

Rating Report

Volkswagen AG

DBRS Morningstar

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Ratings

Debt	Rating Action	Rating	Trend
Volkswagen AG – Issuer Rating	A (low)	Confirmed/Trend Change	Stable
VW Credit Canada, Inc. – Senior Unsecured Debt *	A (low)	Confirmed/Trend Change	Stable
VW Credit Canada, Inc. – Commercial Paper *	R-1 (low)	Confirmed/Trend Change	Stable

* Guaranteed by Volkswagen AG.

Rating Update

DBRS Limited (DBRS Morningstar) changed the trend on Volkswagen AG's (VW or the Company) Issuer Rating to Stable from Negative and confirmed its rating at A (low). DBRS Morningstar also changed the trends on the Senior Unsecured Debt and Commercial Paper ratings of VW Credit Canada, Inc. to Stable from Negative while confirming their ratings at A (low) and R-1 (low), respectively. The trend changes reflect the ongoing solid financial performance of the Company despite meaningful challenges associated with the progression of Coronavirus Disease (COVID-19) last year; VW benefitted from a strong industry recovery in the latter half of 2020. Moreover, despite prevailing headwinds in the form of the current semiconductor shortage, DBRS Morningstar believes the Company's financial risk assessment (FRA) will remain strong in the context of the currently assigned ratings, which remain supported by VW's solid business risk assessment (BRA) as a major automotive original equipment manufacturer (OEM) of substantial scale with a highly diversified brand portfolio. Notwithstanding the above, DBRS Morningstar notes that certain environmental, social, and governance (ESG) risk factors continue to constrain the ratings.

While VW's 2020 results softened considerably year over year (YOY) as a result of challenges associated with the coronavirus pandemic, Automotive earnings remained materially positive with the segment's operating margin exceeding 4%. Moreover, initial liquidity concerns attributable to the pandemic were allayed by a strong industry recovery in H2 2020 (exceeding DBRS Morningstar's expectations) that enabled the Company to fully repay its EUR 10 billion revolving credit facility (drawn in H1 2020 as a precautionary measure) before year end. DBRS Morningstar notes that, going into 2021, the anticipated industry sales growth (following 2020's contraction resulting from the coronavirus) was undermined somewhat by production interruptions attributable to the semiconductor shortage. This notwithstanding, VW's deliveries in H1 2021 increased by 24.7% compared with H1 2020 to a level of 4.7 million units. Automotive earnings benefitted further from firmer product mix and favourable pricing (both being bolstered by low industry inventories as a result of the semiconductor shortage) with the segment's H1 2021 operating margin attaining a strong level of 8.3%. Recent operating performance of the Company's Financial Services business has also remained sound with credit losses being well covered by provisions amid favourable residual value performance given strong used car prices. For the 2021 full year, despite

ongoing uncertainty associated with the semiconductor situation, VW is projecting consolidated revenues to be significantly higher YOY with its consolidated operating margin expected to range from 6.0% to 7.5%; DBRS Morningstar deems the Company's outlook well attainable.

Going forward, reflecting tightening emissions legislation worldwide (albeit most notably in Europe and in China), the Company is targeting a leadership position in the transition of the automotive industry away from internal combustion engines (ICEs) and toward battery electric vehicles (BEVs). Additionally, VW is seeking to further transform itself into a major provider of new mobility services. While these objectives are projected to entail substantial financial outlays over the next several years in the form of requisite capital spending and anticipated merger & acquisition (M&A) activity, DBRS Morningstar expects these to be sufficiently covered by ongoing free cash flow generation of the Company's legacy ICE business that remains significantly profitable; VW has benefitted further from its strong presence in the premium Automotive segment that is projected to outgrow the automotive industry as a whole while typically generating considerably stronger margins relative to mainstream brands. DBRS Morningstar also notes that the Company maintains several additional options to further bolster its liquidity position, including the sale of further equity stakes of its Commercial Vehicles/Trucks business, Traton SE, as well as potential divestitures of noncore assets.

Consistent with the Stable trend, the ratings are expected to remain constant over the near to medium term, and DBRS Morningstar notes that VW's FRA provides some cushion against unexpected challenges at the current ratings level, rendering a downgrade rather unlikely. Conversely, an upgrade is not anticipated over the aforementioned time horizon given the cost headwinds facing the automotive industry amid substantial financial outlays projected to be incurred by the Company in pursuit of its strategic objectives.

Financial Information

	6 mos. to June 30		12 mos. to June 30	For the year ended December 31				
(EUR millions)	2021	2020	2021	2020	2019	2018	2017	2016
Revenue ¹	107,027	77,015	212,118	182,106	212,473	201,067	195,817	186,016
Net income before nonrecurring items	8,104	(775)	17,790	8,911	14,794	13,802	13,177	9,806
Adjusted Interest coverage – EBITDA ¹	13.0	9.9	16.4	16.9	22.9	22.7	18.4	16.6
Adjusted DEBT/EBITDA ¹	0.8	1.8	0.8	0.6	0.8	0.9	0.6	0.6
Adjusted % gross debt in capital structure ¹	17.9	17.0	17.9	11.0	18.0	20.8	16.1	15.8

Note: Certain figures in this and in subsequent tables are subject to adjustments made by DBRS Morningstar.

¹ Excludes Financial Services division.

Issuer Description

VW is the largest auto manufacturer in Europe and ranks second globally in sales volumes (according to 2020 data). The Company has an extended portfolio of brands that, among others, includes Volkswagen, Volkswagen Commercial Vehicles, Porsche, Audi, Skoda, SEAT, Bentley, and Lamborghini. VW's Commercial Vehicles/Truck business, Traton, features the Scania, MAN, and Navistar brands. VW also

has a sizable Financial Services business and operates VW Credit Canada, Inc., its wholly owned subsidiary.

Rating Considerations

Strengths

1. Size provides economies of scale

VW is among the largest automobile manufacturers in the world and the leader in Europe. VW has the size and critical mass to attain the economies of scale necessary to be cost-competitive.

2. Above-average financial strength

The Company has above-average credit metrics and a strong liquidity position. The Company's Automotive operations (excluding Financial Services) had a net cash position of EUR 20.4 billion (as calculated by DBRS Morningstar) as at June 30, 2021.

3. Market leader in Western Europe; globally diversified

Notwithstanding VW's diesel issue (the Diesel Issue) and amid ongoing competition across markets worldwide, the Company's competitive position in terms of market share has held essentially firm. VW's worldwide market share in 2020 stood at 13.0% compared with 12.9% in 2019. In North America, the Company's share decreased slightly and remained low at 4.6% (compared with 4.7% in 2019). In Western Europe, VW's market share increased in 2020 to 23.7% (from a level of 22.8% in 2019), with the Company remaining the region's market leader. Similarly, VW's market position in Central and Eastern Europe increased in 2020 to 22.0% (from a level of 21.5% in 2019).

4. Financial services earnings smooth profitability

VW's Financial Services business has provided a stable and meaningful source of earnings, with annual operating profit totalling EUR 3.0 billion in 2020. Financial services earnings help to reduce the volatility of earnings associated with the Company's Automotive operations.

Challenges

1. Earnings volatility from cyclical automotive industry conditions

VW's operating performance is largely dependent on its Automotive business conditions, which fluctuate generally in line with economic cycles.

2. Significant production in Germany

DBRS Morningstar notes that Germany, a relatively high-cost jurisdiction, continues to represent a material (albeit declining) source of production for the Company (the country having accounted for approximately 19.9% of VW Group production in H1 2021). VW is seeking to improve its productivity through greater application of modular architectures, which will make it easier to build a wider variety of cars in future factories. Moreover, VW's existing labour agreement cites specific objectives of the Volkswagen and Audi brands as well as the German production facilities, targeting savings and efficiency improvements and projected declines in headcount (primarily through attrition taking into consideration the demographic curve of its labour force).

3. Corporate/product governance challenges

DBRS Morningstar considers VW's corporate governance framework suboptimal as indicated by the following characteristics:

1. VW's supervisory board is composed primarily of shareholders and worker representatives, with only a nominal proportion of independent members;
2. The Diesel Issue highlighted the lack of oversight and accountability from VW's management board; and
3. External investors have few voting rights as the majority of voting shares are held by a small group of shareholders (as of year-end 2020, Porsche Automobil Holding SE, Stuttgart owns 53.3% of voting shares, State of Lower Saxony owns 20.0%, and Qatar Holding owns 17.0%). Overall, the challenges in VW's corporate governance, in combination with other ESG risk factors, have resulted in a downward adjustment of the Company's ratings.

4. Modest U.S. presence

VW has a modest presence in the United States, which is among the largest automotive markets in the world.

Earnings and Outlook

(EUR millions, where applicable)	6 mos. to June 30		12 mos. to June 30	For the year ended December 31				
	2021	2020	2021	2020	2019	2018	2017	2016
Sales ¹	107,027	77,015	212,118	182,106	212,473	201,067	195,817	186,016
Operating profit ¹	8,841	(2,051)	18,486	7,595	16,083	14,311	14,368	12,187
Operating profit – Financial Services	2,517	1,248	4,281	3,012	3,212	2,793	2,673	2,435
Equity earnings (i.e. China)	899	1,164	2,491	2,756	3,349	3,369	3,482	3,497
Net income before nonrecurring items	8,104	(775)	17,790	8,911	14,794	13,802	13,177	9,806
Reported net income	8,104	(1,201)	17,639	8,334	13,346	11,827	11,179	5,144
Return on equity	13.4%	-1.5%	16.4%	7.7%	13.2%	13.0%	13.9%	11.4%
Return on capital	7.9%	-0.2%	9.6%	4.6%	7.7%	7.8%	8.3%	6.5%

¹ Excludes Financial Services division and nonrecurring items.

Summary

VW's financial performance weakened in 2020, albeit primarily as a result of the coronavirus. Specifically, performance was weakest in H1 2020, followed by a strong recovery in H2 2020.

2020 annual revenues of the Automotive operations declined by 14% YOY; the decrease substantially reflects adverse effects attributable to the pandemic, with foreign exchange representing another moderately negative factor. Absent special items, operating profit of the Automotive division in 2020 decreased to EUR 7.6 billion (from EUR 16.1 billion in 2019). Negative factors essentially consisted of negative volume, mix and pricing effects (collectively), with fixed cost reductions representing a partial offset. Special items, wholly consisting of ongoing risks related to the Diesel Issue, persisted in 2020 albeit declined considerably to EUR 0.9 billion (from a level of EUR 2.3 billion in 2019).

VW continued to achieve solid results in China (accounted for using the equity method), notwithstanding challenges in early 2020 stemming from the coronavirus pandemic. Deliveries in 2020 decreased by 9% YOY to 3.8 million units. Proportionate operating profit was also lower YOY at EUR 3.6 billion (compared with EUR 4.4 billion in 2019), with dividends paid to VW decreasing to EUR 3.0 billion (compared with EUR 3.6 billion in 2019).

Revenues through H1 2021 were higher by 39% relative to the same prior-year period, significantly reflecting the nonrepeat of the coronavirus. Accordingly, contributing factors included gains in volume, product mix, and pricing, partly offset by adverse foreign exchange effects. Profitability of the Automotive segment was in turn substantially stronger in line with the above-cited positive factors, slightly bolstered by product cost efficiencies. These positive factors were partly offset by fixed cost increases.

Outlook

For 2021, VW has projected that consolidated revenues will be significantly higher YOY, with the consolidated operating margin likely in the range of 6.0% to 7.5% (absent special items). Regarding the Financial Services division, VW projects that revenues will likely increase noticeably compared with 2020, with operating profit anticipated to be sharply higher YOY.

Over the long term, VW is seeking to increase its consolidated operating margin to a target range between 8.0% and 9.0% by 2025, despite meaningful industry headwinds in the form of cost increases attributable to tightening emission requirements and the requisite development of BEVs. The Company is looking to more than offset such headwinds through (among other things) firmer product mix and pricing, complexity reduction, and attained purchasing and productivity efficiencies. Moreover, as with several other OEMs, VW is also looking at emerging businesses (notably in mobility services and solutions) to ultimately represent a meaningful proportion of revenues and earnings.

Segmented Data

Key Figures by Brand	6 mos. to June 30		12 mos. to June 30	As at December 31				
	2021	2020	2020	2020	2019	2018	2017	2016
Unit Vehicle Sales								
VW passenger cars	1,552	1,134	3,253	2,835	3,677	3,715	3,573	4,347
Audi	602	416	1,203	1,017	1,200	1,467	1,530	1,534
Skoda	463	372	940	849	1,062	957	937	814
SEAT	310	197	597	484	667	608	595	548
Bentley	7	5	13	11	12	10	11	11
Porsche	152	116	301	265	277	253	248	239
Commercial vehicles	188	157	376	345	456	469	498	478
Scania & Man	127	78	240	191	244	234	206	185
VW China	1,522	1,422	3,677	3,577	4,048	4,101	4,020	3,873
Other Automotive	-263	-160	-521	-418	-685	-912	-840	-1,638
TOTAL	4,660	3,736	10,081	9,157	10,956	10,900	10,777	10,391
Revenue (EUR millions)								
VW passenger cars	40,689	28,580	83,185	71,076	88,407	84,585	79,186	105,651
Audi	29,212	20,476	58,709	49,973	55,680	59,248	59,789	59,317
Skoda	10,199	7,546	19,734	17,081	19,806	17,293	16,559	13,705
SEAT	5,656	3,749	11,105	9,198	11,496	10,202	9,892	8,894
Bentley	1,324	860	2,513	2,049	2,092	1,548	1,843	2,031
Porsche	15,107	11,192	30,001	26,086	26,060	23,668	21,674	20,710
Commercial vehicles	5,298	4,238	10,418	9,358	11,473	11,875	11,909	11,120
Scania & Man	13,560	9,938	25,981	22,359	26,597	25,085	27,159	24,901
Other Automotive	-12,932	-8,511	-27,354	-22,933	-26,934	-30,421	-30,288	-56,617
TOTAL	108,113	78,068	214,292	184,247	214,675	203,085	197,724	189,713
Operating Profit* (EUR millions)								
VW passenger cars	1,773	-1,491	3,718	454	3,785	3,239	3,301	1,869
Audi	3,113	-643	6,495	2,739	4,509	4,705	5,058	4,846
Skoda	974	228	1,502	756	1,660	1,377	1,611	1,197
SEAT	-26	-271	-94	-339	445	254	191	153
Bentley	178	-99	297	20	65	-288	55	112
Porsche	2,660	1,143	5,538	4,021	4,210	4,110	4,003	3,733
Commercial vehicles	87	-334	-33	-454	510	780	853	455

Scania & Man	404	-202	723	117	1,908	1,539	1,844	1,496
Other Automotive	-144	-291	638	491	-758	-1,225	-2,335	-1,343
TOTAL	9,019	-1,958	18,781	7,804	16,336	14,492	14,581	12,518

Note: Revenue and operating profit exclude VW China data, as this is accounted for using the equity method. Lamborghini data is included in Audi. In 2019, Power engineering sold intragroup to passenger cars; 2018 figures restated. * Before special items.

The 2020 sales and delivery performance of the core Volkswagen brand were adversely affected by the global progression of the coronavirus pandemic. Reported sales accordingly declined to 2.8 million units; (this figure excludes sales of VW's Chinese joint ventures (JVs), which are not attributed to the VW passenger cars brand companies). Global deliveries for 2020 also were at a level of 5.3 million units, representing a YOY decrease of 15.1%. Regarding major models, the ID.3 was launched, representing the first model based on the Modular Electric Drive Toolkit (MEB), with the ID.4 (SUV models) following later in the year. Other significant models include derivatives of the eighth generation Golf, as well as plug-in hybrid versions of nameplates such as the Golf, Tiguan, Arteon, and Touareg. Revenues of the VW brand in 2020 contracted materially YOY as a result of the pandemic. Operating profit of the VW brand accordingly decreased substantially, with cost reduction efforts more than offset by the volume declines, and adverse foreign exchange effects representing another negative factor. Special items attributable to the Diesel Issue persisted in 2020 though they declined considerably to EUR 0.8 billion (from EUR 1.9 billion in 2019). 2020 volumes of the premium Audi brand were also affected by the pandemic, with total global deliveries for the brand amounting to 1.7 million units (including Chinese JV volumes) with reported sales at a level of 1.0 million units. Audi's earnings in 2020 decreased YOY given lower volumes (and negative foreign exchange developments), although the brand remained materially profitable as operating earnings amounted to EUR 2.7 billion. Audi's special items attributable to the Diesel Issue were in the amount of EUR 0.2 billion. Porsche proved relatively resilient to the pandemic, with sales volumes only decreasing slightly compared with 2019 and revenues remaining constant YOY at EUR 26.1 billion. Moreover, the brand's operating margin, while lower YOY, remained strong at a level of 15.4%. Skoda's performance in 2020 reflected challenges attributable to the coronavirus, with revenues decreasing by 14% YOY to EUR 17.1 billion; operating profit declined accordingly to EUR 800 million (from EUR 1.7 billion the prior year), with Skoda's operating margin softening to 4.4% (compared with 8.4% in 2019). With respect to SEAT, the brand incurred an operating loss of EUR 339 million in 2020 amid a revenue decline of 20% YOY. Bentley's 2020 operating performance continued to trend lower, with the brand being nominally profitable given higher depreciation and amortization charges in addition to certain extraordinary items.

In H1 2021, in line with the nonrepeat of the coronavirus pandemic, revenues of the Volkswagen brand revenue increased by 42% compared with H1 2020 to EUR 40.7 billion, reflecting solid sales performance of the T-Roc, T-Cross, Atlas, and Passat, with electric models also becoming popular. Operating profit of the Volkswagen brand also improved and attained a margin of 4.4% as a function of higher volumes, product mix, and pricing. Audi's reported sales in H1 2021 increased by 44.7% compared with H1 2020, with Audi's operating profit attaining a level of EUR 3.1 billion (following a loss incurred in H1 2020), representing an operating margin of 10.7%. Porsche continued to perform well, in line with ongoing growth in sales volumes and revenue, which increased to EUR 15.1 billion (compared with EUR 11.2 billion in H1 2020), with the associated margin being very strong at 17.6%. The Skoda brand similarly

reported significant gains in volumes and revenues, with operating earnings in H1 2021 improving sharply to EUR 1.0 billion, representing a margin of 9.5%. Finally, SEAT's H1 2021 volumes and revenues increased sharply relative to H1 2020. The brand continued to incur an operating loss, which, however, narrowed substantially compared with the similar prior-year period.

Unit Sales/Revenues by Market	6 mos. to June 30		12 mos. to June 30	As at December 31				
	2021	2020	2021	2020	2019	2018	2017	2016
Unit Vehicle Sales								
Europe/Remaining Markets	2,175	1,644	4,460	3,929	4,856	4,739	4,731	4,635
North America	447	300	891	744	956	925	992	968
South America	260	183	548	471	607	596	526	421
Asia Pacific	1,779	1,609	4,182	4,012	4,538	4,640	4,527	4,367
TOTAL	4,660	3,736	10,081	9,157	10,956	10,900	10,777	10,391
Revenue (EUR millions)								
Europe/Remaining Markets	77,552	57,651	153,400	133,499	153,999	143,089	142,753	138,079
North America	22,038	15,930	42,918	36,810	43,351	37,656	37,686	35,454
South America	5,065	3,704	9,993	8,632	11,297	10,405	9,988	7,973
Asia Pacific	25,036	19,267	50,057	44,288	43,974	43,166	39,123	35,761
TOTAL	129,669	96,131	256,422	222,884	252,632	235,849	229,550	217,267

Note:

Revenue by market include Financial Services division revenue.

Revenue and operating profit exclude VW China data; as this is accounted for using the equity method.

2018 and subsequent total revenue data include hedges on sales revenue (not geographically allocated).

With respect to geographic performance, the Company's global unit sales in 2020 decreased significantly YOY as a result of the pandemic with volumes declining across all geographic market segments. The decline in Asia Pacific was more moderate (compared with other geographic segments), consistent with this region being the first to begin recovering from the adverse effects of the pandemic. The global market share of the Company improved slightly to 13.0% in 2020 from 12.9% in 2019.

In Asia Pacific, 2020 sales volumes including those attributable to JVs in China decreased to 4.0 million units (from 4.5 million units in 2019).

For 2020, sales levels in the Europe/Remaining markets segment declined to 3.9 million units (from 4.9 million in 2019), although VW's market share in Western Europe improved to 23.7% (from 22.8% in 2019). VW's results in North America also declined correspondingly, with the Company's regional market share in 2020 softening to 4.6% (compared with the 2019 level of 4.7%).

During H1 2021, the Company's global volumes increased significantly compared with the similar prior-year period given the nonrepeat of the coronavirus pandemic with volume gains being attained across all regional segments and VW's global market share attaining a level of 12.6%.

Financial Profile

Automotive Operations	6 mos. to June 30		12 mos. to June 30		For the year ended December 31			
	2021	2020	2021	2020	2020	2019	2018	2017
EBITDA	17,652	6,366	36,678	25,393	32,041	29,892	29,316	26,518
Earnings after taxes	8,454	(593)	18,447	9,401	15,477	14,128	13,461	10,041
Depreciation	8,811	8,417	18,192	17,798	15,958	15,581	14,948	14,331
Other items (derivatives, other gains/losses)	2,024	(1,232)	1,965	(1,291)	1,125	(1,355)	309	(95)
Cash flow from operations	19,289	6,592	38,604	25,908	32,590	28,354	28,718	24,277
Less: capital expenditure	7,488	7,080	17,946	17,538	19,178	18,452	17,891	18,545
Less: dividends	-	-	2,952	2,952	2,899	2,375	1,332	364
Free cash flow pre-working capital	11,801	(488)	17,706	5,418	10,483	7,527	9,495	5,368
Changes in working capital	528	(1,806)	3,647	1,313	73	(4,344)	(553)	(715)
Free cash flow	12,329	(2,294)	21,353	6,731	10,556	3,183	8,942	4,653
Net debt (cash) position	(25,471)	(25,643)	(25,471)	(16,313)	(8,108)	(15,833)	(13,854)	(18,709)
% net debt in capital structure	-18.7	-29.4	-18.7	-16.2	-7.6	-16.9	-15.7	-27.0
Adjusted % debt in capital structure	17.9	17.0	17.9	17.8	18.0	20.8	16.1	15.8
Adjusted Gross interest coverage – EBITDA	21.2	9.9	21.5	16.9	22.9	22.7	18.4	16.5
Adjusted Cash flow/total debt	1.4	0.6	1.4	1.0	1.3	1.0	1.5	1.5

Notes:

2016 and subsequent figures adjusted to exclude effects of the Diesel Issue.

The Company's 2019 reported debt obligations have been subject to an increase given the adoption (as of January 1, 2019) of IFRS 16, the primary objective of which being to recognize all leases. DBRS Morningstar notes that this has not affected VW's FRA.

Summary

Automotive cash flow from operations in 2020 declined YOY in line with weaker earnings that substantially reflect the global progression of the coronavirus pandemic.

2020 capital expenditures (capex) declined YOY in line with the deferral of selected investments in response to coronavirus. This notwithstanding, capex remained sizable in the amount of EUR 17.5 billion, with investments being primarily allocated to VW's production facilities and models slated to launch in 2020 or 2021. These notably include the Company's ID family of electric vehicles, reflecting its increasing environmental focus across its product range and the ongoing development of modular toolkits, digitalization, and electric powertrains. Dividend payments in 2020 amounted to EUR 3.0 billion and remained essentially constant YOY despite the challenges attributable to the pandemic.

As a function of the above, gross free cash flow (i.e., before working capital items) in 2020 was lower YOY but remained significantly positive at a level of EUR 5.4 billion. Working capital fluctuated considerably though 2020; however, for the year it represented a source of cash in the amount of EUR 1.3 billion, significantly reflecting lower inventories. Accordingly, net free cash flow (i.e., after working capital items) for 2020 was lower YOY but remained solid at EUR 6.7 billion.

DBRS Morningstar notes that the above amount was reduced by cash outflows associated with the Diesel Issue of roughly EUR 2.5 billion. While this amount was moderately higher YOY, the significant

majority of financial outlays associated with the Diesel Issue is now behind the Company. Total dividend payments amounted to EUR 3.0 billion, of which EUR 2.4 billion was made to VW shareholders. Proceeds from hybrid notes issuance totalled EUR 3.0 billion, consisting of two such issuances in June 2020 of EUR 1.5 billion each.

Through the first half of 2021, Automotive cash flow from operations was substantially stronger compared with the prior-year period primarily as a function of much improved earnings amid slightly firmer depreciation and other noncash items. Capex increased moderately compared with H1 2020. Gross free cash flow was accordingly sharply higher (compared with H1 2020) at a level of EUR 11.8 billion. Working capital (in contrast to H1 2020) represented a moderate source of cash, significantly reflecting higher payables, with net free cash flow therefore amounting to EUR 12.3 billion.

Payments associated with the Diesel Issue in H1 2021 amounted to EUR 0.6 billion. Additionally, M&A activities resulted in an outflow of EUR 1.5 billion in the period. Finally, the Company also redeemed a hybrid note in the amount of EUR 1.25 billion in the period.

Outlook

VW's cash flow from operations in 2021 stands to improve substantially YOY as a function of much stronger earnings, with the Company projecting its Automotive operations to generate adjusted net free cash flow (as defined by VW, i.e. including working capital effects while excluding dividends, M&A and outflows associated with the Diesel Issue) in the approximate amount of EUR 15 billion. 2021 capex levels are estimated to moderately increase YOY, with dividends projected to remain essentially constant. As a function of the above, DBRS Morningstar estimates that the Company's gross free cash flow in 2021 will be sharply higher relative to 2020.

Going forward, cash flow from operations is projected to moderately increase over the medium term in line with progressively firmer earnings. Capex is likely to be subject to meaningful increases as a function of additional investments into the progressive electrification of VW's product portfolio as well as additional new mobility business initiatives. Dividends may also progressively increase amid the ongoing growth in earnings. This notwithstanding, the Company's projected free cash flow generation is estimated to remain readily sufficient to absorb potentially sizeable M&A activities in connection with VW's ongoing new mobility business initiatives.

Debt and Liquidity

Despite substantial prior outlays in connection with the Diesel Issue and amid projected sizeable investments associated with the electrification of the product portfolio and significant M&A activity, VW's liquidity position remains strong.

As of June 30, 2021, the Company's Automotive operations had a gross liquidity position (as defined by VW) of EUR 46.9 billion, which included EUR 31.0 billion in cash and cash equivalents and EUR 15.9 billion in securities, loans, and time deposits.

Additionally, the Company has a EUR 10.0 billion syndicated credit facility that matures in December 2025 (with an option to further extend the maturity by one year). While this facility was fully drawn in early 2020 because of projected liquidity challenges stemming from the coronavirus, all drawn amounts were repaid within the year with the facility being unused as of June 30, 2021.

In 2016 through 2020, VW's Automotive liquidity was meaningfully depleted by approximately EUR 28.8 billion in cash outflows related to the Diesel Issue. However, this was considerably offset by solid net free cash flow generation of roughly EUR 34.1 billion (absent effects of the Diesel Issue) over this time period, in addition to combined net proceeds of approximately EUR 8.0 billion from the Company's hybrid bond issuances.

VW faces meaningful industry headwinds over the next several years amid sizeable investment requirements in line with the increasing electrification of its product portfolio. The Company is also targeting additional investments into new mobility businesses. However, DBRS Morningstar estimates that VW's liquidity position will remain robust amid these challenges given its consistent free cash flow generation; DBRS Morningstar notes further that the Company maintains several additional options to further bolster its liquidity position, including the sale of further equity stakes in Traton as well as other potential divestitures of noncore assets.

Industrial debt is a relatively small component of total consolidated debt (i.e., less than 10%).

The Company's consolidated debt maturity schedule (industrial maturity schedule not available) as at December 31, 2020, is outlined in the table immediately below in percentage terms.

< 1 year	1-5 years	>5 years
42%	46%	12%

The debt breakdown (in EUR millions) of the above is as follows:

Bonds	92,626
Comm. paper & notes	37,526
Loans	35,333
Direct Banking Deposits	29,145
Other	8,826

Financial Services Division

	For the year ended December 31				
(EUR millions)	2020	2019	2018	2017	2016
Revenue	40,778	40,160	34,782	33,733	31,251
Operating profit	3,012	3,212	2,793	2,673	2,435
Debt: equity	5.9	6.2	6.3	5.7	6.3
Receivable portfolio	140,571	145,588	132,909	126,395	118,075
Penetration level (%)	35.2	34.2	33.7	33.4	33.3

Results of the Financial Services business in 2020 softened slightly YOY in line with challenges attributable to the coronavirus pandemic. Despite this, profitability was solid with the segment remaining a significant contributor to consolidated earnings.

While 2020 segment revenues increased by 1.5% YOY to EUR 40.8 billion, operating profit declined by 6.2% YOY to EUR 3.0 billion as a function of higher provisions for credit losses; (however, residual value performance remained favourable through the year as used car values held firm).

As of June 30, 2021, the total number of contracts was at a level of 24.5 million.

Credit risk within the wholesale portfolio and the retail/fleet portfolio remains at low levels and readily covered by incurred provisions.

Leverage as of December 31, 2020, was moderately lower YOY and remained well within historical levels and commensurate with industry standards.

VW's Financial Services business has a strong global presence and was active in 48 markets as of December 31, 2020.

Penetration rates as of H1 2021 were at a level of 36.1%. This segment is continuously looking to increase its penetration rate through further product offerings, such as extended warranty programs and short- and long-term vehicle rentals as well as car sharing (i.e., very short-term vehicle rentals). Integrated products are also being launched (i.e., combination of finance, insurance and service contracts). Additionally, VW is seeking to create additional digital touchpoints in the aim of increasing interaction with existing and prospective customers.

For 2021, revenues of the Financial Services business are projected by the Company to be noticeably higher relative to 2020. Additionally, operating profit is also estimated to grow YOY and approach record levels amid ongoing business growth, lower credit provisions and attained efficiencies. Additionally, residual values are projected to remain strong as a function of ongoing high used car demand stemming from the semiconductor shortage (and resulting low new car inventories).

Funding sources are well diversified and include, among others, bond issuances (23.3% as of December 31, 2020), asset-backed securitization transactions (17.6%), customer deposits (12.7%), credit lines

(11.4%) and commercial paper (2.8%). Moreover, VW's Financial Services companies have access to EUR 9.5 billion in credit facilities to further back-up liquidity.

Rating Support

The ratings of VW Credit Canada, Inc. are supported by VW through a Guarantee. Per *DBRS Morningstar Criteria: Guarantees and Other Forms of Support* (May 2021), the Guarantee, in combination with DBRS Morningstar's assessment of additional implicit support considerations, including (but not limited to) business, reputational, and financial factors that are deemed likely to motivate a parent or affiliated company to support its subsidiary issuer, result in a flow through of VW's ratings to VW Credit Canada, Inc.

Volkswagen AG							
(Financial Services business on an equity basis)							
Balance Sheet							
(EUR millions)	June 30	As at December 31			June 30	As at December 31	
Assets	2021	2020	2019	Liabilities & Equity	2021	2020	2019
Cash & deposits	48,647	41,725	33,225	Accounts payable	20,645	19,539	19,603
Accounts receivable	19,240	16,455	17,163	Short-term debt	(7,559)	(2,806)	(7,312)
Inventories	41,014	39,055	41,898	Other current liabs.	54,180	47,107	50,929
Other assets	903	-	795	Total Current Liabs.	67,265	63,840	63,220
Total Current Assets	109,804	97,236	93,081	Long-term debt	28,277	15,637	25,117
Net fixed assets	61,304	62,807	65,043	Pension provision	39,754	44,207	40,631
Intangibles	68,989	67,781	66,010	Other liabilities	34,055	33,680	32,600
Fin. Services equity	35,032	32,050	30,877	Minority interest	1,767	1,734	1,870
Other assets	25,397	26,272	22,683	Shareholders' equity	129,410	127,049	114,256
Total Assets	300,527	286,147	277,694	Total Liabilities	300,527	286,147	277,694

Balance Sheet Ratios	6 mos. to June 30		12 mos. to June 30		For the year ended December 31			
	2021	2020	2021	2020	2019	2018	2017	2016
Current ratio	1.6	1.3	1.6	1.5	1.5	1.3	1.2	1.0
Inventory turnover (days)	87	99	82	98	89	88	82	80
Receivable turnover (days)	32	44	31	34	25	26	31	31
Accounts payable/inventory	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.6
Total debt-to-capital (%)	17.9	17.0	17.9	17.8	18.0	16.5	11.7	10.7
Adj. total debt-to-capital (%)	17.9	17.0	17.9	17.8	18.0	20.8	16.1	15.8
Net debt-to-capital (%)	-18.7	-29.4	-18.7	-16.2	-7.6	-16.9	-15.7	-27.0
DEBT/EBITDA	0.80	1.82	0.77	1.00	0.78	0.73	0.46	0.40
Adj. DEBT/EBITDA	0.80	1.82	0.78	1.00	0.78	0.93	0.65	0.60
EBITDA coverage	21.2	9.9	21.7	16.9	22.9	30.7	22.5	19.9
Adj. EBITDA coverage	21.2	9.9	21.5	16.9	22.9	22.7	18.4	16.6
EBIT coverage	10.6	-3.2	11.0	5.1	11.5	14.7	11.0	9.2
Cash flow/total debt	1.4	0.6	1.4	1.0	1.3	1.3	2.1	2.3
Adj. cash flow/total debt	1.4	0.6	1.4	1.0	1.3	1.0	1.5	1.5
Cash flow/capital expenditure	2.6	0.9	2.2	1.5	1.7	1.5	1.6	1.3

1 Excludes nonrecurring items.

Income Statement	6 mos. to June 30		12 mos. to June 30		For the year ended December 31			
	2021	2020	2021	2020	2019	2018	2017	2016
(EUR millions)	2021	2020	2021	2020	2019	2018	2017	2016
Sales – Automotive	107,027	77,015	212,118	182,106	212,473	201,067	195,817	186,016
Cost of sales	77,499	59,142	151,066	132,709	154,519	145,717	143,586	136,529
Depreciation	8,811	8,417	18,192	17,798	15,958	15,581	14,948	14,331
Other expenses	11,876	11,507	24,374	24,005	25,912	25,457	22,916	22,969
Operating profit – Automotive ¹	8,841	(2,051)	18,486	7,595	16,083	14,311	14,368	12,187
Net interest income (expense)	(440)	(193)	(958)	(711)	(497)	(24)	(466)	(688)
Other income (expense)	(664)	(833)	115	(54)	(1,456)	(1,622)	(3,162)	(2,620)
Financial Services division income	2,517	1,248	4,281	3,012	3,212	2,793	2,673	2,435
Income before taxes	10,254	(1,829)	21,924	9,842	17,342	15,458	13,413	11,314
Income taxes	2,699	(72)	5,968	3,197	5,214	4,699	3,434	4,770
Income before noncontrolling interest	7,555	(1,757)	15,956	6,645	12,128	10,759	9,979	6,544
Net income before nonrecurring items	8,104	(775)	17,790	8,911	14,794	13,802	13,177	9,806
Net income	8,104	(1,201)	17,639	8,334	13,346	11,827	11,179	5,144

Cash Flow - Automotive division								
Earnings after tax	8,454	(593)	18,447	9,401	15,477	14,128	13,461	10,041
Depreciation	8,811	8,417	18,192	17,798	15,958	15,581	14,948	14,331
Other items	2,024	(1,232)	1,965	(1,291)	1,155	(1,355)	309	(95)
Cash flow from operations	19,289	6,592	38,604	25,908	32,590	28,354	28,718	24,277
Less: capital expenditures	7,488	7,080	17,946	17,538	19,178	18,452	17,891	18,545
Less: dividend	-	-	2,952	2,952	2,899	2,375	1,332	364
Free cash flow before working capital	11,801	(488)	17,706	5,418	10,483	7,527	9,495	5,368
Changes in working capital	528	(1,806)	3,647	1,313	73	(4,344)	(553)	(715)
Free cash flow	12,329	(2,294)	21,353	6,731	10,556	3,183	8,942	4,653

Profitability Ratios (%)								
EBITDA margin ^{1,2}	16.5	8.3	17.3	13.9	15.1	14.9	15.0	14.3
Operating margin ^{1,2}	8.3	-2.7	8.7	4.2	7.6	7.1	7.3	6.6
Net margin ¹	7.6	-1.0	8.4	4.9	7.0	6.9	6.7	5.3
Return on equity ¹	13.4	-1.5	16.4	7.7	13.2	13.0	13.9	11.4
Return on capital ¹	7.9	-0.2	9.6	4.6	7.7	7.8	8.3	6.5

Note: Certain figures subject to DBRS Morningstar adjustments.

1 Excludes nonrecurring items.

2 Financial Services excluded.

Rating History

	Current	2020	2019	2018	2017	2016
Issuer Rating – Volkswagen AG	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)
Senior Unsecured Debt – VW Credit Canada, Inc.	A (low)	A (low)	A (low)	BBB (high)	BBB (high)	BBB (high)
Commercial Paper – VW Credit Canada, Inc.	R-1 (low)	R-1 (low)	R-1 (low)	R-2 (high)	R-2 (high)	R-2 (high)
Senior Unsecured Debt – Volkswagen Canada, Inc.	--	--	--	--	--	BBB (high)
Commercial Paper – Volkswagen Canada, Inc.	--	--	--	--	--	R-2 (high)

Previous Action

- “DBRS Morningstar Confirms Volkswagen AG at A (low), Negative; Removes Ratings from Under Review with Negative Implications,” August 11, 2020

Commercial Paper Limit

- CAD 1 billion

Previous Report

- Volkswagen AG: Rating Report, October 31, 2019

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