Research Update:

Thyssenkrupp Upgraded To 'BB' On Transformation Progress; Outlook Stable

December 21, 2022

PRIMARY CREDIT ANALYST

Tanja Paliakoudis, CFA
Frankfurt
+49 6933999219
tanja.paliakoudis
@spglobal.com

SECONDARY CONTACT

Tobias Buechler, CFA
Frankfurt
+ 49 693 399 9136
tobias.buechler
@spglobal.com

ADDITIONAL CONTACT

Corporate and IFR EMEA
RatingsCorpIFREMEA
@spglobal.com

Rating Action Overview

- Thyssenkrupp reported strong operating performance for the fiscal year ended Sept. 30, 2022 (fiscal 2022), with S&P Global Ratings' adjusted EBITDA of almost €3.0 billion (€1.5 billion in fiscal 2021) and an adjusted EBITDA margin of 7.2% (4.4% in fiscal 2021). We expect solid operating performance in fiscal 2023, thanks to still-good order intake and continued progress on its restructuring efforts.
- We now anticipate Thyssenkrupp will generate positive free operating cash flow (FOCF) from fiscal 2023, despite some margin erosion due to the normalizing steel environment and economic headwinds, with the EBITDA margin moderating to 5.0%-6.5% in fiscals 2023 and 2024.
- Uncertainties remain high given the cloudy economic outlook for 2023 and the company's high sensitivity to cyclical end-markets. However, the company has built some headroom, and we expect funds from operations (FFO) to debt of more than 80% in fiscal 2023.
- Therefore, we raised our long-term rating on Thyssenkrupp to 'BB' from 'BB-' and affirmed our 'B' short-term rating.
- The stable outlook reflects our view that the company's improved cost structure will lead to solid operating performance over the next 12-18 months, including positive FOCF despite its heavy investment program.

Rating Action Rationale

Thyssenkrupp reported strong operating performance in fiscal 2022, thanks to cyclical recovery in its steel and materials business, resulting in FFO to debt of more than 100% and debt to EBITDA of less than 1x. The company's revenue increased 21% year on year to €41 billion, primarily due to rising steel prices boosting the operating performance in its Steel Europe and Material Services segment. The company's S&P Global Ratings' adjusted EBITDA margin improved to 7.2% from 4.4% in fiscal 2021, with adjusted EBITDA reaching almost €3.0 billion--the best result in more than a decade. Besides the favorable pricing environment for steel,

progress on its restructuring program also strengthened profitability. This helped more than offset the increasing cost of raw materials, logistics, and energy, and challenging supply-chain conditions, which mainly affected the company's automotive and components-related businesses.

With macroeconomic headwinds and the normalizing steel cycle, we estimate revenue will decline 10%-15% and the EBITDA margin will moderate in fiscal 2023. With the normalization of the steel environment and material prices following the peaks in 2022, we expect revenue to decline 10%-15% to about €36 billion in fiscal 2023. For its non-steel operations, we estimate revenue growth of about 6%-8% backed by decent order intake. While we expect more benefits of the restructuring program to materialize and improving operating performance in its Automotive Technology segment, thanks to higher demand from original equipment manufacturers and fewer supply chain constrains, profitability will be overshadowed by a cool down of its materials business, which reported record profits in fiscal 2022. All in all, we expect Thyssenkrupp's EBITDA margin will drop to 5.0%-6.0% (from 7.2% in fiscal 2022). Excluding the impact of its volatile and low-margin Material Services business, we estimate the group's EBITDA margin at 7.0%-8.0% for fiscal 2023, a slight decline from 8.3% in fiscal 2022. We expect credit metrics to remain strong, despite the contracting operating performance, with FFO to debt of more than 80% in fiscal 2023.

Thyssenkrupp's ability to generate FOCF has notably improved, and we expect it to turn positive from fiscal 2023. The company's FOCF generation is highly dependent on three factors:

- First, its operations have high working capital requirements, which leads to high working capital cash outflows when steel prices are increasing and inflows when prices moderate. In fiscal 2022, we saw a working capital absorption of €1.1 billion and for fiscal 2023 we expect a release of more than €500 million.
- Second, the company's investment program remains heavy. We expect capital expenditure (capex) will exceed €1.7 billion in fiscal 2023 (€1.3 billion in fiscal 2022) and likely remain high. Reflecting depreciation of about €1.0 billion, we believe a notable share of capex is made up of discretionary expansion investments, which should benefit operating performance over the medium term. Most capex goes toward its steel operations and includes increasing investments into its Steel Strategy 20-30 and the green steel transformation.
- Third, with progress on its restructuring program, we estimate cost benefits of about €600 million-€700 million in fiscal 2023 and believe that the company's cost structure has improved and become more flexible. In addition, decreasing provision payouts relating to the restructuring will further support free cash flow generation. We believe Thyssenkrupp should be able to report positive FOCF, if the company is able to achieve an EBITDA margin of more than 8%, excluding Material Services.

Thyssenkrupp has built some headroom in case of harsher economic conditions. We expect FFO to debt of more than 80% in fiscal 2023, which provides the company with some headroom in case of a gloomier economic scenario than what we currently assume in our base case. Even if Thyssenkrupp's EBITDA margin would fall to 4%, FFO to debt should still reach more than 50%, which is comfortably above our threshold of 30% for the current rating level. Given its high working capital requirements, a decline in revenues due to declining steel prices would likely have only a limited impact on credit metrics, assuming working capital is released. However, in such a scenario, released capital would be absorbed again in the following recovery, weighing on credit metrics. We also positively note that Thyssenkrupp possesses some attractive financial assets, which it could monetize over time, namely its hydrogen business and the minority stake in TK

Elevator, which are not factored in our ratio calculation and add to its financial flexibility.

Pension obligations remain the dominant part of our adjusted debt calculation. Net financial debt remained negative in fiscal 2022, with cash of €7.6 billion on balance sheet remaining higher than its outstanding financial debt (before leases) of €3.4 billion. Besides leases (€630 million), trade receivables sold (€500 million), and asset retirement obligations (€208 million), pension obligations of €5.0 billion remain the main part of our adjusted debt calculation. Its pension obligations have a long duration profile, making the obligation very sensitive to any movement in discount rates. In fiscal 2022, discount rates improving by almost 300 basis points was the main factor for the decline in obligations by about €1.5 billion. Annual cash outflows relating to pensions amount to about €400 million per year and are likely to increase to some extent, given the company's obligation to compensate some of its pensioners for inflation. However, the company's cash outflow relating to pensions typically exceeds its pension costs by €100 million-€200 million per year, which leads to a reduction in pension deficits year over year, all else being equal.

Management remains committed to maintaining a strong balance sheet, concluding the restructuring of the business, and improving the credit rating. We believe the company will continue to use its cash on the balance sheet to repay its financial debt at maturity and to keep a strong balance sheet to maintain a high degree of financial flexibility. This will leave open a wide range of strategic options for the company's future shape. Management announced that it will pay a regular dividend for fiscal 2022 at a moderate level of less than €100 million, which we view as a sign of confidence that the restructuring has led to structurally positive FOCF generation capacity.

Outlook

The stable outlook reflects our expectation that the company will be able to post solid operating results over the next 12-18 months, despite the expected challenging economic environment thanks to a more resilient cost structure. We estimate the group will post EBITDA margins (excluding the Material Services division) of about 8% over the next 12-18 months, and that FFO to debt will stay comfortably above 60% over the next 24 months. We also expect FOCF will turn positive, despite its heavy investment program from fiscal 2023, thanks to cash inflows from working capital but also due to improved profitability and lower restructuring provision payouts.

Downside scenario

We could lower the ratings if the group:

- Fails to post at least break-even FOCF over the next 12-18 months, for example due to weak working capital management, a prolonged economic downturn, operating missteps, or a weaker ability to generate positive FOCF;
- Is not able to further improve its cost structure and fails to maintain an EBITDA margin (excluding Material Services) of more than 8%;
- Is not able to maintain an FFO to debt of more than 30% during a cyclical downturn; or
- Loses competitiveness in its steel operations, for example against its non-European peers due to prolonged higher energy costs.

Upside scenario

We could raise our ratings if the group:

- Further strengthened its profitability with continuously improving EBITDA margins (excluding Material Services) approaching 10% through the cycle;
- Posts FFO to debt of more than 45% during a cyclical downturn; and
- Demonstrates reduced cash flows volatility and a track record of positive cumulative FOCF generation over the cycle.

Such a development could occur if the group successfully manages the transition of its steel division toward green steel and completes its restructuring program, including the sale or closure of all loss-making non-core activities.

Company Description

Thyssenkrupp is a Germany-based diversified industrial conglomerate that has active operations in around 50 countries. The group structure comprises six operating segments:

- Automotive Technology (11.2% of fiscal 2022 revenue): Development and production of high-tech components and systems for the auto industry, and development of automated production systems for the auto industry.
- Industrial Components (6.4%): Production of crankshafts, slewing bearings and seamless rings, and undercarriage components.
- Marine Systems (4.2%): System supplier for submarines and surface vessels, as well as for maritime electronics and security technology.
- Material Services (38.1%): Global materials distribution and service provider.
- Steel Europe (30.5%): Production of high-quality flat-rolled carbon steel for the auto industry and other sectors.
- Multi Tracks (9.5%): A portfolio of companies, which Thyssenkrupp will either sell, form partnerships, or close. The Multi Track segment's portfolio currently comprises six businesses: two plant engineering businesses in the areas of chemicals and cement, two automotive suppliers, thyssenkrupp nucera, a subsidiary which operates in the future-oriented hydrogen market and in which Thyssenkrupp has a majority stake, and the investment in TK Elevator.

Thyssenkrupp generated about €41 billion in revenue and about €3.0 billion in adjusted EBITDA in fiscal 2022.

Thyssenkrupp is a listed company, with about 79% of its capital stock in free float (about 64% owned by international mutual funds, and about 15% owned by private investors); the remaining part (about 21%) is held by the Alfried Krupp von Bohlen und Halbach Foundation.

Our Base-Case Scenario

Assumptions

- Eurozone GDP growth dropping to 0% in 2023 before recovering to 1.4% in 2024, from 3.3% in 2022. For the U.S. market, GDP contraction of 0.1% in 2023 before returning to growth of 1.4% in 2024, from 1.8% in 2022. Asia-Pacific GDP growth to increase to 4.4% in 2023 and 4.5% in 2024, from 4.0% in 2022.
- Revenue declining 10%-15% in fiscal 2023, underpinned by normalization of prices of materials trailing the peaks of 2022 and further wind-downs in multi-tracks. We expect revenue to improve 5%-10% in fiscal 2024, assuming growing demand following the recessionary environment and normalization of the supply chain.
- The EBITDA margin moderating to about 5.0%-6.0% in fiscal 2023, from 7.2% in fiscal 2022, as we expect the steel environment to normalize and higher input costs. EBITDA margins to improve to about 5.5%-6.5% in fiscal 2024 as volumes increase as well as margin expansion in all the segments on the back of restructuring benefits and normalization of supply chains. We assume normal market conditions for its steel operations.
- Increased annual capex of about €1.7 billion in fiscal 2023, in light of expanding its capacities mainly in steel operations, increasing to about €1.9 billion-€2.0 billion in fiscal 2024.
- After a working capital buildup in fiscal 2022, net working capital inflows of more than €500 million for fiscal 2023, reflecting expected normalization of raw material price and supply chains. We expect working capital to be about neutral in 2024, assuming some improvement in inventory days.
- Bolt-on acquisitions of about €100 million per year over fiscals 2023 and 2024.
- Resumption of dividend payments of less than €100 million per year over fiscals 2023 and 2024.

Key metrics

Thyssenkrupp AG--Key Metrics

Mil. €	2021a	2022a	2023f	2024f
Revenue	34,015	41,140	35,000-37,000	38,000-39,000
Revenue growth (%)	17.7	20.9	(15)-(10)	5-10
EBITDA	1485	2978	1,800-2,000	>2,200
EBITDA margin (%)	4.4	7.2	5.0-6.0	5.5-6.5
Estimated reported EBITDA margin excluding MX* (%)	3.5	8.3	7.0-8.0	>8
Capex	1,448	1,296	~1,700	1,900-2,000
Free operating cash flow	(1,348)	(678)	>300	>0
Pension obligations	6,485	5,025	~5,000	~4,900
Debt to EBITDA (x)	2.5	0.8	0.8-1.2	0.6-1.0

Thyssenkrupp AG--Key Metrics (cont.)

Mil. €	2021a	2022a	2023f	2024f
FFO to debt (%)	31.4	107.7	>80	>90

All figures adjusted by S&P Global Ratings. a--Actual. e--Estimate. f--Forecast. *Estimate based on segment reporting; overhead costs, special items and reconciliation proportionally allocated. MX--Material Services.

Liquidity

Our short-term rating on Thyssenkrupp is 'B', reflecting the long-term issuer credit rating. We project that liquidity sources will exceed potential uses by more than 2.0x over the 12 months from Sept. 30, 2022, and remain above 1.5x for the 12 months thereafter. We also anticipate that Thyssenkrupp's net sources will remain positive, even if forecast EBITDA declines by more than 30%. Our liquidity assessment is also supported by Thyssenkrupp's prudent financial risk management and well-established relationship with banks.

Principal liquidity sources for the 24 months started Sept. 30, 2022:

- Cash and cash equivalents of about €7.6 billion;
- Access to undrawn bank lines in the form of revolving credit facilities of about €1.5 billion, which we assume to remain in place over the next 24 months;
- About €2.0 billion-€2.2 billion in operating cash flows per year.

Principal liquidity uses over the same period:

- Short-term debt maturities of about €1.1 billion in the next 12 months, and €1.5 billion in the following 12 months;
- About €1.0 billion in intrayear working capital swings;
- Capex of €1.7 billion-€2.0 billion a year in the next 24 months; and
- Dividends of less than €100 million a year in the next 24 months.

Covenants

There is no covenant for the committed credit lines of about €1.5 billion or bonds outstanding.

Environmental, Social, And Governance

ESG credit indicators: To E-3, S-2, G-3; From E-4, S-2, G-3

Environmental factors are now a moderately negative consideration in our credit rating analysis of Thyssenkrupp, compared with negative previously. This reflects a better alignment with its European steel peers, but also recognizes the company's investments and transition plan toward green steel production. As a steel producer (more than 30% of group revenue in fiscal 2022), Thyssenkrupp is exposed to a high risk of changing environmental regulation and more stringent requirements for carbon dioxide emissions, which could force the group to accelerate its

transition toward green steel production, which requires high investments and could potentially erode its cost position compared with less regulated producers. Despite ongoing measures to improve its energy efficiency gains (255 gigawatt hours in fiscal 2022), the group still consumed about 66 terawatt-hours of energy. We recognize Thyssenkrupp's strong technological capabilities in providing hydrogen technologies. A potential partial sale via an IPO would support the balance sheet further.

Governance factors are a moderately negative consideration. The company adheres to high standards of disclosure, in line with international publicly listed groups. However, we view as negative the group's lengthy and significant restructuring to restore its profitability, which is progressing but has been pending for multiple years, as well as multiple unexpected changes in senior management.

Issue Ratings - Recovery Analysis

Key analytical factors

- The 'BB' rating on Thyssenkrupp's various senior unsecured notes is based on recovery prospects of 50%-70% (rounded estimate: 65%).
- Although nominal recovery prospects for unsecured noteholders may exceed 70%, our criteria caps the recovery rating on the debt at '3' due to the unsecured nature of the notes.
- Under our hypothetical scenario, a default would follow the persistent weakness in the industries in which Thyssenkrupp operates. We would also expect operating setbacks to lead to deteriorating financial performance, permanent negative free cash flow, and an inability to refinance key obligations.
- We value Thyssenkrupp as a going-concern, given the solid market positions of several of its core divisions.
- Nevertheless, we believe many parts of the group could be broken up, sold separately, and provide significant value to creditors in a default scenario.

Simulated default assumptions

- Year of default: 2026
- EBITDA at emergence: €1.4 billion (we assume maintenance capex at 2.5% of revenue; cyclical adjustment of 5% and operational adjustment of 10%, which is standard for the sector and €150 million annual pension amortization)
- Implied enterprise value multiple: 5.0x
- Jurisdiction: Germany

Simplified waterfall

- Gross recovery value: €7.2 billion
- Net recovery value for waterfall after administrative expenses (5%) and pension consideration: €4.0 billion

- First priority claims: €0.1 billion
- Value available for senior unsecured claims: €3.9 billion
- Senior unsecured claims: €4.8 billion
- --Recovery range: 50%-70% (capped at 65%)

All debt amounts include six months of prepetition interest.

Ratings Score Snapshot

Issuer Credit Rating: BB/Stable/B

Business risk: Fair

- Country risk: Low
- Industry risk: Moderately high
- Competitive position: Fair

Financial risk: Intermediate

- Cash flow/Leverage: Intermediate

Anchor: bb+

Modifiers

- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Strong (no impact)
- Management and governance: Fair (no impact)
- Comparable rating analysis: Negative (-1 notch)

Related Criteria

- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Corporates | General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016

- Criteria | Corporates | Recovery: Methodology: Jurisdiction Ranking Assessments, Jan. 20, 2016
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Ratings List

Upgraded; Ratings Affirmed

	To	From
Thyssenkrupp AG		
Issuer Credit Rating	BB/Stable/B	BB-/Stable/B
Senior Unsecured	BB	BB-
Recovery Rating	3(65%)	3(65%)
Ratings Affirmed		
Thyssenkrupp AG		
Commercial Paper	B	