RevoCar 2019-2 UG (haftungsbeschränkt)

New Issue

Inside This Report

Related Appendix

RevoCar 2019-2 UG (haftungsbeschränkt)

Related Criteria

Global Structured Finance Rating Criteria (May 2019)

Consumer ABS Rating Criteria (January 2019)

Structured Finance and Covered Bonds Counterparty Rating Criteria (April 2019)

Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (June 2019)

Fitch's Interest Stress Assumptions for Structured Finance and Covered Bonds – Excel File (March 2019)

Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (April 2019)

Analysts

Olga Kashkina
+49 69 768076 264
olga.kashkina@fitchratings.com

Michael Ecke
+49 69 768076 139
michael.ecke@fitchratings.com

Capital Structure

Class	Final Rating	Outlook	Amount (EURm)	CE[a] (%)	Interest Rate (%)	Final Maturity
A	AAAsf	Stable	458.2	8.4%	0.1%	Oct 2036
B	A+sf	Stable	22.3	3.9%	1.2%	Oct 2036
C	BBB+sf	Stable	9.1	2.1%	2.7%	Oct 2036
D	BBsf	Stable	4.3	1.2%	5.2%	Oct 2036
E	NR	n.a.	6.1	n.a.	8.2%	Oct 2036
Total			**500**			

Closing occurred on 24 October 2019. The ratings assigned above are based on the portfolio information as of 30 September 2019, provided by the originator. The offering circular and other material should be reviewed prior to any purchase.

[a] Credit enhancement (CE) consists of overcollateralisation based on an total asset pool of EUR500 million. In addition, the structure benefits from excess spread that may be used to cure defaults as they occur.

Transaction Summary

This is the seventh public securitisation of German loan receivables under the RevoCar brand. The receivables are auto loans, inclusive of balloon portions, granted to private and commercial customers by Bank11 für Privatkunden und Handel GmbH.

Key Rating Drivers

Non-standard Product Securitised: At closing, the portfolio consisted of 25% amortising EvoClassic loans and 75% of EvoSupersmart loans, which are balloon loans with special features. During the initial period, the customers pay monthly instalments with a fixed interest rate. Thereafter, the customers may either repay the balloon amount or continue to pay monthly instalments with a variable interest rate. In Fitch Ratings' view, the loans will be comparable to traditional balloon loans in a stressed scenario.

Limited Pool Migration Potential: Fitch views the potential for adverse portfolio migration to be limited over the four-year revolving period. Most replenishment criteria are reasonably close to initial pool attributes. Fitch considers the performance triggers as adequate to stop the revolving period in case of higher-than-expected losses and insufficient excess spread to cure outstanding defaults.

Moderate Default Expectations: Default rates in the originator's total book have historically been low. Fitch has assigned a default base case of 1.7%, which is above the worst-performing vintage, to primarily address the risks of a limited track record of underwriting in a less favourable economic environment and the long risk-horizon from the four-year revolving period. Fitch further accounted for risks associated with balloon payments and further risks from the revolving period by assigning a higher-than-range multiple of 7.6x at 'AAA'.

Servicer Continuity Adequate: Servicer discontinuity risk is addressed by clearly defined responsibilities around the appointment of a substitute servicer within three months, the standard nature of the assets and an adequately sized liquidity reserve. The liquidity reserve covers at least three months of senior fees and Class A interest in case of servicer termination.

Transaction Comparison

Issuer	RevoCar 2019-2 UG	RevoCar 2017 UG	Silver Arrow S.A., Compartment 10	Bavarian Sky S.A. Comp. German Auto Loans 8	PBD Germany Auto 2018 UG
Type	Revolving (4 years)	Revolving (2 years)	Static	Static	Revolving (12 months)
Closing date	October 2019	March 2017	July 2019	May 2018	October 2018
Originator	Bank11	Bank11	Mercedes-Benz Bank	BMW Bank	PSA Bank Deutschland
Type of receivables	Auto loans	Auto loans	Auto loans	Auto loans	Auto loans
Total outstanding balance (EURm)	500	450	1,250	1,075	666.7
Number of receivables	32,614	32,605	60,125	56,071	64,942
Weighted average (WA) yield (%)	3.1	3.1	3	3.3	4.6
Average outstanding balance (EUR)	15,331	13,801	20,790	19,177	10,266
WA remaining term (months)	45.0	50.8	33	35.1	32.1
WA seasoning (months)	9.8	6.3	16.1	9.1	18
Age of vehicle (%)					
New vehicles	54.0	57.3	45.4	47.6	81.2
Used vehicles	46.0	42.7	54.6	52.4	18.8
Debtor type (%)					
Individuals	96.4	96.4	61.7	73.5	66.5
Professional and small businesses	3.6	3.6	38.3	26.5	33.5
Type of repayment (%)					
Fully amortising	25	39	24.7	0.9	25.2
Balloon payment	75	61	75.3	99.1	74.8
Payment method (%)					
Direct debit	100	100	100	99.8	100
Fitch assumptions (%)					
Cumulative default rate assumption	1.7	2.3	1.5	1.7	2.4
Recovery rate assumption	40	40	70	65	53.4
Prepayment rate assumption	11	11	9	15	10

Transaction Parties

Role	Entity	Rating
Issuer	RevoCar 2019-2 UG (haftungsbeschränkt)	Not rated
Seller, originator, servicer, subordinated lender	Bank11 für Privatkunden und Handel GmbH	Not rated
Account bank	BNP Paribas Securities Services, Frankfurt branch	A+/Stable/F1
Security trustee, data trustee	Wilmington Trust SP Services (Dublin) Limited	Not rated
Substitute servicer facilitator	Wilmington Trust SP Services (Frankfurt) GmbH	Not rated
Paying agent, cash administrator	BNP Paribas Securities Services, Luxembourg branch	A+/Stable/F1
Issuer administrator	Wilmington Trust SP Services (Frankfurt) GmbH	Not rated
Arranger and Lead manager	UniCredit Bank AG	BBB+/Negative/ F2

Source: Fitch Ratings, RevoCar 2019-2 UG

Related Research

German Diesel ABS Risks May Be Easing, but Have Not Disappeared (March 2019)

German Court Ruling Underscores Risk to Diesel Car Prices (March 2018)

Demand, Price Falls Highlight German Used Diesel Car Risk (September 2017)

European Diesel Restrictions Could Hit Used Car Prices (April 2017)

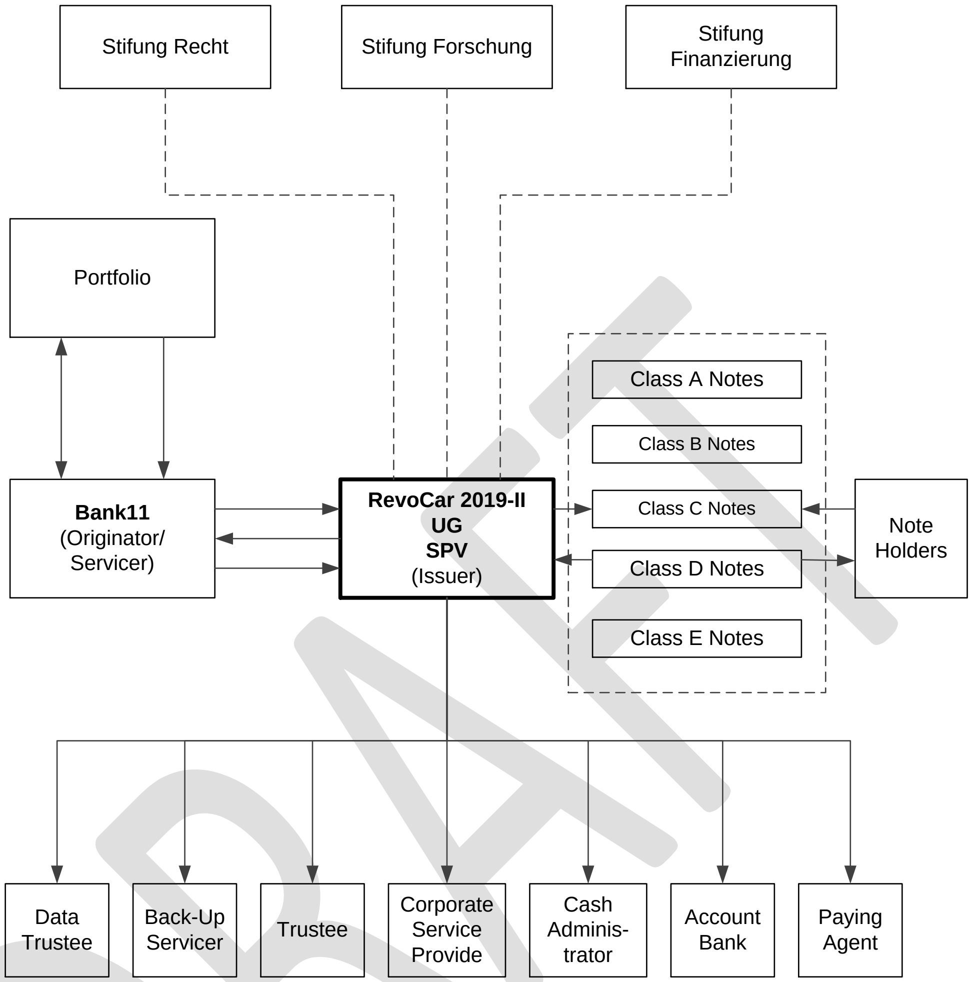
EMEA Auto ABS Primer 2018 (December 2018)

Auto ABS Index – Europe 3Q19 (August 2019)

ABS Compare (October 2019)

Transaction and Legal Structure

Structure Diagram



Source: Fitch Ratings, RevoCar 2019-2 UG

Issuer and True Sale

RevoCar 2019-2 UG is a special-purpose, bankruptcy-remote company incorporated with limited liability under German law. At closing, the issuer has acquired claims arising under loan contracts between the seller and certain debtors. The claims arising under the loan contracts and the related collateral have been assigned and transferred to the issuer as security.

Capital Structure and Credit Enhancement

This issuance consists of the rated class A to D notes as well as the unrated equity tranche. credit enhancement (CE) is provided by overcollateralisation based on a total asset balance of EUR500 million.

In addition, we expect the transaction to benefit from a cumulative excess spread of 2.6%-1.7% over its lifetime in the highest to lowest rating scenarios. The calculation considers Fitch's scenario-specific stress assumptions, including high prepayments, back-loaded defaults and decreasing interest rates, the weighted average (WA) stressed portfolio yield of 2.7%, the criteria servicing fee of 0.7%-1% and the notes' fixed coupons.

The issuer's assets and liabilities at closing are summarised in the balance sheet below.

Issuer's Balance Sheet

Assets	Amount (EURm)	Liabilities	Amount (EURm)	Size in % of receivables
Receivables	500	Class A	458.2	91.6
		Class B	22.3	4.5
		Class C	9.1	1.8
		Class D	4.3	0.9
		Class E	6.1	1.2
Total	**500**		**500**	**100**

Source: Fitch Ratings, RevoCar 2019-2 UG

Eligibility Criteria

A receivable is considered eligible if it satisfies, among other things, the following conditions:

- it is not delinquent, defaulted or disputed at the purchase date;
- it exists and constitutes a legal, valid, binding and enforceable obligation of the debtor;
- it has been originated in accordance with the originator's credit and collection policy;
- it has a minimum remaining term of two months, while the original term is not greater than 120 months for all receivables except for EvoSupersmart receivables. For EvoSupersmart receivables, original term is no longer than 61 months (the original term means the term of the initial period);
- it bears a fixed interest rate. For EvoSupersmart receivables, this condition refers to the interest rate during the initial period;
- the maximum size of the receivables attributable to one borrower is limited to EUR150,000;
- at least one loan instalment has been paid;
- it is payable by direct debit;
- it is not subject to set-off claims;
- it is not due from an employee of the seller.
- debtors do not hold deposits with the originator; and
- debtors are residents of Germany.

Priority of Payments

The transaction uses a combined waterfall for interest and principal payments. The available distribution amount comprises interest, principal, recoveries, and interest earned on the issuer's accounts.

In addition, a liquidity reserve can be drawn in case of a servicer default and to the extent necessary to cover any shortfalls in senior costs and class A note interest. The commingling and set-off reserves will only be drawn to the extent collections are commingled with Bank11's insolvency estate or deposit set-off claims have not been honoured by Bank11.

Before an issuer event of default, payments will be made on each monthly payment date in accordance with the priority of payments shown below.

Pre-Enforcement Priority of Payments

(1)	Senior and other statutory expenses
(2)	Servicing fees
(3)	Class A interest
(4)	Class B interest if no class B PDE[a] is occurring
(5)	Class C interest if no class C PDE is occurring
(6)	Class D interest if no class D PDE is occurring
(7)	Class E interest if no class E PDE is occurring
(8)	During the revolving period, purchase price for additional receivables
(9)	During the revolving period, payment to the replenishment shortfall account
(10)	Class A principal redemption amount up to required amount
(11)	In case a class B PDE is occurring, class B interest
(12)	Class B principal redemption amount up to required amount
(13)	In case a class C PDE is occurring, class C interest
(14)	Class C principal redemption amount up to required amount
(15)	In case a class D PDE is occurring, class D interest
(16)	Class D principal redemption amount up to required amount
(17)	In case a class E PDE is occurring, class E interest
(18)	Class E principal redemption amount up to required amount
(19)	Commingling reserve replenishment up to the required amount
(20)	Set-off risk reserve replenishment up to the required amount
(21)	Any excess paid to the servicer/shareholder of the issuer

[a] PDE – Principal deficiency event
Source: Fitch Ratings, RevoCar 2019-2 UG

During the revolving period, principal collections and excess spread will be used to purchase eligible loan receivables or fund the replenishment shortfall account in a way that the excess spread should cover the principal balance of defaulted receivables in a given period.

Principal Deficiency Event Trigger

During the amortisation phase, the structure foresees principal deficiency event (PDE) triggers which change the priority of payments. A PDE occurs if, on any payment date following the application of the available distribution amount on such payment date, the aggregate note amount exceeds the outstanding asset balance (excluding defaults) by a pre-defined trigger level, shown below. For example, when a class B PDE occurs, interest payments on classes B, C, D and E notes become subordinated to class A principal, as shown in the priority of payments above.

PDE Trigger Levels (EURm)

Class B PDE	Class C PDE	Class D PDE	Class E PDE
20.9	9.8	5.2	3.1

Source: Fitch Ratings, RevoCar 2019-2 UG

Notes Amortisation

The amortisation of the notes is strictly sequential, and any subordinate class of notes will only start to amortise after the senior class notes have been repaid in full.

On each payment date the target redemption amount is such that the aggregate outstanding note balance will be aligned to the non-defaulted asset balance. This ensures that excess spread can be used to cure defaults once they are recorded.

Interest Deferral

According to transaction documentation, unpaid interest on the class B-E notes can be deferred to the next payment dates. Non-payment of class B-E notes interest would only constitute an issuer event of default on the legal final maturity date. Interest does not accrue on the interest shortfalls. The agency tested for timely payment of interest on the class A notes and ultimate payment of interest on the rated class B-D notes in its cash flow modelling.

Since there is no cash reserve for class B-D notes and payment interruption risk is thus not mitigated, the rating for those notes is capped at 'A+sf'.

Early Amortisation Triggers

The triggers detailed below are designed to terminate the revolving period early in case of performance deterioration. In addition, the revolving period is terminated automatically upon insolvency of originator, a servicer termination event or an issuer event of default.

Cumulative Loss Trigger

The revolving period will be terminated early if the cumulative loss ratio exceeds pre-defined trigger levels:

- 0.3% during the first 12 months since closing;
- 0.6% during the 13-24 months since closing;
- 0.9% during the 25-36 months since closing; and
- 1.2% during the 37-48 months since closing.

The cumulative loss ratio takes into account in its numerator defaults as they arise in line with the transaction's default definition, as specified in *Default Risk* section. Incoming recoveries reduce the trigger level. The denominator of the trigger is the total purchased asset balance currently performing.

Fitch compared the trigger levels with expected losses in 'B' and 'BB' scenarios based on the criteria default timing and found that the triggers would be breached sufficiently early to protect the transaction against significant performance deterioration. Fitch also assessed whether the originator has the ability to reduce the trigger effectiveness through buying back or restructuring the receivables and regards these possibilities as limited.

Replenishment Shortfall Account Trigger

During the revolving period, available distribution amount may be used to purchase additional eligible assets or to fund a replenishment shortfall account. Replenishment shortfall account will be funded if the amount of purchased receivables is lower than the amount available for replenishment. Early amortisation will be triggered if for three consecutive months the amounts on the replenishment shortfall account exceed 10% of the initial aggregate note balance of all classes.

Asset-Liability Mismatch Trigger

If the note principal amount of all classes of notes exceeds the sum of the performing portfolio balance including the amount on the replenishment shortfall account, the revolving period will be terminated. This situation may arise if excess spread is not sufficient to purchase new assets in an amount equivalent to defaulted receivables. In Fitch's view, this trigger ensures that the initial credit enhancement levels are maintained throughout the revolving period.

Liquidity Reserve

At closing, the transaction benefits from a EUR 1.25 million liquidity reserve. The reserve can be used only for liquidity purposes and does not provide credit support to the notes as it will only form part of the available distribution amount upon a servicer termination event, which would occur, for example, if the servicer is insolvent or if the servicer fails to comply with its payment obligations with a grace period of three business days. The liquidity reserve can be used to cover any shortfalls in senior expenses and class A note interest.

The reserve starts amortising after the end of the replenishment period and will be equal to 0.25% of outstanding collateral balance. Any released amounts from the reserve amortisation will be paid back to the originator outside the priority of payments. The initial liquidity reserve provides sufficient liquidity to cover any senior costs and interest payments on class A notes for at least three months, assuming the criteria 'B' servicing fee of 0.7%. Overall, Fitch views payment interruption risk as sufficiently addressed by the liquidity reserve.

Clean-Up Call

The seller will have the option to repurchase all outstanding purchased receivables once the outstanding principal amount of the receivables (excluding defaulted receivables) falls below 10% of the initial pool balance. Such a repurchase can be undertaken subject to the requirement that the repurchase price is equal to the then-outstanding performing receivable balance, plus any accrued interest on these receivables plus the value of defaulted and delinquent receivables, as determined by an independent appraiser.

Documentation does not specify whether the repurchase price has to be sufficient to redeem all rated notes. In the cash flow model, the agency has tested whether the performing portfolio balance will be sufficient to cover the principal amounts of the rated notes after the pool balance falls below 10% (clean-up call event). There are no shortfalls in the respective rating scenarios for each rated class of notes. The agency thus believes that clean-up call provision doesn't negatively affect the full repayment of the notes.

Repurchase of EvoSupersmart Receivables

If a borrower opts not to repay the balloon amount of an EvoSupersmart loan at the end of the initial period, the originator is obliged to repay the balloon amount of non-defaulted and non-delinquent EvoSupersmart receivables. Upon the repayment, the receivables are reassigned from the issuer to Bank11. Fitch did not consider the repurchase of EvoSupersmart balloon amounts by the originator in a stressed scenario.

Disclaimer

For the avoidance of doubt, Fitch relies, in its credit analysis, on legal and/or tax opinions provided by transaction counsel. As Fitch has always made clear, Fitch does not provide legal and/or tax advice or confirm that the legal and/or tax opinions or any other transaction documents or any transaction structures are sufficient for any purpose. The disclaimer at the foot of this report makes it clear that this report does not constitute legal, tax and/or structuring advice from Fitch, and should not be used or interpreted as legal, tax and/or structuring advice from Fitch. Should readers of this report need legal, tax and/or structuring advice, they are urged to contact relevant advisers in the relevant jurisdictions.

Asset Analysis

Originator Overview

The originator, Bank11, is an experienced lender that began operating in January 2011. It is headquartered in Neuss, Germany. Bank11 is part of Wilh. Werhahn KG, which operates in many fields, including building materials, consumer goods and financial services. Bank11 is a prominent line of business that shows a double-digit year-on-year growth since foundation, with the balance sheet approaching the size of EUR3 billion. Bank11 employs approximately 240 people, and provides loans and deposits to 510,000 customers.

Bank11's management is experienced in auto loan financing. Bank11 is one of the largest German non-captive financing company offering loans to purchase various car brands. It is specialised in offering auto loans to primarily private clients for financing new and used cars. The cars are offered through a well-diversified dealer network (more than 11,500 dealers).

Bank11 follows a simple business model, i.e. it offers a limited number of loan products to ensure cost efficiency. Bank11 sees its main competitive advantages in a highly diversified mix of offered car brands, the efficiency of its processes and a specialisation on standardised products. Fitch conducted an on-site review in July 2019 at Bank11. Overall, the agency considers the underwriting and servicing capabilities of Bank11 to be in line with market standards within the major German car finance companies.

Loan Products

Bank11 offers financing for new and used cars produced by all car manufacturers. The loans are originated via a diversified dealer network and granted to private and commercial customers. The following loan products are securitised in the transaction:

- EvoClassic: this is a fully amortising loan with a fixed interest rate. The loan is amortised in equal monthly instalments. The usual tenor ranges between 12 and 120 months.
- EvoSupersmart: balloon loan that features special characteristics. During the initial period (13-61 months), the customers pay monthly instalments and a fixed rate. The typical term of the initial period is about four years. After the end of the initial period, the customers may either repay the balloon amount or continue to pay monthly instalments with a condition that the monthly instalment (interest and principal) should be at least 1.5% of the balloon amount. During this subsequent period the interest rate is variable. In addition, a top-up facility is available to borrowers up to the amount of the original loan balance, once half the original loan amount has been repaid and a positive follow up descision has taken place. The term of the subsequent period is undefined. Bank11 has a contractual right to terminate EvoSupersmart loans in the subsequent period with six months prior notice. Bank11 started to originate EvoSupersmart loans in 2013.

Fitch assumes that Bank11 does not honour its repurchase obligation, described in *Repurchase of EvoSupersmart Receivables*. Instead, Fitch accounted for the presence of balloon risk in its analysis of EvoSupersmart loans. The agency assumed the substitute servicer to exercise the termination right granted to it upon servicer default. This scenario is grounded on the transaction documents stipulating that the substitute servicer will terminate EvoSupersmart loans without undue delay after the end of the initial period. As a result, the balloon amount will become due, no refinancing options will be available with Bank11, and the customer may experience a payment shock. The balloon risk is reflected in Fitch's default stress multiple, as described below in Portfolio *Credit Analysis*.

Origination and Underwriting

Loans are originated by the large dealer network with support from Bank11. The underwriting process is highly automated. A loan is granted to applicants who have been analysed in accordance with Bank11's origination standards. The dealer forwards the loan application, customer profile and information on the vehicle to be financed.

Usually, the credit decision is taken within a short time. This is normal for standard product types. The credit decision is taken by the credit department, which cannot be overruled. Bank11 has developed its own scorecard, which incorporates customer information (e.g. on income and employment) and further external data (e.g. Schufa Banken-score) and internal data (e.g. previous payment history).

Once the components have been evaluated, loan applications will be categorised as 'green', 'yellow' or 'red'. If 'green', the credit application will be automatically approved. The loan will be granted, subject to verification of the documentation, and the final decision will be transmitted electronically to the dealer. If 'yellow', the risk underwriting group will review the application and make a manual decision, in accordance with predefined rules. In case of 'red' result, the automatic credit decision is negative. However, under certain conditions monitored by risk management, a 'red' application may be manually approved. Additional security (e.g. higher downpayment or guarantee) may occasionally be requested from the applicant. Loans are settled once all the information required to make a decision has been checked for accuracy. At disbursement, loans are paid directly to the dealer, not to the debtor.

Balloon Setting Policy

Bank11 considers the expected vehicle price for determining maximum balloon rates. Balloon rates are set depending on the loan tenor. The shorter the term of the loan, the higher the maximum balloon rate allowed. Maximum balloon rates are embedded in the system used by dealers in the loan application process.

Servicing and Collections

Clients have to pay by direct debit. If the scheduled monthly payment is not received on the payment date, a special direct debit run takes place seven to 14 days after the due date. About 60% of the initial delinquencies can be cleared with this special direct debit run. In case the direct debit is not successful again, the client is contacted by telephone. In addition, automatic reminders are sent every 14 days by mail.

Occasionally, restructuring possibilities are granted to delinquent customers in case borrowers experience temporary liquidity problems. Such possibilities include rescheduling of payments or a temporary reduction of the instalment amount. The collection policy is limiting the number and extent of rescheduling. According to Bank11, every rescheduling must be reasonable and sustainable; an available proof of the customer situation has to be documented.

On average, Bank11 terminates delinquent accounts after three missed instalment. This is in line with the termination practices of other originators. Bank11 can terminate contracts in arrears for less than 90 days if this is in line with the applicable legal provisions, e.g. in case of insolvency. After loan contract termination, the originator starts judicial procedures for the enforcement of the receivables. This includes the foreclosure of the financed vehicle in instances where it was not returned voluntarily by the obligor at an earlier stage. If the vehicle is not returned voluntarily, Bank11 contracts external repossession companies to collect it.

The remarketing process is carried out by external companies that specialise in collections, enforcement and evaluation of cars. After the vehicle is repossessed, its value is assessed, and it is sold through car auction platforms, to which dealers throughout Germany have access. After contract termination and vehicle sale but prior to a loan write-off, Bank11 may sell the defaulted loans to bad debt collection agencies. Proceeds from bad debt sales will be credited in full against the corresponding loan account.

Portfolio Summary

The portfolio contains private and small commercial debtors. The portfolio is very granular with no obligors accounting for more than three basis points of the total portfolio balance. No geographical concentrations are present as the portfolio distribution is close to the population shares throughout the country.

Key Portfolio Characteristics – Final Portfolio

Loan balance (EURm)	500
Number of loan contracts	32,614
Average balance per loan (EUR)	15,331
WA original term (month)	55
WA remaining term (month)	45
WA seasoning (month)	10
New cars (%)	54
Used cars (%)	46
Commercial customers (%)	4
Private customers (%)	96

Percentages shown are per balance.
Source: Fitch Ratings, RevoCar 2019-2 UG

Revolving Limits

The following revolving limits apply.

- Minimum weighted average portfolio yield: 2.7%
- Minimum share of EvoClassic loans: 25%
- Minimum share of private customer loans: 90%
- Maximum portfolio remaining term: 60 months
- For additionally purchased receivables, minimum share of new vehicles: 30%

Portfolio Credit Analysis

Fitch received monthly vintage default rate data covering January 2013 to June 2019 for the originator's total book and split by sub-portfolios. Fitch also considered publicly available performance data from previous RevoCar deals.

Fitch has analysed the portfolio credit loss expectation and rating-specific loss rates, in line with its *Consumer ABS Rating Criteria* and incorporating our economic expectations. Stress factors are then applied to account for the impact of a deteriorating economic environment, revolving phase and other factors on the transaction's cash flows.

Default Risk

A receivable is considered defaulted if it has been terminated by Bank11 or has more than three instalments overdue. Since fees are typically charged for returned direct debit runs, a default generally occurs with the third missed instalment or shortly thereafter, which corresponds to period of around two months.

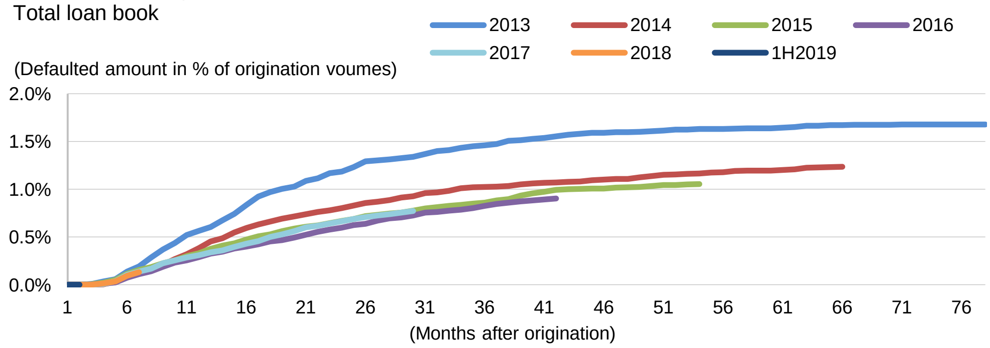
Fitch has determined a default base case of 1.7% over the term of the transaction, accounting for the risks arising from the longer-than-average revolving period. Our expectation takes into account the better performance of recent vintages, the robust performance of predecessor deals, as well as the benign outlook for the German economy with decelerating but positive growth and continued low unemployment.

The applied base cases are set higher than historically observed averages from vintage data. The long revolving period exposes the transaction to additional downside risks from a deteriorating economic environment. Further, the underwriting experience of Bank11 is largely from a benign economic period. The higher base case also incorporates the risks associated with possible changes in the product characteristics, borrower quality as well as underwriting processes during the four-year revolving period.

Fitch sees limited potential for adverse portfolio migration during the four-year revolving period, given that most replenishment limits are set reasonably close to initial pool attributes. In terms of loan types, i.e. amortizing and EvoSupersmart, replenishment criteria are specified on the levels equal to initial portfolio composition. The replenishment limit for the commercial borrowers is set close to the originator's book share at the relatively low level of 10%. Finally, the share of used cars cannot exceed 70% over the transaction's lifetime, which is addressed by the base case set above the historical averages for used cars.

Fitch applies a 'AAA' multiple of 6.5x and 8.0x to EvoClassic and EvoSupersmart sub-portfolios respectively. Based on the revolving period limits (limitation on minimum share of EvoClassic loans of 25%) Fitch has determined a weighted average 'AAA' multiple of 7.6x. These stress multiples reflect the fact that for both products historical data is only available for benign economic situations. The applied stresses also account for the risks associated with the four-year revolving period, which are partially also reflected in the applied default base cases. EvoSupersmart features a higher multiple than EvoClassic mainly due to the balloon risk present in this loan type.

Default Vintage Curves
Total loan book



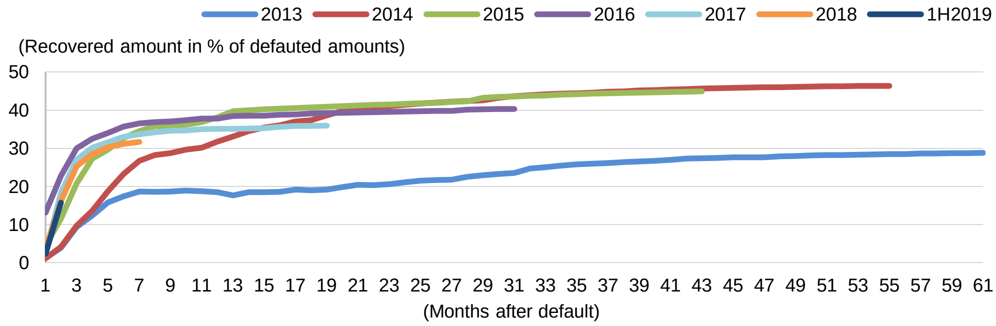
Source: Bank11, FitchRatings

Recovery Rates

Fitch reviewed recovery data split by loan product sub-portfolios and covering January 2013 to June 2019. We set a single base-case assumption of 40%. This is lower than for other German auto transactions, but in line with other non-captive portfolios.

In line with its criteria, Fitch has applied a median recovery haircut to its recovery rate expectation (50% for ‘AAA’), taking into account the shorter-than-average default definition.

Recovery Vintage Curves
Total loan book



Source: Bank11, FitchRatings

Asset Outlook

Fitch considers the asset performance outlook for German ABS to be stable. Our expectation for GDP growth of 0.6% and 0.8% in 2019 and 2020, respectively, represents a slowdown from previous years. Unemployment, which is one of the main drivers for consumer loan portfolios’ performance, is expected to remain close to the historical lows recorded over recent months.

Fitch Stressed Assumptions

Rating scenario	Rating default rate (%)	Rating recovery rate (%)	Rating loss rate (%)
AAA	13.0	20.0	10.4
A+	8.6	26.7	6.3
BBB+	6.3	30.0	4.4
BB	3.9	34.0	2.6
Base case	1.7	40.0	1.0

Source: Fitch Ratings

Prepayment Risk

Historical prepayment rates have been stable. Fitch applied a base-case prepayment rate of 11% a year, which we stressed in line with our criteria assumptions. For instance, high and low prepayments in a ‘AAA’ scenario are 16.5% and 5.5%, respectively.

High prepayments are more stressful in this transaction as they swiftly reduce the interest-generating portfolio balance and thus excess spread, which is then not available to the structure to cover defaults.

Financial Structure and Cash Flow Modelling

Fitch used its proprietary multi-asset cash flow model to test whether the available credit enhancement for each class of notes was sufficient to enable timely payment of interest when required and ultimate payment of principal by final maturity in various stressed scenarios. Even though class B-D interest is deferrable, interest payments of all classes of notes are made on time in the corresponding rating scenarios.

The weighted average life (WAL) of the portfolio taking into account base case prepayments is about 25 months, which is in-between the two default timing vectors from Fitch's *Consumer ABS Rating Criteria*. Even though the WAL and the historical timing derived from the defaults cohorts point towards the application of the short-term vector, Fitch used the front- and evenly loaded timing from the criteria short-term vector, but the criteria long-term evenly distributed vector as back-loaded vector. This was done to reflect the increased risk of the transaction's structure towards more back-loaded default timings, as those appear to be more stressful for junior notes. Under the back-loaded scenario, the PDE triggers are breached at a later stage – this reduces the available excess spread as interest on junior notes is paid over a longer period of time.

The portfolio amortisation was modelled based on data provided to Fitch and defaults, recoveries and prepayments were applied in line with the stressed assumptions summarised above. Interest income was generated on the receivables' balance in line with the portfolio yield distribution, and a WA coupon compression of 50% was applied for defaulted loans in line with Fitch's *Consumer ABS Rating Criteria*. The originator's recovery processes were considered when deriving the recovery timing assumption. Fitch assumed that most recoveries are received within a year of default.

Available cash was then distributed in line with the transaction's priority of payments, which features an implicit provisioning mechanism for defaults (see *Notes' Amortisation*).

Fitch tested the transaction's sensitivity to different default distributions (front-loaded, even and back-loaded), combined with high or low prepayments as well as rising, decreasing or stable interest rates. The overall cash flow model results are relatively insensitive to interest rate assumptions which mainly affect the interest earned/paid on the issuer's accounts. Notes pay fixed interest rates. For the assets, a portfolio yield of 2.7% was assumed at the end of the revolving period, in line with the portfolio covenants.

For the reasons outlined above Fitch found a scenario with decreasing interest rates, high prepayments and a front-loaded default timing to be the most stressful in its analysis for Class A notes. For junior notes, in contrast, back-loaded default timing is driving the assigned ratings. We consider the available credit enhancement for the rated notes adequate under such stressed scenarios.

Rating Sensitivity[1]

This section of the report provides greater insight into the model-implied sensitivities the transaction faces when one or two risk factors are stressed, while holding others equal. The modelling process first uses the estimation and stress of base-case assumptions to reflect asset performance in a stressed environment. Second, structural protection was analysed in a

[1] These sensitivities only describe the model-implied impact of a change in one or two of the input variables. This is designed to provide information about the sensitivity of the rating to model assumptions. It should not be used as an indicator of possible future performance.

customised proprietary cash flow model (see *Financial Structure and Cash Flow Modelling* above). The results below should only be considered as one potential outcome as the transaction is exposed to multiple risk factors that are all dynamic variables.

Rating Sensitivity to Default Rates

The change in rating (i.e. ratings migration) resulting from a relative increase in the base-case joint probability of default for each receivable is demonstrated below. For example, increasing the base-case default rate by 25% could result in a one-notch downgrade of the class A notes, from 'AAAsf' to 'AA+sf'.

Rating Sensitivity to Increased Defaults

	Class A	Class B	Class C	Class D
Original rating (base-case default rate: 1.7%)	AAAsf	A+sf	BBB+sf	BBsf
Increase default base by 10%	AA+sf	Asf	BBBsf	BBsf
Increase default base by 25%	AA+sf	A-sf	BBB-sf	BB-sf
Increase default base by 50%	AA-sf	BBB+sf	BB+sf	B+sf

Source: Fitch Ratings

Rating Sensitivity to Recovery Rates

The change in rating if the base-case recovery rates are adjusted is demonstrated in the *Rating Sensitivity to Reduced Recovery Rates* table. Class A notes' rating shows limited sensitivity to a change in the base-case recovery assumption.

Rating Sensitivity to Reduced Recovery Rates

	Class A	Class B	Class C	Class D
Original rating (base-case recovery rate: 40%)	AAAsf	A+sf	BBB+sf	BBsf
Decrease recovery rate by 10%	AAAsf	Asf	BBBsf	BBsf
Decrease recovery rate by 25%	AA+sf	Asf	BBBsf	BB-sf
Decrease recovery rate by 50%	AA+sf	A-sf	BBB-sf	B+sf

Source: Fitch Ratings

Rating Sensitivity to Shifts in Multiple Factors

The *Rating Sensitivity to Increased Defaults and Reduced Recovery Rates* table summarises the rating sensitivity to stressing multiple factors concurrently. Three scenarios are evaluated to demonstrate the sensitivity of the rating to varying degrees of stress, i.e. mild, moderate and severe changes to the expected level of defaults and recoveries.

Rating Sensitivity to Increased Defaults and Reduced Recovery Rates

	Class A	Class B	Class C	Class D
Original rating	AAAsf	A+sf	BBB+sf	BBsf
Increase defaults by 10% and decrease recovery rate by 10%	AA+sf	Asf	BBBsf	BB-sf
Increase defaults by 25% and decrease recovery rate by 25%	AAsf	BBB+sf	BB+sf	B+sf
Increase defaults by 50% and decrease recovery rate by 50%	Asf	BBB-sf	BB-sf	B-sf

Source: Fitch Ratings

Counterparty Risk

Servicer and Substitute Servicer Facilitator

The originator, Bank11, is acting as the servicer. Bank11 is not rated, but Wilmington Trust is taking the role of substitute servicer facilitator and shall appoint a substitute servicer within three months in case of a servicer termination. Furthermore, there is a liquidity reserve available to cover senior expenses and Class A interest for a limited period of time. Fitch therefore views servicing discontinuity risk as sufficiently addressed.

Account Bank

The transaction accounts (including the operating account, replenishment account, the liquidity reserve account, the commingling reserve account and the set-off reserve account) are held in the name of the issuer at the account bank, BNP Paribas Securities Services, Frankfurt branch. The account bank is an eligible institution according to Fitch's counterparty criteria. The account bank will be replaced within 60 days of its rating falling below 'A' and 'F1' by an entity rated at least 'A' or 'F1'. Fitch considers the remedial actions to be in line with its counterparty criteria.

Commingling

All regular payments (i.e. interest and principal collections) are received via direct debit and are transferred from the servicer's collection account to the issuer on the day of receipt. Since scheduled amounts are transferred daily, those are not subject to commingling risk in line with its *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

Collections not received through direct debit payment (e.g. prepayments) will be transferred monthly on day 25th (the payment date). For those funds, Fitch considers commingling risk to be a secondary risk driver. The agency considers the potential commingling exposure to be 1.8x monthly prepayment collections, which are sufficiently covered by the commingling reserve available.

Bank11 has funded at closing a commingling reserve of EUR10 million initially, held in the name of the issuer. The reserve amount contains a dynamic amortisation feature. In each period, the required commingling reserve amount is equal to next month's scheduled collections and 0.5% of non-defaulted outstanding receivables balance, minus the build-up of CE for class A (e.g. once Class A CE increases by 1pp, the commingling reserve will decrease by 1pp).

The commingling reserve thus amortises in line with the collections and the build-up of CE once the revolving phase ends. This mechanism implies that over the lifetime of the transaction commingling risk will be addressed by increased overcollateralisation (OC) instead of the cash reserve.

This could expose the transaction to tail-end risks in case of back-loaded defaults similar to pro-rata structures. A commingling event would then cause additional stress to the transaction as commingling losses would have to be covered by OC instead of designated cash amounts. However, Fitch regards this additional risk as limited. Commingling risk is only a secondary risk driver in this transaction. The original CE (in relative terms) would still be available and we estimate commingling loss conservatively by assuming a servicer default immediately before transfer of funds to the issuer and a back-loaded default timing would allow curing early defaults by excess spread leaving the OC unaffected.

Set-Off

The transaction is exposed to three set-off risks: deposit set-off and insurance set-off.

Deposit Set-Off Risk

Borrowers with deposits are excluded from the initial pool as per eligibility criteria. However, borrowers may accumulate deposits with Bank11 during the transaction's lifetime. Set-off losses may arise where obligors seek to set off outstanding loan amounts against deposits held with Bank11 following its insolvency.

Bank11 opened a set-off reserve account at closing. The reserve will be funded and adjusted dynamically during the transaction's life to the amount of the lower of the outstanding deposits and the corresponding outstanding loan amounts. In addition, for eligible obligors, amounts of up to EUR100,000 gross of any debts owed to the bank are covered by the deposit protection scheme.

Due to the availability of the set-off reserve and the application of the deposit protection scheme, Fitch considered deposit set-off risk as limited and sufficiently addressed.

Insurance Set-Off

Set-off could occur in relation to the insurance products sold to borrowers together with their loan (payment protection, or gap insurance). These insurance products are provided under an umbrella policy between the originator and an insurer and do not constitute individual contracts between the insurers and the borrowers.

When an insurance product is subscribed by a borrower, the seller will capitalise the lifetime insurance premiums on to the outstanding principal amount of the loan undertaken by the borrower. These contracts could then give rise to set-off, in particular after default of the insurance company in an amount of unused insurance premiums.

Bank11 is contractually obliged to indemnify the issuer for any set-off claim brought by a customer. For this reason, the transaction may only be exposed to insurance set-off risk in case of a simultaneous default of the originator as well as the insurance provider. The involved insurance companies are independent of the originator, and the assumption of a joint default is considered sufficiently remote. Fitch views the risks from insurance set-off as limited.

Criteria Application, Model and Data Adequacy

Criteria Application

Fitch has analysed the risk of borrower default and has set its default, recovery and prepayment assumptions in accordance with its *Consumer ABS Rating Criteria*. See *Related Criteria* for the full list of applied criteria.

Model

The asset assumptions outlined above were applied in Fitch's proprietary multi-asset cash flow model, with which the transaction's cash flows were modelled. Click on the link for a description of the model.

EMEA Cash Flow Model

Data Adequacy

The following information was provided by Bank11 to support Fitch's collateral analysis.

Data Analysed

Data	Vintages	Period	Frequency	Type	Notes
Defaults and recoveries	2013-2019H1	6.5 years	Monthly	Static	By loan type, LTV buckets and vehicle age
Origination volumes	2013-2019H1	6.5 years	Monthly	Dynamic	By customer type, loan type and vehicle age
Delinquency	2013-2019H1	6.5 years	Monthly	Dynamic	By monthly buckets
Prepayments	2013-2019H1	6.5 years	Monthly	Static	By loan type

Source: Fitch Ratings

In addition, the agency received portfolio stratifications and the amortisation profile. The data received were of sufficient quality and quantity to assign ratings. Fitch also took into account the performance data for the preceding German auto loan transactions originated by Bank11, as they are comparable in many instances to this transaction.

Overall, Fitch's assessment of the asset pool information relied upon for the agency's rating analysis according to its applicable rating methodologies indicates that it is adequately reliable.

Surveillance

Throughout the life of the transaction, Fitch will monitor the performance of the collateral and any changes at the servicer, or with the structure, that may influence the ratings of the notes.

Fitch will receive monthly investor reports detailing the performance of the portfolio. These will provide the basis for the agency's surveillance of the transaction's performance against base-case expectations and the performance of the industry. The agency expects to assign an Issuer Report Grade of four stars to the investor reporting in line with previous German auto loan transactions originated by Bank11, as the standards of reporting are expected to remain comparable.

Where appropriate, Fitch may ask to monitor further data from the originator or the servicer. The ratings of the transaction will be reviewed by a committee at least once every 12 months, or when considered appropriate (e.g. if there is a deterioration in performance, an industry-wide development, or a change at the originators or the servicer that may influence the transaction).

Fitch's quantitative analysis will focus on monitoring the key performance parameters (delinquencies, defaults, recoveries and prepayments) against the base-case assumptions. Fitch will further monitor the market developments regarding diesel-powered vehicles.

Fitch's structured finance performance analytics team ensures that the assigned ratings remain an appropriate reflection of the issued notes' credit risk. Details of the transaction's performance are available to subscribers at www.fitchratings.com.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.