Moody's INVESTORS SERVICE

CREDIT OPINION
10 October 2023

Update

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RATINGS

**Volkswagen Bank GmbH**

| | |
|---|---|
| Domicile | Brunswick, Germany |
| Long Term CRR | Aa3 |
| Type | LT Counterparty Risk Rating - Fgn Curr |
| Outlook | Not Assigned |
| Long Term Debt | (P)A1 |
| Type | Senior Unsecured MTN - Dom Curr |
| Outlook | Not Assigned |
| Long Term Deposit | A1 |
| Type | LT Bank Deposits - Fgn Curr |
| Outlook | Stable |

*Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.*


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# Volkswagen Bank GmbH

## Update to credit analysis

## Summary


Volkswagen Bank GmbH's (VW Bank) A1 deposit and issuer ratings reflect the bank's baa2 Baseline Credit Assessment (BCA); a two-notch affiliate support uplift based on the support from the bank's ultimate parent Volkswagen Aktiengesellschaft (Volkswagen, A3 stable[1]); and two notches of rating uplift from our Advanced Loss Given Failure (LGF) analysis, which incorporates the relative loss severity of a liability class. VW Bank's ratings do not benefit from any government support uplift due to its insignificant size in the context of the German banking sector.

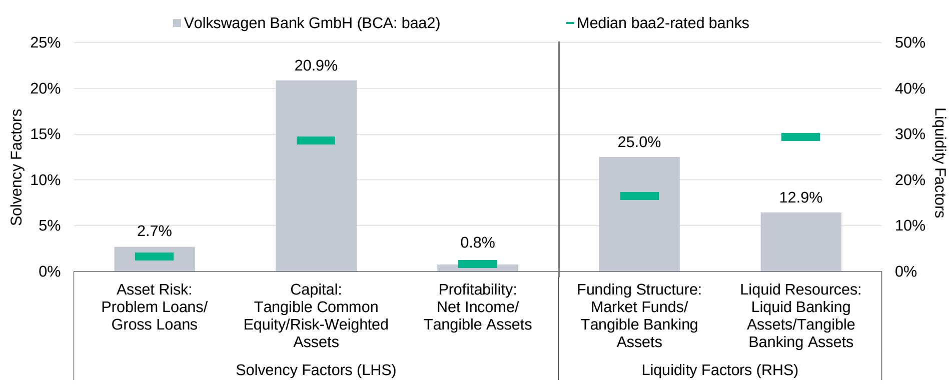
VW Bank's baa2 BCA reflects its sustained sound asset quality, strong regulatory capital levels and continued sound profitability. The broad range of the bank's proven and diversified funding channels displays good access to capital markets even in a volatile market environment, further underpinning the bank's BCA.

The baa2 BCA remains constrained by the bank's undiversified business mix, resulting from its captive finance origin and continuing classification as a monoline business.


Exhibit 1

**Rating Scorecard - Key financial ratios**

**Volkswagen Bank GmbH**




*Sources: Moody's Investors Service and company filings*

## Credit strengths

» Sound underlying profitability, given the bank's position as the carmaker's captive finance subsidiary and further supported by its sound net interest margin

» Solid, through-the-cycle asset quality which reflects bank's prudent risk management

» Strong capitalisation and conservative leverage

» A granular, retail-oriented, stable deposit base, which reduces the bank's reliance on more confidence-sensitive wholesale funding sources

## Credit challenges

» The continued reshaping of the automobile industry towards zero emission mobility could eventually hurt VW Bank's sound asset quality and profitability in the current volatile economic and geopolitical environment. Especially, if the parent's strategy "Auto 2030" and VW FS and VW Bank's Mobility 2030 strategy will face execution challenges.

» The transition towards electric vehicles and clients' reluctance to bear eventual technology obsolescence risks accelerate the shift towards leasing versus financing.

» Inflationary pressure combined with a less benign operating environment might result in lower affordability of cars, hurting financing volumes and margins.

» The bank's high level of encumbered liquid securities is only partially offset by its committed access to additional liquidity resources at present, however encumbrance will reduce following the repayment of the ECB's TLTRO in full by 2024.

» Because of VW Bank's position as the carmaker's captive auto loan provider, the bank's lending portfolio is entirely concentrated in the automobile industry, which links its asset quality, as well as profitability, closely with the strength of its parent.

## Outlook

» The stable rating outlook reflects the alignment of VW Bank's Adjusted BCA with the issuer rating of its ultimate parent Volkswagen.

## Factors that could lead to an upgrade

» Because of the intrinsic links between VW Bank and its automotive parent, its ratings are highly dependent on the creditworthiness of Volkswagen. Therefore, an upgrade of VW Bank's a3 Adjusted BCA could follow the upgrade of Volkswagen's rating. Please see the Credit Opinion of Volkswagen for a discussion of the automaker's rating drivers.

» VW Bank's ratings could be upgraded if we assess that the increased issuance of instruments that are designated to absorb losses at failure is likely to be sustained. This could result in additional notches of rating uplift for VW Bank's various debt classes from our Advanced LGF analysis.

» Upward pressure on VW Bank's baa2 BCA could result from a combination of further improving profitability; significantly lower dependence on wholesale funding sources, combined with a strong increase in the bank's on-balance-sheet liquidity; and a further improvement in the underlying quality of VW Bank's lending assets. However, a BCA upgrade would not automatically result in an upgrade of the bank's ratings.

## Factors that could lead to a downgrade

» Although unlikely at present, VW Bank's ratings could be downgraded if Volkswagen's ratings were to be downgraded. A downgrade of VW Bank's ratings could also be triggered if Volkswagen were to loosen its ties with its bank subsidiary. This loosening could lead to a lowering of our support assumption for VW Bank and a downgrade of the bank's Adjusted BCA to a level below the parent's issuer rating.

» VW Bank's ratings could also be downgraded as a result of an unexpected and significant decrease in the volume of the bank's junior senior unsecured and subordinated debt instruments, resulting in fewer notches of rating uplift from our Advanced LGF analysis.

» A downgrade of VW Bank's BCA could be triggered by the following: a sudden and more pronounced erosion of the bank's asset quality, especially considering the bank's large exposure to car dealers, and the pressure that this could exert on both the bank's profitability and capitalisation; a more significant and sustained increase in the bank's dependence on wholesale funding sources, in particular, if the issued instruments' terms no longer match those of the bank's loan book; or the bank losing or reducing access to committed liquidity lines from its parent or having to substantially use available assets for securitisation. However, a lower BCA would likely be offset by a higher uplift from affiliate support and not result in a rating downgrade.

## Key indicators

Exhibit 2

**Volkswagen Bank GmbH (Consolidated Financials) [1]**

| | 06-23[2] | 12-22[2] | 12-21[2] | 12-20[2] | 12-19[2] | CAGR/Avg.[3] |
|---|---|---|---|---|---|---|
| Total Assets (EUR Billion) | 70.4 | 61.2 | 67.3 | 66.9 | 68.4 | 0.8[4] |
| Total Assets (USD Billion) | 76.8 | 65.3 | 76.2 | 81.9 | 76.8 | 0.0[4] |
| Tangible Common Equity (EUR Billion) | 10.7 | 10.7 | 9.8 | 9.4 | 9.0 | 5.2[4] |
| Tangible Common Equity (USD Billion) | 11.7 | 11.4 | 11.1 | 11.5 | 10.1 | 4.4[4] |
| Problem Loans / Gross Loans (%) | 2.4 | 2.6 | 2.6 | 2.8 | 2.5 | 2.6[5] |
| Tangible Common Equity / Risk Weighted Assets (%) | 20.2 | 21.1 | 19.7 | 18.6 | 16.1 | 19.1[6] |
| Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%) | 9.6 | 10.7 | 11.1 | 13.7 | 13.5 | 11.7[5] |
| Net Interest Margin (%) | 4.1 | 2.4 | 2.4 | 2.4 | 2.3 | 2.7[5] |
| PPI / Average RWA (%) | 1.6 | 1.4 | 1.5 | 1.6 | 1.4 | 1.5[6] |
| Net Income / Tangible Assets (%) | 0.7 | 0.8 | 1.2 | 0.9 | 0.8 | 0.9[5] |
| Cost / Income Ratio (%) | 70.9 | 55.8 | 54.3 | 51.0 | 49.8 | 56.3[5] |
| Market Funds / Tangible Banking Assets (%) | 32.3 | 25.0 | 28.2 | 27.6 | 25.0 | 27.6[5] |
| Liquid Banking Assets / Tangible Banking Assets (%) | 22.0 | 12.9 | 23.9 | 16.8 | 10.9 | 17.3[5] |
| Gross Loans / Due to Customers (%) | 143.7 | 184.2 | 178.3 | 182.0 | 170.2 | 171.7[5] |

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

*Sources: Moody's Investors Service and company filings*

## Profile

Volkswagen Bank GmbH (VW Bank) is a German limited liability company wholly owned by Volkswagen, a major global automotive manufacturer and provider of associated financial services. VW Bank operates within Volkswagen's financial services division, providing a wide range of banking services to private and business customers.

In addition to the captive banking finance services, VW Bank is a significant provider of internet-based banking services in Germany. The company's direct banking unit (VW Direct) was the largest direct bank in the European automotive financial services market based on its total customer deposits of €34.6 billion as of 30 June 2023 (2022: €26.3 billion). VW Bank operates in nine European countries and employs 1,506 people. VW Bank is regulated by the European Central Bank (ECB).

In March 2023 Volkswagen Financial Services has announced a reorganization of the subgroups of VW FS AG and VW Bank. The reorganization is expected to be completed by mid-2024 and is still subject to approvals of the ECB. Under the planned set-up the majority of the German and European companies will be combined and consolidated under a new financial holding company supervised by the ECB. The current Volkswagen Financial Services Aktiengesellschaft shall act as a holding company for non-European companies.

## VW Bank's Macro Profile is Strong+

Because of its sustainable focus on the German market, the bank's assigned Macro Profile is in line with the Strong + Macro Profile of Germany, but also takes into account the issuer's activities in other EU countries (for example, France, the Netherlands, Italy and Spain). For more information, please see VW Bank's Issuer Profile and our German Banking System Profile.

## Detailed credit considerations

### Supply chain challenges have eased, volumes have not yet recovered to pre-pandemic levels

For 2023, we expect global light vehicle sales at 85.7 million units (+5.7% versus 2022). Our new forecast for 2024 is 88.9 million (+3.8%), and we continue to expect the recovery to prepandemic levels to take until at least 2025, given the difficult global macroeconomic environment, where growth suffers from higher borrowing costs and tighter lending.

Our outlook on the global automotive industry remains negative. This is because we expect increasing competition and weakening consumer affordability to weigh on automakers' profit margins.

### Solid asset quality

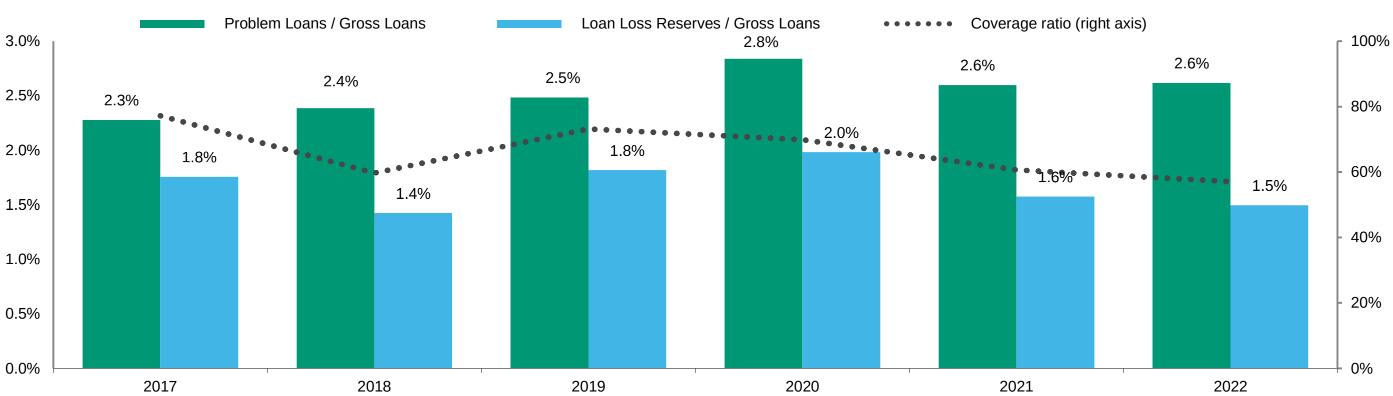
We assign a baa2 Asset Risk score to VW Bank, three notches below its a2 initial score. The assigned score captures the asset-quality risks resulting from a more adverse credit cycle for the type of exposures the bank has, particularly considering the relatively unseasoned nature of its lending book before the pandemic. Additionally, we expect current macroeconomic uncertainties to slow economic growth and strain debt affordability for households and thus demand for cars.

In addition, structural changes in consumer preferences towards more environment-friendly technologies and towards a shared mobility represent a non-lending-related risk factor. These changes could potentially lead to an even more pronounced shift towards leasing or subscription-based products and also affect used car values, although VW Bank's remaining residual value (RV) exposure is almost negligible in this regard because it is largely borne by the dealerships. Furthermore, although currently unlikely, if Volkswagen falls behind in adapting new technologies, it could significantly hurt VW Bank as a captive subsidiary.

Despite these risks, VW Bank's nonperforming loan (NPL) ratio remained stable at 2.6% as of year-end 2022 (2021: 2.6%). Total problem loans increased by 5% to €1.218 million from €1.164 million in 2021, while total gross loans increased by 4% during the same period. As of year-end 2022, the bank's problem loan coverage ratio remained solid at 57% (2021: 61%). We do no longer expect a lagging pandemic-related increase in impaired exposures in 2023, but the inflationary strain on households' debt affordability may result in the formation of new NPLs.

Exhibit 3

**VW Bank's problem loans remained stable in 2022; loan loss coverage remains solid**

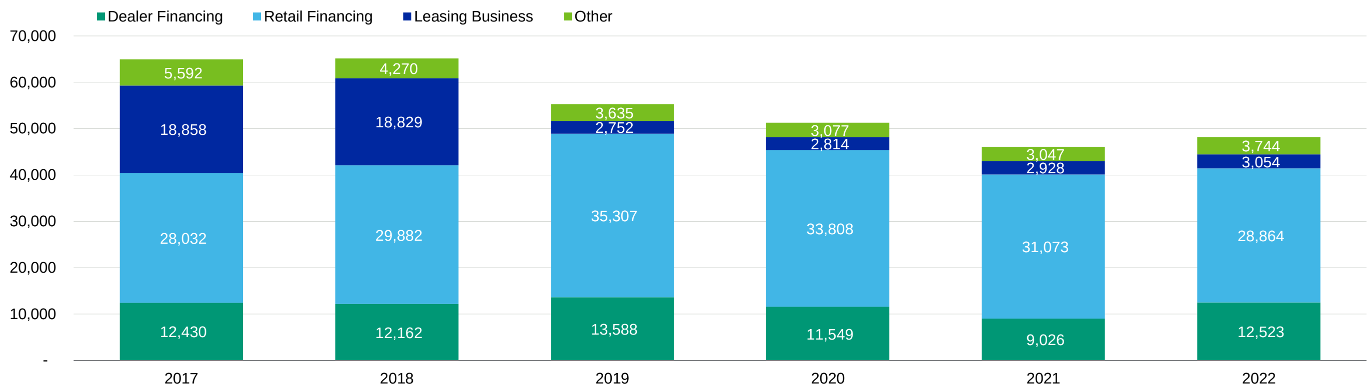



Problem loans displayed in accordance with Moody's definition.
*Sources: Moody's Investors Service and company reports*

Given the low significance of RV risks for VW Bank's asset quality, the main downstream risk is a deterioration in the creditworthiness of car dealers because Volkswagen's financial services arm also provides day-to-day financing to Volkswagen's vehicle dealers (dealer financing). Given the importance of the dealer network to the value chain of the broader group, the carmaker has supported car dealers in the past and will likely continue to provide support in case of need. Such support would help alleviate asset-quality risks at the level of VW Bank.

Total financing volume increased in 2022 by 4.6% after it had been continuously declining since 2020. Dealer financing increased by 39%, driven by improved availability of new cars in 2022 and increased demand for inventory finance; the remaining leasing business increased by 4% while retail financing decreased by 7%. The decline in retail financing is largely attributable by the pronounced shift in customer preferences towards leasing products, particularly for electric vehicles and AFV.

Exhibit 4
**Business volumes in dealer financing increased in 2022**




Loans to and receivables from customers are in € millions; attributable to client segments per VW Bank GmbH's definition.
*Sources: Moody's Investors Service and company reports*

## Profitability decreased in 2022 after an extraordinary strong 2021

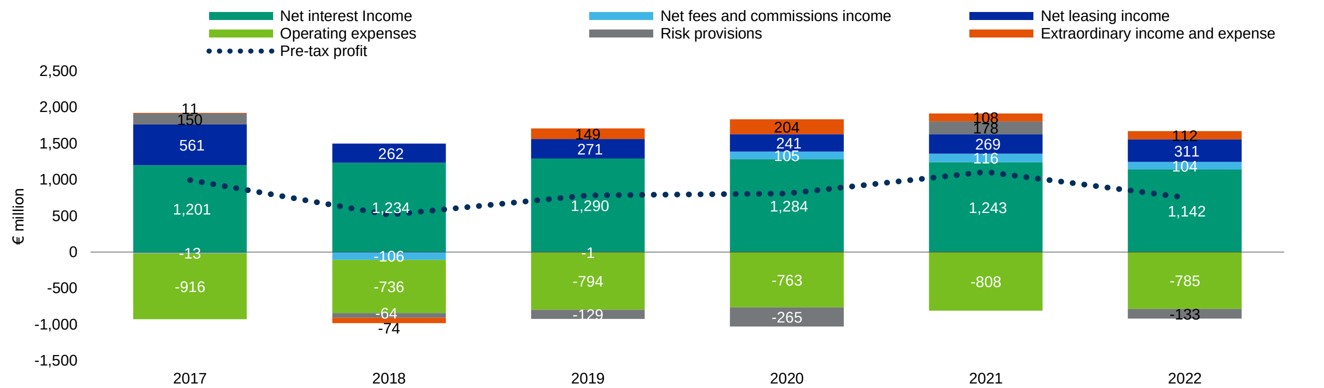
We assign a baa1 Profitability score to VW Bank, in line with the initial score of baa1. The assigned score takes into account VW Bank's strengthened net margin since 2020, supported by our expectation of rising interest rates; however, demand for cars might weaken given the current macroeconomic uncertainties.

In 2022, VW Bank reported net interest income from lending operations of €1,358 million, down from the €1,377 million in 2021, while its net interest margin remained stable at 2.4%. The net income from leasing transactions increased 15.6% year over year to €311 million from €269 million. Operating expenses decreased 3% to €785 million (2021: €808 million); VW Bank's cost-to-income ratio of 55.8% remains among the lowest in the German banking landscape.

Net fee and commission income decreased to €104 million in 2022 (2021: €116 million). VW Bank's provisions for credit risk were €133 million in 2022, compared with a release of €178 million in 2021. The increase was the result of higher provisions in the dealer financing segment and lower reversals. In total, pretax profit decreased 32% to €752 million from €1,107 million, mainly as a result of higher risk costs in 2022 and higher interest expenses.

VW Bank's profitability remains supported by the carmaker's sales and cost efficiency strategy, which targets to grow car sales in combination with the bank's lending, service and insurance products, which constitutes a growing part of the carmaker's overall sales goal. This goal is supported by Volkswagen providing specific subsidies targeted at offering attractively priced financial services packages for new and used cars.

Exhibit 5
**In 2022, pretax profit decreased mainly because of higher risk costs and higher interest expenses**




2018 figures are adjusted for business reorganisation effects in accordance with 2019 and 2018 annual reports. The financials are reported numbers, excluding our standard adjustments.
*Source: Company reports*

## Good capitalisation and conservative leverage

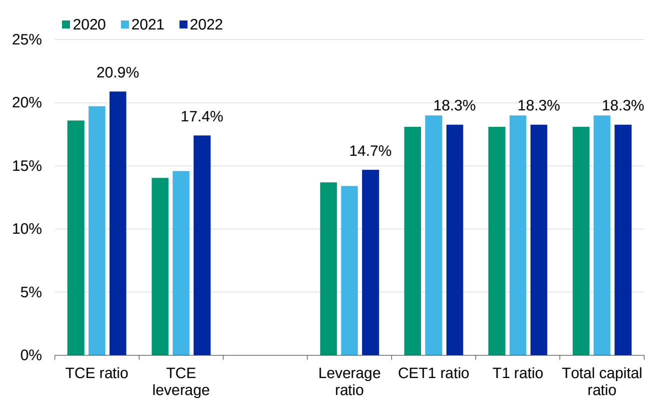
We assign a aa3 Capital score, two notches below the initial aa1 initial score, capturing the limited opportunity to retain earnings because of the existing profit-and-loss transfer agreement with Volkswagen.

Historically, Volkswagen and VW FS AG have injected capital into VW Bank, which, in turn, has upstreamed its net income under the existing profit-and-loss transfer agreement. As a result, VW Bank's capital ratios benefited from capital increases in 2016 and 2017[2]. In 2020 and again in 2021, the bank benefited from the ECB's recommendation to refrain from dividend payments and dividends to the parent were re-injected into the bank.

VW Bank's tangible common equity (TCE) ratio was 21.1% as of year-end 2022 (2021: 19.7%), supported by an increase in retained earnings to €2 billion in 2022 from €1.7 billion as of year-end 2021, which was partially counterbalanced by a 2% increase in risk-weighted assets (RWA). The risk density (defined as RWA/total assets) remained high at 83% as of year-end 2022 (2021: 74%), reflecting the concentration in one asset class. As of year-end 2022, VW Bank reported a strong Common Equity Tier 1 (CET1) capital ratio of 18.3%[3], down slightly from 19.0% in 2021 and a leverage ratio of 14.7% (2021: 13.4%).

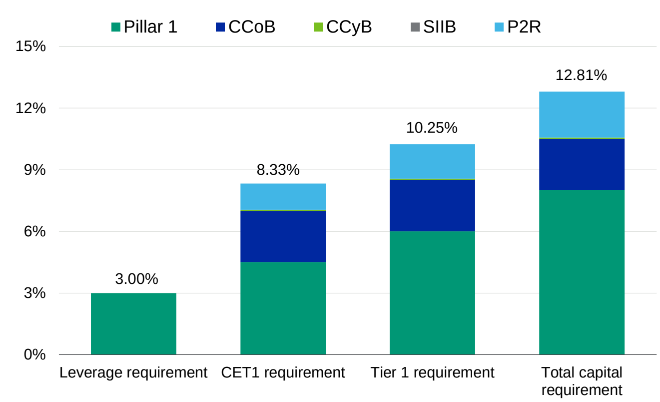
As shown in Exhibits 6 and 7 below, VW Bank comfortably complies with all regulatory ratios, including an increased Pillar 2 requirement (increased to 2.25% from 2.0% in 2023). In the European Banking Authority's (EBA) 2023 EU-wide stress test, VW Bank achieved the best result among the German banks, displaying a 14.75% CET1 capital ratio in the adverse scenario for 2025.

Exhibit 6
**VW Bank has maintained solid capital and leverage levels**




TCE = Tangible common equity (our calculation); CET1 = Common Equity Tier 1 capital; T1 = Tier 1 capital.
*Sources: Company reports and Moody's Investors Service*

Exhibit 7
**VW Bank's capital requirements in detail**



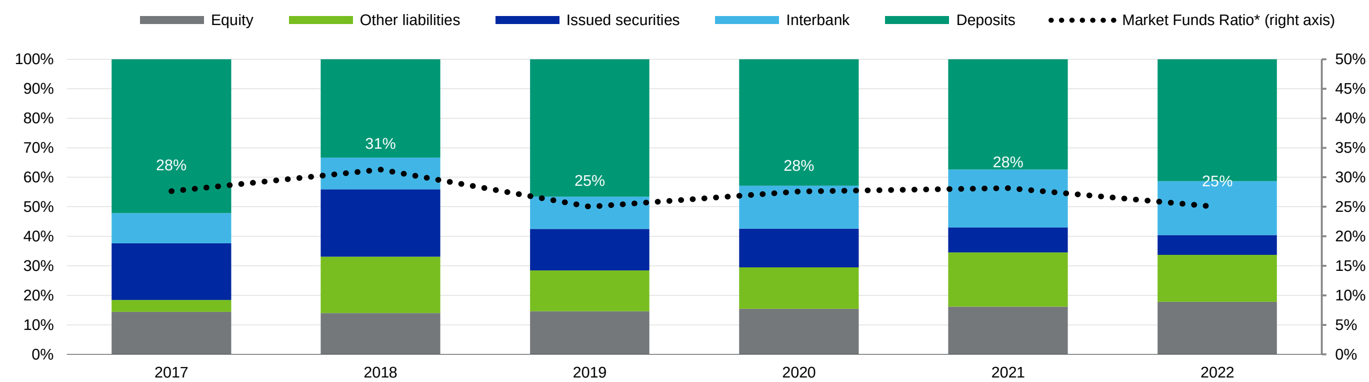

CCoB = Capital conservation buffer; CCyB = Countercyclical capital buffer; SIIB = Systemically important institutions buffer.
*Source: Company reports*

### Access to a granular retail-oriented deposit base supports the bank's balanced funding mix

We assign a baa2 Funding Structure score, one notch below the initial baa1 score. The bank has a balanced funding mix, supported by the access to ECB's targeted longer-term refinancing operations (TLTRO) tenders.

Client deposits, VW Bank's main financing source, returned to €26.2 billion or 43% of total assets as of year-end 2022 (2021: 39%) and increased materially to €34.6 billion by the end of June 2023 as VW Bank resumed paying more attractive deposit rates to both retail and corporate clients. VW Bank's deposit base remains the main funding source and is of particular importance especially during periods of more volatile capital markets as it has repeatedly demonstrated stability – for example, during the 2008-09 financial crisis, following the parent's diesel emissions issue, as well as during the pandemic – and proved to be a reliable and sufficiently flexible funding source.

Exhibit 8
**Market funds ratio started to normalise in 2021, but still captures a higher amount of central bank funding**




*Market funds ratio = Market funds/tangible banking assets.
*Sources: Company reports and Moody's Investors Service*

The bank's sustainable access to a variety of longer-term funding sources also mitigates the risks arising from the frequent refinancing of relatively short-term funding, which generally matches the bank's auto loan assets (with a customary initial tenor of around three years). Other funding sources comprise interbank funding (€11.2 billion as of year-end 2022, largely TLTRO) and asset-backed securities (€0.2 billion as of year-end 2022). VW Bank's funding through group companies remained modest in 2022.

### Liquidity benefits from committed access to additional liquid assets

We assign a Liquid Resources score of ba2, one notch below the initial score of ba1. The assigned score reflects our expectation that the temporarily increased liquidity, as demonstrated by a liquidity score of 23.9% in 2021, resulting from the bank's TLTRO participation in 2020 and 2021, will continue to decrease until 2024.

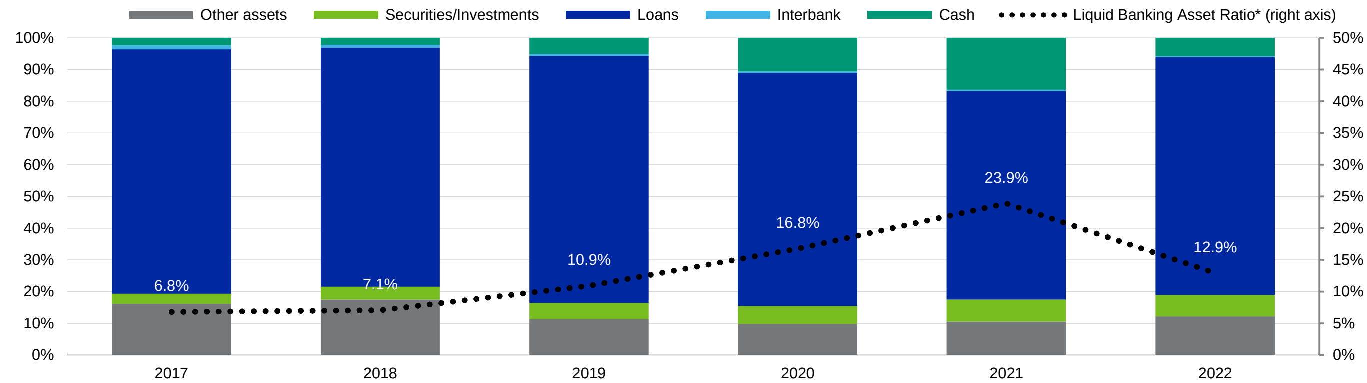
VW Bank has held a rather limited liquidity reserve in the past and temporarily increased its cash reserve in 2020-21. The cash reserve position decreased to €3.5 billion as of year-end 2022 (2021: €11.0 billion) following a partial repayment of TLTRO.

The assigned score further reflects VW Bank's access to additional liquidity resources from its carmaker parent in case of need. Furthermore, the bank can rely on access to additional liquidity resources through committed liquidity lines from its carmaker parent and securitisations.

Exhibit 9

**VW Bank's liquid reserves increased temporarily in 2021**

**Composition of liquid assets**




*Liquid banking asset ratio = Liquid assets/tangible banking assets.

*Sources: Company reports and Moody's Investors Service*

### Qualitative adjustment captures the close links between the bank's and the carmaker's performance

We reduce VW Bank's weighted average outcome of the assigned Financial Profile factor score by one notch, to baa2 from baa1. This adjustment reflects the bank's strongly focused business profile, and sector concentration risks as a captive auto loan provider and lender to borrowers related to the automobile industry.

Business diversification is an important gauge of a bank's sensitivity to stress in a single business line. Business diversification is related to earnings stability in the sense that earnings diversification across distinct and relatively uncorrelated lines of business increases the reliability of a bank's earnings stream and its potential to absorb shocks affecting a business line.

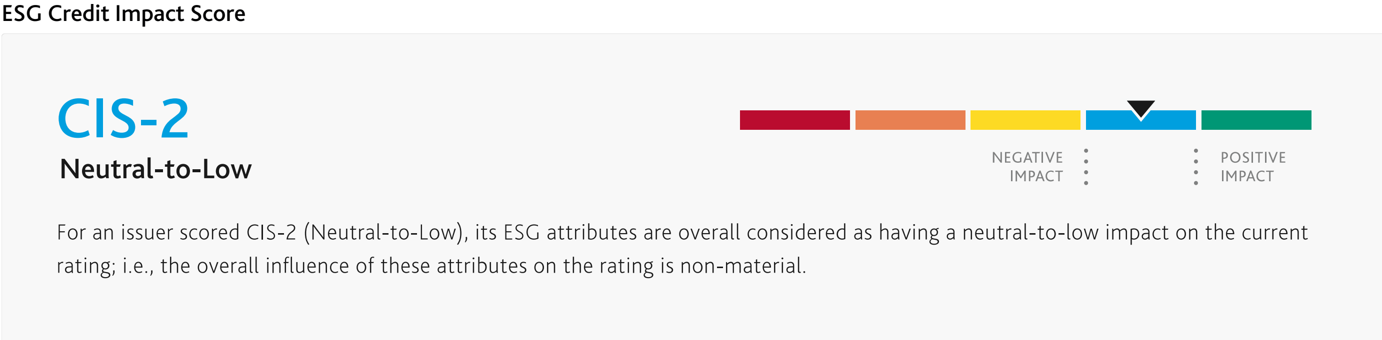
Being a car finance specialist, VW Bank can be exposed to a more volatile automotive business cycle, potentially hurting its income statement in an adverse scenario. The bank's high reliance on car-finance-related earnings streams limits its potential for earnings diversification and exposes it to unexpected shocks outside its direct control. At the same time, VW Bank benefits from its specialist risk management know-how in managing related business cycle risks.

## ESG considerations

### Volkswagen Bank GmbH's ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 10

**ESG Credit Impact Score**




*Source: Moody's Investors Service*

VW Bank's ESG Credit Impact Score (**CIS-2**) indicates that ESG considerations have no material impact on the current ratings. VW Bank is exposed to material environmental and social risks, reflecting the material risk exposures of its parent Volkswagen AG and the bank's role as facilitator of sales. The bank's governance risks are low.

Exhibit 11

**ESG Issuer Profile Scores**

| ENVIRONMENTAL | SOCIAL | GOVERNANCE |
|---|---|---|
| E-4 | S-4 | G-2 |
| Highly Negative | Highly Negative | Neutral-to-Low |

*Source: Moody's Investors Service*

### Environmental

VW Bank faces high environmental risks, primarily related to carbon transition. As a facilitator of sales for its automotive parent, the bank's exposure to carbon transition risk is consistent with that of VW AG and the global auto manufacturing sector because of stricter environmental regulation and the trend towards low and zero emission vehicles. In response, VW Bank, together with VW Financial Services, supports Volkswagen AG's electric mobility strategy targeting to provide financing solutions for 80% of Volkswagen Group's electric vehicles in the medium term. VW Bank's exposure to other environmental risks is low.

### Social

VW Bank faces high social risks from customer relations as well as societal trends. VW Bank's key product is auto financing, the demand for which is subject to societal trends like higher adoption of mass transportation and heightened environmental awareness and is highly correlated to the ability of its parent to meet consumers' demand. In line with other retail consumer-focused banks, the bank is also exposed to fines and reputational damage due to product mis-selling or other types of misconduct. High cyber and personal data risks are also key considerations as more applications are submitted online.

### Governance

VW Bank's governance risks are low. The bank has well-developed risk management and governance practices in place, in line with industry practices. VW Bank's score for board structure, policies and procedures is aligned with that of its parent, given VW Bank's strategic importance to its parent and brand sharing. The bank is a regulated and supervised entity, which mitigates risks from limited board independence.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## Support and structural considerations

### Affiliate support

Based on the control and profit-and-loss transfer agreement of VW Bank with its parent, Volkswagen, and based on the bank's important strategic role within the Volkswagen group, we consider VW Bank an affiliate-backed entity. This results in an Adjusted BCA of a3, aligned with Volkswagen's current long-term issuer rating.

### Loss Given Failure (LGF) analysis

VW Bank is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider an operational resolution regime. Therefore, we apply our Advanced LGF analysis, where we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter resolution.

We assume a residual TCE of 3% and post-failure losses of 8% of tangible banking assets, a 25% runoff in junior wholesale deposits and a 5% runoff in preferred deposits. These ratios are in line with our standard assumptions, with the exception that, in the case of VW Bank, we assume that only a small percentage (10%) of the bank's deposit base can actually be considered junior and qualify as bail-in-able under the BRRD.

The results of our Advanced LGF analysis are as follows:

- For VW Bank's deposits and senior unsecured debt, our LGF analysis indicates a very low loss given failure, leading to two notches of rating uplift from the bank's a3 Adjusted BCA.
- For VW Bank's junior senior unsecured debt, our Advanced LGF analysis indicates a moderate loss given failure, leading to no rating uplift from the bank's a3 Adjusted BCA.
- For VW Bank's subordinated debt, our Advanced LGF analysis indicates a high loss given failure, leading to a positioning of the ratings one notch below the bank's a3 Adjusted BCA.

### Government support considerations

We assign a low government support probability assumption for VW Bank, which does not result in any rating uplift from government support. This assumption reflects VW Bank's relatively small size compared with the German banking system, small market share in the domestic deposit market and limited degree of systemic interconnectedness.

### Aa3/P-1 Counterparty Risk Ratings (CRRs)

The bank's CRRs are three notches above the a3 Adjusted BCA, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities.

### Aa3(cr)/P-1(cr) Counterparty Risk (CR) Assessment

The bank's CR Assessment is three notches above the a3 Adjusted BCA, based on the buffer against default provided by more subordinated instruments to the senior obligations represented by the CR Assessment.

## Methodology and scorecard

### Methodology

The principal methodology used in rating VW Bank is our Banks Methodology, published in July 2021.

### About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in Rating Committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 12

**Volkswagen Bank GmbH**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Macro Factors** | | | | | | |
| **Weighted Macro Profile** | **Strong +** | **100%** | | | | |

| Factor | Historic Ratio | Initial Score | Expected Trend | Assigned Score | Key driver #1 | Key driver #2 |
|---|---|---|---|---|---|---|
| Solvency | | | | | | |
| Asset Risk | | | | | | |
| Problem Loans / Gross Loans | 2.7% | a2 | ↔ | baa2 | Unseasoned risk | Non lending credit risk |
| Capital | | | | | | |
| Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in) | 21.1% | aa1 | ↔ | aa3 | Capital retention | Expected trend |
| Profitability | | | | | | |
| Net Income / Tangible Assets | 0.8% | baa1 | ↔ | baa1 | Expected trend | |
| Combined Solvency Score | | a1 | | a3 | | |
| Liquidity | | | | | | |
| Funding Structure | | | | | | |
| Market Funds / Tangible Banking Assets | 25.0% | baa1 | ↔ | baa2 | Extent of market funding reliance | Expected trend |
| Liquid Resources | | | | | | |
| Liquid Banking Assets / Tangible Banking Assets | 12.9% | ba1 | ↔ | ba2 | Asset encumbrance | Additional liquidity resources |
| Combined Liquidity Score | | baa2 | | baa3 | | |
| Financial Profile | | | | baa1 | | |
| Qualitative Adjustments | | | | Adjustment | | |
| Business Diversification | | | | -1 | | |
| Opacity and Complexity | | | | 0 | | |
| Corporate Behavior | | | | 0 | | |
| Total Qualitative Adjustments | | | | -1 | | |
| Sovereign or Affiliate constraint | | | | Aaa | | |
| BCA Scorecard-indicated Outcome - Range | | | | baa1 - baa3 | | |
| Assigned BCA | | | | baa2 | | |
| Affiliate Support notching | | | | - | | |
| Adjusted BCA | | | | a3 | | |

**Balance Sheet is not applicable.**

| Debt Class | De Jure waterfall | | De Facto waterfall | | Notching | | LGF Notching Guidance vs. Adjusted BCA | Assigned LGF notching | Additional Notching | Preliminary Rating Assessment |
|---|---|---|---|---|---|---|---|---|---|---|
| | Instrument volume + subordination | Sub-ordination | Instrument volume + subordination | Sub-ordination | De Jure | De Facto | | | | |
| Counterparty Risk Rating | - | - | - | - | - | - | - | 3 | 0 | aa3 |
| Counterparty Risk Assessment | - | - | - | - | - | - | - | 3 | 0 | aa3 (cr) |
| Deposits | - | - | - | - | - | - | - | 2 | 0 | a1 |
| Senior unsecured bank debt | - | - | - | - | - | - | - | 2 | 0 | a1 |
| Junior senior unsecured bank debt | - | - | - | - | - | - | - | 0 | 0 | a3 |
| Dated subordinated bank debt | - | - | - | - | - | - | - | -1 | 0 | baa1 |

| Instrument Class | Loss Given Failure notching | Additional notching | Preliminary Rating Assessment | Government Support notching | Local Currency Rating | Foreign Currency Rating |
|---|---|---|---|---|---|---|
| Counterparty Risk Rating | 3 | 0 | aa3 | 0 | Aa3 | Aa3 |
| Counterparty Risk Assessment | 3 | 0 | aa3 (cr) | 0 | Aa3(cr) | |
| Deposits | 2 | 0 | a1 | 0 | A1 | A1 |
| Senior unsecured bank debt | 2 | 0 | a1 | 0 | (P)A1 | A1 |
| Junior senior unsecured bank debt | 0 | 0 | a3 | 0 | A3 | |
| Dated subordinated bank debt | -1 | 0 | baa1 | 0 | Baa1 | |

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.
*Source: Moody's Investors Service*

## Ratings

Exhibit 13

| Category | Moody's Rating |
|---|---|
| **VOLKSWAGEN BANK GMBH** | |
| Outlook | Stable |
| Counterparty Risk Rating | Aa3/P-1 |
| Bank Deposits | A1/P-1 |
| Baseline Credit Assessment | baa2 |
| Adjusted Baseline Credit Assessment | a3 |
| Counterparty Risk Assessment | Aa3(cr)/P-1(cr) |
| Issuer Rating | A1 |
| Senior Unsecured MTN -Dom Curr | (P)A1 |
| Junior Senior Unsecured -Dom Curr | A3 |
| Junior Senior Unsecured MTN -Dom Curr | (P)A3 |
| Subordinate -Dom Curr | Baa1 |
| Commercial Paper -Dom Curr | P-1 |
| Other Short Term -Dom Curr | (P)P-1 |
| **PARENT: VOLKSWAGEN AKTIENGESELLSCHAFT** | |
| Outlook | Stable |
| Issuer Rating | A3 |
| Sr Unsec Bank Credit Facility -Dom Curr | A3 |
| Senior Unsecured MTN -Dom Curr | (P)A3 |
| Commercial Paper -Dom Curr | P-2 |

*Source: Moody's Investors Service*

## Endnotes

1 The rating shown is Volkswagen's long-term issuer rating and outlook.

2 VW Bank received €1.7 billion in 2016 and €710 million (both numbers net of upstreamed dividends) in H1 2017 from its former parent, VW FS AG to help compensate for the effects on capital from temporarily higher reorganisation-driven RWA and high business-driven RWA growth before the pandemic.

3 The difference between the Moody's-adjusted TCE ratio and the regulatory CET1 ratio can be explained by regulatory adjustments for securitisation positions and deferred taxes, which are deducted from the CET1 capital, but not fully from our TCE calculation.

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## CLIENT SERVICES

| | |
|---|---|
| Americas | 1-212-553-1653 |
| Asia Pacific | 852-3551-3077 |
| Japan | 81-3-5408-4100 |
| EMEA | 44-20-7772-5454 |


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