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## New Issue: VCL Multi-Compartment S.A., Compartment VCL 40

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## New Issue: VCL Multi-Compartment S.A., Compartment VCL 40

### **Ratings Detail**

Ratings	Ratings													
Class	Rating*	Amount (mil. €)	Overcollateralization and subordination (%)	Cash reserve (%)	Available credit enhancement (%)§		Legal final maturity							
A	AAA (sf)	709.50	5.40	1.20	6.60	1ME + 42 bps	August 2029							
В	AA (sf)	16.50	3.20	1.20	4.40	1ME + 115 bps	August 2029							
Subordinated loan	NR	17.70	N/A	N/A	N/A	N/A	N/A							

<sup>\*</sup>Our ratings address timely payment of interest and ultimate principal. §Includes subordination, overcollateralization (€6.3 million or 0.84% of the discounted pool balance), and a cash reserve (initial amount of €9.0 million or 1.20% of the discounted pool balance). †Subject to a floor of zero. 1ME-One-month Euro Interbank Offered Rate. NR-Not rated. N/A--Not applicable.

### **Transaction Summary**

- S&P Global Ratings has assigned its credit ratings to VCL Multi-Compartment S.A., Compartment VCL 40's (VCL 40) class A and B notes. At closing, VCL 40 was also granted an unrated subordinated loan.
- Our ratings address timely payment of interest and ultimate payment of principal on the class A and B notes.
- VCL 40's notes securitize a portfolio of German auto lease receivables, which Volkswagen Leasing GmbH (VW Leasing) originated to its mostly retail customer base in the ordinary course of business. The lease receivables arise from fixed-term, level payment lease contracts, with payments due monthly. The residual values of the leased vehicles corresponding to the lease receivables were not sold to VCL 40, so no direct residual value risk is present in this transaction.
- The transaction is static (i.e., it has no replenishment period), and the notes started to amortize immediately after closing. Amortization is sequential, but will switch to pro rata after further overcollateralization has built up, assuming no performance triggers are breached.
- · A combination of subordination, overcollateralization, and a cash reserve provides credit enhancement to the rated notes. VCL 40 will benefit from excess spread if a servicer replacement event occurs or the cumulative net loss ratio exceeds 1.6%. There is no principal deficiency ledger mechanism in place.
- · A fixed-to-floating interest rate swap agreement with Skandinaviska Enskilda Banken AB (publ) is in line with our counterparty criteria and mitigates the risk of potential interest rate mismatches between the fixed-rate assets and floating-rate liabilities.
- · All the receivables securitized were previously refinanced through the existing warehousing facility, VCL Master S.A. Compartment 1.
- The transaction's capital structure is slightly different compared to that of VCL Multi-Compartment S.A.,

Compartment VCL 38 (VCL 38), which we rated in March 2023. The cash reserve in VCL 40 amortizes at 1.20% of the aggregate discounted receivables balance as of the end of the relevant monthly period. This is subject to a floor amount of the lesser of (i) €7.5 million and (ii) the aggregate outstanding principal amount of the class A and B notes as of the end of the relevant monthly period. VCL 38's cash reserve equaled 1.10% of the initial aggregate discounted receivables balance.

- Like VCL 38, seller-related risks (German trade tax and value-added tax [VAT] risks) are mitigated by a nonamortizing seller risk reserve (which decreased to 1.10% of the initial discounted pool balance from 1.25% in VCL 38), which VW Leasing funded at closing. In our view, the seller risk reserve only partially mitigates the potential German trade tax and VAT risks. Therefore, we have considered the uncovered portion (0.86% of the initial discounted pool balance in a 'AAA' scenario) as a loss in our cash flow analysis.
- Similar to other recent VCL transactions that we rate, the servicer will advance collections to cover potential commingling risk if our ratings on its parent company, Volkswagen Financial Services AG, fall below 'BBB'/'A-2' (or 'BBB+' in the absence of a short-term rating) or if we consider that the servicer is no longer deemed eligible under our counterparty criteria (see "Counterparty Risk Framework: Methodology And Assumptions," published on March 8, 2019). We deem that commingling risk is fully mitigated by this servicer advance mechanism.
- Given the sovereign rating on Germany (unsolicited; AAA/Stable/A-1+), our ratings in this transaction are not constrained by our structured finance sovereign risk criteria (see "Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions," published on Jan. 30, 2019).
- The final documentation and the remedy provisions presented at closing adequately mitigate counterparty risk in line with our counterparty criteria. They also adequately address any operational risk in line with our operational risk criteria.

## The Credit Story

Strengths, concerns, and mitigating fa	
Strengths	Concerns and mitigating factors
In our view, VW Leasing has a strong market position as one of the largest leasing companies in Europe, with more than 50 years' business experience.	Although historical net loss data provided by VW Leasing covers the period between 2013 to June 2023, it does not include any gross default or recoveries information. We have factored this into our analysis when deriving our credit and stress assumptions.
The pool is granular and diversified. As of Sept. 30, 2023, it comprised 70,860 lease contracts for a total of 56,316 lessees. The largest single lessee concentration is 0.38% and the top 20 lessees comprise just 1.92% of the pool's discounted principal balance.	The transaction's payment structure is not fully sequential. Once certain target overcollateralization levels have been reached (and as long as certain performance triggers are met), the issuer will pay pro rata principal on the class A and B notes. We have stress-tested appropriate cash flows for each rating level, which included modeling the potential effect of the pro rata payment structure with a back-loaded loss curve.
As of the pool cut-off date, the pool did not contain any contracts with overdue payments.	The transaction is exposed to commingling risk (as the pool collections are paid to the servicer's accounts before being transferred to the issuer), VAT risk (in accordance with section 13c of the German VAT Act), and German trade tax risk. A specific advance mechanism fully mitigates commingling risk, in our view. To mitigate the VAT and trade tax risks, the seller funded at closing a nonamortizing seller risk reserve representing 1.10% of the initial discounted pool balance. In our view, the seller's risk reserve only partially mitigates these potential tax risks. Therefore, we stressed the uncovered portion (0.86% of the initial discounted pool balance in a 'AAA' scenario) as an additional loss in our cash flows.
The portfolio will not revolve, so a shift in pool quality due to substitution cannot occur.	
The structure benefits from an amortizing liquidity reserve, initially sized at 1.20% of the initial discounted pool balance, which was fully funded at closing. The liquidity reserve serves primarily as liquidity support to mitigate any cash strains. Ultimately, it is available to repay the notes at the end of the transaction's life.	

## **Changes From The Predecessor Transaction**

- VCL 40's cash reserve amortizes at 1.20% of the aggregate discounted receivables balance as of the end of the relevant monthly period. This is subject to a floor amount of the lesser of (i) €7.5 million and (ii) the aggregate outstanding principal amount of the class A and B notes as of the end of the relevant monthly period. VCL 38's cash reserve equaled 1.10% of the initial aggregate discounted receivables balance.
- Seller-related risks (German trade tax and VAT risks) are mitigated by a nonamortizing seller risk reserve. This reserve decreased to 1.10% of the initial discounted pool balance from 1.25% in VCL 38.

## Environmental, Social, And Governance (ESG)

Our rating analysis considers a transaction's potential exposure to 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," March 31, 2021). In our view, the exposure to ESG credit factors in this transaction is in line with our sector benchmark.

Environmental credit factors are generally viewed as above average given that the collateral pool primarily comprises

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 ICE vehicle values, we believe that our current approach to evaluating recovery values adequately accounts for vehicle values over the relatively short expected life of the transaction. As a result, we have not separately identified this as a material ESG credit factor in our analysis.

## **Asset Description**

As of the cut-off date, the collateral pool backing the notes comprised 70,860 lease contracts for a total of 56,316 lessees with a total discounted principal balance of €750 million.

Table 1

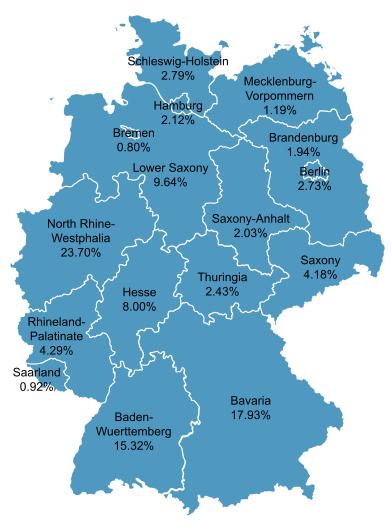
VCL 40	VCL 38	VCL 37	VCL 35	VCL 32	VCL 31
Volkswagen Leasing GmbH	Volkswagen Leasing GmbH	Volkswagen Leasing GmbH	Volkswagen Leasing GmbH	Volkswagen Leasing GmbH	Volkswagen Leasing GmbH
Germany	Germany	Germany	Germany	Germany	Germany
Auto leases	Auto leases	Auto leases	Auto leases	Auto leases	Auto leases
Sept. 30, 2023	Feb. 28, 2023	Oct. 31, 2022	Feb. 28, 2022	Feb. 28, 2021	Oct. 31, 2020
Oct. 25, 2023	March 27, 2023	Nov. 25, 2022	March 25, 2022	March 25, 2021	Nov. 25, 2020
750	1,250	1,000	1,000	1,000	1,064
70,860	129,356	108,887	118,391	123,724	130,378
5.70	5.70	5.70	5.70	5.70	5.70
0.60	0.82	1.21	4.06	4.49	4.49
5.10	4.88	4.49	1.64	1.21	1.21
39.5	39.6	39.6	39.8	39.8	39.9
32.8	32.7	32.3	31.6	30.3	29.9
6.8	6.9	7.3	8.2	9.5	10.0
100	100	100	100	100	100
0	0	0	0	0	0
92.7	94.3	93.9	90.9	91.9	90.8
7.3	5.7	6.1	9.1	8.9	9.2
100	100	100	100	100	100
21.8	22.2	22.7	23.3	21.1	19.8
78.2	77.8	77.3	76.7		80.2
	Volkswagen Leasing GmbH Germany Auto leases Sept. 30, 2023 Oct. 25, 2023 750 70,860 5.70 0.60 5.10 39.5 32.8 6.8 100 0 92.7 7.3	Volkswagen Leasing GmbH         Volkswagen Leasing GmbH           Germany         Germany           Auto leases         Auto leases           Sept. 30, 2023         Feb. 28, 2023           Oct. 25, 2023         March 27, 2023           750         1,250           70,860         129,356           5.70         5.70           0.60         0.82           5.10         4.88           39.5         39.6           32.8         32.7           6.8         6.9           100         100           92.7         94.3           7.3         5.7           100         100           100         100           21.8         22.2	Volkswagen Leasing GmbH         Volkswagen Leasing GmbH         Volkswagen Leasing GmbH           Germany         Germany         Germany           Auto leases         Auto leases         Auto leases           Sept. 30, 2023         Feb. 28, 2023         Oct. 31, 2022           Oct. 25, 2023         March 27, 2023         Nov. 25, 2022           750         1,250         1,000           70,860         129,356         108,887           5.70         5.70         5.70           0.60         0.82         1.21           5.10         4.88         4.49           39.5         39.6         39.6           32.8         32.7         32.3           6.8         6.9         7.3           92.7         94.3         93.9           7.3         5.7         6.1           100         100         100           100         100         100	Volkswagen Leasing GmbH         Cermany           Auto leases         Auto l	Volkswagen Leasing GmbH         Cermany         Germany         Auto leases         Auto l

Table 1

Collateral key features* (c	ont.)					
Compartment of VCL Multi-Compartment S.A.	VCL 40	VCL 38	VCL 37	VCL 35	VCL 32	VCL 31
Engine type (%)						
Gasoline	37.2	29.5	32.6	28.7	31.8	34.7
Diesel	39.3	35.7	40.1	41.5	57.3	61.4
Electric	17.1	17.7	13.3	12.5	3.0	2.0
Hybrid	6.2	16.9	13.8	17.1	7.5	1.4
Other	0.1	0.2	0.2	0.2	0.4	0.4
Vehicle brand (%)						
Audi	28.8	29.4	28.2	30.0	33.1	31.8
Volkswagen	37.9	36.8	35.6	34.2	32.3	33.3
Volkswagen LCV (%)	7.1	8.3	10.0	10.4	11.9	12.6
Skoda (%)	14.4	14.2	14.7	15.9	14.9	14.3
Seat (%)	11.5	11.2	11.1	9.1	7.5	7.7
Geographic concentration (%)						
Top 1	23.7	23.7	22.8	22.9	22.6	22.6
Top 2	17.9	17.5	17.7	17.2	17.0	17.2
Top 3	15.3	15.1	15.2	15.0	15.2	14.9

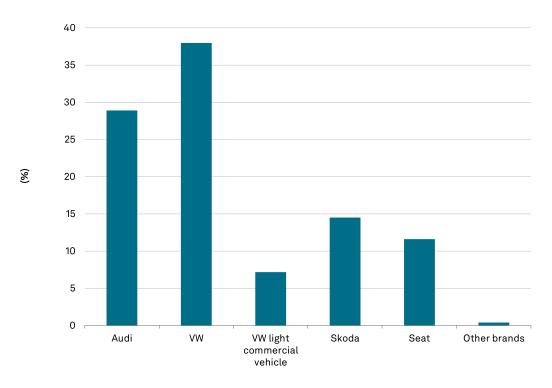
<sup>\*</sup>Percentages are expressed as a percentage of the outstanding discounted principal balance. TBD--To be determined. LCV--Light commercial vehicle.

Chart 1 Geographic distribution



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Chart 2 Pool distribution by brand As of Sept. 30, 2023



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## **Eligibility Criteria**

The transaction documents set out the eligibility criteria for receivables in the pool. Simplified, these state that:

- Contracts are legally valid and binding agreements and their enforceability is not impaired.
- Receivables are denominated and payable in euro.
- The leased vehicles are in Germany.
- The seller may freely dispose of the receivables.
- Receivables are free of defenses and from the rights of third parties. Lessees have no setoff claim.
- No receivable was overdue at the cut-off date.
- None of the lessees is an affiliate of Volkswagen AG, Family Porsche Stuttgart, or Family Piech Salzburg Group.
- Contracts are governed by the laws of Germany.
- Lessees have their registered office/place of residence in Germany.
- At least two lease instalments have been paid.
- Lease contracts require monthly payments to be made within 12 to 60 months after origination.
- The total amount of purchased lease receivables due from one and the same lessee does not exceed 0.50% of the

initial aggregate discounted pool balance.

- · Acquisition of the leased vehicles by VW Leasing is financed in compliance with the requirements of section 108 (I) sentence 2 of the German Insolvency Code ("Insolvenzordnung").
- The share of the discounted pool corresponding to non-VW group vehicle does not exceed 5%.
- None of the lessees has exercised their right of revocation, if any.

#### Nature of the leases

A lease contract comprises two elements. The first, typically the regular lease instalments, relates to the payments from the lessee covering the vehicle's value depreciation over the contract's duration. The second relates to the vehicle's residual value when the lease contract expires. VCL 40 will only purchase the regular lease instalments, and not the residual value. Furthermore, it will also purchase rights associated with the premature termination of a lease receivable or with the transfer of the lease receivable, plus rights to payments from the realization of vehicles. It will not buy rights to insurance premiums, any VAT payments, and the residual value element.

Commercial retail lessees typically have no contractual right to prepay the lease contract. If VW Leasing allows prepayment, it will pay the outstanding net present value of the future lease payments due to VCL 40, discounted at the rate at which the issuer initially purchased the receivables.

VCL 40 purchases the lease receivables in this transaction from the VCL Master Compartment 1 securitization, where they have been warehoused. Furthermore, all of the corresponding residual values can be refinanced via the VCL Master Residual Value S.A. Compartment 2 securitization. The legal title over the leased vehicles is held by the trustee of VCL 40.

## Originator/Seller

VW Leasing is a limited liability company and has underwritten auto leasing contracts in Germany since 1966. It is wholly owned by Volkswagen Financial Services AG, which in turn is a 100% subsidiary of Volkswagen AG. In the overall car financing market, VW Leasing is the leading captive car leasing provider in Germany. Its objectives are to lease motor vehicles and other movable assets from brands such as Volkswagen, Audi, SEAT, Skoda, and Volkswagen Nutzfahrzeuge vehicles, service-leasing to commercial and non-commercial customers, and leasing of used vehicles of all makes, including demonstration vehicles as used vehicles.

In our view, the company's track record of stable, strong quality asset origination is among the best of all European auto ABS issuers.

## Servicing

We conducted a review of VW Leasing's origination, underwriting, collections, and risk management practices. We consider these to be in line with general market practice and our criteria for assessing operational risk (see "Related Criteria"). In our operational risk analysis, we look at the risk that cash flows may be disrupted following an operational failure of the servicer. Our ratings on the class A and B notes reflect our assessment of the company's origination

policies, as well as our evaluation of VW Leasing's ability to fulfil its role as servicer under the transaction documents. Our operational risk analysis do not impose any cap on the maximum achievable rating.

At closing no back-up servicer was specified, but under the transaction documents the issuer shall use its best efforts to replace the servicer and to appoint a new servicer after the occurrence of a servicer replacement event. We rely on the general availability of servicing in the German market to mitigate the risk of servicing disruption and have applied a stressed servicing fee in our cash flow analysis, in line with market standards.

## **Credit Analysis and Assumptions**

We analyzed the transaction's credit risk under various stress scenarios by applying our global auto ABS criteria (see "Related Criteria").

#### Economic outlook

In our base-case scenario for Germany, we forecast GDP growth of -0.2%, 0.6%, and 1.4%, in 2023, 2024, and 2025, respectively. Our baseline forecast was informed by our economic outlook for the Eurozone published on Sept. 25, 2023 (see "Related Research"). Sticky inflation, stunted hiring, and higher interest rates will be clear negatives. But a substantial acceleration in wages and stronger public investment should support domestic demand and steer the economy toward a modest recovery from 2024.

We expect inflation to be 6.3%, 2.8%, and 2.0% in 2023, 2024, and 2025, respectively. We set our credit assumptions to reflect our economic outlook for Germany.

Lessees in this transaction pay a fixed rate. As a result, in the short to medium term borrowers are protected from rate rises but will face cost-of-living pressures. We consider these borrowers to be prime and as such generally resilient to inflationary pressures.

#### **Defaults**

A written-off purchased lease receivable is one that has been reduced by recoveries and that VW Leasing has finally written off in its capacity as servicer in accordance with its customary accounting practice. The net loss definition used in the performance data is in line with the net loss definition used in the transaction documents.

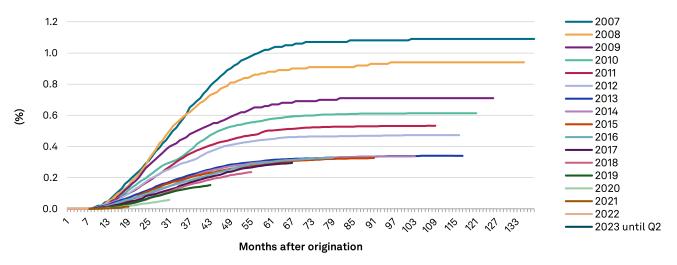
#### Cumulative net losses (VW Leasing's own books)

We received monthly static net loss data, showing cumulative net losses (i.e., actual write-offs after recoveries) as a percentage of VW Leasing's origination volume in its entire lease book. We received data from July 2013 to June 2023. The originator did not provide us with separate recovery or prepayment data. To arrive at a gross loss proxy, we "gross up" the net loss data, using a recovery rate assumption of 69%.

We have also used the performance information available from the predecessor transactions (from January 2009). The quality of data provided is in line with our standards in relation to quality, timeliness, and reliability.

Performance in the originators' books has significantly improved between 2009 and 2017 and has stabilized at very low levels since then (see chart 3).

Chart 3 Cumulative net losses (VW Leasing's own books)



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Based on the historical performance of receivables originated by VW Leasing and of the outstanding VCL transactions, we sized an average net loss of 0.55% for the pool. We then derived a gross loss assumption of 1.77% by assuming a 69% recovery rate. Given the book's and predecessor transactions' good performance, we decreased the base-case gross loss assumption.

At the same time, we decreased our base-case multiples to 4.2x from 4.3x and to 3.2x from 3.3x for defaults at the 'AAA' and 'AA' ratings, respectively, resulting in lower gross losses in these stress scenarios compared to VCL 38.

#### Recoveries and recovery timing

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, and credit, operational, or other factors that might affect the timing, amount, and sustainability of recovery rates. Additionally, considering the share of ICE and BEV/hybrid engines, we set the weighted average recovery rate at 69%.

For VCL 40, we sized stressed recoveries of 38.0% and 41.4% for the 'AAA' and 'AA' ratings, respectively, based on recovery data provided for previous VCL transactions, the share of engine types, and a peer comparison with other German auto leasing transactions.

Table 2 summarizes our credit assumptions.

Table 2

Credit a	Credit assumption summary													
Rating level	Net loss base case (%)	Recovery rate (for gross up) (%)	Gross loss base case (%)	Multiple	Stressed cumulative default rate (%)	Recovery rate haircut	Stressed recovery rate (%)*	Stressed cumulative net losses (%)						
AAA (sf)	0.55	69	1.77	4.20	7.43	45.0	38.0	4.61						

Table 2

Credit a	Credit assumption summary (cont.)													
Rating level	Net loss base case (%)	Recovery rate (for gross up) (%)	Gross loss base case (%)	Multiple	Stressed cumulative default rate (%)	Recovery rate haircut	Stressed recovery rate (%)*	Stressed cumulative net losses (%)						
AA (sf)	0.55	69	1.77	3.20	5.66	40.0	41.4	3.32						

<sup>\*</sup>We assume that 100% of recoveries are realized nine months after default in our cash flow model.

#### Residual value risk

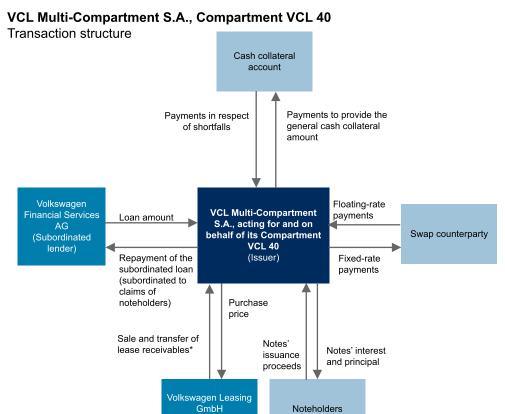
VCL 40 is not directly exposed to residual value risk as it has not purchased this type of receivables.

### **Transaction Structure**

At closing, the issuer purchased a pool of auto lease receivables with a net present value of €750 million. The lease receivables were discounted at a fixed rate of 5.7016%. However, the effective interest available to the issuer was reduced in a way to leave no excess spread in the transaction, unless VW Leasing becomes insolvent or the cumulative net loss ratio exceeds 1.6% at any time. Therefore, interest receipts are equal, in practice, to the sum of:

- · Administrative expenses and a servicing fee;
- The weighted-average interest due to the swap counterparty under the terms of the swaps on the class A and B notes; and
- The interest due under the subordinated loan considering a hypothetical hedging of the latter.

Chart 4



\*Currently held by VCL Master S.A. acting for and on behalf of its Compartment 1 pursuant to the receivables purchase agreement / distribution of collections.

(Seller/servicer)

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The issuer is a Luxembourg special-purpose entity, which we consider to be bankruptcy remote under our legal criteria (see "Related Criteria"). The transaction legal opinion at closing confirmed that the sale of the assets would survive the seller's insolvency.

#### Cash Flow Mechanics

#### Priority of payments

The class A and B notes pay interest in arrears on a designated date each month, at the Euro interbank offered rate (EURIBOR) plus a respective margin. The first interest payment date (IPD) will be on Nov. 21, 2023, and the legal final maturity of the notes will be in August 2029.

On each monthly IPD, the issuer applies to the priority of payments any asset collections (less the buffer release amount), net swap receipts, and amounts drawn from the cash reserve from the previous month, in the order outlined

#### in table 3.

Table 3

Priority o	of payments (simplified)
1	Taxes and payments to the trustee.
2	Senior fees, including payments to the corporate services provider, data protection trustee, and servicer.
3	Payments to the account bank.
4	Payments to the swap counterparty (except termination payments if the swap counterparty is the defaulting party).
5	Interest on the class A notes.
6	Interest on the class B notes.
7	Top-up cash reserve (only if drawn upon previously).
8	Class A notes' principal (sequential or pro rata).
9	Class B notes' principal (sequential or pro rata).
10	Payments to the swap counterparty not paid above.
11	Interest on the subordinated loan.
12	Principal on the subordinated loan.
13	Final success fee to VW Leasing.

#### Repayment of the notes

From closing, the issuer redeems the notes sequentially until it reaches the target overcollateralization levels for the class A and B notes. Once the target overcollateralization levels have been reached, the transaction switches to pro rata pay-down. Moreover, the transaction will switch back to sequential pay-down if there is a credit enhancement increase condition level 1 or level 2, or if the servicer becomes insolvent (see table 4).

The target overcollateralization levels would increase if one of the following performance triggers is breached:

- Trigger level 1: The cumulative net loss ratio exceeds 0.50% before or during January 2025 or 1.15% between January 2025 (exclusive) and October 2025; or
- Trigger level 2: The cumulative net loss ratio exceeds 1.6% at any time.

Table 4

Overc	Overcollateralization levels											
	Actual overcollateralization (%)	Ta	arget overcollateralization	levels (%)								
	At closing	No trigger breach	Trigger level 1 breached	Trigger level 2 breached								
Class A	5.40	12.25	14.00	100.00								
Class B	3.20	7.50	8.25	100.00								

#### Event of default

If interest on the most senior notes outstanding is not paid timely or principal is not fully paid by the legal maturity, the noteholders or the trustee can call an event of default. This could lead to multiple events, such as the swap terminating (with the issuer needing to make termination payments), and the post-enforcement priority of payments being applied. However, we consider these events as ratings remote, and as such, we do not model the post-enforcement priority of payments in our analysis. If the trustee were to call an event of default, it could affect the transaction's cash flows.

#### Cash reserve

The issuer deposited  $\in$  9.0 million (1.2% of the initial discounted asset balance) as a general cash reserve at closing. Amounts deposited in the general cash reserve account are available to bridge any liquidity shortfalls in the payment of senior costs and expenses, and interest on the class A and B notes. On the earlier of (i) the legal maturity date, or (ii) the date on which the aggregate discounted receivables balance has been reduced to zero, the issuer can also use the cash reserve to redeem the class A and B notes. The cash reserve amortizes at 1.2% of the aggregate discounted receivables balance as of the end of the relevant monthly period. This is subject to a floor amount of the lesser of (i)  $\in$  7.5 million and (ii) the aggregate outstanding principal amount of the class A and B notes as of the end of the relevant monthly period.

Funds in this account can only be invested in cash. After all the lease receivables and notes have been repaid, VW Leasing is entitled to any outstanding balance in the cash collateral account.

#### **Excess spread**

There is initially no excess spread in the transaction. All receivables are discounted using a rate equal to 5.7016%. VW Leasing calculated this number for VCL Master Compartment 1 to cover swap, interest and costs, and a buffer in case of increased interest cost for the warehouse facility prior to the subsequent sale to VCL 40. The difference between the 5.7016% discount rate and total interest (i.e., swap payments) and senior costs for this transaction is taken out of the available distribution amount prior to applying the waterfall sequence. Following the servicer insolvency or if the cumulative net loss ratio exceeds 1.6% at any time, the buffer component will not be released, and it will be considered as cash available to the issuer.

#### Fixed-to-floating interest rate swaps

At closing the issuer also entered into fixed-to-floating interest rate swap agreements with a swap counterparty to hedge the risk between the assets' fixed-rate interest and the notes' floating-rate interest for the class A and B notes. Under the swap agreements the issuer pays a fixed rate on the class A and B notes' agreements. The swap counterparty pays one-month EURIBOR plus a class-specific margin. The notional in both contracts is the class A and B outstanding note balance, respectively.

## Mitigation Of Seller Risks

#### Commingling risk

An advance mechanism will be applied to address the servicer commingling risk if our issuer credit rating on Volkswagen Financial Services falls below 'BBB'/'A-2' (or 'BBB+' if no short-term rating is available) or if we consider that the servicer is no longer deemed eligible under our counterparty criteria. We deem that commingling risk is fully mitigated by this servicer advance mechanism.

#### Setoff risk

The transaction's eligibility criteria for the pool exclude leases granted to VW employees, thereby mitigating employee setoff risk. We also do not believe any setoff risk would arise from lessee deposits, insurance, or maintenance/servicing agreements. Lastly, we are not currently aware of any setoff claims that have arisen due to vehicle defects. As part of our ongoing surveillance of the transaction, we will monitor any potential setoff risk that

could arise because of vehicle recalls, and consider the mitigating factors available at that time to determine any potential ratings impact.

#### Tax risks

Similar to VCL 38, seller-related risks (German trade tax risks, and VAT risks) are mitigated by a nonamortizing seller risk reserve (1.10% of the initial discounted pool balance), which VW Leasing funded at closing. In our view, the seller risk reserve only partially mitigates the potential German trade tax risk and VAT risks. Therefore, we have considered the uncovered portion (0.86% of the initial discounted pool balance in a 'AAA' scenario) as a loss in our cash flow analysis.

## **Cash Flow Assumptions**

In our cash flow modeling of this transaction, we applied stressed losses equally over the asset portfolio's weighted-average life (17 months). We also ran a back-loaded loss curve to test the impact of the pro rata pay-down mechanism on the available credit enhancement. We stressed the prepayment rates and ran different interest rate scenarios (stressed interest rate curve [up, down, up/down, down/up]). The model incorporates the notes' potential pro rata amortization, and the cash reserve's amortizing features. We did not model commingling losses because we consider that the advance mechanism fully mitigates these losses. We also modeled tax losses amounting to 0.86% ('AAA' scenario) of the portfolio's initial discounted value because we consider that the seller risk reserve only partially mitigates the related risks. In addition, we modeled the cash credit enhancement's erosion due to negative interest rate scenarios.

Table 5

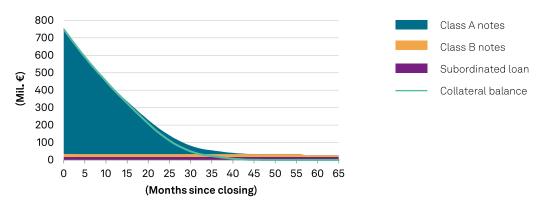
Cash flow assumptions	
Recession start	At closing
Length of recession	WAL (17 months)
Cumulative gross loss curve 1	Evenly distributed over WAL
Cumulative gross loss curve 2	Back loaded
Recovery lag	9 months
Delinquency	Two-thirds of credit losses recovered six months later
Stressed servicing fees (%)	1.03
Fixed fees (£)	100,000
Replacement bank cost	80,000
Prepayments (high/low)(%)	16.0/0.5
Interest rate	Stressed interest rate curve (up, down, up/down, down/up)
Initial WAC (%)	5.10
Relative WAC compression (%)	N/A as purchased at discount
Commingling stress	None, mitigated through servicer advances subject to rating triggers.

WAL--Weighted average life. WAC--Weighted average coupon. N/A--Not applicable.

The ratings scenarios address not only the availability of funds for full payment of interest and principal, but also the timeliness of these payments in accordance with the terms of the rated securities.

Chart 5 below shows the collateral and the note amortization profile under our most stressful scenario.

Chart 5 Collateral and note balances (end of period) in a 'AAA' rating scenario



Source: S&P Global Ratings.

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## **Counterparty Risk**

Our ratings also reflect that the replacement mechanisms to be implemented in the transaction documents adequately mitigate the counterparty risks to which the transaction is exposed. There are no rating constraints due to counterparty risk exposures.

Table 6

Supporting ratings											
Institution/role	Ratings	Replacement trigger	Collateral posting trigger								
The Bank of New York Mellon, Frankfurt Branch as the transaction accounts provider*	ICR: AA-/Stable/A-1+	A/A-1 (or 'A+' if no short-term rating available)	N/A								
Skandinaviska Enskilda Banken AB (publ) as the interest rate swap counterparty	RCR: AA-	BBB+	A-								

<sup>\*</sup>After application of our bank branch criteria and considering the ratings on the parent company. ICR--Issuer credit rating. N/A--Not applicable. RCR--Resolution counterparty rating.

## Sovereign Risk

Our long-term unsolicited sovereign rating on Germany is 'AAA'. Therefore, our ratings in this transaction are not constrained by our structured finance sovereign risk criteria.

## Forward-Looking View

The transaction's resilience to additional stresses to some key variables, in particular defaults and recoveries,

determines our forward-looking view.

In our view, borrowers' ability to repay their auto leases 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 current forecast on unemployment rates for Germany is 3.1% in 2023, 2.9% for 2024, and 3.0% for 2025. Our forecast for inflation in Germany is 6.3% in 2023, and we expect this to decline to 2.8% in 2024, and 2.0% in 2025.

Furthermore, a decline in second-hand car values typically impacts the level of realized recoveries. Although used car prices may decline moderately in Germany in 2023, 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 chart 6.

Chart 6 Sensitivity analysis and results

Class	Base case	1	2	3	4	5	6	7	8
Default rate base case increase (%)	-	10	30	-	-	10	30	10	30
Recovery rate base case decrease (%)	-	-	-	10	30	10	10	30	30
Gross default rate (%)	1.8	1.9	2.3	1.8	1.8	1.9	2.3	1.9	2.3
Recovery rate (%)	69	69	69	62	48	62	62	48	48

	Downside notches								
Class of	Initial					No change	One	Two	Three
notes	rating	1	2	3	4	5	6	7	8
А	AAA	AAA	AA+	AAA	AA+	AA+	AA	AA+	AA
В	AA	AA-	A+	AA-	AA-	AA-	А	А	А

Source: S&P Global Ratings.

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The results of the above sensitivity analysis indicate a deterioration of no more than three notches on the notes, which

is in line with the credit stability considerations in our rating definitions.

The transaction embeds some strengths that may offset an increase of defaults. The transaction has a short weighted-average life and rapidly gains additional credit enhancement as the transaction amortizes. The underlying receivables and the notes pay a fixed rate of interest, which limits the effect of high interest rates on the transaction's performance in the near term. The interest rate swap mitigates the effect on note coupon payments from rising interest rates on the one-month EURIBOR they are linked to.

## **Monitoring And Surveillance**

As part of our ongoing surveillance of this transaction, we will regularly assess:

- The performance of the underlying pool, including defaults, delinquencies, and prepayments;
- · The supporting ratings in the transaction; and
- The servicer's operations and its ability to maintain minimum servicing standards.

## **Appendix**

Transaction participants	
Seller and servicer	Volkswagen Leasing GmbH
Arranger	ING Bank N.V.
Lead managers	ING Bank N.V., Crédit Agricole Corporate and Investment Bank, and DZ Bank AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Security trustee	Intertrust Trustees GmbH
Expectancy rights trustee	Intertrust Trustees Ltd.
Corporate services provider	Circumference FS (Luxembourg) S.A.
Bank account provider and cash administrator	The Bank of New York Mellon, Frankfurt Branch
Principal paying agent, calculation agent, and interest determination agent	The Bank of New York Mellon, London Branch
Data protection trustee	Data Custody Agent Services B.V.
Registrar	The Bank of New York Mellon SA/NV, Luxembourg Branch
Swap counterparty	Skandinaviska Enskilda Banken AB (publ)

#### **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
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019

- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- · Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- General Criteria: Methodology Applied To Bank Branch-Supported Transactions, Oct. 14, 2013
- · Criteria | Structured Finance | General: Global Derivative Agreement Criteria, June 24, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28, 2009

#### Related Research

- European Auto ABS Index Report Q2 2023, Aug. 10, 2023
- Economic Outlook Eurozone Q4 2023: Slower Growth, Faster Tightening, Sept. 25, 2023
- S&P Global Ratings Definitions, June 9, 2023
- European ABS Outlook 2023, Jan. 12, 2023
- · Asset Price Risks: European Auto ABS Appear Resilient To A Potential Fall In Used Car Prices, Nov. 29, 2022
- Credit FAQ: Understanding Pro Rata Amortization Profiles In EMEA ABS Transactions, Nov. 24, 2022
- Germany 'AAA/A-1+' Ratings Affirmed; Outlook Stable, Sept. 23, 2022
- ESG Industry Report Card: Auto Asset-Backed Securities, March 31, 2021
- How Much Is Enough? Information Quality Standards For The EMEA RMBS And ABS Rating Process, Jan. 8, 2019
- 2017 EMEA ABS Scenario And Sensitivity Analysis, July 6, 2017
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- European Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- Scenario Analysis: Gross Default Rates And Excess Spread Hold The Answer To Future European Auto ABS Performance, May 12, 2009

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