Research Update:

Volkswagen AG 'BBB+/A-2' Ratings Affirmed On Balance Sheet's Strength Against Operating Headwinds; Outlook Stable

October 12, 2022

Rating Action Overview

- Global carmaker Volkswagen AG (VW) has significantly strengthened its balance sheet over the past two years through robust cash flow, and we expect the group will deleverage thanks to a declining pension deficit and the net proceeds of about €19 billion (€9.5 billion after the payment of a special dividend) from its divestment of 25% of Porsche.
- However, we view the reduced ownership in Porsche as negative for VW's business, and intensifying competition, particularly in the electric vehicle segment in China, deepens the uncertainty over VW's longer-term market positions.
- We therefore affirmed our 'BBB+/A-2' long- and short-term issuer credit ratings on VW.
- The stable outlook reflects our expectation that VW will advance its "NEW AUTO" strategy and successfully contain the financial impact of deteriorating economic and industry conditions, enabling it to achieve S&P Global Ratings-adjusted free operating cash flow (FOCF) of more than 3% of adjusted revenue while maintaining leverage below 0.5x.

PRIMARY CREDIT ANALYST

Lukas Paul
Frankfurt
+ 49 693 399 9132
lukas.paul
@spglobal.com

SECONDARY CONTACT

Vittoria Ferraris
Milan
+ 390272111207
vittoria.ferraris
@spglobal.com

ADDITIONAL CONTACT

Corporate and IFR EMEA
RatingsCorpIFREMEA
@spglobal.com

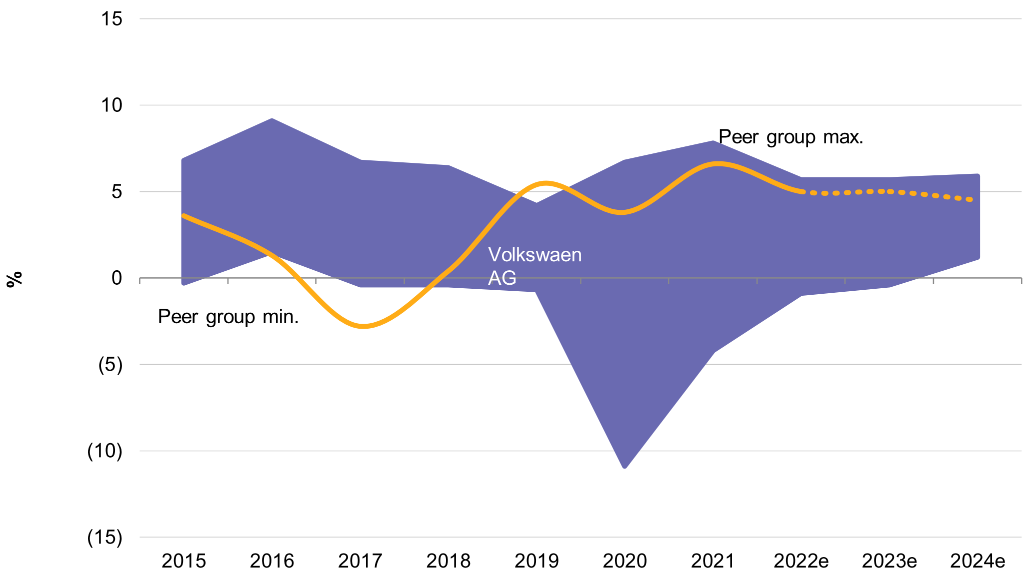
Rating Action Rationale

VW's strong balance sheet should be able to withstand approaching industry headwinds. Despite the past two years' challenges from production shutdowns related to the COVID-19 pandemic and supply chain issues, VW has steadily reduced leverage. In 2022, we project an improvement in S&P Global Ratings-adjusted debt to a net cash position from about €24 billion of debt in 2019. This stems from ongoing leverage reduction through FOCF, as well as this year's boost from a shrinking pension deficit and €9.5 billion of retained net proceeds from the recent IPO and sale of 25% of its subsidiary Porsche AG. We expect VW to remain in a net cash position over 2023-2024, with adjusted debt to EBITDA staying below 0.5x even if EBITDA falls short of our base-case projections by more than 20% each year. We think this comfortably cushions VW's balance sheet against an impending economic slowdown, with likely weakening auto demand particularly in Europe and the U.S., alongside continued unstable auto production. As such, we have positively reassessed VW's financial risk profile as minimal versus modest previously.

We foresee good cash conversion for the 'BBB+' rating, although we expect the use of joint ventures (JVs) will dilute the quality of FOCF. We project that the combination of increasing input costs for labor, energy, and logistics, as well as softer pricing conditions, will translate into a 1.0-1.5 percentage point decline in adjusted EBITDA margin over 2023–2024, after an expected 12%-13% for 2022. In addition, over the coming two to three years, we think competitive conditions will limit the company's flexibility to cut capital expenditure (capex) and spending on research and development (R&D) to materially below the annual average of €30 billion-€32 billion in our base case. Nonetheless, FOCF to sales should stay at 4%-6% in 2022–2024, partly owing to our assumption of €2.5 billion-€3.0 billion in annual dividends from VW's JV in China. We view this as a robust cash conversion for the rating, with some flexibility to accommodate a lull in demand or supply side risks that could stem from energy rationing in Europe (see "Energy Rationing Could Hit The Brakes On European Auto Production," published Sept. 30, 2022, on RatingsDirect). That said, we believe VW will pursue many strategic investments, for example in battery cell manufacturing, mobility services, and software and autonomous driving, through partnerships and JVs. In our view, many of these investments are unlikely to be consolidated, but they will target areas that are vital for VW's competitiveness and substitute for spending on R&D and capex. If we include our assumption of €3 billion-€5 billion on acquisitions and equity participations, this would reduce our projected annual FOCF to sales by 1.5–2.0 percentage points.

Chart 1

Volkswagen's Cash Conversion (Before M&A) Is Robust For The 'BBB+' Rating
Free operating cash flow to sales for Volkswagen AG and peers (%)



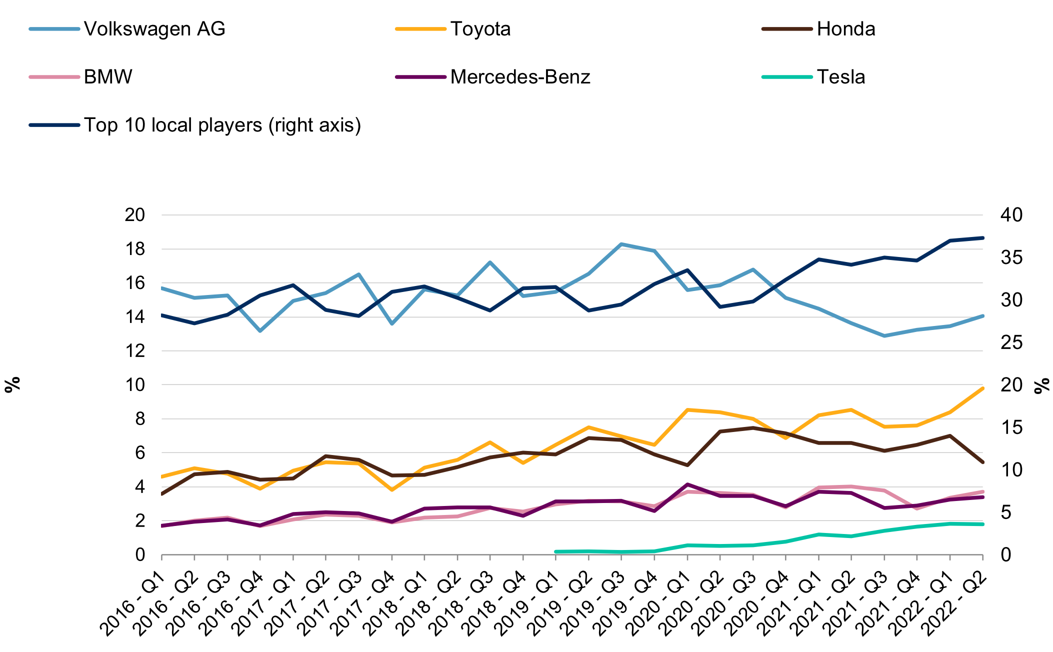
M&A--Mergers and acquisitions. e--Estimate. Source: S&P Global Ratings.

A reduced economic ownership in Porsche after the IPO detracts from VW's credit quality. We consider Porsche to be one of the strongest brands in VW's portfolio thanks to its positioning in the luxury sports car segment, which is less cyclical and enjoys lower price elasticity. This is reflected in the brand's consistently high profitability and cash conversion. Porsche's reported operating margin has stayed between 17% and 20% for many years, often several times higher than that of VW's volume brands SEAT, Skoda, and Volkswagen. Porsche usually contributed more than one-third of total operating income in the group's passenger car segment. Although we continue to fully consolidate Porsche in our adjusted credit metrics, VW's lower stake in the asset incrementally weakens our view of the group's overall business. Porsche will remain in the cash pool of the group and continue its industrial cooperation with VW in many areas, but has the discretion to opt out of joint development efforts. We think this could lead to a gradual departure from the previous strong focus on convergence of management of the different brands with a view to maximizing cost synergies. Additionally, we think VW's influence over Porsche may weaken because of the blocking minority of Porsche Automobil Holding SE (PSE), the family holding company of the Porsche and Piech families that also owns 53% of VW's common shares and now holds a direct ownership stake of 25% plus one common share in Porsche. We adjust VW's metrics by our estimate of about €7 billion of debt that we expect PSE to incur for the acquisition of the direct stake in Porsche.

Increased competition might weaken VW's market position, particularly in China. VW has led the light vehicle market in China for many years, but its market share slumped from a peak of 18% in 2019 to about 14% in first-half 2022. Apart from supply bottlenecks in VW's production in China recently, we think the reduced market share is primarily due to changing competitive dynamics and the ascendancy of local players such as BYD, Changan, Geely, and Great Wall (see chart 2). We also note competition from an array of new entrants in the battery-electric vehicle (BEV) segment, which is currently dominated by BYD (15% market share for the 12 months up to the end of second-quarter 2022), SAIC-GM-Wuling (14%), and Tesla (10%), whereas VW has a small 4%. Moreover, we note that VW's market share in BEV segments--where it has a product available, such as the ID.3 in the Car-C segment and the ID.6 in the SUV-D segment--is dwarfed by companies like Tesla, NIO, or BYD. We think this likely reflects a competitive disadvantage in terms of product positioning, technology, and in some cases pricing. Since we expect the overall EV market to account for about 30% of total Chinese light vehicle sales by 2025, we consider this a risk to VW's longer-term position in this crucial market that accounted for 39% of its global light-vehicle deliveries in first-half 2022. At the same time, we observe more intense competition in VW's home turf in Europe by BEV players such as Tesla, and market entries by Chinese competitors, which could adversely affect pricing dynamics and requires a strategic response by VW to defend its market position.

Chart 2

Stiff Competition Squeezes Volkswagen's Market Share In China
Market share for selected foreign OEMs (left axis) and top 10 local competitors (right axis)



OEM--Original equipment manufacturer. Source: S&P Global Mobility, S&P Global Ratings.

VW's ownership and decision-making structures remain more complex and less effective than peers'. For instance, the composition of VW's supervisory board implies that important decisions often require a careful balancing act to reconcile the interests of its key constituents, namely PSE, workers' representatives, the State of Lower Saxony, and Qatar Holding, whereas stakeholders not affiliated with these parties lack independent representation. This can lead to decisions that we consider detrimental to creditors' interests, such as the Porsche IPO (see "Why Porsche's Potential IPO Has A Limited Impact On Credit Metrics But Highlights Volkswagen's Complex Governance," published April 28, 2022). Additionally, members of PSE's management and supervisory board serve on the supervisory boards of VW and Porsche, and Porsche's CFO is part of PSE's top management. We acknowledge that VW has procedures in place to mitigate conflicts of interest (including rules requiring certain individuals to abstain on certain matters) and VW and PSE have ceded two seats on Porsche's supervisory board to independent members, but the structure is likely to complicate swift and objective decision-making in the interest of VW and Porsche. In our view, it also remains to be seen how the dual role of VW's recently appointed CEO, who also serves as the CEO of Porsche and receives 50% of his pay from each entity, can remain free from conflicts of interest and give adequate consideration to the strategic goals of the two companies.

Outlook

The stable outlook reflects our expectation that VW will continue to make progress with its NEW AUTO strategy, and successfully contain the financial impact of volatile auto production, cost inflation, and deteriorating economic conditions. This should enable VW to achieve adjusted FOCF of more than 3% of adjusted revenue while maintaining leverage below 0.5x.

Downside scenario

Ratings downside could materialize if missteps in the execution of VW's strategy for electrification, vehicle software development, autonomous driving, and mobility services, that, combined with more intense competition in its key markets in Europe and China, lead to persisting pressure on market shares for EVs or other key segments. Alternatively, although we see comfortable headroom in the group's credit metrics, risks could mount if weaker pricing, increasing input costs, materially higher spending on acquisitions and partnerships, plus cash outflows for legal cases cause:

- A material contraction in S&P Global Ratings-adjusted EBITDA margin to below 10% without prospects for swift recovery;
- FOCF to sales falling to 3% for a prolonged period, with continued higher spending on JVs and partnerships in key areas of VW's strategy; and
- Debt to EBITDA approaching 1.5x.

Upside scenario

We could upgrade VW if it successfully strengthens its positions in its key EV markets across its premium and volume brands, supported by a competitive model line-up, progress in vehicle software development, and development of its supply chain for battery cells and EV components. This would help VW restore competitiveness in the Chinese EV market, solidify its market position in Europe, and yield market share growth in the U.S. We would expect VW to achieve this without materially compromising profitability and while maintaining FOCF to sales of 4%-5% with spending on JVs, partnerships, and acquisitions in line with our base case, as well as debt to EBITDA below 1.5x.

Company Description

Headquartered in Germany, VW is one of the world's leading auto manufacturers. During 2021, the group delivered 8.9 million passenger cars and commercial vehicles, across the volume, premium, and luxury segments, including vehicles sold by unconsolidated JVs in China. Key brands include:

- Light vehicles: VW, Audi, Porsche, Skoda, SEAT, Bentley, Lamborghini, and VW Commercial Vehicles.
- Trucks: Scania, MAN, Navistar, and VW Truck and Bus.

VW's key geographical markets are Europe and Asia-Pacific, together accounting for about 80% of total volumes. The VW group has financial services activities that support the sale and leasing of its vehicles. At June 30, 2022, the group had about €205 billion of lease assets and financial services receivables outstanding. Key shareholders include Porsche Automobil Holding SE (31.9% of shares and 53.3% of voting rights), the holding of the Piech family, Qatar Holding LLC (10.5% of shares and 17% of voting rights), and the State of Lower Saxony (11.8% of shares and 20% of voting rights).

Our Base-Case Scenario

Assumptions

- For the eurozone, we forecast real GDP growth of 3.1% in 2022, down from 5.0% in 2021, and slowing to 0.3% in 2023 before recovering to 1.8% in 2024. In China, we expect a deceleration to 2.7% in 2022 from 8.1% in 2021, before picking up to 4.7% in 2023 and 4.8% in 2024. For the U.S., we expect real GDP growth of 1.6% in 2022, down from 5.7% in 2021, followed by 0.2% in 2023 and 1.6% in 2024.
- Global light vehicle sales modestly contract in 2022, after 3.5% growth in 2021, followed by 3%-6% growth annually in 2023-2024.
- A 3%-5% decline in VW's light vehicle sales in 2022, due to a variety of supply chain constraints, after a 5.5% decline in 2021, followed by growth of 2%-4% in 2023 and 3%-5% in 2024.
- Adjusted revenue growth of 10%-12% in 2022, after 14.9% in 2021, factoring in a strong shift toward more expensive models, pricing, and exchange rate effects that outweigh the decline in volume. Our revenue forecast for 2023-2024 is mainly driven by volume, and moderate price adjustments designed to partly recover rising input costs.
- Our projection for EBITDA margins foresees a step-up this year thanks to robust vehicle mix and pricing, before entering a path of gradual decline from 2023 due to rising costs for labor, energy, logistics, and other items that are not fully offset by pricing and cost-saving measures, as well as continued high R&D expenses.
- Our adjusted EBITDA forecast also includes €2.5 billion-€3.0 billion of annual dividends from equity affiliates (€3.0 billion in 2021 and €3.2 billion in 2020), mostly from VW's JVs in China.

- Payments in connection with legal cases of €2 billion-€3 billion in 2022 and €1 billion-€2 billion annually in 2023 and 2024 (about €1 billion in 2021).
- Somewhat flat adjusted capex of about 5% of sales in 2022-2024, incorporating general spending discipline in areas such as capacity expansion, offset by investments to repurpose VW's plant footprint for the production of alternative powertrains.
- Payments for regular dividends and hybrid coupons of about €4.4 billion in 2022, increasing to €5.0 billion-€6.5 billion annually from 2023. This also includes our assumption of dividends to the minority owners of Porsche of about €230 million in 2023 and €300 million-€400 million in 2024.
- About €19 billion total net inflows from the divestment of 25% in Porsche (a portion related to PSE's acquisition of common shares to be received in early 2023), and payment of a special dividend of about €9.6 billion in early 2023.
- Annual spending on acquisitions of €3 billion-€5 billion in 2022-2024, after €3.2 billion in 2021.

Key metrics

Volkswagen AG--Key Metrics*

	--Fiscal year ends Dec. 31--				
Bil. €	**2020a**	**2021a**	**2022f**	**2023f**	**2024f**
Revenue	182.1	209.2	230.1-234.3	244.2-248.9	253.8-258.7
Revenue growth (%)	(14.3)	14.9	10.0-12-0	5.0-7.0	3.0-5.0
EBITDA	19.4	23	27.9-30.2	27.1-30.8	27.0-30.8
EBITDA margin (%)	10.7	11	12.0-13.0	11.0-12.5	10.5-12.0
Funds from operations (FFO)	14.4	19.1	23.8-26.8	23.2-27.2	23.5-27.2
Cash flow from working capital	1.1	2.4	(1.3)-(2.3)	(0.8)-(1.8)	(0.5)-(1.5)
Capital expenditure	11	10.4	11.0-11.5	11.8-12.8	12.8-13.8
Free operating cash flow (FOCF)	6.9	13.8	10.6-12.6	11.2-13.2	10.5-12.5
Debt	23	18.8	Net cash	Net cash	Net cash
Debt to EBITDA (x)	1.2	0.8	N.M.	N.M.	N.M.
FOCF to sales(%)	3.8	6.6	4.5-5.5	4.5-5.5	4.0-5.0
FOCF to sales including acquisitions (%)	3.1	3.8	2.8-3.8	2.8-3.8	2.4-3.4

*All figures adjusted by S&P Global Ratings. a--Actual. e--Estimate. f--Forecast. N.M.--Not meaningful.

Liquidity

Our short-term rating on VW is 'A-2'. We assess the group's liquidity as strong because we expect liquidity sources to cover uses by well above 1.5x in the next and the following 12 months, excluding financial services. Our view is further supported by VW's large diversification of funding sources across markets and instruments, including hybrid debt, and track record of issuing these instruments in a variety of market conditions. VW also enjoys well-established and solid banking relationships, evidenced by diverse and sizable revolving credit facilities (RCFs) and other credit facilities across the different group divisions.

VW's captive finance operations rely heavily on short-term financial liabilities, which stood at about €92 billion on June 30, 2022. We see these liabilities as relatively concentrated in terms of duration, but consider them to broadly match short-term finance receivables and other short-term assets. At this point, we do not believe that the liquidity of the captive finance division poses additional liquidity risk for the group.

Following its IPO, Porsche will continue to participate in the cash pool of the VW group.

We calculate the following liquidity sources as of June 30, 2022, for VW, excluding its financial services business, for the next 24 months:

- Cash and cash equivalents and marketable securities of about €37 billion in the auto business, after excluding our estimate of about €3.6 billion in cash that is not immediately accessible for debt repayment.
- €14.5 billion of undrawn RCFs, consisting of a €10 billion RCF in the VW group and a €4.5 billion RCF at Traton SE, both maturing in December 2026.
- Cash funds from operations of €32 billion-€34 billion annually over the next and subsequent 12 months.
- About a €9.5 billion net cash inflow from the Porsche IPO, after deducting the special dividend of about €9.6 billion to be paid in early 2023.

We calculate the following liquidity uses as of June 30, 2022, for VW, excluding its financial services business, for the same period:

- Our estimate of debt maturities in the auto division of up to €5 billion over the next 12 months, and up to €4 billion in the subsequent 12 months.
- Capex (including capitalized R&D) of €20 billion-€22 billion in the next 12 months and €21 billion-€23 billion in the subsequent 12 months.
- Nonseasonal working capital-related outflows of €1.0 billion-€2.0 billion in the next 12 months and €0.5 billion-€1.5 billion in the subsequent 12 months, plus peak intra-year working capital swings of up to €4 billion in each period.
- Dividend payouts of €5.0 billion-€6.5 billion in each period, including hybrid coupons and dividends to minority owners of PAG.
- Our assumption of €2 billion in each period for committed investments in partnerships, JVs, and related strategic acquisitions.

Covenants

There are no financial covenants in the documentation for the €10 billion syndicated facility issued by VW AG expiring in December 2026, nor in the group's other debt documentation, including for its unsecured bonds, asset-backed securities, commercial paper, and bank debt.

Issue Ratings--Subordination Risk Analysis

Capital structure

The VW group had €208 billion of financial debt on June 30, 2022, of which only €12.7 billion is allocated to the auto business, with the remainder to financial services.

Analytical conclusions

Our issue ratings on the senior unsecured debt issued by Volkswagen AG and its entities that we consider core subsidiaries of the group are 'BBB+', at the same level as the issuer credit rating. Considering VW's solid financial risk profile, we believe that structural subordination does not pose a material risk at this stage. 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 as a permanent layer in 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	Low
Industry risk	Moderately high
Competitive position	Strong
Financial risk:	Minimal
Cash flow/leverage	Minimal
Anchor	a
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 (-1 notch)
Comparable rating analysis	Negative (-1 notch)
Captive finance modifier	Neutral (no impact)

ESG credit indicators: E-3, S-2, G-3

Related Criteria

- General Criteria: Hybrid Capital: Methodology And Assumptions, March 2, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10,

2021

- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- 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: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Ratings List

Ratings Affirmed	
Volkswagen AG	
Volkswagen International Belgium S.A.	
Issuer Credit Rating	BBB+/Stable/A-2
Volkswagen AG	
Senior Unsecured	BBB+
Commercial Paper	A-2
Porsche Holding GmbH	
Commercial Paper	A-2
VW Credit Canada Inc.	
Senior Unsecured	BBB+
Commercial Paper	A-1(LOW)
Commercial Paper	A-2
VW Credit Inc.	
Commercial Paper	A-2
Volkswagen Canada Inc.	
Commercial Paper	A-1(LOW)
Commercial Paper	A-2

Ratings Affirmed	
Volkswagen Group of America Finance LLC	
Senior Unsecured	BBB+
Commercial Paper	A-2
Volkswagen International Belgium S.A.	
Commercial Paper	A-2
Volkswagen International Finance N.V.	
Senior Unsecured	BBB+
Junior Subordinated	BBB-
Commercial Paper	A-2
Volkswagen International Luxemburg S.A.	
Commercial Paper	A-2

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; or Stockholm (46) 8-440-5914