

D	Value Indicators:	EUR	Warburg ESG Risk Score:	2.1	Description:	
Buy	DCF:	2.88	ESG Score (MSCI based):	3.0	Ship owner and maritime inv	.aatmaant
	FCF-Value Potential 23e:	2.88	Balance Sheet Score:	2.8	manager	/esimeni
EUR <b>2.90</b>			Market Liquidity Score:	0.5	<b>.</b>	
	Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2021e
	Market cap:	85	Freefloat	30.2 %	Beta:	1.4
Price EUR 2.62	No. of shares (m):	32	Döhle Group	38.2 %	Price / Book:	1.3 x
Upside 10.7 %	EV:	185	Hamburg Commercial Bank	16.1 %	Equity Ratio:	51 %
2   2   2   2   2   2   2   2   2   2	Freefloat MC:	26	JaJo Beteiligungsgesellschaft	9.1 %	Net Fin. Debt / EBITDA:	2.1 x
	Ø Trad. Vol. (30d):	59.70 th	MS Cordula	6.4 %	Net Debt / EBITDA:	2.2 x

### First-quarter revenue acceleration confirms our investment case

Good start to the year. Group revenues rose 16% to EUR 16.9m, which is fully in line with our forecast. The increase primarily reflects the larger size of the fleet (from 14 to 18 vessels) as well as renewed charter agreements at improved terms and conditions. Furthermore, the company benefited from higher fleet utilisation (up 3.4pp to 96.5%) thanks to less demurrage and downtime. EBIT adj. more than tripled to EUR 1.3m and while it nevertheless fell short our forecast of EUR 1.9m, this should not be overstated. Details regarding the trend in operating expenses were not disclosed but the deviation is presumably attributable to non-capitalised maintenance (i.e. docking) costs, which typically fluctuate between quarters but will balance out over the course of the year. Our projections for 2021 include a total of EUR 3.2m expenses for scheduled docking and ballast-water measures, which we consider to be fully sufficient.

**Positive fundamental picture.** At this week's annual general meeting, the company's CEO outlined the favourable sector environment. Tonnage supply in the market is expected to remain tight for the time being and container charter rates have reached a long-time high, which bodes well for shipowners like Ernst Russ. In addition to regular contract renewals, the company might possibly benefit from upgrades in existing charter agreements ahead of schedule and with a longer duration.

**Further fleet expansion on the agenda.** In his speech to shareholders, the CEO outlined his intention to grow the company by acquiring additional vessels and to evaluate M&A options, should suitable targets come to the market. Provided that the price and quality of the assets involved are appropriate, we welcome this strategic move. For the sake of diversification, we deem investments in second-hand container vessels of >4,000 TEU in size to be most sensible. From the perspective of balancing portfolio risks, a larger fleet is advantageous in terms of exposure to different vessel classes and characteristics (e.g. fuel efficiency, remaining economic lifetime). Based on our FCF projections and assuming a loan-to-value financing ratio of around 50%, we see scope to add one (100-owned) or two (>50% owned) second-hand vessels. If attractive buying opportunities arise on a larger scale, the company has the option to raise equity against cash or contribution in kind. Its shareholders have just renewed authorised and conditional capital of 16.2m shares (50%) each.

**Full-year outlook unchanged.** The company is guiding for a significant increase in revenues and operating profit. At the AGM, the CEO specified his top-line growth expectation in the ballpark of 40%, based on the group's current set-up, which strongly underpins our estimate of EUR 77m. Operational gearing of positive contract renewals should be close to 100%. Accordingly, we predict that EBIT adj. will increase almost six-fold this year to EUR 13.7m.

We reiterate our positive stance. Based on the first-quarter performance and management's statements, we deem our investment case for Ernst Russ to be fully intact (well exposed to a booming shipping market, which will boost revenues and earnings). Since our coverage initiation on May 12, 2021, the company's shares have gained ~15% and approached our DCF-based price target. However, the rise in charter rates has continued since then (e.g. the Harper Petersen charter index increased by another >13% in May), which could result in further upside to our 2022/23 forecasts in the context of contract renewals at improved terms and conditions. Against this background, we maintain our Buy recommendation for the time being. A comprehensive model review will follow after publication of the company's H1 results.



Rel. Performance	vs Scale All
1 month:	13.3 %
6 months:	188.0 %
Year to date:	70.8 %
Trailing 12 months:	251.4 %
Company events:	

FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023
Sales	13.1 %	44	53	59	56	77	80	80
Change Sales yoy		n.a.	19.7 %	11.6 %	-5.5 %	39.0 %	3.2 %	0.9 %
EBITDA	21.2 %	12	15	10	13	22	17	22
Margin		28.1 %	27.7 %	16.5 %	22.6 %	28.3 %	21.8 %	27.8 %
EBIT adj.	81.9 %	4	4	4	2	14	9	14
EBIT	44.8 %	6	7	4	4	13	8	13
Margin		12.6 %	12.4 %	6.4 %	7.8 %	17.0 %	10.6 %	16.5 %
Net income	22.5 %	6	6	2	4	7	4	
EPS	22.5 %	0.17	0.19	0.05	0.13	0.22	0.12	0.2
EPS adj.	22.5 %	0.17	0.19	0.05	0.13	0.22	0.12	0.2
DPS	-	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
FCFPS		-0.12	0.01	-0.05	-0.42	0.30	0.19	0.33
FCF / Market cap		-8.4 %	0.6 %	-6.6 %	-59.1 %	11.5 %	7.3 %	12.7 %
EV / Sales		1.4 x	1.0 x	1.4 x	1.5 x	2.4 x	2.1 x	2.2
EV / EBITDA		5.1 x	3.7 x	8.2 x	6.6 x	8.5 x	9.5 x	7.8
EV / EBIT		11.3 x	8.1 x	21.2 x	19.1 x	14.2 x	19.6 x	13.2
P/E		8.2 x	6.2 x	17.4 x	5.5 x	11.9 x	21.5 x	11.2
P / E adj.		8.2 x	6.2 x	17.4 x	5.5 x	11.9 x	21.5 x	11.2
FCF Potential Yield		18.5 %	26.3 %	-5.8 %	-8.2 %	6.9 %	4.9 %	7.4 %
Net Debt		10	8	46	53	48	45	38
ROCE (NOPAT)		n.a.	12.0 %	2.1 %	3.1 %	9.3 %	5.8 %	9.3 %
Guidance:	Significant incr	ease in reve	nues and ope	erating profit				

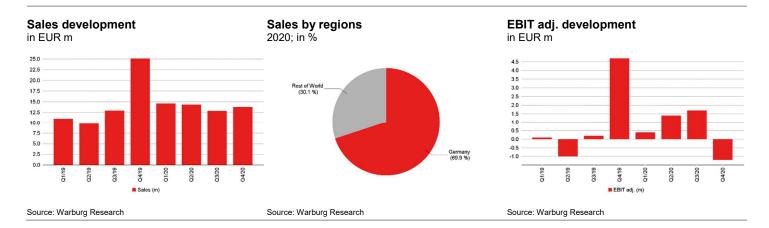
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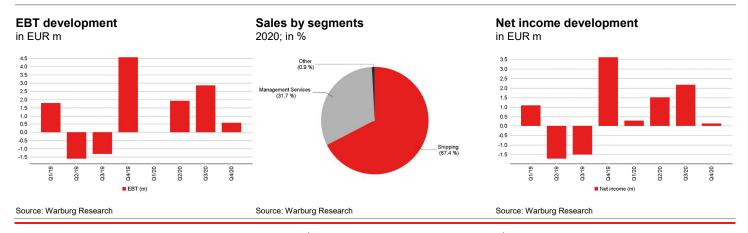


## **Company Background**

- 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 18 fully-consolidated vessels and a further 13 with a significant co-investment. In addition, Ernst Russ manages 38 third-party vessels belonging to single-ship KG funds.
- 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 economic remaining life 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 deployed assets.
- Close ties to the Döhle group provide superior expertise and access to lucrative charter deals or vessel transactions.



## **Ernst Russ**



DCF model														
	Detaile	d forecas	t period				٦	ransition	al period					Term. Value
Figures in EUR m	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	
Sales	77	80	80	81	82	83	84	84	85	86	87	88	89	
Sales change	39.0 %	3.2 %	0.9 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	2.0 %
EBIT	13	8	13	13	13	13	13	13	13	13	13	13	13	
EBIT-margin	17.0 %	10.6 %	16.5 %	16.0 %	15.9 %	15.8 %	15.7 %	15.6 %	15.5 %	15.3 %	15.2 %	15.1 %	15.0 %	
Tax rate (EBT)	4.4 %	7.3 %	4.6 %	4.8 %	4.9 %	5.0 %	5.2 %	5.3 %	5.4 %	5.5 %	5.6 %	5.8 %	5.9 %	
NOPAT	13	8	13	12	12	12	12	12	12	12	13	13	13	
Depreciation	9	9	9	9	9	10	10	10	10	10	10	11	11	
in % of Sales	11.4 %	11.2 %	11.3 %	11.5 %	11.5 %	11.6 %	11.7 %	11.7 %	11.8 %	11.9 %	11.9 %	12.0 %	12.0 %	
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	10	10	10	10	10	10	10	10	11	11	11	11	11	
Capex in % of Sales	12.5 %	12.3 %	12.4 %	12.4 %	12.4 %	12.4 %	12.4 %	12.4 %	12.4 %	12.3 %	12.3 %	12.3 %	12.3 %	
Other	4	3	4	4	4	4	4	4	4	4	4	4	4	
Free Cash Flow (WACC Model)	6	4	8	7	8	8	8	8	8	8	8	8	8	8
PV of FCF	6	4	6	6	6	5	5	5	4	4	4	4	4	70
share of PVs		12.32 %						34.8	1 %					52.88 %

Model parameter				Valuation (m)			
Derivation of WACC:		Derivation of Beta:		Present values 2033e	63		
				Terminal Value	70		
Debt ratio	40.00 %	Financial Strength	1.20	Financial liabilities	61		
Cost of debt (after tax)	3.8 %	Liquidity (share)	1.60	Pension liabilities	2		
Market return	7.00 %	Cyclicality	1.40	Hybrid capital	0		
Risk free rate	1.50 %	Transparency	1.40	Minority interest	0		
		Others	1.40	Market val. of investments	13		
				Liquidity	9	No. of shares (m)	32.4
WACC	7.02 %	Beta	1.40	Equity Value	93	Value per share (EUR)	2.88

Sens	itivity Va	lue per Sh	are (EUR	)									
		Terminal (	Growth							Delta EB	T-margin		
Beta	WACC	1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	Beta WAC	C -1.5 pp	-1.0 pp	-0.5 pp	+0.0
4 = 4	0 0 0/	0.04	0.40	0.40	0.00	2.00	0.07	0.45	4 70 0 0 0 0	4.07	4.05	0.04	

Beta	WACC	1.25 %	1.50 %	1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.70	8.0 %	2.04	2.10	2.16	2.22	2.29	2.37	2.45	1.70	8.0 %	1.67	1.85	2.04	2.22	2.40	2.59	2.77
1.55	7.5 %	2.30	2.36	2.44	2.52	2.61	2.70	2.81	1.55	7.5 %	1.92	2.12	2.32	2.52	2.72	2.92	3.12
1.48	7.3 %	2.44	2.52	2.60	2.69	2.79	2.90	3.02	1.48	7.3 %	2.07	2.27	2.48	2.69	2.90	3.10	3.31
1.40	7.0 %	2.59	2.68	2.77	2.88	2.99	3.12	3.26	1.40	7.0 %	2.22	2.44	2.66	2.88	3.09	3.31	3.53
1.32	6.8 %	2.76	2.86	2.97	3.08	3.21	3.36	3.52	1.32	6.8 %	2.40	2.63	2.86	3.08	3.31	3.54	3.77
1.25	6.5 %	2.95	3.06	3.18	3.31	3.46	3.63	3.82	1.25	6.5 %	2.59	2.83	3.07	3.31	3.55	3.79	4.03
1.10	6.0 %	3.38	3.52	3.68	3.86	4.06	4.29	4.56	1.10	6.0 %	3.05	3.32	3.59	3.86	4.13	4.39	4.66

- Peak EBITDA margin modelled in for 2021/23 (high docking costs will weigh on 2022)
- For the years thereafter we assume business continuation, though with price adjustments < cost inflation
- In light of increased vessel prices, we model capex > D&A to preserve the asset base
- 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 2023e; minorities considered in the FCF calculation



### 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	2017	2018	2019	2020	2021e	2022e	2023e
Net Income before minorities	6	6	2	5	12	7	12
+ Depreciation + Amortisation	7	8	6	8	9	9	9
- Net Interest Income	1	0	-1	-1	-2	-2	-2
- Maintenance Capex	1	0	13	21	10	10	10
+ Other	0	0	0	0	0	0	0
= Free Cash Flow Potential	12	14	-5	-7	13	8	13
FCF Potential Yield (on market EV)	18.5 %	26.3 %	-5.8 %	-8.2 %	6.9 %	4.9 %	7.4 %
WACC	7.02 %	7.02 %	7.02 %	7.02 %	7.02 %	7.02 %	7.02 %
= Enterprise Value (EV)	63	53	80	83	185	166	175
= Fair Enterprise Value	165	200	n.a.	n.a.	181	115	183
- Net Debt (Cash)	52	52	52	52	46	43	36
- Pension Liabilities	2	2	2	2	2	2	2
- Other	0	0	0	0	0	0	0
<ul> <li>Market value of minorities</li> </ul>	7	7	7	7	53	36	51
+ Market value of investments	0	0	0	0	0	0	0
= Fair Market Capitalisation	105	140	n.a.	n.a.	81	34	94
Number of shares, average	32	32	32	32	32	32	32
= Fair value per share (EUR)	3.24	4.31	n.a.	n.a.	2.49	1.05	2.88
premium (-) / discount (+) in %					-5.1 %	-60.0 %	10.1 %
Sensitivity Fair value per Share (El	UR)						
3	3.02 % 2.60	3.54	n.a.	n.a.	1.79	0.61	2.18
7	7.52 % 2.90	3.90	n.a.	n.a.	2.12	0.81	2.51
	7.27 % 3.06	4.09	n.a.	n.a.	2.29	0.93	2.69
	7.02 % 3.24	4.31	n.a.	n.a.	2.49	1.05	2.88
	6.77 % 3.43	4.53	n.a.	n.a.	2.69	1.18	3.09
	3.63	4.78	n.a.	n.a.	2.91	1.32	3.32
6	6.02 % 4.08	5.33	n.a.	n.a.	3.41	1.64	3.82

<sup>•</sup> Tax obligation is primarily determined by the tonnage --> no tax shield on net interest expense is applied

<sup>•</sup> 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

# **Ernst Russ**



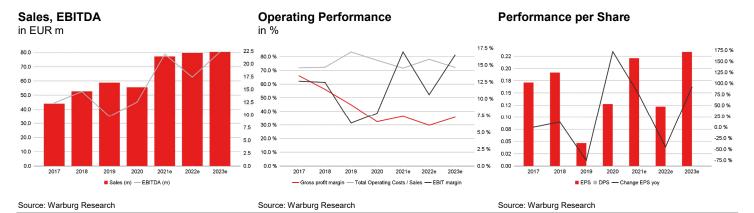
Valuation							
	2017	2018	2019	2020	2021e	2022e	2023e
Price / Book	1.0 x	0.8 x	0.5 x	0.4 x	1.3 x	1.2 x	1.1 x
Book value per share ex intangibles	0.70	1.13	1.36	1.66	1.90	2.04	2.29
EV / Sales	1.4 x	1.0 x	1.4 x	1.5 x	2.4 x	2.1 x	2.2 x
EV / EBITDA	5.1 x	3.7 x	8.2 x	6.6 x	8.5 x	9.5 x	7.8 x
EV / EBIT	11.3 x	8.1 x	21.2 x	19.1 x	14.2 x	19.6 x	13.2 x
EV / EBIT adj.*	16.1 x	12.7 x	19.9 x	36.2 x	13.5 x	18.3 x	12.6 x
P / FCF	n.a.	181.4 x	n.a.	n.a.	8.7 x	13.8 x	7.9 x
P/E	8.2 x	6.2 x	17.4 x	5.5 x	11.9 x	21.5 x	11.2 x
P / E adj.*	8.2 x	6.2 x	17.4 x	5.5 x	11.9 x	21.5 x	11.2 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Potential Yield (on market EV)	18.5 %	26.3 %	-5.8 %	-8.2 %	6.9 %	4.9 %	7.4 %
*Adjustments made for: One-off effects, scheduled good	dwill amortisation						



Consolidated profit & loss							
In EUR m	2017	2018	2019	2020	2021e	2022e	2023
Sales	44	53	59	56	77	80	80
Change Sales yoy	n.a.	19.7 %	11.6 %	-5.5 %	39.0 %	3.2 %	0.9 %
Increase / decrease in inventory	0	0	0	0	0	0	C
Own work capitalised	0	0	0	0	0	0	C
Total Sales	44	53	59	56	77	80	80
Material expenses	15	23	32	38	49	56	52
Gross profit	29	30	26	18	28	24	29
Gross profit margin	66.1 %	56.2 %	44.8 %	32.5 %	36.3 %	29.7 %	35.7 %
Personnel expenses	19	15	10	7	5	5	5
Other operating income	24	19	7	10	3	3	3
Other operating expenses	22	19	13	8	4	4	4
Unfrequent items	0	0	0	0	0	0	C
EBITDA	12	15	10	13	22	17	22
Margin	28.1 %	27.7 %	16.5 %	22.6 %	28.3 %	21.8 %	27.8 %
Depreciation of fixed assets	7	1	3	5	7	8	8
EBITA	6	13	6	7	14	10	15
Amortisation of intangible assets	0	6	2	2	1	1	1
Goodwill amortisation	0	1	1	1	1	1	1
EBIT	6	7	4	4	13	8	13
Margin	12.6 %	12.4 %	6.4 %	7.8 %	17.0 %	10.6 %	16.5 %
EBIT adj.	4	4	4	2	14	9	14
Interest income	2	2	2	1	1	1	1
Interest expenses	1	2	3	3	3	3	3
Other financial income (loss)	3	-1	1	2	1	1	1
EBT	9	6	3	5	12	8	12
Margin	21.1 %	11.6 %	5.9 %	9.7 %	15.7 %	9.4 %	15.5 %
Total taxes	3	0	2	1	1	1	1
Net income from continuing operations	6	6	2	5	12	7	12
Income from discontinued operations (net of tax)	0	0	0	0	0	0	C
Net income before minorities	6	6	2	5	12	7	12
Minority interest	1	0	0	1	4	3	4
Net income	6	6	2	4	7	4	8
Margin	12.6 %	11.8 %	2.6 %	7.4 %	9.3 %	5.0 %	9.4 %
Number of shares, average	32	32	32	32	32	32	32
EPS	0.17	0.19	0.05	0.13	0.22	0.12	0.23
EPS adj.	0.17	0.19	0.05	0.13	0.22	0.12	0.23
*Adjustments made for: One-off effects, scheduled goodw	ill amortisation						

Guidance: Significant increase in revenues and operating profit

Financial Ratios							
	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	71.9 %	72.3 %	83.5 %	77.4 %	71.7 %	78.2 %	72.2 %
Operating Leverage	n.a.	0.9 x	-3.7 x	-3.0 x	5.1 x	-11.0 x	66.2 x
EBITDA / Interest expenses	11.9 x	9.7 x	3.5 x	4.3 x	7.3 x	5.8 x	7.4 x
Tax rate (EBT)	32.7 %	-4.2 %	51.0 %	11.9 %	4.4 %	7.3 %	4.6 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	202,018	319,424	570,806	882,016	n.a.	n.a.	n.a.



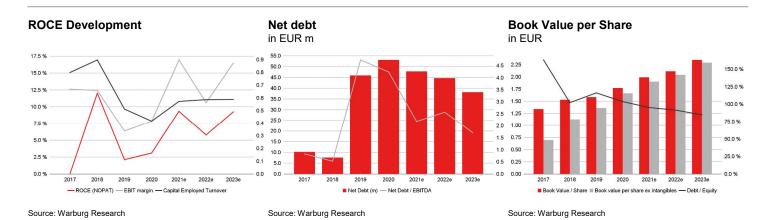
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Consolidated balance sheet							
In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Assets							
Goodwill and other intangible assets	21	13	7	4	3	2	2
thereof other intangible assets	14	8	3	1	1	1	1
thereof Goodwill	7	5	4	3	2	2	1
Property, plant and equipment	17	22	104	120	124	126	127
Financial assets	33	24	13	8	5	5	5
Other long-term assets	1	1	1	1	1	1	1
Fixed assets	73	61	125	132	133	134	135
Inventories	12	7	1	1	1	2	2
Accounts receivable	8	6	3	2	3	3	3
Liquid assets	18	16	10	9	14	17	24
Other short-term assets	8	13	10	19	19	20	20
Current assets	46	42	24	31	37	41	48
Total Assets	118	103	149	163	171	175	183
Liabilities and shareholders' equity							
Subscribed capital	32	32	32	32	32	32	32
Capital reserve	7	7	7	7	7	7	7
Retained earnings	4	11	12	18	26	30	37
Other equity components	0	0	0	0	0	0	0
Shareholders' equity	43	50	51	57	65	69	76
Minority interest	1	1	17	23	23	23	23
Total equity	45	51	69	80	87	91	99
Provisions	20	16	9	6	7	7	7
thereof provisions for pensions and similar obligations	2	2	2	2	2	2	2
Financial liabilities (total)	26	22	54	61	60	60	60
Short-term financial liabilities	1	9	7	8	5	5	5
Accounts payable	2	2	3	3	3	3	3
Other liabilities	23	10	13	12	12	13	13
Liabilities	73	52	80	83	83	84	84
Total liabilities and shareholders' equity	118	103	149	163	171	175	183

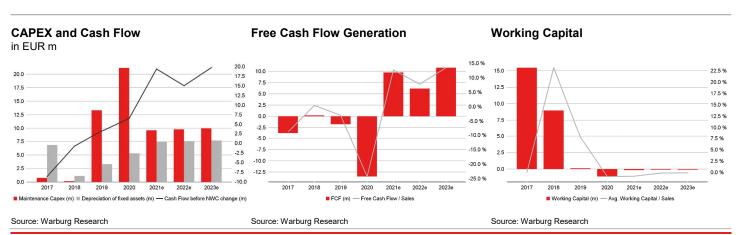
Financial Ratios							
	2017	2018	2019	2020	2021e	2022e	2023e
Efficiency of Capital Employment							
Operating Assets Turnover	1.4 x	1.7 x	0.6 x	0.5 x	0.6 x	0.6 x	0.6 x
Capital Employed Turnover	0.8 x	0.9 x	0.5 x	0.4 x	0.6 x	0.6 x	0.6 x
ROA	7.7 %	10.2 %	1.2 %	3.1 %	5.4 %	3.0 %	5.6 %
Return on Capital							
ROCE (NOPAT)	n.a.	12.0 %	2.1 %	3.1 %	9.3 %	5.8 %	9.3 %
ROE	n.a.	13.3 %	3.0 %	7.6 %	11.7 %	5.9 %	10.5 %
Adj. ROE	n.a.	13.3 %	3.0 %	7.6 %	11.7 %	5.9 %	10.5 %
Balance sheet quality							
Net Debt	10	8	46	53	48	45	38
Net Financial Debt	8	6	44	52	46	43	36
Net Gearing	22.8 %	14.9 %	66.8 %	66.3 %	54.7 %	48.9 %	38.6 %
Net Fin. Debt / EBITDA	67.7 %	40.0 %	455.7 %	410.9 %	210.9 %	247.5 %	163.5 %
Book Value / Share	1.3	1.5	1.6	1.8	2.0	2.1	2.3
Book value per share ex intangibles	0.7	1.1	1.4	1.7	1.9	2.0	2.3





Consolidated cash flow statement							
In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	4	2	0	2	11	6	11
Depreciation of fixed assets	7	1	3	5	7	8	8
Amortisation of goodwill	0	1	1	1	1	1	1
Amortisation of intangible assets	0	6	2	2	1	1	1
Increase/decrease in long-term provisions	0	-3	-7	-3	0	0	0
Other non-cash income and expenses	-19	-8	5	-1	0	0	0
Cash Flow before NWC change	-9	-1	3	7	19	15	20
Increase / decrease in inventory	0	5	6	0	-1	0	0
Increase / decrease in accounts receivable	0	2	3	1	-1	0	0
Increase / decrease in accounts payable	0	-1	1	0	0	0	0
Increase / decrease in other working capital positions	4	-8	-3	-2	0	0	0
Increase / decrease in working capital (total)	4	-1	7	-1	-1	0	0
Net cash provided by operating activities [1]	-4	-2	10	5	18	15	20
Investments in intangible assets	-1	0	72	0	-1	-1	-1
Investments in property, plant and equipment	0	0	-85	-21	-9	-9	-9
Payments for acquisitions	0	-1	-8	1	0	0	0
Financial investments	0	2	4	-3	0	0	0
Income from asset disposals	1	2	2	2	1	1	1
Net cash provided by investing activities [2]	0	3	-16	-21	-9	-9	-9
Change in financial liabilities	0	-4	32	6	-1	0	0
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	0	2	-32	8	-4	-3	-4
Net cash provided by financing activities [3]	0	-2	0	15	-5	-3	-4
Change in liquid funds [1]+[2]+[3]	-4	-2	-6	-1	5	3	7
Effects of exchange-rate changes on cash	-1	0	0	0	0	0	0
Cash and cash equivalent at end of period	18	16	10	9	14	17	24

Financial Ratios							
	2017	2018	2019	2020	2021e	2022e	2023e
Cash Flow							
FCF	-4	0	-2	-13	10	6	11
Free Cash Flow / Sales	-8.7 %	0.4 %	-3.0 %	-24.3 %	12.6 %	7.7 %	13.5 %
Free Cash Flow Potential	12	14	-5	-7	13	8	13
Free Cash Flow / Net Profit	-68.9 %	3.4 %	-115.6 %	-326.6 %	136.0 %	155.9 %	142.6 %
Interest Received / Avg. Cash	n.a.	10.0 %	12.6 %	15.3 %	8.7 %	6.7 %	5.4 %
Interest Paid / Avg. Debt	n.a.	6.2 %	7.1 %	5.0 %	5.0 %	5.0 %	5.0 %
Management of Funds							
Investment ratio	1.7 %	0.3 %	22.7 %	38.1 %	12.5 %	12.3 %	12.4 %
Maint. Capex / Sales	1.7 %	0.3 %	22.7 %	38.1 %	12.5 %	12.3 %	12.4 %
Capex / Dep	10.9 %	1.8 %	223.9 %	258.6 %	109.5 %	109.8 %	110.0 %
Avg. Working Capital / Sales	n.a.	23.2 %	7.7 %	-0.9 %	-0.8 %	-0.2 %	-0.1 %
Trade Debtors / Trade Creditors	307.1 %	329.8 %	83.8 %	60.4 %	83.1 %	85.0 %	84.8 %
Inventory Turnover	1.2 x	3.3 x	26.8 x	39.3 x	33.7 x	37.2 x	34.0 x
Receivables collection period (days)	63	39	16	13	13	13	13
Payables payment period (days)	61	27	35	32	25	22	24
Cash conversion cycle (Days)	254	92	-12	-17	-9	-6	-8





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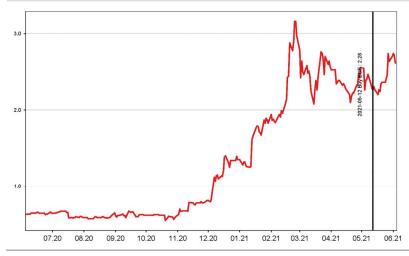
Rating	Number of stocks	% of Universe
Buy	151	70
Hold	55	26
Sell	5	2
Rating suspended	4	2
Total	215	100

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Buy	44	88
Hold	3	6
Sell	0	0
Rating suspended	3	6
Total	50	100

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