Creditreform Structured Finance
VCL Master S.A., Compartment 1

Creditreform Rating
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Rating Object	Rating Information	
VCL Master S.A., Compartment 1	Assigned Ratings: Class A: AAA$_{sf}$ Class B: A+$_{sf}$	Type: Follow-Up Rating Renewal Report
Closing Date: 25.09.2017 Exchange: Luxembourg Stock Exchange Issuer: VCL Master S.A., Compartment 1 Issuer Type: Luxembourg Special Purpose Vehicle Arranger: Crédit Agricole CIB, Montrouge Asset Class : Auto Lease Receivables	Initial Rating Date: 23.09.2016 Initial Publication Date: 26.09.2016 Rating Renewal: 21.09.2017 Rating Methodologies: CRA "Auto ABS Securitizations"	

Class	Rating	Curr. Amount[1] (EUR)	Max. Amount[2] (EUR)	Initial Min. CE[3]	Index	Margin	Final Maturity	ISIN
A 2010-2	AAA$_{sf}$	91,200,000	300,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0480715548
A 2010-4	AAA$_{sf}$	312,000,000	950,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0480716199
A 2011-2	AAA$_{sf}$	125,000,000	125,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0646441575
A 2012-1	AAA$_{sf}$	150,000,000	150,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0857704976
A 2012-2	AAA$_{sf}$	150,000,000	150,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0857705353
A 2012-3	AAA$_{sf}$	100,000,000	100,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0857705866
A 2012-4	AAA$_{sf}$	300,000,000	300,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0857706161
A 2013-1	AAA$_{sf}$	100,000,000	100,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS0950403229
A 2015-1	AAA$_{sf}$	544,000,000	750,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS1309693643
A 2017-1	AAA$_{sf}$	75,000,000	75,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS1577438135
A 2017-2	AAA$_{sf}$	61,800,000	100,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS1675945494
A 2017-3	AAA$_{sf}$	185,400,000	300,000,000	11.15%	1m Euribor	+ 0.25%	September 2024	XS1675945577
Subtotal A		*2,194,400,000*	*3,400,000,000*					
B 2014-1	A+$_{sf}$	52,000,000	52,000,000	8.75%	1m Euribor	+ 0.60%	September 2024	XS1112835910
B 2014-3	A+$_{sf}$	18,400,000	50,000,000	8.75%	1m Euribor	+ 0.60%	September 2024	XS1112837379
B 2014-4	A+$_{sf}$	18,800,000	50,000,000	8.75%	1m Euribor	+ 0.60%	September 2024	XS1112837882
Total		*2,283,600,000*	*3,552,000,000*					

[1]Current Class A and Class B notes series issuance volume outstanding [2] Maximum issuance amount of Class A and Class B notes series [3]Initial Minimum CE for Class A series consisting of (1) Class B subordination,(2) subordinated loan, (3) overcollateralization and (4) the cash reserve and for Class B series consisting of (1) subordinated loan, (2) overcollateralization and (3) the case reserve, see "Capital Structure" below .

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Transaction Summary

The VCL Master S.A., Compartment 1 transaction ("VCL Master"), its first emission dating back to 2010, is a securitisation of a pool of auto lease contracts originated in Germany. Volkswagen Leasing GmbH ("VWL"), acting as Seller and Servicer of these receivables, is a wholly owned subsidiary of Volkswagen Financial Services AG ("VWFSAG"). VWFSAG is a captive and 100% subsidiary of Volkswagen AG ("VWAG").

The current securitised asset pool is a portfolio consisting of 253,660 contracts originated by VWL to retail and corporate customers. The transaction features a 12 months revolving period and is secured by new and used vehicle lease financing contracts. Note investors may opt to extend the revolving period for their series or initiate amortisation at the end of the revolving period. The portfolio has a weighted average remaining term of approximately 31 months and a total volume of EUR 2,466,752,890.

Creditreform Rating AG ("Creditreform Rating" or "CRA") has assigned ratings to VCL Master Class A and Class B notes series. The current issuance comprises twelve series of Class A notes and three series of Class B notes. In addition to the issuance of the rated Class A and Class B notes series, a Subordinated Loan will be granted to fund the purchase of lease financing contracts. The combination of the Subordinated Loan, overcollateralization (OC) and a Cash Collateral Account (CCA) will provide credit enhancement to the rated Class A and Class B notes series.

Key Rating Findings

+ Stable economic environment and strong macroeconomic factors should support VWFS's ABS strategy and future portfolio performance

+ Established origination, servicing & recovery procedures

- Potentially negative impact of VW AG diesel emission manipulations on future portfolio performance

- Extended 12 months revolving period may affect portfolio quality

- Term Takeouts increase the share of delinquent contracts in the portfolio

Transaction Structure

Transaction Parties

Table 1: Transaction Parties

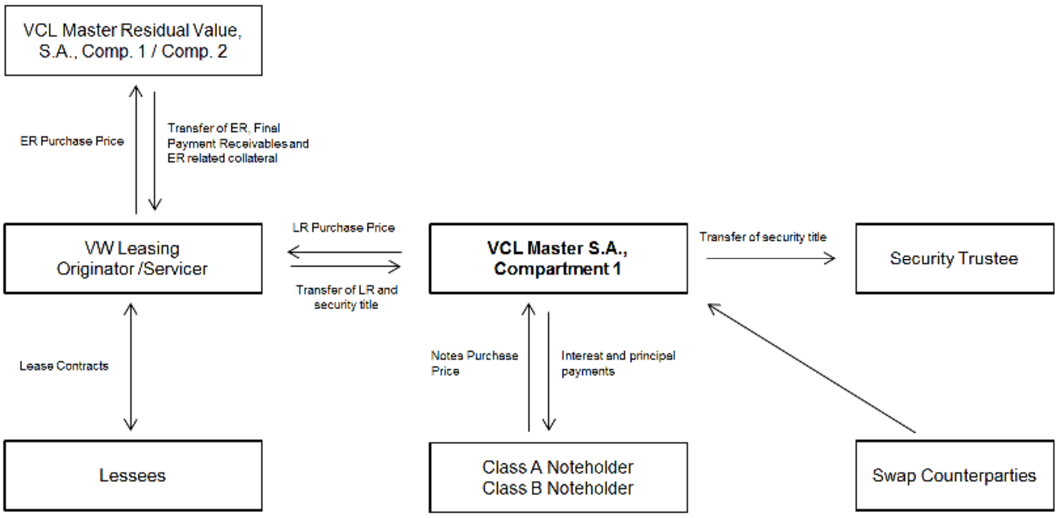
Role	Name
Issuer	VCL Master S.A, Compartment 1, Luxembourg
Seller / Servicer	Volkswagen Leasing GmbH, Braunschweig
Arranger	Crédit Agricole CIB, Montrouge
Lead Manager	Crédit Agricole CIB, Montrouge
Subordinated Lender	Volkswagen International Luxemburg S.A., Luxembourg
Account Bank	The Bank of New York Mellon, Frankfurt Branch, Frankfurt
Corporate Service Provider	Circumference FS (Luxembourg) S.A., Luxembourg
Paying Agent	HSBC Bank plc, London
Registrar	HSBC Bank plc, London
Calculation Agent	HSBC Bank plc, London
Data Protection Trustee	Volkswagen Bank GmbH, Braunschweig
Swap Counterparties (Series):	
A 2010-4, B 2014-1, B 2014-3, B 2014-4	DZ Bank AG, Frankfurt am Main
A 2010-2, A 2011-2, A 2012-1, A 2012-2, A 2012-3, A 2012-4, A 2013-1, A 2015-1, A-2017-1, A 2017-2, A 2017-3	The Bank of Nova Scotia, London

Issuer

The structure of the transaction is shown below (Figure 1). The Issuer, VCL Master S.A., acting for and on behalf of its Compartment 1, 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, by the compartment structure being ring-fenced and with limited recourse to other creditors of the Issuer, 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. A legal opinion addressing the Issuer structure was provided.

Figure 1: Transaction Structure I Source: VWFS



True Sale

The Issuer has entered into a receivables purchase agreement for the initial and revolving purchase of vehicle lease receivables pursuant to the ordinary course of the seller's business. The related lease financing contracts are governed by German law. VCL Master will acquire all right, title and interest arising from such receivables. The rights allocated to VCL Master will be assigned to the Security Trustee for the benefit of the noteholders. The transfer of title and collateralisation for security purpose is subject to *resolutory conditions* which stipulate that title to the vehicle will be returned to VWL once fulfilled (i.e. lease receivables have been settled or terminated). Legally, this creates an expectancy right (*Anwartschaftsrecht*) which transforms into full legal ownership once the resolutory conditions are fulfilled. VWL may opt to sell such expectancy rights (ER) to other entities. Legal opinions addressing the legality, validity and enforceability of such receivables were provided.

Serving as a securitisation platform for VWL, VCL Master may, on a regular basis, purchase further selected lease financing contracts by issuing additional notes (tap-issuance), or sell and transfer selected lease financing contracts to other entities (term takeout). The purchased receivables include only the finance portion of the total vehicle value and will amortise in full. VCL Master will not finance the contractual residual value (RV) of the lease financing contracts at maturity. The RV portion of the total vehicle value may be sold and financed in the form of expectancy rights (*Anwartschaftsrecht*) by other entities (i.e. "VCL Master Residual Value S.A.") or remain with VWL.

If an obligor defaults, the proceeds from the sale of the vehicle will be split *pro rata* between the remaining lease receivable portion and the residual value portion of the vehicle book value.

Revolving Period

The transaction features an initial revolving period of 12 months. During this period, and according to the Order of Priority, the remaining distributions less taxes, fees, costs and interest for Class A and Class B notes series will be used for the purchase of new receivables instead of amortisation. Since the additional receivables are bought with a purchase price discount of 2.1%, the overcollateralization of notes will increase. In contrast to tap-issuance, the purchase of additional receivables during the revolving period does not depend on rating agency confirmation. However, the occurrence of an early amortization event may end the revolving period prematurely (see "Order of Priority and Triggers").

The revolving period can be extended for existing notes series and includes the extension of the final maturity date, and, if relevant, an amendment of the note margins. If current noteholders refuse to extend the revolving period, this may result in the existence of both amortising and nonamortising series of notes. The amortising notes will benefit from an amortisation factor, setting the current pro-rata share of the series and enabling a quick redemption.

Term Takeout

Term Takeouts and Tap-Issuance can only carried out if ratings unaffected

Within the transaction, the Issuer acts as an intermediate warehousing vehicle. The Issuer may on any payment date sell any or all purchased receivables to any member of Volkswagen Group or to an affiliated securitisation vehicle (transferee). The additional receivables purchase price will include overcollateralization in accordance with the purchaser's capital structure, which may affect the level of overcollateralization within the VCL Master structure following a term takeout.

Regardless of the mandatory random selection character of such takeouts, they may affect the quality of the portfolio (lower granularity, adverse diversification through eligibility criteria of transferee, increase of delinquent receivables). Therefore, prior to term takeouts, rating agencies have to confirm that the assigned ratings of Class A and Class B notes series will remain unaffected by such action.

The proceeds from a term takeout bypass the order of priority and will be directed to the distribution account, where the outstanding Class A and Class B notes will be amortised.

Tap-Issuance

During the revolving period, and notwithstanding the purchase of replenishment receivables, the Issuer may from time to time offer to noteholders an increase of the issue amount of existing notes series and/or conduct an issuance of further note series in order to purchase additional receivables. Here, noteholders of existing series have the right, but not the obligation, to increase their respective issue amounts. However, a tap-issuance shall only be realised if the ratings of Class A and Class B notes series will remain unaffected by such action.

Upon occurrence of a tap-issuance, new and existing noteholders share a new portfolio with potentially different characteristics. The larger pool may have higher granularity and the relative share of delinquent and defaulted receivables may decrease because eligibility criteria exclude those receivables from purchase. However, the effects on portfolio diversification depend on the characteristics of the portfolio that will be purchased. As a general rule, tap-issuance receivables will be selected randomly and not with the intention to prejudice the noteholders, which reduces potential adverse effects on diversification.

Moreover, although the receivables will be purchased at a purchase price discount of 0.95% for OC, this may dilute (decrease) the OC for Class A and Class B notes series which builds up during revolving period replenishments (benefiting from a higher discount of 2.1%) and/or the amortization of notes (see "Order of Priority and Triggers").

Seller and Servicer

VWFS challenged by saturated markets and current VW AG diesel emissions manipulation

VWL is a wholly owned subsidiary of VWFSAG and acts as Seller and Servicer of the lease financing contracts. VWAG is the parent company of VWFSAG, holding 100% of its shares and thus a controlling interest. VWAG´s non-bank-related financial division, as represented by VWFSAG, is a core business of the group with a significant contribution to group total earnings. CRA undertook an unsolicited rating of VWAG.

On September 1st 2017 VWFS announced the implementation of a new organisational set-up. Volkswagen Bank is now a wholly owned subsidiary of Volkswagen AG, aiming to bundle the credit and deposit business within the European Economic Area in Volkswagen Bank GmbH. The leasing activities, besides other activities will remain with VWFSAG. CRA didn't expect any material changes or negative impact for the VCL Master transaction resulting from these organisational changes. CRA undertook an unsolicited ranting of Volkswagen Bank GmbH.

VWAG is currently facing legal and financial uncertainties resulting from the use of particular software in type EA 189 EU5 diesel engines. On September 18th, 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 VWAG, around 11 million vehicles worldwide might be affected. On December 16th, Volkswagen announced that the presented technical measures have generally been approved by the German Federal Motor Transport Authority (KBA) with the consequence that the measures also apply to the EU-28 markets.

In its FY2015 report, VW AG recorded provisions of EUR 7.0bn and identified four potential material consequences for its result of operations, financial position and net assets:

- Criminal and administrative proceedings all over the world (excluding USA/Canada)
- Product-related lawsuits worldwide (excluding USA/Canada)
- Lawsuits filed by investors worldwide (excluding USA/Canada)
- Proceedings in the USA/Canada

As of June 2017, VWAG reported sales revenues of EUR 115.9bn (+7.3% YoY) and an operating profit of EUR 8.9bn up from EUR 5.3bn the prior year. No special items have been reported within the half year financial report. However, the Automotive Division's net cash flow sharply decreased to EUR -4.8bn down from EUR 5.1bn on June 30th 2016 due to anticipated high cash outflows attributable to the diesel issue. The impact of diesel-related issues also triggered the expectations in car deliveries to customers for FY2017.

VWAG is in exchange of information with authorities to coordinate remedial actions. VWAG is currently exposed to various investigations as well as lawsuits in which authorities, investors and individuals have asserted claims against VWAG. The long-term implications of the manipulation of diesel emissions might include reputational damage, sale contractions, 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 "Volkswagen Manipulation of Diesel Emissions" below).

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. At the onset of the transaction, it is calculated as follows (Table 2):

Table 2: Discount Rate Composition

Parameters	
Servicing fee (%)	1.0000
Senior expenses (%)	0.0300
Weighted fixed interest payments	0.1988
Subtotal (%)	*1.2288*
Buffer release rate (%)	4.4728
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 VWFS 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 composed as follows:

Table 3: VCL Master Current Balance Sheet

Assets	Amount (EUR)	Liabilities	Amount (EUR)	Size (%)
Receivables	2,466,752,890	Class A	2,194,400,000	85.87
Cash reserve (CCA)	28,316,640	Class B	89,200,000	3.49
Accumulation Account	88,704,441	Sub Loan	163,022,519	6.38
		PPD OC	108,834,813	4.26
		Cash Reserve (CCA)	28,316,640	1.11
Total	**2,583,773,971**		**2,583,773,971**	**101.11**

The Class A notes series currently represent 85.87% and Class B notes series 3.49% of the discounted receivables balance. Credit enhancement to the notes series is provided by a Subordinated Loan (6.38%) and overcollateralization (5.37%), calculated as the sum of purchase price discounts ("PPD OC", 4.26%) and a cash reserve, currently funded 1.11% of the receivables balance and floored at a minimum of 0.60% of the maximum discounted receivables balance.

Table 4: VCL Master Series Overview

Class	Curr. Amount (EUR)	Max. Amount (EUR)	Swap Counterparty	Status
A 2010-2	91,200,000	300,000,000	Bank of Nova Scotia	revolving
A 2010-4	312,000,000	950,000,000	DZ Bank AG	revolving
A 2011-2	125,000,000	125,000,000	Bank of Nova Scotia	revolving
A 2012-1	150,000,000	150,000,000	Bank of Nova Scotia	revolving
A 2012-2	150,000,000	150,000,000	Bank of Nova Scotia	revolving
A 2012-3	100,000,000	100,000,000	Bank of Nova Scotia	revolving
A 2012-4	300,000,000	300,000,000	Bank of Nova Scotia	revolving
A 2013-1	100,000,000	100,000,000	Bank of Nova Scotia	revolving
A 2015-1	544,000,000	750,000,000	Bank of Nova Scotia	revolving
A 2017-1	75,000,000	75,000,000	Bank of Nova Scotia	revolving
A 2017-2	61,800,000	100,000,000	Bank of Nova Scotia	revolving
A 2017-3	185,400,000	300,000,000	Bank of Nova Scotia	revolving
B 2014-1	52,000,000	52,000,000	DZ Bank AG	revolving
B 2014-3	18,400,000	50,000,000	DZ Bank AG	revolving
B 2014-4	18,800,000	50,000,000	DZ Bank AG	revolving

All note series are currently revolving. The Class A notes series benefit from a current total CE of 15.24%, calculated as the sum of Class B subordination, the Subordinated Loan, PPD OC and the Cash Collateral Account. The Class B notes series benefit from a total CE of 11.75%, respectively.

Cash Collateral Account

The Cash Collateral Account (CCA) includes several positions. A cash reserve, currently funded and amounting to 1.11% of the discounted receivables balance (the "General Cash Collateral Amount") is available to cover senior costs 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 1-3 of the priority of payments.

The CCA reduces to a floor amount of 0.6% of the maximum aggregated discounted receivables balance (since the start of the VCL Master program) as of the end of the monthly period and is providing liquidity for fees, expenses and interest of approximately half a year.

Provided that either the final maturity date has been reached or that the aggregate discounted receivables balance has been reduced to zero, any remaining general cash collateral amount can be used to redeem the notes. Otherwise and before final maturity, any excess cash standing to the credit of the CCA will be distributed to make principal and interest payments of the Subordinated Loan or be released as a final success fee to VWFS.

Interest Rate Swap

To hedge interest rate risks arising from the mismatch between the collection of fixed-rate lease payments and floating-rate interest payments on both Class A and Class B notes series, the Issuer will enter into swap agreements for each series of notes to receive floating (1m Euribor +0.25% for Class A notes series and 1m Euribor +0.60% for Class B notes series) while paying the fixed leg, 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 5, Table 6).

Table 5: VCL Master Distributions

Available Distribution Amount	
1	+ Interest accrued on the accumulation account and the distribution account(s)
2	+ Collections received or collected by the Servicer
3	+ Net swap receipts
4	+ Payments from CCA
5	+ Accumulation account (upon end of revolving period)
6	- Buffer release amount to VWFS (provided that no Insolvency Event occurred in respect of VWFS)

Table 6: Priority of Payments

Order of Priority	
1	Taxes, senior expenses and fees
2	Net swap payments
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 Class A amortisation amount for amortising series or to the Class A accumulation amount for revolving series
7	Payment to the Class B amortisation amount for amortising series or to the Class B accumulation amount for revolving series
8	Accrued and unpaid interest on the subordinated loan
9	Principal payment of the outstanding balance of the subordinated loan
10	Payment of a final success fee

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 OC. The 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 amortisation"). 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. Table 7 shows the transaction's target OC levels.

Table 7: Target Overcollateralization Levels

Overcollateralization Levels	Class A	Class B
Minimum OC level (%)	10.0	7.6
Target OC, during revolving period (%)	17.0	13.5
Target OC, after revolving period (%)	20.0	16.5
Target OC, upon CEIC is in effect (%)	100.0	100.0

The structure will switch to sequential amortisation when the asset balance has amortised to 10% of the initial balance or pursuant to an early amortisation event (Table 8). The occurrence of an early amortisation event will end the revolving period immediately.

Table 8: Early Amortisation Event

Early Amortisation Event	
1	No more receivables to purchase (accumulation balance > 10% of discounted receivables balance, on two consecutive payment dates)
2	Class A OC level drops below 10% or Class B OC level drops below 7.6% (with grace period of first 6 months)
3	VWL ceases to be a group member of VWFSAG
4	CEIC is in effect
5	Occurrence of foreclosure event
6	Failure to replace swap counterparty upon default or termination event

Portfolio deterioration through losses can also trigger an early amortisation event (a “Credit Enhancement Increase Condition,” CEIC). Table 9 displays the conditions for a CEIC, which depend on the dynamic net loss ratio (DNL, rolling 3 months net loss average) and the cumulative net loss ratio (CNL), as well as the late delinquency ratio (LDR, obligors more than six instalments overdue). The loss ratio thresholds depend on the seasoning of the portfolio and are more restrictive with a younger portfolio.

Table 9: CEIC Trigger

Weighted Average Seasoning	DNL exceeds (%)	CNL exceeds (%)	LDR exceeds (%)
0 <= x < 12 months	0.40	0.45	2.50
12 <= x <= 24 months	1.00	1.20	2.50
24 < x <= 36 months	2.00	1.75	2.50
> 36 months	2.80	2.25	2.50

At present, the weighted average seasoning of the portfolio is 8.52 months. However, the seasoning of the portfolio may in- or decrease due to the revolving nature of the portfolio and the occurrence of tap-issuances or term takeouts. Further criteria for a CEIC are the occurrence of a Servicer replacement, the insolvency of VWL or insufficient funds for the Cash Collateral Account.

Eligibility Criteria

VWFS as Seller warrants that, as of the purchase date:

- Lease receivables constitute legal, valid and enforceable rights against lessees
- Lease receivables are denominated and payable in EUR
- Lease receivables are assignable and require monthly payments
- Related lease receivables are free of defences, whether pre-emptory or otherwise, as well as free of rights of third parties
- Status and enforceability of purchased receivables is not impaired by set-off rights or warranty claims
- No related lease receivable was overdue at the closing date or additional purchase date

- Related lease financing contracts are governed by the laws of Germany and have been entered into with German companies or residents of Germany
- No defaulted receivables, no insolvency proceedings against lessees
- No obligor is a member of the Volkswagen Group
- Obligor has at least paid two instalments
- Instalments are substantially equal through time
- Contract term of 12-60 months
- Single obligor concentration limit: EUR 500,000
- Concentration limit: ≤5% of all leased vehicles are non-VW group vehicles
- Concentration limit: ≤40% with a remaining term of less than 12 months*
- Concentration limit: ≤30% with a remaining term of more than 36 months*
- Concentration limit: ≤6% of all leased vehicles are used vehicles
- Concentration limit: ≤22% of all leased vehicles are commercial vehicles (VW Nutzfahrzeuge)

* of the aggregate discounted receivables balance

Operational Risk

Economic Outlook and German Auto Leasing Business

Growth in 2016 was mainly driven by strong domestic demand, which Creditreform expects to be robust in 2017. Private consumption spending continued to benefit from increasing real wages and buoyant labour market conditions. The UK's decision to leave the EU may have negative repercussions in case of a disordered Brexit, given the close trade ties and financial linkages, but we do not expect any significant impact to materialize in 2017-18. Compared with its peers, Germany´s headline macro indicators remain strong. We forecast GDP to expand by 1.8% in 2017. Thus, our economic outlook for Germany remains positive, which is also reflected by its sovereign rating and the related outlook. On 30 June 2017, Creditreform Rating has published the unsolicited long-term sovereign rating of "AAA /stable" for the Federal Republic of Germany. In our view, a stable economic environment and strong macroeconomic factors should generally support VWFS's ABS strategy.

The European securitisation market has declined substantially since the 2008 financial crisis and current total market volumes have remained below their pre-2008 levels. Notably, the share of auto ABS in total transaction volume has been increasing 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 30bn in 2016. This mirrored the strong performance of the European automobile markets in 2016, with 14.6m (+6.8% YoY) new vehicle registrations in the EU. In 2016, the German automobile market has shown a robust performance, new vehicle registrations revealing a +5% YoY increase backed by dynamic growth in the commercial vehicle market.

Lease investments in Germany have slightly increased to a total of EUR 56.8bn in 2016 (2015: 52.4bn), with automobile leases taking a major share of 75% (2015: 74%) in all leasing goods. 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 2016 marked a record with 830,000 (+6% YoY) new vehicle registrations in commercial leasing fleets, driven largely by a strong demand for replacements. Overall, new vehicle registrations in leasing fleets had a share of 24.7% (+0.2% YoY) of all new car registrations in Germany.

Developments in the Auto ABS market are driven by a small number of originators. In particular, Volkswagen expanded its market position with the volume of issuances growing between 2010 and 2015, and represents a share of 30% of total issue volume since 2000. In Germany, VWFS´s entire portfolio of lease financing contracts increased from 1.8 million in 2016 to 2.0 million in 2017 (as of June 2017). The German loan and lease business penetration rate of VWFS (vehicle deliveries combined with financial service contracts) has slightly increased from 55.4% in 2016 to 56.7% in 2017.

Origination and Underwriting

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

VWL, representing German leasing operations, is the originator of the purchased lease receivables. The Issuer will enter into a lease receivables purchase agreement with VWL to purchase the lease receivables. 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 2017. 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 VWL to fulfil its obligations as Servicer as defined in the VCL Master transaction documents.

Servicing and Collections

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 terminate the lease contract and to repossess the vehicle. If the debt management process has ended without receiving any notice from the lessee, an application for a court order is made by VWL.

The debt management works closely with the collection centre to ensure the timely repossession of vehicles from terminated lease financing 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.

Residual Value Management

The uncertainty of a vehicle's residual value represents a major risk for creditors of a financing contract, primarily when obligors opt to terminate their contracts voluntarily in the mid or end of the term. Therefore, it is a strategic goal of VWFS to keep the vehicles in equity to the obligor and balance that goal with attractive financing conditions as a support for marketing.

VWFS has set-up a Residual Value Committee consisting of stakeholders from across the business which is meeting regularly, in order to monitor and adjust strategies. CRA is conducting independent analyses relying on third party data to monitor the development of current and future residual values as well as potential strategic changes.

Counterparty Risk

Volkswagen Manipulation of Diesel Emissions

VW diesel emission manipulations may threaten future financial position; pose risk to future portfolio performance

On September 18th 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 15th 2015).

In January 2016, Volkswagen AG started the implementation of technical measures for EA 189 engines affected by the NOx issue, starting with Amarok vehicles. In its HY2016 report, Volkswagen stated that KBA had approved more than 3.7 million Group vehicles for modification in Germany. At the same time, recall processes have started and are progressing in several other countries.

In July 2016, VW announced a preliminary approval of a 2.0L TDI settlement program in the United States of America with private plaintiffs represented by the Plaintiffs' Steering Committee (PSC). Under the proposed settlement, certain civil claims were resolved in relation to 2.0L TDI engines. Settlements were also reached with the attorneys general of 44 US states, the District of Columbia and Puerto Rico in relation to consumer protection and unfair trade practices. However, several other claims, criminal investigations and penalties were not resolved with the above mentioned agreement.

On January 10th 2017 Volkswagen confirmed that the company is in advanced negotiations with the U.S. Department of Justice and with the U.S. Customs and Border Protection aiming to settle an agreement relating civil and criminal investigations.

In Germany, within the "Diesel National Forum" Volkswagen committed itself to launch couple of measures to significantly reduce NOx emissions and improve air quality. Volkswagen will extend the program to install software updates in its European Group Euro 5 and 6 diesel vehicles. Furthermore Volkswagen will grant customers trade-in incentives to replace their Euro 1 – Euro 4 diesel models by Euro 6 vehicles. In addition, Volkswagen will contribute to the EUR 500bn "sustainable mobility fund for cities"; the contribution has not been fixed yet.

As of today, it is not possible to quantify all current and future commercial and financial implications of manipulated diesel emissions.

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 financing 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 0.31% of the outstanding discounted principal balance in the VCL Master portfolio is affected by EA189 software irregularities (only unfixed vehicles). VWL did not provide information on concentrations of affected EA 189 engines 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 maintain a conservative margin in its base case assumptions. 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

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 Master and the Monthly Remittance Condition is satisfied, 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 funded a CCA of currently 1.11% of the discounted receivables balance, which may be used to cover senior cost and interest.

To mitigate commingling risk, the structure obliges the Servicer to advance the aggregate value of all lease payments due in the next monthly period (“Monthly Remittance Condition”) if minimum ratings of VWFS are no longer satisfied.

Set-Off

According to the transaction eligibility criteria, the status and enforceability of the purchased receivables must not be impaired by set-off rights; the Seller would have to repurchase any receivable for which a lessee were to exercise set-off. However, set-off risks could materialise under a limited number of circumstances.

While VWL as the lessor does not take deposits, a lessee could maintain deposits with VW Bank GmbH, a legally separate affiliate. CRA deems the risk of exercising set-off rights against VWL in this case as limited because lessees should not be entitled to set-off obligations against one entity with claims against a legally separate entity.

VWL offers service contracts to certain lessees which can be negotiated with a vehicle lease. Payments for service components will be part of the monthly instalment of the lessee. If VWL fails to perform such services (i.e. in the case of an insolvency of VWL) the lessee may attempt to set-off payment of the lease instalment with claims against the lessor. However, the transaction only securitises the finance portion of the purchased lease financing contracts. In our view, the Issuer's risk to suffer losses from set-off due to service components is limited.

VWFS currently acts only as an intermediary for insurance products and not as counterparty. VWL pools insurance premiums and transfers such amounts to insurance companies. No insurance component will be securitized in the transaction. Therefore, we consider set-off risks due to the non-performance of an insurance service to be limited.

Kilometre Settlement Reserve

The portfolio of lease financing contracts includes the risk that certain lease financing contracts providing for kilometre settlement could be ruled by a court to be subject to additional consumer protection and information requirements in accordance with amendment 506 of the German Civil Code. Most of the relevant lease financing contracts include a residual value guarantee of the lessee aiming at a full amortisation of the Seller's costs and expenses using kilometre settlement clauses. Contracts which were extended by VWL to customers without these additional information requirements could become invalid. In such a case, lessees would be granted an extended right to withdrawal from the contract. New lease contract origination is based on contracts that conform with additional information requirements, however. VWL will have to compensate the Issuer if a lessee opts to withdraw from such a contact. To mitigate the risk of non-payment, a kilometre settlement reserve will be credited to the Issuer´s account in the full amount of the affected contracts by the Seller if the Seller´s creditworthiness declines below a threshold. As of August 2017, VCL Master included 244 lease financing contracts with a relevant kilometre settlement clause. CRA assumes the exposure to gradually decline.

Tax Risk

CRA received legal opinion from transaction counsel clarifying that the Issuer has limited exposure to Value Added Tax (VAT) risk, no exposure to withholding tax risk and limited exposure to income tax risk. The lease financing contracts are governed by the laws of Germany. Regarding VAT, the purchase of the receivables is payable exclusive of any VAT portion. If any future VAT liability with respect to the purchase of the receivables becomes due, the Seller is deemed to bear for any of such sums.

In the case of a servicer default, the Issuer is exposed to the risk that German tax authorities may deem the Issuer to exercise factoring services. This would be relevant if the tax authorities would assume the Issuer to have a permanent establishment in Germany and the replaced servicer has rendered factoring services.

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 add-back 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. In the case that the Issuer would turn to be subject of German trade tax, such respective add-backs are covered by the credit enhancement of the transaction. We deem the credit enhancement levels to be sufficient to cover this risk as well as the credit risk.

CRA included in its cash flow analysis scenarios which included potential VAT and German Trade Tax liabilities and factored these into the structure of the transaction in full, assuming an insolvency of the Seller. CRA observed that these risks do not have an immediate effect on the ratings of Class A and B notes series respectively, but increase sensitivity to further stresses.

While assessing the ratings of the Class A and the Class B notes, we assumed no change in Luxembourg securitization law over the lifetime of the transaction.

Account Bank and Swap Counterparties

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 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 Bank of New York Mellon (BNY), appointed to be the Account Bank. However, default risks are mitigated by certain downgrade provisions linked to the rating of the Account Bank. Should BNY 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 BNY.

The Issuer will enter into 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 series. Under the terms of the swap agreements, 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 Counterparties.

The Issuer is exposed to the risk of the Swap Counterparties failing on any monthly payment, in which case the available distribution amount (including the cash reserve) may be insufficient 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 Counterparties. 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 Counterparties 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 Counterparties, a transfer of obligations to a replacement Swap Counterparty, or the procurement of a guarantee. To assess the risk relating to the Swap Counterparties, Creditreform Rating has undertaken an internal credit assessment of each respective counterparty.

Credit and Portfolio Risk

Creditreform Rating´s credit and portfolio analyses were based on data provided by VWFS, which included net loss vintage performance curves going back to 2002, as well as delinquency data going back to 2010. VWFS provided stratification tables based on the final pool (“black pool”) which allow a further assessment of the portfolio composition. The quality and quantity of data available was considered to be sufficient for the purpose of our analysis.

Receivables Pool Characteristics

Portfolio Composition

The current portfolio consists of lease financing contracts originated by VWFS and entered into between obligors and VWFS. It includes different vehicle brands (i.e. Volkswagen, Audi, SEAT, Skoda and VW LCV). The lease financing 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 10). 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 Master 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 10: Portfolio Characteristics

Portfolio Characteristics[3]	
Outstanding Discounted Receivables Balance (EUR)	2,466,752,889.96
Number of lease financing contracts	253,660
Type of lessees:	
Retail customers (%)	71.61
Corporate customers (%)	28.39
Average nominal balance / lease contract (EUR)	10,474.80
WA seasoning (months)	8.52
WA remaining term (months)	30.66
Closed End Contracts (%)	99.27
Type of Car	
New (%)	95.12
Used (%)	2.57
Demonstration vehicles (%)	2.31
Type EA 189 engine vehicles (%)	0.31

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

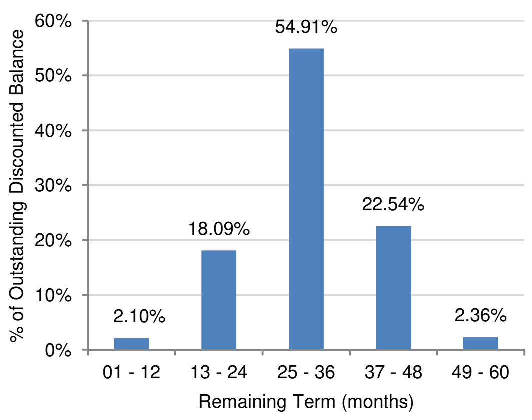
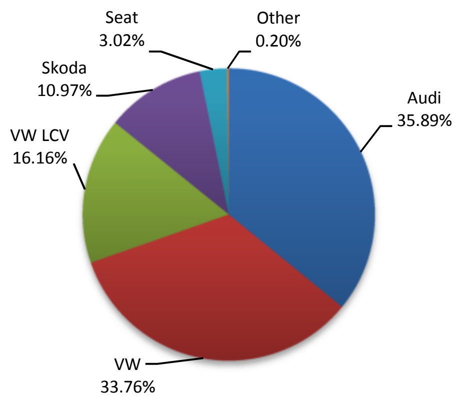


Figure 3: Brand Distribution I Source: VWFS, CRA



Historical Performance

VWFS provided delinquency performance data on single and business customers going back to 2010. 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).

[3] Portfolio Characteristics as of end of August 2017

Figure 4: Delinquencies by Delinquency Bucket
Source: VWFS, CRA

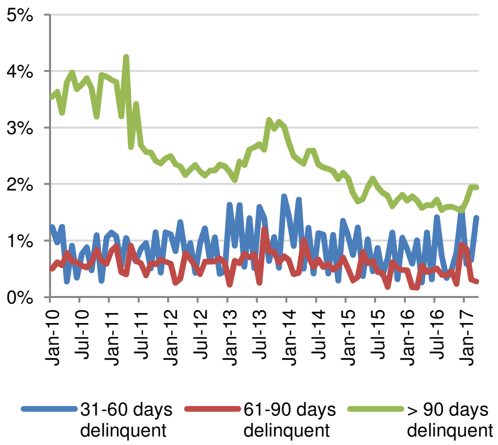
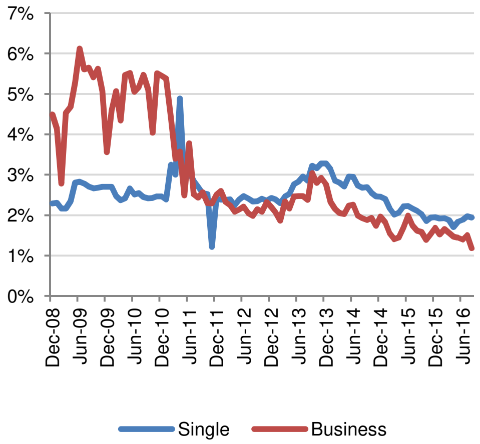


Figure 5: Delinquencies (>90) by Customer Type
Source: VWFS, CRA



The lease financing 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.

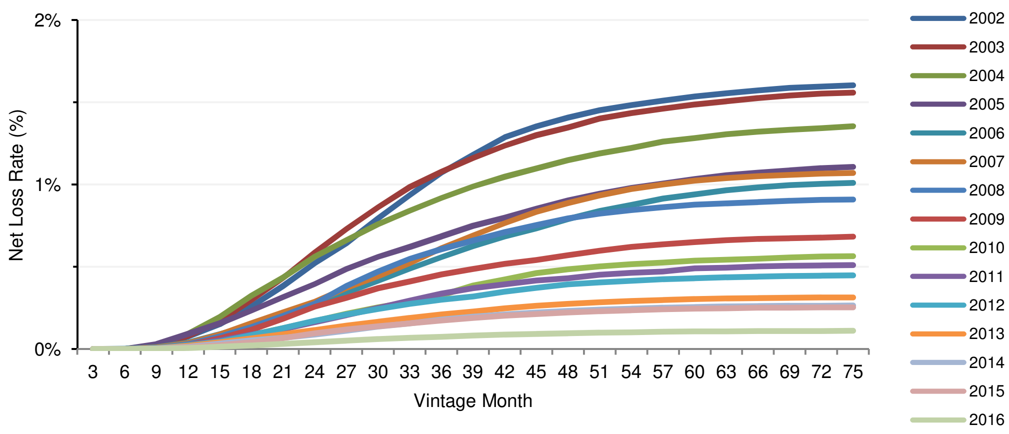
Credit Risk

Defaults

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

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

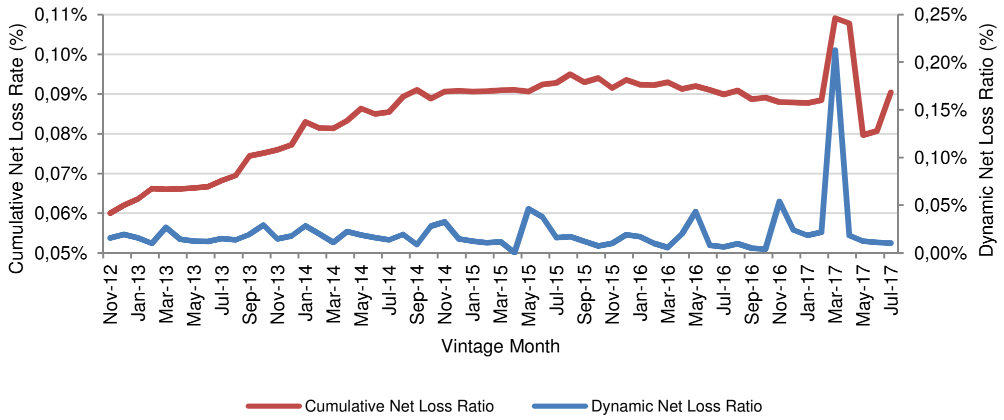
Figure 6: Net Loss Rates of VWFS Total Lease Book by Year, extrapolated I Source: VWFS, CRA



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 (2017): “Default Study - Ausfallraten in der Deutschen Wirtschaft 2016”). 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 and German Auto Leasing Business” above).

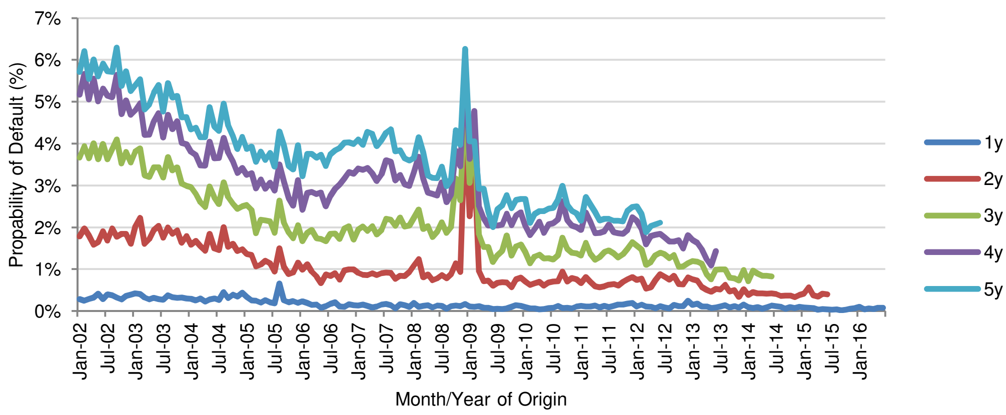
Observed differences between total-book vintage performances and the performances of the VCL Master transaction with respect to recorded cumulative and dynamic net loss ratios (Figure 7) may be explained by the application of eligibility criteria at the pool cut-off date and the revolving structure of the transaction as well as the effects of term takeouts and tap-issuances.

Figure 7: VCL Master Cumulative and Dynamic Net Loss Ratios I Source: VWFS, CRA



Analysis of historical default frequencies from vintage data reveals a trend towards declining default risk. 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



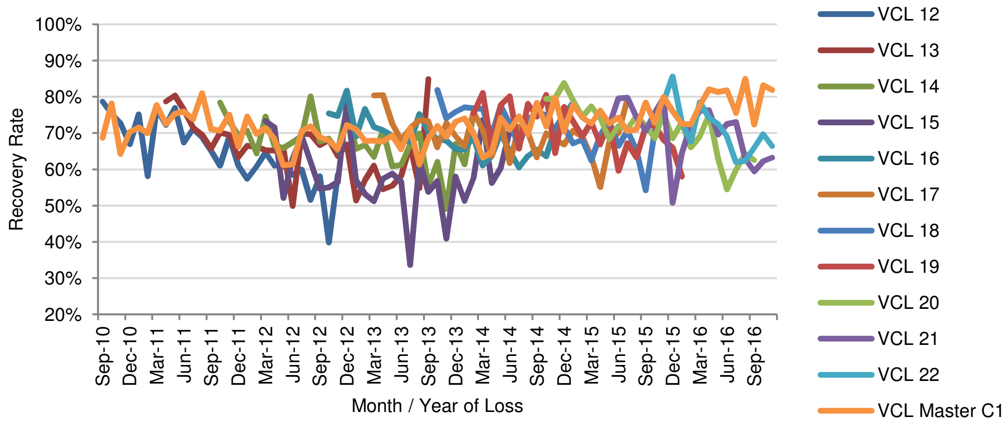
In deriving our base case loss rate assumption, younger vintages were consequently considered a better indicator of future performance. Based on improved historical performance and a stable economic outlook, Creditreform Rating has set a base case net loss expectation of 0.8% for its rating analyses,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

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 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

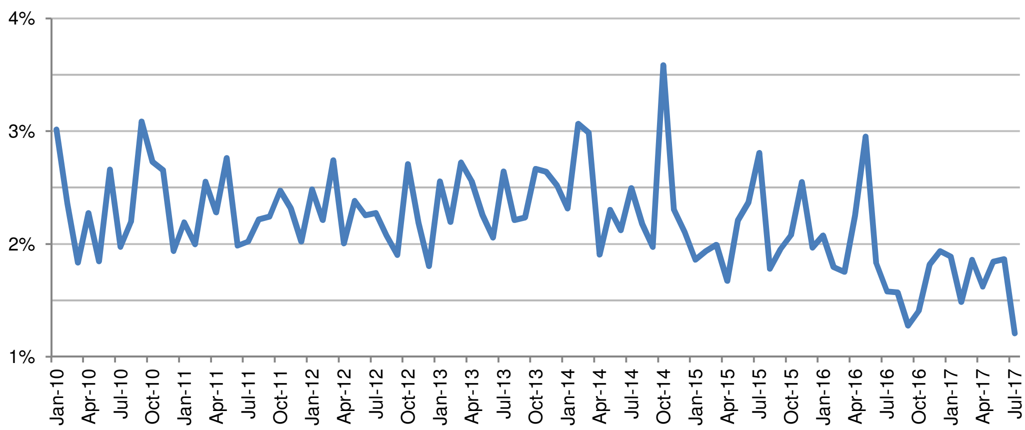


Despite a relatively stable performance (between 60%-70%), the data reveal a fair amount of variation over time. As a cross-check, Creditreform Rating also used vintage data in dynamic format to compare gross defaults to recorded net losses and assuming a granular and homogeneous distribution of contract values in order to calculate implied recovery rates at different points in 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 used data on prior prepayment performance of VCL Master, dating back to 2010. In general, the lease financing 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 financing contracts may be amended, resulting in a potential prepayment or early settlement of the lease contract. Prepayments have historically ranged between about 2 and 3 per cent annualized CPR (Figure 10):

Figure 10: Historical prepayments (annualised CPR) I Source: VWFS, CRA



It is Creditreform Rating´s view that higher prepayments contribute positively 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 2% annualized CPR prepayment rate.

Base Case Summary

Creditreform Rating´s credit risk assessment was based on vintage data and prior VCL investor reports 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 11):

Table 11: 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)	**2.00**

Residual Value Risk

VCL Master 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 pool at the end of June 2016 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=9,137 data points could be identified in our data-bases. As of July 2017 N=7,032 different lessees have ongoing contracts. Because of the structure of VCL Master with a revolving period and the possibility for term takeouts and tap-issuances, we do not expect all contracts still being part of the transaction. However, except for a shorter maturity profile we considered the remaining sample as representative for a typical VCL Master transaction based on the analysis of structural parameters due to the unchanged eligibility criteria. We used the remaining sample to conduct an updated CRA Portfolio and Benchmark Analysis.

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 Master pool sample with a snapshot of the total German economy:

Figure 11: Portfolio Composition by sector I Source: CRA

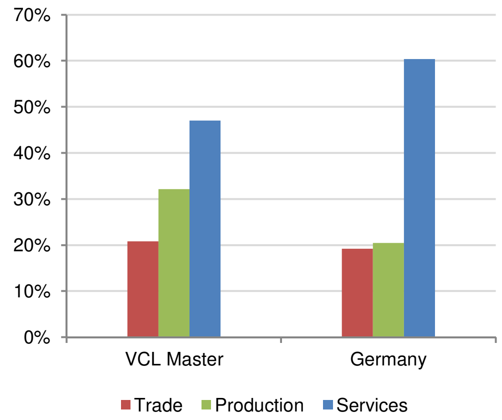
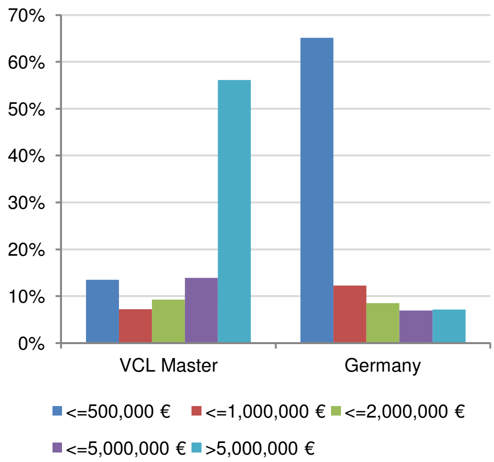


Figure 12: Portfolio Composition by Lessee Turnover Source: CRA



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 Master includes a significantly larger share of lessees classified as high turnover creditors; the largest share (56%) 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 (2017): “Default Study - Ausfallraten in der Deutschen Wirtschaft 2016”).

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 Master portfolio as compared to the total German economy (see Table 12). At the same time, small businesses which represent the largest share of companies in Germany (45.6%) are significantly underrepresented in the portfolio, amounting to only 12.5% of all total lessees.

Table 12: VCL Master Portfolio Composition by Type of Legal Entity I Source: CRA

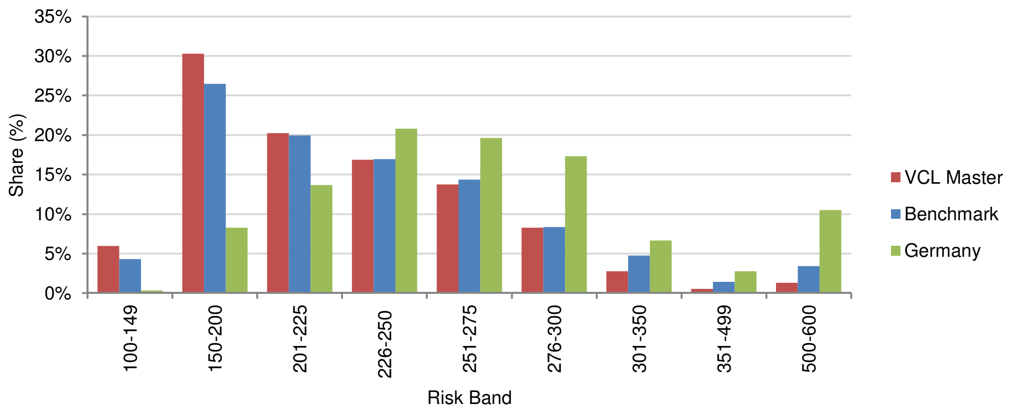
Legal form code	Total German Economy (%)	VCL Master (%)
Self-employed	8.8	5.5
Small business	**45.6**	**12.5**
Partnership	3.5	2.6
Consortium	0.1	0.0
Private firm	3.2	2.8
OHG (general partnership)	0.8	0.8
KG (limited partnership)	1.2	0.8
GmbH & Co. KG	**4.6**	**12.5**
GmbH (limited company)	**26.8**	**56.6**
AG (stock company)	**1.2**	**4.1**
e.G. (cooperative society)	0.2	0.6
e.V.(non-profit association)	4.0	1.2
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 Master portfolio, based either on frequency or weighted by contract 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 Master with respect to sector diversification and turnover/sales composition were taken into account. Risk-class distributions were elicited for the VCL Master sample as well as for the benchmark.

Figure 13 shows the distribution of risk classes of the VCL Master 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:

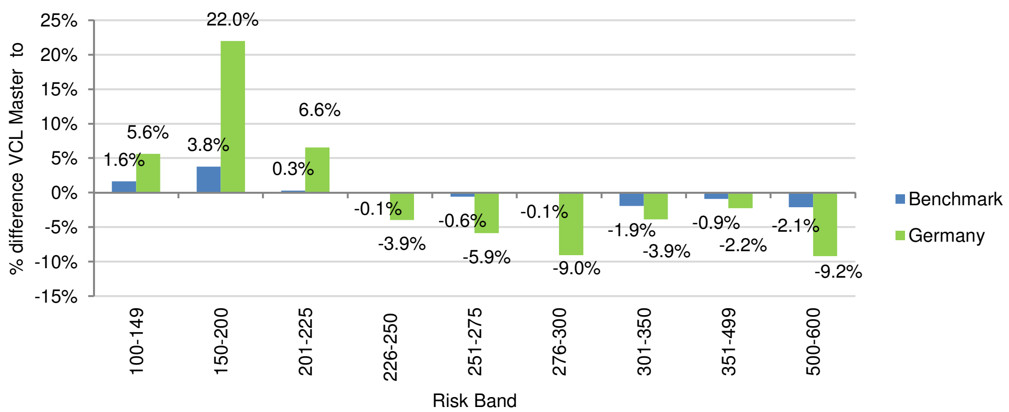
Figure 13: Distribution of Risk Classes I Source: CRA



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

The major part of the VCL Master portfolio consists of obligors in the lower risk bands, weighted by frequency or volume. While 5.9% percent of all lessees were classified into the lowest risk band, more than 56.46% of total lessees could still be classified into the 100-225 score range. Comparing the distribution of risk classes in the VCL Master 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 Master relative to reference I Source: CRA



Compared to the benchmark or the total German economy, the share of lessees with a high credit-risk (i.e. risk scores >250) is lower in the VCL Master portfolio. At the same time, lessees with a lower credit-risk profile are overrepresented in VCL Master. 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 current exposure. 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 VWL to adjust the analytical process inputs.

Table 13: Risk Classes and Expected Loss Calculations for VCL Master

CRA Risk Metrics			VCL Master Portfolio							
Risk Class	CRA Score	ø PD	Frequency			Current Exposure		Risk Profile		
			Freq.	%	Ø PD 1y	€	%	Ø Default in €	%	Ø exp. Loss
1	100 - 149	0.07%	410	5.95%	**1.70%**	3,339,669	7.00%	2,254	0.30%	**1.58%**
2	150 - 200	0.18%	2,086	30.27%		15,362,067	32.18%	28,353	3.75%	
3	201 - 225	0.38%	1,395	20.24%		9,303,590	19.49%	35,502	4.69%	
4	226 - 250	0.66%	1,163	16.87%		7,739,546	16.21%	50,987	6.74%	
5	251 - 275	0.92%	949	13.77%		6,200,461	12.99%	56,953	7.53%	
6	276 - 300	1.91%	570	8.27%		3,696,543	7.74%	70,724	9.35%	
7	301 - 350	4.46%	192	2.79%		1,287,692	2.70%	57,475	7.60%	
8	351 - 499	12.84%	37	0.54%		240,461	0.50%	30,881	4.08%	
9	500 - 600	74.82%	90	1.31%		565,776	1.19%	423,342	55.96%	
Total			*6,892*	100.0%		47,735,805	100.0%	756,472	100.0%	

As highlighted in Table 13, Creditreform Rating derived a one-year expected probability of default (PD) of 1.70% for the portfolio sample across all risk classes. The portfolio´s expected gross loss was sized at 1.58% over a one-year time horizon based on average exposure in the first year and calculated with respect to the current exposure of approximately EUR 47.7m in the VCL Master sample data. The remaining sample has a higher one-year expected probability of default compart-ed to the analysis of last year. However, the exposure of the sample reduced to nearly half.

The CRA Portfolio and Benchmark Analysis shows a higher portfolio credit risk (4.75% gross loss) compared to historical estimates

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 4.75% over the life of the transaction (see Table 14).

Table 14: Historical Data versus Portfolio Analysis Base Case Comparison

Credit Risk Parameter	Base Case Expectation
Gross Loss (%) *Historical Data*	2.29
Gross Loss (%) *Portfolio Analysis*	4.75

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 that default risk in the VCL Master portfolio currently is on an elevated level compared to historical benchmarks. This is mainly due to the share of 1.31% of obligors scoring in the lowest risk band, without which the one-year average PD would reduce to 0.74%. CRA expects these high risk obligors (delinquent or defaulted as per the definition of CRA) to remain in the portfolio and not be transferred to other entities due to the application of the transferee´s eligibility criteria.

Cashflow Analysis

Creditreform Rating analysed the transaction cash flows in its proprietary cash flow model, which was tailored to reflect the structure of VCL Master including the minimum available credit enhancements of 11.15% for Class A and 8.75% for Class B series. 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 and the amount of prepayments.

Rating Scenarios

CRA base case stresses:

AAA_{sf}: x5.59 default multiple
43.06% recovery haircut

$A+_{sf}$: x4.30 default multiple
34.49% recovery haircut

Taking our loss assumptions 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_{sf} and $A+_{sf}$), the stress multiples for default rates were set at x5.59 and x4.30, respectively. The multiples were set at relatively high levels to factor in risks due to the revolving nature of the portfolio, the structure´s term takeout- and tap-issuance-mechanism and the results of the CRA Portfolio and Benchmark analysis. Combined, this leads to the rating-specific stressed gross losses of 12.77% for AAA_{sf} and 9.83% for $A+_{sf}$.

Recovery Rates

The base case recovery expectation of 65.0% was subjected to a rating haircut in each rating scenario. The recovery rate haircuts were set to 43.06% in the AAA_{sf} scenario and 34.49% in the $A+_{sf}$ scenario, respectively. The haircuts take into account transaction-specific features such as observed volatility, potential market value risks caused by the manipulation of EA189 diesel emissions, and established recovery procedures. As a result, the stressed recovery rates were set to 37.01% in an AAA_{sf} scenario and 42.58% in an $A+_{sf}$ scenario. The scenario-specific expected losses were calculated by applying our rating multiplies and haircuts to the base case (Table 15).

Table 15: Stressed Assumptions

Rating Scenario	**AAA_{sf}**	**$A+_{sf}$**
Base Case Gross Loss (%)	2.29	2.29
Default Multiple	x5.59	x4.30
Rating Loss Rate (%)	12.77	9.83
Base Case Recovery Rate (%)	65.00	65.00
Recovery Haircut (%)	43.06	34.49
Rating Recovery Rate (%)	37.01	42.58
Expected Net Loss (%)	**8.04**	**5.65**

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. Table 16 and Table 17 show the resulting rating indications for the Class A and Class B notes series, respectively. For instance, the best case rating of an AAA represents a scenario with unchanged base case assumptions. If the default rate base case assumptions were increased by 25%, our analysis would suggest a Class A note downgrade of AAA_{sf} to $AA+_{sf}$. The worst case rating of $BBB+_{sf}$ for the Class A notes represents a scenario, where a severe 50% stress on both defaults and recoveries is applied collectively.

Table 16: Class A Sensitivities

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

Table 17: Class B Sensitivities

Recovery / Default	Base Case	-10%	-25%	-50%
Base Case	**A+**	A+	A+	A
+10%	A+	A+	A	BBB+
+25%	A+	A-	BBB+	BBB-
+50%	BBB+	BBB	BBB-	BB-

Creditreform Rating tested scenarios with back-, even-, and front-loaded default timings. As highlighted in Table 18, Creditreform Rating also assessed the effect of changing the prepayment rate to 0%. Overall, we observed reduced sensitivities of the Class A and Class B notes.

Table 18: Class A and Class B Prepayment Sensitivities

Prepayment Rate	Class A Notes	Class B Notes
Base Case	AAA	A+
Zero	AAA	A+

Appendix

Regulatory Requirements

Creditreform Rating AG was engaged on July 22nd 2016 by VWFS to conduct ratings for Class A and Class B notes series issued by VCL Master S.A., acting for and on behalf of its Compartment 1. 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, 5th 2017. 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: www.creditreform-rating.de.

This rating was carried out by analysts Dr. Stephan Rompf, Philip Michaelis, Jan Löckenhoff and Edsson Rodriguez, all located in Neuss/Germany.

Closing of the transaction occurs on September 25th 2017. The ratings are based on the portfolio information as of the Cut-Off Date falling on the last day in August 2017.

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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Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. This rating is therefore no statement of fact, but an opinion. For this reason, Creditreform Rating AG cannot be held liable for the consequences of decisions made on the basis of any of their ratings. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at corporate or investment decisions. Ratings are not meant to be used as substitutes for one's own research, inquiries and assessments.

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