



Hold (old: Hold)

Price target: EUR 1.30 (old: EUR 1.90)

Price:	EUR 1.28	Next result:	Q1 n/a
Bloomberg:	MSAG GR	Market cap:	EUR 38.1 m
Reuters:	MSAG.DE	Enterprise Value:	EUR 108.1 m

19-May-20

Christian Glowa
Analyst

christian.glowa@ha-ib.de
Tel.: +49 40 414 3885 95

2020 trough, better prospects from 2021 – remains HOLD / chg

MS's business should take a hit in 2020E with a potential recovery as early as in 2021. The anticipated rebound of the order intake, sales and earnings is seen to be mainly carried by an expected upswing of automotive ultrasonic orders as indicated by OMEs production schedules. However, with limited visibility as to when these orders will materialize, the **stock remains HOLD** despite the undemanding valuation (0.5x book value). Key insights following FY19 results and discussions with management:

- MS Powertrain** (65% of sales in FY20E): FY19 sales slumped by c. 25% yoy to € 166m amid the disposal of the US truck business as per April 2019 (FY sales € 80m, selling price c. € 36m over three annual installments; book gain € 21m). In 2020, the business should deteriorate given the slump of the European truck market. As such, Daimler's European truck order intake declined by 21% yoy in Q1 2020, which translates into an order backlog for MS' powertrain business of € 67m at end of March. Importantly, after a trough in 2020 (eH&A sales -44% yoy to € 92m), sales should gradually recover supported by the new SOP of the Scania order in H2 2021 (eH&A € 25-30m p.a after a ramp-up period of around 5 years).

Notably, despite the expected sales deterioration in 2020, we expect the powertrain EBIT to turn break-even, after an operating loss of € 1.3m in 2019, thanks to reduced headcount and a higher degree of automation. With increased volumes driven by the new Scania series production and thus a better utilization, the EBIT margin should be > 3% by 2022E and at around 5% by 2025E.

- MS Ultrasonic** (35% of sales in FY20E): The Ultrasonic business prospects should cool off in 2020E (eH&A sales -20% yoy to € 49m) as the special machinery automotive business (28% of group sales) should suffer from an abrupt but temporary slash in demand due to a lack of new car model launches aggravated by COVID-19 related headwinds. Most importantly, as the business is driven by car model variety and not unit sales, we expect a swift recovery in 2021E as major new car model launches are scheduled for 2023E (c. 18-24 months lead time). That said, sales should bounce back by +50% yoy to € 60m as early as 2021E.

- continued -

Y/E 31.12 (EUR m)	2016	2017	2018	2019	2020E	2021E	2022E
Sales	237.5	250.6	282.7	226.4	141.0	166.3	184.5
Sales growth	-13 %	6 %	13 %	-20 %	-38 %	18 %	11 %
EBITDA	18.8	22.0	22.8	32.7	7.0	16.5	21.5
EBIT	6.4	9.0	10.8	18.5	-7.0	2.5	7.5
Net income	4.5	7.0	7.1	16.7	-5.9	1.0	4.5
Net debt	60.5	52.9	70.5	90.6	68.1	52.8	51.0
Net gearing	116.6 %	93.1 %	107.7 %	118.0 %	86.5 %	57.5 %	53.0 %
Net Debt/EBITDA	3.2	2.4	3.1	2.8	9.7	3.2	2.4
EPS pro forma	0.15	0.24	0.24	0.56	-0.20	0.03	0.15
CPS	-0.05	-0.11	-0.25	-0.10	0.41	0.18	0.16
DPS	0.00	0.03	0.09	0.03	0.00	0.00	0.00
Dividend yield	0.0 %	2.4 %	7.1 %	2.4 %	0.0 %	0.0 %	0.0 %
Gross profit margin	46.1 %	46.8 %	46.0 %	48.8 %	53.1 %	52.5 %	50.8 %
EBITDA margin	7.9 %	8.8 %	8.1 %	14.4 %	5.0 %	9.9 %	11.7 %
EBIT margin	2.7 %	3.6 %	3.8 %	8.2 %	-5.0 %	1.5 %	4.1 %
ROCE	5.3 %	7.1 %	7.8 %	10.9 %	-4.1 %	1.3 %	3.7 %
EV/sales	0.4	0.4	0.4	0.6	0.8	0.6	0.5
EV/EBITDA	5.3	4.2	4.8	4.0	15.4	5.6	4.2
EV/EBIT	15.8	10.3	10.2	7.1	-15.4	37.1	12.1
PER	8.4	5.4	5.3	2.3	-6.4	37.2	8.4
Adjusted FCF yield	11.8 %	15.2 %	12.4 %	19.6 %	7.5 %	13.9 %	16.3 %

Source: Company data, Hauck & Aufhäuser Close price as of: 18.05.2020

Please refer to important disclosures at the end of the report



Source: Company data, Hauck & Aufhäuser

High/low 52 weeks: 3.21 / 0.86

Price/Book Ratio: 0.5

Relative performance (SDAX):

3 months -16.6 %

6 months -28.2 %

12 months -50.9 %

Changes in estimates

		Sales	EBIT	EPS
2020	old:	188.7	4.5	0.06
	Δ	-25.3%	n/a	n/a
2021	old:	202.0	9.0	0.16
	Δ	-17.7%	-72.3%	-79.2%
2022	old:	-	-	-
	Δ	-	-	-

Key share data:

Number of shares: (in m pcs) 29.9

Authorised capital: (in € m) 9.7

Book value per share: (in €) 2.6

Ø trading volume: (12 months) 52,941

Major shareholders:

Free Float 57.0 %

MS ProActive 20.0 %

Andreas Aufschneider 6.2 %

Kreissparkasse 5.1 %

Biberach 4.8 %

Universal Investments GmbH 3.0 %

AGI 3.0 %

Company description:

Supplier of powertrain parts and systems especially for truck OEMs, of electric motors and of welding machines for the automotive, packaging and other industries.

The remaining ultrasonic business i.e. systems & components as well as the standardized series machines (combined c. 7% of group sales) should grow strongly by around 40% yoy and 50% yoy respectively benefitting from further market share gains and the opening of new end-markets. As such, ultrasonic welding looks set to be the preferred welding technology i.e. for protection mask, where the company currently experiences high demand from the med-tech sector.

Despite the superior profitability in these business fields (target EBIT margin of 20%), it should not be sufficient to compensate for the expected diseconomies of scale in the ultrasonic automotive business. In sum, we expect the Ultrasonic business group to account for an operating loss of around € -7m in 2020E, which should return to profitability as early as in 2021E driven by the revitalization of the automotive welding business.

- **Elevated leverage can be neglected.** The 2020E EBITDA looks set to deteriorate by 50% yoy to € 7m (adjusted for the € 21m one-off gains in 2019), translating into an elevated net debt / EBITDA of 10x at year-end. Importantly, bank loans are only subject to financial covenants with regard to a minimum equity ratio of 30% (eH&A c. 38% YE 2020).

What's more, despite subdued earnings, free cash flow should turn positive in 2020E (eH&A € 11m) supported by enhanced working capital and reduced capex. Notably, required capex to execute the Scania order should be limited (eH&A around € 16m accumulated from 2021E to 2023E).

Finally, the group has € 8m undrawn credit facilities bolstered by the € 12m annual installment payment from the disposal of the US truck business. This would enable MS to repay its short-term bank loans of € 25m due at the end of 2020, which however should be refinanced in summer this year.

Action: We lower our sales and earnings estimates reflecting a weaker than expected business development of both the Powertrain as well as the Ultrasonic business. Moreover, we introduce 2022E estimates.

With limited visibility on a sustainable surge in the ultrasonic order intake and lackluster newsflow ahead amid soft quarterly results, the **stock remains a HOLD with a new PT of € 1.30** (old € 1.90) conservatively based on FCFY20E.

Financials

Profit and loss (EUR m)	2016	2017	2018	2019	2020E	2021E	2022E
Net sales	237.5	250.6	282.7	226.4	141.0	166.3	184.5
<i>Sales growth</i>	-13.5 %	5.5 %	12.8 %	-19.9 %	-37.7 %	17.9 %	10.9 %
Increase/decrease in finished goods and work-in-process	0.4	2.6	4.5	1.8	2.0	2.5	2.5
Total sales	237.9	253.2	287.2	228.2	143.0	168.8	187.0
Other operating income	5.5	5.6	4.1	26.4	5.0	5.3	5.5
Material expenses	128.3	134.8	155.1	116.8	67.0	80.1	92.0
Personnel expenses	60.5	63.6	71.1	69.8	49.0	52.5	54.0
Other operating expenses	35.9	38.3	42.4	35.3	25.0	25.0	25.0
Total operating expenses	219.1	231.2	264.4	195.5	136.0	152.3	165.5
EBITDA	18.8	22.0	22.8	32.7	7.0	16.5	21.5
Depreciation	11.7	11.7	10.6	13.0	12.8	12.8	12.8
EBITA	7.1	10.4	12.2	19.6	-5.8	3.7	8.7
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.7	1.4	1.4	1.2	1.2	1.2	1.2
Impairment charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT (inc revaluation net)	6.4	9.0	10.8	18.5	-7.0	2.5	7.5
Interest income	1.2	1.6	0.9	1.2	1.2	1.2	1.0
Interest expenses	2.9	2.1	2.4	2.6	2.8	2.8	2.8
Other financial result	0.0	0.0	0.0	0.6	0.5	0.5	0.5
Financial result	-1.7	-0.5	-1.5	-0.9	-1.1	-1.1	-1.3
Recurring pretax income from continuing operations	4.6	8.5	9.3	17.6	-8.1	1.4	6.2
Extraordinary income/loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Earnings before taxes	4.6	8.5	9.3	17.6	-8.1	1.4	6.2
Taxes	0.2	1.5	2.2	0.9	-2.2	0.4	1.7
Net income from continuing operations	4.5	7.0	7.2	16.7	-5.9	1.0	4.5
Result from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	4.5	7.0	7.2	16.7	-5.9	1.0	4.5
Minority interest	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Net profit (reported)	4.5	7.0	7.1	16.7	-5.9	1.0	4.5
Average number of shares	29.9	29.9	29.9	29.9	29.9	29.9	29.9
EPS reported	0.15	0.24	0.24	0.56	-0.20	0.03	0.15

Profit and loss (common size)	2016	2017	2018	2019	2020E	2021E	2022E
Net sales	100.0 %						
Increase/decrease in finished goods and work-in-process	0.2 %	1.0 %	1.6 %	0.8 %	1.4 %	1.5 %	1.4 %
Total sales	100.2 %	101.0 %	101.6 %	100.8 %	101.4 %	101.5 %	101.4 %
Other operating income	2.3 %	2.2 %	1.5 %	11.7 %	3.5 %	3.2 %	3.0 %
Material expenses	54.0 %	53.8 %	54.8 %	51.6 %	47.5 %	48.2 %	49.9 %
Personnel expenses	25.5 %	25.4 %	25.1 %	30.8 %	34.8 %	31.6 %	29.3 %
Other operating expenses	15.1 %	15.3 %	15.0 %	15.6 %	17.7 %	15.0 %	13.6 %
Total operating expenses	92.3 %	92.2 %	93.5 %	86.4 %	96.5 %	91.6 %	89.7 %
EBITDA	7.9 %	8.8 %	8.1 %	14.4 %	5.0 %	9.9 %	11.7 %
Depreciation	4.9 %	4.6 %	3.7 %	5.8 %	9.1 %	7.7 %	7.0 %
EBITA	3.0 %	4.1 %	4.3 %	8.7 %	neg.	2.2 %	4.7 %
Amortisation of goodwill	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Amortisation of intangible assets	0.3 %	0.6 %	0.5 %	0.5 %	0.8 %	0.7 %	0.6 %
Impairment charges	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
EBIT (inc revaluation net)	2.7 %	3.6 %	3.8 %	8.2 %	neg.	1.5 %	4.1 %
Interest income	0.5 %	0.6 %	0.3 %	0.5 %	0.9 %	0.7 %	0.5 %
Interest expenses	1.2 %	0.8 %	0.8 %	1.2 %	2.0 %	1.7 %	1.5 %
Other financial result	0.0 %	0.0 %	0.0 %	0.3 %	0.4 %	0.3 %	0.3 %
Financial result	neg.						
Recurring pretax income from continuing operations	2.0 %	3.4 %	3.3 %	7.8 %	neg.	0.8 %	3.4 %
Extraordinary income/loss	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Earnings before taxes	2.0 %	3.4 %	3.3 %	7.8 %	neg.	0.8 %	3.4 %
Tax rate	4.0 %	18.2 %	23.1 %	4.9 %	27.0 %	27.0 %	27.0 %
Net income from continuing operations	1.9 %	2.8 %	2.5 %	7.4 %	neg.	0.6 %	2.5 %
Income from discontinued operations (net of tax)	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Net income	1.9 %	2.8 %	2.5 %	7.4 %	neg.	0.6 %	2.5 %
Minority interest	neg.	neg.	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Net profit (reported)	1.9 %	2.8 %	2.5 %	7.4 %	neg.	0.6 %	2.5 %

Source: Company data, Hauck & Aufhäuser

Balance sheet (EUR m)	2016	2017	2018	2019	2020E	2021E	2022E
Intangible assets	4.3	3.5	2.8	2.8	2.7	2.5	2.4
Property, plant and equipment	63.1	51.2	55.2	74.8	64.0	57.2	53.3
Financial assets	15.6	17.4	11.3	12.3	12.3	12.3	12.3
FIXED ASSETS	83.1	72.1	69.3	90.0	79.0	72.0	68.0
Inventories	37.7	41.8	41.5	37.1	35.3	41.6	46.1
Accounts receivable	25.1	27.5	44.3	40.2	30.9	30.5	33.9
Other current assets	3.0	2.8	13.7	30.6	30.6	30.6	30.6
Liquid assets	4.1	8.4	2.3	9.2	31.7	47.0	48.8
Deferred taxes	0.8	0.1	0.0	0.0	0.0	0.0	0.0
Deferred charges and prepaid expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CURRENT ASSETS	70.7	80.6	101.7	117.0	128.4	149.7	159.3
TOTAL ASSETS	153.8	152.7	171.1	207.0	207.4	221.7	227.4
SHAREHOLDERS EQUITY	51.9	56.8	65.5	76.7	78.7	91.7	96.2
MINORITY INTEREST	-0.1	-0.1	-0.2	0.0	0.0	0.0	0.0
Long-term debt	44.9	34.3	45.8	78.3	78.3	78.3	78.3
Provisions for pensions and similar obligations	1.8	1.7	1.5	1.9	1.9	1.9	1.9
Other provisions	7.6	7.4	9.2	11.1	11.1	11.1	11.1
Non-current liabilities	54.3	43.5	56.5	91.3	91.3	91.3	91.3
short-term liabilities to banks	19.7	27.0	27.0	21.4	21.4	21.4	21.4
Accounts payable	12.0	14.9	16.3	11.3	6.5	7.7	8.9
Advance payments received on orders	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities (incl. from lease and rental contracts)	14.0	9.7	6.0	6.2	9.5	9.5	9.5
Deferred taxes	1.9	0.9	0.0	0.0	0.0	0.0	0.0
Deferred income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current liabilities	47.7	52.6	49.2	39.0	37.4	38.7	39.8
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	153.8	152.7	171.1	207.0	207.4	221.7	227.4

Balance sheet (common size)	2016	2017	2018	2019	2020E	2021E	2022E
Intangible assets	2.8 %	2.3 %	1.6 %	1.4 %	1.3 %	1.1 %	1.0 %
Property, plant and equipment	41.0 %	33.5 %	32.3 %	36.2 %	30.9 %	25.8 %	23.5 %
Financial assets	10.2 %	11.4 %	6.6 %	6.0 %	5.9 %	5.6 %	5.4 %
FIXED ASSETS	54.0 %	47.2 %	40.5 %	43.5 %	38.1 %	32.5 %	29.9 %
Inventories	24.5 %	27.4 %	24.3 %	17.9 %	17.0 %	18.8 %	20.3 %
Accounts receivable	16.3 %	18.0 %	25.9 %	19.4 %	14.9 %	13.8 %	14.9 %
Other current assets	2.0 %	1.8 %	8.0 %	14.8 %	14.7 %	13.8 %	13.4 %
Liquid assets	2.7 %	5.5 %	1.3 %	4.4 %	15.3 %	21.2 %	21.4 %
Deferred taxes	0.5 %	0.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Deferred charges and prepaid expenses	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
CURRENT ASSETS	46.0 %	52.8 %	59.5 %	56.5 %	61.9 %	67.5 %	70.1 %
TOTAL ASSETS	100.0 %						
SHAREHOLDERS EQUITY	33.7 %	37.2 %	38.3 %	37.1 %	37.9 %	41.4 %	42.3 %
MINORITY INTEREST	neg.	neg.	neg.	0.0 %	0.0 %	0.0 %	0.0 %
Long-term debt	29.2 %	22.5 %	26.8 %	37.8 %	37.8 %	35.3 %	34.5 %
Provisions for pensions and similar obligations	1.2 %	1.1 %	0.9 %	0.9 %	0.9 %	0.9 %	0.9 %
Other provisions	4.9 %	4.9 %	5.4 %	5.3 %	5.3 %	5.0 %	4.9 %
Non-current liabilities	35.3 %	28.5 %	33.0 %	44.1 %	44.0 %	41.2 %	40.2 %
short-term liabilities to banks	12.8 %	17.7 %	15.8 %	10.3 %	10.3 %	9.7 %	9.4 %
Accounts payable	7.8 %	9.8 %	9.5 %	5.5 %	3.1 %	3.5 %	3.9 %
Advance payments received on orders	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Other liabilities (incl. from lease and rental contracts)	9.1 %	6.4 %	3.5 %	3.0 %	4.6 %	4.3 %	4.2 %
Deferred taxes	1.3 %	0.6 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Deferred income	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Current liabilities	31.0 %	34.4 %	28.8 %	18.8 %	18.0 %	17.4 %	17.5 %
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	100.0 %						

Source: Company data, Hauck & Aufhäuser

Cash flow statement (EUR m)	2016	2017	2018	2019	2020E	2021E	2022E
Net profit/loss	4.5	7.0	7.2	16.7	-5.9	1.0	4.5
Depreciation of fixed assets (incl. leases)	11.7	11.7	10.6	13.0	12.8	12.8	12.8
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.7	1.4	1.4	1.2	1.2	1.2	1.2
Others	-5.2	-10.4	-3.0	-28.4	0.0	0.0	0.0
Cash flow from operations before changes in w/c	11.7	9.6	16.2	2.5	8.1	15.0	18.5
Increase/decrease in inventory	2.1	-4.2	0.4	4.4	1.9	-6.3	-4.6
Increase/decrease in accounts receivable	0.4	-2.4	-16.8	4.1	9.3	0.4	-3.3
Increase/decrease in accounts payable	-7.1	2.9	1.3	-5.0	-4.8	1.3	1.1
Increase/decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase/decrease in working capital	-4.6	-3.7	-15.1	3.5	6.3	-4.7	-6.7
Cash flow from operating activities	7.2	5.9	1.1	6.0	14.4	10.3	11.8
CAPEX	8.1	7.1	12.1	13.0	3.0	7.0	10.0
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	1.0	8.1	-0.3	19.0	12.0	12.0	0.0
Cash flow from investing activities	-7.5	1.0	-12.4	6.0	9.0	5.0	-10.0
Cash flow before financing	-0.3	6.9	-11.3	11.9	23.4	15.3	1.8
Increase/decrease in debt position	12.7	-3.4	11.5	27.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.9	2.7	0.9	0.0	0.0
Others	-13.1	0.7	-4.8	-33.7	0.0	0.0	0.0
Effects of exchange rate changes on cash	0.0	0.0	-0.6	4.4	0.0	0.0	0.0
Cash flow from financing activities	-0.4	-2.7	5.8	-9.4	-0.9	0.0	0.0
Increase/decrease in liquid assets	-0.8	4.2	-6.1	6.9	22.5	15.3	1.8
Liquid assets at end of period	4.1	8.4	2.3	9.2	31.7	47.0	48.8

Source: Company data, Hauck & Aufhäuser

Key ratios (EUR m)	2016	2017	2018	2019	2020E	2021E	2022E
P&L growth analysis							
Sales growth	-13.5 %	5.5 %	12.8 %	-19.9 %	-37.7 %	17.9 %	10.9 %
EBITDA growth	-10.6 %	17.3 %	3.6 %	43.2 %	-69.3 %	-49.5 %	207.1 %
EBIT growth	-30.1 %	41.1 %	20.4 %	71.0 %	-164.8 %	-86.5 %	-207.1 %
EPS growth	29.3 %	55.2 %	1.7 %	133.8 %	-182.8 %	-93.9 %	-176.5 %
Efficiency							
Total operating costs / sales	92.3 %	92.2 %	93.5 %	86.4 %	96.5 %	91.6 %	89.7 %
Sales per employee	207.6	208.2	216.8	168.3	104.8	123.6	137.2
EBITDA per employee	16.4	18.3	17.5	24.3	5.2	12.3	16.0
Balance sheet analysis							
Avg. working capital / sales	20.4 %	21.0 %	21.9 %	29.9 %	45.8 %	39.2 %	35.4 %
Inventory turnover (sales/inventory)	6.3	6.0	6.8	6.1	4.0	4.0	4.0
Trade debtors in days of sales	38.5	40.1	57.1	64.8	80.0	67.0	67.0
A/P turnover [(A/P*365)/sales]	34.2	40.5	38.3	35.3	35.3	35.3	35.3
Cash conversion cycle (days)	111.5	112.9	116.5	145.4	236.8	221.2	214.7
Cash flow analysis							
Free cash flow	-0.9	-1.2	-11.0	-7.0	11.4	3.3	1.8
Free cash flow/sales	-0.4 %	-0.5 %	-3.9 %	-3.1 %	8.1 %	2.0 %	1.0 %
FCF / net profit	neg.	neg.	neg.	neg.	neg.	325.5 %	39.1 %
Capex / depre	68.3 %	54.5 %	101.0 %	91.7 %	21.5 %	50.1 %	71.5 %
Capex / maintenance capex	72.8 %	71.0 %	134.5 %	131.7 %	94.8 %	122.2 %	128.4 %
Capex / sales	3.6 %	2.8 %	4.3 %	5.8 %	2.1 %	4.2 %	5.4 %
Security							
Net debt	60.5	52.9	70.5	90.6	68.1	52.8	51.0
Net Debt/EBITDA	3.2	2.4	3.1	2.8	9.7	3.2	2.4
Net debt / equity	1.2	0.9	1.1	1.2	0.9	0.6	0.5
Interest cover	2.2	4.3	4.5	7.0	0.0	0.9	2.7
Dividend payout ratio	0.0 %	12.8 %	37.6 %	5.4 %	0.0 %	0.0 %	0.0 %
Asset utilisation							
Capital employed turnover	1.9	2.0	1.9	1.2	0.7	0.8	0.9
Operating assets turnover	2.1	2.4	2.3	1.6	1.1	1.4	1.5
Plant turnover	3.8	4.9	5.1	3.0	2.2	2.9	3.5
Inventory turnover (sales/inventory)	6.3	6.0	6.8	6.1	4.0	4.0	4.0
Returns							
ROCE	5.3 %	7.1 %	7.8 %	10.9 %	-4.1 %	1.3 %	3.7 %
ROE	8.7 %	12.4 %	10.9 %	21.8 %	-7.5 %	1.1 %	4.7 %
Other							
Interest paid / avg. debt	4.9 %	3.3 %	3.6 %	3.1 %	3.2 %	2.8 %	2.8 %
No. employees (average)	1144	1204	1304	1345	1345	1345	1345
Number of shares	29.9	29.9	29.9	29.9	29.9	29.9	29.9
DPS	0.0	0.0	0.1	0.0	0.0	0.0	0.0
EPS reported	0.15	0.24	0.24	0.56	-0.20	0.03	0.15
Valuation ratios							
P/BV	0.7	0.7	0.6	0.5	0.5	0.4	0.4
EV/sales	0.4	0.4	0.4	0.6	0.8	0.6	0.5
EV/EBITDA	5.3	4.2	4.8	4.0	15.4	5.6	4.2
EV/EBITA	14.2	8.9	9.0	6.6	-18.5	25.3	10.5
EV/EBIT	15.8	10.3	10.2	7.1	-15.4	37.1	12.1
EV/FCF	-109.2	-77.4	-10.0	-18.6	9.5	27.9	51.4
Adjusted FCF yield	11.8 %	15.2 %	12.4 %	19.6 %	7.5 %	13.9 %	16.3 %
Dividend yield	0.0 %	2.4 %	7.1 %	2.4 %	0.0 %	0.0 %	0.0 %

Source: Company data, Hauck & Aufhäuser

Disclosures regarding research publications of Hauck & Aufhäuser Privatbankiers AG pursuant to section 85 of the German Securities Trading Act (WpHG) and distributed in the UK under an EEA branch passport, subject to the FCA requirements on research recommendation disclosures

It is essential that any research recommendation is fairly presented and discloses interests of indicates relevant conflicts of interest. Pursuant to section 85 of the German Securities Trading Act (WpHG) a research report has to point out possible conflicts of interest in connection with the analysed company. Further to this, under the FCA’s rules on research recommendations, any conflicts of interest in connection with the recommendation must be disclosed. A conflict of interest is presumed to exist in particular if Hauck & Aufhäuser Privatbankiers AG

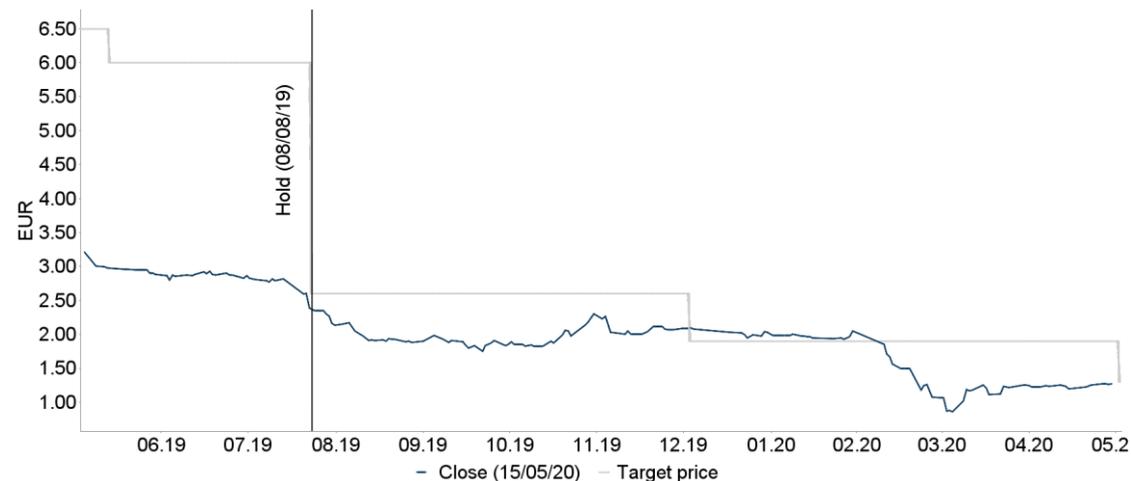
- (1) or any other person belonging to the same group with that person (as part of a consortium) within the past twelve months, acquired the financial instruments of the analysed company,
- (2) or any other person belonging to the same group with that person has entered into an agreement on the production of the research report with the analysed company,
- (3) has, within the past twelve months, been party to an agreement on the provision of investment banking services with the analysed company or have received services or a promise of services under the term of such an agreement,
- (4) holds a) 5% or more of the share capital of the analysed company, or b) the analysed company holds 5% or more of the share capital of Hauck & Aufhäuser Privatbankiers AG or its affiliate(s),
- (5) holds a net long (a) or a net short (b) position of 0.5% of the outstanding share capital of the analysed company or derivatives thereof,
- (6) or any other person belonging to the same group with that person is a market maker or liquidity provider in the financial instruments of the issuer,
- (7) or the analyst has any other significant financial interests relating to the analysed company such as, for example, exercising mandates in the interest of the analysed company or a significant conflict of interest with respect to the issuer,
- (8) The research report has been made available to the company prior to its publication. Thereafter, only factual changes have been made to the report.

Conflicts of interest that existed at the time when this research report was published:

Company	Disclosure
MS Industrie AG	6

Historical target price and rating changes for MS Industrie AG in the last 12 months

Price and Rating History Initiation coverage
12-March-13
MS Industrie AG as of 18/05/20



Company	Date	Analyst	Rating	Target price	Close
MS Industrie AG	20.12.2019	Glowa, Christian	Hold	EUR 1,90	EUR 2,08
	09.08.2019	Glowa, Christian	Hold	EUR 2,60	EUR 2,35
	31.05.2019	Glowa, Christian	Buy	EUR 6,00	EUR 2,97

Hauck & Aufhäuser distribution of ratings and in proportion to investment banking services

Buy	68.15 %	79.17 %
Sell	10.37 %	0.00 %
Hold	21.48 %	20.83 %

Date of publication creation: 18/05/2020 06:11 PM

Date of publication dissemination: 19/05/2020 08:03 AM

1. General Information/Liabilities

This research report has been produced for the information purposes of institutional investors only, and is not in any way a personal recommendation, offer or solicitation to buy or sell the financial instruments mentioned herein. The document is confidential and is made available by Hauck & Aufhäuser Privatbankiers AG, exclusively to selected recipients [in DE, GB, FR, CH, US, UK, Scandinavia, and Benelux or, in individual cases, also in other countries]. A distribution to private investors in the sense of the German Securities Trading Act (WpHG) is excluded. It is not allowed to pass the research report on to persons other than the intended recipient without the permission of Hauck & Aufhäuser Privatbankiers AG. Reproduction of this document, in whole or in part, is not permitted without prior permission Hauck & Aufhäuser Privatbankiers AG. All rights reserved.

Under no circumstances shall Hauck & Aufhäuser Privatbankiers AG, any of its employees involved in the preparation, have any liability for possible errors or incompleteness of the information included in this research report – neither in relation to indirect or direct nor consequential damages. Liability for damages arising either directly or as a consequence of the use of information, opinions and estimates is also excluded. Past performance of a financial instrument is not necessarily indicative of future performance.

2. Responsibilities

This research report was prepared by the research analyst named on the front page (the "Producer"). The Producer is solely responsible for the views and estimates expressed in this report. The report has been prepared independently. The content of the research report was not influenced by the issuer of the analysed financial instrument at any time. It may be possible that parts of the research report were handed out to the issuer for information purposes prior to the publication without any major amendments being made thereafter.

3. Organisational Requirements

Hauck & Aufhäuser Privatbankiers AG took internal organisational and regulative precautions to avoid or accordingly disclose possible conflicts of interest in connection with the preparation and distribution of the research report. All members of Hauck & Aufhäuser Privatbankiers AG involved in the preparation of the research report are subject to internal compliance regulations. No part of the Producer's compensation is directly or indirectly related to the preparation of this financial analysis. In case a research analyst or a closely related person is confronted with a conflict of interest, the research analyst is restricted from covering this company.

4. Information Concerning the Methods of Valuation/Update

The determination of the fair value per share, i.e. the price target, and the resultant rating is done on the basis of the adjusted free cash flow (adj. FCF) method and on the basis of the discounted cash flow – DCF model. Furthermore, a peer group comparison is made.

The adj. FCF method is based on the assumption that investors purchase assets only at a price (enterprise value) at which the operating cash flow return after taxes on this investment exceeds their opportunity costs in the form of a hurdle rate of 7.5%. The operating cash flow is calculated as EBITDA less maintenance capex and taxes.

Within the framework of the DCF approach, the future free cash flows are calculated initially on the basis of a fictitious capital structure of 100% equity, i.e. interest and repayments on debt capital are not factored in initially. The adjustment towards the actual capital structure is done by discounting the calculated free cash flows with the weighted average cost of capital (WACC), which takes into account both the cost of equity capital and the cost of debt. After discounting, the calculated total enterprise value is reduced by the interest-bearing debt capital in order to arrive at the equity value.

Hauck & Aufhäuser Privatbankiers AG uses the following three-step rating system for the analysed companies:

Buy: Sustainable upside potential of more than 10% within 12 months
Sell: Sustainable downside potential of more than 10% within 12 months.
Hold: Upside/downside potential is limited. No immediate catalyst visible.

NB: The ratings of Hauck & Aufhäuser Privatbankiers AG are not based on a performance that is expected to be "relative" to the market.

The decision on the choice of the financial instruments analysed in this document was solely made by Hauck & Aufhäuser Privatbankiers AG. The opinions and estimates in this research report are subject to change without notice. It is within the discretion of Hauck & Aufhäuser Privatbankiers AG whether and when it publishes an update to this research report, but in general updates are created on a regular basis, after 6 months at the latest. A sensitivity analysis is included and published in company's initial studies.

5. Major Sources of Information

Part of the information required for this research report was made available by the issuer of the financial instrument. Furthermore, this report is based on publicly available sources (such as, for example, Bloomberg, Reuters, VWD-Trader and the relevant daily press) believed to be reliable. Hauck & Aufhäuser Privatbankiers AG has checked the information for plausibility but not for accuracy or completeness.

6. Competent Supervisory Authority

Hauck & Aufhäuser Privatbankiers AG are under supervision of the BaFin – German Federal Financial Supervisory Authority Bundesanstalt für Finanzdienstleistungsaufsicht), Graurheindorfer Straße 108, 53117 Bonn and Marie-Curie-Straße 24 – 28, 60439 Frankfurt a.M.

This document is distributed in the UK under a MiFID EEA branch passport and in compliance with the applicable FCA requirements.

7. Specific Comments for Recipients Outside of Germany

This research report is subject to the law of the Federal Republic of Germany. The distribution of this information to other states in particular to the USA, Canada, Australia and Japan may be restricted or prohibited by the laws applicable within this state.

8. Miscellaneous

According to Article 4(1) No. i of the delegated regulation 2016/958 supplementing regulation 596/2014 of the European Parliament, further information regarding investment recommendations of the last 12 months are published under:
<https://www.hauck-aufhaeuser.com/en/investment-banking/equities#institutionalresearch>

Disclosures for U.S. persons only

This research report is a product of HAUCK & AUFHÄUSER PRIVATBANKIERS AG, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by HAUCK & AUFHÄUSER PRIVATBANKIERS AG, only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, HAUCK & AUFHÄUSER PRIVATBANKIERS AG, has entered into an agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo"). Transactions in securities discussed in this research report should be effected through Marco Polo or another U.S. registered broker dealer.

Contacts: Hauck & Aufhäuser Privatbankiers AG

Hauck & Aufhäuser Research

Hauck & Aufhäuser
Privatbankiers AG
Mittelweg 16/17
20148 Hamburg
Germany

Tel.: +49 (0) 40 414 3885 91
Fax: +49 (0) 40 414 3885 71
Email: research@ha-ib.de
www.ha-research.de

Tim Wunderlich, CFA
Head of Transactional Research
Tel.: +49 40 414 3885 81
E-Mail: tim.wunderlich@ha-ib.de

Henning Breiter
Head of Research
Tel.: +49 40 414 3885 73
E-Mail: henning.breiter@ha-ib.de

Marie-Thérèse Grübner
Head of Corporate Brokerage
Tel.: +49 40 450 6342 3097
E-Mail: marie-therese.gruebner@ha-ib.de

Aliaksandr Halitsa
Analyst
Tel.: +49 40 414 3885 83
E-Mail: aliaksandr.halitsa@ha-ib.de

Alina Köhler
Analyst
Tel.: +49 40 450 6342 3095
E-Mail: alina.koehler@ha-ib.de

Catharina Claes
Analyst
Tel.: +49 40 450 6342 3092
E-Mail: catharina.claes@ha-ib.de

Christian Glowa
Analyst
Tel.: +49 40 414 3885 95
E-Mail: christian.glowa@ha-ib.de

Christian Salis
Analyst
Tel.: +49 40 414 3885 96
E-Mail: christian.salis@ha-ib.de

Christian Sandherr
Analyst
Tel.: +49 40 414 3885 79
E-Mail: christian.sandherr@ha-ib.de

Frederik Bitter
Analyst
Tel.: +49 40 450 6342 3091
E-Mail: frederik.bitter@ha-ib.de

Frederik Jarchow
Analyst
Tel.: +49 40 414 3885 76
E-Mail: frederik.jarchow@ha-ib.de

Julius Stinauer
Analyst
Tel.: +49 40 414 3885 84
E-Mail: julius.stinauer@ha-ib.de

Simon Bentlage
Analyst
Tel.: +49 40 450 6342 3096
E-Mail: simon.bentlage@ha-ib.de

Hauck & Aufhäuser Sales

Alexander Lachmann
Equity Sales
Tel.: +41 43 497 30 23
E-Mail: alexander.lachmann@ha-ib.de

Carlos Becke
Equity Sales
Tel.: +44 203 9473 245
E-Mail: carlos.becke@ha-ib.de

Markus Scharhag
Equity Sales
Tel.: +49 89 23 93 2813
E-Mail: markus.scharhag@ha-ib.de

Christian Schwenkenbecher
Equity Sales
Tel.: +44 203 9473 246
E-Mail: christian.schwenkenbecher@ha-ib.de

Christian Bybjerg
Equity Sales
Tel.: +49 414 3885 74
E-Mail: christian.bybjerg@ha-ib.de

Hugues Madelin
Equity Sales
Tel.: +33 1 78 41 40 62
E-Mail: hugues.madelin@ha-ib.de

Vincent Bischoff
Equity Sales
Tel.: +49 40 414 3885 88
E-Mail: vincent.bischoff@ha-ib.de

Imogen Voorspuy
Equity Junior Sales
Tel.: +44 203 9473 244
E-Mail: imogen.voorspuy@ha-ib.de

Hauck & Aufhäuser Sales Trading

Hauck & Aufhäuser
Privatbankiers AG
Mittelweg 16/17
20148 Hamburg
Germany

Tel.: +49 40 414 3885 78
Fax: +49 40 414 3885 71
Email: info@hauck-aufhaeuser.com
www.hauck-aufhaeuser.com

Christian von Schuler
Trading
Tel.: +49 40 414 3885 77
E-Mail: christian.schuler@hauck-aufhaeuser.com

Fin Schaffer
Trading
Tel.: +49 40 414 3885 98
E-Mail: fin.schaffer@hauck-aufhaeuser.com

Kathleen Jonas
Middle-Office
Tel.: +49 40 414 3885 97
E-Mail: kathleen.jonas@hauck-aufhaeuser.com

Alexander Hanisch
Middle-Office
Tel.: +49 40 414 3885 87
E-Mail: alexander.hanisch@hauck-aufhaeuser.com

Carolin Heidrich
Middle-Office
Tel.: +49 176 10 59 41 52
E-Mail: carolin.heidrich@hauck-aufhaeuser.com