

Buy EUR 8.30 Price EUR 5.75 Upside 44.3 %	Value Indicators: EUR DCF: 8.32 FCF-Value Potential 24e: 9.90	Warburg ESG Risk Score: 2.1 ESG Score (MSCI based): 3.0 Balance Sheet Score: 2.8 Market Liquidity Score: 0.5	Description: Ship owner and maritime investment manager
	Market Snapshot: EUR m Market cap: 186 No. of shares (m): 32 EV: 585 Freefloat MC: 86 Ø Trad. Vol. (30d): 184.87 th	Shareholders: Freefloat 46.30 % Döhle Group 38.20 % JaJo Beteiligungsgesellschaft 9.10 % MS Cordula 6.40 %	Key Figures (WRe): 2022e Beta: 1.4 Price / Book: 1.6 x Equity Ratio: 65 %

First Glance: Preliminary results ahead of expectations; Guidance raised

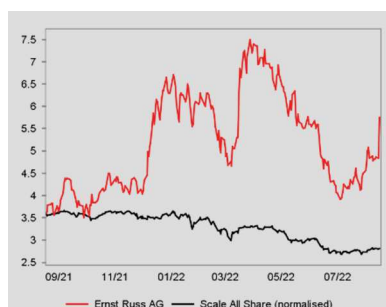
Ernst Russ released preliminary results for H1/22 that were slightly ahead of our projections. Revenues more than doubled to EUR 82.7m, while EBIT adj. increased almost six-fold to EUR 51m. The pronounced upturn is attributable to: a) a larger fleet with more vessels (currently 29 ships versus 18 ships one year ago); b) renewed charter agreements at improved terms and conditions; b) positive FX translation in the context of a stronger USD.

For the full year, management is now eyeing revenues of EUR 183-193m (previously: 160-170m) and EBIT adj. of EUR 85-90m (before: 72-77m). We attribute the guidance upgrade, to some extent, to higher organic earnings generation than anticipated while some part should also be attributable to FX.

The full set of results will be published on August 25. Thereafter we will review our model. Overall, the preliminary figures and guidance upgrade is clearly good news and signals further upside to our estimates. While charter rates have started to ease lately and further headwind might arise in the event of an economic slowdown, it should be noted that Ernst Russ has chartered out large parts of its fleet on good conditions for the medium to longer term (partially until 2026).

EUR m	Q2/2022		Q2/2021		yoy		H1 2022		H1 2021		yoy		Δ WRe	
	reported	WRe	reported		%	%	reported	WRe	reported		%	%	%	%
Sales	47.3	45.1	22.7		109%	5%	82.7	80.5	39.6		109%	3%		
EBIT adj.	34.5	31.6	7.3		373%	9%	51.0	48.1	8.6		493%	6%		

Sources: Company Data, Warburg Research



Rel. Performance vs Scale All

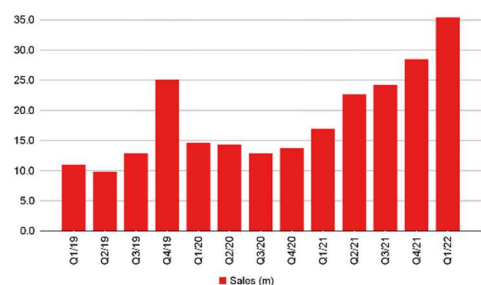
1 month:	29.2 %
6 months:	15.7 %
Year to date:	12.3 %
Trailing 12 months:	81.2 %

Company events:

25.08.22	Q2
15.11.22	Q3

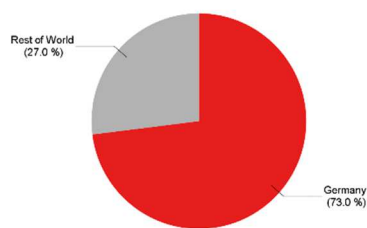
FY End: 31.12. in EUR m	CAGR (21-24e)	2018	2019	2020	2021	2022e	2023e	2024e
Sales	18.6 %	53	59	56	92	163	158	154
Change Sales yoy		19.7 %	11.6 %	-5.5 %	66.1 %	76.4 %	-2.7 %	-2.7 %
EBITDA	25.2 %	15	10	13	36	105	77	71
Margin		27.7 %	16.5 %	22.6 %	39.0 %	64.5 %	48.6 %	45.9 %
EBIT adj.	9.7 %	4	4	3	31	75	47	41
EBIT	13.2 %	7	4	4	28	75	47	40
Margin		12.4 %	6.4 %	7.8 %	29.9 %	45.9 %	29.4 %	26.0 %
Net income	12.5 %	6	2	4	16	41	26	22
EPS	12.5 %	0.19	0.05	0.13	0.49	1.28	0.80	0.69
EPS adj.	12.5 %	0.19	0.05	0.13	0.49	1.28	0.80	0.69
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		0.01	-0.05	-0.42	1.05	1.44	1.45	1.26
FCF / Market cap		0.6 %	-6.6 %	-59.1 %	32.3 %	25.0 %	25.2 %	21.8 %
EV / Sales		3.3 x	3.4 x	3.6 x	3.1 x	3.6 x	2.6 x	2.3 x
EV / EBITDA		11.8 x	20.5 x	16.1 x	8.0 x	5.6 x	5.3 x	5.0 x
EV / EBIT		26.3 x	52.9 x	46.3 x	10.4 x	7.8 x	8.8 x	8.8 x
P / E		6.2 x	17.4 x	5.5 x	6.7 x	4.5 x	7.2 x	8.3 x
P / E adj.		6.2 x	17.4 x	5.5 x	6.7 x	4.5 x	7.2 x	8.3 x
FCF Potential Yield		8.2 %	-2.3 %	-3.4 %	11.7 %	13.0 %	11.6 %	11.5 %
Net Debt		8	46	53	54	0	-27	-49
ROCE (NOPAT)		12.0 %	2.1 %	3.1 %	16.5 %	40.3 %	26.9 %	23.2 %
Guidance:		Revenues: EUR 183-193m; EBIT adj.: EUR 85-90m						

Sales development
in EUR m



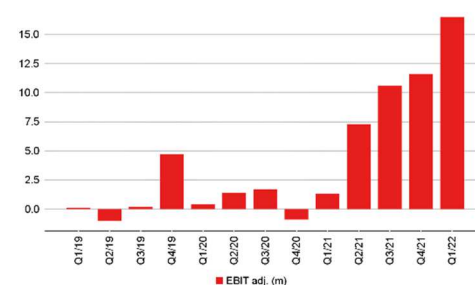
Source: Warburg Research

Sales by regions
2021; in %



Source: Warburg Research

EBIT adj. development
in EUR m



Source: Warburg Research

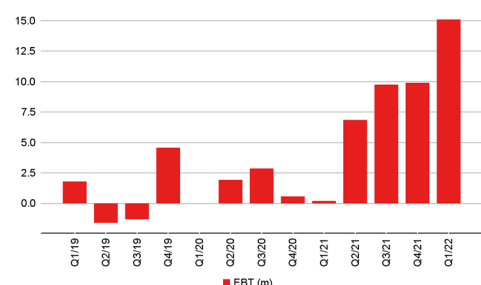
Company Background

- Ernst Russ invests in shipping projects for its own account and on behalf of third parties with the aim of generating stable income from charter proceeds in the long term.
- The scope of services includes the identification and purchase of suitable vessels, structuring of financing, development of a deployment strategy, selection of partners (technical management, crewing) and monitoring.
- The company's fleet currently comprises 29 fully-consolidated vessels as well as various minority holdings.
- To a small extent, the company is also still active in the management of closed-end funds on behalf of large trust companies and fund providers.

Competitive Quality

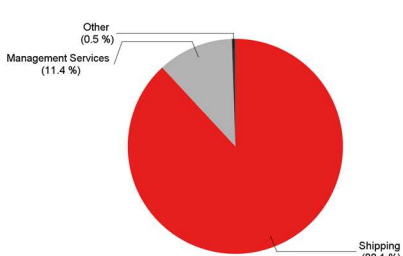
- Charter companies account for >50% of the overall container ship capacity. The supply side is highly fragmented with various small, but no dominant, players. Ernst Russ represents ~0.3% of the charter tonnage.
- Continuous fleet expansion further improves diversification with regards to ship classes, charter periods and remaining economic lifetime of the vessels, resulting in a superior risk profile versus single ship companies.
- Ernst Russ' good financial position and access to the capital market represent a clear competitive advantage over non-listed providers in terms of flexibility and financing costs of the assets deployed.
- Close ties to the Döhle group provide superior expertise and access to lucrative charter deals or vessel transactions.

EBT development
in EUR m



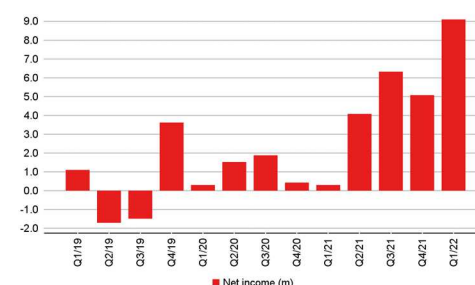
Source: Warburg Research

Sales by segments
2021; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

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	163	158	154	151	149	151	152	154	155	157	159	160	162	
Sales change	76.4 %	-2.7 %	-2.7 %	-2.0 %	-1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	2.0 %
EBIT	75	47	40	36	34	34	35	35	35	36	36	37	37	
EBIT-margin	45.9 %	29.4 %	26.0 %	23.6 %	22.6 %	22.6 %	22.7 %	22.8 %	22.8 %	22.9 %	22.9 %	22.9 %	23.0 %	
Tax rate (EBT)	0.7 %	1.2 %	1.4 %	1.8 %	1.9 %	2.0 %	2.2 %	2.3 %	2.4 %	2.5 %	2.6 %	2.8 %	2.9 %	
NOPAT	74	46	40	35	33	33	34	34	35	35	35	36	36	
Depreciation	30	30	31	30	30	30	30	30	29	29	29	29	29	
in % of Sales	18.6 %	19.2 %	19.8 %	20.1 %	20.2 %	19.9 %	19.5 %	19.2 %	18.9 %	18.6 %	18.3 %	18.1 %	17.8 %	
Changes in provisions	0	0	0	0	0	0	0	0	0	0	0	0	0	
Change in Liquidity from														
- Working Capital	1	0	0	0	0	0	0	0	0	0	0	0	0	
- Capex	31	31	31	31	30	30	30	30	30	30	29	29	29	
Capex in % of Sales	18.9 %	19.5 %	20.1 %	20.2 %	20.3 %	20.0 %	19.7 %	19.4 %	19.1 %	18.9 %	18.6 %	18.3 %	18.0 %	
- Other	33	21	18	16	15	15	16	16	16	16	16	17	17	
Free Cash Flow (WACC Model)	40	25	21	18	18	18	18	18	18	19	19	19	19	19
PV of FCF	39	22	17	14	12	12	11	10	9	9	8	8	7	111
share of PVs	27.10 %			34.41 %										38.49 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	19.40 %	Financial Strength	1.10
Cost of debt (after tax)	3.9 %	Liquidity (share)	1.50
Market return	7.50 %	Cyclicality	1.40
Risk free rate	2.00 %	Transparency	1.40
		Others	1.35
WACC	8.35 %	Beta	1.35

Valuation (m)

Present values 2034e	178		
Terminal Value	111		
Financial liabilities	79		
Pension liabilities	2		
Hybrid capital	-16		
Minority interest	0		
Market val. of investments	19		
Liquidity	26	No. of shares (m)	32.4
Equity Value	270	Value per share (EUR)	8.32

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.58	9.3 %	7.06	7.13	7.21	7.30	7.39	7.49	7.60	1.58	9.3 %	6.43	6.72	7.01	7.30	7.59	7.88	8.17
1.46	8.8 %	7.48	7.57	7.67	7.77	7.89	8.01	8.14	1.46	8.8 %	6.84	7.15	7.46	7.77	8.08	8.39	8.70
1.41	8.6 %	7.71	7.81	7.92	8.03	8.16	8.30	8.44	1.41	8.6 %	7.07	7.39	7.71	8.03	8.35	8.67	8.99
1.35	8.3 %	7.95	8.07	8.19	8.32	8.46	8.61	8.77	1.35	8.3 %	7.32	7.65	7.98	8.32	8.65	8.98	9.31
1.29	8.1 %	8.22	8.34	8.48	8.62	8.78	8.95	9.13	1.29	8.1 %	7.59	7.93	8.28	8.62	8.96	9.31	9.65
1.24	7.8 %	8.50	8.64	8.79	8.95	9.13	9.32	9.53	1.24	7.8 %	7.88	8.24	8.59	8.95	9.31	9.66	10.02
1.12	7.3 %	9.14	9.31	9.50	9.70	9.93	10.17	10.45	1.12	7.3 %	8.54	8.93	9.31	9.70	10.09	10.48	10.87

- Peak EBITDA margin modelled in for 2022
- For the years 2023-2026, we assume a market normalisation and lower earnings, followed by a flattish trend thereafter
- Taxes mainly determined by the tonnage of the ships; cost of debt set at 4% (pre-tax)
- Market value of investments = multiple of 12x on investment income 2024e; minorities considered in the FCF calculation
- Hybrid capital = adjusting for M&A and divestments (cash out / in, consolidation)

Free Cash Flow Value Potential

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF potential" - a FCF "ex growth" figure - which assumes unchanged working capital and pure maintenance capex. A value indication is derived via the perpetuity of a given year's "FCF potential" with consideration of the weighted costs of capital. The fluctuating value indications over time add a timing element to the DCF model (our preferred valuation tool).

in EUR m	2018	2019	2020	2021	2022e	2023e	2024e	
Net Income before minorities	6	2	5	26	75	47	40	
+ Depreciation + Amortisation	8	6	8	8	30	30	31	
- Net Interest Income	0	-1	-1	-2	-2	-1	-1	
- Maintenance Capex	0	13	21	3	31	31	31	
+ Other	0	0	0	0	0	0	0	
= Free Cash Flow Potential	14	-5	-7	33	76	47	41	
FCF Potential Yield (on market EV)	8.2 %	-2.3 %	-3.4 %	11.7 %	13.0 %	11.6 %	11.5 %	
WACC	8.35 %	8.35 %	8.35 %	8.35 %	8.35 %	8.35 %	8.35 %	
= Enterprise Value (EV)	172	199	202	286	585	409	354	
= Fair Enterprise Value	168	n.a.	n.a.	401	908	568	488	
- Net Debt (Cash)	53	53	53	53	-2	-28	-51	
- Pension Liabilities	2	2	2	2	2	2	2	
- Other	0	0	0	0	0	0	0	
- Market value of minorities	126	126	126	126	399	249	216	
+ Market value of investments	0	0	0	0	0	0	0	
= Fair Market Capitalisation	n.a.	n.a.	n.a.	220	509	345	321	
Number of shares, average	32	32	32	32	32	32	32	
= Fair value per share (EUR)	n.a.	n.a.	n.a.	6.79	15.70	10.65	9.90	
premium (-) / discount (+) in %					173.1 %	85.2 %	72.2 %	
Sensitivity Fair value per Share (EUR)								
	9.35 %	n.a.	n.a.	n.a.	5.47	12.71	8.78	8.29
	8.85 %	n.a.	n.a.	n.a.	6.09	14.12	9.66	9.05
	8.60 %	n.a.	n.a.	n.a.	6.43	14.89	10.14	9.47
WACC	8.35 %	n.a.	n.a.	n.a.	6.79	15.70	10.65	9.90
	8.10 %	n.a.	n.a.	n.a.	7.17	16.57	11.19	10.37
	7.85 %	n.a.	n.a.	n.a.	7.58	17.49	11.77	10.86
	7.35 %	0.33	n.a.	n.a.	8.47	19.51	13.03	11.95

- Tax obligation is primarily determined by the tonnage --> no tax shield on net interest expense is applied
- In light of increased vessel prices, we model capex > D&A to preserve the asset base
- Market value of minorities = multiple of 12x applied on the annual minority interest

Valuation	2018	2019	2020	2021	2022e	2023e	2024e
Price / Book	0.8 x	0.5 x	0.4 x	1.5 x	1.6 x	1.3 x	1.2 x
Book value per share ex intangibles	1.13	1.36	1.66	2.13	3.42	4.24	4.95
EV / Sales	3.3 x	3.4 x	3.6 x	3.1 x	3.6 x	2.6 x	2.3 x
EV / EBITDA	11.8 x	20.5 x	16.1 x	8.0 x	5.6 x	5.3 x	5.0 x
EV / EBIT	26.3 x	52.9 x	46.3 x	10.4 x	7.8 x	8.8 x	8.8 x
EV / EBIT adj.*	41.0 x	49.6 x	77.7 x	9.3 x	7.8 x	8.7 x	8.7 x
P / FCF	181.4 x	n.a.	n.a.	3.1 x	4.0 x	4.0 x	4.6 x
P / E	6.2 x	17.4 x	5.5 x	6.7 x	4.5 x	7.2 x	8.3 x
P / E adj.*	6.2 x	17.4 x	5.5 x	6.7 x	4.5 x	7.2 x	8.3 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	8.2 %	-2.3 %	-3.4 %	11.7 %	13.0 %	11.6 %	11.5 %

*Adjustments made for: One-off effects, scheduled goodwill amortisation

Consolidated profit & loss

In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Sales	53	59	56	92	163	158	154
Change Sales yoy	19.7 %	11.6 %	-5.5 %	66.1 %	76.4 %	-2.7 %	-2.7 %
Increase / decrease in inventory	0	0	0	0	0	0	0
Own work capitalised	0	0	0	0	0	0	0
Total Sales	53	59	56	92	163	158	154
Material expenses	23	32	38	49	65	63	64
Gross profit	30	26	18	43	97	96	90
<i>Gross profit margin</i>	<i>56.2 %</i>	<i>44.8 %</i>	<i>32.5 %</i>	<i>46.8 %</i>	<i>59.9 %</i>	<i>60.3 %</i>	<i>58.3 %</i>
Personnel expenses	15	10	7	5	5	6	6
Other operating income	19	7	10	8	28	3	3
Other operating expenses	19	13	8	10	15	15	16
Unfrequent items	0	0	0	0	0	0	0
EBITDA	15	10	13	36	105	77	71
<i>Margin</i>	<i>27.7 %</i>	<i>16.5 %</i>	<i>22.6 %</i>	<i>39.0 %</i>	<i>64.5 %</i>	<i>48.6 %</i>	<i>45.9 %</i>
Depreciation of fixed assets	1	3	5	8	30	30	30
EBITA	13	6	7	28	76	47	41
Amortisation of intangible assets	6	2	2	0	0	0	0
Goodwill amortisation	1	1	1	1	1	1	1
EBIT	7	4	4	28	75	47	40
<i>Margin</i>	<i>12.4 %</i>	<i>6.4 %</i>	<i>7.8 %</i>	<i>29.9 %</i>	<i>45.9 %</i>	<i>29.4 %</i>	<i>26.0 %</i>
EBIT adj.	4	4	3	31	75	47	41
Interest income	2	2	1	1	1	2	2
Interest expenses	2	3	3	4	3	3	2
Other financial income (loss)	-1	1	2	1	2	2	2
EBT	6	3	5	27	75	47	41
<i>Margin</i>	<i>11.6 %</i>	<i>5.9 %</i>	<i>9.7 %</i>	<i>28.9 %</i>	<i>46.2 %</i>	<i>29.9 %</i>	<i>26.7 %</i>
Total taxes	0	2	1	0	1	1	1
Net income from continuing operations	6	2	5	26	75	47	40
Income from discontinued operations (net of tax)	0	0	0	0	0	0	0
Net income before minorities	6	2	5	26	75	47	40
Minority interest	0	0	1	11	33	21	18
Net income	6	2	4	16	41	26	22
<i>Margin</i>	<i>11.8 %</i>	<i>2.6 %</i>	<i>7.4 %</i>	<i>17.1 %</i>	<i>25.5 %</i>	<i>16.4 %</i>	<i>14.6 %</i>
Number of shares, average	32	32	32	32	32	32	32
EPS	0.19	0.05	0.13	0.49	1.28	0.80	0.69
EPS adj.	0.19	0.05	0.13	0.49	1.28	0.80	0.69

*Adjustments made for: One-off effects, scheduled goodwill amortisation

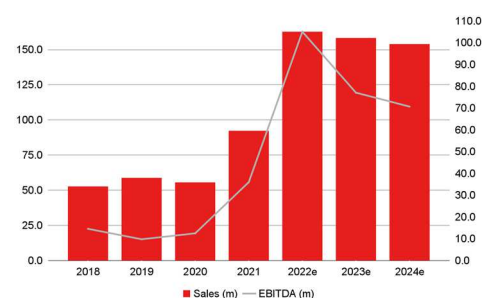
Guidance: Revenues: EUR 183-193m; EBIT adj.: EUR 85-90m

Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Total Operating Costs / Sales	72.3 %	83.5 %	77.4 %	61.0 %	35.5 %	51.4 %	54.1 %
Operating Leverage	0.9 x	-3.7 x	-3.0 x	8.1 x	2.2 x	13.7 x	5.1 x
EBITDA / Interest expenses	9.7 x	3.5 x	4.3 x	10.2 x	35.0 x	28.5 x	29.4 x
Tax rate (EBT)	-4.2 %	51.0 %	11.9 %	1.6 %	0.7 %	1.2 %	1.4 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	319,424	570,806	882,016	2,197,262	n.a.	n.a.	n.a.

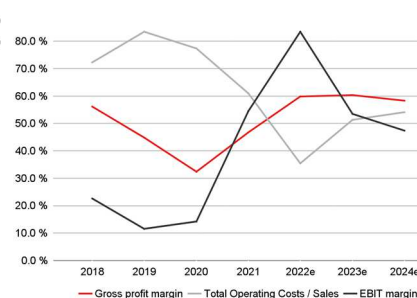
Sales, EBITDA

in EUR m

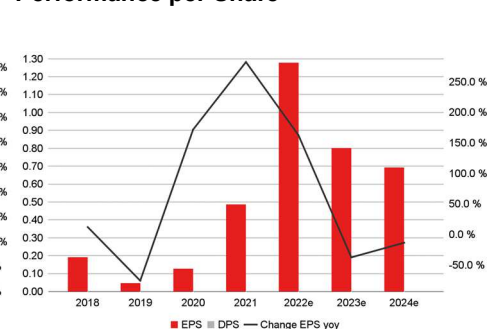


Operating Performance

in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

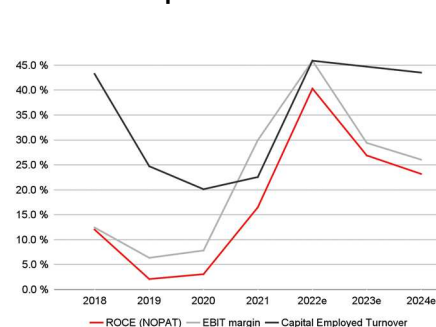
Consolidated balance sheet

In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Assets							
Goodwill and other intangible assets	13	7	4	3	3	2	2
thereof other intangible assets	8	3	1	1	1	1	1
thereof Goodwill	5	4	3	2	2	1	0
Property, plant and equipment	22	104	120	210	183	183	184
Financial assets	24	13	8	7	7	7	7
Other long-term assets	1	1	1	1	1	1	1
Fixed assets	61	125	132	221	193	193	194
Inventories	7	1	1	1	2	2	2
Accounts receivable	6	3	2	3	5	5	5
Liquid assets	16	10	9	26	50	63	76
Other short-term assets	13	10	19	12	12	13	13
Current assets	42	24	31	43	70	83	96
Total Assets	103	149	163	264	263	277	290
Liabilities and shareholders' equity							
Subscribed capital	32	32	32	32	32	32	32
Capital reserve	7	7	7	7	7	7	7
Retained earnings	11	12	18	33	75	101	123
Other equity components	0	0	0	0	0	0	0
Shareholders' equity	50	51	57	72	114	140	162
Minority interest	1	17	23	71	58	58	58
Total equity	51	69	80	143	171	197	220
Provisions	16	9	6	9	10	10	10
thereof provisions for pensions and similar obligations	2	2	2	2	2	2	2
Financial liabilities (total)	22	54	61	79	48	35	25
Short-term financial liabilities	9	7	8	36	5	5	5
Accounts payable	2	3	3	5	6	6	6
Other liabilities	10	13	12	26	25	25	26
Liabilities	52	80	83	121	91	79	70
Total liabilities and shareholders' equity	103	149	163	264	263	277	290

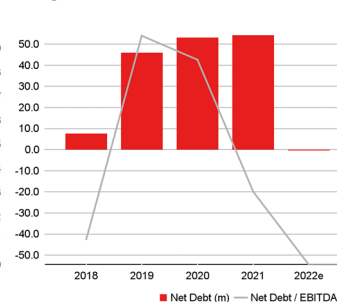
Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Efficiency of Capital Employment							
Operating Assets Turnover	1.7 x	0.6 x	0.5 x	0.4 x	0.9 x	0.9 x	0.8 x
Capital Employed Turnover	0.9 x	0.5 x	0.4 x	0.5 x	1.0 x	0.9 x	0.9 x
ROA	10.2 %	1.2 %	3.1 %	7.1 %	21.5 %	13.5 %	11.6 %
Return on Capital							
ROCE (NOPAT)	12.0 %	2.1 %	3.1 %	16.5 %	40.3 %	26.9 %	23.2 %
ROE	13.3 %	3.0 %	7.6 %	24.3 %	44.6 %	20.5 %	14.9 %
Adj. ROE	13.3 %	3.0 %	7.6 %	24.3 %	44.6 %	20.5 %	14.9 %
Balance sheet quality							
Net Debt	8	46	53	54	0	-27	-49
Net Financial Debt	6	44	52	53	-2	-28	-51
Net Gearing	14.9 %	66.8 %	66.3 %	38.0 %	-0.2 %	-13.5 %	-22.4 %
Net Fin. Debt / EBITDA	40.0 %	455.7 %	410.9 %	146.6 %	n.a.	n.a.	n.a.
Book Value / Share	1.5	1.6	1.8	2.2	3.5	4.3	5.0
Book value per share ex intangibles	1.1	1.4	1.7	2.1	3.4	4.2	4.9

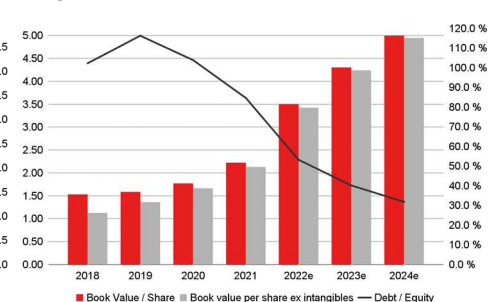
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

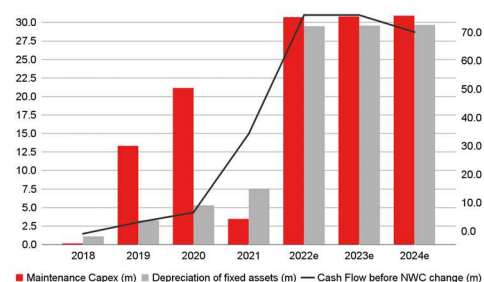
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Net income	2	0	2	24	73	45	39
Depreciation of fixed assets	1	3	5	8	30	30	30
Amortisation of goodwill	1	1	1	1	1	1	1
Amortisation of intangible assets	6	2	2	0	0	0	0
Increase/decrease in long-term provisions	-3	-7	-3	3	0	0	0
Other non-cash income and expenses	-8	5	-1	-1	-27	0	0
Cash Flow before NWC change	-1	3	7	34	76	76	70
Increase / decrease in inventory	5	6	0	0	-1	0	0
Increase / decrease in accounts receivable	2	3	1	-1	-2	0	0
Increase / decrease in accounts payable	-1	1	0	1	1	0	0
Increase / decrease in other working capital positions	-8	-3	-2	3	-1	0	0
Increase / decrease in working capital (total)	-1	7	-1	2	-1	0	0
Net cash provided by operating activities [1]	-2	10	5	37	75	76	70
Investments in intangible assets	0	0	0	0	0	0	0
Investments in property, plant and equipment	0	-13	-21	-3	-30	-30	-31
Payments for acquisitions	-1	-8	1	-33	0	0	0
Financial investments	2	4	-3	8	0	0	0
Income from asset disposals	2	2	2	1	56	2	2
Net cash provided by investing activities [2]	3	-16	-21	-28	25	-29	-29
Change in financial liabilities	-4	32	6	18	-31	-13	-10
Dividends paid	0	0	0	0	0	0	0
Purchase of own shares	0	0	0	0	0	0	0
Capital measures	0	0	0	0	0	0	0
Other	2	-32	8	-9	-46	-21	-18
Net cash provided by financing activities [3]	-2	0	15	10	-77	-34	-28
Change in liquid funds [1]+[2]+[3]	-2	-6	-1	19	24	13	13
Effects of exchange-rate changes on cash	0	0	0	-1	0	0	0
Cash and cash equivalent at end of period	16	10	9	26	50	63	76

Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Cash Flow							
FCF	0	-2	-13	34	47	47	41
Free Cash Flow / Sales	0.4 %	-3.0 %	-24.3 %	37.0 %	28.6 %	29.6 %	26.5 %
Free Cash Flow Potential	14	-5	-7	33	76	47	41
Free Cash Flow / Net Profit	3.4 %	-115.6 %	-326.6 %	216.6 %	112.5 %	180.6 %	181.2 %
Interest Received / Avg. Cash	10.0 %	12.6 %	15.3 %	7.1 %	3.9 %	2.9 %	2.5 %
Interest Paid / Avg. Debt	6.2 %	7.1 %	5.0 %	5.0 %	4.7 %	6.5 %	8.0 %
Management of Funds							
Investment ratio	0.3 %	22.7 %	38.1 %	3.7 %	18.9 %	19.5 %	20.1 %
Maint. Capex / Sales	0.3 %	22.7 %	38.1 %	3.7 %	18.9 %	19.5 %	20.1 %
Capex / Dep	1.8 %	223.9 %	258.6 %	41.3 %	101.3 %	101.3 %	101.3 %
Avg. Working Capital / Sales	23.2 %	7.7 %	-0.9 %	-1.6 %	-0.9 %	-0.7 %	-0.7 %
Trade Debtors / Trade Creditors	329.8 %	83.8 %	60.4 %	65.9 %	87.8 %	87.8 %	87.8 %
Inventory Turnover	3.3 x	26.8 x	39.3 x	34.8 x	26.3 x	26.0 x	27.3 x
Receivables collection period (days)	39	16	13	12	12	12	12
Payables payment period (days)	27	35	32	34	34	34	32
Cash conversion cycle (Days)	92	-12	-17	-24	-24	-25	-23

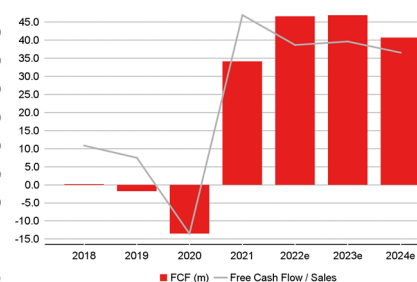
CAPEX and Cash Flow

in EUR m



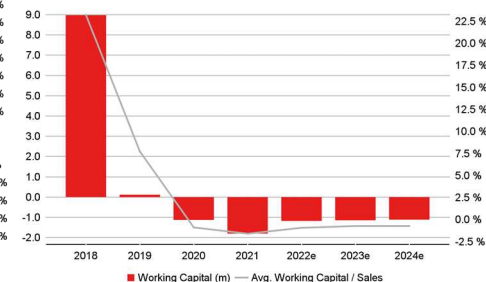
Source: Warburg Research

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)
Ernst Russ	3, 5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A161077.htm

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-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
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-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	162	75
Hold	46	21
Sell	4	2
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	49	83
Hold	8	14
Sell	0	0
Rating suspended	2	3
Total	59	100

PRICE AND RATING HISTORY ERNST RUSS AS OF 17.08.2022



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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