

Buy EUR 69.00	Value Indicators: EUR SotP: 69.00	Warburg ESG Risk Score: 2.4 ESG Score (MSCI based): 3.0 Balance Sheet Score: 3.3 Market Liquidity Score: 1.0	Description: Brockhaus invests into high tech German Mittelstand companies
	Market Snapshot: EUR m Market cap: 236.4 No. of shares (m): 10.9 EV: 363.1 Freefloat MC: 183.5 Ø Trad. Vol. (30d): 46.41 th	Shareholders: Freefloat 77.60 % Kayne Anderson Rudnick Inv. 10.00 % DWS Investment 7.20 % Marco Brockhaus 22.40 %	Key Figures (WRE): 2023e Beta: 1.7 Price / Book: 0.8 x Equity Ratio: 50 %
Price EUR 21.60 Upside 219.4 %			

Strong operational development in Q3

	Q3 23 A	WRe est	delta	Q3 22 A	YOY	Q2 23 A	QOQ	9M 23 A	9M 22 A	yoy
Revenues	58,6	60,0	-2,3%	42,9	37%	50,6	16%	142,7	109,1	30,8%
t/o IHSE	11,8	10,0	18%	9,2	29%	9,4	25%	29,5	24,1	22%
t/o Bikeleasing	46,8	50,0	-6%	33,7	39%	41,2	14%	113,2	85,0	33%
Adj EBITDA	25,4	25,8	-1,6%	18,4	38%	19,3	31%	55,0	40,0	38%
margin	43,3%	43,0%		42,9%		38,2%		38,5%	36,7%	
t/o IHSE	4,3	2,6	64%	2,4	77%	2,0	113%	7,8	5,4	44%
t/o Bikeleasing	22,6	25,0	-10%	17,8	27%	19,3	17%	51,8	39,1	32%

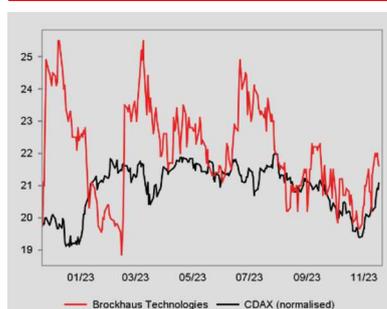
Bikeleasing showed strong operational development in Q3. Compared to Q3 22, the number of leased bikes rose by 36% to 51k and the number of newly onboarded customers doubled to around 5000. This year to date, Bikeleasing has added 700k employees to the platform.

Bikeleasing sales in Q3 were lighter than we expected due to a still high forfeiting backlog but some more contract selling is indicated for Q4. Bikeleasing's EBITDA margin stood at 45% in Q3. Adjusted for a EUR 1.8m provision, as Bikeleasing is terminating and internalizing its dealership structure, the margin would have been 49%. Two dealers are still remaining and have a scope similar to the two acquired in Q2 for EUR 8.5m. Cash generation was nevertheless strong with a group operational cash flow of EUR 16.4m versus EUR 8.9m in Q3 22. In turn, Bikeleasing redeemed a further EUR 9m acquisition financing in Q3. The move lifts dividend restriction but expensive subordinated loans are still in place. IHSE had a very strong Q3, driven by Americas. Recall that IHSE reported a very strong trade fair order intake in Q2. The good operating leverage explains the sound EBITDA margin of 36% in Q3. The backlog is still sound and in turn we expect a strong Q4 as well.

Net income was negatively impacted by a EUR 2.9m write-down of the earn-out receivables from Palas, which was sold at the end of 2022. Adjusted for that, net income to Brockhaus shareholders increased by EUR 8.6m in Q3 23 versus an increase of EUR 6.4m in Q3 22.

Management mentioned one specific M&A opportunity that it is currently examining and seems more advanced but no more details were provided. We would highly welcome increasing leverage on the holding costs by a further acquisition. Q4 residual to lifted guidance still looks conservative as it implies roughly flat yoy sales and adj. EBITDA. Flat development seems unlikely given that Q4 should be sound for IHSE, that Bikeleasing incurred extra costs in Q4 22, that two dealers have been acquired and the onboarding rate continues at a high rate. We remain at Buy due to the strong operational achievements. PT remains unchanged at EUR 69.

Changes in Estimates:				Comment on Changes:			
FY End: 31.12. in EUR m	2023e (old)	+ / -	2024e (old)	+ / -	2025e (old)	+ / -	
Sales	197.2	-5.5 %	246.4	-6.5 %	305.0	-4.3 %	<ul style="list-style-type: none"> Higher onboarding rate benefits future lease contracts but we take a more conservative approach to FY 24 due to the current economic situation. Net income impacted by the cut to P&L earn-out expectations and impact. In addition, we increased financing costs on the greater number of leases on balance sheet.
EBITDA adj.	69.7	-2.9 %	95.3	-2.7 %	116.9	0.0 %	
Net income	24.0	-21.1 %	36.6	-12.6 %	45.0	-2.2 %	

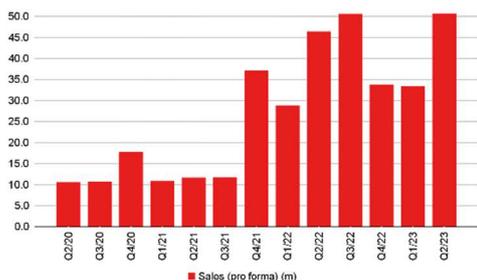


1 month:	1.2 %
6 months:	n/a
Year to date:	-13.4 %
Trailing 12 months:	4.1 %

Net Debt 44.2 ROCE (NOPAT) n.a. Guidance: Sales around 175m and adj. EBITDA margin of 35%

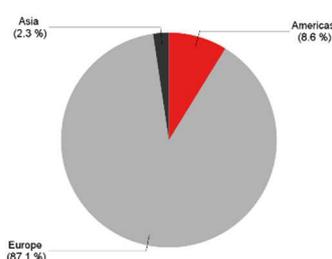
FY End: 31.12. in EUR m	CAGR (22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales (pro forma)	26.2 %	54.3	51.6	126.5	145.3	186.3	230.3	291.8
yoy		n.a.	-5.0 %	145.3 %	14.9 %	28.2 %	23.6 %	26.7 %
Sales	26.9 %	16.6	51.6	60.3	142.7	186.3	230.3	291.8
Change Sales yoy		1408.3 %	211.5 %	16.9 %	136.6 %	30.5 %	23.6 %	26.7 %
EBITDA (pro forma)	32.7 %	16.2	12.3	48.2	50.0	67.7	92.7	116.9
Margin (pro forma)		29.8 %	23.8 %	38.1 %	34.4 %	36.3 %	40.3 %	40.0 %
EBITDA	35.7 %	1.3	8.3	0.4	46.7	67.4	92.4	116.9
Margin		7.7 %	16.2 %	0.7 %	32.7 %	36.2 %	40.1 %	40.0 %
EBIT	49.2 %	-2.3	-1.0	-9.3	29.3	49.9	74.0	97.3
Margin		-13.7 %	-2.0 %	-15.4 %	20.5 %	26.8 %	32.1 %	33.3 %
Net income	-11.5 %	-3.8	-6.8	-15.9	49.0	5.7	21.7	33.9
EPS	-11.6 %	-1.32	-0.81	-1.52	4.48	0.52	1.98	3.10
FCFPS		1.47	0.57	-0.71	2.90	3.10	3.84	5.20
FCF / Market cap		n.a.	1.8 %	-2.9 %	15.4 %	14.4 %	17.8 %	24.1 %
EV / Sales		n.a.	3.6 x	6.0 x	1.6 x	1.9 x	1.4 x	0.9 x
EV / EBITDA		n.a.	22.4 x	859.3 x	5.0 x	5.4 x	3.4 x	2.2 x
EV / EBIT		n.a.	n.a.	n.a.	8.0 x	7.3 x	4.3 x	2.6 x
P / E		n.a.	n.a.	n.a.	4.2 x	41.5 x	10.9 x	7.0 x
FCF Potential Yield		n.a.	2.8 %	-1.1 %	35.5 %	14.5 %	22.6 %	33.8 %
Net Debt		44.2	-69.3	110.6	28.1	-17.4	-63.4	-124.3
ROCE (NOPAT)		n.a.	n.a.	n.a.	4.5 %	9.6 %	16.1 %	21.2 %

Sales (pro forma) development
in EUR m



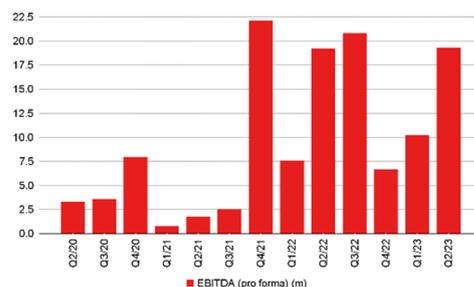
Source: Warburg Research

Sales by regions
2022; in %



Source: Warburg Research

adj. EBITDA (pro forma) development
in EUR m



Source: Warburg Research

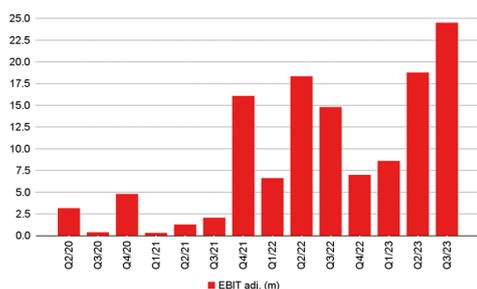
Company Background

- Founded in 2017 by CEO Marco Brockhaus and other team members as the successor to three private equity funds.
- In contrast to the limited lifetime of a PE fund, the structure of a holding company precludes forced exits and management influence is increased.
- IPO in 2020
- Portfolio companies are managed by a lean holding with around 10 employees

Competitive Quality

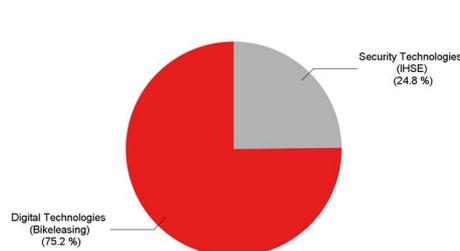
- Brockhaus has an extensive network and over 20 years of expertise in PE transactions to support portfolio companies to grow and expand into new markets
- Focus of investment is scalable B2B business models in high-tech German Mittelstand companies that generate high margins and superior cash returns
- Typically, the companies invested in are not large enough to go to the capital market alone but are champions in their niches
- Brockhaus' investments represent a niche that asset managers have little or no access to.

adj. EBIT development
in EUR m



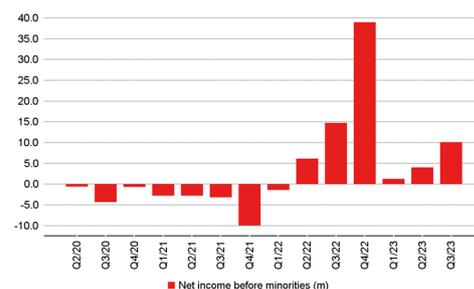
Source: Warburg Research

Sales by segments
2022; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

Sum of the parts

DCF model - IHSE

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	43	49	56	62	68	75	82	91	97	105	113	118	122	2.5 %
Sales change	18.0 %	15.0 %	15.0 %	10.0 %	10.0 %	10.0 %	10.0 %	10.0 %	7.5 %	7.5 %	7.5 %	5.0 %	3.0 %	
EBIT	11	15	17	19	20	22	25	27	29	31	34	35	37	
EBIT-margin	27.0 %	30.0 %	31.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
Tax rate (EBT)	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	
NOPAT	8	11	13	13	15	16	18	20	21	23	24	26	26	
Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	
in % of Sales	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 %	
Change in provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	
Change in liquidity from														
- Working Capital	2	1	2	2	2	2	2	3	2	2	3	2	1	
- Capex	2	3	3	3	4	4	4	5	5	6	6	6	6	
Capex in % of Sales	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	5.3 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC-model)	4	7	7	8	9	10	11	12	14	15	16	18	19	
PV of FCF	4	7	6	6	6	6	6	6	6	6	6	5	5	58
share of PVs	12.7 %			43.5 %										43.8 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	15.0 %	Financial Strength	100
Cost of debt	6.0 %	Liquidity	3.00
Market return	8.3 %	Cyclicality	100
Risk free rate	2.8 %	Transparency	150
Risk premium	5.5 %	Others	2.20
Cost of equity	12.3 %		
WACC	11.12 %	Beta	1.74

Valuation (m)

Present values until 2035e	75		
Terminal Value	58		
Financial liabilities	39		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	4		
Equity Value	97	No. of shares (m)	10
		Value per share (EUR)	97.45

Sensitivity Value per share (EUR)

Beta (WACC)	Terminal Growth							Delta EBITDA-margin						
	175 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %	-150 pp	-100 pp	-0.50 pp	0.0	0.50 pp	100 pp	150 pp
2.38 (14.1%)	58.13	58.74	59.37	60.03	60.72	61.43	62.19	52.57	55.06	57.54	60.03	62.51	65.00	67.48
2.17 (13.1%)	67.55	68.34	69.18	70.06	70.97	71.94	72.95	61.84	64.58	67.32	70.06	72.79	75.53	78.27
1.95 (12.1%)	78.89	79.96	81.09	82.27	83.52	84.84	86.23	73.13	76.18	79.22	82.27	85.32	88.37	91.42
1.74 (11.1%)	92.81	94.27	95.82	97.45	99.19	101.03	102.99	87.16	90.59	94.02	97.45	100.89	104.32	107.75
1.53 (10.1%)	110.21	112.27	114.45	116.77	119.26	121.92	124.77	105.01	108.93	112.85	116.77	120.70	124.62	128.54
1.31 (9.1%)	132.56	135.52	138.70	142.13	145.82	149.81	154.14	128.44	133.00	137.56	142.13	146.69	151.25	155.81
1.10 (8.1%)	162.18	166.63	171.47	176.74	182.50	188.82	195.79	160.43	165.87	171.31	176.74	182.18	187.61	193.05

- Financial liabilities are based on FY 20 segment debt
- High BETA is used as the company is unlisted, segment reporting omits full balance sheet and PE structure. WACC is calculated with a equity target rate of 85%.
- We use a normalized tax rate and do not take the tax shield from PPA into effect

DCF model - Bikeleasing

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	144	181	236	274	330	379	436	488	532	564	584	602	620	2.0 %
Sales change	316 %	26.2 %	29.9 %	16.2 %	20.5 %	15.0 %	15.0 %	12.0 %	9.0 %	6.0 %	3.5 %	3.0 %	3.0 %	
EBIT	62	84	105	127	151	173	200	223	244	258	267	275	283	
EBIT-margin	43.3 %	46.3 %	44.7 %	46.5 %	45.8 %	45.8 %	45.8 %	45.8 %	45.8 %	45.8 %	45.8 %	45.8 %	45.8 %	
Tax rate (EBT)	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	28.0 %	
NOPAT	45	60	76	92	109	125	144	161	175	186	192	198	204	
Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	
in % of Sales	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 %	
Change in provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	
Change in liquidity from														
- Working Capital	6	3	7	5	7	6	7	7	6	4	3	2	2	
- Capex	1	1	1	3	3	4	4	5	5	6	6	6	6	
Capex in % of Sales	0.8 %	0.7 %	0.6 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	10 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC-model)	38	56	67	84	98	115	132	149	164	176	184	190	196	
PV of FCF	38	50	55	61	64	68	70	71	71	68	64	60	55	620
share of PVs	10.1 %			46.1 %										43.8 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	15.0 %	Financial Strength	100
Cost of debt	6.0 %	Liquidity	3.00
Market return	8.3 %	Cyclicality	100
Risk free rate	2.8 %	Transparency	150
Risk premium	5.5 %	Others	2.20
Cost of equity	12.3 %		
WACC	11.12 %	Beta	1.74

Valuation (m)

Present values until 2035e	795		
Terminal Value	620		
Financial liabilities	61		
Pension liabilities	0		
Hybrid capital	9		
Minority interest	0		
Market val. of investments	0		
Liquidity	24	No. of shares (m)	10
Equity Value	1,367	Value per share (EUR)	1,367.28

Sensitivity Value per share (EUR)

Beta (WACC)	Terminal Growth							Delta EBITDA-margin						
	125 %	150 %	175 %	2.00 %	2.25 %	2.50 %	2.75 %	-150 pp	-100 pp	-50 pp	0.0	0.50 pp	100 pp	150 pp
1.95 (12.1 %)	1171.39	1182.38	1193.90	1205.99	1218.69	1232.05	1246.13	1162.15	1176.76	1191.38	1205.99	1220.61	1235.22	1249.84
1.85 (11.6 %)	1241.99	1254.75	1268.15	1282.25	1297.10	1312.76	1329.31	1235.78	1251.27	1266.76	1282.25	1297.73	1313.22	1328.71
1.79 (11.4 %)	1280.07	1293.84	1308.32	1323.58	1339.67	1356.66	1374.65	1275.70	1291.66	1307.62	1323.58	1339.54	1355.50	1371.46
1.74 (11.1 %)	1320.19	1335.07	1350.74	1,367.28	1384.74	1403.21	1422.79	1317.90	1334.36	1350.82	1,367.28	1383.73	1400.19	1416.65
1.69 (10.9 %)	1362.52	1378.62	1395.61	1413.55	1432.53	1452.65	1474.00	1362.58	1379.57	1396.56	1413.55	1430.54	1447.52	1464.51
1.63 (10.6 %)	1407.23	1424.68	1443.12	1462.62	1483.29	1505.23	1528.56	1409.97	1427.52	1445.07	1462.62	1480.17	1497.72	1515.27
1.53 (10.1 %)	1504.62	1525.21	1547.04	1570.20	1594.84	1621.10	1649.13	1513.87	1532.65	1551.42	1570.20	1588.98	1607.76	1626.54

- We assume Bikeleasing debt free as of the purchase. Acquisition loans are attributed.
- We net debt from finance lease versus receivables from finance lease, which should be higher in value than the debt
- Finance lease does not lead to depreciation and hence we make no adjustment to the EBITDA estimates for Bikeleasing
- High BETA is used as the company is unlisted, segment reporting omits full balance sheet and PE structure. WACC is calculated with a equity target rate of 85%.
- We use a normalized tax rate and do not take the tax shield from PPA into effect

(EURm)	2023	WACC -1%	WACC +1%
Equity value IHSE (DCF)	97	119	81
Share Brockhaus	100%	100%	100%
	97	119	81
Equity value Bikeleasing (DCF)	1.367	1.433	1.308
Share Brockhaus	52%	52%	52%
	714	748	684
FY 23e adj. EBITDA Holding	-6	-6	-6
Discount factor	6%	5%	7%
Value holding	-110	-134	-93
Sum of the Parts	702	733	672
Less net debt (-cash) holding	-52	-52	-52
Equity value Brockhaus Technologies	754	785	724
Number of shares	10,95	10,95	10,95
Value per share	68,90	71,74	66,15

- IHSE and Bikeleasing valued by separate DCF models
- Debt at portfolio company level is included in DCF model. Remaining debt at holding level is subtracted separately.
- Holding cost are discounted in a single stage model with same WACC as portfolio companies.
- Holding cost are expected to be subject to inflation of 4.5% p.a. subtracted from the discount rate.
- Deal generating capability of holding is a hidden reserve and not valued currently

Valuation							
	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	n.a.	1.1 x	1.1 x	0.8 x	0.8 x	0.8 x	0.7 x
Book value per share ex intangibles	-41.67	6.81	-16.15	-7.70	-4.91	-1.74	2.63
EV / Sales	n.a.	3.6 x	6.0 x	1.6 x	1.9 x	1.4 x	0.9 x
EV / EBITDA	n.a.	22.4 x	859.3 x	5.0 x	5.4 x	3.4 x	2.2 x
EV / EBIT	n.a.	n.a.	n.a.	8.0 x	7.3 x	4.3 x	2.6 x
EV / EBIT adj.*	n.a.	17.6 x	18.3 x	5.0 x	5.7 x	3.6 x	2.3 x
P / FCF	n.a.	54.1 x	n.a.	6.5 x	7.0 x	5.6 x	4.2 x
P / E	n.a.	n.a.	n.a.	4.2 x	41.5 x	10.9 x	7.0 x
P / E adj.*	n.a.	57.9 x	52.2 x	25.9 x	12.5 x	7.4 x	5.4 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	n.a.	2.8 %	-1.1 %	35.5 %	14.5 %	22.6 %	33.8 %

*Adjustments made for: -

Company Specific Items							
	2019	2020	2021	2022	2023e	2024e	2025e
Sales (pro forma)	54.3	51.6	126.5	145.3	186.3	230.3	291.8
yoy	n.a.	-5.0 %	145.3 %	14.9 %	28.2 %	23.6 %	26.7 %
EBITDA (pro forma)	16.2	12.3	48.2	50.0	67.7	92.7	116.9
Margin (pro forma)	29.8 %	23.8 %	38.1 %	34.4 %	36.3 %	40.3 %	40.0 %

Consolidated profit & loss

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	16.6	51.6	60.3	142.7	186.3	230.3	291.8
Change Sales yoy	1408.3 %	211.5 %	16.9 %	136.6 %	30.5 %	23.6 %	26.7 %
Increase / decrease in inventory	0.2	-0.1	-0.2	-0.2	0.0	0.0	0.0
Own work capitalised	0.8	0.9	1.4	1.0	0.0	0.0	0.0
Total Sales	17.5	52.3	61.5	143.5	186.3	230.3	291.8
Material expenses	4.3	13.8	14.2	51.7	67.1	80.6	102.1
Gross profit	13.2	38.6	47.3	91.7	119.2	149.7	189.7
<i>Gross profit margin</i>	<i>80.0 %</i>	<i>74.7 %</i>	<i>78.4 %</i>	<i>64.3 %</i>	<i>64.0 %</i>	<i>65.0 %</i>	<i>65.0 %</i>
Personnel expenses	6.8	19.5	21.8	26.6	35.4	43.8	55.4
Other operating income	0.4	1.5	2.0	1.5	1.9	2.3	2.9
Other operating expenses	5.6	12.0	26.9	19.5	18.3	15.8	20.3
Unfrequent items	0.0	-0.1	-0.2	-0.3	0.0	0.0	0.0
EBITDA	1.3	8.3	0.4	46.7	67.4	92.4	116.9
<i>Margin</i>	<i>7.7 %</i>	<i>16.2 %</i>	<i>0.7 %</i>	<i>32.7 %</i>	<i>36.2 %</i>	<i>40.1 %</i>	<i>40.0 %</i>
Depreciation of fixed assets	0.8	1.7	2.1	3.2	3.4	4.1	5.3
EBITA	0.4	6.7	-1.7	43.5	64.1	88.3	111.6
Amortisation of intangible assets	2.7	7.7	7.6	14.2	14.2	14.2	14.3
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	-2.3	-1.0	-9.3	29.3	49.9	74.0	97.3
<i>Margin</i>	<i>-13.7 %</i>	<i>-2.0 %</i>	<i>-15.4 %</i>	<i>20.5 %</i>	<i>26.8 %</i>	<i>32.1 %</i>	<i>33.3 %</i>
EBIT adj.	1.9	10.6	19.7	46.8	64.2	88.3	111.3
Interest income	0.1	0.1	0.0	4.8	1.2	1.2	1.2
Interest expenses	1.2	3.9	6.2	14.7	17.5	12.5	8.8
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	-3.4	-4.8	-15.4	19.3	33.6	62.7	89.8
<i>Margin</i>	<i>-20.5 %</i>	<i>-9.4 %</i>	<i>-25.5 %</i>	<i>13.5 %</i>	<i>18.0 %</i>	<i>27.2 %</i>	<i>30.8 %</i>
Total taxes	0.4	1.9	3.4	8.9	11.8	17.6	25.1
Net income from continuing operations	-3.8	-6.8	-18.8	10.5	21.8	45.2	64.6
Income from discontinued operations (net of tax)	0.0	0.0	0.0	48.0	0.0	0.0	0.0
Net income before minorities	-3.8	-6.8	-18.8	58.5	21.8	45.2	64.6
Minority interest	0.0	0.0	-2.9	9.4	16.2	23.5	30.7
Net income	-3.8	-6.8	-15.9	49.0	5.7	21.7	33.9
<i>Margin</i>	<i>-23.1 %</i>	<i>-13.1 %</i>	<i>-26.3 %</i>	<i>34.3 %</i>	<i>3.0 %</i>	<i>9.4 %</i>	<i>11.6 %</i>
Number of shares, average	2.9	8.3	10.4	10.9	10.9	10.9	10.9
EPS	-1.32	-0.81	-1.52	4.48	0.52	1.98	3.10
EPS adj.	-0.01	0.53	0.46	0.73	1.73	2.93	4.02

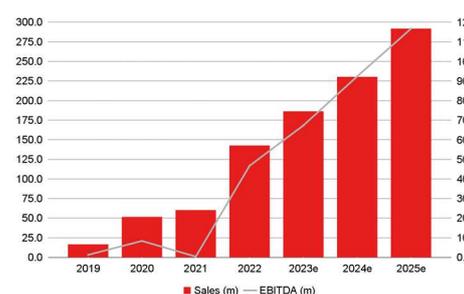
*Adjustments made for:

Guidance: Sales around 175m and adj. EBITDA margin of 35%

Financial Ratios

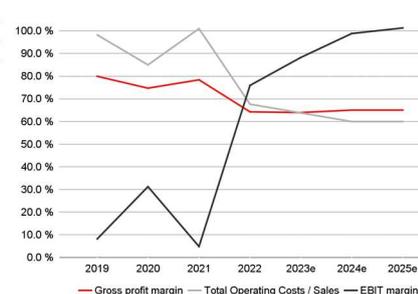
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	98.2 %	85.0 %	101.0 %	67.6 %	63.8 %	59.9 %	60.0 %
Operating Leverage	0.0 x	-0.3 x	46.5 x	n.a.	2.3 x	2.1 x	1.2 x
EBITDA / Interest expenses	1.1 x	2.1 x	0.1 x	3.2 x	3.9 x	7.4 x	13.4 x
Tax rate (EBT)	-12.9 %	-39.7 %	-22.0 %	45.8 %	35.0 %	28.0 %	28.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sales, EBITDA
in EUR m



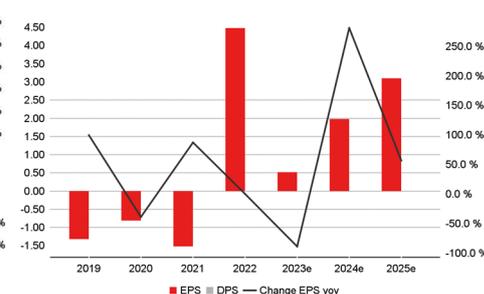
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

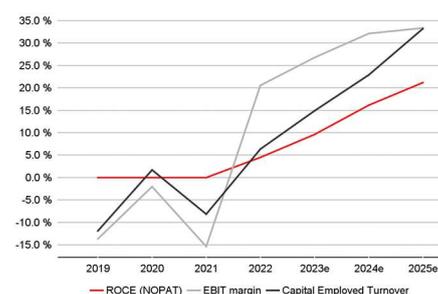
Consolidated balance sheet

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	160.6	152.7	398.9	356.9	343.6	329.3	315.1
thereof other intangible assets	0.0	53.7	147.7	133.5	119.3	105.1	90.8
thereof Goodwill	91.4	91.4	243.6	221.9	221.9	221.9	221.9
Property, plant and equipment	11.3	11.7	16.2	7.6	8.1	8.3	9.9
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	1.0	0.6	82.7	131.4	172.9	228.2	306.4
Fixed assets	172.9	165.0	497.7	496.0	524.5	565.8	631.3
Inventories	10.7	9.7	12.6	10.9	14.3	17.7	22.4
Accounts receivable	5.9	7.2	20.2	29.4	24.0	29.7	37.6
Liquid assets	17.2	123.5	30.3	70.8	76.3	97.3	133.2
Other short-term assets	1.1	0.9	53.7	48.4	51.4	53.2	47.0
Current assets	34.8	141.4	116.8	159.5	166.0	197.9	240.2
Total Assets	207.7	306.4	614.5	655.5	690.5	763.7	871.5
Liabilities and shareholders' equity							
Subscribed capital	6.6	10.4	10.4	10.9	10.9	10.9	10.9
Capital reserve	118.7	227.7	227.7	240.1	240.1	240.1	240.1
Retained earnings	0.0	0.0	0.0	0.0	5.7	27.3	61.3
Other equity components	-6.5	-14.6	-16.0	21.6	33.1	31.9	31.5
Shareholders' equity	118.9	223.4	222.0	272.7	289.9	310.3	343.9
Minority interest	0.0	0.0	32.9	42.6	58.8	82.3	113.0
Total equity	118.9	223.4	254.9	315.3	348.7	392.7	456.9
Provisions	0.6	2.2	4.9	0.2	0.2	0.2	0.2
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	61.3	54.3	140.9	98.9	58.9	33.9	8.9
Short-term financial liabilities	5.4	6.1	17.0	5.3	-4.7	-4.7	-4.7
Accounts payable	3.1	2.5	12.7	15.5	24.0	29.7	37.6
Other liabilities	23.8	24.0	201.0	225.7	258.8	307.3	367.9
Liabilities	88.8	83.0	359.6	340.2	341.8	371.1	414.6
Total liabilities and shareholders' equity	207.7	306.4	614.5	655.5	690.5	763.7	871.5

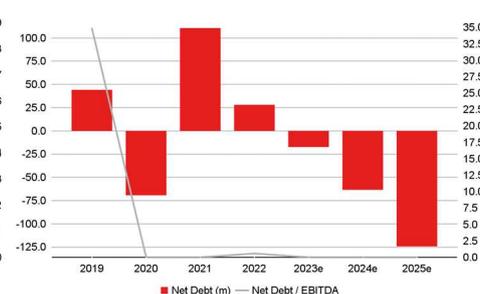
Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	0.7 x	2.0 x	1.7 x	4.4 x	8.3 x	8.9 x	9.0 x
Capital Employed Turnover	0.1 x	0.3 x	0.2 x	0.4 x	0.6 x	0.7 x	0.9 x
ROA	-2.2 %	-4.1 %	-3.2 %	9.9 %	1.1 %	3.8 %	5.4 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	n.a.	4.5 %	9.6 %	16.1 %	21.2 %
ROE	-4.6 %	-3.9 %	-7.1 %	19.8 %	2.0 %	7.2 %	10.4 %
Adj. ROE	0.0 %	2.6 %	2.1 %	3.3 %	6.7 %	10.7 %	13.5 %
Balance sheet quality							
Net Debt	44.2	-69.3	110.6	28.1	-17.4	-63.4	-124.3
Net Financial Debt	44.2	-69.3	110.6	28.1	-17.4	-63.4	-124.3
Net Gearing	37.1 %	-31.0 %	43.4 %	8.9 %	-5.0 %	-16.2 %	-27.2 %
Net Fin. Debt / EBITDA	3482.1 %	n.a.	n.a.	60.1 %	n.a.	n.a.	n.a.
Book Value / Share	118.9	21.5	20.3	24.9	26.5	28.3	31.4
Book value per share ex intangibles	-41.7	6.8	-16.2	-7.7	-4.9	-1.7	2.6

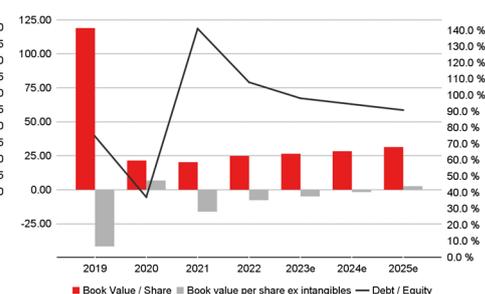
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

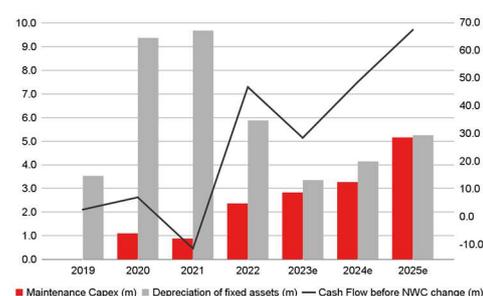
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	-3.8	-6.8	-18.8	58.5	21.8	45.2	64.6
Depreciation of fixed assets	3.5	9.4	9.7	5.9	3.4	4.1	5.3
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	2.7	7.7	7.6	14.2	14.2	14.2	14.3
Increase/decrease in long-term provisions	0.1	0.0	-0.1	0.0	0.0	0.0	0.0
Other non-cash income and expenses	0.0	-3.4	-9.9	-31.9	-11.0	-15.0	-17.0
Cash Flow before NWC change	2.6	7.0	-11.5	46.6	28.4	48.5	67.2
Increase / decrease in inventory	0.5	-1.1	-2.3	-16.1	-3.4	-3.4	-4.7
Increase / decrease in accounts receivable	0.0	0.0	0.0	0.0	5.4	-5.7	-7.9
Increase / decrease in accounts payable	1.2	-0.2	7.6	4.6	8.5	5.7	7.9
Increase / decrease in other working capital positions	0.0	0.0	0.0	-0.2	-1.2	1.3	1.3
Increase / decrease in working capital (total)	1.7	-1.3	5.3	-11.7	9.4	-2.1	-3.4
Net cash provided by operating activities [1]	4.3	5.7	-6.2	34.9	37.7	46.4	63.8
Investments in intangible assets	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	0.0	-1.0	-1.2	-1.3	-3.8	-4.4	-6.9
Payments for acquisitions	0.0	-0.1	-142.1	0.0	-8.5	0.0	0.0
Financial investments	0.0	-0.4	-0.8	0.0	0.0	0.0	0.0
Income from asset disposals	0.1	0.0	0.1	56.2	10.0	4.0	4.0
Net cash provided by investing activities [2]	0.1	-1.4	-144.0	53.0	-2.3	-0.4	-2.9
Change in financial liabilities	17.2	0.0	58.0	-42.4	-40.0	-25.0	-25.0
Dividends paid	0.0	0.0	0.0	0.0	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	56.5	112.7	0.0	0.0	0.0	0.0	0.0
Other	-2.2	-10.4	-2.4	-4.3	10.0	0.0	0.0
Net cash provided by financing activities [3]	71.5	102.3	55.7	-46.7	-30.0	-25.0	-25.0
Change in liquid funds [1]+[2]+[3]	75.9	106.6	-94.5	41.2	5.5	21.0	35.9
Effects of exchange-rate changes on cash	0.0	0.2	0.3	0.2	0.0	0.0	0.0
Cash and cash equivalent at end of period	107.5	124.0	29.3	71.8	76.3	97.3	133.2

Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	4.3	4.7	-7.4	31.8	34.0	42.1	56.9
Free Cash Flow / Sales	25.8 %	9.2 %	-12.2 %	22.3 %	18.2 %	18.3 %	19.5 %
Free Cash Flow Potential	0.8	5.3	-3.8	83.5	52.8	71.6	86.6
Free Cash Flow / Net Profit	-111.6 %	-70.0 %	46.5 %	64.8 %	600.0 %	194.3 %	167.7 %
Interest Received / Avg. Cash	0.2 %	0.1 %	0.1 %	9.5 %	1.6 %	1.4 %	1.0 %
Interest Paid / Avg. Debt	3.0 %	6.7 %	6.3 %	12.3 %	22.1 %	27.0 %	40.9 %
Management of Funds							
Investment ratio	0.0 %	2.0 %	1.9 %	0.9 %	2.0 %	1.9 %	2.4 %
Maint. Capex / Sales	0.0 %	2.1 %	1.5 %	1.7 %	1.5 %	1.4 %	1.8 %
Capex / Dep	0.0 %	11.2 %	12.1 %	7.2 %	21.5 %	23.7 %	35.2 %
Avg. Working Capital / Sales	49.1 %	27.0 %	28.5 %	15.7 %	10.5 %	6.9 %	6.9 %
Trade Debtors / Trade Creditors	188.4 %	284.5 %	158.4 %	190.1 %	100.0 %	100.0 %	100.0 %
Inventory Turnover	0.4 x	1.4 x	1.1 x	4.7 x	4.7 x	4.6 x	4.6 x
Receivables collection period (days)	129	51	122	75	47	47	47
Payables payment period (days)	264	67	326	109	131	134	134
Cash conversion cycle (Days)	772	241	118	43	-6	-7	-7

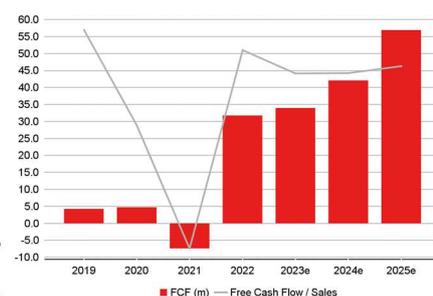
CAPEX and Cash Flow

in EUR m



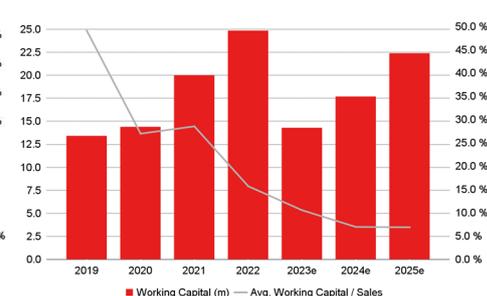
Source: Warburg Research

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)
Brockhaus Technologies	3, 5	https://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2GSU42.htm

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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.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	154	72
Hold	47	22
Sell	5	2
Rating suspended	7	3
Total	213	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	43	81
Hold	7	13
Sell	0	0
Rating suspended	3	6
Total	53	100

PRICE AND RATING HISTORY BROCKHAUS TECHNOLOGIES AS OF 20.11.2023



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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