LANXESS AG
Germany, Specialty Chemicals

STABLE
BBB+

Key metrics

			Scope estimates	
Scope credit ratios	2020	2021	2022E	2023E
Scope-adjusted EBITDA/interest cover	6.6x	10.3x	27.0x	10.8x
Scope-adjusted debt (SaD)/Scope-adjusted EBITDA	1.8x	3.0x	3.3x	2.4x
Funds from operations/SaD	47%	29%	29%	31%
Free operating cash flow/SaD	5%	-6%	9%	13%

Rating rationale

The business risk profile continues to reflect a BBB+ quality, also accounting for the recently announced transaction with Advent International (see: **LANXESS, Advent International team up to acquire DSM's Engineering Materials division**).

LANXESS's positioning in medium-sized segments of the specialty chemicals market where barriers to entry are high contribute to its strong business risk profile. The company is well diversified by end markets, which also has a favourable impact on business risk. One weakness is the company's weaker operating profitability (EBITDA margin). Given an EBITDA margin of 11.4% in 2021 and our expectation that the ratio will remain on that level in 2022, figures are weaker in terms of thresholds for operating profitability out in our methodology for chemical corporates and compared to key competitors.

We have lowered its financial risk profile to BBB from BBB+ due to temporary weaker credit ratios measured by SaD/EBITDA and FFO/SaD. SaD/EBITDA is expected to deteriorate to 3.0x in 2022 (2021: 3.0x) before declining to 2.4x in 2023 and 2.1x in 2024 assuming the company uses the EUR 1.1bn proceeds from the sale of its High Performance Materials business to the new joint venture with Advent International for deleveraging as planned.

Regarding supplementary rating drivers, financial policy remains the most important. We continue to consider LANXESS's financial policy as conservative, based on the aim to balance the interests of shareholders and debtholders and the focus on deleveraging to maintain a BBB category rating.

Outlook and rating-change drivers

The Outlook for the issuer rating remains Stable. This mirrors our updated rating base case, including leverage (SaD/EBITDA) to return below 2.5x in 2023. In hand with our assumption of an ongoing positive trend of company's profitability, and the company's ambition to deleverage.

A positive rating action could be triggered if SaD/EBITDA persistently falls below 1.5x. This could be achieved via a sustained improvement in the company's EBITDA margin e.g. by the exertion of higher pricing setting power.

The rating could come pressure if SaD/EBITDA is expected to remain above 2.5x for longer than our rating case currently expect. This could be triggered by a less conservative financial policy, or indication that deleveraging is getting lower importance.

Ratings & Outlook

Issuer	BBB+/Stable
Short-term debt	S-2
Senior unsecured debt	BBB+
Subordinated (hybrid) debt	BBB-

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Related Methodology(ies) and Related Research

Corporate Rating Methodology; July 2021

Rating Methodology: Chemical Corporates; April 2022

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LANXESS AG

Germany, Specialty Chemicals

Rating history

Date	Rating action/monitoring review	Issuer rating & Outlook
27 June 2022	Affirmation	BBB+/Stable
04 August 2021	Affirmation	BBB+/Stable
09 August 2020	Affirmation	BBB+/Stable

Positive rating drivers

- Industry risk profile – specialty chemicals (assessed A)
- Powerful position in medium-sized markets with considerable barriers to entry
- Increased, more resilient end-market mix due to portfolio clean-up and acquisitions
- Ongoing efforts to upgrade the portfolio
- Attractive innovation and growth projects in the pipeline (e.g. with Standard Lithium and Tinci Materials Technologies, CheMondis)
- Strong awareness for sustainable and environmental topics
- Conservative financial policy, including balancing share- and debtholder interests and maintain an investment-grade rating in the 'BBB range'

Negative rating drivers

- Comparably high share of revenue is generated in cyclical end-markets Highly cyclical end-markets generating around 35% of sales (based on our calculations)
- Weaker profitability in terms of thresholds for operating profitability set out in our methodology, positive profitability trend but still weak compared to key competitors' as well as profitability and efficiency thresholds under our methodology
- Temporary weaker financial risk profile (lowered to BBB) following M&A and investment in working capital

Positive rating-change drivers

- SaD/EBITDA of around 1.5x on a sustained basis

Negative rating-change drivers

- If SaD/EBITDA to remain above 2.5x for longer than our rating case currently expect.

Corporate profile

LANXESS AG, based in Cologne (Germany), is a producer of specialty chemicals. In 2021, it had around EUR 7.6bn in sales and EBITDA of EUR 863m. On 30 May 2022, LANXESS said it will set up a joint venture with Advent International. The newly formed entity will acquire DSM's engineering materials division for a purchase price of roughly EUR 3.7bn. LANXESS will transfer its High Performance Materials business unit (segment: Engineering Materials) into the JV with Advent, receiving a payment of at least EUR 1.1bn and acquiring DSM's Engineering Materials with Advent International. The deal should be completed in the first half 2023 pending anti-trust approvals. After closing of the transaction, the company will be organised into three divisions as of Q2 2022: Advanced Intermediates, Specialty Additives and Consumer Protection. The product portfolio includes chemical intermediates, additives, specialty chemicals used in industries such as automotive, construction, agricultural, nutrition and industrial manufacturing.

Financial overview

				Scope estimates	
Scope credit ratios	**2019**	**2020**	**2021**	**2022E**	**2023E**
Scope-adjusted EBITDA/interest cover	9.6x	6.6x	10.3x	27.0x	10.8x
SaD/Scope-adjusted EBITDA	2.3x	1.8x	3.0x	3.3x	2.4x
Funds from operations/SaD	28%	47%	29%	29%	31%
Free operating cash flow/SaD	2%	5%	-6%	9%	13%
Scope-adjusted EBITDA in EUR m					
EBITDA	910	757	863	1,058	1,024
Operating lease payments	-	-	-	-	-
Other items	1	1	1	0	0
Scope-adjusted EBITDA	911	758	864	1,058	1,024
Funds from operations in EUR m					
Scope-adjusted EBITDA	911	758	864	1,058	1,024
less: (net) cash interest paid	-3	0	-88	-69	-135
less: cash tax paid per cash flow statement	0	0	-10	0	-149
add: dividends from associates	0	0	0	0	0
Change in provisions and other items	-46	-32	-29	0	0
Funds from operations	862	726	737	989	740
Free operating cash flow in EUR m					
Funds from operations	862	726	737	989	750
Change in working capital	68	106	-413	-200	0
Non-operating cash flow	-343	-263	60	70	70
less: capital expenditure (net)	-502	-452	-476	-483	-466
less: operating lease payments	-49	-52	-54	-50	-50
Free operating cash flow	36	65	-146	326	304
Net cash interest paid in EUR m					
Net cash interest per cash flow statement	40	74	55	10	66
add: interest component, operating leases	-	-	-	-	-
Other items[1]	55	41	29	29	29
Net cash interest paid	95	115	84	39	95
Scope-adjusted debt in EUR m					
Reported gross financial debt	2,343	2,331	3,004	3,404	3,404
add: subordinated (hybrid) debt	250	250	250	250	250
less: cash and cash equivalents	-1,064	-1,794	-1,134	-619	-1,678
add: non-accessible cash	0	0	0	0	0
add: pension adjustment	388	407	286	286	286
add: operating lease obligations	-	-	-	-	-
Other items[2]	153	143	149	149	149
Scope-adjusted debt	2,070	1,337	2,554	3,470	2,411

[1] Including: Capitalised interest, pension interest, interest related to contingent liabilities and subordinated (hybrid) debt
[2] Contingent liabilities

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Environmental, social and governance (ESG) profile[3]

Environment		Social		Governance	
Resource management (e.g. raw materials consumption, carbon emissions, fuel efficiency)		Labour management		Management and supervision (supervisory boards and key person risk)	
Efficiencies (e.g. in production)		Health and safety (e.g. staff and customers)		Clarity and transparency (clarity, quality and timeliness of financial disclosures, ability to communicate)	
Product innovation (e.g. transition costs, substitution of products and services, green buildings, clean technology, renewables)		Clients and supply chain (geographical/product diversification)		Corporate structure (complexity)	
Physical risks (e.g. business/asset vulnerability, diversification)		Regulatory and reputational risks		Stakeholder management (shareholder payouts and respect for creditor interests)	

Legend
Green leaf (ESG factor: credit positive)
Red leaf (ESG factor: credit negative)
Grey leaf (ESG factor: credit neutral)

ESG profile: No adjustment

No key drivers of the credit rating action are considered as ESG factors for the time being. We consider the main chemical industry risk to be on the environmental side, as chemical companies usually have a heavy focus on production. There is also litigation risk in the chemicals industry, given possible toxic effects on product users. Apart from the industry risks identified above, we see no company specific ESG factors at this stage.

[3] These evaluations are not mutually exclusive or exhaustive as ESG factors may overlap and evolve over time. We only consider ESG factors that are credit-relevant, i.e. those that have a discernible, material impact on the rated entity's cash flow and, by extension, its credit quality.

Business risk profile: BBB+

Industry risk profile: A

The specialty chemicals industry is dominated by a wide range of different-sized companies as well as factors such as production expertise and relationships with customers in aftermarkets. All of these factors serve as de-facto high entry barriers. The assessment of low substitution risk is based on the high technical production requirements and a lack of alternative production methods. We believe specialty chemicals companies face medium sensitivity to changes in GDP, because aftermarkets require lower quantities of specialty chemicals in their product processes and prices tend to be negotiated individually.

LANXESS, Advent International team up to acquire DSM's Engineering Materials division

On 30 May 2022, LANXESS said it will set up a joint venture with Advent International. The newly formed entity will acquire DSM's Engineering Materials division for a purchase price of roughly EUR 3.7bn. The new JV is financing the purchase with equity from Advent and external debt. LANXESS will transfer its High Performance Materials business unit (segment: Engineering Materials) into the JV with Advent. The new entity will generate yearly sales and EBITDA of roughly EUR 3.0bn and EUR 500m respectively. LANXESS will hold up to a 40% share of the joint venture. Beginning with the H1 2022 reporting, LANXESS will disclose results of High Performance Materials business line as discontinued operations and as income from at equity after the closing of the transaction. The deal should be completed in the first half 2023 pending anti-trust approvals. We assess the risk that no regulatory approval will be granted as low. We understand that the Urethane Systems division will be now shown in reconciliation and the Engineering Materials division will be terminated as part of the operating reallocation.

Limited impact on LANXESS's business risk profile from the transaction

The transfer of High Performance Materials to the new joint venture will have a limited impact on LANXESS's business risk profile. We expect the transfer to weaken the company's market share, based on the segment's decent market share globally, including being ranked no.1 in hot cast elastomer systems, brands such as TEPEX and product innovations and product innovations. However, the company's remaining portfolio and profitability (EBITDA margin) should become more resilient. Additionally, the highly cyclical automobile industry will account for less of group sales, to roughly 5%-10% from 20% in 2021. That said, LANXESS will have a narrower scope and less diversity. After the separation of the High Performance Materials division, LANXES sales and EBITDA will fall by roughly 20% and 25%, respectively.

Powerful position in multiple medium-sized markets…

… reinforced by acquisition of Emerald Kalama Chemical and IFF Microbial Control arm

The business risk profile is driven by LANXESS' strong position in multiple medium-sized and niche markets. These markets are often characterised by i) high concentration; ii) domination by a few players; iii) modest competition; and iv) stable conditions. The LANXESS' Consumer protection activities are protected by tight regulatory requirements. To strengthen its position in that area, the company acquired Emerald Kalama Chemical and IFF's Microbial Control business unit (see: **LANXESS: Acquisition of Microbial-Control business unit of International Flavors & Fragrances**; **LANXESS: Acquisition of Emerald Kalama Chemical**). Emerald has a strong position in the market for sodium benzoates, used in the production of soft drinks. Both acquisitions significantly reinforce the market position of LANXESS's Material Protection business unit, part of the Consumer Production division. In addition to an increased market share, LANXESS will have the widest product portfolio in the industry, including many applications in various industries and geographies, giving the company a strong competitive position in a business characterised by technical expertise/knowledge and strict regulation.

Figure 1: Selected market positions

Business line (segment)	Inorganic Pigments (Advanced Intermediates)	Lubricant Additives Business (Specialty Additives)	Material Protection Products (Consumer Protection)
Market position	Among the leading players	No. 1 to no. 3	No. 1 in bromine, bromine intermediates and brominated flame retardants

Source: LANXESS, Scope

Weaker orientation towards R&D…

LANXESS's ability to strengthen its product portfolio through innovation continues to be weaker than the specialty chemicals industry average. This exposes the company to a deterioration in market position because: i) most of its products are relatively mature; ii) its spending on product innovation is low for the specialty chemicals industry (around 2.0% versus around 3.0% for the broader sector); and iii) most of its R&D is focused on optimising and improving existing products.

… focus on partnerships and cooperations instead

As part of a partnership with China's Guangzhou Tinci Materials Technology Co., LANXESS intends to produce electrolyte formulations for lithium-ion batteries at its site in Leverkusen. This is on top of partnerships and collaborations already in the pipeline with Standard Lithium Ltd. (testing to extract battery grade lithium from tail brine) and CheMondis GmbH (an internet-based marketplace for chemicals).

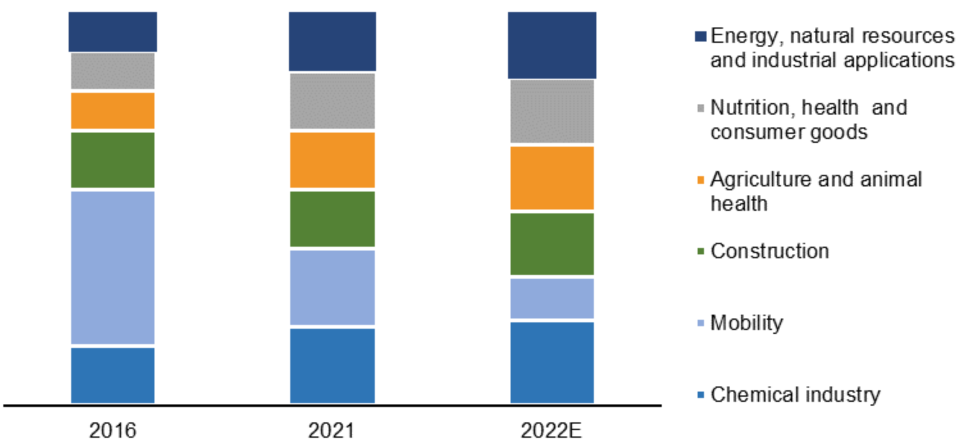
Improved end-market diversification

Intensive portfolio realignment in recent years has improved the revenue mix by end-markets, which improves diversification substantially. Divestments have not reduced the company's scale while LANXESS has multiple acquisitions. We expect LANXESS to continue making acquisitions to bolster its consumer-protection business once it has reduced leverage as planned in the next two years. Additionally, the highly cyclical automobile industry will account for less of group sales, to roughly 5%-10% from 20% in 2021. That said, LANXESS will have a narrower scope and less diversity.

Share of cyclical end-markets have been significantly reduced

LANXESS' substantial share of highly cyclical end-markets is one weakness of its current diversification. The company derives up to 40% of revenues from the automobile, chemicals and construction industries in which aftermarket demand correlates strongly with global GDP. The company is less dependent on demand from the car- and tyre-making sectors (grouped as mobility in figure 2) than in previous periods. This positive trend was bolstered by the recent transaction with Advent International and DSM. We expect LANXESS to try to further reduce the cyclicality of its end markets.

Figure 2: Sales by end-markets, 2016, 2021 and 2022E (excluding High Performance Materials)



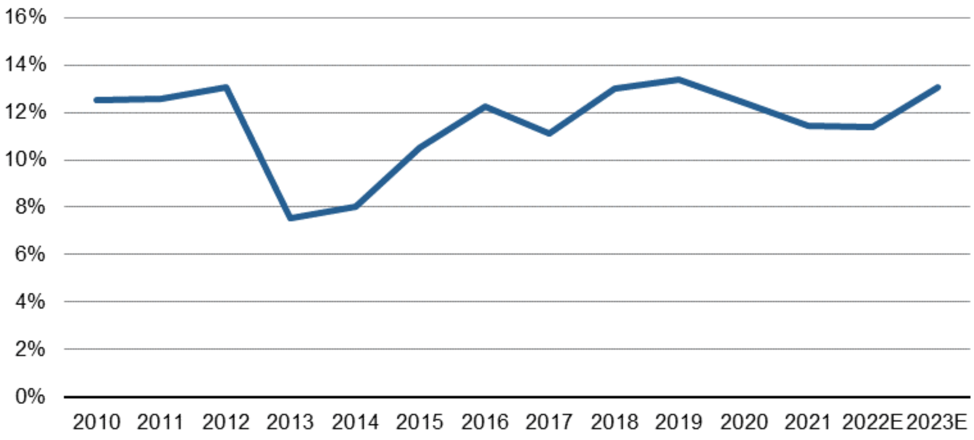
Source: LANXESS, Scope

EBITDA margins by division in 2021:

Advanced Intermediates 15.8%
Specialty Additives 13.3%
Engineering Materials 14.1%
Consumer Protection 18.7%

In accordance with our rating methodology for the chemical sector, we focus on the through-the-cycle profitability when assessing operating profitability. From 2010 to 2021, LANXESS' EBITDA margin averaged around 11.5%, which is weaker than that of similar companies in the sector. With reference to our rating base case, LANXESS is not in a position to improve its EBITDA margin in the foreseeable future following the High Performance Materials transaction and related one-off expenditure. Specialised, high-margin products such as preservatives, aroma ingredients, disinfectants, all under Consumer Protection, are relatively profitable. Another positive is LANXESS's increased ability to pass on energy and raw material prices: up to 70% of customer contracts now include price step-up clauses. The company's price increases in Q1 2022 were in line with the industry. LANXESS remains committed to an EBITDA pre-margin target (before exceptional costs) of 14%-18% through the cycle, combined with a volatility objective of 2%-3%.

Figure 3: Profitability (EBITDA margin)



Source: LANXESS, Scope estimates, Bloomberg

Financial risk profile: BBB

Key adjustments of the rating case include:

- Net present value of operating lease obligations added to SaD (pre 2019, as LANXESS implemented IFRS 16 as of 01 January 2019)
- 80% of provisions for environmental protection (contingent liabilities) are included in SaD and 5% of contingent liabilities included in Scope-adjusted interest expense to reflect the interest proportion of these liabilities
- Half of the company's unfunded pension provisions added to SaD, given the high coverage of annual pension payments through dedicated pension assets
- Interest adjusted for the (estimated) interest component of pension provisions, operating leases (pre 2019) and contingent liabilities
- We do not adjust for restricted cash
- The issued hybrid bond (ISIN: XS1405763019, EUR 500m) rated BBB-, 50% equity credit according to our Corporate Rating Methodology

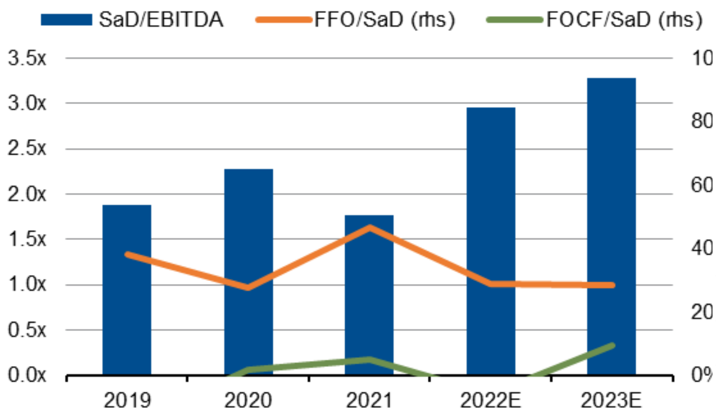
Tempoary weaker financial risk profile – now asssed at BBB…

LANXESS's financial risk profile assessment has been lowered to BBB from BBB+ due weaker credit ratios. Leverage ratios Scope-adjusted debt (SaD)/EBITDA and funds from operations/SaD temporarily dipped below Scope's thresholds for the BBB+ rating. Even though LANXESS's operations are now more resilient, Scope's assessment incorporates sufficient headroom for potentially tougher trading conditions in H2 2022 and the company's plan to deleverage.

… but strong commitment to repairing balance sheet, helped by financial reserves

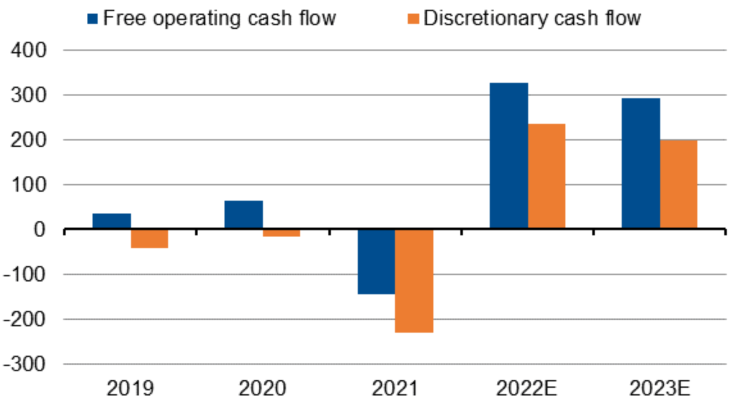
Scope updated its rating scenario for 2022 to 2024 to account for the impending transaction. Scope now expects a SaD/EBITDA of above 3.0x in 2022 (2021: 3.0x) before increasing to 2.4x in 2023 and 2.1x in 2024. Furthermore, we anticipate LANXESS financial risk profile to benefit and being less volatile. This is based on the from the more resilient end-market structure. Moreover, the remaining 40% in the JV with Advent International represents a significant financial reserve. LANXESS has the option to monetise its remaining stake in the JV in 2026 which could raise further funds for deleveraging or external growth opportunities, especially for expanding its consumer-protection business. Key credit ratios deteriorated in 2021 and 2022E from the strong levels in 2018-20. This is mainly due to the two acquisitions (IFF's Microbial Control business unit and Emerald Kalama Chemical), significant investments in working capital and the related costs for the portfolio reconfiguration. Key credit ratios are expected to improve from 2023 onwards on the back of the Advent International deal as around EUR 1.1bn of the proceeds are earmarked for deleveraging, helped by the assumed continuation of organic growth due to the ability to pass on higher raw materials and energy prices to customers, and the first-time contribution of the two acquisitions.

Figure 1: Credit metrics



Sources: LANXESS, Scope estimates

Figure 2: Free operating and discretionary cash flow



Sources: LANXESS, Scope estimates

Key assumptions of the rating base case

Further key pillars of our rating are: i) working capital headwinds to ease 2023; ii) lower capex spending after the High Performance Materials transaction. More precisely, we expect future capex of around EUR 460m; iii) EUR 1.1bn cash inflow in 2023 of up to EUR 300m are planned for share-buybacks, whereby we assume that buybacks could be cancelled if necessary iv) continued seeking external growth opportunists up to EUR 200m per from 2024 onwards; v) progressive dividend payments; and vi) no significant tax and interest payments in 2022, as the company awaits extraordinary tax from tax audits and overpayments, as well as income from interest rate hedges in that period.

Favorable industry environment in H1 2022

For 2022, LANXESS has issued guidance for EBITDA before exceptional items significantly over EUR 1,010m achieved in 2021, based on the assumption of management's ability to pass through higher raw material and energy prices to customers. On negative side, deconsolidation of the High Performance Materials division line should reduce EBITDA in 2022, while all segment benefited the industry environment in Q1 2022, expected to be prolong at least for most of Q2 2022.

Free operating cash flow remains weak against the specialty chemicals industry

A negative rating driver is still the low free operating cash flow generation, weakened primarily by weak EBITDA, significant one-off cost related to the portfolio reallocation and multiple voluntary payments to strengthen pension assets in the past. That said, free operating cash flow is also expected to improve after High Performance Materials is offloaded, especially as capex requirements will decline. This should also cascade into improving discretionary cash flow and improve LANXESS's capacity to deleverage.

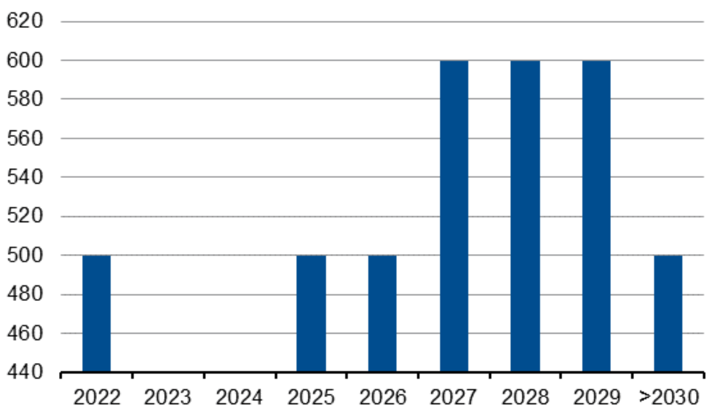
Figure 3: Liquidity

Balance in EUR m	2021	2022E	2023E
Unrestricted cash (t-1)	1,794	1,134	619
Open committed credit lines (t-1)	1,000	1,000	1,000
Free operating cash flow	-146	326	304
Short-term debt (t-1)	566	675	75
Coverage	**4.7x**	**3.6x**	**25.6x**

Liquidity: Adequate

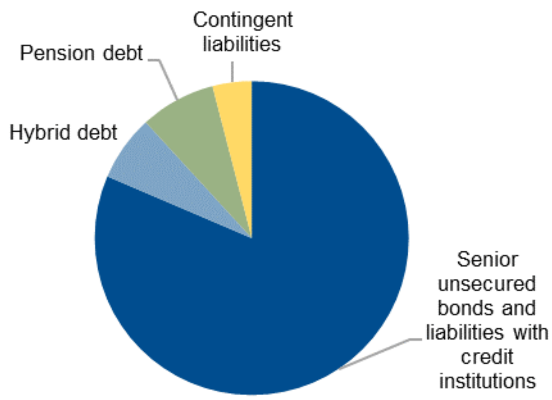
Liquidity remains adequate given the history of strong internal and external liquidity coverage, the well-structured debt maturity profile and access to a EUR 1.0bn credit facility, though offset somewhat by historically poor free operating cash flow. That said, Scope understands that free operating cash flow is improving under the company configuration.

Figure 7: Maturity profile (EUR m; 31 March 2022)



Source: LANXESS, Scope

Figure 8: Composition of SaD (2021)



Source: LANXESS, Scope

Diversified maturity profile and debt composition

Our view on LANXESS's liquidity also applies to the composition of SaD. While most of the debt is in the form of bonds and green bonds, diversification into hybrid debt when acquiring Chemtura in 2016, with the aim of keeping rating-relevant leverage under control, is positive. Additionally, pension assets were bolstered by multiple voluntary pension payments to offset low interest rates.

Supplementary rating drivers: +/- 0 notches

No shift to an aggressive financial policy despite temporary weaker finanical risk profile

The deterioration of LANXESS credit profile in 2021 and our projections for 2022 look temporary rather than the result of a longer-term shift to a more shareholder-value orientated financial policy. The company says it is fully committed to maintain a credit rating in the 'BBB range' and to deleverage its balance sheet in the next years. These aims are supported by the transaction with Advent International and DSM and our understanding that LANXESS is not in the hunt for M&A in the foreseeable future. We still see LANXESS pursuing a conservative financial policy, balancing the interests of shareholders and creditors.

The other subcategories of the supplementary rating driver's section continue to play a tangential role.

Long-term and short-term debt ratings

Short-term rating: S-2

Scope has affirmed LANXESS' short-term rating at S-2. This is grounded on its affirmed issuer rating, the 'better than adequate' internally and externally provided liquidity coverage as well as its banking relationships and standing in capital markets.

Rating for unsecured debt: BBB+

All senior unsecured debt has been affirmed at BBB+, the level of the issuer.

Rating for subordinated (hybrid) debt: BBB-

Scope has affirmed the subordinated (hybrid) debt category at BBB-. At present, one hybrid bond is outstanding (ISIN: XS1405763019, EUR 500m). The two notches below the issuer rating reflect the key structural elements of the outstanding hybrid debt: convertibility, replacement, coupon deferral, accumulation of payments, contractual subordination and the remaining maturity.

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