Brenntag

(DAX, Industrial Goods & Services, BNR GR)

WARBURG RESEARCH

Buy	
EUR 93.00	(EUR 80.00)
Price	EUR 68.30
Upside	**36.2 %**

Value Indicators:	EUR
DCF:	93.05
FCF-Value Potential 25e:	93.47

Warburg ESG Risk Score:	**3.6**
ESG Score (MSCI based):	4.0
Balance Sheet Score:	3.8
Market Liquidity Score:	3.0

Description:

Brenntag is the global No 1 in chemical distribution

Market Snapshot:	EUR m
Market cap:	9,912
No. of shares (m):	145
EV:	12,375
Freefloat MC:	9,912
Ø Trad. Vol. (30d):	31.92 m

Shareholders:	
Freefloat	100.00 %
Wellington Management Group	*5.00 %*
Capital Research & Management	*5.00 %*
Flossbach von Storch	*3.00 %*
Kühne Holding	*3.00 %*

Key Figures (WRe):	2023e
Beta:	1.1
Price / Book:	2.3 x
Equity Ratio:	44 %
Net Fin. Debt / EBITDA:	1.3 x
Net Debt / EBITDA:	1.4 x

On a good track and with no need to split up

Brenntag last week reported record-high earnings for 2022 with operating EBITDA of EUR 1.81bn, thereby reaching the upper half of management's guidance. Stripping out FX effects and M&A, this reflects an organic earnings increase of 22%. The positive performance is attributable to superior delivery capability in times of product shortages thanks to advantageous competitive positioning and geographic reach as well as internal improvements related to the transformation initiative "Project Brenntag", which slightly overdelivered on the envisaged EBITDA uplift and is one year ahead of schedule. Against the backdrop of a weakening macroeconomic environment and inventory correction on the customer side, however, operating earnings momentum softened in the course of the year. Additionally, the company recorded some temporarily higher year-end expenses, resulting in a 2% organic decline in operating earnings in Q4/22, moderately missing expectations.

Reassuring financial outlook for 2023. Management targets operating EBITA in the range of EUR 1.3-1.5bn. This guidance implies stable to only moderately declining earnings, which we take as fairly positive considering that operating EBITA has soared by almost 90% in the exceptionally favourable industry environment of the last two years. Management is obviously convinced that much of the increase can be sustained. First-quarter results will again be sequentially higher, according to the CEO in the conference call.

Shareholder return of EUR >1bn. Cash generation has accelerated significantly as product shortages have eased and chemical prices have stopped or even partially reversed their upward trend. Against this backdrop, we welcome management's announcement of a EUR 750m share buyback programme. In addition, it is proposed to increase the ordinary dividend to EUR 2 per share. In total, more than EUR 1bn will flow into shareholders' wallets. This corresponds to about 10% of Brenntag's current market cap. Notwithstanding the generous payout, the company will have ample headroom to pursue its M&A strategy without crossing the CFO's leverage comfort zone.

Market misunderstands the value and strengths of Brenntag Essentials. Over the past few weeks, the discussion has mainly centred on the relative underperformance of Brenntag's Specialties business as well as the pros and cons of a separation. We are against cutting the company into pieces and believe that the performance gap of the Specialities division can be gradually overcome in the context of the ongoing reorganisation and improvement agenda. Moreover, the common perception that the Specialties business is more attractive due to its lower asset intensity and faster growth is misleading, in our view, and neglects the impact of the much higher (both capital and product volume) turnover of the Essentials business, which results in a very decent, if not superior, return on capital. After updating our estimates and rolling forward the model by one year, we increase our DCF-based price target to EUR 93, which is supported by the fair-value proposition of the FCFVP model. With ~35% upside, we stick to our Buy rating.

Changes in Estimates:

FY End: 31.12. in EUR m	2023e (old)	+/-	2024e (old)	+/-	2025e (old)	+/-
Sales	18,490	1.0 %	18,682	-0.2 %	n.a.	n.m.
EBITA adj.	1,350	0.0 %	1,428	0.0 %	n.a.	n.m.
EPS	5.23	4.3 %	5.48	10.6 %	n.a.	n.m.
DPS	2.60	-13.6 %	2.70	-9.4 %	n.a.	n.m.

Comment on Changes:

- Fine-tuning of our underlying operational forecasts.
- Higher EPS reflects lower number of shares (assumption: EUR 750m buyback programme fully executed in 2023 with an average purchase price of EUR 80 per share) as well as the absence of exceptional costs related to the strategic initiative "Horizon II").
- First-time publication of 2025 estimates.

Rel. Performance vs DAX:	
1 month:	-5.0 %
6 months:	-14.9 %
Year to date:	5.3 %
Trailing 12 months:	-8.9 %

Company events:	
16.03.23	RS EDI
10.05.23	Q1
15.06.23	AGM
09.08.23	Q2

FY End: 31.12. in EUR m	CAGR (22-25e)	2019	2020	2021	2022	2023e	2024e	2025e
Sales	0.0 %	12,822	11,776	14,383	19,429	18,671	18,641	19,420
Change Sales yoy		2.2 %	-8.2 %	22.1 %	35.1 %	-3.9 %	-0.2 %	4.2 %
Gross profit	2.0 %	2,822	2,850	3,379	4,319	4,254	4,399	4,580
Gross profit margin		*22.0 %*	*24.2 %*	*23.5 %*	*22.2 %*	*22.8 %*	*23.6 %*	*23.6 %*
EBITDA	2.1 %	1,010	1,011	1,116	1,789	1,660	1,755	1,902
Margin		*7.9 %*	*8.6 %*	*7.8 %*	*9.2 %*	*8.9 %*	*9.4 %*	*9.8 %*
EBITA adj.	1.2 %	758	805	1,082	1,512	1,349	1,432	1,566
EBIT	3.0 %	717	713	742	1,383	1,286	1,373	1,511
Margin		*5.6 %*	*6.1 %*	*5.2 %*	*7.1 %*	*6.9 %*	*7.4 %*	*7.8 %*
Net income	3.2 %	467	467	448	887	824	879	975
EPS	5.4 %	3.02	3.02	2.90	5.74	5.46	6.06	6.72
DPS	9.9 %	1.25	1.35	1.45	2.00	2.25	2.45	2.65
Dividend Yield		2.8 %	2.7 %	1.9 %	2.9 %	3.3 %	3.6 %	3.8 %
FCFPS		3.67	5.87	0.45	3.56	5.85	5.79	5.22
FCF / Market cap		8.2 %	11.8 %	0.6 %	5.2 %	8.6 %	8.5 %	7.5 %
EV / Sales		0.7 x	0.8 x	1.0 x	0.7 x	0.7 x	0.6 x	0.6 x
EV / EBITDA		9.3 x	9.4 x	12.9 x	7.2 x	7.7 x	6.8 x	6.1 x
EV / EBIT		13.1 x	13.3 x	19.3 x	9.4 x	9.9 x	8.6 x	7.7 x
P / E		14.8 x	16.5 x	26.5 x	11.9 x	12.5 x	11.3 x	10.4 x
FCF Potential Yield		6.3 %	6.5 %	5.5 %	8.6 %	7.9 %	8.9 %	9.7 %
Net Debt		2,250	1,541	2,254	2,169	2,328	1,815	1,405
ROCE (NOPAT)		9.6 %	9.7 %	9.2 %	15.3 %	13.5 %	14.2 %	15.2 %
Guidance:	EBITA adj. in a range of EUR 1,300 - 1,500m							

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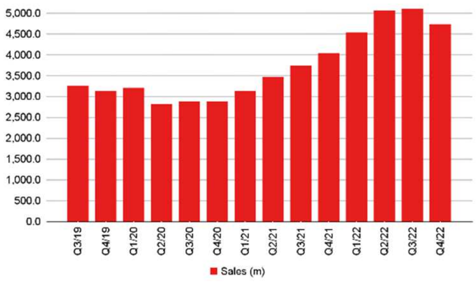
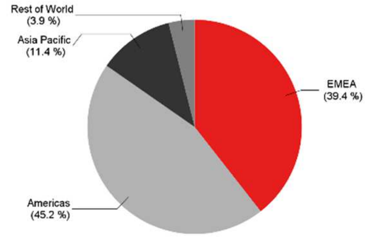
Sales development
in EUR m



Source: Warburg Research

Sales by regions
2022; in %



Source: Warburg Research

Gross Profit development
in EUR m

Source: Warburg Research

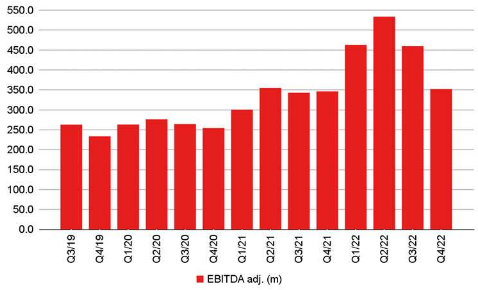
Company Background

- Brenntag is a full-line distributor providing >10,000 different (industrial and specialty) chemical substances. It employs >17,000 people and operates about 600 distribution facilities in more than 70 countries.
- As a bulk breaker, the company buys chemicals in large quantities from a variety of suppliers and repackages these into smaller quantities. Services also include warehousing, mixing and blending.
- Brenntag serves around 180,000 customers annually with an average order value of EUR ~4,000 per delivery.
- Brenntag's role as an intermediary in the chemical B2B market helps to reduce complexity which is driven by 1) high market fragmentation in both supply and demand; 2) a high number of different substances.

Competitive Quality

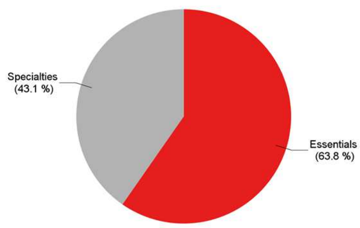
- Brenntag is a consolidator in fragmented markets. The company is market leader in EMEA and Latin America; No. 2 in North America and the APAC region.
- The company is well diversified in terms of suppliers, products, customers and end-markets. In terms of regions, the mature markets of EMEA and North America still account for >80% of group gross profit.
- Broad set of structural growth drivers: continuous market consolidation, outsourcing of distribution and procurement of chemical products in the less-than-truckload segment, catch-up effects in the emerging markets.
- Its superior positioning allows Brenntag 1) a closer partnership with chemical producers; 2) a more comprehensive product portfolio; 3) to set up an efficient distribution network with better service quality.

EBITDA adj. development
in EUR m



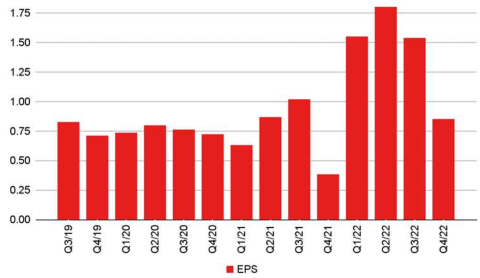
Source: Warburg Research

EBITDA adj. by segments
2022; in %



Source: Warburg Research

EPS development
in EUR



Source: Warburg Research

Summary of Investment Case

Investment triggers

- Shareholder return of EUR >1bn. Management has announced a EUR 750m share buyback programme. In addition, it is proposed to increase the ordinary dividend to EUR 2 per share. In total, more than EUR 1bn will flow into shareholders' wallets. This corresponds to about 10% of Brenntag's current market cap.
- We identify two stock-price levers: a) closing the performance gap of Brenntag Specialties; b) more clarity on the hidden beauty of Brenntag Essentials and consequently a better capital market perception for this division.

Valuation

- In view of a presumably high return on capital, Brenntag Essentials appears significantly mispriced.
- Our DCF-based price target signals ~35% upside, supported by the FCFVP.

Growth

- FY 2023 guidance implies stable to only moderately decreasing earnings. This is reassuring given that operating EBITA has risen by almost 90% in the exceptionally favourable sector environment of the past two years and much of this increase can be sustained.
- Cash generation to flourish: The unwinding of supply-chain bottlenecks is freeing up working capital, resulting in ample cash flow, as seen in H2/22. The normalisation of working capital should continue in the upcoming quarters, resulting in solid cash generation.

Competitive quality

- The company is market leader in EMEA and Latin America; No. 2 in North America and the APAC region.
- Brenntag serves around 180,000 customers annually with an average order value of EUR ~4,000 per delivery.
- Its superior positioning allows Brenntag to 1) form closer partnerships with chemical producers, 2) offer a more comprehensive product portfolio, and 3) set up an efficient distribution network with better service quality.

Warburg versus consensus

- Our forecasts are in line with the market.

Earnings at new height

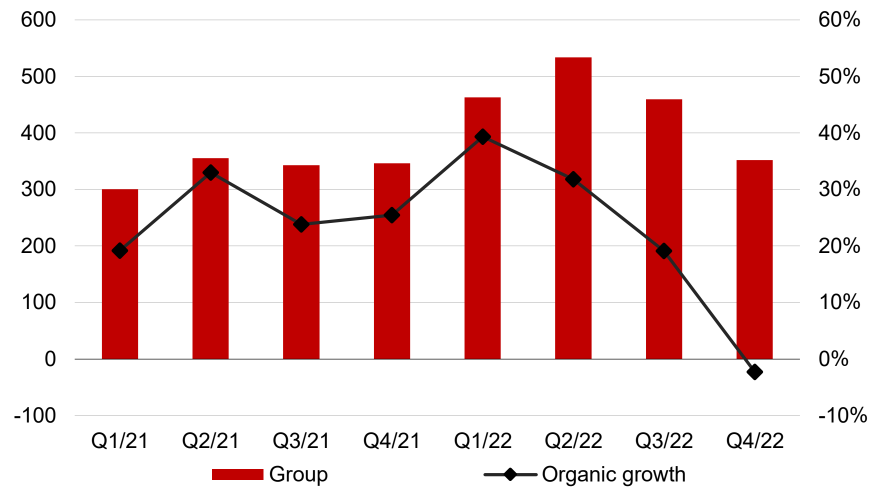
Record-high earnings in 2022 despite slowdown in H2

Review of full-year results

Brenntag reported operating EBITDA of EUR 1.81bn for 2022 (+35% yoy), reaching the upper half of management's guidance raised in June. Stripping out FX effects and M&A, we calculate an organic increase of 22%. We attribute the positive performance to two drivers: a) advantageous competitive positioning and geographic reach, which provided superior access to chemical producers as well as sourcing from multiple regions to overcome product shortages and maintain a reliable delivery capability in times of tight supply; and b) internal improvements related to the transformation initiative "Project Brenntag", which contributed EUR 129m to EBITDA last year (and EUR 249m since its inception). The initiative's agenda (creation of two distinct divisions, i.e. Specialties and Essentials, customer segmentation and complexity reduction) has been completed and a follow-up project called Horizon II has been launched to further exploit the potential of the streamlined organisation and drive its digitisation.

However, earnings momentum softened in the course of the year and turned negative in the final quarter, for which we calculate a 2% organic decrease in operating EBITDA. Quarterly earnings peaked at EUR 534m in the second quarter and have since declined. This is mainly due to a sequential decrease in gross profit, reflecting the softer macroeconomic environment, an easing of the tight supply situation and the normalisation of Brenntag's pricing power (i.e. gross profit per unit) as well as a correction in customer inventory levels. These effects were widely anticipated and do not come as a surprise. Gross profit of EUR 1,030m was perfectly in line with our Q4 forecast, whereas quarterly operating EBITDA of EUR 352m missed our estimate and consensus by ~10% due to higher than expected opex. The company recorded some unusually high year-end expenses, e.g. for the tax-free inflation compensation bonus paid to employees in Germany, as well as a temporary increase in advisory costs, which were not classified as a special item. In the conference call, management clearly stated that Q4 opex should not be extrapolated.

Trend in quarterly operating EBITDA (in EURm) and organic growth



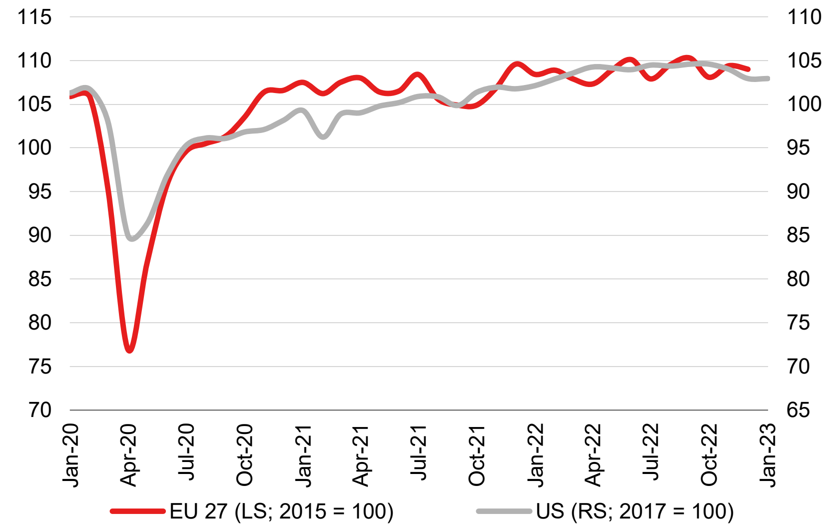
Source: Warburg Research

Q1/23 earnings likely to be above Q4/22

Reassuring guidance for 2023

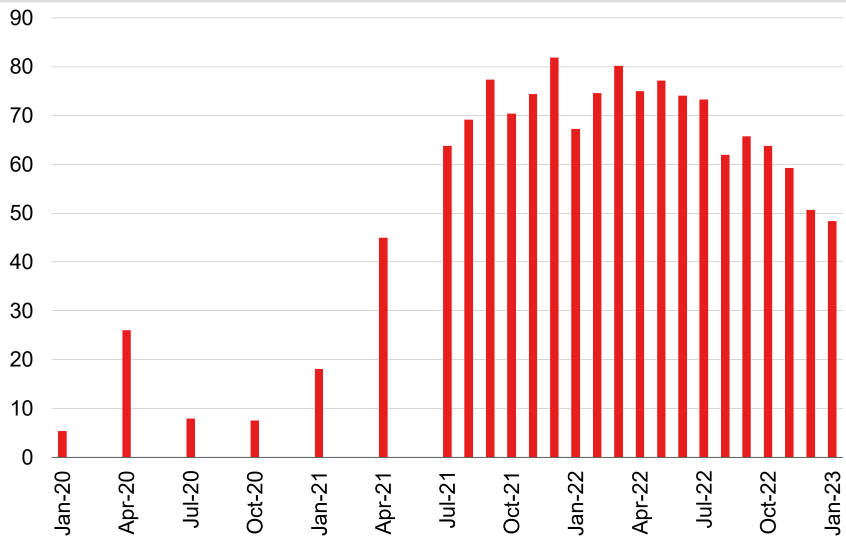
The financial outlook for the current FY is based on a new KPI "operating EBITA", which is supposed to be in the range of EUR 1.3-1.5bn, compared to EUR 1.51bn in 2022. The pre-release consensus (EUR 1.38bn) and our nearly unchanged forecast (EUR 1.35bn) are at the lower end of the range. The guidance implies stable to only moderately decreasing earnings, which we consider quite reassuring given that operating EBITA has risen by almost 90% in the exceptionally favourable sector environment of the past two years. Management obviously believes that a large part of the increase can be sustained and that group earnings are generally at a new level. According to CEO statements in the conference call, first-quarter earnings should be sequentially higher again. Brenntag's peer Univar is guiding the same. We expect the sequential improvement to be largely driven by the cost base and seasonality. Chemical distribution activity is usually closely linked to industrial production, which has been lacking momentum lately in the US and Europe (see chart below). Furthermore, the situation regarding supply bottlenecks continues to ease. The IFO shortage indicator fell again in January, but not yet to pre-pandemic levels. The destocking on the customer side is therefore likely to continue for a little longer. Against this backdrop, we have refrained from upgrading our estimates.

Industrial production EU 27 and US



Sources: Federal Reserve Economic Data, Eurostat, Warburg Research

Germany: Ifo shortage indicator is receding



Sources: Ifo, Destatis

Share buyback programme of EUR 750m announced

Accelerating cash generation and high shareholder returns

The cash drain from higher chemical prices has started to reverse. In the period from Q1/21 to H1/22, a total cash-out in working capital of EUR 1.2bn was recorded. This was related to the pronounced increase in chemical prices as well as higher safety stock buffers to maintain delivery capability in times of product shortages. With the easing of supply-chain bottlenecks, this changed in the second half of 2022, when the company generated >80% of its full-year operating cash flow. The normalisation of working capital should continue in the upcoming quarters, resulting in solid cash generation. Against this backdrop and in view of the group's robust balance sheet (net debt vs operating EBITDA of 1.1x), we welcome the announcement of a EUR 750m share buyback programme, which is scheduled to start in May. Combined with the proposed increase of the ordinary dividend to EUR 2 (+38% from EUR 1.45), we calculate a total cash return to shareholders of EUR >1bn, which represents approximately 10% of Brenntag's current market cap.

Chemical prices strongly determine Brenntag's cash-flow performance

EURm	FY 2020	FY 2021	Q1/22	Q2/22	Q3/22	Q4/22	FY 2022	FY 2023e	FY 2024e	FY 2025e
EBITDA adj	1,058	1,345	463	534	460	352	1,809	1,660	1,755	1,902
Working Capital change	325	-575	-330	-295	-23	262	-386	171	74	-98
Other	-164	-381	-98	-140	-17	-211	-466	-487	-514	-551
CF from Operations	**1,219**	**389**	**35**	**98**	**421**	**403**	**957**	**1,344**	**1,315**	**1,254**

Sources: Brenntag, Warburg Research

In spite of the share buyback, there is still sufficient scope for acquisitions. M&A are an important element of the company's growth strategy. In the past three years, Brenntag has spent EUR ~670m on 15 small to mid-sized M&A transactions. The chemical distribution sector is highly fragmented, with Brenntag being the No. 1 with a 5% global market share. The group's annual M&A budget has been doubled recently to EUR 400-500m. The envisaged EUR >1bn shareholder return does not harm this goal or the company's financial stability. Our model is based on the current company status and does not include any future acquisitions. Assuming EUR 500m cash-out for M&A, we arrive at a pro-forma net debt of EUR 2.7bn, translating into a leverage of 1.6x that is well within the new CFO's comfort zone of approximately 2x.

Prospective net financial debt assuming EUR 500m cash-out for M&A

	2023e
Net financial debt at 1/1	**-2,050**
Cash flow from operations	1,344
Cash flow from investing	-325
Dividend payout	-309
Share buy-back	-750
Leasing & Other	-117
M&A	-500
Net financial debt at 12/31	**-2,706**
Leverage (net debt vs EBITDA adj.)	1.6

Source: Warburg Research

Some thoughts on break-up discussions and valuation

A spin-off of the Specialities business could be short-sighted

Brenntag was recently approached by activist investors, who, in our view, raised two valid points by **urging the management team to stop the takeover negotiations with Univar and to seek a more efficient capital allocation** via a share buyback programme. These two demands have been met in the meantime, which we clearly welcome**. A third demand relates to the break-up of the company into two separate entities**, i.e. Brenntag Specialties and Brenntag Essentials. We understand the logic behind this move when looking at the higher valued and faster growing pure specialty chemical distributors. The table below illustrates that Brenntag's corresponding peers Azelis and IMCD are trading at considerably higher multiples. However, this alone is not an argument to cut Brenntag into pieces.

Peer-group valuation*

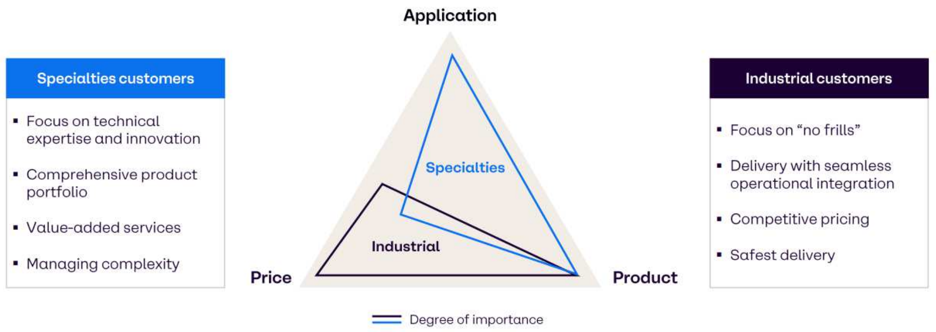
Company	EV/Sales		EV/EBITDA		EV/EBIT		P/E		EV/CE	
	2023e	2024e	2023e	2024e	2023e	2024e	2023e	2024e	2023e	2024e
Azelis Group N.V.	1.5	1.3	12.8	11.8	14.7	13.5	18.5	17.3	1.8	1.7
Bunzl plc	0.9	0.9	10.4	10.0	12.6	12.0	16.6	16.2	2.7	2.6
Global Partners LP	0.1	0.1	7.7	7.3	11.5	11.1	10.3	10.6	1.1	1.1
Hawkins, Inc.	1.1		9.2		12.2		15.2		2.3	
IMCD N.V.	1.9	1.8	15.5	14.5	18.7	17.5	22.4	21.5	3.4	3.4
Manutan International SA	0.7	0.7	7.4	6.9	10.0	9.4	15.7	15.5	1.4	1.3
SIG plc	0.3	0.3	5.6	5.1	11.2	9.5	14.0	10.9	1.3	1.2
TAKKT AG	0.8	0.8	8.7	7.7	12.7	10.3	14.3	11.9	1.2	1.2
Univar Solutions Inc.	0.6	0.6	7.7	7.1	9.7	8.8	10.7	9.4	1.5	1.4
Veritiv Corp	0.3		5.2		6.3		6.4		1.7	
Distributors (Mkt cap weighted mean)	**1.1**	**1.0**	**11.1**	**10.0**	**13.6**	**12.1**	**16.7**	**15.3**	**2.4**	**2.3**
Distributors (Median)	**0.8**	**0.7**	**8.2**	**7.5**	**11.8**	**10.7**	**14.8**	**13.7**	**1.6**	**1.6**
Brenntag Societas Europaea (WRe)	**0.7**	**0.6**	**7.6**	**6.7**	**9.8**	**8.6**	**12.4**	**11.1**	**1.8**	**1.7**

*based on the closing prices on March 13, 2023

Sources: Factset, Warburg Research

Indeed, Specialties and Essentials not only have things in common, but are also quite different in some respects. Both are distribution businesses. However, Specialties is much more driven by expertise and innovation; it is about the creation and marketing of new formulas and applications. At Essentials, the focus is on logistics and warehousing to break the bulk and supply customers with industrial chemicals in a reliable, cost-efficient and timely manner.

Specialties vs. Essentials: differentiated needs and characteristics



Source: Brenntag

Nevertheless, we dislike the idea of a separation, at least for the time being, but would rather welcome the management team to pursue its strategy of digitising the organisation and further sharpening the profile of each division. Our reasons:

- **The new corporate structure is still at too early a stage to have proven itself, and tearing it apart risks causing damage.** Before the new CEO Christian Kohlpaintner took over in 2020, Brenntag was managed according to regions without much customer and product differentiation. In the course of the transformation initiative "Project Brenntag" this has changed and today's divisional structure was implemented comprising two separate platforms, Specialties and Essentials, under one roof with shared service functions. This process is still ongoing and supplemented by a digitisation initiative. The separation is at an early stage, with cross-divisional ties and services still in place. Hence, an immediate spin-off bears the risk of damage and organisational disorder. Moreover, the new corporate structure has not even had a chance to prove itself yet.
- **We have the impression that management has a clear understanding of the reasons for the relative underperformance of Brenntag Specialties versus peers as well as an agenda to fix it.** On the one hand, this comprises moving forward with the separation by building its own supply-chain capabilities and, on the other hand, further expanding the portfolio in the life science end markets, creating specialised global teams for marketing and development as well as using and monetising the already existing expertise by developing new solutions and services.
- **Big remains beautiful** in a physical network business, even if parallel structures are going to be implemented. Size allows for a broader geographical presence and more customer interactions, it is advantageous when it comes to compliance (e.g. with regard to environmental and safety regulations, as chemical substances are often hazardous goods), and lastly it offers efficiency benefits.

Overall, the two business units Specialities and Essentials are in our view not incompatible if adequately structured and we see no reason why they should not both be run as part of the same group. There are many positive examples of larger organisations (e.g. Deutsche Post DHL) successfully operating heterogeneous business pillars separately under one roof and with a common thematic DNA.

Brenntag's Essentials business is anything but an ugly duckling

Diving deeper into the company's divisional performance and comparing it with IMCD, the strength of Brenntag's Essentials business becomes apparent. Despite the company's relative underperformance versus pure-play IMCD in the higher-growth and more profitable specialty chemicals business, Brenntag's group return on capital employed is at the same level or even slightly above that of its peer. We conclude that the Essentials division, which has a lower margin and more assets, must be generating a very decent, if not superior capital return. This is explained by the significantly higher capital turnover, i.e. moving large quantities of industrial chemicals through the network. Hence, Essentials is a truly attractive business.

Brenntag vs. IMCD - comparison of 2022 KPIs

EURm	Brenntag				IMCD
	Specialities	Essentials	Holding	Group	
Gross Profit	1,678	2,609	32	4,319	1,147
op. EBITDA	780	1,153	-124	1,809	585
Conversion margin I	46%	44%		42%	51%
op. EBITA	738	911	-137	1,512	555
Conversion margin II	44%	35%		35%	48%
EBIT adj.				1,402	473
Avg. Capital Employed*				6,767	2,587
op. EBITA / CE				22%	21%
EBIT adj. / CE				21%	18%
organic grow th**	22%	26%		22%	36%

* Capital Employed: equity, net financial debt, leases and long-term provisions

**Organic growth for IMCD based on operating EBITA, for Brenntag on operating EBITDA

Sources: Brenntag, IMCD; Warburg Research

The market is mispricing Brenntag (Essentials). Two thoughts from our side:

- According to the peer-group valuation comparison on the preceding page, IMCD is trading at an EV/CE multiple of well above 3x, while Brenntag is valued below 2x. The valuation gap fully ignores that the two companies are roughly on par in terms of return on capital.
- Using a reverse sum-of-the-parts (see table below) and applying a steep discount to Brenntag Specialties, we calculate that the market is currently valuing Essentials at an EV of EUR 4.9bn, and therefore well below the Specialties business. This lacks any logic. Essentials is bigger than Specialties, operates more assets and therefore accounts for the majority of the group's capital employed, while achieving a capital return that must be similar or even above that of the Specialties division. Accordingly, the enterprise value attributable to Essentials should be greater than that of Specialties.

In the interest of the company and for the sake of more clarity on Brenntag Essentials' hidden beauty, we would highly welcome the regular disclosure of additional segment information, preferably EVA metrics by division.

Reverse sum-of-the-parts - the market misunderstands the value and strengths of Brenntag Essentials

EURm	EBITDA 2023e	multiple	Enterprise Value	Comment
Brenntag Group	1,660	7.6	12,654	EV based on stock price of EUR 67.50
Specialities	738	10.5	7,753	18% valuation discount applied on Azelis, 32% on IMCD
Essentials & Holding	921	5.3	4,901	Implicit EV and multiple

Source: Warburg Research

Due to the lack of divisional information, we consider it difficult to assess an SOTP-based price target for Brenntag. Instead, we rely on the outcome of the DCF, which is supported by the fair-value proposition of the FCFVP model. A double-check of our EUR 93 price target using the reverse sum-of-the-parts again meets the criteria of logic outlined in the previous paragraph.

Reverse sum-of-the-parts – double-check of our price target

EURm	EBITDA 2023e	multiple	Enterprise Value	Comment
Brenntag Group	1,660	9.9	16,504	EV based on our target price of EUR 93
Specialities	738	10.5	7,753	18% valuation discount applied on Azelis, 32% on IMCD
Essentials & Holding	921	9.5	8,751	Implicit EV and multiple

Source: Warburg Research

DCF model

	Detailed forecast period			Transitional period										Term. Value
Figures in EUR m	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	2035e	
Sales	18,671	18,641	19,420	20,197	20,960	21,705	22,428	23,126	23,794	24,429	25,026	25,582	26,094	
Sales change	*-3.9 %*	*-0.2 %*	*4.2 %*	*4.0 %*	*3.8 %*	*3.6 %*	*3.3 %*	*3.1 %*	*2.9 %*	*2.7 %*	*2.4 %*	*2.2 %*	*2.0 %*	*2.0 %*
EBIT	1,286	1,373	1,511	1,547	1,591	1,632	1,670	1,705	1,736	1,764	1,788	1,807	1,822	
EBIT-margin	*6.9 %*	*7.4 %*	*7.8 %*	*7.7 %*	*7.6 %*	*7.5 %*	*7.4 %*	*7.4 %*	*7.3 %*	*7.2 %*	*7.1 %*	*7.1 %*	*7.0 %*	
Tax rate (EBT)	*27.0 %*	*28.0 %*	*29.0 %*	*29.5 %*	*30.1 %*	*30.7 %*	*31.3 %*	*31.9 %*	*32.6 %*	*33.2 %*	*33.8 %*	*34.4 %*	*35.0 %*	
NOPAT	939	988	1,073	1,091	1,112	1,130	1,147	1,160	1,171	1,179	1,184	1,186	1,184	
Depreciation	374	382	391	412	432	452	472	492	512	532	552	572	592	
in % of Sales	*2.0 %*	*2.0 %*	*2.0 %*	*2.0 %*	*2.1 %*	*2.1 %*	*2.1 %*	*2.1 %*	*2.2 %*	*2.2 %*	*2.2 %*	*2.2 %*	*2.3 %*	
Changes in provisions	-14	-13	-12	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	
Change in Liquidity from														
- Working Capital	-171	-74	98	83	95	93	90	87	84	79	75	70	64	
- Capex	442	460	485	430	449	468	487	507	526	545	564	583	602	
Capex in % of Sales	*2.4 %*	*2.5 %*	*2.5 %*	*2.1 %*	*2.1 %*	*2.2 %*	*2.2 %*	*2.2 %*	*2.2 %*	*2.2 %*	*2.3 %*	*2.3 %*	*2.3 %*	
- Other	9	9	10	10	10	11	11	11	11	12	12	12	12	
Free Cash Flow (WACC Model)	1,019	962	859	972	981	1,002	1,022	1,039	1,055	1,067	1,078	1,085	1,090	1,099
PV of FCF	977	857	712	749	704	669	634	600	566	533	501	469	438	8,012
share of PVs	**15.51 %**			**35.70 %**										**48.79 %**

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	19.20 %	Financial Strength	1.00
Cost of debt (after tax)	2.1 %	Liquidity (share)	1.00
Market return	8.25 %	Cyclicality	1.20
Risk free rate	2.75 %	Transparency	1.20
		Others	1.10
WACC	**7.51 %**	**Beta**	**1.10**

Valuation (m)

Present values 2035e	8,410		
Terminal Value	8,012		
Financial liabilities	3,096		
Pension liabilities	119		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	296	No. of shares (m)	145.1
Equity Value	**13,503**	**Value per share (EUR)**	**93.05**

Sensitivity Value per Share (EUR)

		Terminal Growth						
Beta	WACC	1.25 %	1.50 %	1.75 %	**2.00 %**	2.25 %	2.50 %	2.75 %
1.33	8.5 %	72.17	73.50	74.92	76.46	78.12	79.92	81.87
1.21	8.0 %	78.77	80.40	82.16	84.07	86.14	88.40	90.87
1.16	7.8 %	82.46	84.27	86.23	88.36	90.69	93.24	96.04
1.10	7.5 %	86.44	88.46	90.65	**93.05**	95.67	98.55	101.74
1.04	7.3 %	90.74	93.00	95.47	98.17	101.14	104.42	108.07
0.99	7.0 %	95.43	97.96	100.75	103.80	107.18	110.93	115.13
0.87	6.5 %	106.12	109.36	112.95	116.93	121.38	126.38	132.04

		Delta EBIT-margin						
Beta	WACC	-1.5 pp	-1.0 pp	-0.5 pp	**+0.0 pp**	+0.5 pp	+1.0 pp	+1.5 pp
1.33	8.5 %	54.38	61.74	69.10	76.46	83.82	91.18	98.54
1.21	8.0 %	60.20	68.16	76.11	84.07	92.02	99.98	107.93
1.16	7.8 %	63.49	71.78	80.07	88.36	96.65	104.95	113.24
1.10	7.5 %	67.08	75.73	84.39	**93.05**	101.70	110.36	119.02
1.04	7.3 %	71.00	80.05	89.11	98.17	107.23	116.29	125.35
0.99	7.0 %	75.31	84.80	94.30	103.80	113.30	122.80	132.30
0.87	6.5 %	85.35	95.87	106.40	116.93	127.46	137.98	148.51

- Peak EBITDA margin modeled in for 2025
- The period 2026 to 2035 is characterised by decreasing top-line momentum and shrinking profitability
- Minorities are considered in the annual FCF calculation
- Hybrid Capital = net cash out for M&A
- Financial status adjusted for the announced EUR 750m share-buyback; cost of debt set at 3% (pretax)

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	2019	2020	2021	2022	2023e	2024e	2025e
Net Income before minorities	469	474	461	902	833	889	985
+ Depreciation + Amortisation	293	298	374	406	374	382	391
- Net Interest Income	-90	-66	-60	-92	-132	-126	-112
- Maintenance Capex	231	240	250	282	295	307	320
+ Other	-30	19	145	-10	-36	-35	-33
= Free Cash Flow Potential	**591**	**617**	**790**	**1,109**	**1,009**	**1,055**	**1,136**
FCF Potential Yield (on market EV)	6.3 %	6.5 %	5.5 %	8.6 %	7.9 %	8.9 %	9.7 %
WACC	7.51 %	7.51 %	7.51 %	7.51 %	7.51 %	7.51 %	7.51 %
= Enterprise Value (EV)	**9,398**	**9,482**	**14,357**	**12,937**	**12,775**	**11,869**	**11,683**
= Fair Enterprise Value	**7,869**	**8,205**	**10,512**	**14,753**	**13,427**	**14,037**	**15,119**
- Net Debt (Cash)	2,050	2,050	2,050	2,050	2,206	1,691	1,278
- Pension Liabilities	119	119	119	119	122	124	127
- Other	0	0	0	0	0	0	0
- Market value of minorities	236	236	236	236	135	142	149
+ Market value of investments	0	0	0	0	0	0	0
= Fair Market Capitalisation	**5,465**	**5,801**	**8,108**	**12,349**	**10,964**	**12,080**	**13,565**
Number of shares, average	155	155	155	155	151	145	145
= Fair value per share (EUR)	**35.37**	**37.55**	**52.48**	**79.93**	**72.62**	**83.24**	**93.47**
premium (-) / discount (+) in %					6.3 %	21.9 %	33.9 %

Sensitivity Fair value per Share (EUR)

		2019	2020	2021	2022	2023e	2024e	2025e
	10.51 %	20.84	22.39	33.06	52.68	47.24	55.64	63.75
	9.51 %	24.67	26.38	38.17	59.86	53.92	62.90	71.57
	8.51 %	29.39	31.31	44.48	68.71	62.17	71.88	81.24
WACC	**7.51 %**	**35.37**	**37.55**	**52.48**	**79.93**	**72.62**	**83.24**	**93.47**
	6.51 %	43.19	45.70	62.92	94.59	86.27	98.09	109.47
	5.51 %	53.85	56.81	77.16	114.57	104.88	118.32	131.26
	4.51 %	69.23	72.85	97.70	143.40	131.73	147.52	162.72

- The line "Others" in the calculation of FCF: adjusting for a) exceptional items; b) tax shield on net interest expenses
- Maintenance capex assumed 5% below depreciation on property, plant and equipment
- Minorities deducted from the EV valued with a P/E of 15x

Valuation

	2019	2020	2021	2022	2023e	2024e	2025e
Price / Book	2.0 x	2.2 x	3.0 x	2.2 x	2.3 x	2.0 x	1.8 x
Book value per share ex intangibles	2.79	3.96	3.59	8.37	7.39	11.70	16.21
EV / Sales	0.7 x	0.8 x	1.0 x	0.7 x	0.7 x	0.6 x	0.6 x
EV / EBITDA	9.3 x	9.4 x	12.9 x	7.2 x	7.7 x	6.8 x	6.1 x
EV / EBIT	13.1 x	13.3 x	19.3 x	9.4 x	9.9 x	8.6 x	7.7 x
EV / EBIT adj.*	13.1 x	13.3 x	19.3 x	9.4 x	9.9 x	8.6 x	7.7 x
P / FCF	12.2 x	8.5 x	170.0 x	19.1 x	11.7 x	11.8 x	13.4 x
P / E	14.8 x	16.5 x	26.5 x	11.9 x	12.5 x	11.3 x	10.4 x
P / E adj.*	14.8 x	16.5 x	26.5 x	11.9 x	12.5 x	11.3 x	10.4 x
Dividend Yield	2.8 %	2.7 %	1.9 %	2.9 %	3.3 %	3.6 %	3.8 %
FCF Potential Yield (on market EV)	6.3 %	6.5 %	5.5 %	8.6 %	7.9 %	8.9 %	9.7 %

*Adjustments made for: -

Consolidated profit & loss

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Sales	**12,822**	**11,776**	**14,383**	**19,429**	**18,671**	**18,641**	**19,420**
Change Sales yoy	2.2 %	-8.2 %	22.1 %	35.1 %	-3.9 %	-0.2 %	4.2 %
Material expenses	10,000	8,925	11,004	15,110	14,417	14,241	14,840
Gross profit	**2,822**	**2,850**	**3,379**	**4,319**	**4,254**	**4,399**	**4,580**
Gross profit margin	*22.0 %*	*24.2 %*	*23.5 %*	*22.2 %*	*22.8 %*	*23.6 %*	*23.6 %*
Personnel expenses	1,073	1,107	1,205	1,380	1,449	1,493	1,537
Other operating income	0	0	0	0	0	0	0
Other operating expenses	739	733	1,058	1,150	1,145	1,152	1,140
EBITDA	**1,010**	**1,011**	**1,116**	**1,789**	**1,660**	**1,755**	**1,902**
Margin	*7.9 %*	*8.6 %*	*7.8 %*	*9.2 %*	*8.9 %*	*9.4 %*	*9.8 %*
EBITDA adj.	**1,002**	**1,058**	**1,345**	**1,809**	**1,660**	**1,755**	**1,902**
Depreciation of fixed assets	244	252	263	297	310	323	336
EBITA	767	758	853	1,492	1,349	1,432	1,566
EBITA adj.	**758**	**805**	**1,082**	**1,512**	**1,349**	**1,432**	**1,566**
Amortisation of intangible assets	50	45	111	71	64	59	55
Goodwill amortisation	0	0	0	38	0	0	0
EBIT	**717**	**713**	**742**	**1,383**	**1,286**	**1,373**	**1,511**
Margin	*5.6 %*	*6.1 %*	*5.2 %*	*7.1 %*	*6.9 %*	*7.4 %*	*7.8 %*
Interest income	4	4	5	17	10	10	10
Interest expenses	94	70	64	109	142	136	122
Other financial income (loss)	7	-13	-33	-55	-12	-12	-12
EBT	**633**	**633**	**650**	**1,235**	**1,141**	**1,234**	**1,387**
Margin	*4.9 %*	*5.4 %*	*4.5 %*	*6.4 %*	*6.1 %*	*6.6 %*	*7.1 %*
Total taxes	164	160	189	333	308	346	402
Net income from continuing operations	**469**	**474**	**461**	**902**	**833**	**889**	**985**
Income from discontinued operations (net of tax)	0	0	0	0	0	0	0
Net income before minorities	**469**	**474**	**461**	**902**	**833**	**889**	**985**
Minority interest	3	7	13	16	9	9	10
Net income	**467**	**467**	**448**	**887**	**824**	**879**	**975**
Margin	*3.6 %*	*4.0 %*	*3.1 %*	*4.6 %*	*4.4 %*	*4.7 %*	*5.0 %*
Number of shares, average	155	155	155	155	151	145	145
EPS	**3.02**	**3.02**	**2.90**	**5.74**	**5.46**	**6.06**	**6.72**
EPS adj.	3.02	3.02	2.90	5.74	5.46	6.06	6.72

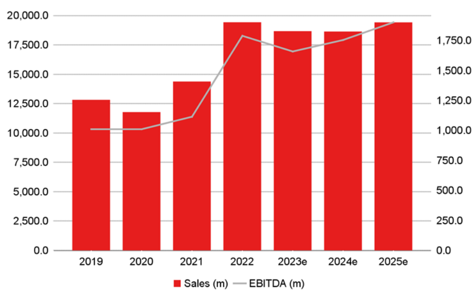
*Adjustments made for:

Guidance: EBITA adj. in a range of EUR 1,300 - 1,500m

Financial Ratios

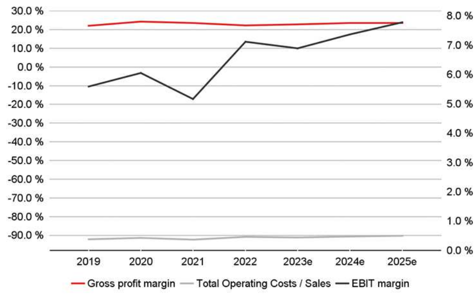
	2019	2020	2021	2022	2023e	2024e	2025e
Total Operating Costs / Sales	-92.1 %	-91.4 %	-92.2 %	-90.8 %	-91.1 %	-90.6 %	-90.2 %
Operating Leverage	-0.3 x	0.1 x	0.2 x	2.5 x	1.8 x	-42.1 x	2.4 x
EBITDA / Interest expenses	10.7 x	14.4 x	17.4 x	16.4 x	11.7 x	12.9 x	15.6 x
Tax rate (EBT)	25.9 %	25.2 %	29.0 %	26.9 %	27.0 %	28.0 %	29.0 %
Dividend Payout Ratio	41.2 %	44.0 %	48.6 %	34.2 %	40.8 %	40.0 %	39.1 %
Sales per Employee	733,009	683,170	834,445	1,107,714	1,053,925	1,026,562	1,043,393

Sales, EBITDA
in EUR m



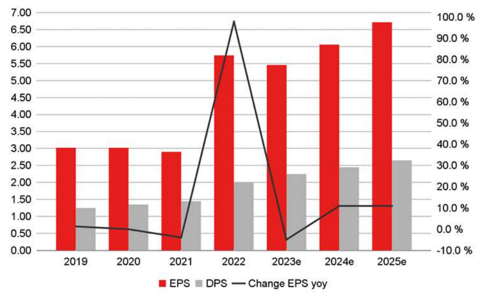
Source: Warburg Research

Operating Performance
in %



Source: Warburg Research

Performance per Share



Source: Warburg Research

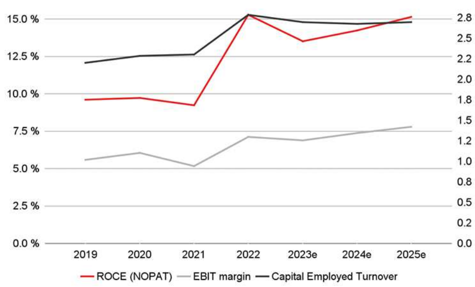
Consolidated balance sheet

In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Assets							
Goodwill and other intangible assets	3,084	2,938	3,359	3,459	3,414	3,384	3,360
thereof other intangible assets	374	373	371	348	302	273	249
thereof Goodwill	2,710	2,565	2,988	3,112	3,112	3,112	3,112
Property, plant and equipment	1,577	1,547	1,673	1,784	1,897	2,005	2,124
Financial assets	4	3	4	5	5	5	5
Other long-term assets	109	109	202	204	200	202	209
Fixed assets	**4,773**	**4,598**	**5,237**	**5,453**	**5,517**	**5,597**	**5,699**
Inventories	1,177	979	1,622	1,774	1,635	1,562	1,627
Accounts receivable	1,820	1,598	2,290	2,677	2,472	2,368	2,467
Liquid assets	520	726	705	1,046	409	409	412
Other short-term assets	274	243	341	424	445	467	490
Current assets	**3,791**	**3,546**	**4,958**	**5,920**	**4,960**	**4,806**	**4,996**
Total Assets	**8,564**	**8,144**	**10,196**	**11,373**	**10,477**	**10,403**	**10,695**
Liabilities and shareholders' equity							
Subscribed capital	155	155	155	155	145	145	145
Capital reserve	1,491	1,491	1,491	1,491	751	751	751
Retained earnings	1,870	1,904	2,268	3,107	3,634	4,186	4,818
Other equity components	0	0	0	0	0	0	0
Shareholders' equity	3,516	3,550	3,914	4,753	4,530	5,082	5,713
Minority interest	63	62	81	50	59	69	79
Total equity	**3,579**	**3,612**	**3,995**	**4,803**	**4,589**	**5,150**	**5,792**
Provisions	413	383	517	440	426	414	402
thereof provisions for pensions and similar obligations	189	201	183	119	122	124	127
Financial liabilities (total)	2,581	2,066	2,775	3,096	2,615	2,100	1,690
Short-term financial liabilities	325	252	789	430	335	335	333
Accounts payable	1,229	1,230	1,802	1,862	1,689	1,587	1,653
Other liabilities	763	853	1,105	1,173	1,157	1,152	1,159
Liabilities	**4,985**	**4,532**	**6,200**	**6,570**	**5,888**	**5,253**	**4,903**
Total liabilities and shareholders' equity	**8,564**	**8,144**	**10,196**	**11,373**	**10,477**	**10,403**	**10,695**

Financial Ratios

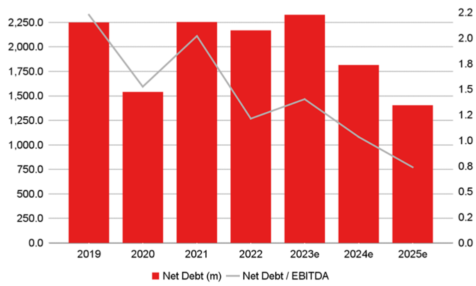
	2019	2020	2021	2022	2023e	2024e	2025e
Efficiency of Capital Employment							
Operating Assets Turnover	3.8 x	4.1 x	3.8 x	4.4 x	4.3 x	4.3 x	4.3 x
Capital Employed Turnover	2.2 x	2.3 x	2.3 x	2.8 x	2.7 x	2.7 x	2.7 x
ROA	9.8 %	10.1 %	8.6 %	16.3 %	14.9 %	15.7 %	17.1 %
Return on Capital							
ROCE (NOPAT)	9.6 %	9.7 %	9.2 %	15.3 %	13.5 %	14.2 %	15.2 %
ROE	13.7 %	13.2 %	12.0 %	20.5 %	17.8 %	18.3 %	18.1 %
Adj. ROE	13.7 %	13.2 %	12.0 %	20.5 %	17.8 %	18.3 %	18.1 %
Balance sheet quality							
Net Debt	2,250	1,541	2,254	2,169	2,328	1,815	1,405
Net Financial Debt	2,061	1,340	2,070	2,050	2,206	1,691	1,278
Net Gearing	62.9 %	42.7 %	56.4 %	45.2 %	50.7 %	35.2 %	24.3 %
Net Fin. Debt / EBITDA	204.0 %	132.6 %	185.5 %	114.6 %	132.9 %	96.4 %	67.2 %
Book Value / Share	22.8	23.0	25.3	30.8	30.0	35.0	39.4
Book value per share ex intangibles	2.8	4.0	3.6	8.4	7.4	11.7	16.2

ROCE Development



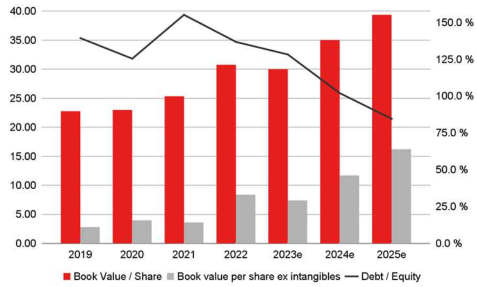
Source: Warburg Research

Net debt
in EUR m



Source: Warburg Research

Book Value per Share
in EUR



Source: Warburg Research

Consolidated cash flow statement

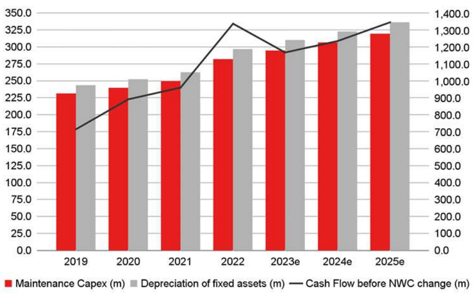
In EUR m	2019	2020	2021	2022	2023e	2024e	2025e
Net income	467	500	471	927	840	901	1,002
Depreciation of fixed assets	244	252	263	297	310	323	336
Amortisation of goodwill	0	0	0	38	0	0	0
Amortisation of intangible assets	50	45	111	71	64	59	55
Increase/decrease in long-term provisions	38	8	12	-45	-6	-5	-5
Other non-cash income and expenses	-80	88	108	54	-36	-36	-37
Cash Flow before NWC change	**718**	**894**	**964**	**1,342**	**1,173**	**1,241**	**1,352**
Increase / decrease in inventory	19	198	-643	-152	139	73	-65
Increase / decrease in accounts receivable	23	223	-693	-387	205	104	-99
Increase / decrease in accounts payable	-3	1	573	60	-173	-103	66
Increase / decrease in other working capital positions	122	-96	188	93	0	0	0
Increase / decrease in working capital (total)	162	325	-575	-386	171	74	-98
Net cash provided by operating activities [1]	**879**	**1,219**	**389**	**957**	**1,344**	**1,315**	**1,254**
Investments in intangible assets	-39	-43	-5	-11	-18	-29	-31
Investments in property, plant and equipment	-165	-156	-194	-256	-306	-310	-330
Payments for acquisitions	-195	-47	-417	-154	0	0	0
Financial investments	0	0	-1	-2	0	0	0
Income from asset disposals	27	22	9	22	0	0	0
Net cash provided by investing activities [2]	**-372**	**-224**	**-609**	**-401**	**-325**	**-340**	**-361**
Change in financial liabilities	5	-521	690	332	-462	-500	-400
Dividends paid	-185	-193	-209	-224	-309	-340	-355
Purchase of own shares	0	0	0	0	0	0	0
Capital measures	0	0	0	0	-750	0	0
Other	-203	-21	-308	-334	-137	-135	-135
Net cash provided by financing activities [3]	**-383**	**-736**	**174**	**-226**	**-1,657**	**-975**	**-890**
Change in liquid funds [1]+[2]+[3]	**124**	**259**	**-46**	**330**	**-637**	**0**	**3**
Effects of exchange-rate changes on cash	3	-53	25	12	0	0	0
Cash and cash equivalent at end of period	520	726	705	1,046	409	409	412

Financial Ratios

	2019	2020	2021	2022	2023e	2024e	2025e
Cash Flow							
FCF	567	906	70	550	883	840	758
Free Cash Flow / Sales	4.4 %	7.7 %	0.5 %	2.8 %	4.7 %	4.5 %	3.9 %
Free Cash Flow Potential	591	617	790	1,109	1,009	1,055	1,136
Free Cash Flow / Net Profit	121.4 %	194.3 %	15.6 %	62.0 %	107.1 %	95.5 %	77.8 %
Interest Received / Avg. Cash	0.9 %	0.6 %	0.6 %	1.9 %	1.4 %	2.4 %	2.4 %
Interest Paid / Avg. Debt	4.0 %	3.0 %	2.6 %	3.7 %	5.0 %	5.8 %	6.5 %
Management of Funds							
Investment ratio	1.6 %	1.7 %	1.4 %	1.4 %	1.7 %	1.8 %	1.9 %
Maint. Capex / Sales	1.8 %	2.0 %	1.7 %	1.5 %	1.6 %	1.6 %	1.6 %
Capex / Dep	69.6 %	66.9 %	53.4 %	65.8 %	86.8 %	89.0 %	92.3 %
Avg. Working Capital / Sales	13.9 %	13.2 %	12.0 %	12.1 %	13.4 %	12.8 %	12.3 %
Trade Debtors / Trade Creditors	148.1 %	129.9 %	127.1 %	143.8 %	146.3 %	149.3 %	149.3 %
Inventory Turnover	8.5 x	9.1 x	6.8 x	8.5 x	8.8 x	9.1 x	9.1 x
Receivables collection period (days)	52	50	58	50	48	46	46
Payables payment period (days)	45	50	60	45	43	41	41
Cash conversion cycle (Days)	50	39	52	48	47	46	46

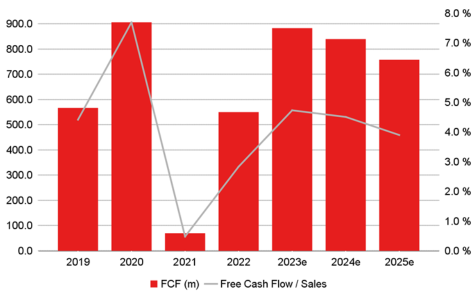
CAPEX and Cash Flow

in EUR m



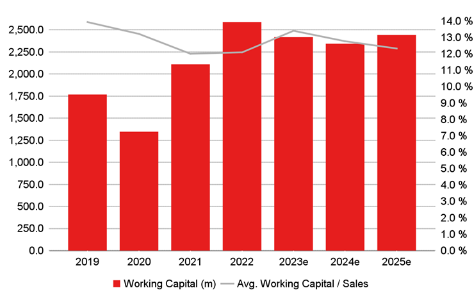
Source: Warburg Research

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)
Brenntag	–	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A1DAHH0.htm

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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.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

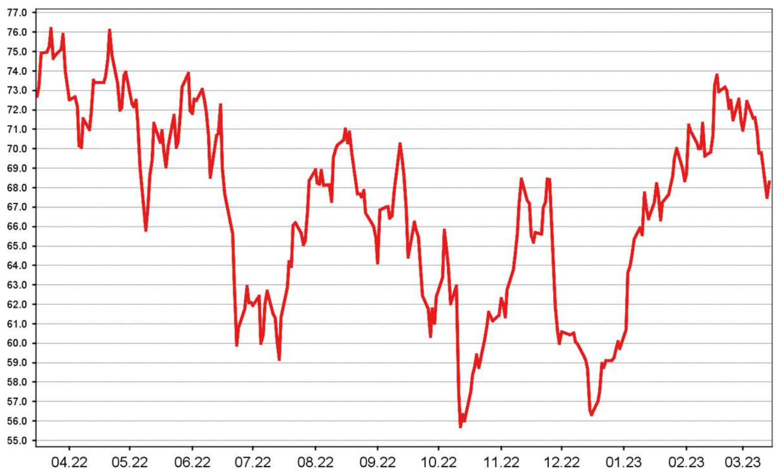
Rating	Number of stocks	% of Universe
Buy	160	74
Hold	45	21
Sell	7	3
Rating suspended	3	1
Total	**215**	**100**

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING …

… taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	44	86
Hold	6	12
Sell	0	0
Rating suspended	1	2
Total	**51**	**100**

PRICE AND RATING HISTORY BRENNTAG AS OF 15.03.2023



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.

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