

2022e

76 x

55 %

1.3

Description:

Price / Book:

**Equity Ratio:** 

Exasol develops and offers highperformance data warehousing and data analytics solutions

Key Figures (WRe):

Buy	
EUR <b>24.50</b>	(EUR 23.50)
Price	FUR 4 36
Upside	461.9 %

value indicators:	EUR	warburg ESG RISK Score:	3.5
DCF:	24.63	ESG Score (MSCI based):	n.a.
		Balance Sheet Score:	5.0
		Market Liquidity Score:	2.0
Market Snapshot:	EUR m	Shareholders:	
Market cap:	106.6	Freefloat	61.50 %
No. of shares (m):	24.4	Supervisory board	28.70 %
EV:	92.9	Management	0.30 %
Freefloat MC:	65.5	Hesz'sche Privatstiftung	7.10 %
Ø Trad. Vol. (30d):	116.14 th	Treasury stocks	2.40 %

## EBITDA outlook appears cautious

Stated Figure	ted Figures Q2/2022:										
FY End: 31.12. in EUR m	Q2 22	Q2 22e	Q2 21	yoy	6M 22	6M 22e	6M 21	yoy	٠		
ARR	32.5	32.5		23 %		32.5		23 %	i		
Sales EBITDA	8.4 -0.3	8.4 -0.3	6.9 -10.1	22 % n.a.	16.1 -4.1	16.1 -4.1		23 % n.a.			
Margin	-3.2 %	-3.2 %	-146.2 %		-25.4 %	-25.4 %	-111.7 %				
EPS	-0.04	-0.04	-0.47	n.a.	-0.23	-0.23	-0.68	n.a.			

### Comment on Figures:

- ARR increased by only EUR 2m ytd, due to smaller ticket sizes of the 14 new customers
- Sales increased 22% yoy driven by the net ARR retention rate of 119% The significant EBITDA improvement resulted from successful costcutting measures and a positive one-off of EUR 1.9m

After Exasol released its H1 report, which was in line with the preliminary figures, we held a roadshow with the management on Friday. The ARR increased by 23% yoy to EUR 32.5m, which still requires growth of 18.5% to 23.0% from the current level to meet the FY guidance. Although the ARR growth has a Q4-heavy seasonality, the upper end might be too ambitious as new customers are starting with smaller initial ticket sizes due to the overall economic uncertainty. This was already observed in H1 as Exasol gained 14 new customers but its ARR increased by only EUR 2.0m. In the previous year, ARR increased by EUR 2.4m in H1 with only eight new customers. Considering Exasol's success with its land-and-expand approach, we still expect these customers to be good basis for future growth but, for this year, we have reduced our ARR estimate from EUR 39.7m to EUR 38.7m.

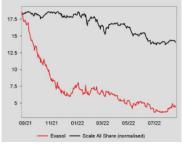
At the same time, we have increased our EBITDA estimate from EUR -14.3m to EUR -12.0m. In H1, OPEX was reduced from EUR 28.9m to EUR 20.2m. Even when adjusted for the positive one-off associated with the pre-IPO stock programmes of EUR 1.9m, costs decreased by 30%. The EBITDA after six months was at EUR -4.1 or at EUR -6.0m adjusted for one-offs. Even taking the seasonally higher marketing spending in Q4 into account, the adj. EBITDA target of EUR -14m to -16m appears very conservative.

With our more cautious forecast for short-term ARR growth and the decrease in our OPEX estimates, we increase our target price to EUR 24.50. The Buy recommendation is confirmed.

Changes in E	Estimates:					
FY End: 31.12. in EUR m	2022e (old)	+/-	2023e (old)	+ / -	2024e (old)	+/-
ARR	39.7	-2.5 %	55.4	-0.9 %	74.9	3.7 %
Sales	33.7	-1.0 %	46.0	-1.7 %	63.2	1.3 %
EBITDA	-14.3	n.m.	-1.7	n.m.	8.9	3.5 %
EPS	-0.73	n.m.	-0.19	n.m.	0.24	8.3 %

## Comment on Changes:

- We reduced the ARR for 2022 and 2023 due to smaller initial ticket sizes in the current economic environment
- With the solid customer gains and the high ARR retention rate we increased the ARR for 2024
- We increased the EBITDA to reflect the successful cost-cutting measures

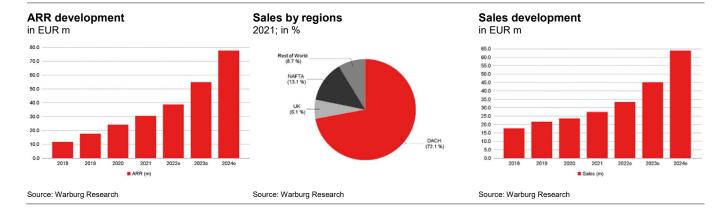


Rel. Performance vs Sca	le All
1 month:	19.6 %
6 months:	-16.6 %
Year to date:	-20.3 %
Trailing 12 months:	-53.0 %
Company events: 16.11.22	Q3

FY End: 31.12.	CAGR							
in EUR m	(21-24e)	2018	2019	2020	2021	2022e	2023e	2024e
ARR	36.5 %	11.8	17.6	24.1	30.5	38.7	54.9	77.6
Sales	32.6 %	17.7	21.6	23.6	27.5	33.4	45.2	64.0
Change Sales yoy		4.4 %	22.0 %	9.2 %	16.4 %	21.6 %	35.3 %	41.6 %
Gross profit margin		98.7 %	97.3 %	94.5 %	96.5 %	92.0 %	92.0 %	92.0 %
EBITDA	-	1.8	-11.0	-29.9	-25.7	-12.0	-1.5	9.2
Margin		10.0 %	-50.7 %	-126.9 %	-93.5 %	-36.0 %	-3.3 %	14.3 %
EBIT	-	-0.1	-13.2	-34.1	-28.5	-14.9	-4.4	6.2
Margin		-0.6 %	-60.8 %	-144.5 %	-103.8 %	-44.5 %	-9.8 %	9.7 %
EBIT adj.		0.5	-4.1	-11.6	-34.4	-16.9	-4.4	6.2
Margin		2.6 %	-18.7 %	-49.2 %	-125.3 %	-50.5 %	-9.8 %	9.7 %
Net income	-	-0.6	-14.0	-34.3	-29.3	-15.2	-4.5	6.4
EPS	-	-0.04	-0.89	-1.70	-1.45	-0.63	-0.18	0.26
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		-0.05	-0.03	-0.70	-2.01	-0.98	-0.09	0.42
FCF / Market cap		n.a.	n.a.	-4.1 %	-11.7 %	-22.2 %	-2.0 %	9.6 %
EV / Sales		n.a.	n.a.	11.8 x	11.6 x	2.8 x	2.1 x	1.3 x
EV / EBITDA		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.3 x
EV / EBIT		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.6 x
P/E		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.8 x
FCF Potential Yield		n.a.	n.a.	-10.8 %	-8.3 %	-13.2 %	-1.7 %	11.0 %
Net Debt		0.3	1.6	-69.4	-27.2	-13.6	-11.5	-21.7
Guidance:	ARR EUR 38.	5-40m., adj.	EBITDA EU	R -14m to -16	6m, liquid fun	ds EUR 10-12	2m	

Analyst



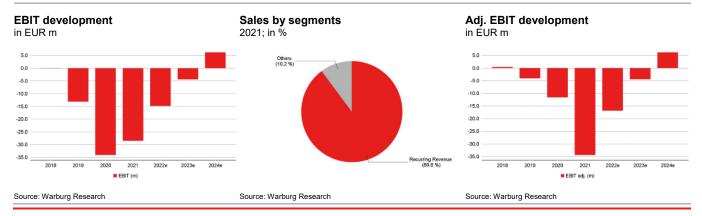


## **Company Background**

- Exasol, headquartered in Nuremberg, Germany, is a technologically leading provider of database solutions for high-performance data warehousing and data analytics
- With its origins as a university spin-off, the company has a history of more than two decades in data science, especially in the field of high-performance computing
- The leading performance of its database solutions is based on a deeply integrated in-memory and massively parallel processing (MPP) architecture
- The customer base consists of approx. 200 enterprises worldwide from a variety of industries including top-tier companies such as adidias, Zalando, Revolut and Piedmont Healthcare
- While the company is currently expanding its geographical footprint, the largest part of its revenue (70.3%) is still generated in the DACH region, followed by Northern America with 13.1% and the UK with 6.8%

## **Competitive Quality**

- Exasol offers the world's fastest database for data analytics and data warehousing according to the relevant independent benchmark research
- Leading technology based on more than two decades in high-performance computing, massive parallel processing and in-memory technology deeply rooted in its database architecture
- Surveys show best-in-class customer satisfaction with the solutions and the customer support as reflected in a low churn-rate
- High scalability through R&D focuses on core application with a vast array of applications and automated deployment and tuning algorithms
- Increasing sales share of subscription-based recurring revenue reached 80.5% in 2020 and, in combination with high customer loyalty, provides a high level of visibility



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## **Exasol**



DCF model														
	Detailed	d forecas	t period				٦	Transition (	al period					Term. Value
Figures in EUR m	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	33.4	45.2	64.0	88.2	117.3	152.5	191.9	234.7	280.7	334.0	390.8	449.4	460.6	
Sales change	21.6 %	35.3 %	41.6 %	37.9 %	32.9 %	30.0 %	25.9 %	22.3 %	19.6 %	19.0 %	17.0 %	15.0 %	2.5 %	2.5 %
EBIT	-14.9	-4.4	6.2	22.4	38.4	42.7	55.6	70.4	81.4	93.5	105.5	116.8	115.2	
EBIT-margin	-44.5 %	-9.8 %	9.7 %	25.4 %	32.7 %	28.0 %	29.0 %	30.0 %	29.0 %	28.0 %	27.0 %	26.0 %	25.0 %	
Tax rate (EBT)	-2.0 %	-2.0 %	0.0 %	14.0 %	17.0 %	19.0 %	21.0 %	23.0 %	25.0 %	27.0 %	29.0 %	30.0 %	30.0 %	
NOPAT	-15.2	-4.5	6.2	19.3	31.9	34.6	44.0	54.2	61.0	68.3	74.9	81.8	80.6	
Depreciation	2.9	2.9	2.9	3.8	4.5	5.0	5.8	7.0	8.4	10.0	11.7	13.5	13.8	
in % of Sales	8.6 %	6.5 %	4.6 %	4.3 %	3.8 %	3.3 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
Changes in provisions	-11.6	-1.3	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	-0.7	-1.3	-1.4	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Capex	0.5	0.5	0.5	2.6	3.5	4.6	5.8	7.0	8.4	10.0	11.7	13.5	13.8	
Capex in % of Sales	1.5 %	1.1 %	0.8 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	3.0 %	
- Other	-10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-13.6	-2.1	10.1	17.9	32.8	35.0	44.0	54.2	61.0	68.3	74.9	81.8	80.6	83
PV of FCF	-13.4	-1.9	8.2	13.2	22.0	21.3	24.3	27.2	27.8	28.3	28.2	27.9	25.0	336
share of PVs		-1.23 %						42.69	9 %					58.53 %

Model parameter								
Derivation of WACC:		Derivation of Beta:						
Debt ratio	0.00 %	Financial Strength	1.50					
Cost of debt (after tax)	4.2 %	Liquidity (share)	1.30					
Market return	8.25 %	Cyclicality	0.80					
Risk free rate	2.75 %	Transparency	1.50					
		Others	1.60					
WACC	10.12 %	Beta	1.34					

Valuation (m)			
Present values 2034e	238		
Terminal Value	336		
Financial liabilities	0		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	27	No. of shares (m)	24.4
Equity Value	602	Value per share (EUR)	24.63

Sens	itivity Va	lue per Sh	are (EUR	)													
		Terminal Growth Delta EBIT-margin															
Beta	WACC	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.52	11.1 %	20.19	20.46	20.75	21.06	21.39	21.73	22.10	1.52	11.1 %	19.83	20.24	20.65	21.06	21.47	21.88	22.29
1.43	10.6 %	21.69	22.02	22.36	22.73	23.12	23.53	23.97	1.43	10.6 %	21.40	21.84	22.28	22.73	23.17	23.62	24.06
1.39	10.4 %	22.52	22.87	23.25	23.65	24.07	24.53	25.01	1.39	10.4 %	22.26	22.72	23.18	23.65	24.11	24.57	25.03
1.34	10.1 %	23.39	23.78	24.19	24.63	25.09	25.59	26.13	1.34	10.1 %	23.18	23.67	24.15	24.63	25.11	25.59	26.07
1.29	9.9 %	24.33	24.75	25.20	25.68	26.19	26.74	27.34	1.29	9.9 %	24.17	24.68	25.18	25.68	26.18	26.68	27.19
1.25	9.6 %	25.32	25.79	26.28	26.81	27.38	27.98	28.64	1.25	9.6 %	25.24	25.76	26.28	26.81	27.33	27.86	28.38
1.16	9.1 %	27.53	28.09	28.69	29.33	30.03	30.78	31.60	1.16	9.1 %	27.61	28.19	28.76	29.33	29.91	30.48	31.06

- The estimated cash burn between 2021 and 2023 should reduce the net cash position to EUR 6.1m.
- The decline in profitability from 2028 onwards reflects the limited visibility.
- The WACC reflects the expected cash burn, the limited visibility of the expected growth and the target debt ratio of 0%.
- The changes in provisions are associated with the pay-out for the Stock Appreciation Right obligations.
- The EUR 16.6m cash inflow in the "others" line comes from disposal from treasury shares to cover SAR obligations.





	2018	2019	2020	2021	2022e	2023e	2024e
Price / Book	n.a.	n.a.	7.2 x	18.1 x	7.6 x	11.3 x	6.7 x
Book value per share ex intangibles	-0.85	-1.23	1.72	0.45	0.32	0.23	0.58
EV / Sales	n.a.	n.a.	11.8 x	11.6 x	2.8 x	2.1 x	1.3 x
EV / EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.3 x
EV / EBIT	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.6 x
EV / EBIT adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13.6 x
P/FCF	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11.4 x
P/E	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.8 x
P / E adj.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.8 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.	-10.8 %	-8.3 %	-13.2 %	-1.7 %	11.0 %

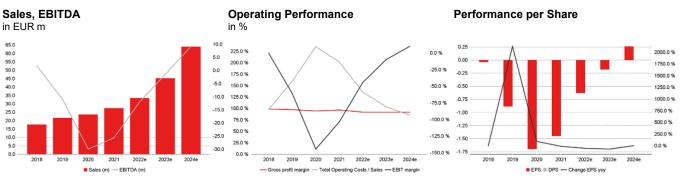
Company Specific Items							
	2018	2019	2020	2021	2022e	2023e	2024e
ARR	11.8	17.6	24.1	30.5	38.7	54.9	77.6



Consolidated profit & loss									
In EUR m	2018	2019	2020	2021	2022e	2023e	2024		
Sales	17.7	21.6	23.6	27.5	33.4	45.2	64.		
Change Sales yoy	4.4 %	22.0 %	9.2 %	16.4 %	21.6 %	35.3 %	41.6		
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.		
Own work capitalised	1.4	1.8	1.9	2.2	0.0	0.0	0.		
Total Sales	19.1	23.4	25.5	29.7	33.4	45.2	64.		
Material expenses	1.6	2.4	3.2	3.2	2.7	3.6	5.		
Gross profit	17.5	21.0	22.3	26.5	30.7	41.6	58.		
Gross profit margin	98.7 %	97.3 %	94.5 %	96.5 %	92.0 %	92.0 %	92.0 9		
Personnel expenses	10.7	24.3	37.3	39.3	31.2	30.8	33.		
Other operating income	0.3	0.3	0.4	8.2	3.3	0.7	0.		
Other operating expenses	5.3	8.0	15.3	21.1	14.9	13.0	16.		
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.		
EBITDA	1.8	-11.0	-29.9	-25.7	-12.0	-1.5	9.		
Margin	10.0 %	-50.7 %	-126.9 %	-93.5 %	-36.0 %	-3.3 %	14.3 %		
Depreciation of fixed assets	0.3	0.4	0.5	0.6	0.6	0.7	0.		
EBITA	1.5	-11.4	-30.4	-26.3	-12.6	-2.2	8.		
Amortisation of intangible assets	1.1	1.3	3.2	2.1	2.2	2.2	2.		
Goodwill amortisation	0.5	0.5	0.5	0.1	0.0	0.0	0.		
EBIT	-0.1	-13.2	-34.1	-28.5	-14.9	-4.4	6.		
Margin	-0.6 %	-60.8 %	-144.5 %	-103.8 %	-44.5 %	-9.8 %	9.7 9		
EBIT adj.	0.5	-4.1	-11.6	-34.4	-16.9	-4.4	6.:		
Interest income	0.0	0.0	0.0	0.0	0.0	0.0	0.		
Interest expenses	0.5	0.7	0.2	0.0	0.0	0.0	0.		
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.		
EBT	-0.6	-13.8	-34.3	-28.5	-14.9	-4.4	6.:		
Margin	-3.5 %	-64.1 %	-145.4 %	-103.6 %	-44.5 %	-9.8 %	9.7 %		
Total taxes	0.0	0.1	0.0	8.0	0.3	0.1	-0.		
Net income from continuing operations	-0.6	-14.0	-34.3	-29.3	-15.2	-4.5	6.		
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.		
Net income before minorities	-0.6	-14.0	-34.3	-29.3	-15.2	-4.5	6.		
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.		
Net income	-0.6	-14.0	-34.3	-29.3	-15.2	-4.5	6.		
Margin	-3.6 %	-64.7 %	-145.4 %	-106.7 %	-45.4 %	-10.0 %	9.9 %		
Number of shares, average	15.7	15.7	20.2	20.2	24.1	24.4	24.		
EPS	-0.04	-0.89	-1.70	-1.45	-0.63	-0.18	0.2		
EPS adi.	-0.04	-0.89	-1.70	-1.45	-0.63	-0.18	0.2		

Guidance: ARR EUR 38.5-40m., adj. EBITDA EUR -14m to -16m, liquid funds EUR 10-12m

Financial Ratios							
	2018	2019	2020	2021	2022e	2023e	2024e
Total Operating Costs / Sales	97.9 %	159.1 %	235.1 %	201.6 %	136.0 %	103.3 %	85.7 %
Operating Leverage	n.a.	601.6 x	17.3 x	-1.0 x	-2.2 x	-2.0 x	n.a.
EBITDA / Interest expenses	3.4 x	n.m.	n.m.	n.m.	n.m.	n.m.	1153.4 x
Tax rate (EBT)	-1.1 %	-0.9 %	0.0 %	-3.0 %	-2.0 %	-2.0 %	-2.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	162,518	145,048	105,826	96,686	107,721	137,368	167,532

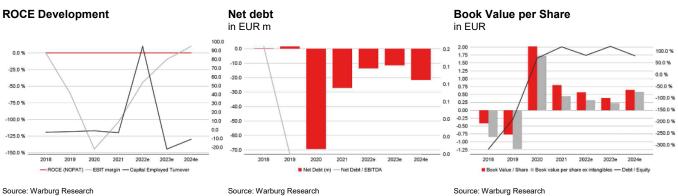


Source: Warburg Research Source: Warburg Research Source: Warburg Research



Consolidated balance sheet							
In EUR m	2018	2019	2020	2021	2022e	2023e	2024
Assets							
Goodwill and other intangible assets	6.7	7.2	7.1	8.4	6.1	3.9	1.6
thereof other intangible assets	2.0	1.9	1.1	0.8	0.6	0.3	0.0
thereof Goodwill	1.0	0.5	0.3	0.2	0.2	0.2	0.2
Property, plant and equipment	0.6	0.6	0.6	1.0	0.9	0.7	0.5
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	7.4	7.9	7.7	9.4	7.0	4.6	2.2
Inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable	4.9	1.8	3.3	2.9	2.7	2.6	2.6
Liquid assets	1.1	0.6	69.5	27.2	13.6	11.6	21.7
Other short-term assets	0.7	0.7	1.6	2.1	2.1	2.1	2.1
Current assets	6.8	3.2	74.4	32.1	18.4	16.2	26.4
Total Assets	14.2	11.1	82.1	41.5	25.4	20.8	28.
Liabilities and shareholders' equity							
Subscribed capital	15.7	15.7	24.4	24.4	24.4	24.4	24.4
Capital reserve	13.0	13.5	107.7	107.7	117.2	117.2	117.2
Retained earnings	-35.3	-49.3	-83.6	-112.9	-128.1	-132.6	-126.2
Other equity components	0.2	8.2	-0.2	-0.2	0.4	0.4	0.4
Shareholders' equity	-6.5	-12.0	48.3	19.0	14.0	9.5	15.8
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	-6.5	-12.0	48.3	19.0	14.0	9.5	15.8
Provisions	1.4	11.5	27.2	13.6	2.0	0.7	0.7
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilities (total)	1.4	2.2	0.1	0.0	0.0	0.0	0.0
Short-term financial liabilities	1.3	2.1	0.0	0.0	0.0	0.0	0.0
Accounts payable	1.0	1.5	1.1	1.2	1.8	3.0	4.4
Other liabilities	16.9	7.9	5.5	7.6	7.6	7.6	7.6
Liabilities	20.7	23.1	33.8	22.5	11.4	11.3	12.7
Total liabilities and shareholders' equity	14.2	11.1	82.1	41.5	25.4	20.8	28.5

Financial Ratios							
	2018	2019	2020	2021	2022e	2023e	2024e
Efficiency of Capital Employment							
Operating Assets Turnover	3.8 x	21.8 x	8.5 x	10.4 x	18.6 x	154.2 x	-50.5 x
Capital Employed Turnover	-2.8 x	-2.1 x	-1.1 x	-3.4 x	94.7 x	-21.9 x	-10.9 x
ROA	-8.6 %	-177.6 %	-444.2 %	-313.1 %	-216.7 %	-98.2 %	295.1 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ROE	10.3 %	151.1 %	-189.2 %	-87.1 %	-92.0 %	-38.5 %	50.3 %
Adj. ROE	10.3 %	151.1 %	-189.2 %	-87.1 %	-92.0 %	-38.5 %	50.3 %
Balance sheet quality							
Net Debt	0.3	1.6	-69.4	-27.2	-13.6	-11.5	-21.7
Net Financial Debt	0.3	1.6	-69.4	-27.2	-13.6	-11.5	-21.7
Net Gearing	-4.2 %	-13.1 %	-143.8 %	-142.8 %	-97.5 %	-121.8 %	-137.3 %
Net Fin. Debt / EBITDA	15.4 %	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Book Value / Share	-0.4	-0.8	2.0	8.0	0.6	0.4	0.6
Book value per share ex intangibles	-0.8	-1.2	1.7	0.4	0.3	0.2	0.6

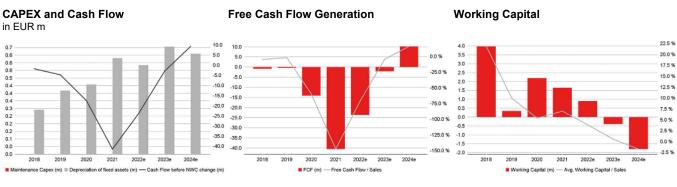


Source: Warburg Research Source: Warburg Research



Consolidated cash flow statement								
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e	
Net income	-0.6	-14.0	-34.3	-29.3	-15.2	-4.5	6.4	
Depreciation of fixed assets	0.3	0.4	0.5	0.6	0.6	0.7	0.7	
Amortisation of goodwill	0.5	0.5	0.5	0.1	0.0	0.0	0.0	
Amortisation of intangible assets	1.1	1.3	3.2	2.1	2.2	2.2	2.3	
Increase/decrease in long-term provisions	-0.2	9.8	15.9	-12.6	-11.6	-1.3	0.0	
Other non-cash income and expenses	-2.8	-2.7	-3.3	-2.3	0.0	0.0	0.0	
Cash Flow before NWC change	-1.8	-4.7	-17.5	-41.4	-23.9	-2.9	9.3	
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Increase / decrease in accounts receivable	-1.0	2.5	-2.8	-1.5	0.2	0.1	0.0	
Increase / decrease in accounts payable	4.0	4.5	9.0	6.8	0.6	1.2	1.4	
Increase / decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Increase / decrease in working capital (total)	3.0	7.0	6.2	5.3	0.7	1.3	1.4	
Net cash provided by operating activities [1]	1.2	2.2	-11.3	-36.1	-23.2	-1.6	10.7	
Investments in intangible assets	-1.4	-2.3	-2.4	-3.4	0.0	0.0	0.0	
Investments in property, plant and equipment	-0.6	-0.4	-0.4	-1.0	-0.5	-0.5	-0.5	
Payments for acquisitions	0.0	0.0	-0.9	0.0	0.0	0.0	0.0	
Financial investments	0.0	0.0	35.6	-35.5	0.0	0.0	0.0	
Income from asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Net cash provided by investing activities [2]	-2.1	-2.7	-39.3	31.1	-0.5	-0.5	-0.5	
Change in financial liabilities	0.8	-0.9	-3.8	-0.2	0.0	0.0	0.0	
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Purchase of own shares	0.0	0.0	2.6	0.0	10.1	0.0	0.0	
Capital measures	0.0	0.0	87.2	-1.6	0.0	0.0	0.0	
Other	0.1	0.0	0.0	0.0	0.0	0.0	0.0	
Net cash provided by financing activities [3]	0.9	-0.9	85.9	-1.8	10.1	0.0	0.0	
Change in liquid funds [1]+[2]+[3]	0.0	-1.4	35.3	-6.8	-13.6	-2.1	10.2	
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
Cash and cash equivalent at end of period	-0.1	-1.5	33.9	27.2	13.6	11.6	21.7	

Financial Ratios							
	2018	2019	2020	2021	2022e	2023e	2024e
Cash Flow							
FCF	-0.8	-0.5	-14.1	-40.5	-23.7	-2.1	10.2
Free Cash Flow / Sales	-4.7 %	-2.1 %	-59.8 %	-147.6 %	-70.9 %	-4.6 %	15.9 %
Free Cash Flow Potential	1.8	-11.1	-29.9	-26.5	-12.3	-1.6	9.3
Free Cash Flow / Net Profit	132.9 %	3.2 %	41.1 %	138.3 %	156.0 %	46.4 %	160.4 %
Interest Received / Avg. Cash	0.0 %	0.1 %	0.0 %	0.1 %	0.0 %	0.0 %	0.0 %
Interest Paid / Avg. Debt	50.4 %	39.1 %	18.9 %	15.8 %	27.1 %	27.1 %	27.1 %
Management of Funds							
Investment ratio	11.7 %	12.4 %	11.9 %	16.2 %	1.5 %	1.1 %	0.8 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	110.7 %	121.9 %	67.2 %	157.4 %	17.5 %	17.2 %	17.0 %
Avg. Working Capital / Sales	21.8 %	10.0 %	5.4 %	7.0 %	3.8 %	0.6 %	-1.7 %
Trade Debtors / Trade Creditors	511.6 %	122.8 %	298.8 %	234.0 %	150.0 %	86.7 %	59.1 %
Inventory Turnover	n.a.	n.a.	160.8 x	n.a.	n.a.	n.a.	n.a.
Receivables collection period (days)	102	31	50	38	30	21	15
Payables payment period (days)	216	227	123	140	246	303	314
Cash conversion cycle (Days)	n.a.	n.a.	-70	n.a.	n.a.	n.a.	n.a.



Source: Warburg Research Source: Warburg Research Source: Warburg Research



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-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
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<u>"_"</u>	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	161	75
Hold	46	21
Sell	4	2
Rating suspended	4	2
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	48	83
Hold	8	14
Sell	0	0
Rating suspended	2	3
Total	58	100

## PRICE AND RATING HISTORY EXASOL AS OF 22.08.2022



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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