

POWER ENGINEERING BUSINESS AREA BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2020	Dec. 31, 2019
Noncurrent assets	1,847	2,206
Current assets	2,800	4,202
Total assets	4,647	6,408
Equity	1,922	2,885
Noncurrent liabilities	668	777
Current liabilities	2,057	2,746

The Power Engineering Business Area's intangible assets and property, plant and equipment were lower on December 31, 2020 than on the prior-year balance sheet date. Noncurrent assets dropped by a total of 16.3%. Current assets decreased by 33.4%, with a significant reduction in the cash and cash equivalents included in this item. In the previous year, the "Assets held for sale" item had included the carrying amounts of assets derecognized as a result of the sale of Renk completed in October 2020. As a result, total assets in the Power Engineering Business Area went down to €4.6 (6.4) billion at the end of fiscal year 2020.

At the end of 2020, the Power Engineering Business Area's equity amounted to €1.9 (2.9) billion. Overall, noncurrent liabilities were lower than a year earlier. Current liabilities also declined compared with the end of 2019. The financial liabilities included here fell significantly, while other provisions went up because of provisions recognized for restructuring measures. Current liabilities as of the end of 2019 had also included the carrying amounts of the liabilities of Renk, which were derecognized as a result of the sale of Renk in 2020.

Financial Services Division balance sheet structure

On December 31, 2020, the Financial Services Division had total assets of €243.0 (241.3) billion, slightly more than at the balance sheet date in 2019.

Noncurrent assets declined by 1.1% to €145.3 billion compared with the end of the prior year; the property, plant and equipment included in this item was virtually unchanged. Lease assets increased, while non-current financial services receivables were down because volumes and exchange rates were affected by the Covid-19 pandemic.

Current assets expanded to €97.7 (94.4) billion. Current financial services receivables were lower than at the end of 2019, primarily for pandemic-related reasons. At €13.3 billion, total securities and cash and cash equivalents in the Financial Services Division exceeded the figure recorded at the end of 2019 by €3.9 billion.

On December 31, 2020, the Financial Services Division accounted for around 48.9 (49.4)% of the Volkswagen Group's assets.

At the end of the reporting year, the Financial Services Division's equity stood at €32.0 billion, 3.8% more than a year earlier. Negative exchange rate effects were offset by positive earnings. The equity ratio was 13.2 (12.8)%.

Noncurrent liabilities increased by 3.5% overall, mainly due to a rise in noncurrent financial liabilities and higher other provisions. A reduction in current financial liabilities, offset by higher other current liabilities, led to a net decrease in total current liabilities.

Deposits from the direct banking business amounted to €28.9 (32.5) billion, and were therefore below the figure recorded at the end of 2019.

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION

The Volkswagen Group's financial target system centers on continuously and sustainably increasing the value of the Company. In order to ensure the efficient use of resources in the Automotive Division and to measure the success of this, we have been using a value-based management system for a number of years, with return on investment (ROI) as a relative indicator and value contribution¹, a key performance indicator linked to the cost of capital, as an absolute performance measure.

The return on investment serves as a consistent target in strategic and operational management. If the return on investment exceeds the market cost of capital, there is an increase in the value of the invested capital and a positive value contribution. The concept of value-based management allows the success of the Automotive Division and individual business units to be evaluated. It also enables the earnings power of our products, product lines and projects – such as new plants – to be measured.

Components of value contribution

Value contribution¹ is calculated on the basis of the operating result after tax and the opportunity cost of invested capital.

The operating result shows the economic performance of the Automotive Division and is initially a pre-tax figure. Based on our companies' income tax rates, which vary from country to country, we assume an overall average tax rate of 30% when calculating the operating result after tax.

¹ The value contribution corresponds to the Economic Value Added (EVA®). EVA® is a registered trademark of Stern Stewart & Co.

The cost of capital is multiplied by the average invested capital to give the opportunity cost of capital. Invested capital is calculated as total operating assets reported in the balance sheet (property, plant and equipment, intangible assets, lease assets, inventories and receivables) less non-interest-bearing liabilities (trade payables and payments on account received). Average invested capital is derived from the balance at the beginning and the end of the reporting period.

As the concept of value-based management only comprises our operating activities, assets relating to investments in subsidiaries and associates and the investment of cash funds are not included when calculating invested capital. Interest charged on these assets is reported in the financial result.

Determining the current cost of capital

The cost of capital is the weighted average of the required rates of return on equity and debt.

The cost of equity is determined using the Capital Asset Pricing Model (CAPM).

This model uses the yield on long-term risk-free Bunds, increased by the risk premium attaching to investments in the equity market. The risk premium comprises a general market risk and a specific business risk.

The general risk premium of 7.5% reflects the general risk of a capital investment in the equity market.

The specific business risk – price fluctuations in Volkswagen preferred shares – is modeled in comparison to the MSCI World Index when calculating the beta factor. The MSCI World Index is a global capital market benchmark for investors.

The analysis period for the beta factor calculation spans five years with annual beta figures calculated on a weekly basis followed by the subsequent calculation of the average. A beta factor of 1.26 (1.17) was determined for 2020.

The cost of debt is based on the average yield for long-term debt. As borrowing costs are tax-deductible, the cost of debt is adjusted to account for the tax rate of 30%.

A weighting on the basis of a fixed ratio for the fair values of equity and debt gives an effective cost of capital for the Automotive Division of 6.5 (6.3)% for 2020.

COST OF CAPITAL AFTER TAX IN THE AUTOMOTIVE DIVISION

%	2020	2019
Risk-free rate	-0.2	0.0
Market risk premium	7.5	7.5
Volkswagen-specific risk premium	2.0	1.3
(Volkswagen beta factor)	(1.26)	(1.17)
Cost of equity after tax	9.3	8.8
Cost of debt	1.4	1.9
Tax	-0.4	-0.6
Cost of debt after tax	1.0	1.3
Proportion of equity	66.7	66.7
Proportion of debt	33.3	33.3
Cost of capital after tax	6.5	6.3

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE REPORTING PERIOD

At €7,450 (13,019) million, the Automotive Division's operating profit after tax, including the proportionate operating profit of the Chinese joint ventures, was down on the prior-year figure in fiscal year 2020, mainly due to the persistently negative impact of the spread of the SARS-CoV-2 virus. In addition particularly to the decline in revenue resulting from the pandemic-related fall in customer demand, turbulence in the capital markets led to negative effects from the measurement of receivables and liabilities denominated in foreign currencies. One-off expenses for restructuring measures also reduced earnings. A positive impact was made by lower costs. In addition, income was generated from the contribution of AID to the Argo AI joint venture and from the sale of Renk. Negative special items weighed on the operating profit, but to a lesser extent than in the previous year. The effect of purchase price allocation on earnings and assets is not taken into account as this cannot be influenced by management in the course of business operations.

In the reporting year, the invested capital fell to €114,907 (116,016) million, partly due to exchange rates. The decrease was due primarily to lower inventory levels and lower property, plant and equipment, offset by higher capitalized development costs.

The return on investment (ROI) is the return on invested capital for a particular period based on the operating result after tax. Due to earnings-related factors as a result of the Covid-19 pandemic, ROI declined year-on-year; at 6.5 (11.2)% it was below our defined minimum required rate of return on invested capital of 9%.

At €7,504 (7,328) million, the opportunity cost of capital (invested capital multiplied by cost of capital) slightly exceeded the prior-year figure. After deduction of the oppor-

tunity cost of invested capital, the operating result after tax – which was negatively impacted by the pandemic – led to a negative value contribution of €–54 (5,691) million.

More information on value-based management is contained in our publication entitled “Financial Control System of the Volkswagen Group”, which can be downloaded from our Investor Relations website: www.volkswagenag.com/en/Investor_Relations/news-and-publications/More_Publications.html.

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE AUTOMOTIVE DIVISION¹

€ million	2020	2019
Operating result after tax	7,450	13,019
Invested capital (average)	114,907	116,016
Return on investment (ROI) in %	6.5	11.2
Cost of capital in %	6.5	6.3
Opportunity cost of invested capital	7,504	7,328
Value contribution	–54	5,691

¹ Including proportionate inclusion of the Chinese joint ventures (including the relevant sales and component companies) and allocation of consolidation adjustments between the Automotive and Financial Services Divisions.