

Rating Action: Moody's Ratings affirms Volkswagen A3/P-2 ratings, outlook stable

01 Jul 2024

Frankfurt am Main, July 01, 2024 -- Moody's Ratings (Moody's) has today affirmed the ratings of Volkswagen Aktiengesellschaft (Volkswagen, VW or the company), including the company's long-term issuer rating of A3 and its short-term Prime-2 (P-2) commercial paper rating. The outlook remains stable.

A full list of affected ratings can be found at the end of this press release.

The ratings affirmation and stable outlook balance VW's strong business profile as one of the two largest auto maker globally with stable, but relatively weak margins and free cash flow for the A3 rating category. Today's rating action is supported by the company's low leverage, sizeable liquidity position and the expectation of medium term performance improvements. We expect a muted operating performance this year as investments peak and key model launches are delayed and some improvement next year mainly driven by release of new models at Audi and Porsche. With its new strategy for China announced in April 2024 and the just announced Rivian transaction on software partnership for electric vehicles, VW management is making progress on the execution of its strategy, a positive even if both announcements are subject to significant execution risks and positive impact on metrics will likely not be visible before 2026 at least. As such, we expect ratings to remain weakly positioned for the next 12-18 months.

RATINGS RATIONALE

VW's A3 long-term ratings are supported by its robust portfolio of highly recognizable brands (including Volkswagen, Audi and Porsche) and established market positions in Western Europe and China; its geographical diversification and good product offering that help shield the group's earnings from local or regional demand cycles, which are inherent to the automotive industry and the company's sizeable liquidity position.

VW's ratings are currently weakly positioned, given the following constraining factors: the high cyclicality of the automotive industry; the group's declining market share in China, its largest single market; the significant divergence in profitability across

passenger car brands, with particular weak margins at VW's brand group "Core" somewhat mitigated by strong margins at the premium brands Audi and Porsche; need for high investments to cope with globally increasing environmental standards and the transition to electric vehicles (including EV battery business), and to develop a group-wide vehicle software architecture; and high governance risks according to our ESG criteria, due to the organizational complexity within the group.

After a strong recovery in global light vehicle sales last year, we expect market conditions to become more challenging this year, with an intensified competitive environment characterized by an increasing price pressure. We expect VW to grow revenue by 1-2% this year, implying a muted volume growth as key models release especially for Audi and Porsche have been delayed towards the end of the year. A stronger product momentum should boost revenue growth next year. We forecast Moody's EBITA margin of 6.5% this year and 7.0% next compared with 6.8% last year or 7.9% when adjusted for negative hedge accounting effects. Headwinds to the margin development this year include labor cost inflation; the rising share of less-profitable battery electric vehicles (BEV) and price and mix pressure linked to tougher competition. Lower raw material prices and continuous progress on the fixed cost structure should provide some margin protection. The margin improvement forecasted for next year is mainly driven by the release of new models in particular at Audi and Porsche.

Since 2019, VW's competitive positioning has been weakening in China because the company did not manage to effectively compete with fierce local competition on the rapidly growing BEV segment. As a result, VW's market share declined from 19.3% in 2020 to 14.5% in 2023 and its proportionate operating result coming from the Chinese JV decreased from €4.4 billion in 2019 to €2.6 billion in 2023. In order to defend its challenged position in China, VW released a new strategy in April 2024. The company intends to localize some of the decision making processes and leverage capabilities of the local JV partners as well as the new partnership with Xpeng (06/23) for the electronic architecture. Thanks to this new set up the company expects to reduce time to market by 30% and become cost competitive with local players on BEV and ICE by 2026. In the next 12-18 months, we assume a stabilization of the performance in China, at low levels versus historic figures. The Moody's adjusted EBITA margin includes the at-equity contribution from the Chinese JV which we forecast at €1.5 billion per annum for this year and next down from €2.6 billion in 2023.

VW just announced a new partnership with the American automotive manufacturer Rivian that includes the creation of a 50/50 JV and an equity investment into Rivian. The JV will provide E/E architectures and software for electric vehicles of both partners. The JV will serve all VW brands in Western regions while XPeng will remain VW's E architecture development partner for the Chinese market. VW intends to invest up to \$5 billion in Rivian and the new JV until 2026 based on certain milestones. VW's in-house software subsidiary CARIAD, founded in 2020, faced operational issues which caused delays of key model launches in particular at Audi and Porsche. CARIAD reported €2.4 billion and €2.1 billion operating losses in 2023

and 2022 respectively. Also subject to significant execution risks, the Rivian transaction is a positive in our view as it is an attempt to reduce software development costs and time to market of new models going forward. The \$5 billion cash outflow expected during 2024-26 can be absorbed by VW's sizeable cash balance. VW indicated that it might finance part of the \$5 billion investment by divestment of noncore assets.

As part of its new strategy announced in June 2023, the management team aims to improve the group's profitability to 8%-10% return on sales by 2027, compared to 7% achieved in 2023 (8% excluding hedge accounting effect). The main area of improvement will be at the VW brand (part of brand group "Core"), where profitability has been notoriously weak but recently improving (4.1% return on sales in 2023 versus 3.6% in 2022). Key drivers of the expected margin improvement towards 6.5% for VW brand and 8.0% for the division "Core" by 2027 include improved product positioning and efficiency measures. Notwithstanding recent small margin improvement, we believe that the management targets have significant execution risks given the mixed track record, the highly competitive automotive sector environment and the high organizational complexity within the group.

Execution risk around the transition to electric vehicles continues to be significant. The global automotive industry remains at an early stage of a significant long-term transition to reduce carbon emissions by improving fuel efficiency and shifting to fully electric vehicles. Key risks for automakers, including VW, include a loss of market share, inability to earn adequate profits and returns on electric vehicles, as well as inability to manufacture vehicles due to potential constraints in the supply of critical materials. VW has heavily invested into the transition including its in-house battery production capacity under its subsidiary "PowerCo" that should cover around 50% of the EV battery demand of the company by 2030. Volkswagen has also accelerated the development and production of electric vehicles in recent years. In 2023, VW's sales of BEV increased by 35% to 771 thousands units and accounted for 8% of its total sales. EV adoption has recently lost momentum in all geographies. We still forecast sales of BEV to grow but at a slower rate than previously expected. VW expects its own BEV penetration to increase to 9-11% by 2024 and to 50% by 2030 fueled by the launch of new models. VW reported an EU CO2 emission of 119g CO2/km last year, stable since 2021, versus a regulatory target of less than 122g. The regulatory target will be tighten as from 2025 (15% reduction versus 2021) meaning a CO2 target of less than 100g. Given the trend over the last three years, we believe that it will be difficult for VW to comply with the 2025 regulatory target without additional efforts to boost volume, for example in terms of discounts.

VW's rating remains constrained by high governance risks. These are exemplified by the highly complex group structure, with multiple stakeholders, including the family owners, the German State of Lower Saxony and workers unions, and the existence of minority shareholders in key businesses, like Porsche AG, TRATON SE and the JVs in China. There was no management turnover over the last 12 months, an improvement compared to the 12 months before where we had witnessed the

replacement of the CEO in September 2022, and the early replacement of the divisional CEO of Audi in June 2023. These weaknesses are only partially mitigated by the company's conservative financial strategy and risk management.

OUTLOOK

The stable outlook reflects our expectations that VW will maintain a Moody's adjusted EBITA margin around 6.5-7.0% and a Moody's adjusted leverage well below 2x in the next 12-18 months. The stable outlook assumes that VW will maintain a sizeable liquidity position despite the expected weakening of free cash flow generation as investments peak this year and conservative financial policies.

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Given the weak positioning of the rating there is currently no upward rating pressure. Nonetheless, we would consider upgrading VW's ratings if (1) it demonstrates its ability to, at least, protect its market share in the major markets where it operates, especially in Western Europe and China, regardless of potential changes in global macroeconomic conditions, (2) there is a significantly improved competitive position for the Volkswagen Passenger Cars brand and in the US market, (3) more stringent corporate governance structures are implemented, (4) VW generates robust cash flow on a sustained basis, despite elevated capital spending, with Moody's-adjusted FCF/debt of around 10% and (5) VW's Moody's-adjusted EBITA margin is comfortably above 7% on a sustained basis.

VW's ratings could be downgraded in case of an operational weakness or more aggressive financial policies resulting in: (1) Moody's-adjusted EBITA margin sustainably well below 7%, (2) Moody's-adjusted debt/EBITDA above 2.0x, or (3) FCF/debt (Moody's-adjusted) falling below mid-single-digit percentages for a prolonged period. Also, an erosion in VW's market shares in its core markets, as well as its inability to enhance the profitability of Volkswagen's brand group "Core" to a more competitive level of above 5% on a sustained basis, delays in the transformation towards electrification as well as higher than expected R&D and capex requirements to achieve this, and a weakening of the company's liquidity profile could lead to a rating downgrade.

PRINCIPAL METHODOLOGY

The principal methodology used in these ratings was Automobile Manufacturers published in May 2021 and available at https://ratings.moodys.com/rmc-documents/72240. Alternatively, please see the Rating Methodologies page on https://ratings.moodys.com for a copy of this methodology.

LIST OF AFFECTED RATINGS

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Issuer: Volkswagen Aktiengesellschaft
..Affirmations:
.... LT Issuer Rating, Affirmed A3
.... Senior Unsecured Bank Credit Facility (Local Currency), Affirmed A3
.... Commercial Paper (Local Currency), Affirmed P-2
.... Senior Unsecured Medium-Term Note Program (Local Currency), Affirmed (P)A3
..Outlook Actions:
....Outlook, Remains Stable
Issuer: Porsche Holding Gesellschaft m.b.H.
.. Affirmations:
.... Backed Commercial Paper (Local Currency), Affirmed P-2
..Outlook Actions:
....Outlook, NOO
Issuer: Volkswagen Group Canada, Inc.
..Affirmations:
.... Backed Commercial Paper (Local Currency), Affirmed P-2
..Outlook Actions:
....Outlook, NOO
Issuer: Volkswagen Group of America Finance, LLC
.... Backed Commercial Paper (Local Currency), Affirmed P-2
.... Backed Commercial Paper (Foreign Currency), Affirmed P-2
.... Backed Senior Unsecured Medium-Term Note Program (Foreign Currency),
Affirmed (P)A3
.... Backed Senior Unsecured (Local Currency), Affirmed A3
..Outlook Actions:
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....Outlook, Remains Stable
Issuer: Volkswagen Group of America, Inc.
..Affirmations:
.... Backed Commercial Paper (Local Currency), Affirmed P-2
..Outlook Actions:
....Outlook, NOO
Issuer: Volkswagen International Belgium S.A.
.... Commercial Paper (Local Currency), Affirmed P-2
..Outlook Actions:
....Outlook, NOO
Issuer: Volkswagen International Finance N.V.
.... Backed Junior Subordinated (Local Currency), Affirmed Baa2
.... Backed Commercial Paper (Local Currency), Affirmed P-2
.... Backed Other Short Term (Local Currency), Affirmed (P)P-2
.... Backed Senior Unsecured Medium-Term Note Program (Local Currency), Affirmed
(P)A3
.... Backed Senior Unsecured (Foreign Currency), Affirmed A3
.... Backed Senior Unsecured (Local Currency), Affirmed A3
..Outlook Actions:
....Outlook, Remains Stable
Issuer: Volkswagen International Luxemburg S.A
.. Affirmations:
.... Backed Commercial Paper (Local Currency), Affirmed P-2
..Outlook Actions:
....Outlook, NOO
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Issuer: VW Credit Canada, Inc.

- Backed Commercial Paper (Local Currency), Affirmed P-2
- Backed Senior Unsecured Medium-Term Note Program (Foreign Currency), Affirmed (P)A3
- Backed Other Short Term (Foreign Currency), Affirmed (P)P-2
- Backed Senior Unsecured (Local Currency), Affirmed A3
- ..Outlook Actions:
-Outlook, Remains Stable

Issuer: VW Credit, Inc.

- .. Affirmations:
- Backed Commercial Paper (Local Currency), Affirmed P-2
- Backed Other Short Term (Foreign Currency), Affirmed (P)P-2
- ..Outlook Actions:
-Outlook. Remains Stable

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