(SDAX, Software/IT, NA9 GR)



Buy		Value Indicators: DCF:		Warburg ESG Risk Score: ESG Score (MSCI based): Balance Sheet Score:	<b>3.0</b> 3.0 4.0	Description: Custom software and digital engineering	
EUR 220.00				Market Liquidity Score:	2.0	engineening	
		Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2022e
		Market cap:	1,456.7	Freefloat	70.30 %	Beta:	1.1
Price	EUR 105.00	No. of shares (m):	13.9	Carl G. Duerschmidt	20.00 %	Price / Book:	9.8 x
Upside	109.5 %	EV:	1,578.9	Detlef Dinsel	9.70 %	Equity Ratio:	23 %
openae		Freefloat MC:	1,024.0			Net Fin. Debt / EBITDA:	0.9 x
		Ø Trad. Vol. (30d):	5.38 m			Net Debt / EBITDA:	1.0 x

#### Strong growth expected to continue but at a slower pace

• Nagarro's preliminary results have easily beaten our estimates. Following the publication of the preliminary figures, management also hosted a conference call. In 2022, currency-adjusted organic growth was 39% (27.5% in Q4) supporting the achievement of a revenue level of EUR 856.4m. With this pace of expansion, the company continued to outperform the overall IT services sector. In the third quarter, Management Consulting & Business Information was the fastest growing vertical. We assume that this vertical was also the strongest growth driver in Q4.

Nagarro -	Q4 2022
-----------	---------

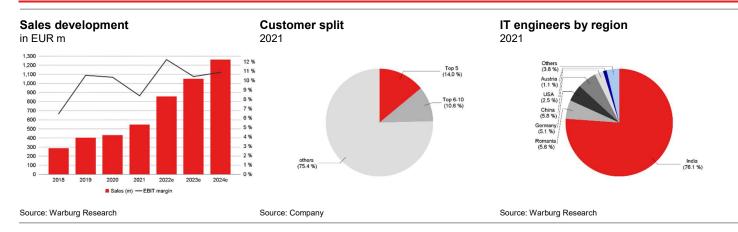
in EUR m	Q4/22	Q4/22e	Q4/21	уоу
Sales	231.0	229.6	162.0	42.6%
EBITDA adjusted margin	<b>30.5</b> 13.2%	18.2 7.9%	20.5 12.6%	49.1%
EBITDA margin	<b>30.3</b> 13.1%	16.9 7.4%	18.3 <i>11.3%</i>	65.2%

- The 2023 targets for revenue of EUR 1,020m at an adjusted EBITDA margin of 15% were confirmed. These targets reflect 19% revenue growth and do not include any acquisitions in 2023.
- As already highlighted in the context of the Q3 results, wage inflation and attrition have normalised and reverted towards pre-Covid levels. These developments contributed to adj. EBITDA margin expansion which reached 17% in 2022 vs. 15% in 2021. Against this backdrop, the adj. EBITDA margin of 15% appears to be conservative, especially as growth is projected to be slower than in 2022. Slower employee onboarding and, as a consequence, higher utilization looks set to support profitability.
- FY operating cash flow after changes in working capital was approx. EUR 82m. Days of sales outstanding, calculated for Q4 including trade receivables and contract assets, dropped to 68 on December 31, 2022 compared to 71 at the end of 2021. We estimate that capex was approx. EUR 4.7m leading to FCF of approx. EUR 53m after rental payments.
- In Q4, the staff increased by 163 people (+0.9% sequentially) and should have reached 18,250. Somewhat slower hiring in Q4 underpins lower attrition in the final quarter. Considering the number of employees at the end of each of the last four quarters, there was an increase in average revenue per employee from approx. EUR 49k to approx. EUR 55k p.a. according to our calculations. Company calculations reflect EUR 47k for 2022 and EUR 40k for 2021 indicating its ability to monetize its access to IT experts in an environment of high-demand and higher added value as industry-specific expertise has been enhanced.
- Hiring should have accelerated in Q1. On LinkedIn, the current number of Nagarro employees stands at approx. 18.300, which is a sequential increase of 5% or approx. 20% on an annualized basis and 36% yoy, indicating that Nagarro is preparing to reach its FY revenue targets.
- Estimates for 2023 and onwards are maintained without noteworthy changes. Given continued strong momentum and upside to our DCF-based PT, the Buy rating is confirmed.

	FY End: 31.12.	CAGR							
150 -	in EUR m	(21-24e)	2018	2019	2020	2021	2022e	2023e	2024e
140 -	Sales	32.2 %	287.3	402.4	430.4	546.0	856.4	1,051.7	1,262.0
130 - MAN	Change Sales yoy		36.5 %	40.1 %	6.9 %	26.9 %	56.8 %	22.8 %	20.0 %
	gross margin		31.3 %	32.1 %	32.6 %	28.3 %	29.5 %	28.6 %	30.2 %
120 - M	(company reporting	)							
110 - MANY MANY	EBITDA adj.		34.3	55.0	76.2	79.7	148.1	164.9	201.0
M M	Margin		12.0 %	13.7 %	17.7 %	14.6 %	17.3 %	15.7 %	15.9 %
100 - V NLL	EBITDA	39.8 %	32.3	61.6	66.2	70.3	145.2	156.9	192.0
90 -	Margin		11.2 %	15.3 %	15.4 %	12.9 %	17.0 %	14.9 %	15.2 %
	EBIT	44.3 %	18.6	42.4	44.5	45.7	104.7	109.5	137.2
05/22 07/22 09/22 11/22 01/23 03	<sup>23</sup> Margin		6.5 %	10.5 %	10.3 %	8.4 %	12.2 %	10.4 %	10.9 %
Nagarro SE SDAX (normalised)	Net income before		8.2	30.4	24.4	30.0	70.5	74.0	93.9
	minorities								
Rel. Performance vs SDAX:	Net income	46.3 %	6.9	25.5	18.4	30.0	70.5	74.0	93.9
1 month: -21.3	<sup>%</sup> EPS	39.2 %	n.a.	n.a.	n.a.	2.51	5.08	5.33	6.77
6 months: -9.5	% FCFPS		n.a.	n.a.	n.a.	1.81	3.79	4.53	5.32
Year to date: -18.9	% FCF / Market cap		n.a.	n.a.	n.a.	1.5 %	3.6 %	4.3 %	5.1 %
Trailing 12 months: -15.6	% EV / Sales		n.a.	n.a.	n.a.	3.0 x	1.9 x	1.5 x	1.2 x
, , , , , , , , , , , , , , , , , , ,	EV / EBIT adj.		n.a.	n.a.	n.a.	33.8 x	14.5 x	13.8 x	10.7 x
Company events:	EV / EBIT		n.a.	n.a.	n.a.	35.4 x	15.3 x	14.4 x	11.0 x
	P/E		n.a.	n.a.	n.a.	48.9 x	20.7 x	19.7 x	15.5 x
	Net Debt		67.4	86.0	87.8	149.7	144.0	122.2	49.4
	ROCE (NOPAT)		8.9 %	23.0 %	20.5 %	18.8 %	27.8 %	24.7 %	28.0 %
	Guidance:	2022: revenue	e: EUR 850m	; adj. EBITDA	A margin: ap	orox. 16%			





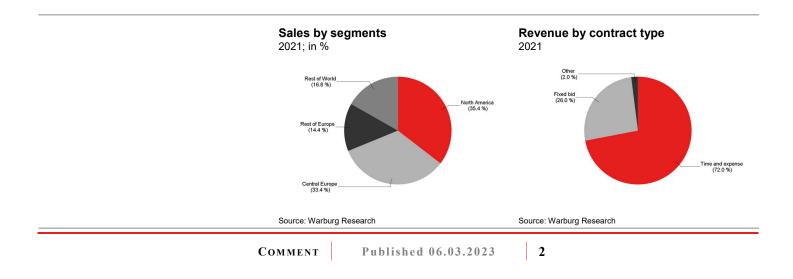


## **Company Background**

- Nagarro provides technology and custom software development services for digital transformation,...
- ...with a focus on disruptive technologies such as artificial intelligence, big data, and internet of things.
- Complementary business fields such as managed services, e-commerce solutions or ERP consulting complete the offering.
- While the majority of revenue is generated in higher price countries, Nagarro is able to serve this demand with access to experts in regions associated with lower costs.

## **Competitive Quality**

- Nagarro is a trusted and valued digitalisation partner developing tailor-made software to achieve competitive differentiation for its clients.
- Technological focus and expertise position the company as an IT engineering expert rather than a consulting or services company.
- Proprietary software Ginger supports collaboration, a decentralised organisational structure which provides access to IT talent and enables Nagarro to serve both, small and large companies around the globe.
- Organizational design and processes allow Nagarro to cross-fertilize knowledge across the global organisation and adapt quickly to new technologies and client needs with lean and agile teams and short time-to-market.
- Access to scarce IT specialists: Nagarro's approx. 8,000 IT experts e.g. in India, China or Romania have a strong footprint in futureoriented technologies such as cloud, AI, IoT, deep learning or big data.





DCF model														
	Detaile	d forecas	st period				-	Transitior	nal period					Term. Value
Figures in EUR m	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	856.4	1,051.7	1,262.0	1,514.4	1,799.2	2,117.1	2,468.8	2,854.3	3,273.3	3,724.9	4,208.0	4,721.0	4,815.4	
Sales change	56.8 %	22.8 %	20.0 %	20.0 %	18.8 %	17.7 %	16.6 %	15.6 %	14.7 %	13.8 %	13.0 %	12.2 %	2.0 %	2.0 %
EBIT	104.7	109.5	137.2	159.0	188.9	222.3	259.2	299.7	343.7	391.1	441.8	495.7	505.6	
EBIT-margin	12.2 %	10.4 %	10.9 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	10.5 %	
Tax rate (EBT)	28.0 %	28.0 %	28.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	32.0 %	
NOPAT	75.4	78.9	98.8	108.1	128.5	151.2	176.3	203.8	233.7	266.0	300.5	337.1	343.8	
Depreciation	40.5	47.4	54.8	16.7	18.0	21.2	24.7	28.5	32.7	37.2	42.1	47.2	53.0	
in % of Sales	4.7 %	4.5 %	4.3 %	1.1 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.0 %	1.1 %	
Changes in provisions	-3.1	1.0	1.0	1.8	2.0	2.3	2.5	2.7	3.0	3.2	3.4	3.7	0.7	
Change in Liquidity from														
- Working Capital	13.4	26.1	29.9	21.4	31.3	35.0	38.7	42.4	46.1	49.7	53.1	56.4	10.4	
- Capex	4.7	7.8	9.2	16.7	19.8	23.3	27.2	31.4	36.0	41.0	46.3	51.9	53.0	
Capex in % of Sales	0.6 %	0.7 %	0.7 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	1.1 %	
- Other	25.0	30.7	36.8	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)	69.6	62.6	78.6	88.5	97.4	116.3	137.6	161.3	187.3	215.8	246.5	279.6	334.1	341
PV of FCF	69.6	57.8	67.1	69.8	70.9	78.3	85.5	92.6	99.4	105.7	111.6	116.9	129.1	2,107
share of PVs		5.97 %						29.4	3 %					64.61 %
Model parameter							Valuat	ion (m)						
Derivation of WACC:			Derivation	of Beta			Preser	nt values 2	034e	1,15	54			
			Donnation	or Bota.				al Value	00.0	2,10				
Debt ratio	7.00 %		Financial S	Strength		1.00	Financ	ial liabilitie	S	24	46			
Cost of debt (after tax)	2.4 %		Liquidity (s	share)		1.10	Pensio	n liabilities	6		10			
Market return	8.25 %		Cyclicality			1.10	Hybrid	capital			0			
Risk free rate	2.75 %		Transpare	ncy		1.10	Minorit	y interest			0			
			Others			1.10	Market	val. of inv	estments		0			
							Liquidi	ty		6	67	No. of sha	ares (m)	13.9
WACC	8.25 %		Beta			1.08	Equity	Value		3,07	72	Value pe	r sharo /E	UR) 221.42

#### Sensitivity Value per Share (EUR)

		Terminal (	Growth								Delta EBIT	-margin					
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
1.28	9.2 %	170.74	174.17	177.82	181.73	185.92	190.42	195.26	1.28	9.2 %	151.04	161.27	171.50	181.73	191.96	202.19	212.42
1.18	8.7 %	186.71	190.84	195.26	200.01	205.13	210.66	216.65	1.18	8.7 %	166.57	177.72	188.87	200.01	211.16	222.31	233.45
1.13	8.5 %	195.58	200.13	205.02	210.28	215.96	222.12	228.81	1.13	8.5 %	175.30	186.96	198.62	210.28	221.94	233.60	245.26
1.08	8.2 %	205.14	210.16	215.57	221.42	227.75	234.63	242.13	1.08	8.2 %	184.77	196.98	209.20	221.42	233.63	245.85	258.07
1.03	8.0 %	215.46	221.02	227.03	233.53	240.61	248.33	256.78	1.03	8.0 %	195.07	207.89	220.71	233.53	246.35	259.18	272.00
0.98	7.7 %	226.62	232.80	239.49	246.76	254.70	263.39	272.95	0.98	7.7 %	206.32	219.80	233.28	246.76	260.24	273.72	287.20
0.88	7.2 %	251.92	259.61	268.00	277.19	287.30	298.47	310.89	0.88	7.2 %	232.21	247.20	262.20	277.19	292.19	307.18	322.17

Slight EBIT margin expansion anticipated

• Other: IFRS 16 impact in the detailed forecast. Depreciation and capex at same levels thereafter.



#### Valuation 2022e 2024e 2018 2019 2020 2021 2023e Price / Book n.a. n.a. 15.2 x 9.8 x 6.7 x 4.7 x n.a. -5.12 -2.62 Book value per share ex intangibles n.a. n.a. n.a. -5.90 4.16 EV / Sales 3.0 x 1.9 x 1.5 x 1.2 x n.a. n.a. n.a. EV / EBITDA 23.0 x 11.0 x 10.1 x 7.8 x n.a. n.a. n.a. EV / EBIT 35.4 x 15.3 x 14.4 x 11.0 x n.a. n.a. n.a. EV / EBIT adj.\* 33.8 x 14.5 x 13.8 x 10.7 x n.a. n.a. n.a. P / FCF 67.9 x 27.7 x 23.2 x 19.7 x n.a. n.a. n.a. P/E 20.7 x 15.5 x n.a. n.a. n.a. 48.9 x 19.7 x P / E adj.\* 48.9 x 20.7 x 19.7 x 15.5 x n.a. n.a. n.a. **Dividend Yield** n.a. n.a. n.a. n.a. n.a. n.a. n.a. 5.7 % 7.3 % FCF Potential Yield (on market EV) 2.5 % 5.5 % n.a. n.a. n.a. \*Adjustments made for: -

Company Specific Items							
	2018	2019	2020	2021	2022e	2023e	2024e
gross profit (company reporting) gross margin (company reporting)	89.9 31.3 %	129.1 32.1 %	140.2 32.6 %	154.4 28.3 %	252.9 29.5 %	300.6 28.6 %	380.8 30.2 %

#### **Consolidated profit & loss**

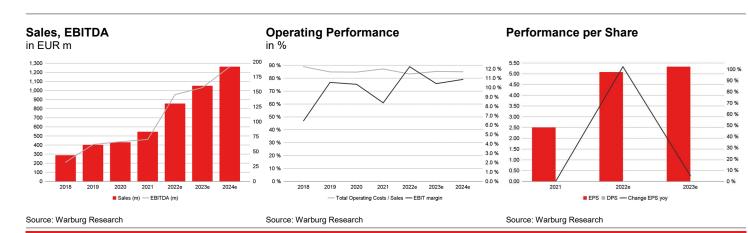


In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Sales	287.3	402.4	430.4	546.0	856.4	1,051.7	1,262.0
Change Sales yoy	36.5 %	40.1 %	6.9 %	26.9 %	56.8 %	22.8 %	20.0 %
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	0.5	0.9	0.3	0.2	1.5	1.9	2.2
Material expenses	39.9	49.1	49.2	59.1	81.4	118.8	147.7
Personnel expenses	179.8	254.7	271.7	373.0	582.4	669.9	788.8
Other operating income	2.4	12.7	11.6	14.8	38.2	8.0	9.0
Other operating expenses	37.4	49.8	53.3	55.5	82.2	110.4	138.8
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	32.3	61.6	66.2	70.3	145.2	156.9	192.0
Margin	11.2 %	15.3 %	15.4 %	12.9 %	17.0 %	14.9 %	15.2 %
Depreciation of fixed assets	10.4	15.7	16.9	19.9	34.0	41.8	50.1
EBITA	21.9	45.9	49.3	50.3	111.2	115.1	141.9
Amortisation of intangible assets	3.3	3.5	4.7	4.7	6.5	5.6	4.7
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	18.6	42.4	44.5	45.7	104.7	109.5	137.2
Margin	6.5 %	10.5 %	10.3 %	8.4 %	12.2 %	10.4 %	10.9 %
EBIT adj.	20.8	45.4	48.0	47.8	110.7	114.5	141.2
Interest income	0.5	0.2	0.5	0.4	0.2	0.2	0.2
Interest expenses	4.6	5.5	7.3	7.8	7.0	7.0	7.0
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	14.4	37.2	37.7	38.2	97.9	102.7	130.4
Margin	5.0 %	9.2 %	8.8 %	7.0 %	11.4 %	9.8 %	10.3 %
Total taxes	6.2	6.8	13.4	8.2	27.4	28.8	36.5
Net income from continuing operations	8.2	30.4	24.4	30.0	70.5	74.0	93.9
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	8.2	30.4	24.4	30.0	70.5	74.0	93.9
Minority interest	1.3	4.9	5.9	0.0	0.0	0.0	0.0
Net income	6.9	25.5	18.4	30.0	70.5	74.0	93.9
Margin	2.4 %	6.3 %	4.3 %	5.5 %	8.2 %	7.0 %	7.4 %
Number of shares, average	n.a.	n.a.	n.a.	12.0	13.9	13.9	13.9
EPS	n.a.	n.a.	n.a.	2.51	5.08	5.33	6.77
EPS adj.	n.a.	n.a.	n.a.	2.51	5.08	5.33	6.77
*Adjustments made for:							

Guidance: 2022: revenue: EUR 850m; adj. EBITDA margin: approx. 16%

#### **Financial Ratios**

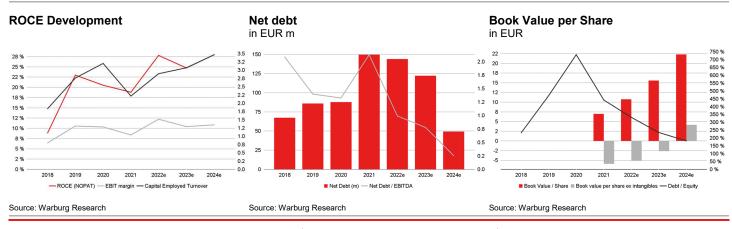
	2018	2019	2020	2021	2022e	2023e	2024e
Total Operating Costs / Sales	88.9 %	84.9 %	84.7 %	87.2 %	83.2 %	85.3 %	85.0 %
Operating Leverage	1.8 x	3.2 x	0.7 x	0.1 x	2.3 x	0.2 x	1.3 x
EBITDA / Interest expenses	7.0 x	11.2 x	9.1 x	9.0 x	20.7 x	22.4 x	27.4 x
Tax rate (EBT)	43.3 %	18.2 %	35.5 %	21.5 %	28.0 %	28.0 %	28.0 %
Dividend Payout Ratio	n.a.	n.a.	n.a.	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	n.a.						



## Consolidated balance sheet



Consolidated balance sheet							
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Assets							
Goodwill and other intangible assets	107.7	111.4	106.9	178.7	220.2	252.4	251.9
thereof other intangible assets	10.2	9.0	11.0	14.0	13.1	12.4	11.9
thereof Goodwill	97.5	102.4	95.9	163.4	207.1	240.0	240.0
Property, plant and equipment	6.7	7.2	6.4	11.1	5.6	0.8	-4.9
Financial assets	3.4	2.7	3.0	3.7	3.7	3.7	3.7
Other long-term assets	47.3	54.9	51.7	59.3	94.4	116.8	141.0
Fixed assets	165.0	176.2	168.0	253.0	323.9	373.8	391.7
Inventories	0.1	0.0	0.1	0.3	0.2	0.3	0.4
Accounts receivable	75.0	80.3	73.9	103.3	154.9	195.9	242.0
Liquid assets	27.9	43.8	107.7	106.6	116.1	101.9	175.7
Other short-term assets	29.1	41.7	37.1	61.7	61.5	66.0	77.0
Current assets	132.1	165.8	218.8	271.9	332.7	364.1	495.1
Total Assets	297.1	342.0	386.8	524.9	656.6	738.0	886.9
Liabilities and shareholders' equity							
Shareholders' equity	74.5	50.2	43.8	96.8	149.1	216.1	309.5
Minority interest	14.4	9.7	2.7	0.0	3.0	4.0	5.0
Total equity	88.9	59.9	46.5	96.8	152.1	220.1	314.5
Provisions	20.9	25.5	33.2	45.3	37.0	40.0	43.0
thereof provisions for pensions and similar obligations	3.2	4.4	6.0	10.1	7.0	8.0	9.0
Financial liabilities (total)	92.1	125.3	189.5	246.1	253.1	216.1	216.1
Short-term financial liabilities	5.7	5.3	14.4	23.8	30.0	30.0	30.0
Accounts payable	17.4	16.1	22.2	18.5	44.6	54.7	65.7
Other liabilities	77.8	115.1	95.4	118.2	169.8	207.1	247.6
Liabilities	208.2	282.0	340.3	428.0	504.5	517.9	572.3
Total liabilities and shareholders' equity	297.1	342.0	386.8	524.9	656.6	738.0	886.9
Financial Ratios							
	2018	2019	2020	2021	2022e	2023e	2024e
Efficiency of Capital Employment							
Operating Assets Turnover	4.8 x	6.3 x	8.8 x	6.3 x	9.0 x	9.1 x	9.0 x
Capital Employed Turnover	1.8 x	2.8 x	3.2 x	2.2 x	2.9 x	3.1 x	3.5 x
ROA	4.2 %	14.5 %	11.0 %	11.9 %	21.8 %	19.8 %	24.0 %
Return on Capital							
ROCE (NOPAT)	8.9 %	23.0 %	20.5 %	18.8 %	27.8 %	24.7 %	28.0 %
ROE	13.4 %	40.8 %	39.2 %	42.7 %	57.3 %	40.5 %	35.7 %
Adj. ROE	13.4 %	40.8 %	39.2 %	42.7 %	57.3 %	40.5 %	35.7 %
Balance sheet quality							
Net Debt	67.4	86.0	87.8	149.7	144.0	122.2	49.4
Net Financial Debt	64.2	81.6	81.8	139.5	137.0	114.2	40.4
Net Gearing	75.8 %	143.4 %	188.7 %	154.6 %	94.7 %	55.5 %	15.7 %
Net Fin. Debt / EBITDA	198.8 %	132.4 %	123.6 %	198.6 %	94.4 %	72.8 %	21.0 %
Book Value / Share	n.a.	n.a.	n.a.	7.0	10.7	15.6	22.3
Book value per share ex intangibles	n.a.	n.a.	n.a.	-5.9	-5.1	-2.6	4.2
· · ·							



COMMENT

Published 06.03.2023

6

#### Consolidated cash flow statement



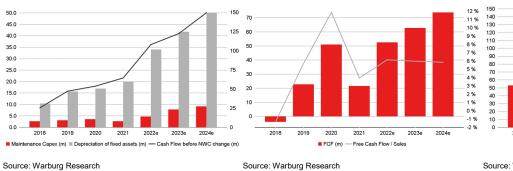
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Net income	8.2	30.4	24.4	30.0	70.5	74.0	93.9
Depreciation of fixed assets	10.4	15.7	16.9	19.9	34.0	41.8	50.1
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	3.3	3.5	4.7	4.7	6.5	5.6	4.7
Increase/decrease in long-term provisions	0.6	0.4	1.2	1.3	-3.1	1.0	1.0
Other non-cash income and expenses	3.1	-2.9	6.6	8.7	0.0	0.0	0.0
Cash Flow before NWC change	25.6	47.1	53.8	64.5	107.9	122.3	149.7
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in accounts receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase / decrease in accounts payable	0.0	0.0	0.0	0.0	-14.2	0.0	0.0
Increase / decrease in other working capital positions	-17.0	-6.3	18.4	-20.6	-11.4	-21.0	-29.8
Increase / decrease in working capital (total)	-17.0	-6.3	18.4	-20.6	-25.6	-21.0	-29.8
Net cash provided by operating activities [1]	8.6	40.9	72.2	44.0	82.3	101.3	119.8
Investments in intangible assets	0.0	-1.3	-1.0	-0.8	-1.3	-1.5	-1.6
Investments in property, plant and equipment	-2.7	-1.8	-2.6	-1.9	-3.4	-6.3	-7.6
Payments for acquisitions	5.0	-2.9	-7.8	-50.1	-40.0	-40.0	0.0
Financial investments	0.4	-2.5	1.2	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	0.4	0.1	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	2.7	-8.0	-10.1	-52.8	-44.7	-47.8	-9.2
Change in financial liabilities	4.3	-3.3	23.9	18.2	6.9	-37.0	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	0.0	0.0	-10.0	0.0	0.0
Capital measures	0.0	0.0	0.1	6.1	0.0	0.0	0.0
Other	-8.1	-13.8	-17.5	-24.2	-25.0	-30.7	-36.8
Net cash provided by financing activities [3]	-3.9	-17.1	6.5	0.0	-28.1	-67.7	-36.8
Change in liquid funds [1]+[2]+[3]	7.5	15.7	68.6	-8.8	9.5	-14.2	73.8
Effects of exchange-rate changes on cash	0.4	0.4	-1.4	0.6	0.0	0.0	0.0
Cash and cash equivalent at end of period	24.4	44.0	110.9	99.6	116.1	101.9	175.7

### **Financial Ratios**

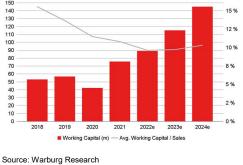
	2018	2019	2020	2021	2022e	2023e	2024e
Cash Flow							
FCF	-3.9	22.8	51.0	21.6	52.6	62.8	73.8
Free Cash Flow / Sales	-1.3 %	5.7 %	11.9 %	4.0 %	6.1 %	6.0 %	5.8 %
Free Cash Flow Potential	23.4	36.8	31.6	39.7	88.0	89.6	109.5
Free Cash Flow / Net Profit	-56.5 %	89.4 %	276.6 %	72.1 %	74.6 %	84.9 %	78.6 %
Interest Received / Avg. Cash	2.1 %	0.6 %	0.7 %	0.4 %	0.2 %	0.2 %	0.1 %
Interest Paid / Avg. Debt	6.0 %	5.0 %	4.6 %	3.6 %	2.8 %	3.0 %	3.2 %
Management of Funds							
Investment ratio	0.9 %	0.8 %	0.8 %	0.5 %	0.6 %	0.7 %	0.7 %
Maint. Capex / Sales	0.9 %	0.8 %	0.8 %	0.5 %	0.6 %	0.7 %	0.7 %
Capex / Dep	19.4 %	16.1 %	16.5 %	10.9 %	11.7 %	16.5 %	16.7 %
Avg. Working Capital / Sales	15.5 %	13.6 %	11.5 %	10.8 %	9.6 %	9.7 %	10.3 %
Trade Debtors / Trade Creditors	431.9 %	500.3 %	332.8 %	559.6 %	347.3 %	358.1 %	368.3 %
Inventory Turnover	398.7 x	5452.4 x	387.1 x	219.6 x	406.8 x	396.1 x	369.1 x
Receivables collection period (days)	95	73	63	69	66	68	70
Payables payment period (days)	159	119	165	114	200	168	162
Cash conversion cycle (Days)	-106	-103	-172	-102	-229	-180	-169

**Free Cash Flow Generation** 





### Working Capital



COMMENT

Published 06.03.2023

7



#### 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 <u>http://www.mmwarburg.de/disclaimer/disclaimer.htm#Valuation</u>). 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.
- -2- 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.
- -3- 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.
- -5- 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)
Nagarro	5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A3H2200.htm



#### 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.

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

#### WARBURG RESEARCH GMBH - ANALYSED RESEARCH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	161	75
Hold	43	20
Sell	7	3
Rating suspended	3	1
Total	214	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 NAGARRO AS OF 06.03.2023



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.

#### EQUITIES

Matthias Rode Head of Equities

#### RESEARCH

Michael Heider Head of Research Henner Rüschmeier Head of Research Stefan Augustin Cap. Goods, Engineering Jan Bauer Renewables **Christian Cohrs** Industrials & Transportation Dr. Christian Ehmann BioTech, Life Science Felix Ellmann Software, IT Jörg Philipp Frey Retail, Consumer Goods Marius Fuhrberg Financial Services Mustafa Hidir Automobiles, Car Suppliers Fabio Hölscher Automobiles, Car Suppliers

Philipp Kaiser Real Estate, Construction

Head of Equity Sales. Germany

Head of Equity Sales, Germany

Marc Niemann

Klaus Schilling

Tim Beckmann

Lea Bogdanova

Jens Buchmüller

Scandinavia, Austria

Matthias Fritsch

Maximilian Martin

SALES TRADING

United Kingdom

Austria. Poland

Oliver Merckel Head of Sales Trading

Marcel Magiera

Elyaz Dust

Sales Trading

Sales Trading

United Kingdom, Ireland

United Kingdom

#### INSTITUTIONAL EQUITY SALES

+49 40 309537-280 mheider@warburg-research.com +49 40 309537-270 hrueschmeier@warburg-research.com +49 40 309537-168 saugustin@warburg-research.com +49 40 309537-155 jbauer@warburg-research.com +49 40 309537-175 ccohrs@warburg-research.com +49 40 309537-167 cehmann@warburg-research.com +49 40 309537-120 fellmann@warburg-research.com +49 40 309537-258 jfrey@warburg-research.com +49 40 309537-185 mfuhrberg@warburg-research.com +49 40 309537-230 mhidir@warburg-research.com +49 40 309537-240 fhoelscher@warburg-research.com +49 40 309537-260 pkaiser@warburg-research.com

+49 40 3282-2660

+49 69 5050-7400

+49 40 3282-2665

+49 69 5050-7411

+49 69 5050-7415

+49 40 3282-2696

+49 69 5050-7413

+49 40 3282-2634

+49 40 3282-2702

+49 40 3282-2662

edust@mmwarburg.com

mniemann@mmwarburg.com

kschilling@mmwarburg.com

tbeckmann@mmwarburg.com

lbogdanova@mmwarburg.com

jbuchmueller@mmwarburg.com

mfritsch@mmwarburg.com

mmartin@mmwarburg.com

omerckel@mmwarburg.com

mmagiera@mmwarburg.com

+49 40 3282-2678

mrode@mmwarburg.com

Christopher Seedorf

Thilo Kleibauer

Hannes Müller

Andreas Pläsier

Malte Schaumann

Chemicals, Agriculture

Cap. Goods, Engineering

Automobiles, Car Suppliers

Robert-Jan van der Horst

**Oliver Schwarz** 

Simon Stippig

Real Estate, Telco

Marc-René Tonn

Cansu Tatar

Technology

Software, IT

Andreas Wolf

Software, IT

Technology

Retail, Consumer Goods

Banks, Financial Services

+49 40 3282-2695 cseedorf@mmwarburg.com

Sophie Hauer Roadshow/Marketing Juliane Niemann Roadshow/Marketing

Jan-Philip Schmidt Sales Trading Sebastian Schulz Sales Trading Jörg Treptow Sales Trading +49 69 5050-7417 shauer@mmwarburg.com +49 40 3282-2694 jniemann@mmwarburg.com

+49 40 3282-2682 jschmidt@mmwarburg.com +49 40 3282-2631 sschulz@mmwarburg.com +49 40 3282-2658 jtreptow@mmwarburg.com

Bastian Quast Sales Trading	+49 40 3282-2701 bquast@mmwarburg.com		
MACRO RESEARC	H		
Carsten Klude Macro Research	+49 40 3282-2572 cklude@mmwarburg.com	Dr. Christian Jasperneite Investment Strategy	+49 40 3282-2439 cjasperneite@mmwarburg.com
Our research can b	be found under:		
Warburg Research Bloomberg	research.mmwarburg.com/en/index.html RESP MMWA GO	Refinitiv Capital IQ	www.refinitiv.com www.capitaliq.com
FactSet	www.factset.com		
For access please co	ontact:		
Andrea Schaper Sales Assistance	+49 40 3282-2632 aschaper@mmwarburg.com	Kerstin Muthig Sales Assistance	+49 40 3282-2703 kmuthig@mmwarburg.com



+49 40 309537-257

+49 40 309537-255

+49 40 309537-246

+49 40 309537-170

+49 40 309537-250

+49 40 309537-265

+49 40 309537-248

+49 40 309537-259

+49 40 309537-290

+49 40 309537-140

tkleibauer@warburg-research.com

hmueller@warburg-research.com

aplaesier@warburg-research.com

oschwarz@warburg-research.com

sstippig@warburg-research.com

ctatar@warburg-research.com

mtonn@warburg-research.com

awolf@warburg-research.com

rvanderhorst@warburg-research.com

mschaumann@warburg-research.com