

Hold EUR 4.30 Price EUR 3.56 Upside 20.8 %	Value Indicators: EUR DCF: 4.30	Warburg ESG Risk Score: 1.8 ESG Score (MSCI based): 3.0 Balance Sheet Score: 2.5 Market Liquidity Score: 0.0	Description: Producer of implants to mend broken bones
	Market Snapshot: EUR m Market cap: 17.3 No. of shares (m): 4.9 EV: 22.5 Freefloat MC: 9.2 Ø Trad. Vol. (30d): 16.30 th	Shareholders: Freefloat 53.3 % Ratio Capital Management B.V. 15.0 % Noes Beheer B.V. 10.3 % Axxion S.A. 9.9 % Juergen Krebs 8.3 %	Key Figures (WRe): 2021e Beta: 1.4 Price / Book: 1.3 x Equity Ratio: 58 %

Strong end to the year and promising 2022 outlook

aap Implantate published solid Q4 preliminary figures, showing sound growth across the board.

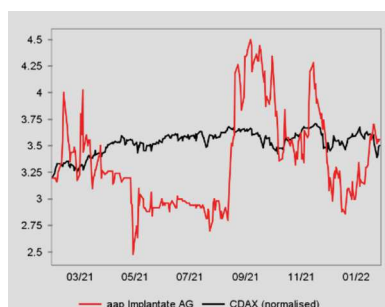
Sales rose by 34% yoy to EUR 3.2m in Q4 (WRe: EUR 3.0m), which was ahead of expectations and represented a re-acceleration compared to Q3 (15% yoy). This was driven by double-digit growth across all regions, particularly in EMEA. Here, sales growth of 50% yoy was driven by a revival of business in the Middle East and a sharp recovery in South Africa, where pre-COVID levels have almost been reached again. At the same time, North America remained dynamic, growing by 24% yoy in Q4 particularly on the back of contracts concluded with US-wide purchasing associations and networks, providing access to a large number of clinics and surgical operation centers. With that, aap reached its FY 21 guidance of around EUR 12m revenue (WRe: EUR 12.2m). While profitability has not yet been disclosed, the sound top-line development should have led to a significant EBITDA improvement in Q4 and aap should have reached the upper end of its FY 21 EBITDA guidance of EUR -2.0m to EUR -0.7m (WRe: EUR -1.1m).

The company also provided a 2022 outlook and is expecting sales of EUR 14-16m (WRe: EUR 15.6m), which implies c. 28% growth yoy. EBITDA is expected at EUR -0.5m to -1.7m (WRe: EUR -0.8m), which is slightly below our estimate due to costs related to the development of the promising silver coating technology (i.e. clinical study). Adjusted for these costs, EBITDA should be in positive territory in 2022 as the company's restructuring and repositioning should continue to bear fruit. The further improvement in EBITDA should be driven by the planned sales growth and further efficiency improvements to be realized.

Meanwhile, following the successful capital increase in 2021, aap should have sufficient firepower to pursue its growth path in its trauma business and the innovative silver coating technology, which has shown promising clinical data. It has recorded excellent healing processes and no indications of infections. The company has already started to invest in sales structures, particularly in North America and Germany.

Overall, sound Q4 preliminary results show the ongoing success of restructuring measures in the past two years as well as a solid recovery post COVID. aap should continue to capitalize on the recovery post COVID as mobility is set to increase again following the reopening. Final Q4 results will be published on March 31. We confirm our Hold rating, PT EUR 4.30.

Changes in Estimates:							Comment on Changes:	
FY End: 31.12. in EUR m	2021e (old)	+ / -	2022e (old)	+ / -	2023e (old)	+ / -		
Sales	12.0	1.7 %	15.4	1.2 %	17.5	1.3 %	<ul style="list-style-type: none"> Sales estimates are slightly lifted to reflect the better-than-expected sales development in Q4 Slight reduction in EBITDA estimates for 2022 due to costs related to the clinical study in silver coating 	
EBITDA	-1.1	n.m.	-0.2	n.m.	1.2	1.7 %		
EPS	-0.58	n.m.	-0.28	n.m.	-0.02	0.0 %		

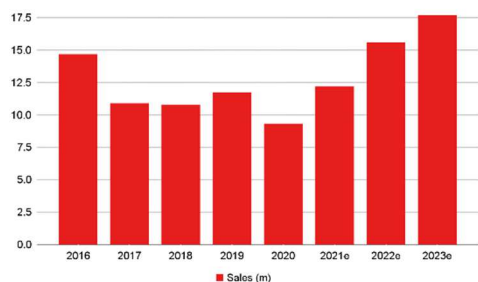


Rel. Performance vs CDAX:	
1 month:	15.7 %
6 months:	20.9 %
Year to date:	21.2 %
Trailing 12 months:	5.6 %

Company events:	
31.03.22	FY 2021
12.08.22	Q2

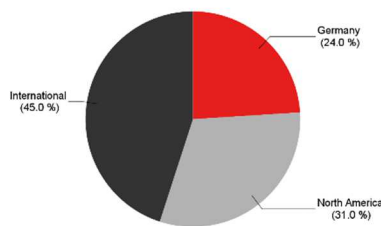
FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023e
Sales	23.8 %	10.9	10.8	11.7	9.3	12.2	15.6	17.7
Change Sales yoy		-25.8 %	-1.1 %	8.9 %	-20.6 %	30.8 %	27.9 %	13.5 %
EBITDA	-	-6.2	-6.4	-5.1	-4.8	-1.1	-0.8	1.2
Margin		-57.0 %	-59.5 %	-43.8 %	-51.1 %	-8.8 %	-5.0 %	6.7 %
EBITDA adj.		-6.2	-6.4	-5.1	-3.4	-1.6	-0.8	1.2
Margin		-57.0 %	-59.5 %	-43.8 %	-36.3 %	-12.9 %	-5.0 %	6.7 %
EBIT	-	-8.0	-8.1	-19.8	-7.9	-2.4	-1.7	0.3
Margin		-73.3 %	-75.5 %	-168.4 %	-84.6 %	-19.6 %	-10.6 %	1.5 %
Net income	-	-8.9	-7.8	-19.5	-8.8	-2.8	-2.0	-0.1
EPS	-	-0.31	-0.27	-0.61	-2.74	-0.57	-0.41	-0.02
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		-0.26	-0.31	-0.23	-1.28	-0.71	-0.82	-0.23
FCF / Market cap		-1.8 %	-1.8 %	-2.7 %	-31.9 %	-20.1 %	-22.9 %	-6.5 %
EV / Sales		36.4 x	44.7 x	23.1 x	1.8 x	1.5 x	1.4 x	1.3 x
EV / EBITDA		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19.8 x
EV / EBIT		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	86.3 x
P / E		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield		-1.9 %	-1.7 %	-7.1 %	-46.5 %	-6.6 %	-5.1 %	3.0 %
Net Debt		-12.2	-3.9	-0.6	4.1	1.2	5.1	6.3
ROCE (NOPAT)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.1 %
Guidance:	Sales EUR 14 - 16m, upper half of EBITDA range EUR -1.7 to -0.5m							

Sales development
in EUR m



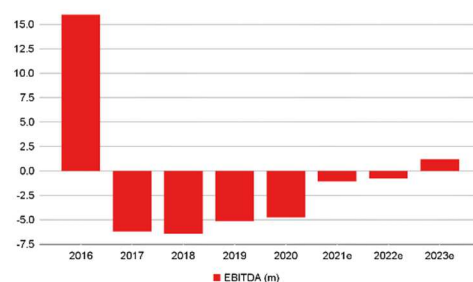
Source: Warburg Research

Sales by regions
2020; in %



Source: Warburg Research

EBITDA development
in EUR m



Source: Warburg Research

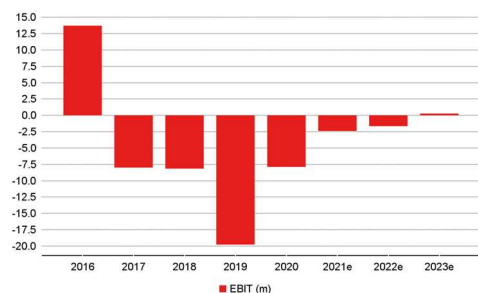
Company Background

- aap Implantate AG develops, produces and sells medical implants, which are primarily used in orthopaedics to mend fractures.
- aap Implantate AG was founded in 1990 as an MBO from the Johnson & Johnson Group and is headquartered in Berlin.
- The company covers the entire value chain and sells the products worldwide with a focus on established markets such as Germany, North America as well as further European countries.
- The products are sold by direct sale, by international sales partners or OEM partnerships.
- Also addressed are so-called "Global Partners", larger companies interested in an agreement to distribute aap's current products (and, if approved, the silver coating technology) via their sales channels.

Competitive Quality

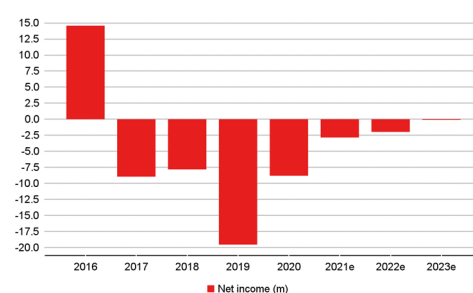
- aap Implantate AG has developed a patent protected anatomical plating system (LOQTEQ), which provides significant improvements for surgeons, hospitals and clinics as well as patients.
- Additionally, aap Implantate AG has a promising development pipeline with an antibacterial silver coating for the implants as well as coated magnesium implants.

EBIT development
in EUR m



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	
Sales	12.2	15.6	17.7	19.9	22.2	24.5	26.9	29.1	31.1	32.9	34.2	35.3	36.3	2.5 %
Sales change	30.8 %	27.9 %	13.5 %	12.5 %	11.4 %	10.6 %	9.6 %	8.3 %	6.8 %	5.8 %	4.2 %	3.0 %	3.0 %	
EBIT	-2.4	-1.7	0.3	1.4	2.9	3.4	3.8	4.1	4.4	4.6	4.6	4.6	4.5	12.5 %
EBIT-margin	-19.6 %	-10.6 %	1.5 %	7.0 %	13.0 %	14.0 %	14.0 %	14.0 %	14.0 %	14.0 %	13.5 %	13.0 %	12.5 %	
Tax rate (EBT)	3.4 %	4.8 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	3.3
NOPAT	-2.3	-1.6	0.2	1.0	2.1	2.5	2.7	2.9	3.1	3.3	3.3	3.3	3.3	
Depreciation	1.3	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.1	1.1	3.0 %
in % of Sales	10.8 %	5.6 %	5.2 %	4.8 %	4.4 %	4.0 %	3.6 %	3.2 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
Changes in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
Change in Liquidity from														
- Working Capital	1.7	2.4	1.4	0.9	0.9	0.8	0.6	0.4	0.2	-0.4	-0.7	-1.0	-1.0	19
- Capex	0.3	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.1	1.1	
Capex in % of Sales	2.3 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	74.76 %
- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-3.0	-3.6	-0.8	0.4	1.5	1.9	2.2	2.6	3.0	3.7	4.0	4.3	4.3	51.11 %
PV of FCF	-2.8	-3.1	-0.7	0.3	1.0	1.2	1.3	1.4	1.4	1.6	1.7	1.6	1.5	
share of PVs	-25.88 %													74.76 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	15.00 %	Financial Strength	1.70
Cost of debt (after tax)	5.8 %	Liquidity (share)	1.70
Market return	7.00 %	Cyclicality	1.00
Risk free rate	1.50 %	Transparency	1.20
		Others	1.40
WACC	8.68 %	Beta	1.40

Valuation (m)

Present values 2033e	6		
Terminal Value	19		
Financial liabilities	5		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	1	No. of shares (m)	5.0
Equity Value	21	Value per share (EUR)	4.30

Sensitivity Value per Share (EUR)

		Terminal Growth									Delta EBIT-margin						
Beta	WACC	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.61	9.7 %	2.94	3.03	3.12	3.22	3.33	3.44	3.56	1.61	9.7 %	2.48	2.73	2.97	3.22	3.47	3.72	3.96
1.51	9.2 %	3.38	3.49	3.60	3.72	3.85	3.99	4.14	1.51	9.2 %	2.92	3.19	3.45	3.72	3.99	4.26	4.52
1.45	8.9 %	3.63	3.74	3.87	4.00	4.15	4.30	4.47	1.45	8.9 %	3.17	3.44	3.72	4.00	4.28	4.56	4.84
1.40	8.7 %	3.89	4.02	4.16	4.30	4.47	4.64	4.83	1.40	8.7 %	3.43	3.72	4.01	4.30	4.59	4.89	5.18
1.35	8.4 %	4.17	4.32	4.47	4.63	4.82	5.01	5.23	1.35	8.4 %	3.72	4.03	4.33	4.63	4.94	5.24	5.55
1.29	8.2 %	4.48	4.64	4.81	4.99	5.20	5.42	5.67	1.29	8.2 %	4.04	4.36	4.68	4.99	5.31	5.63	5.95
1.19	7.7 %	5.17	5.37	5.58	5.82	6.08	6.37	6.69	1.19	7.7 %	4.77	5.12	5.47	5.82	6.17	6.52	6.87

- Strong double-digit mid-term growth reflects vast growth potential of patent-protected plating system (LOQTEQ)
- EBITDA margin is expected to reach mid-term target of 20% in 2026e, translating into an EBIT margin of 14%
- Elevated working capital is expected to normalise to 35% in the long-term

Valuation	2017	2018	2019	2020	2021e	2022e	2023e
Price / Book	9.6 x	13.9 x	14.4 x	1.2 x	1.3 x	1.4 x	1.4 x
Book value per share ex intangibles	1.07	0.75	0.46	2.28	2.25	1.96	2.00
EV / Sales	36.4 x	44.7 x	23.1 x	1.8 x	1.5 x	1.4 x	1.3 x
EV / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	19.8 x
EV / EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	86.3 x
EV / EBIT adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	86.3 x
P / FCF	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
P / E	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
P / E adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	-1.9 %	-1.7 %	-7.1 %	-46.5 %	-6.6 %	-5.1 %	3.0 %
*Adjustments made for: -							

Consolidated profit & loss

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Sales	10.9	10.8	11.7	9.3	12.2	15.6	17.7
Change Sales yoy	-25.8 %	-1.1 %	8.9 %	-20.6 %	30.8 %	27.9 %	13.5 %
Increase / decrease in inventory	-0.5	0.0	0.0	-0.5	0.0	0.0	0.0
Own work capitalised	1.3	1.9	1.2	0.1	0.0	0.0	0.0
Total Sales	11.7	12.6	13.0	9.0	12.2	15.6	17.7
Material expenses	1.9	2.3	2.4	1.0	1.7	2.0	1.8
Gross profit	9.8	10.3	10.6	8.0	10.5	13.6	15.9
Gross profit margin	89.9 %	95.5 %	90.3 %	85.3 %	86.0 %	87.0 %	90.0 %
Personnel expenses	7.4	7.8	8.2	6.5	6.5	8.0	8.5
Other operating income	0.8	0.5	1.2	1.0	0.9	0.9	1.0
Other operating expenses	9.4	9.4	8.8	7.2	6.0	7.3	7.3
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	-6.2	-6.4	-5.1	-4.8	-1.1	-0.8	1.2
Margin	-57.0 %	-59.5 %	-43.8 %	-51.1 %	-8.8 %	-5.0 %	6.7 %
Depreciation of fixed assets	1.2	1.1	13.1	3.1	1.0	0.6	0.6
EBITA	-7.4	-7.5	-18.2	-7.8	-2.1	-1.4	0.6
Amortisation of intangible assets	0.6	0.7	1.5	0.0	0.3	0.3	0.3
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	-8.0	-8.1	-19.8	-7.9	-2.4	-1.7	0.3
Margin	-73.3 %	-75.5 %	-168.4 %	-84.6 %	-19.6 %	-10.6 %	1.5 %
EBIT adj.	-8.0	-8.1	-19.8	-7.9	-2.4	-1.7	0.3
Interest income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.0	0.0	0.5	0.3	0.6	0.4	0.4
Other financial income (loss)	-1.3	0.5	0.2	-0.6	0.0	0.0	0.0
EBT	-9.3	-7.7	-20.0	-8.8	-2.9	-2.1	-0.1
Margin	-85.3 %	-71.0 %	-170.7 %	-94.5 %	-24.1 %	-13.3 %	-0.8 %
Total taxes	0.0	0.0	-0.6	0.1	-0.1	-0.1	0.0
Net income from continuing operations	-9.3	-7.6	-19.4	-8.9	-2.8	-2.0	-0.1
Income from discontinued operations (net of tax)	0.3	-0.2	-0.1	0.1	0.0	0.0	0.0
Net income before minorities	-8.9	-7.8	-19.5	-8.8	-2.8	-2.0	-0.1
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	-8.9	-7.8	-19.5	-8.8	-2.8	-2.0	-0.1
Margin	-82.0 %	-72.5 %	-166.3 %	-94.3 %	-23.3 %	-12.6 %	-0.6 %
Number of shares, average	28.6	28.7	32.1	3.2	5.0	4.9	4.9
EPS	-0.31	-0.27	-0.61	-2.74	-0.57	-0.41	-0.02
EPS adj.	-0.31	-0.27	-0.61	-2.74	-0.57	-0.41	-0.02

*Adjustments made for:

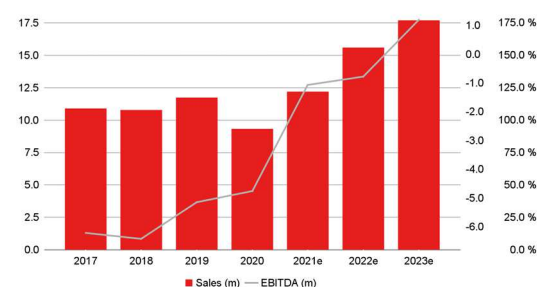
Guidance: Sales EUR 14 - 16m, upper half of EBITDA range EUR -1.7 to -0.5m

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	164.0 %	176.8 %	154.6 %	147.1 %	108.8 %	105.0 %	93.3 %
Operating Leverage	n.a.	-1.7 x	16.1 x	2.9 x	-2.3 x	-1.1 x	n.a.
EBITDA / Interest expenses	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.	2.8 x
Tax rate (EBT)	0.3 %	0.2 %	3.0 %	-1.4 %	3.4 %	4.8 %	28.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	75,186	74,352	80,959	91,882	120,197	153,695	174,384

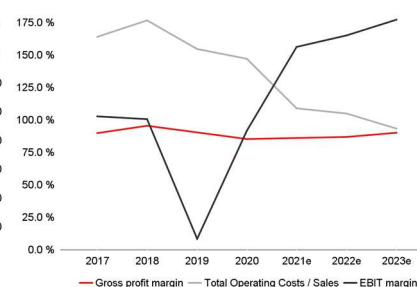
Sales, EBITDA

in EUR m

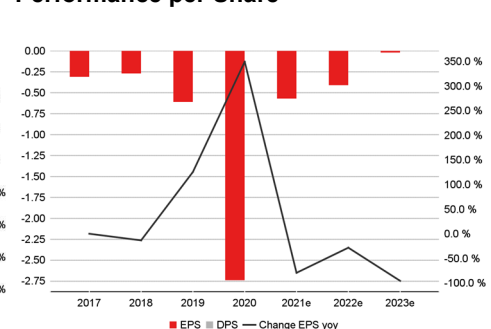


Operating Performance

in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

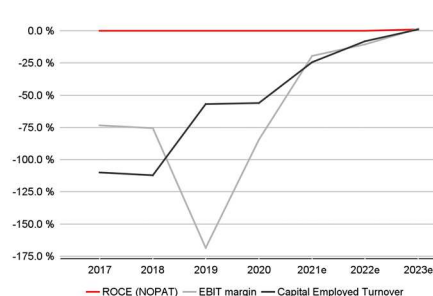
Consolidated balance sheet

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Assets							
Goodwill and other intangible assets	11.8	13.3	4.1	3.0	2.5	2.5	2.5
thereof other intangible assets	0.1	0.2	0.1	0.0	0.0	0.0	0.0
thereof Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property, plant and equipment	7.2	6.9	6.2	4.3	3.5	3.4	3.3
Financial assets	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Other long-term assets	1.1	0.6	0.4	0.4	0.4	0.4	0.4
Fixed assets	20.3	20.9	10.7	7.7	6.5	6.4	6.3
Inventories	9.6	9.6	7.7	7.0	9.1	11.6	13.2
Accounts receivable	2.5	2.7	1.9	1.8	2.0	2.6	2.9
Liquid assets	13.3	4.3	2.9	0.9	3.6	2.4	2.2
Other short-term assets	4.7	4.8	3.1	2.4	2.4	2.4	2.4
Current assets	30.2	21.3	15.6	12.0	17.1	18.9	20.7
Total Assets	50.5	42.2	26.3	19.7	23.6	25.3	27.0
Liabilities and shareholders' equity							
Subscribed capital	28.6	28.7	32.1	3.2	4.9	4.9	4.9
Capital reserve	19.9	20.0	20.1	21.6	24.9	24.9	24.9
Retained earnings	12.1	11.9	11.8	11.7	8.9	7.0	6.9
Other equity components	-18.0	-25.7	-45.1	-26.2	-25.0	-24.7	-24.4
Shareholders' equity	42.6	34.9	18.9	10.3	13.7	12.1	12.3
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	42.6	34.9	18.9	10.3	13.7	12.1	12.3
Provisions	0.8	0.3	0.4	0.6	0.6	0.6	0.6
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	1.1	0.3	2.3	5.0	4.8	7.5	8.5
Short-term financial liabilities	0.3	0.0	0.5	0.4	0.4	0.4	0.4
Accounts payable	1.8	2.1	1.3	1.9	2.5	3.2	3.7
Other liabilities	4.3	4.5	3.4	1.9	1.9	1.9	1.9
Liabilities	7.9	7.3	7.4	9.4	9.8	13.2	14.7
Total liabilities and shareholders' equity	50.5	42.2	26.3	19.7	23.6	25.3	27.0

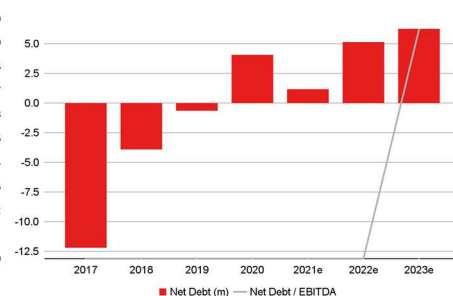
Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Efficiency of Capital Employment							
Operating Assets Turnover	0.6 x	0.6 x	0.8 x	0.8 x	1.0 x	1.1 x	1.1 x
Capital Employed Turnover	0.4 x	0.3 x	0.6 x	0.6 x	0.8 x	0.9 x	1.0 x
ROA	-44.0 %	-37.4 %	-181.8 %	-114.6 %	-43.9 %	-30.9 %	-1.7 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.1 %
ROE	-18.4 %	-20.2 %	-72.6 %	-60.3 %	-23.7 %	-15.3 %	-0.9 %
Adj. ROE	-18.4 %	-20.2 %	-72.6 %	-60.3 %	-23.7 %	-15.3 %	-0.9 %
Balance sheet quality							
Net Debt	-12.2	-3.9	-0.6	4.1	1.2	5.1	6.3
Net Financial Debt	-12.2	-3.9	-0.6	4.1	1.2	5.1	6.3
Net Gearing	-28.7 %	-11.2 %	-3.4 %	39.5 %	8.5 %	42.7 %	51.1 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	525.2 %
Book Value / Share	1.5	1.2	0.6	3.2	2.8	2.5	2.5
Book value per share ex intangibles	1.1	0.8	0.5	2.3	2.3	2.0	2.0

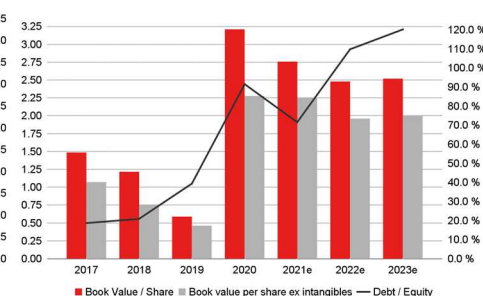
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

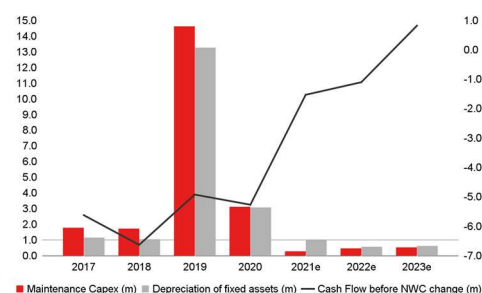
In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	-9.3	-7.6	-19.9	-8.5	-2.8	-2.0	-0.1
Depreciation of fixed assets	1.2	1.1	13.3	3.1	1.0	0.6	0.6
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.6	0.7	1.5	0.0	0.3	0.3	0.3
Increase/decrease in long-term provisions	0.3	-0.5	0.1	0.2	0.0	0.0	0.0
Other non-cash income and expenses	1.5	-0.2	0.1	-0.1	0.0	0.0	0.0
Cash Flow before NWC change	-5.6	-6.6	-4.9	-5.3	-1.5	-1.1	0.8
Increase / decrease in inventory	0.1	0.6	0.4	1.4	-2.1	-2.5	-1.6
Increase / decrease in accounts receivable	0.0	0.0	-0.8	0.9	-0.2	-0.6	-0.3
Increase / decrease in accounts payable	0.0	0.0	-0.4	-0.7	0.6	0.7	0.5
Increase / decrease in other working capital positions	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Increase / decrease in working capital (total)	0.2	0.7	-0.8	1.6	-1.7	-2.4	-1.4
Net cash provided by operating activities [1]	-5.4	-5.9	-5.8	-3.7	-3.3	-3.5	-0.6
Investments in intangible assets	-1.3	-2.2	-1.0	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	-0.7	-0.7	-0.7	-0.4	-0.3	-0.5	-0.5
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	-2.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.5	0.0	0.0	0.3	0.6	0.0	0.0
Net cash provided by investing activities [2]	-1.5	-3.0	0.3	-0.1	0.4	-0.5	-0.5
Change in financial liabilities	-1.4	-0.8	-0.5	-0.3	-0.2	2.7	1.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.1	0.1	3.4	0.0	4.8	0.0	0.0
Other	1.2	0.6	1.3	2.0	1.0	0.0	0.0
Net cash provided by financing activities [3]	-3.5	-0.2	4.1	1.8	5.7	2.7	1.0
Change in liquid funds [1]+[2]+[3]	-10.5	-9.0	-1.3	-2.0	2.7	-1.3	-0.1
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	13.3	4.3	2.9	0.9	3.6	2.4	2.2

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Cash Flow							
FCF	-7.5	-8.9	-7.5	-4.1	-3.6	-4.0	-1.1
Free Cash Flow / Sales	-68.6 %	-82.5 %	-63.6 %	-43.8 %	-29.1 %	-25.5 %	-6.3 %
Free Cash Flow Potential	-7.6	-8.3	-19.3	-7.9	-1.3	-1.2	0.7
Free Cash Flow / Net Profit	83.7 %	113.8 %	38.2 %	46.5 %	125.1 %	201.6 %	1058.2 %
Interest Received / Avg. Cash	0.0 %	0.0 %	0.0 %	0.5 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	2.8 %	4.2 %	38.5 %	9.4 %	11.3 %	6.8 %	5.3 %
Management of Funds							
Investment ratio	18.8 %	26.9 %	14.8 %	3.8 %	2.3 %	3.0 %	3.0 %
Maint. Capex / Sales	16.4 %	16.0 %	124.6 %	33.5 %	2.3 %	3.0 %	3.0 %
Capex / Dep	114.8 %	167.7 %	11.8 %	11.2 %	21.3 %	54.0 %	57.8 %
Avg. Working Capital / Sales	100.2 %	95.3 %	78.2 %	80.9 %	63.3 %	62.8 %	66.1 %
Trade Debtors / Trade Creditors	145.1 %	123.9 %	141.8 %	94.5 %	80.0 %	81.3 %	78.4 %
Inventory Turnover	0.2 x	0.2 x	0.3 x	0.1 x	0.2 x	0.2 x	0.1 x
Receivables collection period (days)	85	90	58	71	60	61	60
Payables payment period (days)	342	335	202	707	534	576	763
Cash conversion cycle (Days)	1,619	1,255	1,027	1,918	1,470	1,573	2,019

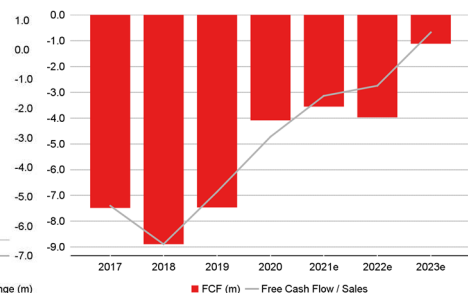
CAPEX and Cash Flow

in EUR m



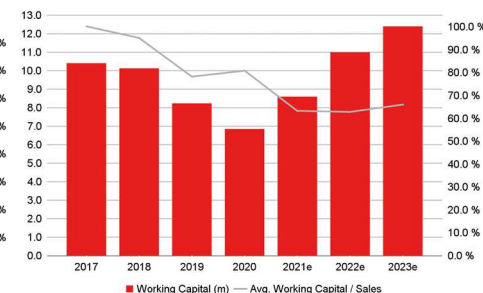
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
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Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

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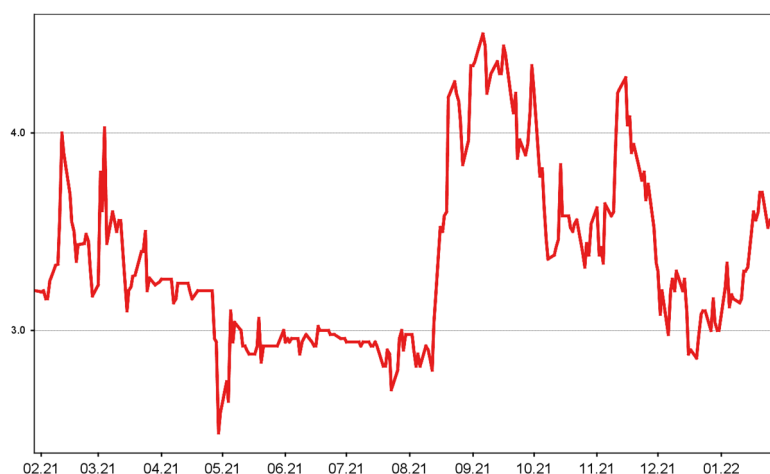
Rating	Number of stocks	% of Universe
Buy	159	74
Hold	49	23
Sell	3	1
Rating suspended	3	1
Total	214	100

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	52	85
Hold	7	11
Sell	0	0
Rating suspended	2	3
Total	61	100

PRICE AND RATING HISTORY AAP IMPLANTATE AS OF 28.01.2022



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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