(CDAX, Telecom/Internet, SB1 GR)



Hold	(D.)	Value Indicators:		Warburg ESG Risk Score:		Description:	
пош	(Buy)	DCF:	9.97	ESG Score (MSCI based):	3.0	Operator of financial portals,	
40.00				Balance Sheet Score:	4.8	including the largest German	
EUR 10.00	(EUR 13.50)			Market Liquidity Score:	1.0	financial user forum	
		Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2023e
		Market cap:	134.86	Freefloat	37.28 %	Beta:	1.4
Price	EUR 8.60	No. of shares (m):	15.68	Management Team	2.02 %	Price / Book:	2.9 x
Upside	16.3 %	EV:	120.90	André Kolbinger	60.70 %	Equity Ratio:	72 %
		Freefloat MC:	50.28				
		Ø Trad. Vol. (30d):	54.64 th				

2023 to be another year of transition in a still challenging market environment

Stated Figure	es Q4/2022:				Comment on Figures:
in EUR m	2022	2022e	2021	yoy	 Reported revenue increased by +9.5% yoy. However, including
Sales	52.80	54.5	48.2	9.5%	Smartbroker AG (previously wallstreet:online capital AG) for the full year 2021, revenue would have shown a declining trend of -7%
EBITDA	9.10	8.1	3.6	155.8%	On a pro forma basis, EBITDA would have increased by +153%, only a
margin	17.2%	14.9%	7.4%		minor deviation to reported figures
EBIT margin	-8.20 -15.5%	-3.6 -6.6%	0.35 0.7%	-	 EBIT was affected by high extraordinary depreciation amounting to EUR 12.7m

Smartbroker AG reported preliminary figures for 2022 that were broadly in line with expectations but were also affected by further extraordinary depreciation on activated development costs.

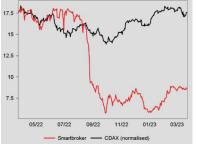
- The media segment experienced a decline of -33% in the number of page impressions to 2.6bn. Against this backdrop, revenues in this segment showed rather robust development, declining by only -4% to 34.1bn. In light of the persistently challenging market environment, revenues are expected to remain rather flat for the current year before returning to slight growth in 2024e.
- The transaction segment was strongly affected by the adverse market environment and the strategic decision to partner with Baader Bank rather than pursuing the development of its own trading infrastructure. In the course of this decision, the company applied a brake on customer gains, resulting in brokerage accounts totaling 267k (+8% yoy) at the end of 2022e. Smartbroker will remain in transition mode in 2023 with the migration to Baader due in H2 2023 and the development of its own trading app. Thus, further customer acquisitions will remain on pause for the current year, before returning to focus in 2024e when the management expects to gain an additional 75k trading customers.
- Considering the market environment, the upcoming organizational challenges in the course of the migration to Baader Bank and the further development of the trading app, the company is guiding for revenues in the range of EUR 51-56m and EBITDA in a range of EUR 1-4m.

Assessment: The migration to Baader and the further development of the app are clearly in focus for the current year before the company returns its attention to customer growth in 2024. However, the market environment appears challenging and we remain on the sidelines until the technical migration and setup is finalized. Our updated financial model points to a new PT of EUR 10 and, as a result, our rating is reduced to Hold.

Changes in E	stimates:					
FY End: 31.12. in EUR m	2023e (old)	+ / -	2024e (old)	+/-	2025e (old)	+/-
Sales EBITDA EBIT	61.76 16.59 11.50	-14.3 % -78.1 % n.m.	67.78 19.78 14.39	-17.7 % -24.7 % -29.7 %	n.a. n.a. n.a.	n.m. n.m. n.m.

Comment on Changes:

- Significant investment in the technical migration of customers and the further development of its own trading app to burden EBITDA development in 2023
- The lower base in turn results in lower estimates for 2024e
- Inclusion of detailed 2025 estimates for the first time.

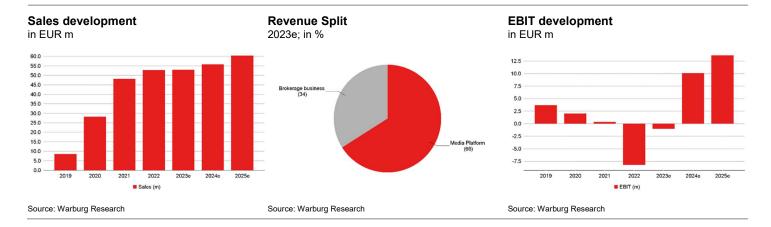


Rel. Performance vs CDAX:	
1 month:	1.0 %
6 months:	4.0 %
Year to date:	37.9 %
Trailing 12 months:	-49.0 %

Company events:

FY End: 31.12.	CAGR							
in EUR m	(22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales	4.6 %	8.55	28.21	48.20	52.80	52.94	55.76	60.41
Change Sales yoy		10.0 %	229.9 %	70.9 %	9.5 %	0.3 %	5.3 %	8.3 %
Gross profit margin		84.0 %	52.3 %	48.2 %	75.0 %	62.2 %	69.4 %	71.0 %
EBITDA	27.0 %	3.70	4.52	3.56	9.10	3.63	14.90	18.66
Margin		43.3 %	16.0 %	7.4 %	17.2 %	6.9 %	26.7 %	30.9 %
EBIT	-	3.69	2.03	0.35	-8.20	-1.01	10.11	13.64
Margin		43.1 %	7.2 %	0.7 %	-15.5 %	-1.9 %	18.1 %	22.6 %
Net income	-	1.90	3.51	-0.56	-10.80	-0.71	7.08	9.27
EPS	-	1.06	0.24	-0.04	-0.69	-0.05	0.45	0.59
EPS adj.	-	1.06	0.24	-0.04	-0.69	-0.05	0.45	0.59
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		-0.29	0.03	0.10	-1.00	-0.02	0.42	0.57
EV / Sales		0.5 x	4.0 x	6.6 x	3.9 x	2.3 x	2.1 x	1.8 x
EV / EBITDA		1.2 x	24.8 x	89.6 x	22.6 x	33.3 x	7.7 x	5.7 x
EV / EBIT		1.2 x	55.3 x	913.4 x	n.a.	n.a.	11.3 x	7.9 x
P/E		4.7 x	34.4 x	n.a.	n.a.	n.a.	19.1 x	14.8 x
P / E adj.		4.7 x	34.4 x	n.a.	n.a.	n.a.	19.1 x	14.8 x
FCF Potential Yield		57.0 %	3.1 %	0.9 %	3.9 %	3.3 %	10.4 %	13.3 %
Net Debt		-4.50	-6.57	-19.82	-14.23	-13.96	-20.51	-29.49
ROE		8.2 %	12.2 %	-1.4 %	-22.5 %	-1.5 %	14.2 %	16.0 %
ROCE (NOPAT)		14.2 %	6.8 %	n.a.	n.a.	n.a.	21.4 %	27.7 %
Guidance:	2023: Revenue	e EUR 51m	- 56m; EBITE	A EUR 1m -	· 4m			
EV / EBITDA EV / EBIT P / E P / E adj. FCF Potential Yield Net Debt ROE ROCE (NOPAT)	2023: Revenue	1.2 x 1.2 x 4.7 x 4.7 x 57.0 % -4.50 8.2 % 14.2 %	24.8 x 55.3 x 34.4 x 34.4 x 3.1 % -6.57 12.2 % 6.8 %	89.6 x 913.4 x n.a. n.a. 0.9 % -19.82 -1.4 % n.a.	22.6 x n.a. n.a. 3.9 % -14.23 -22.5 % n.a.	33.3 x n.a. n.a. n.a. 3.3 %	7.7 x 11.3 x 19.1 x 19.1 x 10.4 % -20.51 14.2 %	5.7 x 7.9 x 14.8 x 14.8 x 13.3 % -29.49 16.0 %



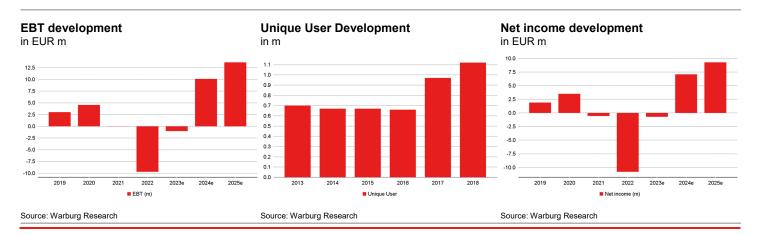


Company Background

- The operation of the German financial information platforms www.wallstreet-online.de,www.boersennews.de, www.finanznachrichten.de and ariva.de forms the core business of the company.
- The financial user forum on www.wallstreet-online.de is the biggest in Germany with more than 460k active users and 1.1m articles on more than 80 topics.
- The newly established smartbroker enlarges the business in the direction of online discount brokerage services and represents a potentially significant growth driver for the future
- The users of the portals are very homogeneous and thus attractive for advertisers in terms of specific targeting.
- The company aims at further diversification along the value chain of financial services and capital markets to broaden the offering to the customer.

Competitive Quality

- Strong number two in German financial portals after the acquisition of Ariva.de. Merger with boersennews.de strengthens mobile offering.
- Key differentiator is the large user forum, resulting in a high number of loyal users, who also generate new content.
- Homogeneous user structure makes advertisers' targeting more specific, resulting in comparably high prices for marketing space on the platform.
- Future diversification of revenue streams will reduce cyclicality and, to a certain extent, decouple the company's revenues from capital market developments.



Smartbroker



DCF model														
	Detaile	d forecas	t period				7	ransition	al period					Term. Value
Figures in EUR m	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales Sales change	52.94 0.3 %	55.76 5.3 %	60.41 8.3 %	65.85 9.0 %	71.12 8.0 %	76.10 7.0 %	80.66 6.0 %	84.70 5.0 %	88.09 4.0 %	90.73 3.0 %	92.54 2.0 %	93.93 1.5 %	95.34 1.5 %	1.0 %
Sales Change	0.5 %	5.5 %	0.3 %	9.0 %	0.0 %	7.0 %	0.0 %	5.0 %	4.0 %	3.0 %	2.0 %	1.5 %	1.5 %	1.0 %
EBIT	-1.01	10.11	13.64	16.46	19.91	22.83	24.20	25.41	26.43	27.22	27.76	28.18	28.60	
EBIT-margin	-1.9 %	18.1 %	22.6 %	25.0 %	28.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	
Tax rate (EBT)	30.0 %	30.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	
NOPAT	-0.71	7.08	9.27	11.19	13.54	15.52	16.46	17.28	17.97	18.51	18.88	19.16	19.45	
Depreciation	4.65	4.79	5.02	3.95	3.56	2.28	2.42	2.54	2.64	2.72	2.78	2.82	2.86	
in % of Sales	8.8 %	8.6 %	8.3 %	6.0 %	5.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
Changes in provisions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Change in Liquidity from														
- Working Capital	-0.80	0.30	0.30	0.36	0.42	0.40	0.37	0.32	0.27	0.21	0.15	0.11	0.11	
- Capex	5.02	5.02	5.02	3.29	2.84	2.28	2.42	2.54	2.64	2.72	2.78	2.82	2.86	
Capex in % of Sales	9.5 %	9.0 %	8.3 %	5.0 %	4.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
- Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Free Cash Flow (WACC Model)	-0.28	6.55	8.98	11.50	13.83	15.13	16.09	16.96	17.70	18.30	18.73	19.05	19.34	20
PV of FCF	-0.26	5.46	6.78	7.85	8.55	8.47	8.16	7.78	7.36	6.89	6.38	5.88	5.40	58
share of PVs		8.40 %						51.02	2 %					40.57 %

Model parameter				Valuation (m)			
Derivation of WACC:		Derivation of Beta:		Present values 2035e	85		
				Terminal Value	58		
Debt ratio	0.00 %	Financial Strength	1.40	Financial liabilities	6		
Cost of debt (after tax)	2.4 %	Liquidity (share)	1.50	Pension liabilities	0		
Market return	8.25 %	Cyclicality	1.40	Hybrid capital	0		
Risk free rate	2.75 %	Transparency	1.40	Minority interest	0		
		Others	1.30	Market val. of investments	0		
				Liquidity	20	No. of shares (m)	15.7
WACC	10.45 %	Beta	1.40	Equity Value	156	Value per share (EUR)	9.97

Selis	onlivity va	iue per on	are (LUK	,													
		Terminal (Growth								Delta EBIT	-margin					
Beta	WACC	0.25 %	0.50 %	0.75 %	1.00 %	1.25 %	1.50 %	1.75 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.58	11.4 %	8.72	8.78	8.85	8.92	8.99	9.07	9.15	1.58	11.4 %	8.45	8.61	8.76	8.92	9.07	9.23	9.38
1.49	11.0 %	9.19	9.26	9.34	9.42	9.50	9.59	9.69	1.49	11.0 %	8.93	9.09	9.25	9.42	9.58	9.74	9.91
1.45	10.7 %	9.44	9.52	9.60	9.69	9.78	9.88	9.98	1.45	10.7 %	9.18	9.35	9.52	9.69	9.85	10.02	10.19
1.40	10.5 %	9.70	9.79	9.88	9.97	10.07	10.18	10.29	1.40	10.5 %	9.45	9.63	9.80	9.97	10.14	10.32	10.49
1.35	10.2 %	9.98	10.07	10.17	10.27	10.38	10.50	10.62	1.35	10.2 %	9.74	9.92	10.09	10.27	10.45	10.63	10.81
1.31	9.9 %	10.27	10.37	10.48	10.59	10.71	10.83	10.97	1.31	9.9 %	10.04	10.22	10.41	10.59	10.77	10.96	11.14
1.22	9.5 %	10.91	11.03	11.15	11.28	11.43	11.58	11.74	1.22	9.5 %	10.70	10.89	11.09	11.28	11.48	11.68	11.87

- The long-term EBIT margin of 45% is expected to be reached from 2025 onwards
- Growth rates for 2020 and 2021 include consolidation of acquired companies

Smartbroker



Valuation							
	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	0.3 x	3.9 x	6.9 x	4.7 x	2.9 x	2.5 x	2.2 x
Book value per share ex intangibles	14.98	0.68	0.77	0.76	0.69	1.13	1.72
EV / Sales	0.5 x	4.0 x	6.6 x	3.9 x	2.3 x	2.1 x	1.8 x
EV / EBITDA	1.2 x	24.8 x	89.6 x	22.6 x	33.3 x	7.7 x	5.7 x
EV / EBIT	1.2 x	55.3 x	913.4 x	n.a.	n.a.	11.3 x	7.9 x
EV / EBIT adj.*	1.2 x	55.3 x	913.4 x	n.a.	n.a.	11.3 x	7.9 x
P/FCF	n.a.	245.7 x	233.1 x	n.a.	n.a.	20.6 x	15.2 x
P/E	4.7 x	34.4 x	n.a.	n.a.	n.a.	19.1 x	14.8 x
P / E adj.*	4.7 x	34.4 x	n.a.	n.a.	n.a.	19.1 x	14.8 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	57.0 %	3.1 %	0.9 %	3.9 %	3.3 %	10.4 %	13.3 %
*Adjustments made for: -							

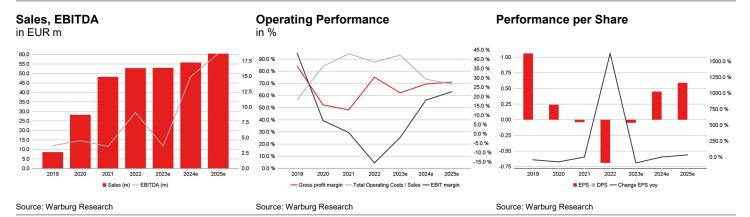
Company Specific Items							
	2019	2020	2021	2022	2023e	2024e	2025e
Unique User	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.



Consolidated profit & loss							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025
Sales	8.55	28.21	48.20	52.80	52.94	55.76	60.41
Change Sales yoy	10.0 %	229.9 %	70.9 %	9.5 %	0.3 %	5.3 %	8.3 %
Increase / decrease in inventory	0.00	0.00	-0.01	0.00	0.00	0.00	0.00
Own work capitalised	0.00	0.00	0.88	2.50	0.10	0.10	0.10
Total Sales	8.55	28.21	49.07	55.30	53.04	55.86	60.51
Material expenses	1.37	13.45	25.85	15.70	20.11	17.16	17.65
Gross profit	7.18	14.75	23.22	39.60	32.92	38.70	42.87
Gross profit margin	84.0 %	52.3 %	48.2 %	75.0 %	62.2 %	69.4 %	71.0 %
Personnel expenses	2.41	7.98	12.64	18.70	20.11	16.69	16.93
Other operating income	0.16	0.26	0.63	1.30	0.50	0.50	0.50
Other operating expenses	1.23	2.51	7.65	13.10	9.68	7.61	7.77
Unfrequent items	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EBITDA	3.70	4.52	3.56	9.10	3.63	14.90	18.66
Margin	43.3 %	16.0 %	7.4 %	17.2 %	6.9 %	26.7 %	30.9 %
Depreciation of fixed assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EBITA	3.70	4.52	3.56	9.10	3.63	14.90	18.66
Amortisation of intangible assets	0.02	2.93	3.80	17.30	4.65	4.79	5.02
Goodwill amortisation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EBIT	3.69	2.03	0.35	-8.20	-1.01	10.11	13.64
Margin	43.1 %	7.2 %	0.7 %	-15.5 %	-1.9 %	18.1 %	22.6 %
EBIT adj.	3.69	2.03	0.35	-8.20	-1.01	10.11	13.64
Interest income	0.02	0.03	0.01	0.00	0.00	0.00	0.00
Interest expenses	0.05	0.17	0.16	0.30	0.00	0.00	0.00
Other financial income (loss)	1.76	2.66	0.23	1.20	0.00	0.00	0.00
EBT	3.02	4.56	0.04	-9.70	-1.01	10.11	13.64
Margin	35.4 %	16.2 %	0.1 %	-18.4 %	-1.9 %	18.1 %	22.6 %
Total taxes	1.12	1.01	0.58	1.10	-0.30	3.03	4.36
Net income from continuing operations	1.90	3.55	-0.54	-10.80	-0.71	7.08	9.27
Income from discontinued operations (net of tax)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net income before minorities	1.90	3.55	-0.54	-10.80	-0.71	7.08	9.27
Minority interest	0.00	0.05	0.02	0.00	0.00	0.00	0.00
Net income	1.90	3.51	-0.56	-10.80	-0.71	7.08	9.27
Margin	22.2 %	12.4 %	-1.2 %	-20.5 %	-1.3 %	12.7 %	15.4 %
Number of shares, average	1.80	14.38	15.10	15.68	15.68	15.68	15.68
EPS	1.06	0.24	-0.04	-0.69	-0.05	0.45	0.59
EPS adj.	1.06	0.24	-0.04	-0.69	-0.05	0.45	0.59
*Adjustments made for:							

Guidance: 2023: Revenue EUR 51m - 56m; EBITDA EUR 1m - 4m

Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	56.7 %	84.0 %	94.4 %	87.5 %	93.3 %	73.5 %	69.3 %
Operating Leverage	0.8 x	-0.2 x	-1.2 x	n.a.	-341.5 x	n.a.	4.2 x
EBITDA / Interest expenses	73.9 x	26.9 x	21.8 x	30.3 x	n.a.	n.a.	n.a.
Tax rate (EBT)	37.1 %	22.1 %	1394.2 %	-11.3 %	30.0 %	30.0 %	32.0 %
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.

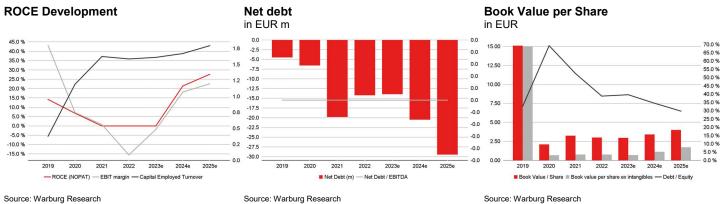






Consolidated balance sheet							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025
Assets							
Goodwill and other intangible assets	0.21	20.47	37.47	35.17	35.52	35.73	35.7
thereof other intangible assets	0.00	8.23	14.39	12.09	12.44	12.66	12.63
thereof Goodwill	0.00	11.43	22.59	22.59	22.59	22.59	22.5
Property, plant and equipment	0.03	0.40	0.91	0.92	0.94	0.95	0.9
Financial assets	28.02	7.92	2.23	1.03	1.03	1.03	1.0
Other long-term assets	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Fixed assets	28.27	28.79	40.60	37.12	37.49	37.71	37.7
Inventories	0.00	0.01	0.00	0.10	0.10	0.10	0.1
Accounts receivable	3.17	4.33	6.97	6.50	5.80	6.10	6.6
Liquid assets	4.50	14.07	25.53	19.94	19.66	26.21	35.1
Other short-term assets	0.08	3.95	2.28	2.28	2.28	2.28	2.2
Current assets	7.76	22.36	34.78	28.82	27.84	34.69	44.1
Total Assets	36.00	51.20	75.40	65.90	65.30	72.40	81.9
Liabilities and shareholders' equity							
Subscribed capital	1.80	14.38	15.10	15.68	15.68	15.68	15.6
Capital reserve	23.45	10.86	29.27	38.73	38.73	38.73	38.7
Retained earnings	1.90	4.95	4.39	-6.41	-7.12	-0.04	9.2
Other equity components	0.00	0.01	0.30	-0.90	-0.90	-0.90	-0.9
Shareholders' equity	27.15	30.21	49.06	47.10	46.39	53.47	62.7
Minority interest	0.00	0.02	0.40	0.40	0.40	0.40	0.4
Total equity	27.15	30.23	49.46	47.50	46.79	53.87	63.1
Provisions	1.21	2.72	6.11	6.11	6.11	6.11	6.1
thereof provisions for pensions and similar obligations	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Financial liabilities (total)	0.00	7.50	5.70	5.70	5.70	5.70	5.7
Short-term financial liabilities	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Accounts payable	0.18	1.57	8.88	1.40	1.50	1.50	1.7
Other liabilities	7.48	9.13	5.22	5.22	5.22	5.22	5.2
Liabilities	8.87	20.93	25.92	18.44	18.54	18.54	18.7
Total liabilities and shareholders' equity	36.00	51.20	75.40	65.90	65.30	72.40	81.9

Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	2.8 x	9.0 x	-44.2 x	8.8 x	10.1 x	10.0 x	10.3 x
Capital Employed Turnover	0.4 x	1.2 x	1.6 x	1.6 x	1.6 x	1.7 x	1.8 x
ROA	6.7 %	12.2 %	-1.4 %	-29.1 %	-1.9 %	18.8 %	24.6 %
Return on Capital							
ROCE (NOPAT)	14.2 %	6.8 %	n.a.	n.a.	n.a.	21.4 %	27.7 %
ROE	8.2 %	12.2 %	-1.4 %	<i>-</i> 22.5 %	-1.5 %	14.2 %	16.0 %
Adj. ROE	8.2 %	12.2 %	-1.4 %	-22.5 %	-1.5 %	14.2 %	16.0 %
Balance sheet quality							
Net Debt	-4.50	-6.57	-19.82	-14.23	-13.96	-20.51	-29.49
Net Financial Debt	-4.50	-6.57	-19.82	-14.23	-13.96	-20.51	-29.49
Net Gearing	-16.6 %	-21.7 %	-40.1 %	-30.0 %	-29.8 %	-38.1 %	-46.7 %
Net Fin. Debt / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	15.1	2.1	3.2	3.0	3.0	3.4	4.0
Book value per share ex intangibles	15.0	0.7	0.8	0.8	0.7	1.1	1.7

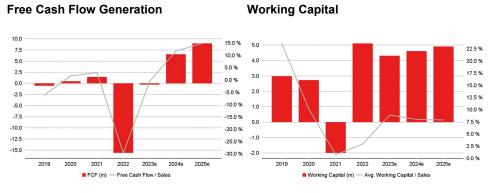


Source: Warburg Research



Consolidated cash flow statement							
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	1.90	3.55	-0.54	-10.80	-0.71	7.08	9.27
Depreciation of fixed assets	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortisation of goodwill	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Amortisation of intangible assets	0.02	2.93	3.80	17.30	4.65	4.79	5.02
Increase/decrease in long-term provisions	0.00	0.27	3.29	0.00	0.00	0.00	0.00
Other non-cash income and expenses	0.00	0.00	0.72	0.00	0.00	0.00	0.00
Cash Flow before NWC change	1.92	6.75	7.27	6.50	3.94	11.87	14.30
Increase / decrease in inventory	0.00	-0.01	0.01	-0.10	0.00	0.00	0.00
Increase / decrease in accounts receivable	-1.92	-5.74	-2.26	0.47	0.70	-0.30	-0.50
Increase / decrease in accounts payable	-0.01	2.28	9.03	-7.48	0.10	0.00	0.20
Increase / decrease in other working capital positions	0.00	-2.18	-0.11	0.00	0.00	0.00	0.00
Increase / decrease in working capital (total)	-1.93	-5.65	6.67	-7.11	0.80	-0.30	-0.30
Net cash provided by operating activities [1]	-0.01	1.10	13.93	-0.61	4.74	11.57	14.00
Investments in intangible assets	-0.50	-0.60	-10.00	-15.00	-5.00	-5.00	-5.00
Investments in property, plant and equipment	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
Payments for acquisitions	0.00	-0.50	-9.14	0.00	0.00	0.00	0.00
Financial investments	3.00	0.00	-1.82	0.00	0.00	0.00	0.00
Income from asset disposals	0.00	-0.20	0.00	0.00	0.00	0.00	0.00
Net cash provided by investing activities [2]	-3.52	-1.32	-19.80	-15.02	-5.02	-5.02	-5.02
Change in financial liabilities	0.00	7.50	-1.80	0.00	0.00	0.00	0.00
Dividends paid	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchase of own shares	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capital measures	5.94	0.00	19.13	10.03	0.00	0.00	0.00
Other	0.00	-2.92	-0.16	0.00	0.00	0.00	0.00
Net cash provided by financing activities [3]	5.94	4.58	17.16	10.03	0.00	0.00	0.00
Change in liquid funds [1]+[2]+[3]	2.41	4.36	11.30	-5.59	-0.28	6.55	8.98
Effects of exchange-rate changes on cash	0.00	-0.02	0.15	0.00	0.00	0.00	0.00
Cash and cash equivalent at end of period	11.67	14.02	25.52	19.94	19.66	26.21	35.19

Financial Ratios							
	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	-0.53	0.48	1.45	-15.62	-0.28	6.55	8.98
Free Cash Flow / Sales	-6.2 %	1.7 %	3.0 %	-29.6 %	-0.5 %	11.7 %	14.9 %
Free Cash Flow Potential	2.58	3.52	2.98	8.00	3.94	11.87	14.30
Free Cash Flow / Net Profit	-27.8 %	13.8 %	-259.4 %	144.7 %	39.2 %	92.5 %	96.8 %
Interest Received / Avg. Cash	0.3 %	0.4 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	n.a.	4.5 %	2.5 %	5.3 %	0.0 %	0.0 %	0.0 %
Management of Funds							
Investment ratio	6.0 %	2.2 %	20.8 %	28.4 %	9.5 %	9.0 %	8.3 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	3289.2 %	24.7 %	312.1 %	86.8 %	107.9 %	104.8 %	99.9 %
Avg. Working Capital / Sales	23.6 %	10.1 %	0.8 %	3.0 %	8.9 %	8.0 %	7.9 %
Trade Debtors / Trade Creditors	1744.5 %	276.1 %	78.5 %	464.3 %	386.7 %	406.7 %	388.2 %
Inventory Turnover	n.a.	1360.2 x	6062.8 x	157.0 x	201.1 x	171.6 x	176.5 x
Receivables collection period (days)	136	56	53	45	40	40	40
Payables payment period (days)	49	43	125	33	27	32	35
Cash conversion cycle (Days)	n.a.	13	-74	13	13	8	5



Source: Warburg Research

Source: Warburg Research

Smartbroker



LEGAL DISCLAIMER

This research report ("investment recommendation") was prepared by the Warburg Research GmbH, a fully owned subsidiary of the M.M.Warburg & CO (AG & Co.) KGaA and is passed on by the M.M.Warburg & CO (AG & Co.) KGaA. It is intended solely for the recipient and may not be passed on to another company without their prior consent, regardless of whether the company is part of the same corporation or not. It contains selected information and does not purport to be complete. The investment recommendation is based on publicly available information and data ("information") believed to be accurate and complete. Warburg Research GmbH neither examines the information for accuracy and completeness, nor guarantees its accuracy and completeness. Possible errors or incompleteness of the information do not constitute grounds for liability of M.M.Warburg & CO (AG & Co.) KGaA or Warburg Research GmbH for damages of any kind whatsoever, and M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are not liable for indirect and/or direct and/or consequential damages. In particular, neither M.M.Warburg & CO (AG & Co.) KGaA nor Warburg Research GmbH are liable for the statements, plans or other details contained in these investment recommendations concerning the examined companies, their affiliated companies, strategies, economic situations, market and competitive situations, regulatory environment, etc. Although due care has been taken in compiling this investment recommendation, it cannot be excluded that it is incomplete or contains errors. M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH, their shareholders and employees are not liable for the accuracy and completeness of the statements, estimations and the conclusions derived from the information contained in this investment recommendation. Provided a investment recommendation is being transmitted in connection with an existing contractual relationship, i.e. financial advisory or similar services, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH shall be restricted to gross negligence and wilful misconduct. In case of failure in essential tasks, M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are liable for normal negligence. In any case, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH is limited to typical, expectable damages. This investment recommendation does not constitute an offer or a solicitation of an offer for the purchase or sale of any security. Partners, directors or employees of M.M.Warburg & CO (AG & Co.) KGaA, Warburg Research GmbH or affiliated companies may serve in a position of responsibility, i.e. on the board of directors of companies mentioned in the report. Opinions expressed in this investment recommendation are subject to change without notice. The views expressed in this research report accurately reflect the research analyst's personal views about the subject securities and issuers. Unless otherwise specified in the research report, no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in the research report. All rights reserved.

COPYRIGHT NOTICE

This work including all its parts is protected by copyright. Any use beyond the limits provided by copyright law without permission is prohibited and punishable. This applies, in particular, to reproductions, translations, microfilming, and storage and processing on electronic media of the entire content or parts thereof.

DISCLOSURE ACCORDING TO §85 OF THE GERMAN SECURITIES TRADING ACT (WPHG), MAR AND MIFID II INCL. COMMISSION DELEGATED REGULATION (EU) 2016/958 AND (EU) 2017/565

The valuation underlying the investment recommendation for the company analysed here is based on generally accepted and widely used methods of fundamental analysis, such as e.g. DCF Model, Free Cash Flow Value Potential, NAV, Peer Group Comparison or Sum of the Parts Model (see also http://www.mmwarburg.de/disclaimer/disclaimer.htm#Valuation). The result of this fundamental valuation is modified to take into consideration the analyst's assessment as regards the expected development of investor sentiment and its impact on the share price.

Independent of the applied valuation methods, there is the risk that the price target will not be met, for instance because of unforeseen changes in demand for the company's products, changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, tax rate etc. For investments in foreign markets and instruments there are further risks, generally based on exchange rate changes or changes in political and social conditions.

This commentary reflects the opinion of the relevant author at the point in time of its compilation. A change in the fundamental factors underlying the valuation can mean that the valuation is subsequently no longer accurate. Whether, or in what time frame, an update of this commentary follows is not determined in advance.

Additional internal and organisational arrangements to prevent or to deal with conflicts of interest have been implemented. Among these are the spatial separation of Warburg Research GmbH from M.M.Warburg & CO (AG & Co.) KGaA and the creation of areas of confidentiality. This prevents the exchange of information, which could form the basis of conflicts of interest for Warburg Research GmbH in terms of the analysed issuers or their financial instruments.

The analysts of Warburg Research GmbH do not receive a gratuity – directly or indirectly – from the investment banking activities of M.M.Warburg & CO (AG & Co.) KGaA or of any company within the Warburg-Group.

All prices of financial instruments given in this investment recommendation are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated.

M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are subject to the supervision of the Federal Financial Supervisory Authority, BaFin. M.M.Warburg & CO (AG & Co.) KGaA is additionally subject to the supervision of the European Central Bank (ECB).

SOURCES

All data and consensus estimates have been obtained from FactSet except where stated otherwise.

The Warburg ESG Risk Score is based on information © 2020 MSCI ESG Research LLC. Reproduced by permission. Although Warburg Research's information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for, or a component, of any financial instruments or products indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damage (including lost profits) even if notified of the possibility.



Additional information for clients in the United States

- 1. This research report (the "Report") is a product of Warburg Research GmbH, Germany, a fully owned subsidiary of M.M.Warburg & CO (AG & Co.) KGaA, Germany (in the following collectively "Warburg"). Warburg is the employer of the research analyst(s), who have prepared the Report. The research analyst(s) reside outside the United States and are not associated persons of any U.S. regulated broker-dealer and therefore are not subject to the supervision of any U.S. regulated broker-dealer.
- 2. The Report is provided in the United States for distribution solely to "major U.S. institutional investors" under Rule 15a-6 of the U.S. Securities Exchange Act of 1934 by CIC.
- 3. CIC (Crédit Industriel et Commercial) and M.M. Warburg & CO have concluded a Research Distribution Agreement that gives CIC Market Solutions exclusive distribution in France, the US and Canada of the Warburg Research GmbH research product.
- 4. The research reports are distributed in the United States of America by CIC ("CIC") pursuant to a SEC Rule 15a-6 agreement with CIC Market Solutions Inc ("CICI"), a U.S. registered broker-dealer and a related company of CIC, and are distributed solely to persons who qualify as "Major U.S. Institutional Investors" as defined in SEC Rule 15a-6 under the Securities Exchange Act of 1934.
- 5. Any person who is not a Major U.S. Institutional Investor must not rely on this communication. The delivery of this research report to any person in the United States of America is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein.

Reference in accordance with section 85 of the German Securities Trading Act (WpHG) and Art. 20 MAR regarding possible conflicts of interest with companies analysed:

- -1- Warburg Research, or an affiliated company, or an employee of one of these companies responsible for the compilation of the research, hold a **share of more than 5%** of the equity capital of the analysed company.
- Warburg Research, or an affiliated company, within the last twelve months participated in the **management of a consortium** for an issue in the course of a public offering of such financial instruments, which are, or the issuer of which is, the subject of the investment recommendation.
- Companies affiliated with Warburg Research **manage financial instruments**, which are, or the issuers of which are, subject of the investment recommendation, in a market based on the provision of buy or sell contracts.
- MMWB, Warburg Research, or an affiliated company, reached an agreement with the issuer to provide **investment banking and/or**investment services and the relevant agreement was in force in the last 12 months or there arose for this period, based on the relevant agreement, the obligation to provide or to receive a service or compensation provided that this disclosure does not result in the disclosure of confidential business information.
- The company compiling the analysis or an affiliated company had reached an **agreement on the compilation of the investment recommendation** with the analysed company.
- -6a- Warburg Research, or an affiliated company, holds a **net long position of more than 0.5%** of the total issued share capital of the analysed company.
- -6b- Warburg Research, or an affiliated company, holds a **net short position of more than 0.5%** of the total issued share capital of the analysed company.
- -6c- The issuer holds shares of more than 5% of the total issued capital of Warburg Research or an affiliated company.
- -7- The company preparing the analysis as well as its affiliated companies and employees have **other important interests** in relation to the analysed company, such as, for example, the exercising of mandates at analysed companies.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Smartbroker	5	http://www.mmwarburg.com/disclaimer/disclaimer en/DE000A2GS609.htm

COMMENT Published 23.03.2023

9



INVESTMENT RECOMMENDATION

Investment recommendation: expected direction of the share price development of the financial instrument up to the given <u>price target</u> in the opinion of the analyst who covers this financial instrument.

<u>"_"</u>	Rating suspended:	The available information currently does not permit an evaluation of the company.
-S-	Sell:	The price of the analysed financial instrument is expected to fall 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.
-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.

WARBURG RESEARCH GMBH -	ANALYSED RESEAR	CH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	159	74
Hold	46	21
Sell	7	3
Rating suspended	3	1
Total	215	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	44	86
Hold	6	12
Sell	0	0
Rating suspended	1	2
Total	51	100

PRICE AND RATING HISTORY SMARTBROKER AS OF 23.03.2023



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.



+49 40 3282-2678 mrode@mmwarburg.com		
+49 40 309537-280 mheider@warburg-research.com +49 40 309537-270	Thilo Kleibauer Retail, Consumer Goods	+49 40 309537-257 tkleibauer@warburg-research.com +49 40 309537-255
hrueschmeier@warburg-research.com	Software, IT	hmueller@warburg-research.com
+49 40 309537-168 saugustin@warburg-research.com	Andreas Pläsier Banks, Financial Services	+49 40 309537-246 aplaesier@warburg-research.com
+49 40 309537-155 jbauer@warburg-research.com	Malte Schaumann Technology	+49 40 309537-170 mschaumann@warburg-research.com
+49 40 309537-175 ccohrs@warburg-research.com	Oliver Schwarz Chemicals, Agriculture	+49 40 309537-250 oschwarz@warburg-research.com
cehmann@warburg-research.com	Real Estate, Telco	+49 40 309537-265 sstippig@warburg-research.com
fellmann@warburg-research.com	Cap. Goods, Engineering	+49 40 309537-248 ctatar@warburg-research.com
jfrey@warburg-research.com	Automobiles, Car Suppliers	+49 40 309537-259 mtonn@warburg-research.com
mfuhrberg@warburg-research.com	Technology	+49 40 309537-290 rvanderhorst@warburg-research.com
+49 40 309537-230 mhidir@warburg-research.com +49 40 309537-240 fhoelscher@warburg-research.com	Andreas Wolf Software, IT	+49 40 309537-140 awolf@warburg-research.com
+49 40 309537-260 pkaiser@warburg-research.com		
TY SALES		
+49 40 3282-2660 mniemann@mmwarburg.com	Christopher Seedorf Switzerland	+49 40 3282-2695 cseedorf@mmwarburg.com
+49 69 5050-7400 kschilling@mmwarburg.com		
+49 40 3282-2665		
tbeckmann@mmwarburg.com		
jbuchmueller@mmwarburg.com		
+49 40 3282-2696		
mfritsch@mmwarburg.com		
+49 69 5050-7413 mmartin@mmwarburg.com	Juliane Niemann Roadshow/Marketing	+49 40 3282-2694 jniemann@mmwarburg.com
+49 40 3282-2634	Jan-Philip Schmidt	+49 40 3282-2682 jschmidt@mmwarburg.com
+49 40 3282-2702	Sebastian Schulz	+49 40 3282-2631
edust@mmwarburg.com	Sales Trading	sschulz@mmwarburg.com
+49 40 3282-2662	Jörg Treptow	+49 40 3282-2658
mmagiera@mmwarburg.com +49 40 3282-2701 bquast@mmwarburg.com	Sales Trading	jtreptow@mmwarburg.com
+49 40 3282-2572	Dr. Christian Jasperneite	+49 40 3282-2439 cjasperneite@mmwarburg.com
		-JP5
	Refinitiv	www.refinitiv.com
· ·		www.capitaliq.com
www.factset.com	Capital 13	www.capitanq.com
ot:		
+49 40 3282-2632 aschaper@mmwarburg.com	Kerstin Muthig Sales Assistance	+49 40 3282-2703 kmuthig@mmwarburg.com
	## ## ## ## ## ## ## ## ## ## ## ## ##	# 49 40 309537-280 mheider@warburg-research.com