

CREDIT OPINION

21 November 2023

Update



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RATINGS

Lanxess AG

Domicile	Koeln, Germany
Long Term Rating	Baa3
Type	LT Issuer Rating - Fgn Curr
Outlook	Negative

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Lanxess AG

Update following rating downgrade

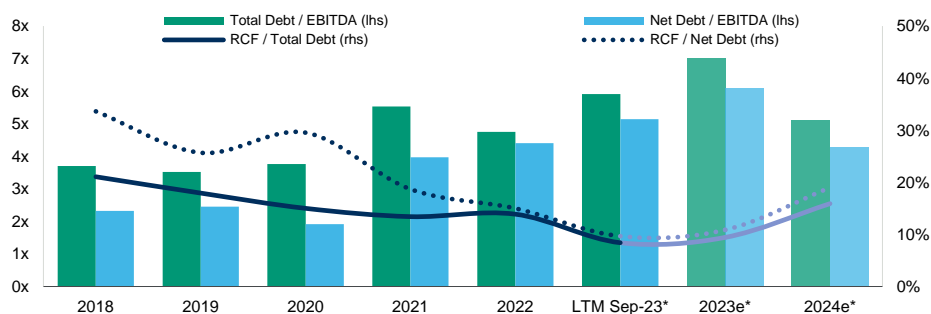
Summary

Lanxess AG's Baa3 rating and the negative outlook reflect the company's high Moody's-adjusted gross leverage, which is likely to be around 7x in 2023 (excluding losses from the at-equity-accounted Envalior JV), and leverage of around 5x expected in 2024; and its relatively weak funds from operations (FFO) of around 10% of net debt, which is likely to improve to the high teens in 2024 but remain strained by cash outflow for restructuring programmes. The rating and outlook also capture Lanxess' lack of track record of achieving its targeted EBITDA margins; and the high uncertainty surrounding a demand recovery that would support a recovery in earnings.

Management's strong commitment to defend its "solid investment grade" rating with consistent measures, including a proposed dividend reduction and the initiated disposal of its urethane systems business; reduction in net leverage supported by our expectation free cash flow (FCF) of more than €250 million in 2023; potential for disposal proceeds from the sale of its stake in Envalior (B2 stable) in 2026 or thereafter to improve financial flexibility; sizeable scale and reduced capital sending intensity following the formation of Envalior; and a sound liquidity profile, reflecting a conservative and proactive approach to liquidity management, somewhat balance these negatives.

Exhibit 1

Leverage and coverage metrics



*LTM Sep-23, 2023e and 2024e exclude Envalior equity-accounted income.

Sources: Moody's Investors Service and company filings

Credit strengths

- » Increased share of specialty chemicals could reduce margin and cash flow volatility
- » Management's commitment to investment-grade rating and tangible actions to defend it
- » Sound and conservatively managed liquidity profile

Credit challenges

- » Long history of operating with gross leverage higher than our expectation for its rating; limited near-term flexibility to manage leverage down
- » Demand weakness, partially exacerbated by long period of customer destocking
- » EBITDA margin at lower end of range for specialty chemicals peers
- » No history of achieving targeted EBITDA pre-margin in 14%-18% range following portfolio realignment

Rating outlook

The negative outlook reflects the uncertainty surrounding Lanxess' ability to sustainably reduce leverage as the magnitude of proceeds and timing of the urethane systems disposal remain unclear. Furthermore, the negative outlook reflects the risk that the initiated cost reduction measures will not be successful or sufficient to decisively reduce leverage and sustainably improve cash generation.

Factors that could lead to an upgrade

An upgrade of Lanxess' rating is currently not envisaged given its elevated leverage and weak credit metrics but could occur if the company demonstrates the resilience of its operating profitability and cash flow. For an upgrade, we would also expect a reduction in financial leverage, with total adjusted debt/EBITDA (excluding equity-accounted income) around or below 3x and retained cash flow/net debt to increase to the low 20s in percentage terms on a sustained basis.

Factors that could lead to a downgrade

A downgrade of Lanxess' rating could occur with an expectation for leverage remaining clearly above 3.5x on a sustainable basis and its RCF/net debt remaining below the low to mid-teens on a sustainable basis. Furthermore, EBITDA margins (excluding equity accounted income) remaining below 14% on a sustainable basis could reflect fundamental weaknesses in the company's product portfolio or cost structure, which could point to negative rating pressure.

Key indicators

Exhibit 2 Lanxess AG

	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	LTM Sep-23*
Revenue (USD Billion)	\$8.1	\$7.6	\$7.0	\$7.2	\$8.5	\$7.7
EBITDA Margin %	14.2%	14.9%	15.9%	11.9%	11.4%	7.9%
ROA - EBIT / Average Assets	5.5%	6.3%	5.7%	2.8%	3.4%	0.0%
Debt / EBITDA	3.7x	3.5x	3.8x	5.5x	4.8x	5.9x
EBITDA / Interest Expense	8.5x	10.4x	11.4x	9.5x	9.7x	6.4x
Retained Cash Flow / Debt	21.1%	17.9%	15.0%	13.4%	13.9%	8.4%
Retained Cash Flow / Net Debt	33.6%	25.7%	29.5%	18.7%	15.0%	9.7%

*LTM Sep-23 excludes Envalior equity-accounted income.

All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

Source: Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody.com> for the most updated credit rating action information and rating history.

Profile

Headquartered in Cologne, Germany, Lanxess AG is a leading European chemical company, with reported sales of around €8.1 billion from continuing operations and company-reported EBITDA (pre-exceptionals) of around €930 million in 2022. As of 16 September 2023, Lanxess had a market capitalisation of around €2.1 billion. Its activities are divided into three business segments:

Consumer Protection — It combines application-focused specialty chemicals used in such areas as disinfection, preservation and protection of materials, flavours and fragrances. It also comprises products for water treatment and pharmaceuticals, and Saltigo for agrochemicals.

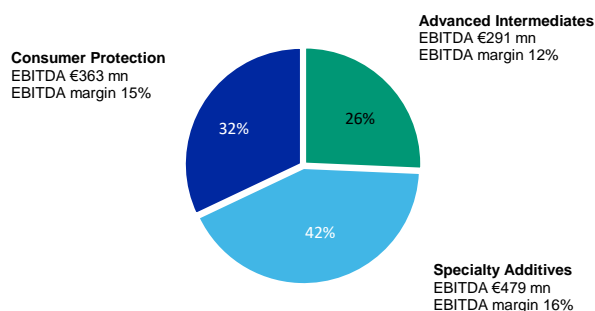
Specialty Additives — It pools all units that manufacture additives. In particular, it covers additives (that is, lubricant additives, plastic additives, and phosphorous and brominated flame retardants) and the Rhein Chemie business (colourants and polymer additives).

Advanced Intermediates — It comprises businesses in the field of high-quality industrial intermediates. The segment includes inorganic pigments and a portfolio of advanced industrial intermediates.

Lanxess also owns a 40% stake in [SCUR-Alpha 1503 GmbH](#) (dba as Envalior [B2 stable]).

Exhibit 3

Segment EBITDA pre-exceptionals and before reconciliation 2022



Sources: Moody's Investors Service and company filings

Detailed credit considerations

Difficult demand environment continues to strain leverage; initiated cost restructuring, disposal and dividend reduction underpin commitment to leverage reduction but execution surrounded by uncertainty

Lanxess' September 2023 leverage of around 6x (excluding equity-accounted income) exceeds our expectation for the Baa3 rating and we forecast it will increase to 7x in 2023 (excluding equity-accounted income and cost related to project FORWARD!), a level that is not commensurate with the current rating, even in the context of the trough-of-the-cycle industry conditions. Lanxess' rating positively reflects management's reiterated commitment to initiate measures to defend a "solid investment grade rating" and its track record of tangible actions to improve its financial flexibility.

In response to weak operating performance, Lanxess initiated an extensive restructuring programme (project FORWARD!) in the second half of 2023, targeting sustainable cost savings of €150 million. The company expects to book restructuring cost of €100 million related to the programme and estimates cash outflow of €80 million, of which €50 million will be paid in 2024 and the remainder in 2025. The recently proposed dividend cut will offset the additional cash outflow related to the FORWARD! program. Specifically, the company announced that it would propose a dividend reduction to €0.1 per share for 2023 (payout of around €8.7 million), down from €1.05 (payout of around €91 million).

Similar to its peers, Lanxess has seen demand weakness, destocking by customers and no signs of a swift recovery over the last few quarters. Over the past year the company twice adjusted its guidance down and now expects its EBITDA pre exceptionals in 2023 to be in the range of €500 million-€550 million. This guidance would translate into Moody's-adjusted gross leverage of around 7x.

We expect G-20 GDP growth to slow to 2.1% in 2024 from the 2.8% expected for 2023; in particular, growth in advanced economies will remain low. That points to substantial uncertainty surrounding any improvement in sales volume in 2024. We expect Lanxess' 2024 EBITDA to benefit from initiated cost savings and lower raw material prices. As higher-priced inventories have largely been consumed, the EBITDA growth should facilitate a reduction in leverage towards 5x in 2024. This view does not take into account any proceeds from a potential disposal of the urethane systems business.

Portfolio realignment, enhanced business profile

Since 2016, Lanxess has realigned its portfolio towards specialty chemical products with higher profitability, higher cash generation and lower cyclicity, which it achieved through a series of acquisitions (estimated total transaction value of €4.2 billion) and disposals (€6.2 billion). Acquisitions and growth capital spending have also increased the company's exposure to the US market, improving geographical diversification and expanding operations to lower energy cost regions. However, Lanxess has yet to prove that its revamped product portfolio will — in a more favourable environment — deliver sustainably higher EBITDA margins and stable/predictable cash flow.

We expect Lanxess to continue to invest in organic and inorganic EBITDA growth to further complement and diversify its product portfolio, but over at least the next couple of years, the company reiterated its focus on cash generation through, and we expect the company to focus on reducing its leverage before undertaking acquisitions.

Over the past several years Lanxess conducted a string of acquisitions — such as those of Emerald Kalama (2021) and the IFF microbial control business (2022) — which reduced its exposure to cyclical end markets. Other transactions include the acquisitions of Clean & Disinfect activities from [The Chemours Company](#) (Ba3 stable) in 2016 and Chemtura in 2017. Lanxess also bought smaller targets such as the disinfection and hygiene solutions company Theseo for an enterprise value of around €70 million and the biocide company Intace, both in 2021.

Envalior disposal further reduced capital intensity and cyclical end-market exposure; potential exit could create financial flexibility but not before 2026

Lanxess' most recent disposal closed in April 2023 with the formation of a polymer joint venture, Envalior, with Advent International. Lanxess continues to hold a stake of around 41% in the JV. This transaction reduced Lanxess' exposure to the cyclical automotive and electronics industries, and its capital intensity. While in 2020 the company still generated more than 20% of its sales from the automotive industry, this ratio in 2022, pro forma for the Envalior deconsolidation, decreased to less than 10%. The company also disclosed that its annual maintenance capital spending needs have decreased to the range of €250 million-€300 million from previously €300 million-€350 million.

Lanxess has the possibility to exit Envalior three years after closing, that is, from April 2026. The company has hinted that the terms and conditions of an exit to some extent have been pre-agreed using the same valuation parameters as the initial HPM sale. A disposal of the remaining stake from 2026 onwards in our view creates additional financial flexibility. At closing in April 2023, Envalior had a cash balance of around €200 million and an undrawn revolving credit facility of €375 million, an ample liquidity position that we expect will alleviate any need for Lanxess to support Envalior with additional liquidity.

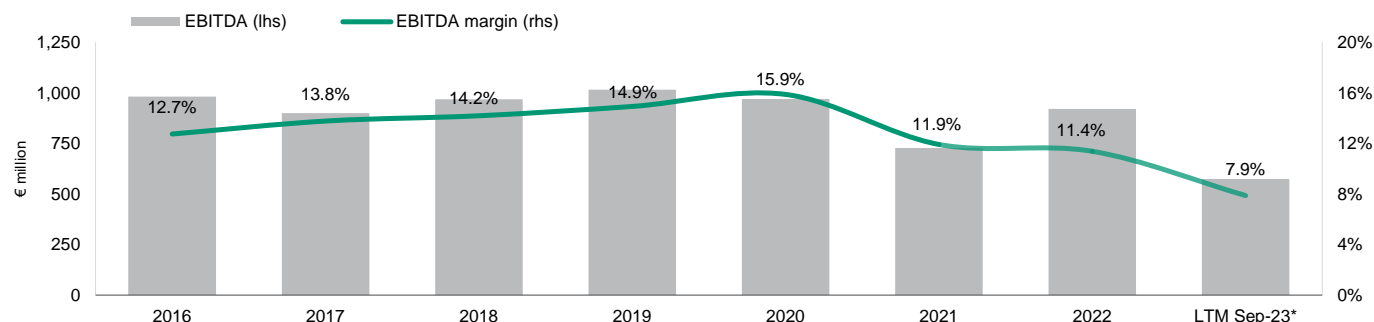
Lack of track record in achieving targeted margins

Lanxess is aiming an EBITDA margin pre-exceptionals of 14%-18% through the cycle, but we do not foresee a rise to this level over at least the next year to 18 months. As a result of portfolio measures and its focus on cost control, the company's Moody's-adjusted EBITDA margin improved to 15.9% in 2020 — aligned more with other specialty chemicals peers — from 12.7% in 2016. The margin has since declined again to 7.9% (for the 12 months that ended September 2023) because of low capacity utilisation, and high energy prices and raw material costs. Weak demand in its end markets also hurt the company's margin, and this trend has not reversed yet. Furthermore, as of September 2023, Lanxess does not see a recovery in its order book. During Q3 2023, asset utilisation was close to 50%, which has contributed to the marked weakening in profitability.

Despite recent acquisitions and a relatively favourable environment for the chemical industry in 2021 and H1 2022, Lanxess' EBITDA margin had remained weak, with minimal proof of the company's ability to achieve its target margins and desired EBITDA stability with its current product portfolio and cost structure. Therefore, successful execution of the cost-saving programmes will be key to lifting margins closer to its target range on a sustained basis.

Exhibit 4

Lanxess EBITDA margin remained weak in 2022 2018-LTM Sep 2023 EBITDA and EBITDA margin



*LTM Sep-23 excludes Envalior equity-accounted income.

Sources: Moody's Investors Service and company filings

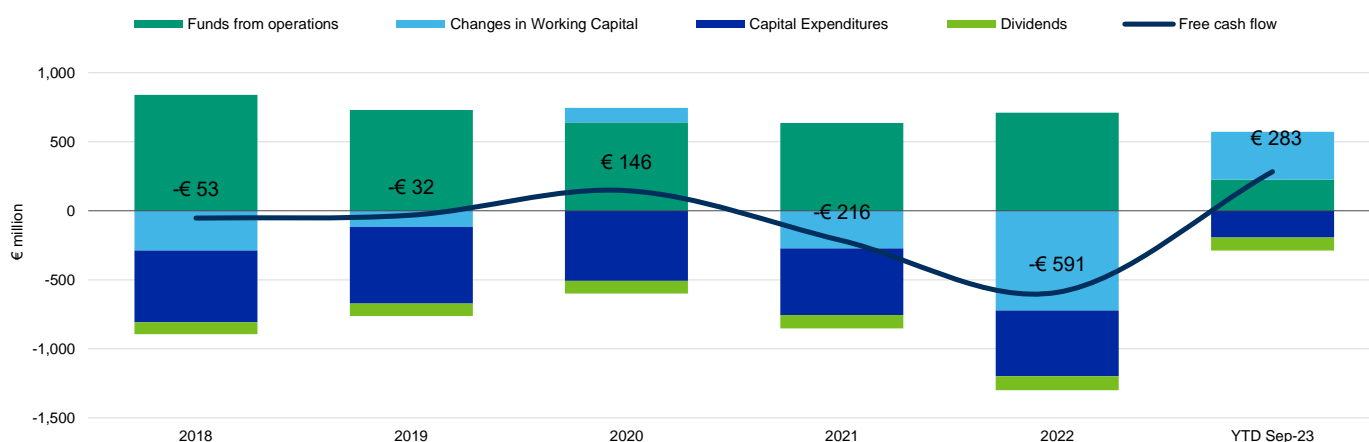
Focus on cash generation should help generate moderate FCF over next year

Lanxess' track record of negative FCF (after dividends and operating lease repayments) constrained its ability to manage its balance sheet structure in the past. This was mainly due to low profitability and high capital spending requirements. The deconsolidation of the HPM business reduced capital spending intensity and supports Lanxess' ability to generate positive FCF on a more sustained basis, essential for financial flexibility.

During 2023, the company focused on cash generation; in the first nine months of the year, it managed to release significant amounts of working capital, which resulted in Moody's-adjusted FCF of €283 million during the period. Because the company has already significantly reduced its working capital and, according to the company, the fourth quarter usually is somewhat capital spending heavy, we forecast FCF in Q4 2023 will be around breakeven levels or moderately negative, but we expect positive FCF for the full year.

Exhibit 5

FCF development over 2018-YTD September 2023



Sources: Moody's Investors Service and company filings

Lanxess remains committed to preserving an investment-grade rating and in the past has delivered tangible actions to defend its rating. In March 2023, the company announced that it would allocate most of the net proceeds from the formation of Envalior to debt reduction compared to previous indications that a portion of the proceeds would be allocated to share buybacks. In addition, Lanxess

had previously increased the funding of its pension plan assets to reduce net pension liability. The company has a well-balanced maturity profile, with its next material debt maturity in 2025, when €500 million of bonds mature. The company disclosed that it already has committed bilateral facilities in place to address the 2025 maturity.

Liquidity analysis

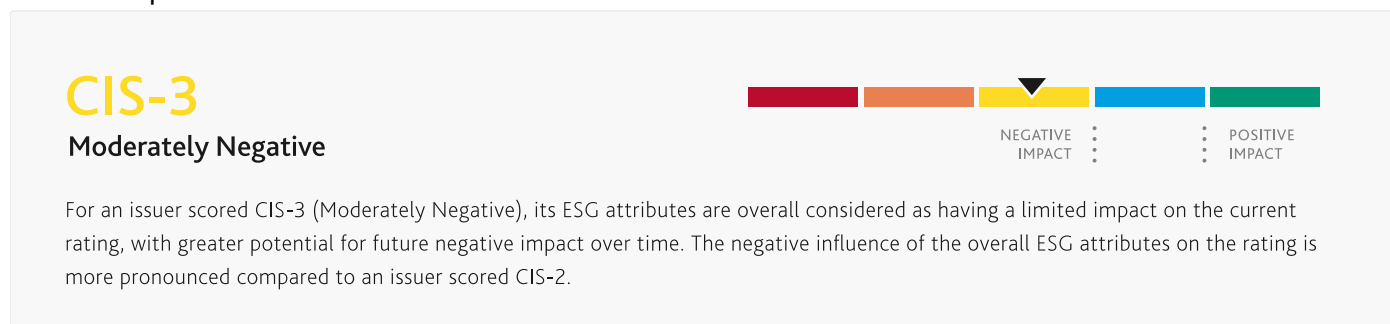
Lanxess has a sound and conservatively managed liquidity profile. Its next material debt maturity is in 2025 when €500 million of notes mature. The company already has secured bilateral facilities to refinance this maturity. Lanxess' liquidity profile benefits from €170 million of cash on balance sheet and €271 million of near-cash assets and the availability of a €1.0 billion syndicated revolving credit facility and €750million of committed bilateral lines not subject to covenants.

ESG considerations

Lanxess AG's ESG Credit Impact Score is Moderately Negative CIS-3

Exhibit 6

ESG Credit Impact Score

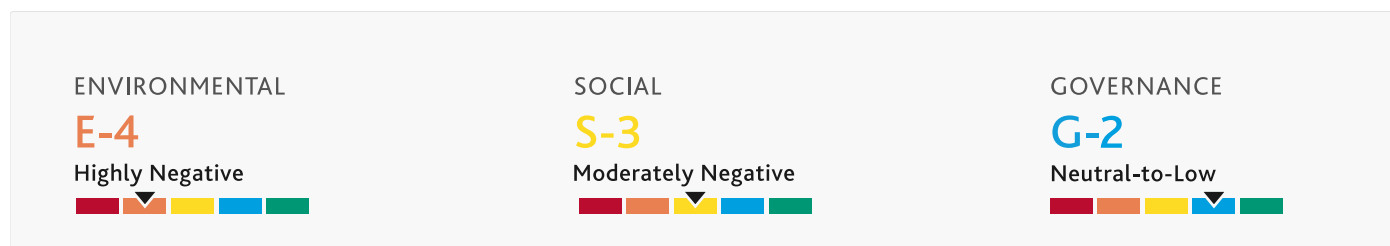


Source: Moody's Investors Service

Lanxess' **CIS-3** indicates that ESG considerations have a limited impact on the current credit rating with potential for greater negative impact over time, especially through exposure to environmental risk including waste and pollution, as well as social risks. This is partially mitigated by strong governance practices

Exhibit 7

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

E-4. Lanxess exposure to environmental risks includes carbon transition risk owing to the company's CO2 footprint, notwithstanding the decline after the formation of a polymer JV with Advent International in April 2023 and likely further reduction with an eventual exit by Lanxess. Thanks to its diversified operational footprint, Lanxess faces lower exposure to physical climate risks than the overall sector.

Social

S-3. Social risk exposure stems from the danger associated with operating chemical plants, as well as responsible production, demographic & societal trends and human capital.

Governance

G-2. Lanxess has demonstrated tangible action to defend its credit quality. This is reflected in the company's financial strategy and risk management, including a commitment to an investment grade rating, evidenced by the allocation of the Envalior proceeds to debt reduction and pension fund top-ups, as well as the high credibility and strong management track record.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Methodology and scorecard

The principal methodology used in rating Lanxess is the Chemical Industry rating methodology.

The scorecard-indicated outcome is Ba2 for the 12 months that ended September 2023 and Ba1 for the forward view. This outcome is one notches below the assigned rating and reflects the current weaker macroeconomic conditions, which result in weak credit metrics.

Exhibit 8

Rating factors

Lanxess AG

Chemical Industry Scorecard [1][2]			Moody's 12-18 Month Forward View As of 11/17/2023 [3]	
	Current LTM 9/30/2023	Score	Measure	Score
Factor 1 : Scale (15%)				
a) Revenue (USD Billion)	\$7.7	Baa	\$8.1 - \$8.2	Baa
Factor 2 : Business Profile (25%)				
a) Business Profile	Baa	Baa	Baa	Baa
Factor 3 : Profitability (10%)				
a) EBITDA Margin	5.9%	B	8% - 9%	B
b) Return on Average Assets	-1.2%	Ca	1% - 3%	Caa
Factor 4 : Leverage & Coverage (30%)				
a) Debt / EBITDA	7.9x	Caa	4.5x - 5.5x	B
b) RCF / Net Debt	9.7%	B	14% - 18%	Ba
c) EBITDA / Interest Expense	4.8x	Ba	9x - 11x	Baa
Factor 5 : Financial Policy (20%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Rating:				
a) Scorecard-Indicated Outcome		Ba2		Ba1
b) Actual Rating Assigned				Baa2

[1] All ratios are based on adjusted financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 09/30/2023(L). Forward view is adjusted for equity accounted income related to Lanxess stake in Envalior

[3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures. Moody's forward view excludes Envalior equity-accounted income.

Source: Moody's Financial Metrics™

Appendix

Exhibit 9

Peer comparison

(in USD million)	Lanxess AG Baa3 Negative			Covestro AG Baa2 Stable			Eastman Chemical Company Baa2 Stable			Celanese US Holdings LLC Baa3 Negative		
	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM
	Dec-21	Dec-22	Sep-23*	Dec-21	Dec-22	Sep-23	Dec-21	Dec-22	Sep-23	Dec-21	Dec-22	Sep-23
Revenue	7,218	8,524	7,739	18,816	18,937	16,004	10,476	10,580	9,376	8,537	9,673	10,719
EBITDA	860	970	613	3,648	1,673	1,224	2,141	1,855	1,703	2,649	2,729	2,491
Total Debt	4,570	4,666	3,590	3,909	4,171	4,144	5,727	5,857	5,942	4,730	15,519	14,514
Cash & Cash Equivalents	1,290	346	467	1,253	1,279	1,237	459	493	439	536	1,508	1,357
EBITDA margin %	11.9%	11.4%	7.9%	19.4%	8.8%	7.6%	20.4%	17.5%	18.2%	31.0%	28.2%	23.2%
ROA - EBIT / Average Assets	2.8%	3.4%	0.0%	15.9%	4.6%	0.4%	9.5%	8.4%	7.4%	19.6%	11.6%	7.5%
EBITDA / Interest Expense	9.5x	9.7x	6.4x	32.9x	13.0x	8.5x	9.9x	8.6x	6.6x	21.5x	6.1x	3.3x
Debt / EBITDA	5.5x	4.8x	5.9x	1.1x	2.5x	3.4x	2.7x	3.2x	3.5x	1.8x	5.7x	5.8x
Net Debt / EBITDA	4.0x	4.4x	5.1x	0.8x	1.7x	2.4x	2.5x	2.9x	3.2x	1.6x	5.1x	5.3x
RCF / Debt	13.4%	13.9%	8.4%	75.6%	14.7%	16.0%	23.7%	15.3%	10.2%	41.7%	8.5%	7.0%
RCF / Net Debt	18.7%	15.0%	9.7%	111.3%	21.3%	22.8%	25.8%	16.7%	11.0%	47.0%	9.4%	7.7%

*LTM Sep-23 excludes Envalor equity-accounted income.

All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

Source: Moody's Financial Metrics™

Exhibit 10

Moody's-adjusted debt reconciliation for Lanxess AG¹

(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	LTM Sep-23
As Reported Debt	2,720	2,818	2,806	3,504	4,247	3,016
Pensions	965	1,001	1,090	765	245	245
Operating Leases	150	0	0	0	0	0
Hybrid Securities	(250)	(250)	(250)	(250)	(250)	0
Securitization Adjustments	0	0	0	0	130	130
Moody's Adjusted Debt	3,585	3,569	3,646	4,019	4,372	3,391
Cash & Cash Equivalents	1,339	1,076	1,794	1,134	324	441
Moody's Adjusted Net Debt	2,246	2,493	1,852	2,885	4,048	2,950

All figures are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

Source: Moody's Financial Metrics™

Exhibit 11

Moody's-adjusted EBITDA reconciliation for Lanxess AG

(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-23	LTM Sep-23
As Reported EBITDA	901	954	1,665	699	893	358
Pensions	4	(2)	4	3	8	69
Operating Leases	44	0	0	0	0	8
Interest Expense Discounting	(10)	(11)	(9)	(6)	(6)	0
Unusual Adjustments	29	74	(691)	31	25	2
Securitization Adjustments	0	0	0	0	0	(6)
Moody's Adjusted EBITDA	968	1,015	969	727	920	431
Envalor Equity-Accounted Income	0	0	0	0	0	143
Moody's Adjusted EBITDA excl. Envalor Equity-Accounted Income	968	1,015	969	727	920	574

All figures are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

Source: Moody's Financial Metrics™

Exhibit 12

Historical Moody's-adjusted financial data

(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	LTM Sep-23*
INCOME STATEMENT						
Revenue	6,824	6,802	6,104	6,101	8,088	7,251
EBITDA	968	1,015	969	727	920	574
EBIT	530	555	505	270	374	3
BALANCE SHEET						
Cash & Cash Equivalents	1,339	1,076	1,794	1,134	324	441
Total Debt	3,585	3,569	3,646	4,019	4,372	3,391
Net Debt	2,246	2,493	1,852	2,885	4,048	2,950
CASH FLOW						
Funds from Operations	840	730	640	636	709	382
Changes in Working Capital items	(289)	(116)	106	(273)	(722)	343
Cash Flow From Operations	551	614	746	363	(13)	725
Capital Expenditures (CAPEX)	(519)	(556)	(507)	(482)	(476)	(421)
Dividends	(85)	(90)	(93)	(97)	(102)	(97)
Free Cash Flow (FCF)	(53)	(32)	146	(216)	(591)	207
Retained Cash Flow (RCF)	755	640	547	539	607	285
RCF / Debt	21.1%	17.9%	15.0%	13.4%	13.9%	8.4%
RCF / Net Debt	33.6%	25.7%	29.5%	18.7%	15.0%	9.7%
FCF / Debt	-1.5%	-0.9%	4.0%	-5.4%	-13.5%	6.1%
PROFITABILITY						
EBIT margin %	7.8%	8.2%	8.3%	4.4%	4.6%	0.0%
EBITDA margin %	14.2%	14.9%	15.9%	11.9%	11.4%	7.9%
INTEREST COVERAGE						
EBIT / Interest Expense	4.7x	5.7x	5.9x	3.5x	3.9x	0.0x
EBITDA / Interest Expense	8.5x	10.4x	11.4x	9.5x	9.7x	6.4x
LEVERAGE						
Debt / EBITDA	3.7x	3.5x	3.8x	5.5x	4.8x	5.9x
Net Debt / EBITDA	2.3x	2.5x	1.9x	4.0x	4.4x	5.1x

*LTM Sep-23 excludes Envalior equity-accounted income.

All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

Source: Moody's Financial Metrics™

Ratings

Exhibit 13

Category	Moody's Rating
LANXESS AG	
Outlook	Negative
Issuer Rating	Baa3
Senior Unsecured -Dom Curr	Baa3

Source: Moody's Investors Service

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