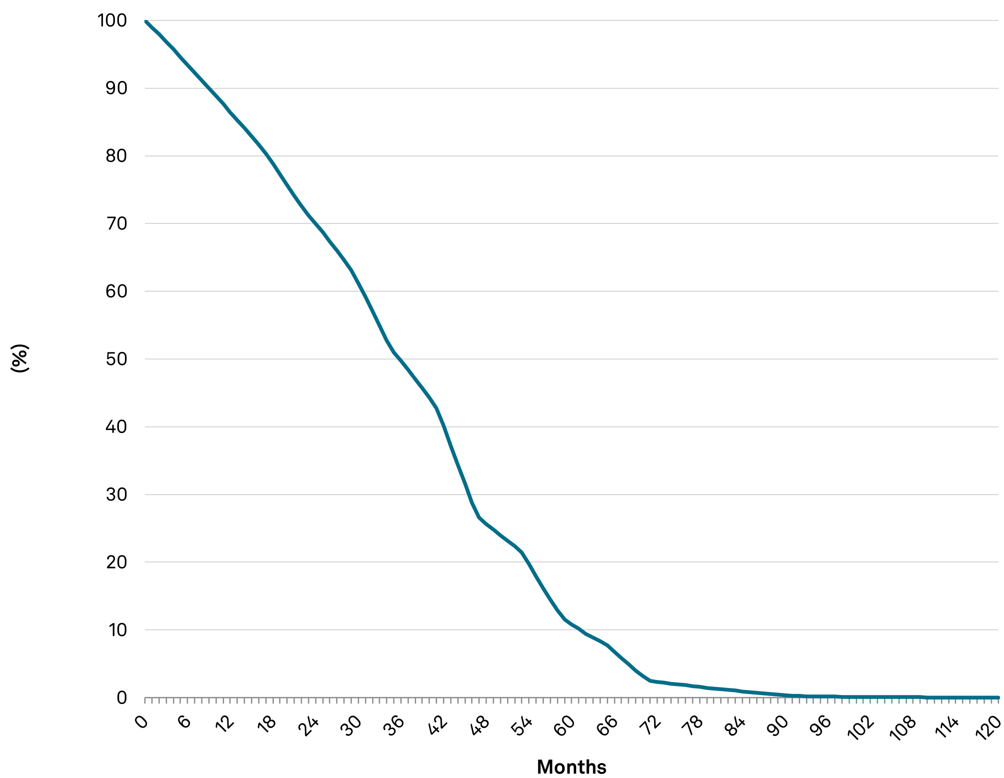
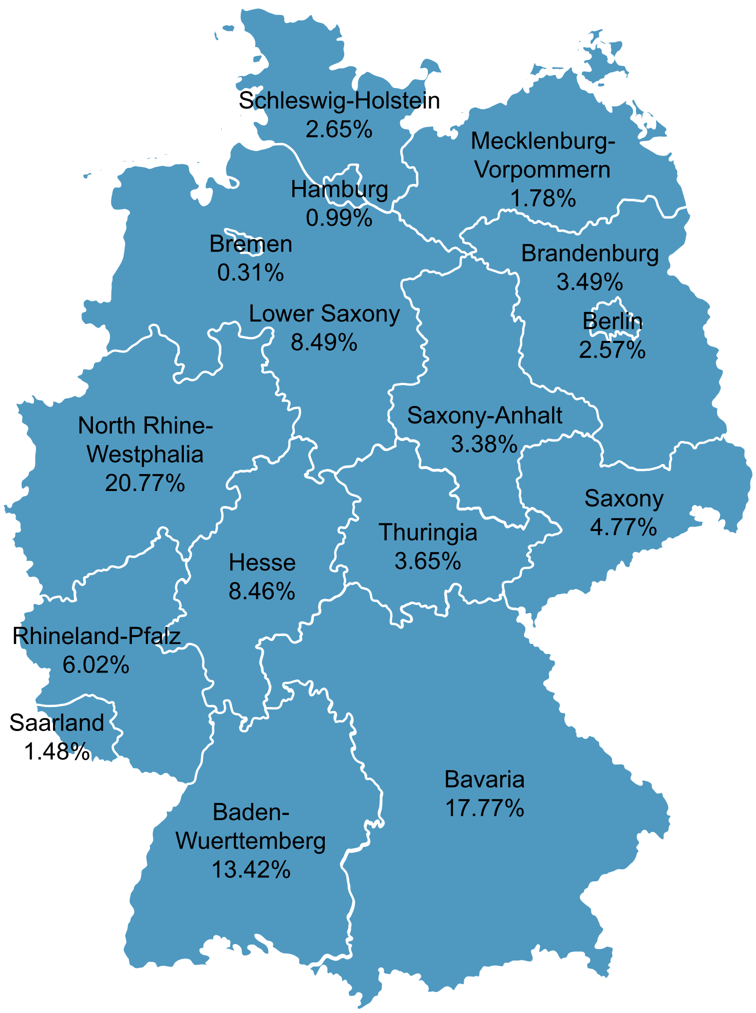


Chart 2

Geographic distribution



Originator And Servicer

Bank11 was founded in 2011 and is headquartered in Neuss. It is a small bank with a strong business focus on providing auto loans to private and commercial customers, and to a smaller extent, car dealer financing and consumer credit. Bank11 is an indirect subsidiary of Wilh. Werhahn KG, a family owned German conglomerate with a diversified business portfolio, mainly operating in building materials, financial services, and consumer goods.

Since its foundation, Bank11 has gained substantial market share in the German non-captive car financing market. Bank11 is now the second largest non-captive car financing company in Germany, after Santander Consumer Bank

AG.

Bank11 originates most of its new loan business through its sale partners, including, among others, car dealers and online platforms for vehicle loans, and automobile clubs. In addition, it originates a small portion of its loan business through Bank11's direct online channel. We understand that loans granted via Bank11's own platform ("autowunsch.de") are not part of the portfolio.

In 2023, Bank11's total car financing origination volume stabilized at about €2.5 billion. Bank11's total balance sheet increased to €7.7 billion, compared to €6.5 billion in 2022. About 67% of Bank11's refinancing is sourced via deposits from private and institutional customers.

It is a licensed bank in Germany and is therefore regulated by the German regulatory authority (BaFin).

Underwriting policy

During the underwriting process, we understand that Bank11 checks the customer credit reference for private customers with SCHUFA and with CreditReform for commercial customers, both German credit bureaus. The vehicle serves as collateral for the loan. To mitigate the risk of a fraudulent vehicle sale, Bank11 or a third party on behalf of Bank11 stores the vehicle registration documents. In line with the underwriting policy, Bank11 can waive the handover of the vehicle registration documents if a debtor fulfils certain criteria. These include, among others, credit and fraud scores and borrower types.

The arrears collection process starts automatically through system-generated reminders, and a specialist company quickly handles the vehicle repossessions. If repossession and/or full recovery is not possible, we understand that Bank11 would initiate legal action.

Servicing policy

On the issuer's behalf, Bank11 is responsible for the daily administration and servicing of the securitized portfolio and for the recovery of loans in accordance with its internal policy. We have considered Bank11's ability to service the portfolio under our operational risk criteria, and we are satisfied with its ability to perform its functions in the transaction. Consequently, our operational risk criteria do not constrain the maximum potential rating assignable to the transaction.

As part of our analysis, we conducted an on-site visit to Bank11's headquarters in 2024. We are satisfied that the underwriting and servicing standards are in line with other players in the German auto loan market. Upon servicer insolvency, the substitute servicer facilitator, Intertrust (Deutschland) GmbH, will assist the issuer in finding a suitable replacement servicer within 90 calendar days.

Credit Analysis

Our analysis includes an assessment of the credit risk inherent in the transaction under various stress scenarios. We based our credit analysis on our European auto loan criteria, using historical gross loss data from the originator's loan book (see "Related Criteria").

We have received monthly static gross loss data from March 2016 to December 2023 for EvoClassic and EvoSmart loans. Gross losses include contracts where the servicer has terminated the related loan agreement for good cause, has enforced any security provided to secure the receivable, has declared the loan due and payable in full in accordance with German Civil Code Section 498, or where the corresponding borrower is insolvent. This data was provided for various subportfolios, such as products (EvoClassic and EvoSmart), vehicle type (new and used), and loan-to-value (LTV) ratio buckets. In addition, we have received for the same subportfolios monthly dynamic delinquency data based on Bank11's book.

Defaults

We analyzed the performance data provided by the originator at the subpool level, split by the EvoClassic and EvoSmart products. Bank11 provided more than seven years of historical data (both static and dynamic) for all products.

A portion of the portfolio has been originated through sales partners, such as cooperation partners like automobile clubs. In our view, we expect this portion's credit performance to be comparable to the overall portfolio and have not stressed this separately.

Charts 3, 4, and 5 show the historical cumulative gross losses, by year of origination.

Chart 3

Cumulative quarterly gross losses for total portfolio

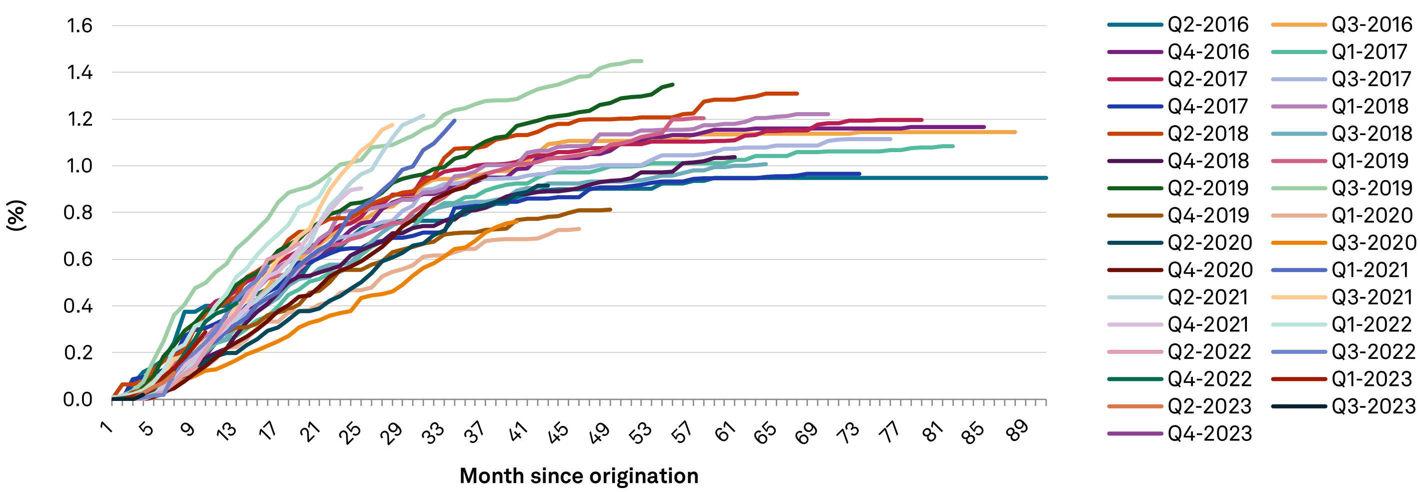


Chart 4

Cumulative quarterly gross losses for EvoClassic

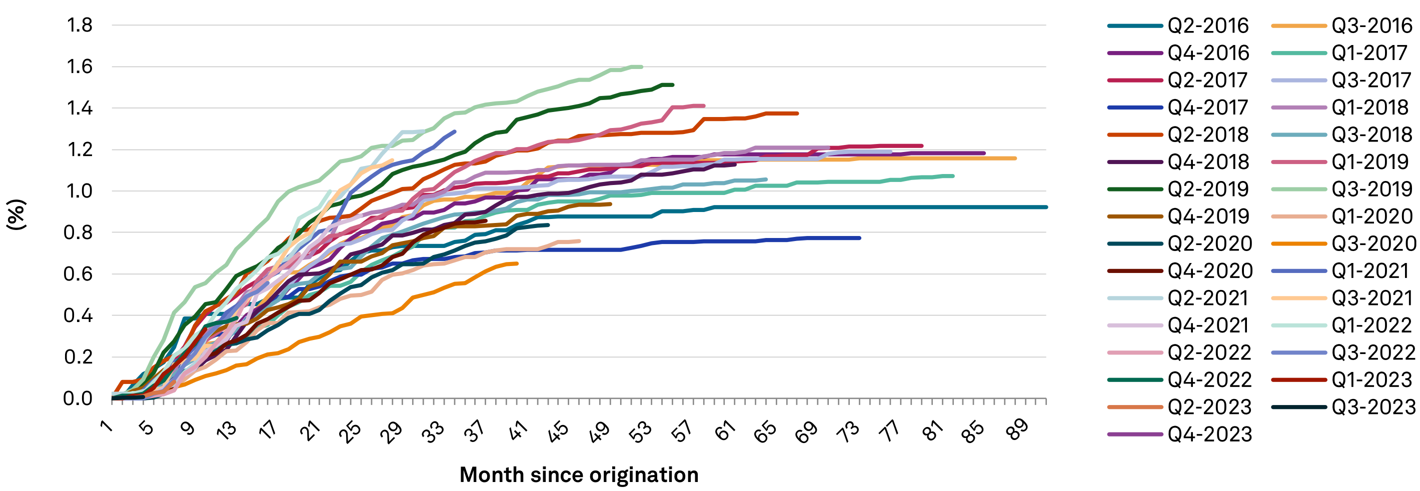


Chart 5

Cumulative quarterly gross losses for EvoSmart

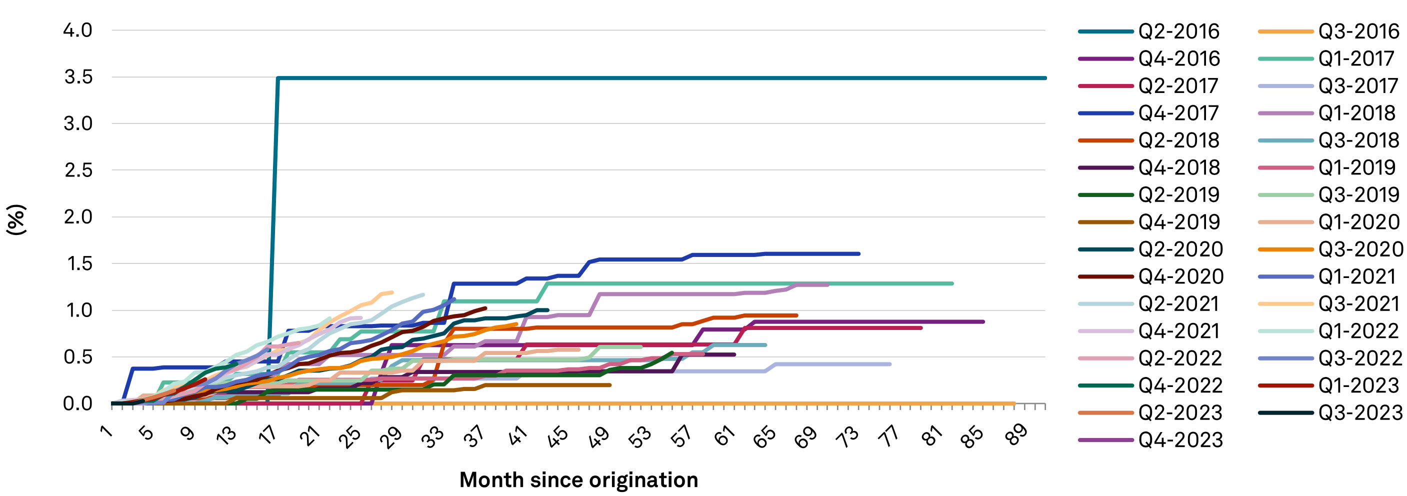


Table 4

Cumulative gross loss base-case		
	Pool (%)	**Cumulative gross loss base-case (%)**
EvoClassic	30.00	1.65
EvoSmart	70.00	2.00
Weighted average	N/A	1.90

N/A--Not applicable.

Our multiples reflect the good data quality and quantity and Bank11's extensive experience as a servicer.

Recovery rates and recovery timings

Recoveries are a combination of vehicle sale proceeds and ancillary payments received from the borrowers. Under our global auto ABS criteria, we establish recovery rate assumptions based primarily on an analysis of historical recovery rates for the issuer and the market, the volatility of past performance as well as credit, operational, or other factors that might affect the timing, amount, and sustainability of recovery rates. After considering all this information we set the base-case recovery rate at 40%.

Table 5

Credit assumptions summary--pool						
Rating level	**Cumulative gross loss base-case (%)**	**Stress multiple (x)**	**Stressed cumulative gross losses (%)**	**Recovery rate base-case (%)**	**Recovery rate haircuts (%)**	**Stressed cumulative net losses (%)**
AAA	1.90	4.80	9.10	40	45.0	7.1
AA	1.90	3.80	7.20	40	35.0	5.3
A	1.90	2.80	5.31	40	26.3	3.7
BBB	1.90	1.80	3.41	40	21.3	2.3
BB	1.90	1.30	2.46	40	16.3	1.6
B	1.90	1.05	1.99	40	11.3	1.3

Balloon loan risk

Balloon contracts may introduce additional obligor default risk to the transaction, if we assume that obligors expect to be able to finance the final balloon payment through the sale of the vehicle at contract maturity. In a stressed economic environment, such obligors may default on the balloon payment because the market value of the vehicle could have declined to below the amount needed to pay the final balloon payment.

Therefore, if an obligor defaults on the balloon payment, RevoCar 2024-1 will incur an additional loss equal to the difference between the balloon instalment and the vehicle's sale proceeds. We have set our balloon loan gross loss assumption at a 'AAA' level at 9.0%, based on the significant diversification by brand and vehicle type, Bank11's balloon setting policy, and the maturing balloon payments' overall size and concentration.

In applying the additional loss rate in our cash flow analysis, we establish an adjusted balloon payment amount by adjusting the aggregate balloon payments on the securitized loans to reflect stress scenario defaults and prepayments. We calculate the incremental balloon gross loss rate by multiplying the applicable additional balloon loss rate by the adjusted balloon payment amount as a percentage of the total pool balance.

Table 6

Balloon loss assumptions--pool

Rating level	Balloon loss rate(%)
AAA	9.0
AA	7.2
A	4.4
BBB	2.6
BB	0.0
B	0.0

Prepayment

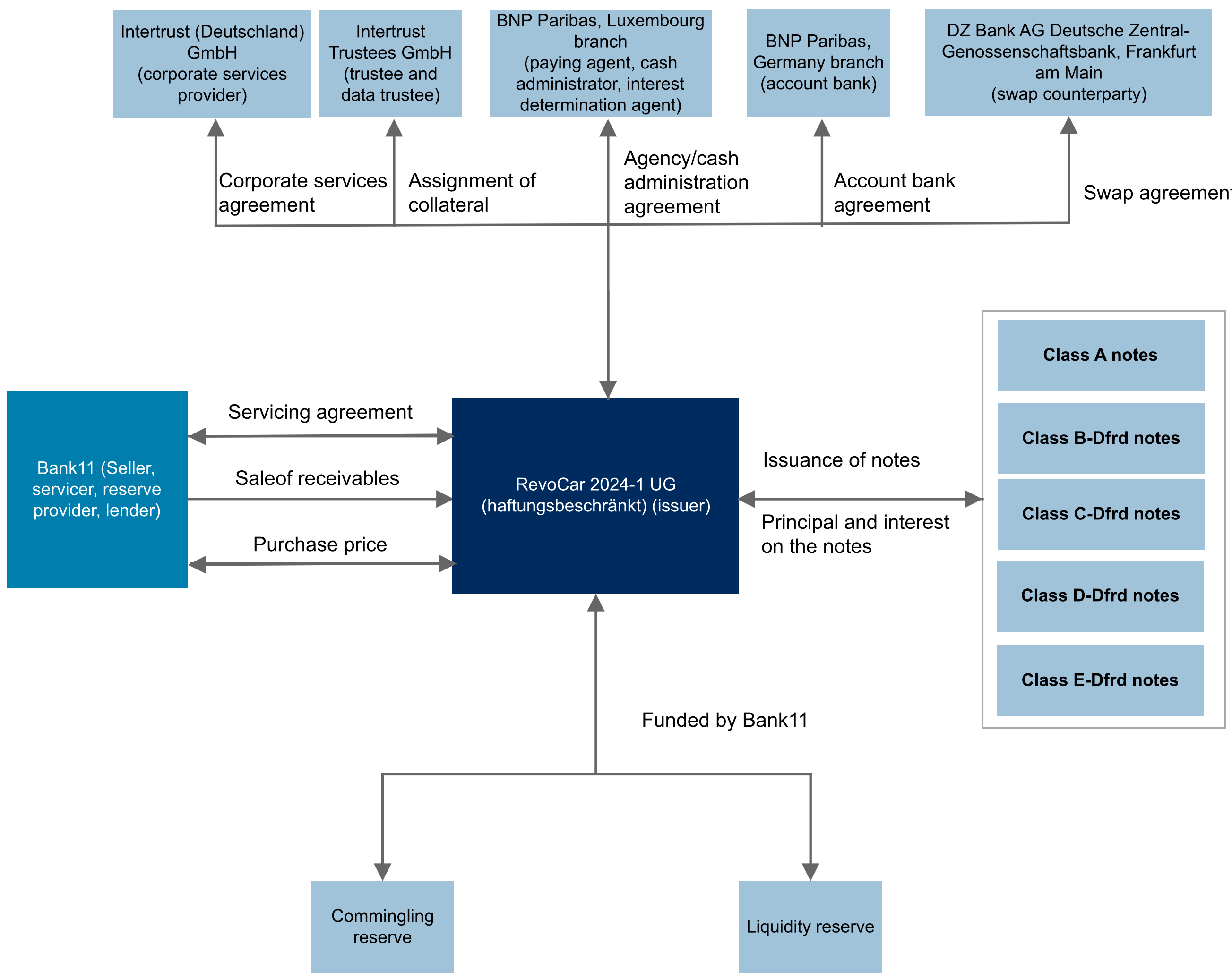
We have modelled the prepayment rate up to 24.0% and down to 0.5%.

Transaction Structure

At closing, the issuer purchased a pool of auto loan receivables from Bank11, and issued notes to fund such purchase (see chart 6).

Chart 6

Transaction structure



RevoCar 2024-1 is a German special-purpose entity (SPE), which we consider to be bankruptcy remote under our legal criteria (see "Structured Finance: Asset Isolation And Special-Purpose Entity Methodology," published on March 29, 2017). The transaction's legal opinion at closing confirmed that the sale of the assets would survive the seller's insolvency.

Recent changes introduced to German interest stripping rules could limit the issuer's ability to deduct net interest expenses if they exceed a certain threshold. In considering the issuer's tax status for the purposes of our legal criteria, we have taken account of forecasts provided by the originator indicating that the issuer's net interest expense should not exceed that threshold.

Cash Flow Mechanics

The class A, B-Dfrd, C-Dfrd, D-Dfrd and E-Dfrd notes are denominated in euros and pay interest at a floating rate plus a margin. If the interest rate is less than zero, it will be deemed to be zero. The legal final maturity date is in February 2037.

Issuer available funds

The transaction has combined interest and principal payment waterfalls. The waterfall features a mechanism, by which the issuer can use excess spread to cure principal defaults. Principal payments on the class A to D-Dfrd notes pay pro rata from day one until a potential sequential trigger is breached.

On any monthly interest payment date (IPD), RevoCar 2024-1 applies to the waterfall the sum of the following payments that it received on the preceding month:

- Interest collections;
- Principal collections;
- Recoveries;
- Net swap receipts;
- Liquidity reserve on the payment date. Payments are only available to cover shortfalls down to the class A notes' interest;
- Commingling reserve on the payment date, which applies only if the servicer as of the previous payment date has failed to transfer received collections. Payments are only available to cover shortfalls down to the class E-Dfrd notes' principal; and
- On the regulatory change event redemption date only, the mezzanine loan disbursement amount paid by the lender to the issuer, which will be applied solely to repay the class B-Dfrd to D-Dfrd notes.

Eligibility criteria

The transaction documents set out certain eligibility criteria for the initial pool which include:

- First instalment has been collected;
- Granted to individuals resident in Germany;
- it is either an EvoClassic or an EvoSmart receivable;
- The receivable is not delinquent or defaulted;
- The receivable has a remaining term of no more than 73 months for an EvoSmart contract or no more than 120 months for an EvoClassic contract;
- The loan contract was entered to finance a vehicle and the original loan amount does not exceed 115.0% of the vehicle sale price, and the balloon payment does not exceed 90% of the vehicle sale price;
- Payments are made via direct debit;
- The loan is originated in accordance with Bank11's credit and collection policy and is governed by German law;

- No borrower has a banking deposit with Bank11; and
- No credit-impaired borrower or guarantors are included.

Interest deferral trigger

The class B-Dfrd to E-Dfrd notes can defer interest if a principal deficiency event (PDE) has occurred. On each payment date the PDE balance for each class is determined as the difference between:

- The note principal of the class of notes including those ranking senior, minus
- Amounts on the replenishment account, minus
- The total outstanding principal balance of non-defaulted receivables.

Effectively, the PDE determines each tranche's undercollateralization, based on the performing principal balance.

Table 7

Principal deficiency event

Class of notes	Minimum threshold (mil. €)
B-Dfrd	39.4
C-Dfrd	20.4
D-Dfrd	9.1
E-Dfrd	3.3

Repayment of the notes and pro rata mechanism

From closing, the issuer redeems the notes pro rata unless a sequential payment trigger is hit.

The transaction will switch to sequential payment if one of the following events occurs:

- The cumulative loss ratio exceeds 0.50% during the first twelve months, and 1% afterward;
- The class E-Dfrd notes' PDE has occurred;
- The aggregate outstanding portfolio balance falls below 10% of the original outstanding portfolio balance;
- A servicer termination event has occurred;
- An issuer event of default has occurred; or
- A regulatory change event has occurred.

Priority of payments

The class A through E-Dfrd notes pay interest in arrears on a designated date each month, at a floating rate. The transaction has a combined priority of payments.

Table 8

Priority of payments (simplified)	
1	Senior fees
2	Swap fees
3	Interest on the class A notes
4	Interest on the class B-Dfrd notes if no class B-Dfrd PDE occurs
5	Interest on the class C-Dfrd notes if no class C-Dfrd PDE occurs
6	Interest on the class D-Dfrd notes if no class D-Dfrd PDE occurs
7	Interest on the class E-Dfrd notes if no class E-Dfrd PDE occurs and until the occurrence of a regulatory change event redemption date
8	Prior to occurrence of a sequential payment trigger, to pay pari passu and on a pro rata basis:
i)	Class A principal
ii)	Class B-Dfrd principal
iii)	Class C-Dfrd principal
iv)	Class D-Dfrd principal
9	After the occurrence of a sequential payment trigger event, class A principal
10	After the occurrence of a sequential payment trigger event and if a class B-Dfrd PDE is occurring, class B-Dfrd interest amount
11	After the occurrence of a sequential payment trigger event, class B-Dfrd principal amount
12	After the occurrence of a sequential payment trigger event and if a class C-Dfrd PDE is occurring, class C-Dfrd interest amount
13	After the occurrence of a sequential payment trigger event, class C-Dfrd principal amount
14	After the occurrence of a sequential payment trigger event and if a class D-Dfrd PDE is occurring, class D-Dfrd interest amount
15	After the occurrence of a sequential payment trigger event, class D-Dfrd principal amount
16	After the occurrence of a sequential payment trigger event and after the occurrence of a regulatory change event redemption date, to the payment of interest amounts due and payable on the mezzanine loan
17	After the occurrence of a sequential payment trigger event and after the occurrence of a regulatory change event redemption date, to the payment of the mezzanine loan redemption amount until the mezzanine loan is reduced to zero
18	After the occurrence of a sequential payment trigger event, if a class E-Dfrd PDE is occurring, or after the occurrence of a regulatory change event redemption date, class E-Dfrd interest amount
19	Class E-Dfrd principal amount
20	Payment of the commingling reserve adjustment
21	Termination payment for the swap
22	Class E-Dfrd turbo principal amount
23	Additional servicing fee to the servicer
24	Transaction gain to the issuer

Through the payment waterfall, the transaction first redeems the class A to D-Dfrd notes' principal (pro rata) or the most senior notes' principal (once a sequential payment trigger is breached) up to an amount equaling the difference between the outstanding class A to E-Dfrd notes' balance (class E-Dfrd notes' balance at closing), and the assets' outstanding balance (excluding defaults). This means that the transaction uses excess spread to cure defaults, as defaulted receivables reduce the performing asset balance.

Excess spread

Excess spread results from the difference between the interest income received from the assets and the interest paid to the rated noteholders, plus any senior fees and expenses. At closing, we estimate the unstressed excess spread is about 2.09%.

Optional redemption

Under the transaction documents, RevoCar 2024-1 can redeem the notes at their outstanding principal amount, together with interest accrued before the date fixed for redemption, on any IPD:

- At the originator's option, when the aggregate outstanding principal amount has been reduced to 10% of the initial aggregate outstanding principal amount (clean-up call); or
- Following tax changes that affect note payments.

The repurchase price on the clean-up call or tax change date must be sufficient to fulfil all payment obligations under the class A to D-Dfrd notes.

Following a regulatory change event, the originator has the option to dispurse a mezzanine loan to the issuer in order to fully redeem the class B-Dfrd to D-Dfrd notes. The class A to D-Dfrd notes' outstanding interest amounts must be paid in accordance with the priority of payments on the relevant regulatory change event payment date. The mezzanine loan will rank junior to the class A notes' interest and principal payments and will pay a fixed interest rate equal to the class B-Dfrd to D-Dfrd notes' current weighted average margin plus the fixed swap rate. If this regulatory event occurs then all future payments would follow a sequential basis, with principal paid on the class A notes before the mezzanine loan. Therefore, we have tested various scenarios in our cash flow analysis. The introduction of a mezzanine loan and redemption of the class B-Dfrd to D-Dfrd notes would not negatively impact the rating on the class A notes.

Liquidity reserve

At closing, Bank11 funded an amortizing liquidity reserve held in the name of the issuer for an amount of 1.2% of the outstanding principal balance with a floor of €550,000. Amounts deposited in the liquidity reserve account are available to mitigate any liquidity shortfalls in the payment of senior costs, swap costs, and for class A notes' interest. Any excess of the reserve over the required amount flows outside of the waterfall. The reserve is not replenished in the waterfall and is not available to repay notes' principal at the end of the transaction's life. Hence, we do not consider this as available credit enhancement.

Interest rate hedging

At closing, the issuer and the swap counterparty entered into a fixed-to-floating interest swap agreement to hedge the risk between the fixed rate of interest paid by the assets and the floating rate of interest payable on the notes.

The notional for the swap is the outstanding principal balance of all the classes of notes as of the previous IPD. the swap counterparty pays the issuer a floating interest rate based on one-month EURIBOR (i.e., the same index that the notes pay), and the SPE pays the swap counterparty a fixed rate.

The final swap documentation was in line with our criteria at closing.

Bank account provider

The bank account provider, BNP Paribas, Germany branch holds the operating account and the reserve accounts.

The minimum documented required long-term issuer credit rating on the bank account provider is 'A', supporting a maximum rating of 'AAA (sf)' on the notes.

Mitigation Of Seller Risks

Commingling risk

Commingling risk may arise if the servicer becomes insolvent. We assume that: (i) the amounts in the collection account at servicer insolvency, plus (ii) the amounts that enter the collection account before the issuer notifies borrowers to redirect their payments, would become part of the servicer's insolvency estate and would therefore be lost.

Collections from the purchased receivables are deposited in the servicer collection account. The servicer will transfer the collections within the same business day into the SPE's transaction account opened with BNP Paribas, Germany branch, in the issuer's name. All borrowers pay via direct debit either on the first day or the 15th day of each month.

Under the documents, the servicer and the substitute servicer facilitator have committed to put in place a procedure to notify the borrowers to pay directly to the issuer's account upon the servicer becoming insolvent and its collection authority under the direct debit being revoked.

In our analysis, we assume that 30% of monthly collections will be lost due to amounts that come into the collection account after servicer insolvency. We do not size for amounts in the collection account at servicer insolvency because we believe the daily sweeping sufficiently mitigates this risk.

To mitigate this risk, at closing Bank11 funded a commingling reserve, equal to 1% of the performing balance. This will become available to the priority of payments to cover items down to the class E-Dfrd notes' principal, if the servicer fails to transfer collections for the relevant payment date.

We have considered the reserve's amortizing feature in our cash flow analysis (see cash flow section).

Setoff risk

In general, setoff risk may arise at servicer insolvency. This is because obligors can set off their loan instalments against:

- Their salary (employee setoff);
- Insurance obligations (if the insurance provider becomes insolvent); or
- Their deposits (deposit setoff).

The transaction's pool eligibility criteria exclude loans granted to Bank11's employees, mitigating employee setoff risk. Bank11 is a deposit-taking institution. The potential deposit-related setoff risk is minimal in our view, as borrowers who hold deposits with the originator are excluded as per the eligibility criteria. Also, considering support from the German deposit protection insurance scheme, we have not sized any additional losses.

Additionally, obligors may exercise their right to set off loan payments because some of the contracts have been sold with insurance products. Their right to reduce their instalments by an amount equal to the insurance premium cannot be excluded. The risk cannot be excluded if Bank11 and the insurer simultaneously become insolvent. We consider this risk to be remote in our analysis.

Cash Flow Analysis

Our rating on the class A notes address the timely payment of interest and ultimate payment of principal, while our ratings on the class B-Dfrd to D-Dfrd notes address the ultimate payment of interest and principal no later than the legal final maturity date.

Table 9

Cash flow assumptions	
Recession start	Closing
Length of recession	The shorter of the Weighted-average life (36 months) and 36 months = 36 months
Cumulative gross loss curve	Evenly distributed and back-loaded over weighted-average life
Recovery lag	Nine months
Delinquency	Liquidity stress equal to two-thirds of credit losses recovered six months later
WAC (%)*	6.10
Relative WAC compression (%)	0.70
Servicing fee (%)	1.00
Fixed fees (€)	100,000
Replacement bank cost (€)	100,000
Low CPR (%)	0.50
High CPR (%)	24.00
Interest rate	Up, down, up/down, down/up
Commingling loss	30% of monthly collections, mitigated in our driving run through the commingling reserve
Setoff loss (€)	None

WAC--Weighted-average coupon before spread compression. CPR--Constant prepayment rate.

Our cash flow model incorporates the transaction's payment structure, including the notes' sequential/pro rata amortization feature and the liquidity reserve's amortizing nature.

Our analysis indicates that the available credit enhancement is sufficient to withstand the credit and cash flow stresses that we apply at the 'AAA' rating level for the class A notes, 'A' rating level for the class B-Dfrd notes, 'BBB+' rating level for the class C-Dfrd notes, and 'BB+' rating level for the class D-Dfrd notes.

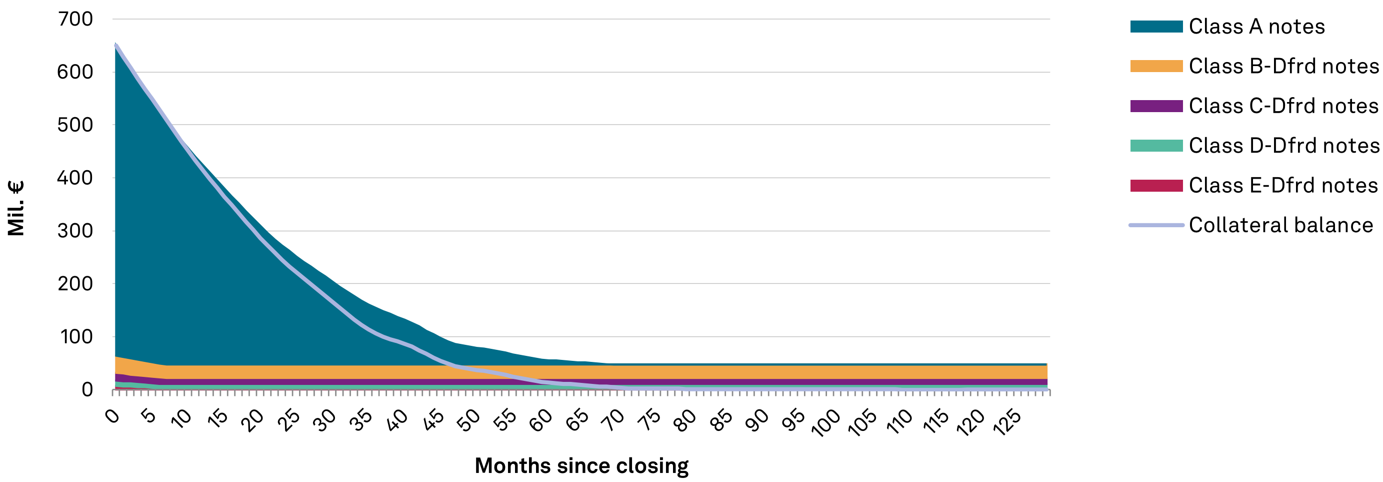
To account for the notes' sequential/pro rata amortization feature, we have also tested the structure's sensitivity to a back-loaded and delayed loss timing. Considering the tight conditions that would switch the transaction to a sequential payment and the portfolio's short weighted-average life, we have considered the scenario when the recession starts in month seven to be the most appropriate to determine the ratings.

At closing, Bank11 funded a commingling reserve at 1% of the performing balance. Since the reserve amortizes, there may be some periods where the reserve does not cover all of the potential commingling loss. This means that we would need to stress for commingling in our surveillance of the ratings to check whether stresses applied later on may have an impact on credit enhancement. In line with our analysis of RevoCar 2020-1, we will sense check commingling and recovery timings at later stages of the assets' weighted-average life to monitor the robustness of the ratings.

To account for the commingling reserve's amortizing feature, we have also tested the structure's sensitivity to different commingling loss timings. For this, we ran various cash flow runs to determine if the transaction will have enough credit enhancement to maintain the rated notes' credit stability. The commingling reserve fully covered all commingling losses applied in our sensitivity cash flow runs.

Chart 7

Collateral and note balances (EOP) in the 'AAA' most stressful scenario



EOP--End of period.

Sovereign Risk

Our long-term unsolicited sovereign credit rating on Germany is 'AAA'. Therefore, our ratings in this transaction are not constrained by our structured finance sovereign risk criteria (see "Incorporating Sovereign Risk In Rating Structured Finance Securities," published on Jan. 30, 2019).

Forward-Looking View

We consider the transaction's resilience to additional stresses to some key variables, in particular defaults and recoveries, to determine our forward-looking view.

In our view, borrowers' ability to repay their auto loans will be highly correlated to macroeconomic conditions, particularly the unemployment rate and, to a lesser extent, consumer price inflation and interest rates. Given the loans are fixed-rate, we believe rising interest rates will have a lower effect on these borrowers in the near term, while longer term, they will likely further stretch household finances. Our unemployment rate forecasts for Germany are 3.3% in 2024, 3.2% in 2025, and 3.0% in 2026. Our forecasts for inflation in Germany are 2.7% in 2024, 2.2% in 2025, and 1.9% in 2026.

Furthermore, a decline in second-hand car values typically lowers realized recoveries. Although used car prices may decline moderately in Germany in 2024, we do not expect them to fall significantly.

Given our current macroeconomic forecast and forward-looking view of Germany's auto market, our sensitivity scenarios consider, all else being equal, the hypothetical effect on our credit ratings of:

- An increased gross default base case of up to 30%; and
- A maximum haircut of 30% to the recovery rate base case.

We therefore ran eight scenarios with increased gross defaults and/or reduced expected recoveries, as shown in the table below.

Chart 8

Sensitivity analysis

Class	Base case	1	2	3	4	5	6	7	8
Default rate base-case increase (%)	0	10	30	0	0	10	30	10	30
Recovery rate base-case decrease (%)	0	0	0	10	30	10	10	30	30
Gross default rate (%)	1.90	2.09	2.47	1.90	1.90	2.09	2.47	2.09	2.47
Recovery rate (%)	40	40	40	36	28	36	36	28	28

Class of notes	Initial rating	1	2	3	4	5	6	7	8
A	AAA	AA+	AA	AAA	AA+	AA+	AA	AA+	AA
B	A	A	A-	A	A	A	A-	A-	BBB+
C	BBB+	BBB	BBB	BBB	BBB	BBB	BBB	BBB	BBB-
D	BB+	BB+	BB	BB+	BB+	BB+	BB	BB	BB-

No change
One-notch downgrade
Two-notch downgrade
Three-notch or more downgrade

Source: S&P Global Ratings.

The results of the above sensitivity analysis indicate a deterioration of no more than two notches on the notes, which is in line with the credit stability considerations in our rating definitions. Transaction features such as initial subordination levels and a liquidity reserve enhance the stability of the ratings under each scenario.

Monitoring and surveillance

We will assess quarterly the underlying portfolio's performance, including defaults and delinquencies.

Additionally, we will also assess annually:

- The supporting ratings;
- The servicer's operations and its ability to maintain minimum servicing standards; and

- Whether the then-available credit enhancement for each class of notes is sufficient to withstand losses that are commensurate with the ratings assigned.

Appendix

Transaction participants	
Seller and servicer	Bank11 für Privatkunden und Handel GmbH
Arranger and joint lead manager	UniCredit Bank GmbH
Trustee	Intertrust Trustees GmbH
Corporate service provider and substitute servicer facilitator	Intertrust (Deutschland) GmbH
Paying agent, cash administrator, and listing agent	BNP Paribas, Luxembourg branch
Bank account provider	BNP Paribas, Germany branch
Data protection trustee	Intertrust Trustees GmbH
Swap provider	DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main

Related Criteria

- Criteria | Structured Finance | ABS: Global Auto ABS Methodology And Assumptions, March 31, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
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Related Research

- Economic Outlook Eurozone Q4 2023: Slower Growth, Faster Tightening, Sept. 25, 2023
- European Auto ABS Index Report Q4 2023, Feb. 7, 2024
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- Germany 'AAA/A-1+' Ratings Affirmed; Outlook Stable, March 24, 2023
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- How Much Is Enough? Information Quality Standards For The EMEA RMBS And ABS Rating Process, Jan. 8, 2019
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