

Buy EUR 66.00 (EUR 70.00) Price EUR 17.60 Upside 275.0 %	Value Indicators: EUR SotP: 66.00	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: 182.8 No. of shares (m): 10.4 EV: 446.3 Freefloat MC: 141.8 Ø Trad. Vol. (30d): 36.36 th	Shareholders: Freefloat 77.60 % Kayne Anderson Rudnick Inv. 10.00 % DWS Investment 7.20 % Marco Brockhaus 22.40 %	Key Figures (WRe): 2022e Beta: 1.7 Price / Book: 0.8 x Equity Ratio: 42 % Net Fin. Debt / EBITDA: 1.5 x Net Debt / EBITDA: 1.5 x

Growth and cash generation ahead

We update our model post the release of audited accounts, including Bikeleasing for the first time. Foremost, we continue to see high growth potential for the three portfolio companies Palas, IHSE and Bikelease and assume the market is underestimating cash generation capability.

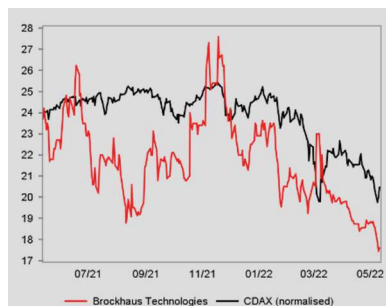
Palas passed the first market-entry hurdle in China for its core product certified fine dust measurement stations. Successful follow-up test cycles are expected during 2022 - more than half of the runs have been passed already. This would give the company access to a market far larger than the current main market, the EU. IHSE has a rising order intake and growing project pipeline, which should lead to sales growth beyond the acquisition of kvm-tec. Further, upcoming drone traffic and increased spending on security and defence should play into the hands of IHSE. Bikeleasing continued to expand its eligible customer base, which is now 36k clients with more than 2m employees. Unions are now also offering the scheme to its members. In addition, the company is working on expanding the platform beyond bicycles, possibly even launching in 2022.

Analyzing the release, we conclude that, in general, the portion of lease contract value shown as sales is lower than we were anticipating but this is less the case for EBITDA. We adjust for the value step-up in our forecast but not for the sale of the leasing portfolio as this is part of the Bikelease strategy and it was due to the business combination that it was recognized in the month of December instead of during the year. Note that for the contracts sold, sales recognized match EBITDA and cash flow. In turn, we expect to see that Bikeleasing is a highly cash generative business with upcoming Q1 figures, even though these are seasonally weak.

The modelling framework for Bikeleasing remains unchanged. The basis (eligible employees) is continuing to expand by an envisaged 50% for 2022, even more if union members are taken into consideration. Instead of a catch-up effect from the shortage of supply of bikes last year, we have now modelled an additional headwind for FY 22, which we unwind again in FY 23 and FY 24. We regard this as cautious as it means that the employee/lease factor increases from 7.7 to 9.9 and does not return to former levels before FY 25e. On the flip side, we expect a further rise in average bike prices. With current supply-chain constraints, our forecast is also more cautious for Palas and IHSE but this has far less of an impact on group level. Note that business model expansion by Bikeleasing is not included in our estimates.

Changes in estimates and our portfolio-wide increase in the risk-free rate reduces the PT from 70 to 66. The stock remains a clear Buy.

Changes in Estimates:				Comment on Changes:			
FY End: 31.12. in EUR m	2022e (old)	+ / -	2023e (old)	+ / -	2024e (old)	+ / -	
Sales	187.3	-20.4 %	233.8	-13.3 %	n.a.	n.m.	<ul style="list-style-type: none"> Instead of a catch-up of 25k leasing contracts from a supply shortage of bikes in FY 22, we add a headwind of 15k bikes, which becomes tailwind in FY 23 and FY 24. Increase in EPS stems from a change in PPA depreciation from EUR 30m to EUR 8m Step-up in net debt from kvm-tec acquisition cash-out of EUR 10m, which was above our estimate.
EBITDA adj.	69.1	-17.3 %	88.4	-5.6 %	n.a.	n.m.	
EPS	1.66	33.7 %	3.01	23.3 %	n.a.	n.m.	
Net Debt	66.3	29.7 %	10.9	282.3 %	n.a.	n.m.	

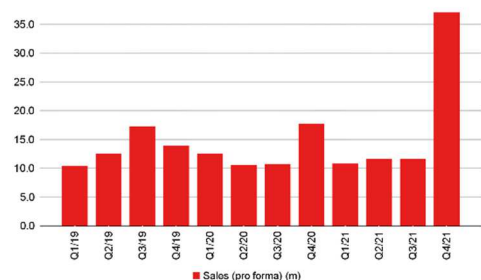


Rel. Performance vs CDAX:	
1 month:	-2.0 %
6 months:	-11.9 %
Year to date:	-6.1 %
Trailing 12 months:	-12.7 %

Company events:	
16.05.22	Q1
22.06.22	AGM
24.08.22	Q2
14.11.22	Q3

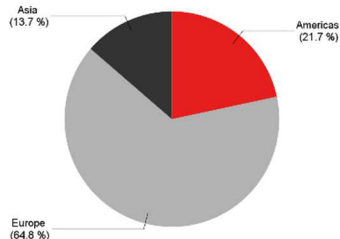
FY End: 31.12. in EUR m	CAGR (21-24e)	2018	2019	2020	2021	2022e	2023e	2024e
Sales (pro forma)	27.4 %	11.7	54.3	51.6	126.5	149.1	202.7	261.4
Sales yoy		n.a.	n.a.	-5.0 %	145.3 %	17.9 %	35.9 %	28.9 %
Sales	63.0 %	1.1	16.6	51.6	60.3	149.1	202.7	261.4
Change Sales yoy		n.a.	1408.3 %	211.5 %	16.9 %	147.2 %	35.9 %	28.9 %
EBITDA (pro forma)	31.9 %	3.7	16.2	12.3	48.2	57.1	83.1	110.6
Margin (pro forma)		31.9 %	29.8 %	23.8 %	38.1 %	38.3 %	41.0 %	42.3 %
EBITDA	540.9 %	-1.3	1.3	8.3	0.4	56.8	83.1	110.6
Margin		-119.7 %	7.7 %	16.2 %	0.7 %	38.1 %	41.0 %	42.3 %
EBIT		-1.6	-2.3	-1.0	-9.3	45.8	67.4	92.6
Margin		-141.9 %	-13.7 %	-2.0 %	-15.4 %	30.7 %	33.2 %	35.4 %
Net income		-1.7	-3.8	-6.8	-15.9	24.4	40.6	61.2
EPS		-0.66	-1.32	-0.81	-1.52	2.22	3.71	5.59
FCFPS		-0.30	1.47	0.57	-0.71	2.24	4.04	6.24
FCF / Market cap		n.a.	n.a.	1.8 %	-2.9 %	12.8 %	23.0 %	35.4 %
EV / Sales		n.a.	n.a.	3.6 x	6.0 x	3.1 x	2.0 x	1.3 x
EV / EBITDA		n.a.	n.a.	22.4 x	859.3 x	8.0 x	5.0 x	3.1 x
EV / EBIT		n.a.	n.a.	n.a.	n.a.	10.0 x	6.1 x	3.7 x
P / E		n.a.	n.a.	n.a.	n.a.	7.9 x	4.7 x	3.1 x
FCF Potential Yield		n.a.	n.a.	2.8 %	-1.1 %	10.0 %	15.8 %	24.5 %
Net Debt		-14.6	44.2	-69.3	110.6	86.0	41.8	-26.5
ROCE (NOPAT)		n.a.	n.a.	n.a.	n.a.	9.2 %	14.0 %	19.8 %
Guidance:	Pro forma sales of EUR 140-150m and adj. EBITDA pro forma of EUR 49-53m							

Sales (pro forma) development
in EUR m



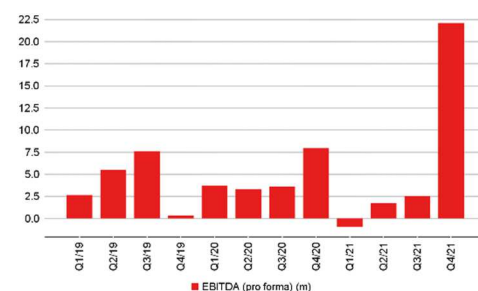
Source: Warburg Research

Sales by regions
2020; in %



Source: Warburg Research

adj. EBITDA (pro forma) development
in EUR m



Source: Warburg Research

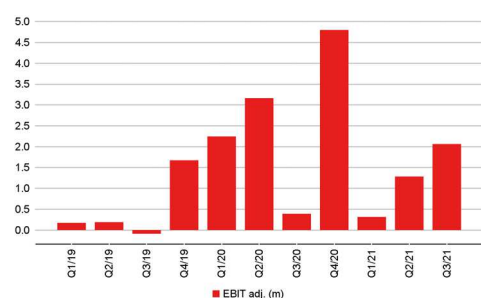
Company Background

- 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

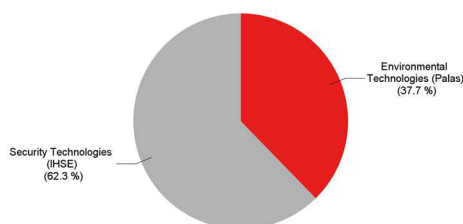
- Brockhaus has an extensive network and over 20 years of expertise in PE transactions to support portfolio companies to grow and expand into new markets
- Focus of investment is scalable B2B business models in high-tech German Mittelstand companies that generate high margins and superior cash returns
- 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



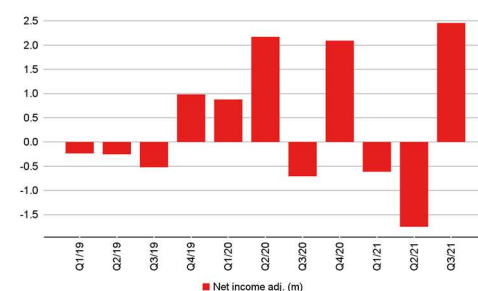
Source: Warburg Research

Sales by segments
2020; in %



Source: Warburg Research

adj. Net income development
in EUR m



Source: Warburg Research

Sum of the parts

(EURm)	2022	WACC -1%	WACC +1%
Equity value Palas (DCF)	112	138	92
Share Brockhaus	70%	70%	70%
	78	96	64
Equity value IHSE (DCF)	139	176	112
Share Brockhaus	100%	100%	100%
	139	176	112
Equity value Bikeleasing (DCF)	1.259	1.329	1.197
Share Brockhaus	52%	52%	52%
	658	694	625
FY 21e adj. EBITDA Holding	-7	-7	-7
Discount factor	6%	5%	7%
Value holding	-136	-168	-115
Sum of the Parts	738	799	687
Less net debt holding	15	15	15
Equity value Brockhaus Technologies	723	784	672
Number of shares	10,95	10,95	10,95
Value per share	66,09	71,59	61,38

- Palas, 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% p.a. subtracted from the discount rate.
- Deal generating capability of holding is a hidden reserve and not valued currently

DCF model - Palas

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	26	32	40	48	55	61	67	73	79	85	91	96	98	
Sales change	20.0 %	25.0 %	25.0 %	20.0 %	15.0 %	10.0 %	10.0 %	10.0 %	7.5 %	7.5 %	7.5 %	5.0 %	2.5 %	2.5 %
EBIT	9	11	14	17	19	21	23	26	28	30	32	33	34	
EBIT-margin	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	35.0 %	
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	6	8	10	12	14	15	17	18	20	21	23	24	25	
Depreciation in % of Sales	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	0	2	2	2	2	1	2	2	1	2	2	1	1	
- Capex	0	1	1	1	1	1	1	1	1	1	1	1	1	
Capex in % of Sales	2.0 %	2.0 %	2.0 %	15 %	15 %	15 %	15 %	15 %	15 %	15 %	15 %	15 %	15 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC-model)	5	6	7	9	11	13	14	16	17	19	20	21	23	
PV of FCF	5	5	6	7	8	8	8	8	8	8	7	7	7	63
share of PVs	10.7 %			48.6 %										40.7 %

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	7.5 %	Cyclicality	100
Risk free rate	2.0 %	Transparency	150
Risk premium	5.5 %	Others	2.00
Cost of equity	11.4 %		
WACC	10.30 %	Beta	1.70

Valuation (m)

Present values until 2034e	92		
Terminal Value	63		
Financial liabilities	16		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	33		
Market val. of investments	0		
Liquidity	5		
Equity Value	112	No. of shares (m)	10
		Value per share (EUR)	111.52

Sensitivity Value per share (EUR)

Beta (WACC)	Terminal Growth							Delta EBITDA-margin						
	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %	-150 pp	-100 pp	-50 pp	0.0	50 pp	100 pp	150 pp
2.34 (13.3 %)	65.23	65.92	66.63	67.38	68.17	68.99	69.85	61.0	63.20	65.29	67.38	69.48	71.57	73.66
2.13 (12.3 %)	76.25	77.17	78.13	79.14	80.20	81.32	82.50	72.14	74.47	76.81	79.14	81.47	83.80	86.14
1.91 (11.3 %)	89.57	90.81	92.13	93.52	94.99	96.55	98.21	85.63	88.26	90.89	93.52	96.15	98.78	101.41
1.70 (10.3 %)	105.97	107.71	109.55	111.52	113.61	115.85	118.25	102.50	105.51	108.51	111.52	114.52	117.53	120.53
1.49 (9.3 %)	126.66	129.16	131.83	134.70	137.79	141.13	144.74	124.22	127.71	131.21	134.70	138.20	141.69	145.19
1.27 (8.3 %)	153.59	157.31	161.35	165.73	170.51	175.73	181.48	153.26	157.41	161.57	165.73	169.89	174.04	178.20
1.06 (7.3 %)	190.09	195.93	202.35	209.45	217.32	226.11	235.99	194.14	199.24	204.34	209.45	214.55	219.65	224.76

- 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

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	40	48	55	62	68	75	82	90	97	105	112	118	122	2.5 %
Sales change	21.2 %	20.0 %	15.0 %	13.0 %	10.0 %	10.0 %	10.0 %	10.0 %	7.5 %	7.5 %	7.5 %	5.0 %	3.0 %	
EBIT	13	16	19	21	23	25	28	31	33	36	38	40	41	
EBIT-margin	32.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	34.0 %	
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	9	12	13	15	17	18	20	22	24	26	28	29	30	
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	3	2	2	2	2	2	2	2	2	2	2	2	1	
- Capex	1	1	1	1	1	1	2	2	2	2	2	2	2	
Capex in % of Sales	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC-model)	5	8	10	12	13	15	16	18	20	21	23	25	26	
PV of FCF	5	8	8	9	9	9	9	9	9	9	9	8	8	93
share of PVs	10.5 %			43.4 %										46.1 %

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	7.5 %	Cyclicality	100
Risk free rate	2.0 %	Transparency	150
Risk premium	5.5 %	Others	2.00
Cost of equity	11.4 %		
WACC	10.30 %	Beta	1.70

Valuation (m)

Present values until 2034e	109		
Terminal Value	93		
Financial liabilities	41		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	33		
Market val. of investments	0		
Liquidity	9	No. of shares (m)	10
Equity Value	139	Value per share (EUR)	138.81

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
2.34 (13.3 %)	74.71	75.72	76.78	77.89	79.05	80.26	81.54	69.89	72.55	75.22	77.89	80.55	83.22	85.88
2.13 (12.3 %)	89.68	91.03	92.45	93.94	95.52	97.17	98.92	85.05	88.02	90.98	93.94	96.91	99.87	102.83
1.91 (11.3 %)	107.92	109.77	111.71	113.77	115.94	118.25	120.70	103.77	107.10	110.44	113.77	117.10	120.43	123.76
1.70 (10.3 %)	130.60	133.17	135.90	138.81	141.90	145.21	148.76	127.41	131.21	135.01	138.81	142.60	146.40	150.20
1.49 (9.3 %)	159.48	163.17	167.13	171.37	175.94	180.88	186.22	158.16	162.56	166.97	171.37	175.78	180.18	184.59
1.27 (8.3 %)	197.42	202.93	208.89	215.37	222.43	230.16	238.66	199.69	204.92	210.14	215.37	220.60	225.83	231.05
1.06 (7.3 %)	249.34	257.98	267.47	277.96	289.60	302.59	317.19	258.76	265.16	271.56	277.96	284.36	290.76	297.16

- 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

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	84	123	167	214	259	305	351	393	428	454	470	484	498	2.0 %
Sales change	15.8 %	46.7 %	35.4 %	28.4 %	21.1 %	17.5 %	15.0 %	12.0 %	9.0 %	6.0 %	3.5 %	3.0 %	3.0 %	
EBIT	43	63	85	109	133	157	175	196	214	227	235	242	249	
EBIT-margin	50.9 %	51.1 %	51.1 %	51.1 %	51.2 %	51.4 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	50.0 %	
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	31	45	61	79	96	113	126	141	154	163	169	174	179	
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	0	4	5	3	5	5	5	4	4	3	2	1	1	
- Capex	1	1	1	2	3	3	4	4	4	5	5	5	5	
Capex in % of Sales	1.3 %	1.0 %	0.8 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	
Free Cash Flow (WACC-model)	29	40	55	74	89	105	118	133	146	156	163	168	173	
PV of FCF	29	36	45	55	60	64	66	67	67	65	61	57	53	631
share of PVs	8.2 %			45.3 %										46.5 %

Model parameter		Valuation (m)	
Derivation of WACC:		Derivation of Beta:	
Debt ratio	15.0 %	Financial Strength	100
Cost of debt	6.0 %	Liquidity	3.00
Market return	7.5 %	Cyclicality	100
Risk free rate	2.0 %	Transparency	150
Risk premium	5.5 %	Others	2.00
Cost of equity	11.4 %		
WACC	10.30 %	Beta	1.70
		Present values until 2034e	726
		Terminal Value	631
		Financial liabilities	65
		Pension liabilities	0
		Hybrid capital	0
		Minority interest	33
		Market val. of investments	0
		Liquidity	1
		Equity Value	1,259
		No. of shares (m)	10
		Value per share (EUR)	1,259.27

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	-0.50 pp	0.0	0.50 pp	100 pp	150 pp
1.91 (11.3 %)	1054.99	1066.92	1079.47	1092.69	1106.65	1121.40	1137.01	1054.69	1067.35	1080.02	1092.69	1105.36	1118.03	1130.70
1.81 (10.8 %)	1126.83	1140.79	1155.52	1171.09	1187.57	1205.04	1223.60	1130.56	1144.07	1157.58	1171.09	1184.60	1198.10	1211.61
1.75 (10.5 %)	1165.78	1180.92	1196.92	1213.85	1231.80	1250.87	1271.16	1171.95	1185.92	1199.88	1213.85	1227.82	1241.78	1255.75
1.70 (10.3 %)	1206.99	1223.43	1240.82	1,259.27	1278.87	1299.72	1321.95	1215.91	1230.37	1244.82	1,259.27	1273.73	1288.18	1302.63
1.65 (10.0 %)	1250.64	1268.52	1287.47	1307.61	1329.03	1351.88	1376.29	1262.69	1277.66	1292.64	1307.61	1322.58	1337.55	1352.52
1.59 (9.8 %)	1296.95	1316.43	1337.12	1359.14	1382.62	1407.70	1434.57	1312.57	1328.09	1343.61	1359.14	1374.66	1390.19	1405.71
1.49 (9.3 %)	1398.54	1421.80	1446.60	1473.10	1501.48	1531.95	1564.75	1422.86	1439.61	1456.35	1473.10	1489.85	1506.60	1523.34

- 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

Valuation							
	2018	2019	2020	2021	2022e	2023e	2024e
Price / Book	n.a.	n.a.	1.1 x	1.1 x	0.8 x	0.7 x	0.6 x
Book value per share ex intangibles	46.59	-41.67	6.81	-16.15	-14.05	-9.71	-3.19
EV / Sales	n.a.	n.a.	3.6 x	6.0 x	3.1 x	2.0 x	1.3 x
EV / EBITDA	n.a.	n.a.	22.4 x	859.3 x	8.0 x	5.0 x	3.1 x
EV / EBIT	n.a.	n.a.	n.a.	n.a.	10.0 x	6.1 x	3.7 x
EV / EBIT adj.*	n.a.	n.a.	17.6 x	18.3 x	8.4 x	5.4 x	3.4 x
P / FCF	n.a.	n.a.	54.1 x	n.a.	7.8 x	4.4 x	2.8 x
P / E	n.a.	n.a.	n.a.	n.a.	7.9 x	4.7 x	3.1 x
P / E adj.*	n.a.	n.a.	57.9 x	52.2 x	6.3 x	4.1 x	2.9 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.	n.a.	2.8 %	-1.1 %	10.0 %	15.8 %	24.5 %

*Adjustments made for: -

Company Specific Items							
	2018	2019	2020	2021	2022e	2023e	2024e
Sales (pro forma)	11.7	54.3	51.6	126.5	149.1	202.7	261.4
yoy	n.a.	n.a.	-5.0 %	145.3 %	17.9 %	35.9 %	28.9 %
EBITDA (pro forma)	3.7	16.2	12.3	48.2	57.1	83.1	110.6
Margin (pro forma)	31.9 %	29.8 %	23.8 %	38.1 %	38.3 %	41.0 %	42.3 %

Consolidated profit & loss

In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Sales	1.1	16.6	51.6	60.3	149.1	202.7	261.4
Change Sales yoy	n.a.	1408.3 %	211.5 %	16.9 %	147.2 %	35.9 %	28.9 %
Increase / decrease in inventory	-0.1	0.2	-0.1	-0.2	0.0	0.0	0.0
Own work capitalised	0.0	0.8	0.9	1.4	0.0	0.0	0.0
Total Sales	1.1	17.5	52.3	61.5	149.1	202.7	261.4
Material expenses	0.2	4.3	13.8	14.2	16.4	38.5	49.7
Gross profit	0.8	13.2	38.6	47.3	132.7	164.2	211.7
<i>Gross profit margin</i>	<i>75.8 %</i>	<i>80.0 %</i>	<i>74.7 %</i>	<i>78.4 %</i>	<i>89.0 %</i>	<i>81.0 %</i>	<i>81.0 %</i>
Personnel expenses	0.7	6.8	19.5	21.8	43.3	56.8	73.2
Other operating income	0.3	0.4	1.5	2.0	1.5	2.0	2.6
Other operating expenses	1.6	5.6	12.0	26.9	34.2	26.4	30.6
Unfrequent items	0.0	0.0	-0.1	-0.2	0.0	0.0	0.0
EBITDA	-1.3	1.3	8.3	0.4	56.8	83.1	110.6
<i>Margin</i>	<i>-119.7 %</i>	<i>7.7 %</i>	<i>16.2 %</i>	<i>0.7 %</i>	<i>38.1 %</i>	<i>41.0 %</i>	<i>42.3 %</i>
Depreciation of fixed assets	0.0	0.8	1.7	2.1	2.8	3.6	4.7
EBITA	-1.3	0.4	6.7	-1.7	54.0	79.4	105.9
Amortisation of intangible assets	0.2	2.7	7.7	7.6	8.1	12.1	13.2
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	-1.6	-2.3	-1.0	-9.3	45.8	67.4	92.6
<i>Margin</i>	<i>-141.9 %</i>	<i>-13.7 %</i>	<i>-2.0 %</i>	<i>-15.4 %</i>	<i>30.7 %</i>	<i>33.2 %</i>	<i>35.4 %</i>
EBIT adj.	-1.6	1.9	10.6	19.7	54.1	75.7	100.9
Interest income	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Interest expenses	0.0	1.2	3.9	6.2	12.0	11.1	7.8
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	-1.6	-3.4	-4.8	-15.4	33.8	56.3	84.9
<i>Margin</i>	<i>-146.2 %</i>	<i>-20.5 %</i>	<i>-9.4 %</i>	<i>-25.5 %</i>	<i>22.7 %</i>	<i>27.8 %</i>	<i>32.5 %</i>
Total taxes	0.1	0.4	1.9	3.4	9.5	15.7	23.7
Net income from continuing operations	-1.7	-3.8	-6.8	-18.8	24.4	40.6	61.2
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	-1.7	-3.8	-6.8	-18.8	24.4	40.6	61.2
Minority interest	0.0	0.0	0.0	-2.9	0.0	0.0	0.0
Net income	-1.7	-3.8	-6.8	-15.9	24.4	40.6	61.2
<i>Margin</i>	<i>-151.5 %</i>	<i>-23.1 %</i>	<i>-13.1 %</i>	<i>-26.3 %</i>	<i>16.3 %</i>	<i>20.0 %</i>	<i>23.4 %</i>
Number of shares, average	2.5	2.9	8.3	10.4	10.9	10.9	10.9
EPS	-0.66	-1.32	-0.81	-1.52	2.22	3.71	5.59
EPS adj.	-0.66	-0.01	0.53	0.46	2.78	4.26	6.15

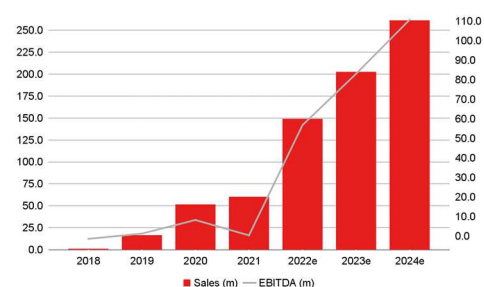
*Adjustments made for:

Guidance: Pro forma sales of EUR 140-150m and adj. EBITDA pro forma of EUR 49-53m

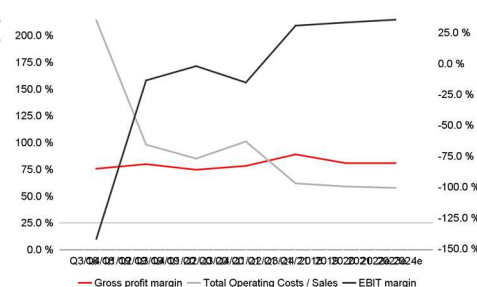
Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Total Operating Costs / Sales	214.2 %	98.2 %	85.0 %	101.0 %	61.9 %	59.0 %	57.7 %
Operating Leverage	n.a.	0.0 x	-0.3 x	46.5 x	n.a.	1.3 x	1.3 x
EBITDA / Interest expenses	n.m.	1.1 x	2.1 x	0.1 x	4.7 x	7.5 x	14.3 x
Tax rate (EBT)	-3.7 %	-12.9 %	-39.7 %	-22.0 %	28.0 %	27.9 %	27.9 %
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.

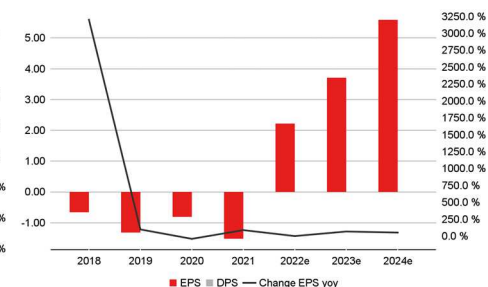
Sales, EBITDA
in EUR m



Operating Performance
in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

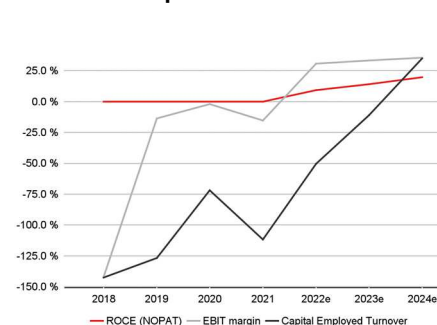
Consolidated balance sheet

In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Assets							
Goodwill and other intangible assets	0.0	160.6	152.7	398.9	385.4	373.4	360.2
thereof other intangible assets	0.0	0.0	53.7	147.7	139.6	127.5	114.3
thereof Goodwill	0.0	91.4	91.4	243.6	243.6	243.6	243.6
Property, plant and equipment	0.8	11.3	11.7	16.2	15.7	14.8	13.3
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	32.2	1.0	0.6	82.7	95.7	140.5	190.1
Fixed assets	33.0	172.9	165.0	497.7	496.9	528.7	563.6
Inventories	4.3	10.7	9.7	12.6	14.9	20.3	26.1
Accounts receivable	1.4	5.9	7.2	20.2	22.5	30.5	39.4
Liquid assets	31.6	17.2	123.5	30.3	29.9	34.1	77.4
Other short-term assets	0.1	1.1	0.9	53.7	59.8	80.9	104.2
Current assets	37.3	34.8	141.4	116.8	127.1	165.8	247.2
Total Assets	70.3	207.7	306.4	614.5	624.0	694.5	810.8
Liabilities and shareholders' equity							
Subscribed capital	4.2	6.6	10.4	10.4	10.4	10.4	10.4
Capital reserve	42.1	118.7	227.7	227.7	227.7	227.7	227.7
Retained earnings	-2.6	0.0	0.0	0.0	24.4	64.7	125.6
Other equity components	3.0	-6.5	-14.6	-16.0	-30.8	-35.6	-38.4
Shareholders' equity	46.6	118.9	223.4	222.0	231.6	267.1	325.2
Minority interest	0.0	0.0	0.0	32.9	32.9	32.9	32.9
Total equity	46.6	118.9	223.4	254.9	264.5	300.0	358.1
Provisions	0.3	0.6	2.2	4.9	6.9	6.9	6.9
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	17.0	61.3	54.3	140.9	115.9	75.9	50.9
Short-term financial liabilities	1.0	5.4	6.1	17.0	42.0	2.0	2.0
Accounts payable	2.8	3.1	2.5	12.7	15.5	21.1	27.2
Other liabilities	3.7	23.8	24.0	201.0	221.2	290.7	367.7
Liabilities	23.8	88.8	83.0	359.6	359.6	394.6	452.7
Total liabilities and shareholders' equity	70.3	207.7	306.4	614.5	624.0	694.5	810.8

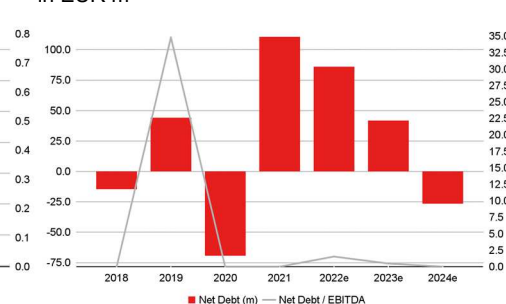
Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Efficiency of Capital Employment							
Operating Assets Turnover	0.3 x	0.7 x	2.0 x	1.7 x	4.0 x	4.6 x	5.1 x
Capital Employed Turnover	0.0 x	0.1 x	0.3 x	0.2 x	0.4 x	0.6 x	0.8 x
ROA	-5.0 %	-2.2 %	-4.1 %	-3.2 %	4.9 %	7.7 %	10.9 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	n.a.	n.a.	9.2 %	14.0 %	19.8 %
ROE	-6.8 %	-4.6 %	-3.9 %	-7.1 %	10.7 %	16.3 %	20.7 %
Adj. ROE	-6.8 %	0.0 %	2.6 %	2.1 %	13.4 %	18.7 %	22.7 %
Balance sheet quality							
Net Debt	-14.6	44.2	-69.3	110.6	86.0	41.8	-26.5
Net Financial Debt	-14.6	44.2	-69.3	110.6	86.0	41.8	-26.5
Net Gearing	-31.3 %	37.1 %	-31.0 %	43.4 %	32.5 %	13.9 %	-7.4 %
Net Fin. Debt / EBITDA	n.a.	3482.1 %	n.a.	n.a.	151.4 %	50.3 %	n.a.
Book Value / Share	46.6	118.9	21.5	20.3	21.2	24.4	29.7
Book value per share ex intangibles	46.6	-41.7	6.8	-16.2	-14.1	-9.7	-3.2

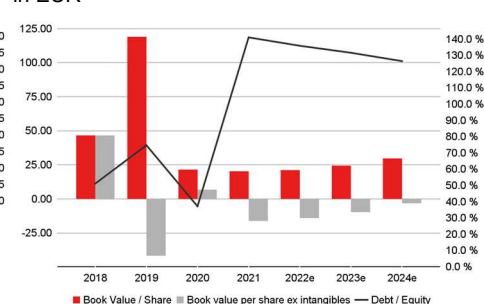
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

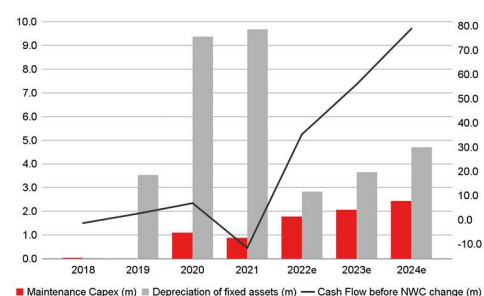
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Net income	-1.7	-3.8	-6.8	-18.8	24.4	40.3	60.9
Depreciation of fixed assets	0.0	3.5	9.4	9.7	2.8	3.6	4.7
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.2	2.7	7.7	7.6	8.1	12.1	13.2
Increase/decrease in long-term provisions	0.0	0.1	0.0	-0.1	0.0	0.0	0.0
Other non-cash income and expenses	0.1	0.0	-3.4	-9.9	0.0	0.0	0.0
Cash Flow before NWC change	-1.4	2.6	7.0	-11.5	35.3	56.0	78.8
Increase / decrease in inventory	0.5	0.5	-1.1	-2.3	-2.3	-5.4	-5.8
Increase / decrease in accounts receivable	0.0	0.0	0.0	0.0	-2.3	-8.0	-8.9
Increase / decrease in accounts payable	0.1	1.2	-0.2	7.6	2.8	5.6	6.1
Increase / decrease in other working capital positions	0.0	0.0	0.0	0.0	-6.5	-1.2	1.3
Increase / decrease in working capital (total)	0.6	1.7	-1.3	5.3	-8.4	-9.0	-7.3
Net cash provided by operating activities [1]	-0.7	4.3	5.7	-6.2	26.9	47.0	71.5
Investments in intangible assets	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	0.0	0.0	-1.0	-1.2	-2.4	-2.8	-3.2
Payments for acquisitions	0.0	0.0	-0.1	-142.1	0.0	0.0	0.0
Financial investments	0.0	0.0	-0.4	-0.8	0.0	0.0	0.0
Income from asset disposals	-26.0	0.1	0.0	0.1	0.0	0.0	0.0
Net cash provided by investing activities [2]	-26.0	0.1	-1.4	-144.0	-2.4	-2.8	-3.2
Change in financial liabilities	12.7	17.2	0.0	58.0	-25.0	-40.0	-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	0.0	56.5	112.7	0.0	0.0	0.0	0.0
Other	0.0	-2.2	-10.4	-2.4	0.0	0.0	0.0
Net cash provided by financing activities [3]	12.7	71.5	102.3	55.7	-25.0	-40.0	-25.0
Change in liquid funds [1]+[2]+[3]	-14.0	75.9	106.6	-94.5	-0.4	4.2	43.3
Effects of exchange-rate changes on cash	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Cash and cash equivalent at end of period	-11.5	107.5	124.0	29.3	29.9	34.1	77.4

Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Cash Flow							
FCF	-0.7	4.3	4.7	-7.4	24.6	44.2	68.3
Free Cash Flow / Sales	-68.2 %	25.8 %	9.2 %	-12.2 %	16.5 %	21.8 %	26.1 %
Free Cash Flow Potential	-1.4	0.8	5.3	-3.8	45.6	65.0	84.2
Free Cash Flow / Net Profit	45.0 %	-111.6 %	-70.0 %	46.5 %	100.9 %	109.0 %	111.6 %
Interest Received / Avg. Cash	0.0 %	0.2 %	0.1 %	0.1 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	0.5 %	3.0 %	6.7 %	6.3 %	9.3 %	11.6 %	12.2 %
Management of Funds							
Investment ratio	0.0 %	0.0 %	2.0 %	1.9 %	1.6 %	1.4 %	1.2 %
Maint. Capex / Sales	3.2 %	0.0 %	2.1 %	1.5 %	1.2 %	1.0 %	0.9 %
Capex / Dep	0.0 %	0.0 %	11.2 %	12.1 %	21.6 %	17.5 %	18.1 %
Avg. Working Capital / Sales	129.3 %	49.1 %	27.0 %	28.5 %	14.1 %	12.7 %	13.0 %
Trade Debtors / Trade Creditors	48.8 %	188.4 %	284.5 %	158.4 %	145.2 %	144.5 %	144.9 %
Inventory Turnover	0.1 x	0.4 x	1.4 x	1.1 x	1.1 x	1.9 x	1.9 x
Receivables collection period (days)	458	129	51	122	55	55	55
Payables payment period (days)	4,677	264	67	326	345	200	200
Cash conversion cycle (Days)	2,883	772	241	118	42	47	47

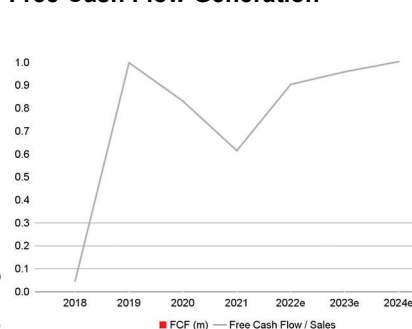
CAPEX and Cash Flow

in EUR m



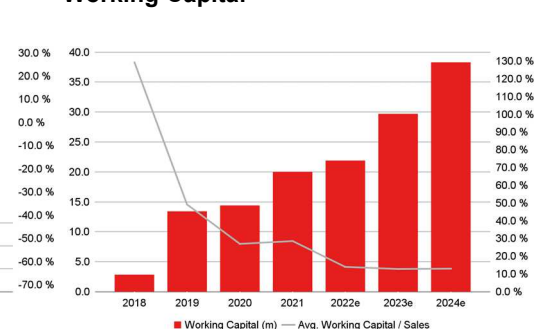
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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SOURCES

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Brockhaus Technologies	3, 5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2GSU42.htm

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-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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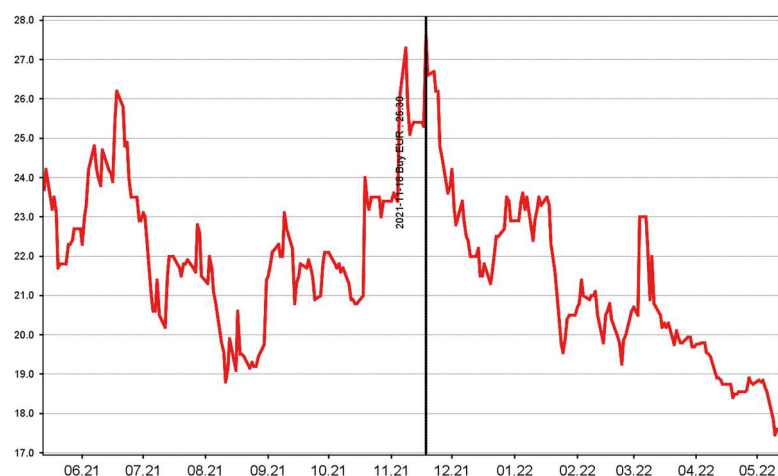
Rating	Number of stocks	% of Universe
Buy	170	81
Hold	36	17
Sell	3	1
Rating suspended	2	1
Total	211	100

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	50	86
Hold	6	10
Sell	0	0
Rating suspended	2	3
Total	58	100

PRICE AND RATING HISTORY BROCKHAUS TECHNOLOGIES AS OF 12.05.2022



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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