# **Creditreform New Issue Rating**

Auto Lease Receivables



Rating Object		Rating Information	on	
VCL Multi-Compartment S.A., Compartment VCL 23		Assigned Ratings: Class A: AAA <sub>sf</sub> Class B: A+ <sub>sf</sub>		Type: Initial Rating, New Issue Report
Closing Date: Legal Final Maturity: Exchange: Issuer:	25.04.2016 21.01.2022 Luxembourg Stock Exchange VCL Multi-Compartment S.A., Compartment VCL 23	Date of Mandate: Rating Date: Publication Date:	28.01.2016 21.04.2016 25.04.2016	5
Issuer Type: Arranger:	Luxembourg Special Purpose Vehicle Volkswagen Financial Services AG HSBC Bank plc	Rating Renewal:  Rating Methodologies:	-	ABS Securitizations"

Class	Rating*	Amount (EUR)	Credit Enhancement	Index	Margin	Final Maturity	ISIN
Α	AAA <sub>sf</sub>	702,000,000	7.60%	1m Euribor	+ 0.55%	21 January 2022	XS1387217794
В	A+sf	18,700,000	5.11%	1m Euribor	+ 1.35%	21 January 2022	XS1387218339
Sub Loan	NR	21,813,568	1.00%	-	-	21 January 2022	N/A
OC	-	7,500,000	-	-	-	-	-

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# **Transaction Summary**

The VCL Multi-Compartment S.A., Compartment VCL 23 transaction ("VCL 23") is a securitisation of a static pool of auto lease receivables originated in Germany. Volkswagen Leasing GmbH ("VWL"), acting as Seller and Servicer of these auto lease receivables, is a wholly owned subsidiary of Volkswagen Financial Services AG ("VWFS"). VWFS is a captive and 100% subsidiary of Volkswagen AG ("VW AG"). Creditreform Rating AG ("Creditreform Rating" or "CRA") has assigned ratings to VCL 23 Class A and Class B notes. In addition to the issuance of the rated Class A and Class B notes, a Subordinated Loan will be granted to fund the purchase of auto lease receivables. A combination of Subordinated Loan, overcollateralization and a cash reserve will provide credit enhancement to the rated Class A and Class B notes.

The asset pool securitised by VCL 23 is a portfolio consisting of 73,605 lease contracts originated by VWL to retail and corporate customers. The non-revolving transaction is secured by new and used vehicle lease receivables. The portfolio of auto lease receivables has a weighted average remaining term of approximately 31 months and a total volume of EUR 750,013,568.

#### **Key Rating Findings Analysts**

- VCL 23 securitises only the finance portion of the leases; residual values are not securitised by the Issuer
- Very low portfolio credit risk according to CRA Portfolio and Benchmark Analysis
- A stable economic environment and strong macroeconomic factors should support VWFS's ABS strategy and future portfolio performance
- Risks related to the Issuer are limited, the compartment structure being ring-fenced and with limited recourse to other creditors of the Issuer, including non-petition provisions
- Downgrade collateral and replacement provisions mitigate counterparty risk exposures w.r.t. the Swap Counterparty and Account Bank
- Legal documentation does not foresee a back-up servicer
- Potentially negative impact of VW AG diesel emission manipulations on future portfolio performance

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### **Transaction Structure**

### **Transaction Parties**

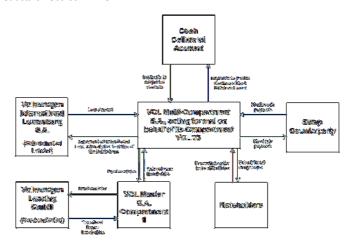
Table 1: Transaction Parties

Role	Name
Issuer and Purchaser	VCL Multi-Compartment S.A., acting for and on behalf of its Compartment VCL 23, Luxembourg
Seller and Servicer	Volkswagen Leasing GmbH, Braunschweig
Security Trustee	Wilmington Trust SP Services (Frankfurt) GmbH, Frankfurt
Paying Agent, Calculation Agent, Interest Determination Agent	Elavon Financial Services Limited, UK Branch, London, London
Cash Administrator, Account Bank	Elavon Financial Services Limited, UK Branch, London
Swap Counterparty	DZ Bank AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main
Subordinated Lender	Volkswagen International Luxembourg S.A., Luxembourg
Co-Arrangers	HSBC Bank plc, London; Volkswagen Financial Services AG, Braunschweig
Joint Lead Managers	HSBC Bank plc, London; Mitsubishi UFJ Securities International plc, London;
Co-Manager	DZ Bank AG, Frankfurt; Skandinaviska Enskilda Banken AB (publ.), Stockholm; Lloyds Bank plc, London
Corporate Service Provider	Wilmington Trust SP Services (Luxembourg) S.A., Luxembourg
Registrar	Elavon Financial Services Limited, Dublin
Data Protection Trustee	Volkswagen Bank GmbH, Braunschweig

### Issuer

The structure of the transaction is shown below (Figure 1). The Issuer, VCL Multi-Compartment, acting for and on behalf of its Compartment VCL 23, is a special purpose vehicle (SPV) incorporated under the laws of Luxembourg. The company is registered with the Luxembourg Trade and Companies Register and has explicitly stated in its Articles of Incorporation to be governed by the Luxembourg Securitisation Law. The Issuer is a securitisation company with the sole purpose of entering into securitisation transactions through separate compartments. Risks related to the Issuer are limited, the compartment structure being ring-fenced and with limited recourse to other creditors of the Issuer and including non-petition provisions. We regard the structure of the Issuer as being bankruptcy-remote. CRA conducted its rating assuming no adverse future change in Luxembourg securitisation law.

Figure 1: Transaction Structure I Source: VWFS





The Issuer has entered into a receivables purchase agreement with the Seller to purchase lease receivables and create a portfolio of auto lease receivables. As of the closing date, VCL 23 will acquire all rights and claims arising from the purchase of such receivables. The lease receivables were initially originated by the Seller and subsequently sold to VCL Master S.A., Compartment 1 ("VCL Master"), acting as an intermediate warehousing vehicle.

### Seller and Servicer

VWL challenged by saturated markets and current VW AG diesel emissions manipulation, EUR 6.7bn provisions cut into FY2015 operating profits VWL is a wholly owned subsidiary of VWFS and acts as Seller and Servicer of the lease receivables. VW AG is the parent company of VWFS, holding 100% of its shares and thus a controlling interest. VW AG's financial division, as represented by VWFS, is a core business of the group with a significant contribution to group total earnings. In our view, the strong integration of VWFS within the VW group places an upper bound on its rating. We assigned to VWFS an internal credit assessment equivalent to the internal credit assessment of VW AG.

VW AG is currently facing legal and financial uncertainties resulting from the use of particular software in type EA 189 EU5 diesel engines. On September 18<sup>th</sup>, the US Environmental Protection Agency (EPA) published a Notice of Violation alleging Volkswagen of having used certain software in diesel engines to circumvent emission standards under the Clean Air Act. According to a public announcement by VW AG, some 11 million vehicles worldwide might be affected. On October 15<sup>th</sup> the Kraftfahrtbundesamt (KBA, German Federal Motor Transport Authority) required VW to recall all diesel vehicles fitted with the affected engine type registered in Germany.

As of September 2015, VW AG increased its sales revenues by 8.5% to EUR 160.3bn and reported a EUR 3.3bn operating profit (YtD), down EUR 6.1bn year-on-year. Provisions in the passenger car area amounting to EUR 6.7bn were a major cause for this decline. The impact of these initial one-off charges recognized for diesel-related issues also triggered a cut in FY2015 earnings targets.

At the end of January 2016, Volkswagen AG began the implementation of the technical measures for affected EA 189 engines in Europe. On February 18<sup>th</sup> Volkswagen announced the successful completion of required software modifications in over 50% of the first wave in Germany.

VW AG is in exchange of information with authorities to coordinate remedial actions. VW AG is currently exposed to various investigations as well as lawsuits in which authorities, investors and individuals could assert claims against VW. The long-term implications of the manipulation of diesel emissions might include reputational damage, reduced sales, and negative financial impacts due to fines, costs of recall campaigns and higher financing costs. Creditreform Rating will closely monitor all future developments and implications for the transaction (also see "Counterparty Risk" below).

### **True Sale**

CRA has undertaken a review of the transactions structure and checked the consistency with the legal documentation. Legal opinions addressing the true sale of the assets to the Issuer were made available by the transaction legal counsel.

# **Eligibility Criteria**

VWL as Seller warrants and guarantees, with respect to the purchased lease receivables, that the following eligibility criteria, among others, have been fulfilled at the cut-off date:

- The lease contracts are legally binding and valid, governed under German law;
- Lessees are corporate entities with offices or private individuals with residences registered in Germany:
- The lease contracts were not terminated and terminations are not pending;
- No purchased lease receivable was overdue; no lessee insolvencies have occurred
- The purchased lease receivables are free of defenses, whether pre-emptory or otherwise for the agreed term of the lease contract as well as free of rights of third parties
- The status and enforceability of the lease receivables is not impaired due to warranty claims or any other rights;
- As of the cut-off date at least two instalments have been paid with respect to each of the lease contracts:



- Lease contracts must include substantially equal monthly payments to be made within 12-60 months from origination;
- The amount of purchased lease receivables assigned to any single lessee does not exceed EUR 500,000;
- The pool of lease receivables does not represent a separately conducted business or business segment of the seller;
- More than 95% of the leased vehicles belong to the VW AG brands VW, Audi, Seat, Skoda, VW Nutzfahrzeuge ("VW LCV")

Following a breach of eligibility criteria, VWL is obliged to cure and remedy such breach or repurchase the receivables within the end of the monthly period which includes the 60<sup>th</sup> day after VWL became aware or was notified of such breach at the fair value that any misrepresented receivable had prior to becoming aware of the misrepresentation.

### **Capital Structure**

The discounted receivables balance is calculated using a discount rate equal to 5.7016% per annum. The discount rate is used to cover senior expenses and the servicing fee as well as the weighted average swap rate based on the notional amounts outstanding at each date. At the onset of the transaction, it is calculated as follows (Table 2):

Table 2: Discount Rate Composition

Parameters	
Weighted average swap rate (%)	0.2734
Servicing fee (%)	1.0000
Senior expenses (%)	0.0300
Subtotal (%)	1.3034
Buffer release rate (%)	4.3982
Discount Rate (%)	5.7016

A buffer release amount, calculated as the product of the buffer release rate and the future discounted receivables balance, is paid to the Seller as long as no insolvency event on the part of VWL has occurred. In the event of insolvency, the structure will additionally benefit from the buffer release rate. The total balance sheet of the Issuer is shown in Table 3 and is composed as follows:

Table 3: VCL 23 Balance Sheet

Assets	Amount (EUR)	Liabilities	Amount (EUR)	Size (%)
Receivables	750,013,568	Class A	702,000,000	93.6
Cash reserve (CCA)	9,000,000	Class B	18,700,000	2.5
VWL Risk Reserve (CCA)	47,800,000	Sub Loan	21,813,568	2.9
		Cash Reserve (CCA)	9,000,000	1.2
		VWL Risk Reserve (CCA)	47,800,000	6.4
		PPD OC	7,500,000	1.0
Total	806,813,568		806,813,568	107.6

The Class A notes represent 93.6% of the discounted receivables balance. Credit enhancement to the notes is provided by a Subordinated Loan (2.9%), a purchase price discount for overcollateralization (1.0%), and a cash reserve, funded at initially 1.2% of the lease receivables balance and amortizing to a floor of 1.0% over time.

#### **Interest Rate Swap**

To hedge the interest rate risk arising from a mismatch between fixed lease payments and floatingrate interest payments on Class A and Class B notes, the Issuer will enter into two swap agree-



ments to receive floating (1m Euribor + 0.55% for Class A Notes and 1m Euribor + 1.35% for Class B Notes) while paying the fixed leg of 0.18% and 0.94%, respectively. The fixed rates have been calculated to include the Class A or Class B margins; payments under the swaps are linked to the outstanding balance of the respective notes.

### **Order of Priority and Triggers**

Monthly payments to transaction parties are calculated on the available distribution amount and will be distributed according to the priority of payments. The monthly amount available for distribution and the order of priority are shown below (Table 4a, Table 4b):

Table 4a: VCL 23 Distributions

Available	Available Distribution Amount		
1	Collections received or collected by the Servicer		
2	+ Issuer's portion of the recovery proceeds from the realisation / sale of leased vehicles		
3	+ Net swap receipts		
4	+ Investment earnings from the Distribution Account		
5	+ Drawings from the cash collateral account		
6	Less the buffer release amount to be paid to the Servicer, provided that it is not insolvent		

Table 4b: Priority of Payments

Order of	Priority
1	Taxes, senior expenses and fees
2	Net swap payments, first, for the class A note, second, for the class B note
3	Interest payments on the class A note (accrued and unpaid)
4	Interest payments on the class B note (accrued and unpaid)
5	Payment to the cash collateral account
6	Payment to the cash collateral account in case of a German trade tax increase event
7	Principal payment of the outstanding balance of the class A note, to the targeted Class A note balance
8	Principal payment of the outstanding balance of the class B note, to the targeted Class B note balance
9	Payments to the swap counterparties under the swap agreement
10	Accrued and unpaid interest on the subordinated loan
11	Principal payment of the outstanding balance of the subordinated loan
12	Payment of a final success fee

Transaction benefits from OC and uses performance triggers to switch to sequential amortization

Interest payments of Class A notes rank senior to interest payments of Class B notes. The targeted note balances are calculated with respect to a target level of overcollateralization. The overcollateralization (OC) level can be defined as the relative excess of the aggregate discounted receivables balance over the nominal amount of the Class A or Class B notes. Principal payments of Class A notes are granted sequential priority over those of Class B until the Class A target OC level has been reached ("sequential amortization"). After this event, Class A and B notes will be redeemed on a pro-rata basis, maintaining the Class A target OC level while redeeming Class B notes until the Class B target OC level has been reached. The structure will switch to sequential amortisation of the notes again when the asset balance has amortised to 10% of the initial balance or after certain performance triggers have been breached.

Should the cumulative net loss ratio exceed certain threshold values, target OC levels will be increased. A "Level 1 Credit Enhancement Increase Condition" will be triggered if cumulative net losses exceed 0.50% prior to July 2017, or 1.15% between July 2017 and April 2018 (see Table 5). This results in a switch to sequential amortization until the new Class A target OC level has been



reached. An increase in cumulative net losses to more than 1.6% will trigger a "Level 2 Credit Enhancement Increase Condition" and amortisation would become strictly sequential.

Table 5: Performance triggers and target OC levels

Triggers	Class A	Class B
Initial OC level (%)	6.40	3.91
Target OC, if no CE increase condition is in effect (%)	12.25	7.50
Target OC after the level 1 trigger breached (%)	14.00	8.25
Target OC after the level 2 trigger breached (%) / asset balance <10%	100.00	100.00

#### **Cash Collateral Account**

Cash Collateral Account includes fully funded "VWL Risk Reserve" to cover seller-related risks

The Cash Collateral Account (CCA) includes several positions. A cash reserve, initially amounting to 1.2% of the discounted receivables balance (the "General Cash Collateral Amount") is available to cover senior costs, swap payments and note interest payments. Prior to the occurrence of a foreclosure event, the cash collateral account will be refunded on each payment date from the available distribution amount remaining after items 1-4 of the priority of payments. The cash reserve minimum floor equals 1.0% of the aggregated discounted receivables balance as of the end of the monthly period. Provided that either the final maturity date is reached or the aggregate discounted receivables balance has been reduced to zero, any remaining General Cash Collateral Amount can be used to redeem the notes.

On the Issue Date, VWL will credit to the Cash Collateral Account an additional amount of EUR 47.8m (the "VWL Risk Reserve") which will be available to mitigate commingling risks, trade tax and VAT tax risks, and cover the Issuer's exposure to VWL. Furthermore, the VWL Risk Reserve covers claims against the Issuer resulting from negative interest on the accounts. The amounts credited to the VWL Risk Reserve will not be part of the General Cash Collateral Amount. Provided that either the final maturity date is reached or the aggregate discounted receivables balance has been reduced to zero, any remaining amounts standing to the credit of the VWL Risk Reserve will be released to VWL.

# **Operational Risk**

# **Economic Outlook and German Leasing Business**

Our economic outlook for Germany is positive. We expect a moderate growth in GDP in the medium term for the German economy. We forecast an increase in GDP growth to 1.6% in 2016, following an average growth of 1.7% in 2015. Growth in 2015 was mainly driven by private consumption, which Creditreform expects to be robust in 2016. The labour market as an important driver for Germany's economy has shown further improvements and should support the dynamic development in Germany. Creditreform Rating forecasts the level of unemployment to range between 4.6% to 5.0% by the end of 2016. The current decrease in energy prices as well as rising net household income should lift German private consumer spending. Compared with its peers, Germany's important macro figures remain strong. In our view, a stable economic environment and strong macroeconomic factors should support VWFS's ABS strategy.

The securitisation market in Europe has declined substantially since the 2008 financial crisis, with the various segments for structured finance instruments developing differently. Notably, the share of Auto ABS in total ABS transactions by volume has increased to 28.4% in recent years. Following an average annual issuance volume of EUR 4.6bn between 2000 and 2005, it increased to EUR 13bn between 2006 and 2010, peaking at EUR 28.5bn in 2014. Developments in the Auto ABS market are driven by a small number of originators. In particular, Volkswagen has been expanding its market position with the volume of issuances growing since 2010. For detailed information please refer to the Creditreform Rating studies "European Auto ABS on the Rise" and "Auto ABS from an EDW Perspective" which are available from our web-site (www.creditreform-rating.de/en/about-us/publications.html).

Positive German economic outlook, a growing European Auto ABS market and strong German lease business support VWFS's strategy



Lease investments in Germany have slightly increased to a total of EUR 52.2bn YTD as of November 2015 (2014: 50.3bn), with automobile leases taking a major share of 74% (2014: 72%) in all leasing goods. The leasing penetration rate for equipment leasing (incl. fleet leasing) in Germany is still on an upward trend. The German fleet leasing market is dominated by national captives such as Volkswagen, Audi, BMW or Mercedes-Benz, which generate well beyond 70% of the total business. Following a severe drop in new lease registrations in the aftermath of the 2008 financial crisis and the subsequent economic recovery, the year 2011 marked a record 700,000+ new car registrations in commercial leasing fleets, driven largely by a strong demand for replacements. The current replacement cycle, stretching from 2014 well into 2015, spurred a +9.2% growth of the market in 2014 and record new lease business in 2015, monthly new fleet vehicle registrations reaching all-time highs in July 2015.

In Germany, VWFS's entire portfolio of lease contracts increased from 1.3 million in 2012 to 1.6 million in 2014. The German loan and lease business penetration rate of VWFS (vehicle deliveries combined with financial service contracts) increased from 55.8% in 2012 to 59.4% in 2014.

### **Origination and Underwriting**

VWL is the originator of the purchased lease receivables. German leasing operations are represented by VWL. VWL will enter into a lease receivables purchase agreement with VCL 23 to sell the lease receivables, using the VCL Master structure for the transfer of assets from VWL to the Issuer. VWL and its subsidiaries provide leasing solutions for new and used Volkswagen, Audi, Seat, Skoda and VW Commercial Vehicles ("VW LCV") to commercial and non-commercial customers. VWL co-operates closely with the group dealership network as well as manufacturing departments to scale VW AG's business. Co-operations are established by dealer agreements.

Managing its lease portfolio, VWL has to ensure high consistency and quality of underwriting procedures in its lease operations and business entities. Being one of the largest servicers in the European auto loan and auto lease business, VWL relies on established processes and IT systems to support its operations. VWL has implemented internal score-cards including credit scores sourced from external credit bureaus to assess customer credit profiles. Lease applications are processed and approved automatically without involvement of VWL staff for low risk customers. For customers with a higher credit risk profile, qualified credit officers evaluate a credit decision. Certain limits for credit engagements are established, as well as special guidelines for lease applications with an aggregate amount of more than EUR 1m.

VWL has integrated a separate fraud detection team in its operations unit. New employees are required to pass a three month training programme before entering into operational tasks in their respective teams. VWL furthermore ensures ongoing internal training to improve professional qualifications.

Creditreform Rating analysts conducted an on-site review and due diligence in VWFS's facilities in Braunschweig in April 2016. CRA got a fair picture of servicing and underwriting capacities, as well as of debt management, collection procedures and risk management. In our view, a long track record of leasing originations as well as proven and established procedures in servicing and debt management enable VWFS to fulfil its obligations as Servicer as defined in the VCL 23 transaction documents.

### Servicing and Collections

50% of terminated contracts become current again after threatened repossession, according to VWFS VWL services the lease receivables over time and is responsible for collections and repossession of leased vehicles. The first lease instalment is due when the vehicle is handed over to the lessee. VWL offers lessees to make use of the direct debit system which covers approximately 95% of all monthly lease instalments. VWL employs a debt management team to handle delinquent contracts with the aim to minimize losses and assert all claims against defaulted customers. The debt management team uses reminder letters and phone contact to collect overdue outstanding lease payments. Standardized collection and debt management procedures were implemented to reduce court orders and legal enforcement measures. VWL's debt management employees are authorized to grant reasonable payment extensions. If a commercial lessee has failed to pay two instalments, VWL will have the right to repossess the vehicle without prior termination of the lease contract. If the debt management process has ended without receiving any notice from the lessee, an application for a court order is made by VWL.

Established and proven origination and underwriting procedures, IT systems and operation units



The debt management works closely with the collection centre to ensure the timely repossession of vehicles from terminated lease contracts. The main tasks of the collection centre are negotiating on agreements on payment extensions, the processing of corporate and consumer insolvencies, the use of payment guarantees and processing of irrecoverable debt and write-offs. If lessees do not return the vehicles voluntarily, VWL mandates external repossession servicers. For enforcement purposes, VWL will refer to the resources of the entire VW group to enforce interests and claims.

# **Counterparty Risk**

### Volkswagen Manipulation of Diesel Emissions and Type Approval Irregularities

VW diesel emission manipulations may threaten future financial position; pose risk to future portfolio performance On September 18<sup>th</sup> 2015, the US Environmental Protection Agency (EPA) issued a Notice of Violation to Volkswagen Group of America Inc. alleging that VW had been using software to circumvent emission standards under the Clean Air Act. Subsequently, Volkswagen AG announced that irregularities concerning particular software used in type EA 189 EU5 diesel engines affected approximately 11 million vehicles worldwide and approximately 8.5 million vehicles in Europe (VW AG press release, October 15<sup>th</sup> 2015). VW AG recorded provisions of EUR 6.7bn in its Q3/2015 interim report. As of today, it is not possible to quantify all current and future commercial and financial implications of manipulated diesel emissions.

In January 2016, Volkswagen AG started the implementation of the technical measures for EA 189 engines affected by the NOx issue, starting with Amarok vehicles. On February 18<sup>th</sup> Volkswagen published that has already successfully completed the modification of over 50% of the first wave in Germany.

According to transaction legal counsel, lessees can exercise rights and assert claims only against the relevant vehicle seller, normally a group dealership, and not directly against VWL. Standard lease agreements cannot be terminated or lease instalments be withheld or reduced by the lessees as long as the vehicle seller fulfils its obligation to repair the leased vehicles.

If the vehicle seller fails or refuses to rectify a defect, this may have a number of consequences. If they deem the rectification unsuccessful, lessees may agree on a purchase price reduction with the vehicle seller to reduce future lease instalments. If a purchase price reduction cannot be agreed upon and lessees successfully file court action against the vehicle seller, lease instalments can be withheld temporarily and, if the court upholds the lessees claim, may be re-calculated and reduced following an adjudicated purchase price reduction. If material defects cannot or will not be remedied by the vehicle seller, a lessee may rescind from a vehicle sale contract. The lessee will then be released from its obligation to pay further lease instalments; VWL will have to repay previous lease payments less a compensation for normal wear and tear. Overall, this imposes the risk of a (temporary or permanent) interruption or reduction of cash flows which could adversely affect the performance of the transaction.

Creditreform Rating notes, following clarification from legal transaction counsel, that any of the above-mentioned events may be interpreted as a breach of eligibility criteria by a court. The Seller represents and warrants that, as of the cut-off date, the purchased lease contracts are "legally valid and binding agreements" which are "free of defences" and that their "status and enforceability is not impaired due to warranty claims or any other rights" of the lessee (see "Eligibility Criteria"). According to transaction counsel, it is likely that a court with relevant jurisdiction would determine that there was misrepresentation as of the cut-off date if the underlying finance agreements are terminated or lessees validly refuse to pay further instalments. In this case, VWL would have to cure or remedy such breach or repurchase the receivable at the fair value such receivable had prior to becoming aware of the misrepresentation.

According to information provided by VWL, about 8% of the outstanding discounted principal balance in the VCL 23 portfolio is affected by EA189 software irregularities. VWL did not provide information on concentrations of affected EA 189 engines or type approval irregularities with respect to the distribution by brand and model in the portfolio. In our view, an increased risk of a deterioration of the portfolio´s credit quality may exist if the Seller is obliged to buy back affected vehicles as a remedy following a breach of eligibility criteria and if the credit risk of lessees is systematically (not randomly) distributed to specific brands or models.

As of the current date, quantitative estimates and a more detailed assessment of the risks involved were not possible due to the limited basis of information. As a consequence, CRA decided to main-



tain a conservative margin in its base case assumptions, even when our Portfolio and Benchmark Analysis suggested headroom for a reduction of the default base case. Furthermore, we take into account potential market impact on residual values from the manipulation of diesel emissions by stressing the recovery rate haircuts. We closely monitor VW AG's financial position and any impact of future developments on the structure and the duties of VW AG and its subsidiaries within the VCL transactions. We will update our ratings subject to new information that will be available in the future.

### **Commingling Risk**

VWL Risk Reserve available to cover seller-related exposure up to an amount of EUR 47.8m

The transaction is structured to include a mechanism to protect against counterparty exposure resulting from VWL acting as a Seller and Servicer. As long as VWL is the Servicer for VCL 23, the Servicing Agreement grants a right to VWL to commingle funds such as monthly collections or proceeds from the realisation of vehicles with its own funds during each monthly period and to use these funds at its own risk and for its own benefit until the next relevant payment date. In the case of a default of VWL, such funds may be lost in the Servicer's insolvency estate, resulting in a (potentially non-recoverable) loss of monthly collections, including prepayments, for Investors. To mitigate this risk, VWL will, on the Issue Date, credit additional EUR 47.8m to the Cash Collateral Account (the "VWL Risk Reserve"). The VWL Risk Reserve will be available to secure the rights and claims of the Issuer against VWL.

### German Tax Risk

The Issuer might be exposed to several tax risks according to German tax legislation. In general risks might become due when German tax authorities change their interpretation of tax legislations. In Creditreform Rating's opinion, the Issuer's risk to become liable for tax risks is limited. The Issuer could be exposed to German value added tax (VAT) risk. VAT tax risks might materialise in case of a Servicer replacement and a subsequent classification of the transaction as factoring by German tax authorities. A secondary VAT tax liability could arise if VWL fails to forward the VAT portion included in the lease receivables to the tax authorities. In such a case the issuer will collect the gross amount of the receivables including the VAT and settle such liability on its own. Risks to the issuer arise if VWL defaults before it has forwarded such amounts to German Tax Authorites. With regard to our internal credit assessment of VW AG, we see limited exposure to such an event. VAT tax risks are covered by the VWL Risk Reserve. German trade tax risk may materialize if German tax authorities conclude that the Issuer is subject to trade tax in Germany. In such a case an addback of interest would lead to higher business profits of the issuer, which would result in a trade tax deduction. However, following the German Trade Tax Act, an add-back is limited to the amount of one quarter of the interest payments of the issuer. Risks related to a German Trade Tax Event are covered by part of the VWL Risk Reserve (the "German Trade Tax Risk Reserve"). We deem the German Trade Tax Risk Reserve to be sufficient to cover this risk.

#### **Account Bank and Swap Counterparty**

Downgrade and replacement provisions partly mitigate counterparty exposure

VWL has entered into a service agreement with the Issuer to perform tasks according to its usual business practices, such as the service and administration of the lease receivables. To fulfil its duties, VWL will transfer the collected funds to the Account Bank on behalf of the Issuer. Therefore, the Issuer has established at least four accounts as defined in the Account Agreement in accordance with the terms and conditions of the transaction structure. The Issuer is exposed to the default risk of Elavon Financial Services Ltd., London, appointed to be the Account Bank. Default risks are mitigated by certain downgrade provisions linked to the rating of the Account Bank. Should Elavon Financial Services Ltd. be downgraded, the Account Bank is required to transfer the balance of the account to another bank with sufficient ratings on its own cost. To assess the risk relating to the Account Bank, Creditreform Rating has undertaken an internal credit assessment of U.S. Bankcorp, the parent company of its 100% subsidiary Elavon Financial Services Ltd..

The Issuer will enter into two separate swap agreements to mitigate exposure to interest rate changes over time and hedge the interest rate risk arising from receiving fixed rate payments under the lease receivables and paying a floating rate on the Class A and Class B notes. Under the terms of the swap agreement, the Issuer expects to receive floating rate payments based on 1-month Euribor plus spread in return of a fixed rate paid to the Swap Counterparty.

The Issuer is exposed to the risk of DZ Bank AG as the Swap Counterparty failing on any monthly payment, in which case the available distribution amount (including the cash reserve) may be insuf-



ficient to make required payments on the notes. Depending on the future development of interest rates, the Issuer may also be obliged to transfer net payments to the Swap Counterparty. As the monthly net swap payments rank senior to any liabilities on the notes, the available distribution amount may be insufficient to cover all required payments on the notes. The transaction is also exposed to the risk of Swap Counterparty insolvency. In this case, substantial swap termination payments may arise depending on the future development of interest rates and the future market value of the swap.

To mitigate Swap Counterparty exposure, the structure foresees certain downgrade provisions linked to the rating of the Swap Counterparty which require certain actions should its ratings fall below a minimum rating threshold. These actions may include the collateralization of the referenced amounts by the Swap Counterparty, a transfer of obligations to a replacement Swap Counterparty, or the procurement of a guarantee. To assess the risk relating to the Swap Counterparty, Creditreform Rating has undertaken an internal credit assessment of DZ Bank AG.

### **Credit and Portfolio Risk**

Creditreform Rating's credit and portfolio analyses were based on data provided by VWFS in monthly origination vintages going back to 2002, which included write-offs relative to originated volumes and default frequencies, as well as delinquency data going back to 2008. VWFS also provided stratification tables based on the preliminary pool ("red pool") and the final pool ("black pool") which allow a further assessment of the portfolio composition. In addition, loan-level data sourced from EDW (European Data Warehouse) as well as data compiled from prior VCL transactions sourced from investor reports and Bloomberg were considered. The quality and quantity of data available for our analysis was considered to be sufficient.

#### **Receivables Pool Characteristics**

## Portfolio Composition

The portfolio consists of lease contracts originated by VW group dealers and entered into between lessees and VWL. It includes different vehicle brands (Volkswagen, Audi, SEAT, Skoda and VW LCV). The lease contracts are extended to commercial and non-commercial customers as a partially-amortizing finance lease. Dealers typically bear the residual value (RV) risks related to the final sale, but may buy insurance against RV losses from VWL. A small percentage of lessees choose to bear part of the RV risk ("Open End Lease Contracts", see Table 6). At the end of the lease term, the vehicle will be sold by the dealer and the proceeds will be distributed according to the terms of the lease contract. The portfolio is well diversified and can be considered representative with respect to (1) geographical location and (2) industry sectors. This was established by comparing VCL 23 data to a total German economy benchmark (see "CRA Portfolio and Benchmark Analysis" below). The portfolio does not contain any significant single obligor concentrations.

Table 6: Portfolio Characteristics

Provisional Portfolio Characteristics	
Outstanding Discounted Receivables Balance (EUR)	750,013,568
Number of lease contracts	73,605
Number of lessees	49,599
Type of lessee:	
Retail customers (%)	73.74
Corporate customers (%)	26.26
Average nominal balance / lease contract (EUR)	10,189.71
WA seasoning (months)	8.52
WA remaining term (months)	31.25
Closed End Contracts (%)	99.16
Type of Car	



New (%)	95.53
Used (%)	2.04
Demonstration (%)	2.43
Type EA 189 engine vehicles (%)	8.00

The following graphs show the maturity profile of the portfolio at the cut-off date as well as the distribution of vehicles by brand (see below):

Figure 2: Contract Maturity Profile I Source: VWFS, CRA

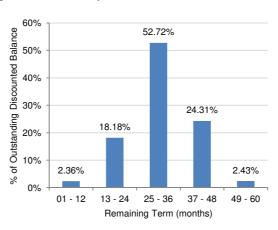
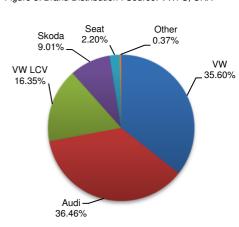
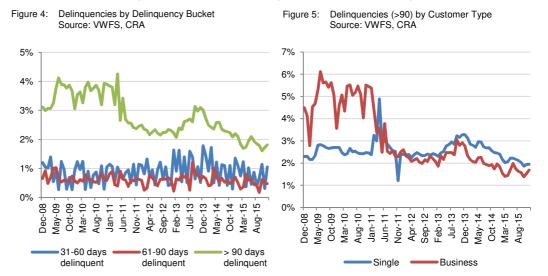


Figure 3: Brand Distribution I Source: VWFS, CRA



# Historical Performance

VWFS provided delinquency performance data on single and business customers going back to 2008. Historically, delinquencies for the entire lease portfolio have shown a decreasing trend since 2013 (see Figure 4). Currently, delinquencies >90 days are more frequently observed with "single" retail customers as compared to "business" leasing-fleet customers (see Figure 5).



The lease contracts extended to customers typically grant a right to VWL to terminate a lease contract when the lessee is due more than two monthly lease instalments. As described in "Servicing and Collections" above, VWL normally reaches payment arrangements to remedy any outstanding liabilities with a client before terminating a lease contract.



#### **Credit Risk**

To size the credit risk of the portfolio and derive base case assumptions about loss rates and expected recovery performance, Creditreform Rating used historical vintage data provided by VWL as well as loan-level data sourced from European Data Warehouse (EDW) and publicly available data on prior VCL transactions.

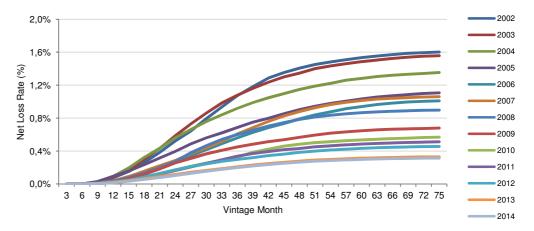
VWL provided cumulative net loss data and default frequencies in vintage format going back to 2002 and monthly dynamic delinquencies going back to 2012, covering the entire lease portfolio of the Seller. Creditreform Rating used this data to determine a net loss base case. This result was then combined with the analysis of recovery performance in order to derive expected total cumulative gross losses, which serve as an input to rating scenarios and cash-flow modelling.

#### Defaults

Creditreform Rating fixed its net-loss base case at 0.80%

VWL provided detailed total book vintage data on write-offs, net losses and default frequencies. Creditreform Rating used this information to analyse the historical default and net loss performance of different vintages (see Figure 6):

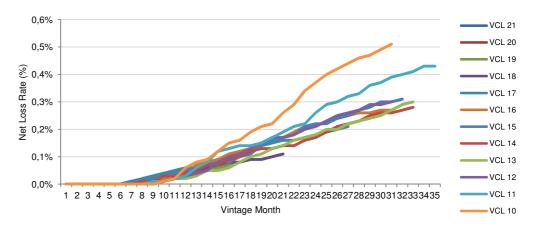
Figure 6: Net Loss Rates of VWL Total Lease Book by Year, extrapolated I Source: VWFS, CRA



Historical and projected losses show a trend towards lower loss rates in younger vintages. This effect may, in part, be explained by improved servicing and collection performance of the Servicer. Moreover, the credit risk of the German corporate sector, which we consider a main driver of portfolio performance in the current lease securitisation, has been significantly decreasing since 2009 (see Creditreform Rating (2015): "Ausfallraten in der Deutschen Wirtschaft: Halbjahresbericht 2015"). Our economic outlook for Germany remains positive and we expect corporate insolvencies to remain subdued due to a stable economic development and favourable macroeconomic indicators (see "Economic outlook" above).

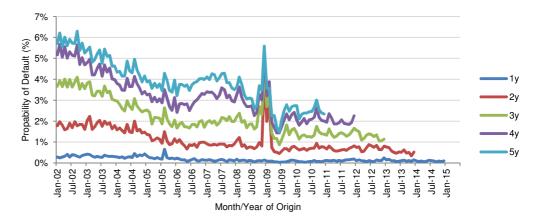
Observed differences between total-book vintage performances and the performances of previous VCL transactions with respect to recorded net losses (compare Figure 7) may be explained by the application of eligibility criteria at the pool cut-off date and VWL exercising its clean-up call option at the end of a VCL transaction.

Figure 7: VCL Transaction Net Loss Performance I Source: VWFS, Bloomberg, CRA



A trend towards declining default risk is also supported by an analysis of historical default frequencies in vintage data. In the graph below we show probabilities of default (PDs) for different time horizons, combining overlapping vintages by date and time into a dynamic perspective (Figure 8):

Figure 8: Historical total book default rates, 1-year to 5-year probability of default (PD) I Source: VWFS, CRA



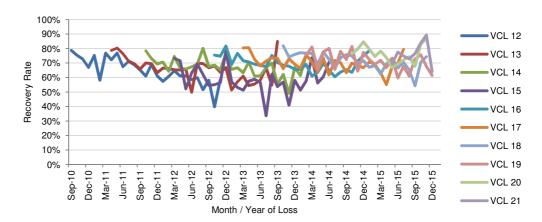
In deriving our base case loss rate assumption, younger vintages were consequently considered a better indicator of future performance. Based on improved historical performance and a stable economic outlook, Creditreform Rating has set a base case net loss expectation of 0.8% for its rating analyses, taking into account the typical maturity profile of lease contracts and adjusting for the specific maturity profile of VCL 23.

### Recoveries

Creditreform Rating set the recovery base case at 65%

VWL did not provide explicit historical data on the recovery performance of its leases and leasing portfolios. However, an analysis of EDW loan level data and data on previous VCL transactions derived from investor reports provided sufficient information to gauge the recovery performance of the Servicer (see below):

Figure 9: Historical recovery performance of VCL transactions I Source: VWFS, CRA



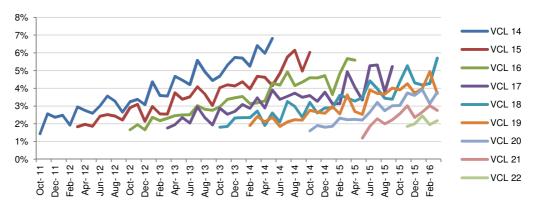
Despite a relatively stable performance (between 60%-70%), the data reveal a fair amount of variation over time. As a cross-check, Creditreform Rating also used vintage data in dynamic format to compare gross defaults to recorded net losses and assuming a granular and homogeneous distribution of contract values in order to calculate implied recovery rates at different time. Creditreform Rating has set the recovery base case at 65%. Combining our net-loss base case of 0.8% with a 65% recovery assumption leads to a gross-loss default rate base case expectation of 2.29% over the term of the transaction.

# Prepayments

Creditreform Rating set the prepayment base case at 3.57% CPR

Creditreform Rating used data on prior VCL transactions to analyse historical prepayments. In general, the lease contracts purchased by the issuer do not provide a lessee with an option to prepay the lease contract. However, and subject to the discretion of VWL, lease contracts may be amended, resulting in a potential prepayment or early settlement of the lease contract. Prepayments have historically ranged between about 1 and close to 7 per cent annualized CPR (see Figure 10):

Figure 10: Historical prepayments (annualized CPRs) I Source: VWFS, CRA



High prepayments pose a re-investment risk to investors because of a lower weighted-average life (WAL) of the notes. However, it is Creditreform Rating´s view that higher prepayments contribute to the structural stability of the transaction. From a rating perspective, lower prepayment assumptions represent a more conservative approach because the structure has to sustain the higher WAL of the notes resulting from an overall lower cash inflow. Following the analysis of empirical data available, the base case prepayment assumption was accordingly set to an average 3.57% annualized CPR prepayment rate.



### Base Case Summary

Creditreform Rating's credit risk assessment was based on vintage data, prior VCL investor reports and EDW loan-level data and results in the following base case assumptions, which will be used as an input to building rating scenarios and modelling the cash-flows of the structure. The loss parameters displayed in the following table are stated with respect to the lifetime of the transaction, taking into account the seasoning and remaining maturities of the pool (see Table 7):

Table 7: Summary of Base Case Assumptions

Credit Risk Parameter	Base Case
Gross Loss (%)	2.29
Recovery Rate (%)	65.00
Net Loss (%)	0.80
Prepayment Rate (% ann. CPR)	3.57

#### Residual Value Risk

VCL 23 does not securitise residual values of the purchased lease receivables. Therefore, the Issuer is not exposed to risks related to the securitization of residual values.

### **CRA Portfolio and Benchmark Analysis**

Creditreform Rating conducted an extensive portfolio and benchmark analysis based on a randomly selected sample of N=10,000 contracts of the preliminary red pool which were matched to CRA-internal default and risk metrics of the corresponding obligors. VWL provided the random sample including the payment and maturity-profile of each randomly selected lease receivable. From the initial sample, N=8954 data points could be identified in our data-bases and were used to conduct the CRA Portfolio and Benchmark Analysis. The sample was considered representative based on the analysis of structural parameters such as observed defaults and remaining maturities.

The CRA Portfolio and Benchmark Analysis includes a comparative benchmarking of the portfolio sample against a stratified reference portfolio, as well as the derivation of the sample's risk profile according CRA-internal risk scores. This serves to validate the base case assumptions derived from historical data as a plausibility check and to size the portfolio credit risk using an independent data source as a complement to the analysis of Issuer-related historical data, both at initial ratings and during monitoring.

Following the identification procedure, CRA-internal descriptive figures were matched to the sample data along with related credit and performance metrics. The following charts compare distributional parameters of the VCL 23 pool sample with a snapshot of the total German economy:



Germany

Figure 11: Portfolio Composition by sector I Source: CRA

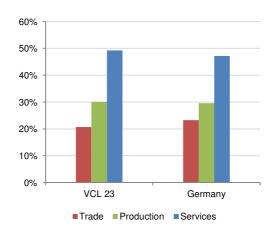


Figure 12: Portfolio Composition by Lessee Turnover Source: CRA

80%

70%

60%

50%

40%

30%

10%

■<=5.000.000 € ■>5.000.000 €

■<=500.000 € ■<=1.000.000 € ■<=2.000.000 €

While broad industry sectors match well with the total German economy, the composition of lessees markedly differs with respect to the turnover/sales classification of the lessees. In this regard, VCL 23 includes a significantly larger share of lessees classified as high turnover creditors; the largest share (57%) represent companies with a yearly turnover of more than five million EUR. From a credit risk perspective, this indicates an overall lower portfolio credit risk as compared to the German benchmark because high turnover companies have historically tended to show a significantly lower default risk than their low-turnover counterparts (see Creditreform Rating (2015): "Ausfallraten in der Deutschen Wirtschaft: Halbjahresbericht 2015").

The credit quality of the portfolio is also supported by an analysis of the distribution of legal entities in the sample and a comparison to the total German economic background, revealing a significantly larger share of limited and stock companies within the VCL 23 portfolio as compared to the total German economy (see Table 8). At the same time, small businesses which represent the largest share of companies in Germany (45.2%) are significantly underrepresented in the portfolio, amounting to only 12.5% of all total lessees.

Table 8: VCL 23 Portfolio Composition by Type of Legal Entity I Source: CRA

	Total German Economy	VCL 23
Legal form code	%	%
Self-employed	10.5	6.6
Small business	45.2	12.5
Partnership	4.1	2.7
Consortium	0.1	0.0
Private firm	3.7	2.7
OHG (general partnership)	0.6	0.6
KG (limited partnership)	0.7	1.2
GmbH & Co. KG	5.2	12.4
GmbH (limited company)	27.3	54.7
AG (stock company)	0.4	4.8
e.G. (cooperative society)	0.2	0.5
e.V.(non-profit association)	2.0	1.4
Total	100.0	100.0

An integral part of the CRA Portfolio and Benchmark Analysis covers the representation of the distribution of risk-classes of the VCL 23 portfolio, based either on frequency or weighted by con-

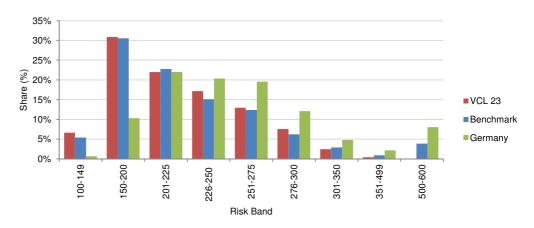


tract volume. Risk classes range from score 100 (very low credit risk) to scores 500-600 (high risk of default/defaulted) and were constructed by splitting the range into different bands.

For comparative and benchmarking purposes, Creditreform Rating created a benchmark sample as a stratified random selection from the total German company data-base. In constructing the benchmark, the distributional characteristics of VCL 23 with respect to sector diversification and turnover/sales composition were taken into account. Risk-class distributions were elicited for the VCL 23 sample as well as for the benchmark.

Figure 13 shows the distribution of risk classes of the VCL 23 portfolio according to CRA-internal risk metrics, based on the data sample provided by VWFS in comparison to the stratified benchmark sample and the total German economy:

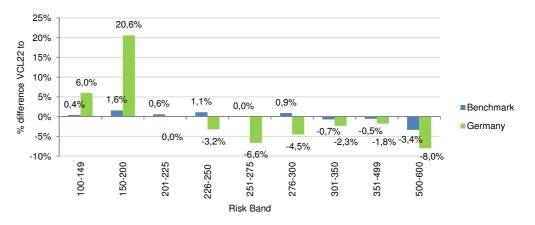
Figure 13: Distribution of Risk Classes I Source: CRA



The VCL 23 portfolio compares favourably against two benchmarks in terms of underlying asset quality

The major part of the VCL 23 portfolio consists of obligors in the lower risk bands, weighted by frequency or volume. While 6.61% percent of all lessees were classified into the lowest risk band, more than 59.47% of total lessees could still be classified into the 100-225 score range. Comparing the distribution of risk classes in the VCL 23 portfolio to our two benchmark measures, we observe the following percentage-differences across risk classes, using either the benchmark or the German total economy as a reference (Figure 14):

Figure 14: Percentage Differences by Risk Class, VCL 23 relative to reference I Source: CRA



Compared to the benchmark or the total German economy, the share of lessees with a high creditrisk (i.e. risk scores >250) is lower in the VCL 23 portfolio. At the same time, lessees with a lower credit-risk profile are overrepresented in VCL 23. This indicates an overall lower credit risk of the portfolio in relation to the German economy and points to the effectiveness of the Seller's origination and underwriting practices, i.e. internal scoring systems and the lease application process.



As each risk class translates into a specific probability of default (PD, estimated by CRA), the distribution of risk classes allows the derivation of portfolio expected default and, combined with lease information, loss rates. To this end, risk band PDs were weighted by average one-year exposures of each risk class in the sample, taking into account the maturity and payment profile of each specific lease contract in the sample. As a corollary, we also calculated expected losses with respect to the initial exposure in t=0. This information provides a plausibility check and validation of the base case derived from the analysis of historical data. It facilitates an assessment of the current default and loss performance with a view on future potential deviations from historical estimates. In order to mitigate potential estimation error (arising, for example, from diverging definitions of default) CRA used a calibration sample provided by VWFS to adjust the analytical process inputs.

Table 9: Risk Classes and Expected Loss Calculations for VCL 23

CR	A Risk M	letrics	VCL 23 Portfolio							
				Frequency		Initial Exposure		Risk Profile		
Risk Class	CRA Score	ø PD	Freq.	%	Ø PD 1y	€	%	Ø Default in €	%	Ø exp. Loss
1	100 - 149	0.02%	592	6.61%		6,732,874	6.64%	1,468	0.29%	
2	150 - 200	0.13%	2764	30.87%		32,474,887	32.03%	43,606	8.49%	
3	201 - 225	0.27%	1969	21.99%		22,057,725	21.76%	59,648	11.62%	
4	226 - 250	0.48%	1537	17.17%	0.500/	16,880,076	16.65%	81,003	15.78%	0.540/
5	251 - 275	0.75%	1160	12.96%	0.52%	12,973,451	12.80%	96,766	18.85%	0.51%
6	276 - 300	1.46%	677	7.56%		7,357,754	7.26%	107,106	20.86%	
7	301 - 350	3.42%	219	2.45%		2,549,871	2.51%	87,187	16.98%	
8	351 - 499	10.15%	36	0.40%		360,832	0.36%	36,642	7.14%	
Total			8954	100.0%		101,387,471	100.0%	513,426	100.0%	

As highlighted in Table 9, Creditreform Rating derived a one-year expected probability of default (PD) of 0.52% for the portfolio sample across all risk classes. The portfolio's expected gross loss was sized at 0.51% over a one-year time horizon based on average exposure in the first year and calculated with respect to the initial exposure of approximately EUR 101,387,471m in the VCL 23 sample data.

To compare this result to the base-case estimates as derived from historical data, Creditreform Rating then projected the performance of the transaction over its life, taking into account the seasoning and maturity profile of the asset pool and assuming no prepayments. The resulting expected gross loss was sized at 1.42% over the life of the transaction (see Table 10).

Table 10: Historical Data versus Portfolio Analysis Base Case Comparison

Credit Risk Parameter	Base Case Expectation
Gross Loss (%) Historical Data	2.29
Gross Loss (%) Portfolio Analysis	1.42

An important feature of the CRA Portfolio and Benchmark Analysis is the use of current credit information to inform historical data analyses. The above result suggests the potential for a reduction of the base case loss rate when taking into account the more current picture of credit quality in the portfolio. However, Creditreform Rating decided to maintain a conservative approach in selecting the appropriate base case. In our view, a 87 bps difference between assumed gross losses in the rating and the loss expectations derived from the CRA Portfolio and Benchmark Analysis represent

The CRA Portfolio and Benchmark Analysis shows a lower portfolio credit risk (1.42% gross loss) compared to historical estimates



a conservative additional margin against unexpected economic deterioration which may result in the future.

# **Cashflow Analysis**

Creditreform Rating simulated the transaction cash flows in its proprietary cash flow model, which was tailored to the structure of VCL 23. The purpose of the cash flow analysis is to test the transactions' ability of paying interest and ultimate payment of principal by final maturity using stressed base case assumptions in each specific rating scenario. Creditreform Rating also tested the sensitivity of the transaction's performance with respect to increases in the default rate base case, decreases in the recovery rates, and prepayment scenarios.

A run-out schedule of the portfolio was implemented into the cash flow model taking into consideration the timing of defaults, the amount of prepayments, and the level of interest rates.

### **Rating Scenarios**

Taking the credit risk expectations as shown in Table 7 as a starting point, Creditreform Rating then stressed its base case assumptions in higher rating scenarios in order to account for unexpected economic deterioration and worsening portfolio performance. Separate stress factors were applied to default and recovery rates to arrive at scenario-specific stressed loss expectations, which were then fed into the cash flow model.

### Default Rates

Following our "Rating of Auto ABS Securitisations" methodology and depending on the specific rating scenarios (AAA $_{\rm sf}$  and A+ $_{\rm sf}$ ), the stress multiples for default rates were set at x4.65 and x3.68, respectively. This leads to the rating-specific stressed gross loss of 10.63% for AAA $_{\rm sf}$  and 8.42% for A+ $_{\rm sf}$ .

### Recovery Rates

The base case recovery expectation of 65% was subjected to a rating haircut in each rating scenario. The recovery rate haircuts were set to 46% in the AAA $_{\rm sf}$  scenario and 39% in the A+ $_{\rm sf}$  scenario, respectively. The haircuts take into account different transaction-specific features such as observed volatility, potential residual value downturn caused the manipulation of diesel emission, and established recovery procedures. As a result, the stressed recovery rates were set to 35% in an AAA $_{\rm sf}$  scenario and 40% in an A+ $_{\rm sf}$  scenario. The scenario-specific expected losses were calculated by applying our rating multiplies and haircuts to the base case (Table 11).

Table 11: Stressed Assumptions

Rating Scenario	AAA	A+
Base Case Gross Loss (%)	2.29	2.29
Default Multiple	4.65	3.68
Rating Loss Rate (%)	10.63	8.42
Base Case Recovery Rate (%)	65.00	65.00
Recovery Haircut (%)	46.22	38.63
Rating Recovery Rate (%)	34.96	39.89
Expected Net Loss (%)	6.91	5.06

CRA base case stresses:

AAA<sub>sf</sub>:

x4.65 default multiple 46% recovery haircut

A+sf:

x3.68 default multiple 39% recovery haircut



# **Sensitivity Analysis**

In order to gauge the effect of variations in default and recovery rates on rating indications, Creditreform Rating conducted a sensitivity analysis including independent and combined stresses of the default and recovery base case assumptions. The resulting rating indications for Class A and Class B notes are shown below.

Table 12 and Table 13 show the results for the Class A and Class B note, respectively. For example, if the default rate base case was set to increase by 25%, our analysis would suggest a Class A note downgrade from  $AAA_{sf}$  to  $AA_{sf}$ . When considering a severe 50% stress on both defaults and recoveries, the sensitivity analysis confirms a  $BBB_{sf}$  rating indication for the Class A notes.

Table 12: Class A Sensitivities

Recovery Default	Base Case	-10%	-25%	-50%
Base Case	AAA	AAA	AA+	AA
+10%	AAA	AA+	AA	A+
+25%	AA	AA	A+	A-
+50%	A+	Α	BBB+	BBB

Table 13: Class B Sensitivities

Recovery Default	Base Case	-10%	-25%	-50%
Base Case	A+	Α	BBB+	BBB
+10%	A-	BBB+	BBB	BB+
+25%	BBB+	BBB	BBB-	BB-
+50%	BBB-	BB+	BB-	В

Creditreform Rating tested scenarios with back-, even-, and front-loaded default timings and supported these with high- and low-level prepayment rate sensitivity analyses. As highlighted in Table 14, Creditreform Rating assessed the effect of changing prepayment patterns in both directions. In accordance with the CRA Methodology "Rating of Auto ABS Securitizations", prepayments were stressed with a factor of  $\pm 47\%$  in an AAAsf scenario and  $\pm 17\%$  in an A+sf scenario. Overall, we observed limited sensitivities of the Class A and Class B notes to prepayment stresses.

Table 14: Class A and Class B Prepayment Sensitivities

Prepayment rate	Class A	Class B
Base Case (3.57%)	AAA	A+
High (AAA: 5.25% / A+: 4.18%)	AAA	A+
Low (AAA: 2.43% / A+: 3.05%)	AAA	A+
Zero	AAA	A



# **Appendix**

### **Regulatory Requirements**

Creditreform Rating AG was engaged on January, 28<sup>th</sup> 2016 by VWFS to conduct ratings for for Class A and Class B notes each issued by VCL Multi-Compartment S.A., acting for and on behalf of its Compartment VCL 23.

The rating was conducted on the basis of Creditreform Rating's "Rating Auto ABS Securitizations" methodology. Important sources of information in the context of the ratings were, in addition to the submitted documents, a due diligence meeting in Braunschweig (Germany) on April 2016. The submitted documents and information from VWFS were sufficient to meet the requirements of Creditreform Rating AG's rating methodology.

A complete description of Creditreform Rating's rating methodologies is published on the following internet page: <a href="https://www.creditreform-rating.de">www.creditreform-rating.de</a>.

This rating was carried out by senior analyst Jan Löckenhoff (<u>J.Loeckenhoff@creditreform-rating.de</u>) and analysts Dr. Stephan Rompf (<u>S.Rompf@creditreform-rating.de</u>) and Philip Michaelis (<u>P.Michaelis@creditreform-rating.de</u>), all located in Neuss/Germany.

The pool cut-off date is March 31<sup>st</sup> 2016. Closing occurs on April 25<sup>th</sup> 2016. The ratings are based on the portfolio information as of April 13<sup>th</sup> 2016, as provided by the originator.

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG (CRAG) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

#### **Conflict of Interests**

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks.

In case of providing ancillary services to the rated entity, CRAG will disclose all ancillary services in the credit rating report.

### Rules on the Presentation of Credit Ratings and Rating Outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our policy "Rating Committee," all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRAG has used following substantially material sources:

- 1. Transaction documentation
- 2. Collateral performance data
- 3. Audited financial statements
- 4. Website of the participants

There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRAG website. Furthermore CRAG considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity Creditreform Rating AG regarded available historical data as sufficient.

Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The "Basic data" information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.



In case where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating and indicates how the different methodologies or these other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions, such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings as well as best-case scenario credit ratings are explained.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the "Basic data" card as a "Rating action"; first release is indicated as "initial rating", other updates are indicated as an "update", "upgrade or downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within "Basic data" information card.

In accordance to Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website: https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

An explanatory statement of the meaning of Creditreform's default rates are available in the credit rating methodologies disclosed on the website.

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