S&P Global Ratings

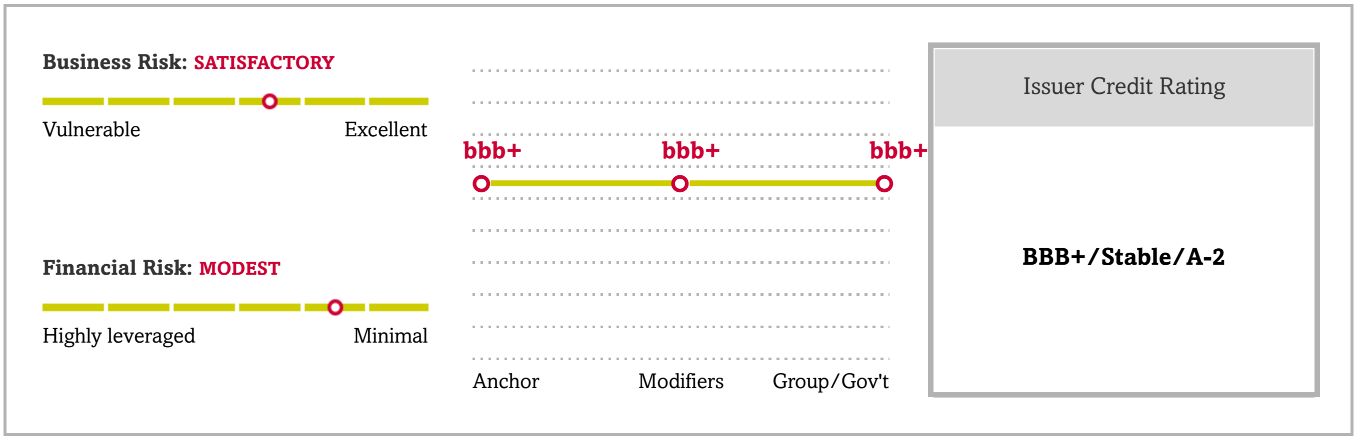
RatingsDirect®

Volkswagen AG

Primary Credit Analyst:
Vittoria Ferraris, Milan (39) 02-72111-207; vittoria.ferraris@spglobal.com

Table Of Contents

Volkswagen AG



Credit Highlights

Overview

Key Strengths	Key Risks
Unrivaled leadership in Europe, with almost one-quarter of the passenger car market, and a No. 1 position in the Chinese passenger vehicle market.	A slowdown of the Chinese market, which represents approximately 40% of the group's volumes.
Significant product breadth and diversity of brands, ranging from volume to premium passenger cars to commercial vehicles.	A relatively inflexible cost structure and operating complexity.
Our expectation of positive free cash flow in the automotive segment of about €10 billion-€15 billion over 2018-2020.	Ongoing losses in regional markets, namely North and South America.
Strong and diversified liquidity sources, with €25 billion of available cash balances in the automotive division, €5 billion of undrawn committed revolving credit facilities (RCFs), and comfortable access to the debt markets including hybrid issuance.	Low visibility on the impact on profitability and cash flows of litigation and CO2 emissions regulation in Europe.
Low leverage of the group's captive finance business (6.0x) compared to peers.	An absence of material changes in the group's management and governance framework following the diesel emissions scandal.

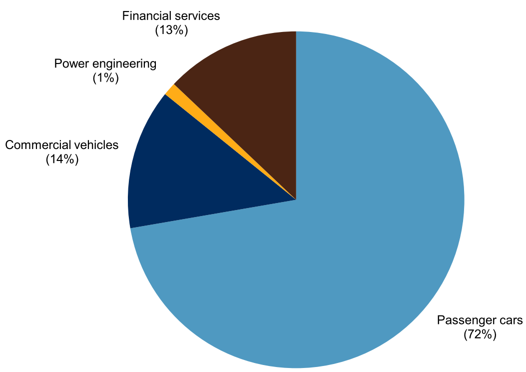
Free operating cash flow in the automotive division will turn positive through 2019, after material substantial outflows related to the diesel emissions scandal. We expect Volkswagen AG (VW) to generate S&P Global Ratings-adjusted free cash flow for the automotive division at around €4 billion-€5 billion in 2018 (including payments related to the diesel emissions scandal), after an equivalent -€5.8 billion in 2017, burdened by a €16.1 billion diesel-emissions related cash outflow. We estimate that the group will maintain positive free cash flow generation from now on. VW recently reconfirmed its guidance of €10 billion of annual free cash flow (before special items) for the automotive division.

We see VW outperforming market growth in Europe and China, where it has unrivalled market positions and a strong product pipeline. In the first nine months of 2018, VW passenger car deliveries were up 3.0% in Western Europe, against market growth of 1.4%, and up 5.2% in Asia-Pacific, against market growth of 1.2%. VW sold approximately 40% of its volumes in the Chinese market in 2017 and expects volumes to be slightly higher in 2018 than in the previous year. This is despite both a large deterioration in the Chinese market and headwinds linked to VW's alignment with a new environmental standard in Europe.

The group's main challenge is complying with tightening environmental regulations in its two major markets, while limiting the dilutive impact on its operating margins. We see VW as in a good position to bring a large range of electric models to the market. This will support the group's efforts to comply with tighter environmental regulations while consumer preferences are increasingly for sport utility vehicles (SUVs), which have greater emissions. However, we understand that the contribution to margins of each new electric vehicle will be positive, but lower than that of an equivalent combustion vehicle, until volumes become more significant. This leads us to maintain a cautious view on the group's operating margins, which we measure after special items. VW recently reaffirmed its targeted operating margins before special items of 6.5%-7.5% by 2020 and 7.0%-8.0% by 2025.

Chart 1

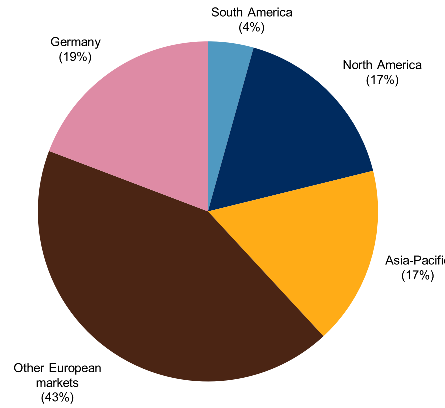
Volkswagen AG Revenues Per Segment



Source: S&P Global Ratings.

Chart 2

Volkswagen AG Revenues Per Geography



Source: S&P Global Ratings.

Outlook : Stable

The stable outlook on VW reflects our expectation of steady operating performance improving cash flow generation in 2018-2020, despite our expectation of lower growth in the automotive manufacturing industry globally. Our base case factors in only limited additional charges in relation to the diesel emissions scandal. We expect that VW will maintain leverage ratios in line with our forecasts of funds from operations (FFO) to adjusted debt of above 45% and adjusted debt to EBITDA below 2x in the next two years.

Downside scenario

We could lower the ratings if VW continues to bear material additional diesel emissions-related charges to meet fines or litigation damages, without taking sufficient offsetting measures. Weakening market positions in Europe or China, as well as ongoing negative free operating cash flow (FOCF) in the automotive division, would also be factors in a downgrade.

Upside scenario

We deem an upgrade to the 'A' category as unlikely under VW's current governance and management framework, which, in our view, has not managed to restore the group's reputation after the diesel emissions scandal in 2015. Any tangible change in the governance and management framework would need to be supported by adjusted FFO to debt of more than 60% and positive adjusted FOCF in excess of €10 billion in the automotive business.

Our Base-Case Scenario

Assumptions

- Global GDP growth in 2019 and 2020 of slightly above 5%, including less than 2% in Europe and North America, and 3%-4% in Asia-Pacific.
- A slowdown in the growth of global light vehicle volumes, despite generally supportive economic conditions. We expect global growth of 1%-2% over 2018 and 2019, with Europe at around 2% in 2018 and 1%-2% in 2019 and 2020, and flat growth in China in 2018 and 1%-2% in 2019, accelerating thereafter.
- Growth in VW's revenues of 5%-7% over 2019-2020, primarily due to a favorable product mix effect.
- About €1 billion of additional costs, of which we consider banking and logistic costs to be non-recurring, linked to both the transition to a new emissions certification--the so-called worldwide harmonized light duty vehicles test procedure (WLTP)--and diesel emissions-related charges in the €2 billion-€3 billion range per year over 2018-2020.
- Dividends from joint ventures in China of around €3 billion per year in 2018-2020, marginally lower than the €3.6 billion in 2017.
- Annual capital expenditure (capex; including capitalized development costs) of 6%-7% of automotive revenues, compared with 6.4% in 2017.
- Annual dividends in line with a 30% payout ratio.
- No material acquisitions or disposals, in particular, no consideration for the potential IPO of VW's commercial vehicles business Traton.
- A further increase in debt at the captive finance operations to fund future volume growth.

Key Metrics

	2017a	2018e	2019e	2020e
EBITDA margin (%)	12.9	11-12	12-13	Around 13
FFO/Debt (%)	60.7	50-60	50-60	50-60
Debt/EBITDA (x)	1.29	1.0-1.5	1.0-1.5	1.0-1.5
FOCF (€ bil.)	Negative	4-5	5-6	>6

All figures are S&P Global Ratings-adjusted. FFO--Funds from operations. FOCF--Free operating cash flow. A--Actual. E--Estimate.

Base-Case Projections

Credit metrics have headroom to withstand a weaker operating environment. VW's credit metrics as of Sept. 30, 2018, compare favorably with our expectations, particularly adjusted FFO to debt, which is more than 60%, versus our expectation of 50%-60%. FOCF after diesel emissions-related outflows of €3.4 billion in the third quarter of 2018 is in line with our forecast of €4 billion-€5 billion for 2018.

Key credit measures are relatively stable over 2018-2020. Despite a more difficult operating environment for the automotive manufacturing industry, we expect VW's credit metrics to remain stable over 2018-2020. In particular, we forecast adjusted FFO to debt in the 50%-60% range and adjusted debt to EBITDA in the 1.0x-1.5x range.

Company Description

Headquartered in Germany, VW is one of the world's leading automotive manufacturers. During the first half of 2018, the group sold 5.5 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:

- Passenger cars: VW, Audi, Porsche, Skoda, SEAT, and Bentley;
- Commercial vehicles: Scania, MAN, and VW Commercial Vehicles.

VW's key geographic markets are Europe and Asia-Pacific, which each represent about 40% of total volumes. VW has only a very small market position in North America. The VW group also has financial services activities that support the sale and leasing of its vehicles. At the end of September 2018, the group had about €167 million of leasing and financing contracts in the financial services division.

Business Risk : Satisfactory

VW's market position as the world's largest automotive manufacturer, with diversified operations across multiple brands and segments, reflects its strong performance in the first nine months of 2018. Volume growth in the global car markets was up 1.2% in the first nine months of 2018, and VW's volume growth of 4.1% year-on year was solid, despite a relatively weak third quarter. VW's growth markedly outperformed market dynamics in Western Europe, Asia-Pacific, and South America over this period, but lagged the markets in Central and Eastern Europe.

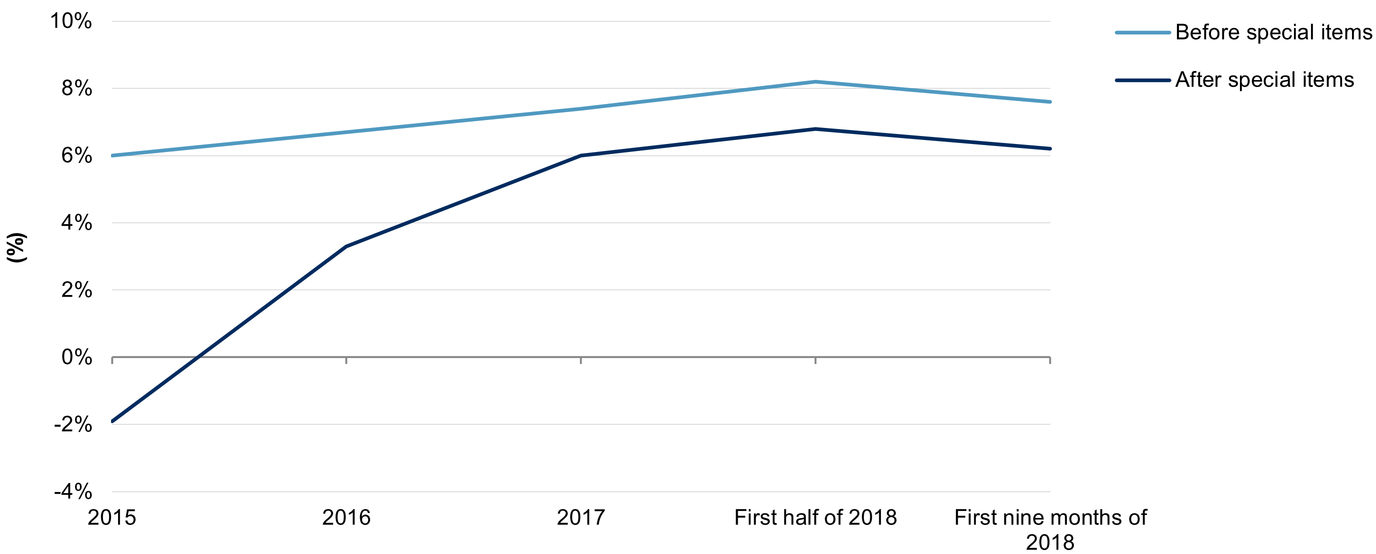
We anticipate that volume growth will be only 2% in 2018 due to delays linked to the implementation of WLTP, the new emission certification. WLTP was introduced for passenger vehicles on Sept. 1, 2018, and is designed to test emissions in real life conditions. WLTP replaces the New European Driving Cycle (NEDC). After Sept. 1, 2018, only a negligible number of vehicles certified under NEDC can be sold. Certification delays affected around 200,000 vehicles on a rolling basis throughout the third quarter, but the net impact on inventory was significantly lower.

Net of WLTP-related issues, we see VW as being in a good position in terms of its product mix to seize the opportunities and withstand the challenges in its largest single markets, namely China and Europe. In China, the group enjoys a solid production base, and only a minor share of vehicles delivered are imported--approximately 5% of the production base in 2017. We believe that the escalating trade war between China and the U.S. will not have a major impact on the group in view of its localized production facilities. The deceleration of the Chinese automotive market since July this year is more of a concern, but we deem this weakness as temporary.

In North America, the new trilateral free trade agreement (FTA) between the U.S., Mexico, and Canada (the USMCA) might have a negative impact on VW, because, of the 1 million units delivered in the region in 2017, approximately 600,000 are produced in Mexico. The USMCA is likely to increase the production costs of cars sourced from Mexico and eligible for exemption of import tariffs on entry into the U.S. Because the FTA has not been finalized, we do not have any visibility on the repercussions of the agreement for VW, although we anticipate that the application of the agreement could further delay the turnaround of VW's North American business.

Chart 3

Volkswagen AG Reported Operating Margins
Before and after special items

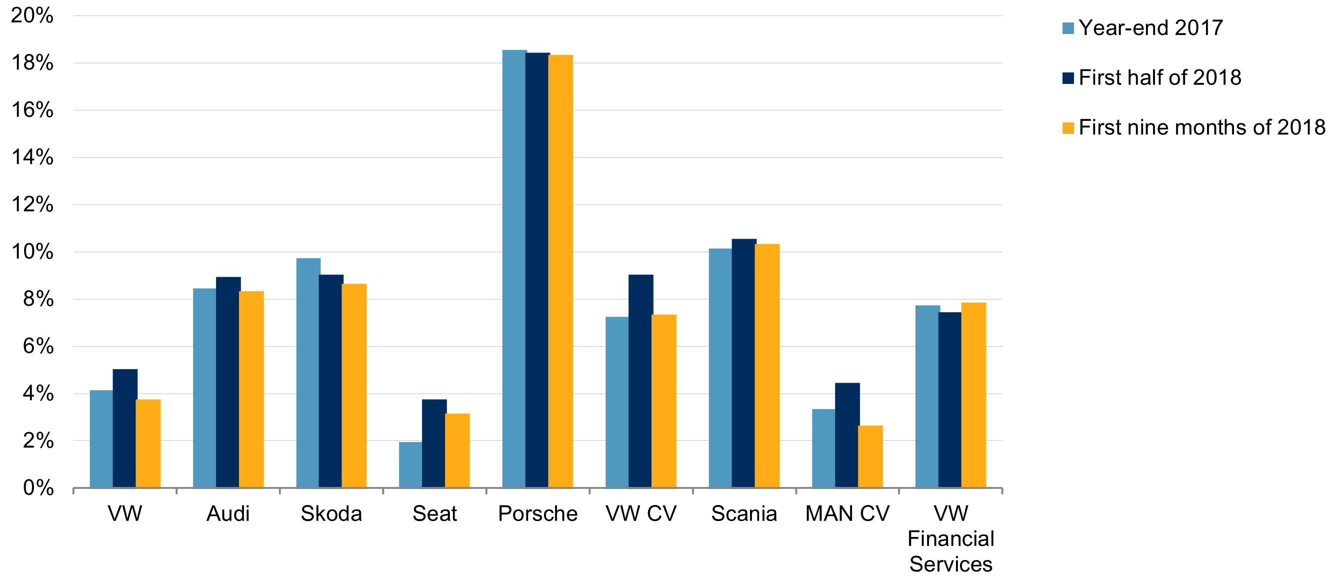


Source: S&P Global Ratings.

VW's underlying business performance has been relatively resilient to the turbulence the WLTP has triggered. VW's reported operating margin before special items of 7.6% for the first nine months of 2018 is slightly higher than 7.4% at year-end 2017. Ongoing volume growth, coupled with a positive effect from the product and price mix, drives the slight improvement and mitigates the increase of fixed costs that affects almost all the group's brands in the first nine months of 2018.

Chart 4

Volkswagen AG Operating Margins Per Brand, Before Special Items



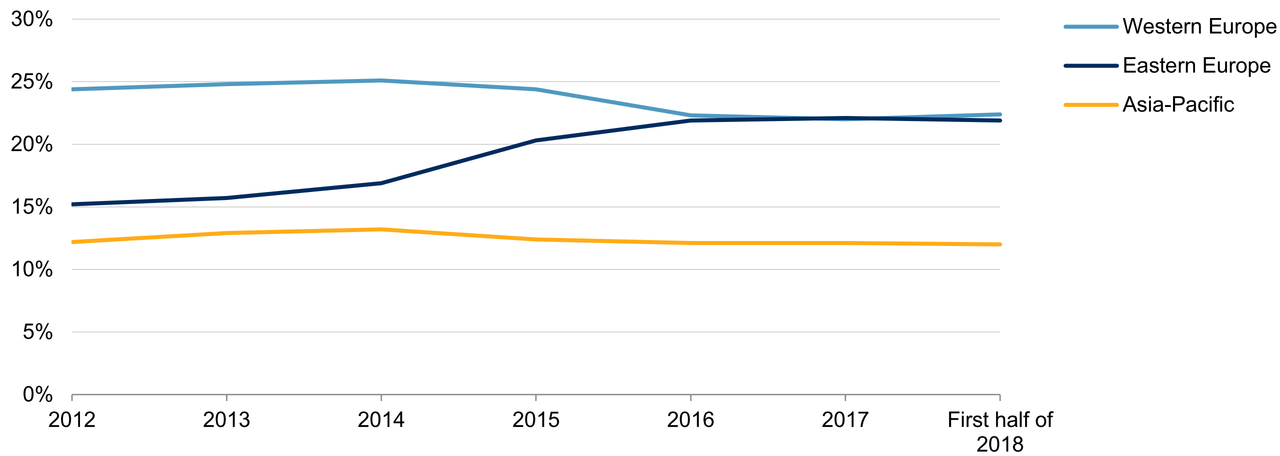
Source: S&P Global Ratings.

Audi and Porsche remain the largest contributors to group operating profit of €13.3 billion before special items, at €3.6 billion and €3.2 billion, respectively. For the nine months to Sept. 30, 2018, VW's adjusted EBITDA margin exceeded 12%--including €2.4 billion of diesel emissions-related charges in the second and third quarters of 2018--which is stronger than in the same period in 2017.

VW's future performance will take advantage of broadly favorable macroeconomic trends, although we see global demand for light vehicles softening in the second half of 2018 and in 2019. We expect VW's deliveries to outperform our demand forecasts in its main markets of China and Europe, driven by the introduction of new models in the most dynamic segment of the market, mid-range SUVs. In addition, we deem that VW is well-placed to meet a shift in consumer demand away from diesel and toward electric vehicles. In its two main markets, where electrification is driven by environmental regulations, VW has spent €30 billion to support the development of electric vehicles as per its five-year plan. VW plans to launch more than 80 new electric models by 2025, including 50 purely battery-powered electric vehicles and 30 plug-in hybrid models, accounting for approximately 25% of its sales volumes, which could be around three million units.

Chart 5

Volkswagen AG Market Share



Source: S&P Global Ratings.

At the same time, VW's business risk profile is constrained by persistently high complexity in the group's product line-up and diseconomies of scale, affecting in particular some of the volume brands in VW's portfolio. The additional costs linked to the introduction of WLTP in Europe on Sept. 1, 2018, are evidence of this complexity. We regard VW's cost structure to be less flexible than that of its peers, and we see it as constraining the group's ability to adjust to disruptive changes in the industry linked to connectivity, electrification, and autonomous driving, or to a market turnaround.

Peer comparison

Table 1

Volkswagen AG--Peer Comparison

	Volkswagen AG	Daimler AG	Renault S.A.	General Motors Co.	Nissan Motor Co. Ltd.
Rating as of Nov. 28, 2018	BBB+/Stable/A-2	A/Stable/A-1	BBB/Stable/A-2	BBB/Stable/--	A/Watch Neg/A-1
	--Fiscal year ended Dec. 31, 2017--				--Fiscal year ended March 31, 2018--
(Mil. €)					
Revenues	196,949.0	140,555.0	55,725.0	111,127.0	82,547.8
EBITDA	25,318.5	15,436.0	5,377.0	13,562.1	6,535.3
Funds from operations (FFO)	19,807.9	10,238.0	4,708.5	12,060.1	6,016.2
Net income from continuing operations	11,354.0	10,525.0	5,114.0	289.8	5,707.7
Cash flow from operations	6,662.9	12,587.0	4,875.2	11,949.3	5,752.7
Capital expenditures	12,548.0	7,246.0	2,390.0	6,810.9	2,905.1
Free operating cash flow	(5,885.1)	5,341.0	2,485.2	5,138.4	2,847.6
Discretionary cash flow	(7,217.1)	1,614.0	1,436.2	3,279.0	1,217.6

Table 1

Volkswagen AG--Peer Comparison (cont.)					
Cash and short-term investments	34,396.0	22,135.0	14,057.0	16,288.2	9,216.5
Debt	32,634.0	0.0	1,812.1	13,451.2	0.0
Equity	75,558.3	53,004.0	28,770.0	21,572.7	32,699.6
Adjusted ratios					
EBITDA margin (%)	12.9	11.0	9.6	12.2	7.9
Return on capital (%)	12.8	21.3	17.1	23.2	12.3
EBITDA interest coverage (x)	10.3	22.5	10.9	10.7	23.2
FFO cash interest coverage (x)	9.2	35.9	14.8	23.3	65.0
Debt/EBITDA (x)	1.3	0.0	0.3	1.0	0.0
FFO/debt (%)	60.7	N.M.	259.8	88.9	N.M.
Cash flow from operations/debt (%)	20.4	N.M.	269.0	88.1	N.M.
Free operating cash flow/debt (%)	(18.0)	N.M.	137.1	37.5	N.M.
Discretionary cash flow/debt (%)	(22.1)	N.M.	79.3	23.6	N.M.

N.M.--Not meaningful.

Financial Risk: Modest

Our financial risk profile assessment is supported by our expectation of FFO to adjusted debt in the 50%-60% range and adjusted debt to EBITDA of less than 1.5x in 2019 and 2020. Constraining factors are substantial capex and low visibility of litigation risk on margins and cash flow generation, although we do not expect litigation to weigh substantially on our expectation of positive free cash flow from 2019.

We expect VW to manage its dividend policy while considering the global markets' growing complexity and disruptive changes in the industry. Therefore we do not anticipate a change of the dividend policy--a 30% payout ratio--over 2018-2020. Neither do we consider any potential benefit for VW's financial risk from the rumored partial IPO of its commercial vehicles business Traton in 2019, as we do not have visibility either on market conditions or on the potential use of the proceeds.

VW has a substantial financial services business that supports the sale and leasing of its vehicles. On Sept. 30, 2018, the group had captive finance receivables and operating lease assets of about €167 billion. We regard the asset quality of the €129 billion of finance receivables--primarily vehicle-financing term loans--to be excellent, based on annual net credit losses of less than 1% in recent years.

Lease assets of about €37.8 billion on Sept. 30, 2018, expose the financial business to the risk of residual value losses. These arise when the proceeds from the sale of the assets at the end of the lease periods are lower than expected. VW manages this as part of its risk management framework. Such losses are naturally unpredictable and can be significant during periods of stress, thereby potentially weakening the overall creditworthiness of the group. For VW, lease assets comprise a relatively small share (18%) of its total captive finance-related assets.

To finance these captive assets, VW has incurred significant debt obligations. These stood at about €171 billion on Sept. 30, 2018, and represented almost all of the group's total gross debt of €175.6 billion. Leverage, that is, reported debt to equity, in the captive finance operations was 6.0x, lower than peers' leverage, and we expect that VW will maintain it at a similar level. VW's captive finance operations rely heavily on short-term financial liabilities, which stood at about €84.4 billion on Sept. 30, 2018. 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.

We continue to regard VW's management and governance as a weakness because we do not see any material evidence of changes that would help the group distance itself from the consequences of the diesel-emissions scandal. We also view VW's ownership structure as negatively influencing its corporate decision-making, with limited consideration given to minority shareholders. In particular, this reflects the continued disproportionate voting rights of Porsche Automobil Holding SE (Porsche SE). Porsche SE has a 52.2% share in VW, held through only 30.8% of VW's subscribed capital, which gives it full control of VW. Porsche SE is itself 100% owned and controlled by members of the Porsche and Piech families. Without improvements in VW's management and governance framework, a rating in the 'A' category is unlikely.

We continue to regard VW's captive finance entities Volkswagen Financial Services AG and Volkswagen Bank GmbH as core entities under our criteria, reflecting our view that the parent would support them under any foreseeable circumstances.

Financial summary

Table 2

Volkswagen AG--Financial Summary					
	--Fiscal year ended Dec. 31--				
	2017	**2016**	**2015**	**2014**	**2013**
Rating history	BBB+/Stable/A-2	BBB+/Negative/A-2	BBB+/Negative/A-2	A/Stable/A-1	A-/Positive/A-2
(Mil. €)					
Revenues	196,949.0	186,016.0	183,935.0	177,538.0	175,003.0
EBITDA	25,318.5	17,473.0	7,712.5	22,352.5	20,138.0
Funds from operations (FFO)	19,807.9	13,124.3	3,588.2	17,498.4	15,087.3
EBIT	14,126.3	6,668.1	(2,496.8)	14,323.7	12,882.3
Net income from continuing operations	11,354.0	5,144.0	(1,582.0)	10,847.0	9,066.0
Cash flow from operations	6,662.9	14,926.8	19,113.2	17,408.4	16,952.8
Capital expenditures	12,548.0	12,712.0	12,659.0	11,410.0	10,966.0
Free operating cash flow	(5,885.1)	2,214.8	6,454.2	5,998.4	5,986.8
Dividends paid	1,332.0	364.0	2,516.0	1,962.0	1,849.0
Discretionary cash flow	(7,217.1)	1,850.8	3,938.2	4,036.4	4,137.8
Cash and short-term investments	34,396.0	36,785.0	35,878.0	29,984.0	31,670.0
Debt	32,634.0	36,089.0	31,549.2	24,882.5	18,030.9
Equity	75,558.3	65,364.7	63,598.7	70,337.3	75,563.5
Debt and equity	108,192.3	101,453.7	95,147.9	95,219.8	93,594.4
Adjusted ratios					
Annual revenue growth (%)	5.9	1.1	3.6	1.4	1.3
EBITDA margin (%)	12.9	9.4	4.2	12.6	11.5
EBIT margin(%)	7.2	3.6	(1.4)	8.1	7.4
Return on capital (%)	12.8	6.5	(2.5)	14.2	12.1
EBITDA interest coverage (x)	10.3	6.7	2.8	8.4	7.7
FFO cash interest coverage (x)	9.2	5.6	2.5	5.8	4.5
Debt/EBITDA (x)	1.3	2.1	4.1	1.1	0.9
FFO/debt (%)	60.7	36.4	11.4	70.3	83.7
Cash flow from operations/debt (%)	20.4	41.4	60.6	70.0	94.0
Free operating cash flow/debt (%)	(18.0)	6.1	20.5	24.1	33.2
Discretionary cash flow/debt (%)	(22.1)	5.1	12.5	16.2	22.9

Liquidity : Strong

Our short-term rating on VW is 'A-2'. We assess the group's liquidity as strong, as we expect liquidity sources--namely, available cash, committed facilities with maturities of at least 12 months, and our estimates of FFO--to cover uses by at least 1.5x in 2019 and by at least 1x in the following 12 months. Our view is supported by VW's large diversification of funding sources across markets and instruments, including hybrid debt. We calculate the following liquidity sources and uses as of June 30, 2018.

Principal Liquidity Sources	Principal Liquidity Uses
• Cash and cash equivalents of €30 billion, excluding €3.0 billion of cash not available for debt repayment. • An undrawn RCF of €5.0 billion maturing in 2020, which we assume is dedicated to the automotive business. • Our estimate of FFO for the automotive business only exceeding €15 billion.	• Debt maturities for the automotive segment not exceeding €4 billion, including a hybrid instrument called in September 2018. • Capex of around €23 billion (including capitalized development costs). • Dividend payouts of approximately €2 billion. • Working capital requirements of €4 billion.

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)

Stand-alone credit profile : bbb+

- **Group credit profile:** bbb+

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.

Reconciliation

We exclude the reported gross debt of the financial services division from reported group debt to calculate our adjusted debt figures. On this basis, adjusted debt was €25.3 billion on June 30, 2018. Our main analytical adjustments to total reported gross debt of €169 billion are to deduct €167 billion of financial services debt and €27 billion of surplus cash. We add about €26 billion for pensions; €9.28 billion of diesel emissions-related charges that VW has not yet disbursed; €4 billion for operating leases; a €4 billion put option in respect of German trucking subsidiary MAN; and about €6 billion for hybrid instruments. VW is one of the largest corporate issuers of hybrid instruments, with €13.77 billion of issuance, including €2.75 billion issued in June 2018. These instruments qualify for intermediate equity content, so we have allocated 50% to debt and 50% to equity in our debt figures.

As VW disburses the diesel emissions-related provisions in cash, we reverse the adjustment to debt. The adjustment for diesel emissions-related charges of about €9.28 billion on June 30, 2018, comprises:

- €25.8 billion of charges, less €19.8 billion of cash disbursements in 2016 and 2017 and €1 billion of non-cash charges;
- An additional €0.4 billion of debt related to Scania; and
- €3.4 billion of contingent liabilities linked to diesel emissions-related lawsuits.

Table 3

Reconciliation Of Volkswagen AG Reported Amounts With S&P Global Ratings Adjusted Amounts

	--Fiscal year ended Dec. 31, 2017--								
Volkswagen AG reported amounts									
(Mil. €)	**Debt**	**Shareholders' equity**	**Revenues**	**EBITDA**	**Operating income**	**Interest expense**	**EBITDA**	**Cash flow from operations**	**Capital expenditures**
Reported	164,086.0	108,849.0	230,682.0	35,849.0	13,819.0	1,334.0	35,849.0	(1,185.0)	18,312.0
S&P Global Ratings adjustments									
Interest expense (reported)	--	--	--	--	--	--	(1,334.0)	--	--
Interest income (reported)	--	--	--	--	--	--	839.0	--	--

Table 3

Reconciliation Of Volkswagen AG Reported Amounts With S&P Global Ratings Adjusted Amounts (cont.)									
Current tax expense (reported)	--	--	--	--	--	--	(3,205.0)	--	--
Operating leases	4,291.9	--	--	1,010.5	304.3	304.3	706.2	706.2	--
Intermediate hybrids reported as equity	5,500.0	(5,500.0)	--	--	--	137.0	(137.0)	--	--
Postretirement benefit obligations/deferred compensation	26,009.0	20.3	--	7.0	7.0	602.0	(430.3)	(386.3)	--
Surplus cash	(24,329.9)	--	--	--	--	--	--	--	--
Capitalized interest	--	--	--	--	--	83.0	(83.0)	(83.0)	(83.0)
Capitalized development costs	--	--	--	(5,260.0)	(1,526.0)	--	(5,260.0)	(5,260.0)	(5,260.0)
Dividends received from equity investments	--	--	--	3,640.0	--	--	3,640.0	--	--
Captive finance operations	(157,221.0)	(28,040.0)	(33,733.0)	(11,586.0)	(4,618.0)	--	(12,435.0)	12,871.0	(421.0)
Non-operating income (expense)	--	--	--	--	4,061.0	--	--	--	--
Non-controlling interest/minority interest	--	229.0	--	--	--	--	--	--	--
Debt--guarantees	423.0	--	--	--	--	--	--	--	--
Debt--put options on minority stakes	3,795.0	--	--	--	--	--	--	--	--
Debt--other	9,280.0	--	--	--	--	--	--	--	--
EBITDA--other	--	--	--	(37.0)	(37.0)	--	(37.0)	--	--
Total adjustments	(132,252.0)	(33,290.7)	(33,733.0)	(12,225.5)	(1,808.7)	1,126.3	(17,736.1)	7,847.9	(5,764.0)
S&P Global Ratings adjusted amounts									
	Debt	**Equity**	**Revenues**	**EBITDA**	**EBIT**	**Interest expense**	**Funds from operations**	**Cash flow from operations**	**Capital expenditures**
Adjusted	31,834.0	75,558.3	196,949.0	23,623.5	12,010.3	2,460.3	18,112.9	6,662.9	12,548.0

Related Criteria

- General Criteria: Methodology And Assumptions: Assigning Equity Content To Hybrid Capital Instruments Issued By Corporate Entities And Other Issuers Not Subject To Prudential Regulation, Jan. 16, 2018
- General Criteria: S&P Global Ratings' National And Regional Scale Mapping Tables, Aug. 14, 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

- General Criteria: National And Regional Scale Credit Ratings, Sept. 22, 2014
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Industrials: Key Credit Factors For The Auto And Commercial Vehicle Manufacturing Industry, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Criteria Clarification On Hybrid Capital Step-Ups, Call Options, And Replacement Provisions, Oct. 22, 2012
- Criteria - Financial Institutions - General: Methodology: Hybrid Capital Issue Features: Update On Dividend Stoppers, Look-Backs, And Pushers, Feb. 10, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	**Modest**	Intermediate	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	**bbb+**	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of November 28, 2018)

Volkswagen AG	
Issuer Credit Rating	BBB+/Stable/A-2
Issuer Credit Ratings History	
06-Nov-2017	BBB+/Stable/A-2
01-Dec-2015	BBB+/Negative/A-2
12-Oct-2015	A-/Watch Neg/A-2
24-Sep-2015	A/Watch Neg/A-1
22-Sep-2014	A/Stable/A-1

Ratings Detail (As Of November 28, 2018) (cont.)	
Related Entities	
Banco Volkswagen S.A.	
Issuer Credit Rating	
Brazil National Scale	brAAA/Stable/--
Scania AB (publ.)	
Issuer Credit Rating	BBB+/Stable/A-2
Nordic Regional Scale	--/--/K-1
South Africa National Scale	zaAAA/--/zaA-1+
Volkswagen Bank GmbH	
Issuer Credit Rating	A-/Negative/A-2
Commercial Paper	
Local Currency	A-2
Senior Subordinated	BBB+
Senior Unsecured	A-
Short-Term Debt	A-2
Volkswagen Financial Services AG	
Issuer Credit Rating	BBB+/Stable/A-2
Volkswagen Finans Sverige AB	
Issuer Credit Rating	
Nordic Regional Scale	--/--/K-1
Volkswagen International Belgium S.A.	
Issuer Credit Rating	BBB+/Stable/A-2
Commercial Paper	
Local Currency	A-2

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

Additional Contact:
Industrial Ratings Europe; Corporate_Admin_London@spglobal.com