

Research Update:

Volkswagen AG Outlook Revised To Stable From Negative On Stronger-Than-Expected Free Cash Flow Generation

April 28, 2021

Rating Action Overview

- Volkswagen AG (VW) posted stronger free cash flow than we expected in 2020 and is also likely to exceed our prior base case in 2021-2022. The group is benefiting from the strong market recovery, particularly in China and the U.S.
- Longer term, VW's strategic priorities fit well with increasing political support to global decarbonization in the U.S. and in Europe. However, any acceleration in the transition to electromobility could jeopardize the cash flow optimization offered by a gradual phasing out of internal combustion engines at VW.
- We revised our outlook to stable from negative and affirmed 'BBB+/A-2' long- and short-term issuer credit ratings on VW. At the same time, we revised our outlooks on VW and its subsidiaries--including Volkswagen Financial Services AG, Volkswagen Leasing GmbH, and Volkswagen Financial Services (UK) Ltd.--to stable from negative and affirmed our 'BBB+/A-2' ratings, including the 'K-1' Nordic regional scale rating on Volkswagen Finans Sverige AB. We also affirmed our 'BBB-' rating on VW's junior subordinate hybrid instruments.
- The stable outlook indicates that we anticipate the group to post adjusted free operating cash flow (FOCF) to sales hovering at 4%-5% over 2021-2023.

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Rating Action Rationale

Auto industry growth in China and the U.S. is exceeding our expectations. VW reported stronger-than-expected industrial free cash flow with about €7 billion in 2020, and we expect this to continue to increase toward €8 billion-€9 billion in 2021 and to €10-€11 billion in our revised base case, respectively. The group is benefiting from the strong market recovery, particularly in China and the U.S., as well as from strong pricing and positive mix effects thanks to very low inventory levels achieved throughout the industry as of year-end 2020. This is partly offset by a persistently weak Western European market and the ongoing shortage of semiconductors in 2021.

In the first quarter of 2021, Volkswagen global deliveries increased 21% from the previous year, driven by strong brand performance at Audi and Porsche and supported by the solid recovery of the Volkswagen brand on the success of the new ID. series. Volkswagen is positioned to take advantage of this uneven global auto market recovery with a consistent pipeline of new products. Despite poor visibility on the semiconductor shortage, the group, like the bulk of its peers, manages short-term production interruption and diverts available electronic components to prioritize electric vehicles (EVs) and vehicles with a higher contribution to the operating margin. We see the risk of the semiconductor shortage extending into the second half of 2021, with VW unable to recover units missed in the first part of the year. Considering the resilience of the group amid the production downtime during the peak of the pandemic (second quarter of 2020), we don't expect the semi shortage to materially impair the group's performance this year. In addition, the drawback of the semiconductor shortage crisis, combined with tight inventories, is resulting in generally positive pricing and residual value development, which we expect to observe across the industry in the first quarter of 2021.

The carbon dioxide goal in Europe is less of a challenge in 2021. VW fell slightly short of meeting its CO2 commitment in 2020, although the deviation was lower than we had expected, and we have no big concerns about the group's capacity to hit the target in 2021. The group delivered 422,000 electrified vehicles in 2020 and intends to triple the amount in 2021. VW AG targets 6% battery EVs this year (up from 3% in 2020), gradually rising to 20% in 2025, and 50% in 2030. With the Green Deal in Europe, prolonged support schemes are more likely than we had expected previously. The ambitious product pipeline for 2021 is also supportive, which includes the new ID.4, which started to be delivered recently, followed by Skoda Enyaq iV, Audi e-tron GT, Porsche Taycan Cross Turismo, Audi Q4 e-tron in the second quarter, VW ID.6 scheduled to hit the Chinese market in the third quarter, and VW ID.5 and Cupra Born expected for the fourth quarter.

VW's challenge is to "Turn EV into mainstream." VW AG announced the evolution of the current MEB (modular electric-drive toolkit) and PPE (premium platform electric) platforms for its volume and premium brands, into a modified platform called SSP (Scalable Systems Platform). SSP should be key to VW's electrification strategy, allowing for the convergence across all VW Group brands. Available in 2024, the platform will underpin a next-generation all-electric Audi, known as Project Artemis. Standardization of the battery will play a significant role. The development fits well in VW's electrification strategy, which in our view is ahead of many global legacy original equipment manufacturers. Additionally, the strategy differs from that of its German peers Daimler and BMW, which focus mainly on the product availability within the premium segment. VW demonstrated already superior capacity to bring a variety of models in the EV space to the market. VW's challenge is to make EV adoption mainstream and affordable, similar to Tesla's strategy. Passenger cars volume brands like VW, SEAT, and Skoda characterized by operating margins in the 3%-5% range call for substantial review of cost structure and control of the key cost items. VW is confronted with the need to set up a comprehensive cell and battery value chain as well as to stimulate and foster a much more granular development of charging infrastructure compared to what initially imagined with its participation in IONITY (a joint venture of BMW Group, Ford Motor Co., Hyundai Motor Group, Mercedes Benz AG and Volkswagen Group to build a high-power charging network for electric vehicles along major highways in Europe). These conditions are critical to a sustainable transition to electric mobility. We see the group well advanced, but we also think a series of key milestones remain to be secured.

Our rating on Volkswagen continues to be constrained by our assessment of governance. Since the diesel scandal, the group has made strides in fostering higher transparency, improving internal controls, reviewing processes, and increasing the role of compliance, as evidenced after completion of the Independent Compliance Monitorship under agreement with U.S. authorities in 2020. One major weakness that we deem unlikely to be overcome is the lack of independence of the group's supervisory board members, which was identified as a flaw in the context of the diesel scandal. At the same time, our base case for the next three years reflects a lower financial impact from the consequences of the diesel scandal as litigation cases are winding down. We also believe a successful transition to electric mobility, coupled with a consistent and stronger commitment to sustainability, will mitigate risks for the group's reputation and cash flow that we have built in the rating since 2015. Thus, with the group progressing in its transformation, we expect to deemphasize the impact of governance on the rating.

Outlook

The stable outlook on VW reflects our view that the group is reverting as from 2021 to its adjusted FOCF capacity of approximately €8 billion-€10 billion per year, which is before consideration of acquisitions such as the Navistar takeover.

Downside scenario

We see comfortable headroom in the group's credit metrics, which coupled with the group's proven resilience to the pandemic shock, indicates low likelihood of a downgrade. The rating, however, could still be impaired by challenges in restoring profitability in the 6%-7% operating margin range, by the occurrence of major litigations that lead to reputational damage and material cash outflows, or by strategic missteps in the transition to electrification, digitalization, and autonomous driving.

Upside scenario

We could upgrade VW upon further evidence of a successful deployment of electric mobility in its two main markets--Europe and China--across its premium and volume brands while ensuring adjusted FOCF to auto sales in the 4%-5% range. We believe a similar achievement would allow the group to turn the page on the diesel scandal and we would expect to have reassessed our view of the group's governance by then.

Company Description

Headquartered in Germany, VW is one of the world's leading auto manufacturers. In 2020, the group delivered 9.3 million passenger cars and commercial vehicles, across the volume, premium, and luxury segments, including vehicles sold by unconsolidated joint ventures in China. Key brands include:

- Light vehicles (LVs): VW, Audi, Porsche, Skoda, SEAT, Bentley, and VW Commercial Vehicles; and
- Commercial vehicles: Scania and MAN.

Our Base-Case Scenario

Our 2021-2023 base case for Volkswagen reflects our views on credit metrics for the manufacturing business only.

Assumptions

- Global LV volumes to grow 9% this year (versus negative 15% in 2020) and 4% in 2022.
- Cost increases in 2021 linked to raw materials and other costs non compensated as occurred in 2020.
- Research and development (R&D) at 7% of auto revenues with average capitalization rates of 40%.
- Capital expenditure (capex) at 6% of auto revenues, to which we add capitalized R&D.
- Acquisition of Navistar in 2021.
- Based on the above, we believe 2021 could be another transition year where the group might face substantial raw material inflation, foreign exchange volatility, and decline of support measures received by the group during the first lockdown, and some dilution from quickly increasing EV mix.
- Growth of total deliveries of 12% (slightly less than 10% when excluding joint ventures in China) followed by mid-single-digit-percent growth in 2022-2023.
- Automotive revenue growth of 12% in 2021 (versus 9.9% volume increase), 6.4% in 2022 (versus volumes of 5%), 4% in 2023 (versus volumes of 3%).
- Adjusted EBITDA margins clearly recovering in 2022 (to 11%) from 10.7% in 2020 and back to 2019 levels (around 12%) only in 2023.
- FOCF increasing in the 4%-5% range over 2021-2023.

Volkswagen AG--Key Metrics*

	--Fiscal year ended Dec. 31--				
	2019a	2020a	2021f	2022f	2023f
(Mil. €)					
Revenue	212.5	182.1	205-208	218-222	227-231
Revenue growth (%)	5.7	(14.3)	12-14	5-7	3-5
EBITDA	25.8	19.4	19-21	23-25	26-28
EBITDA margin (%)	12.2	10.7	10-11	10.5-11.5	11.5-12.5
Funds from operations (FFO)	21	14.4	16-18	19-21	21-23
Capital expenditure	13.9	11	12-13	12-13	12-13
Free operating cash flow (FOCF)	11.5	6.9	8-9	10-11	11-12
Debt	23.9	23	21-22	20-21	22-23
Debt to EBITDA (x)	0.9	1.2	1.1-1.2	0.8-0.9	0.8-0.9

Volkswagen AG--Key Metrics* (cont.)

	--Fiscal year ended Dec. 31--				
	2019a	2020a	2021f	2022f	2023f
FOCF to debt (%)	48.3	30	38-40	50-52	50-52

*All figures adjusted by S&P Global Ratings. a--Actual. e--Estimate. f--Forecast.

Liquidity

We are reassessing the group's liquidity as strong, as our concerns over 2020 proved unfounded. We expect available sources to cover uses by more than 1.5x in the next 12 months and over 1.2x the following year. Liquidity at VW proved resilient even during the peak of pandemic, and the group didn't need to access any specific government-funded privileged access. We limit our view on liquidity on the perimeter of manufacturing activities.

Principal liquidity sources as of Dec. 31, 2020, include:

- More than €35 billion available in cash and liquid investments net of amounts we deem not readily available.
- €2.2 billion availability under committed lines adjusted for the amount of commercial paper of the entire group.
- Cash funds from operations (FFO) of €25 billion, excluding our estimate of FFO in the financial service businesses.

Principal liquidity uses as of Dec. 31, 2020, include:

- Virtually no working capital outflow at the industrial business.
- Estimated short-term refinancing needs of €3 billion at the manufacturing business, which includes the €2.6 billion hybrids reaching first call date next year.
- Capex including capitalized R&D hovering around €18 billion per year.
- Dividend distribution of €2.6 billion, increasing by 2023.
- Committed acquisition and other investment (Navistar and cap increase at QuantumScape) in 2021.

Covenants

There are no financial maintenance covenants, rating triggers, or material adverse change clauses in VW's undrawn €10 billion undrawn revolving credit facility. Equally, there are no financial maintenance covenants in VW AG other debt documentation, including its unsecured bonds, asset-backed securities, commercial paper, or bank debt.

Issue Ratings - Subordination Risk Analysis

Our issue ratings on the senior unsecured debt issued by Volkswagen Financial Services and other group financial entities that we consider core are 'BBB+'. In view of VW's solid financial risk profile,

we believe that structural subordination does not pose any risks. The issue rating on VW's hybrid instruments is 'BBB-', two notches below the issuer credit rating due to contractual subordination and deferability of interests. We assign intermediate equity content to the outstanding hybrid instruments, which we see a permanent layer of VW's capital structure representing less than 15% of the group's adjusted capital.

Ratings Score Snapshot

Issuer credit rating: BBB+/Stable/A-2

Business risk: Satisfactory

- Country risk: Intermediate
- Industry risk: Moderately high
- Competitive position: Strong

Financial risk: Modest

- Cash flow/leverage: Modest

Anchor: bbb+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Strong (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Neutral (no impact)

Related Criteria

- General Criteria: Hybrid Capital: Methodology And Assumptions, July 1, 2019
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- General Criteria: Methodology For National And Regional Scale Credit Ratings, June 25, 2018
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Corporates | General: Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers, Dec. 14, 2015
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013

- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria | Financial Institutions | Banks: Quantitative Metrics For Rating Banks Globally: Methodology And Assumptions, July 17, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Criteria | Financial Institutions | Banks: Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Ratings List

*****Volkswagen AG*****

Ratings Affirmed; Outlook Action

	To	From
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Volkswagen AG

Volkswagen International Belgium S.A.

Volkswagen Financial Services AG

Issuer Credit Rating	BBB+/Stable/A-2	BBB+/Negative/A-2
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Ratings Affirmed

Volkswagen Finans Sverige AB

Issuer Credit Rating	
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Nordic Regional Scale	--/--/K-1
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Volkswagen AG

Volkswagen Financial Services Australia Pty Ltd.

Volkswagen Financial Services Japan Ltd.

Volkswagen Financial Services N.V.

Volkswagen Financial Services AG

Volkswagen Group of America Finance LLC

Volkswagen Leasing GmbH

Senior Unsecured	BBB+
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Commercial Paper	A-2
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Porsche Holding GmbH

Skofin s.r.o.

VW Credit Inc.

Volkswagen Finans Sverige AB

Volkswagen International Belgium S.A.

Volkswagen International Luxemburg S.A.

Commercial Paper	A-2
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VW Credit Canada Inc.

Senior Unsecured	BBB+
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Commercial Paper	A-1(LOW)
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Commercial Paper	A-2
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Volkswagen Bank RUS

Senior Unsecured	BBB-
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Volkswagen Canada Inc.

Commercial Paper	A-1(LOW)
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Commercial Paper	A-2
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Volkswagen International Finance N.V.

Senior Unsecured	BBB+
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Junior Subordinated	BBB-
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Commercial Paper	A-2
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Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. A description of each of S&P Global Ratings' rating categories is contained in "S&P Global Ratings Definitions" at https://www.standardandpoors.com/en_US/web/guest/article/-/view/sourceId/504352 Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column. Alternatively, call one of the following S&P Global Ratings numbers: Client Support Europe (44) 20-7176-7176; London Press Office (44) 20-7176-3605; Paris (33) 1-4420-6708; Frankfurt (49) 69-33-999-225; Stockholm (46) 8-440-5914; or Moscow 7 (495) 783-4009.

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