S&P Global
Ratings

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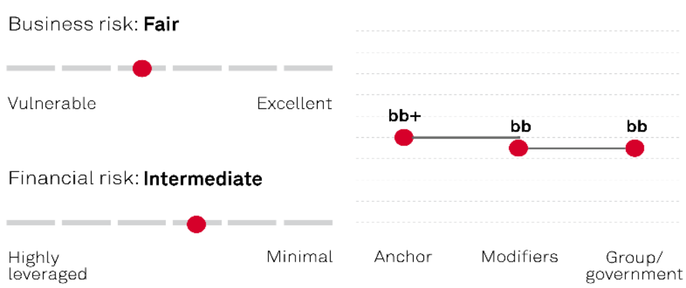
Thyssenkrupp AG

December 22, 2023

Ratings Score Snapshot



BB/Stable/B

Issuer credit rating

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Credit Highlights

Overview

Key strengths	Key risks
Strong technological capabilities, with market-leading positions in multiple industrial segments.	High exposure to cyclical steel (which is sensitive to macroeconomic conditions, global overcapacity, and imports), auto, and large-scale industrial engineering markets.
Sizable scale, with more than €37 billion revenue in the fiscal year ended Sept. 30, 2023, and good product and end-market diversification with its five operating segments.	Below-average profitability compared with industry peers, demonstrated by S&P Global Ratings-adjusted EBITDA margins of 4.2% in fiscal 2023 and about 4.0%-6.0% in our base-case forecast.
No net financial debt and low S&P adjusted debt to EBITDA of about 0.9x, including a high share of pension liabilities (about €4.8 billion as of Sept. 30, 2023).	Ongoing restructuring to improve its competitiveness, operational flexibility, and profitability.
Strong liquidity, with about €7.4 billion in cash and about €1.5 billion in credit lines as of Sept. 30, 2023.	Limited FOCF generation prospects due to high investments in its steel operations to fund the transition to green steel production, overall low profit margins and annual pension-related outflows of about €0.4 billion.

The company achieved a moderate operating performance in fiscal 2023, on the back of a normalization of the steel environment and material prices following the peaks in fiscal 2022, and coupled with macroeconomic and geopolitical challenges. During fiscal 2023 (ending on Sept. 30), Thyssenkrupp AG's order intake decreased considerably by 16% year on year to €37.0 billion, and revenue reduced by 9% year on year to €37.5 billion--even with the pass through of increased factor costs. In our view, the significant decrease in orders and revenue was caused by lower market prices for many materials, including steel, at Thyssenkrupp's Materials Services and Steel Europe segments. The decline was limited by higher order volumes from the Steel Europe and Automotive Technology segments, primarily by the increase in demand from the automotive industry. The group's company adjusted EBIT margins declined to 1.9% in fiscal 2023 from 5.0% in fiscal 2022. The decrease in earnings was attributable to lower revenue and reduced margins in the steel and materials business. The decline was slightly neutralized by higher volumes in the Automotive Technology segment, a consistent sales trajectory in Marine Systems, and ongoing efficiency measures.

The resilient machinery sector and steel sector growth are aiding the automotive market recovery, even on the back of uncertain macroeconomic conditions. We expect modest revenue growth of about 1% in fiscal 2024 and a further improved top line would result in approximately 3%-4% revenue growth in fiscal 2025. The EBITDA margin will improve modestly in fiscal 2024, before significant improvement from fiscal 2025 onward. We expect revenues to be supported by the easing of supply chain bottlenecks in the automotive sector, high demand from original equipment manufacturers, and growth in the construction industry in developing and emerging markets. Following the normalization of the steel environment and material prices in 2023, we expect a modest recovery in the steel industry. Sluggish demand and persistently higher interest rates will, however, impair the demand. Management has reduced shipment costs, assisting in improved margins for the segment over the next two years. We expect the additional benefits of the restructuring program to materialize, and Thyssenkrupp's Automotive Technology segment's operating performance to improve in terms of volumes. Profitability will be supported by milder growth across segments and the restructuring of its existing segments. Overall, we expect Thyssenkrupp's EBITDA margins to improve marginally by about 10 basis points (bps)-30 bps to 4.0%-4.5% in fiscal 2024. Having launched a new performance program called APEX in September 2023, Thyssenkrupp plans to improve the pricing, purchasing, and optimizing of net working capital to offset cost inflation. This should result in improving EBITDA margins of 5%-6% in fiscal 2025, coupled with somewhat higher volumes across its segments. We expect credit metrics to remain strong, despite the mildly weaker operating performance in fiscal 2024, with funds from operations (FFO) to debt of about 100% in fiscals 2024 and 2025, mainly due to the group's net financial cash position of about €4 billion as of Sept. 30, 2023, and prospects of about break-even free operating cash flow generation and limited dividend payments.

The restructuring measures and disposals are progressing, and the successfully completed IPO of Thyssenkrupp Nucera (Nucera) further strengthens the balance sheet. The company has completed more than 85% of its planned headcount reductions and has booked about €900 million in expenses until fiscal 2023. However, a low three-digit million-euro amount is expected to weigh on cash flow over the next few years. The company achieved sizable savings in fiscal 2023 and expects further benefits in fiscal 2024. Thyssenkrupp completed an IPO of its hydrogen electrolysis business, Nucera, given the favorable market valuations on July 7, 2023, which generated a cash inflow of €0.6 billion. The transaction reinforced the group's already-sound balance sheet and strengthened its credit metrics, providing high financial flexibility.

As of Oct. 1, 2023, Thyssenkrupp is structured into distinct segments, namely Automotive Technology, Decarbon Technologies, Materials Services, Marine Systems, and Steel Europe. The strategic restructuring aims to optimize the group's operational and financial efficiency. Thyssenkrupp established the Decarbon Technologies segment, with key technologies and solutions for energy transition including, Nucera, Thyssenkrupp Uhde, Thyssenkrupp Rothe Erde, and Thyssenkrupp Polysius; from the dissolved Multi Tracks segment, and bearings from the Industrial Components segment. Springs and stabilizers, and automation engineering transitioned from the Multi Tracks segment to the Automotive Technology segment alongside forged technologies from the Industrial Components segment to better align with the end-customer structure.

Thyssenkrupp's ability to generate free operating cash flow (FOCF) has notably improved and we expect FOCF to remain positive in our forecast period over the next 24 months.

In our view, the group's FOCF generation is highly dependent on three factors:

- First, its operations have high working capital requirements, which lead to large working capital cash outflows when steel prices increase and inflows when prices moderate. We saw a working capital release of €1.1 billion post absorption in fiscal 2023, a roughly similar amount to that in fiscal 2022. We expect a working capital release of €400 million-€600 million, on the back of easing supply chain issues, lower volume growth, and working capital optimization measures.
- Second, the group's investment program remains heavy. We expect capital expenditure (capex) will continue to exceed €1.6 billion in fiscal 2024 (€1.7 billion in fiscal 2023) and likely remain high. This reflects a depreciation of about €1.0 billion. We think a notable share of capex is made up of discretionary expansion investments, which should benefit operating performance over the medium term. Most capex is used for 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 €750 million-€850 million in fiscal 2024 and think that the group's cost structure has improved and is more flexible. In addition, decreasing provision payouts relating to the restructuring will support FOCF generation. We anticipate Thyssenkrupp should be able to report positive FOCF, if it can achieve an EBITDA margin of more than 5%, excluding Material Services.

Outlook

The stable outlook reflects our expectation that the group will be able to post solid operating results over the next 12-18 months thanks to a more resilient cost structure and despite the expected challenging economic environment. We estimate the group will post EBITDA margins (excluding the Materials Services division) of about 8% over the next 12-18 months, and that FFO to debt will stay above 60% over the next 24 months. Despite its heavy investment program in fiscal 2023, we expect FOCF will remain positive thanks to cash inflows from working capital but also thanks 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, due to weak working capital management, a prolonged economic downturn, operating missteps, or a weaker ability to generate positive FOCF;
- Is not able to 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 significantly higher energy costs.

Upside scenario

We could raise our ratings if the group:

- Further strengthens its profitability with 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 flow 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, which includes the sale or closure of all loss-making noncore activities.

Our Base-Case Scenario

Assumptions

- Eurozone GDP growth will drop to 0.6% in 2023 before improving slightly to 0.9% in 2024, from 3.4% in 2022. For the U.S., GDP growth will be about 2.3% in 2023 before decreasing to 1.7% in 2024, from 2.1% in 2022. Asia-Pacific GDP growth will increase to 4.3% in 2023 and 4.4% in 2024, from 3.9% in 2022.
- Revenue will improve marginally to about 1% in fiscal 2024 and 3%-4% in fiscal 2025, assuming growing demand will follow a weaker economic environment in fiscal 2024.
- The EBITDA margin will improve marginally to about 4.0%-4.5% in fiscal 2024, from 4.2% in fiscal 2023. We expect the steel environment will normalize and a successful pass through of higher input costs. EBITDA margins will improve further to 5.0%-6.0% in fiscal 2025 as volumes increase, as well as margin expansion in all segments on the back of restructuring benefits and improved macroeconomic conditions. We assume normal market conditions for steel operations in fiscal 2025.
- Stable annual capex of about €1.6 billion to €1.7 billion in fiscal 2024 and fiscal 2025, mainly in steel operations--which includes investments toward decarbonization of steel.
- After a working capital release in fiscal 2023 on the back of the buildup in fiscal 2022, net working capital will be positive for fiscal 2024, which reflects further expected normalization of supply chains and lower raw material prices. We expect working capital inflows will be €400 million-€600 million in fiscal 2024, assuming some improvement in inventory days.
- Bolt-on acquisitions of about €100 million per year over fiscals 2024 and 2025.
- Continuation of dividend payments of less than €100 million per year over fiscals 2024 and 2025.

Key metrics

Thyssenkrupp AG--Forecast summary

Period ending	Sep-30-2022	Sep-30-2023	Sep-30-2024	Sep-30-2025
(Mil. EUR)	2022a	2023a	2024e	2025f
Revenue	41,140	37,536	37,700-38,200	38,200-39,200
EBITDA	2,978	1,590	1,500-1,800	2,000-2,300
Capex	1,296	1,757	1,600-1,700	1,600-1,700
Free operating cash flow (FOCF)	(678)	307	~50	~50
Dividends	0	93	93	93
Pension & other post-retirement debt	5,025	4,841	~4,700	~4,550
Debt (adjusted)	2,291	1,438	~1,500	~1,600
Adjusted ratios				
Debt/EBITDA (x)	0.8	0.9	0.8-1.0	0.6-0.8
FFO/debt (%)	107.7	83.4	>90	>100
Annual revenue growth (%)	20.9	(8.8)	~1.0	3.0-4.0
EBITDA margin (%)	7.2	4.2	4.0-4.5	5.0-6.0

Company Description

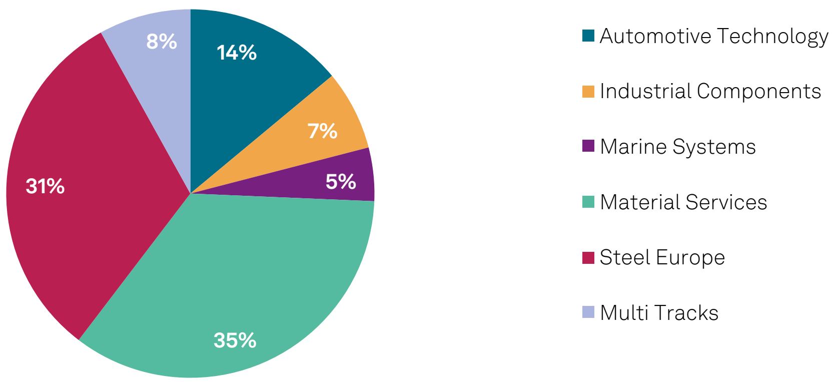
Germany-based Thyssenkrupp is a diversified industrial conglomerate that has active operations in about 50 countries. Until Sept. 30,2023, the group structure comprised six operating segments:

- Automotive Technology (14.0% of fiscal 2023 revenue): Development and production of high-tech components and systems for the auto industry. Development of automated production systems for the auto industry.
- Industrial Components (7.0%): Production of crankshafts, slewing bearings, seamless rings, and undercarriage components.
- Marine Systems (4.7%): System supplier for submarines and surface vessels, as well as for maritime electronics and security technology.
- Material Services (34.7%): Global materials distribution and service provider.
- Steel Europe (31.5%): Production of high-quality flat-rolled carbon steel for the auto industry and other sectors.
- Multi Tracks (8.1%): A portfolio of companies, which Thyssenkrupp will either sell, form partnerships from, or close. The Multi Tracks segment's portfolio comprises six businesses: two plant engineering businesses in the areas of chemicals and cement; two automotive suppliers; Nucera, which operates in the future-oriented hydrogen market and which Thyssenkrupp has a majority stake in; and TK Elevator, which Thyssenkrupp has an investment in.

As of Oct. 1, 2023, the new portfolio structure no longer includes the Multi Tracks and Industrial Components segments, instead new segment called Decarbon Technologies was established. Some businesses under the Multi Tracks segment, namely Nucera, Rothe Erde, Uhde, and Polysius, will be reported under Decarbon Technologies going forward. Springs and stabilizers and automation engineering will be reported under Automotive Technology. The bearings business will be classified under Decarbon Technologies, and forged technologies will be reported under Automotive Technology (from Industrial Components).

Thyssenkrupp AG--Revenue by segment

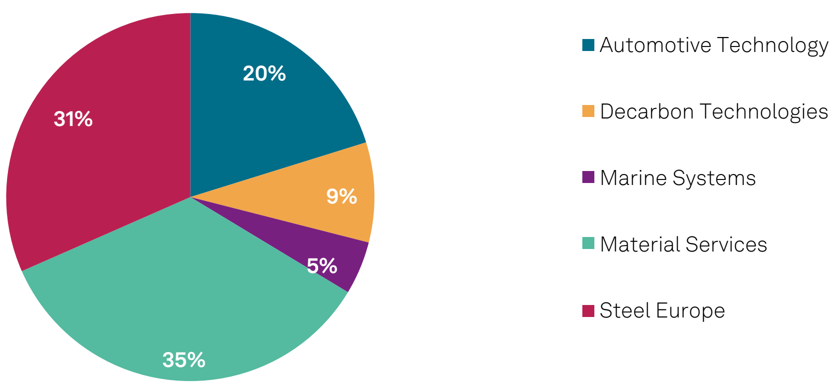
Fiscal year 2023



Source: S&P Global Ratings.

Thyssenkrupp AG--Revenue by segment (new portfolio structure)

Fiscal year 2023



Source: S&P Global Ratings.

Thyssenkrupp generated about €37.6 billion in revenue and about €1.6 billion in S&P Global adjusted EBITDA in fiscal 2023.

Thyssenkrupp is a listed group, 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 stock (about 21%) is held by the Alfried Krupp von Bohlen und Halbach Foundation.

Peer Comparison

thyssenkrupp AG--Peer Comparisons

	Thyssenkrupp AG	Sandvik AB	Alfa Laval AB	ArcelorMittal	ZF Friedrichshafen AG
Foreign currency issuer credit rating	BB/Stable/B	A-/Negative/A-2	BBB+/Stable/--	BBB-/Positive/A-3	BB+/Stable/--
Local currency issuer credit rating	BB/Stable/B	A-/Negative/A-2	BBB+/Stable/--	BBB-/Positive/A-3	BB+/Stable/--
Period	Annual	Annual	Annual	Annual	Annual
Period ending	2023-09-30	2022-12-31	2022-12-31	2022-12-31	2022-12-31
Mil.	EUR	EUR	EUR	EUR	EUR
Revenue	37,536	10,083	4,680	81,124	43,801
EBITDA	1,590	2,174	833	13,925	3,377
Funds from operations (FFO)	1,199	1,578	642	10,572	2,607
Interest	279	154	31	604	451
Cash interest paid	116	124	26	579	350
Operating cash flow (OCF)	2,064	958	278	10,764	1,896
Capital expenditure	1,757	425	166	3,739	1,753
Free operating cash flow (FOCF)	307	533	112	7,025	143
Discretionary cash flow (DCF)	214	(2)	(171)	3,656	(60)
Cash and short-term investments	7,339	942	419	8,702	2,542
Gross available cash	7,339	942	419	8,702	2,542
Debt	1,438	3,582	1,455	15,227	13,223
Equity	12,692	7,256	3,205	55,087	8,595
EBITDA margin (%)	4.2	21.6	17.8	17.2	7.7
Return on capital (%)	(8.5)	16.7	14.1	17.7	5.2
EBITDA interest coverage (x)	5.7	14.1	26.5	23.0	7.5
FFO cash interest coverage (x)	11.3	13.8	25.7	19.3	8.4
Debt/EBITDA (x)	0.9	1.6	1.7	1.1	3.9
FFO/debt (%)	83.4	44.0	44.1	69.4	19.7
OCF/debt (%)	143.5	26.7	19.1	70.7	14.3
FOCF/debt (%)	21.3	14.9	7.7	46.1	1.1
DCF/debt (%)	14.9	(0.1)	(11.8)	24.0	(0.5)

Business Risk

Thyssenkrupp's fair business risk profile is supported by the diversification of its business across several industrial end markets, product lines, and geographies; its leading market position as a steel distributor; and as a Tier 1 supplier of high-tech components for most of its automotive and capital goods operations. The volatile nature of its steel operations, exposure to cyclical end markets, and improving profitability margins (but still below the peer average) constrain the group's business risk.

The group's operating performance heavily depends on its steel operations (€12.4 billion of fiscal 2023 revenue). By nature, steel production and steel distribution operations are more volatile and only have a limited-service share, which leads to more-volatile cash flow generation. Thyssenkrupp is a large-scale producer that has a strong presence in more-resilient markets and industries. The group's product mix skews toward premium flat carbon steels, especially for the auto industry and other steel-using sectors that have demanding quality and service requirements, this results in somewhat less volatility in price and volume compared with that of pure commodity peers.

According to the World Steel Association, Thyssenkrupp ranked 43rd among global steel producers in 2022, down from being in the top 15 in 2017. Cheaper steel imports from China resulted in an oversupply and capacity under-usage in the European steel market; we do not expect this to change in the medium term. We expect earnings volatility to persist, given the steel industry's cyclical nature.

Steel producers are under pressure to reduce their carbon dioxide emissions and transform their operations to produce "green" steel, which will require significant investment. We expect this to weigh on the industry's free cash flow generation and profitability.

A potential separation of the steel business would reduce the size and diversification of Thyssenkrupp's product portfolio. This would, however, be offset by the lower capital intensity and reduced margin and cash flow volatility. We do not expect that a potential separation of the steel business would materially change our business risk assessment.

The Materials Services segment is one of the leading steel distributors in Europe (the other being ArcelorMittal). It contributed €13.6 billion in fiscal 2023 revenue to the group's total revenue of more than €37.6 billion. Materials Services is the market leader in Germany and holds top four positions in Europe, Eastern Europe, and North America. This reflects its exposure to commodity prices as earnings are depressed when markets are volatile, while cash flow volatility is moderated by offsetting working capital movements.

Thyssenkrupp's Automotive Technology segment (which contributes about €5.5 billion in revenue) produces high-tech components for the auto industry. The product spectrum in the powertrain area includes integrated camshafts and cylinder head modules. In the chassis area, the range incorporates manufactured steering and damper systems and axis module assembly. We view the following as positive: i) Thyssenkrupp's position as a Tier 1 supplier for global auto original equipment manufacturers; ii) its product range contains technologically advanced components such as steering systems; and iii) the expected increase in electric vehicle volumes will benefit the business.

The electrification of automobiles will have a lower effect on Thyssenkrupp compared with its peers because a significant portion of the group's product portfolio is already based on technology that is not related to light vehicles with internal combustion engines. Credit negatives include: i) the limited scale and scope of the business compared with large global auto suppliers; ii) the segment's somewhat lower profitability compared with other Tier 1 suppliers; and iii) high investment needs.

The Industrial Components segment (bearings and forged technologies) produces high-precision components for heavy-duty vehicles, industrial applications, and the wind-turbine industry. The product offering includes bearings, crankshafts, and connecting tools. The group ranks No. 1 worldwide for large slewing bearings for wind turbines. We view this operation as mid-scale and well-positioned in its markets. It is supported by solid segment profit margins, compared with peers in the capital goods sector.

The Marine Systems segment manufactures surface vessels and submarines and is exposed to project risks, which has in the past led to cash flow volatility, or negative or low earnings contributions. The restructuring has brought notable benefits from fiscal 2023 onward, including an improved EBIT margin, increasing from 1.3% in fiscal 2022 to 4.2% in fiscal 2023. Given this segment contributed little revenue and EBITDA to the group until fiscal 2023, its effect on the business risk profile remains limited.

The now dissolved Multi Tracks business includes a portfolio of companies, which Thyssenkrupp wanted to either sell, form partnerships from, or close. It includes Thyssenkrupp's plant technology business Polysius and Uhde, which engages in large-scale turn-key engineering projects for the process industry, as well as the ongoing development of key elements of the decarbonization strategy. In the past, project charges have lowered operating results. Over the past 24 months, Thyssenkrupp has made good progress on restructuring its operations. Post divesting five businesses in fiscal 2022, including to float Nucera (its hydrogen technologies business) on the stock market at the beginning of the fourth quarter of fiscal 2022, the segment reported a similar loss in fiscal 2023 overall. Thyssenkrupp continues to pursue the disposal of automation engineering and springs and stabilizers.

Financial Risk

We base our assessment of Thyssenkrupp's financial risk profile on the group's resilient key credit metrics, even in the case of harsher economic conditions and positive FOCF in fiscal 2023. This will be on the back of a huge inflow in fiscal 2023 driven by raw material price normalization and supply chain easing. We expect only limited positive FOCF in our forecast period and its cash flow volatility to remain key constraining factors to our assessment. We estimate these issues will persist over the next 12-24 months.

Thyssenkrupp's adjusted debt stood at €1.4 billion at the end of fiscal 2023, including financial debt of about €2.3 billion, €678 million of lease obligations, about €210 million for asset retirement obligations, and €4.8 billion for pension obligations. The increase in interest rates resulted in higher discount rates, which reduced the group's pension obligations by more than €1 billion over the past 24 months. We exclude €200 million from the cash balance of approximately €7.3 billion as of fiscal 2023 because we assume it will be not available for immediate debt repayments.

Our base-case scenario assumes that Thyssenkrupp's FFO to debt will stay comfortably above 60% and debt to EBITDA will remain below 1.0x over the next two years. Management remains committed to reducing debt on the balance sheet, restructuring the business, and raising the credit rating. We expect the group to use the cash held on its balance sheet to pay back its financial debt at maturity. Management has announced to resume paying a regular dividend of €93 million p.a. We do not expect Thyssenkrupp to increase its dividend or implement any other shareholder-friendly measures, until its new APEX performance program is completed and FOCF generation capacity significantly improves.

Debt maturities

- Fiscal 2024: €1,589 million
- Fiscal 2025: €628 million
- Thereafter: €130 million

thyssenkrupp AG--Financial Summary

Period ending	Sep-30-2018	Sep-29-2019	Sep-30-2020	Sep-30-2021	Sep-30-2022	Sep-30-2023
Reporting period	2018a	2019a	2020a	2021a	2022a	2023a
Display currency (mil.)	EUR	EUR	EUR	EUR	EUR	EUR
Revenues	34,777	41,996	28,899	34,015	41,140	37,536
EBITDA	1,408	1,785	(315)	1,485	2,978	1,590
Funds from operations (FFO)	771	1,243	(667)	1,149	2,466	1,199
Interest expense	396	346	264	205	147	279
Cash interest paid	283	274	222	159	131	116

thyssenkrupp AG--Financial Summary

Operating cash flow (OCF)	347	284	(4,484)	100	618	2,064
Capital expenditure	925	1,391	1,334	1,448	1,296	1,757
Free operating cash flow (FOCF)	(578)	(1,107)	(5,818)	(1,348)	(678)	307
Discretionary cash flow (DCF)	(671)	(1,200)	(5,818)	(1,348)	(678)	214
Cash and short-term investments	2,993	3,706	11,547	8,974	7,638	7,339
Gross available cash	2,993	3,706	11,547	8,974	7,638	7,339
Debt	7,259	13,022	2,844	3,863	2,291	1,438
Common equity	3,275	2,220	10,174	10,845	14,742	12,692
Adjusted ratios						
EBITDA margin (%)	4.0	4.2	(1.1)	4.4	7.2	4.2
Return on capital (%)	4.4	2.7	(31.8)	2.2	8.3	(8.5)
EBITDA interest coverage (x)	3.6	5.2	(1.2)	7.2	20.3	5.7
FFO cash interest coverage (x)	3.7	5.5	(2.0)	8.2	19.8	11.3
Debt/EBITDA (x)	5.2	7.3	(9.0)	2.6	0.8	0.9
FFO/debt (%)	10.6	9.5	(23.5)	29.7	107.7	83.4
OCF/debt (%)	4.8	2.2	(157.7)	2.6	27.0	143.5
FOCF/debt (%)	(8.0)	(8.5)	(204.6)	(34.9)	(29.6)	21.3
DCF/debt (%)	(9.2)	(9.2)	(204.6)	(34.9)	(29.6)	14.9

Reconciliation Of thyssenkrupp AG Reported Amounts With S&P Global Adjusted Amounts (Mil. EUR)

	Debt	Shareholder Equity	Revenue	EBITDA	Operating income	Interest expense	S&PGR adjusted EBITDA	Operating cash flow	Dividends	Capital expenditure
Financial year	Sep-30-2023									
Company reported amounts	2,347	11,838	37,536	1,574	(1,457)	93	1,590	2,064	93	1,757
Cash taxes paid	-	-	-	-	-	-	(275)	-	-	-
Cash interest paid	-	-	-	-	-	-	(116)	-	-	-
Trade receivables securitizations	500	-	-	-	-	-	-	-	-	-
Lease liabilities	678	-	-	-	-	-	-	-	-	-
Postretirement benefit obligations/ deferred compensation	4,841	-	-	3	3	190	-	-	-	-
Accessible cash and liquid investments	(7,139)	-	-	-	-	-	-	-	-	-
Dividends from equity investments	-	-	-	25	-	-	-	-	-	-
Asset-retirement obligations	211	-	-	-	-	(4)	-	-	-	-
Nonoperating income (expense)	-	-	-	-	135	-	-	-	-	-
Noncontrolling/ minority interest	-	854	-	-	-	-	-	-	-	-

Reconciliation Of thyssenkrupp AG Reported Amounts With S&P Global Adjusted Amounts (Mil. EUR)

	Debt	Shareholder Equity	Revenue	EBITDA	Operating income	Interest expense	S&PGR adjusted EBITDA	Operating cash flow	Dividends	Capital expenditure
EBITDA - Gain/(loss) on disposals of PP&E	-	-	-	(9)	(9)	-	-	-	-	-
EBITDA: Business divestments	-	-	-	(4)	(4)	-	-	-	-	-
EBITDA: other	-	-	-	1	1	-	-	-	-	-
Total adjustments	(909)	854	-	16	126	186	(391)	-	-	-

S&P Global Ratings adjusted	Debt	Equity	Revenue	EBITDA	EBIT	Interest expense	Funds from Operations	Operating cash flow	Dividends	Capital expenditure
	1,438	12,692	37,536	1,590	(1,331)	279	1,199	2,064	93	1,757

Liquidity

Our short-term issuer credit rating on Thyssenkrupp is 'B', reflecting the long-term issuer credit rating of 'BB'. We project that liquidity sources will exceed potential uses by more than 2.0x over the 12 months from Sept. 30, 2023, 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

- Cash and cash equivalents of about €7.4 billion;
- Access to undrawn bank lines in the form of revolving credit facilities of about €1.5 billion;
- About €1.0 billion-€1.2 billion in operating cash flows over the next 12 months; and
- About €500 million in the working capital inflow in the next 12 months.

Principal liquidity uses

- Short-term debt maturities of about €1.6 billion in the next 12 months, and €0.6 billion in the following 12 months;
- About €1.0 billion in intra-year working capital swings;
- Capex of €1.6 billion-€1.7 billion a year in the next 24 months; and
- Dividends of less than €100 million a year in the next 24 months.

Covenant Analysis

Requirements

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

Environmental, Social, And Governance

Environmental factors are a moderately negative consideration in our credit rating analysis of Thyssenkrupp, similar to its European steel peers. This mainly recognizes the group's investments and transition plan toward green steel production. As a steel producer (more than 30% of group revenue in fiscal 2023), Thyssenkrupp is exposed to the high risk of changing environmental regulation and more stringent requirements for carbon dioxide emissions. This 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 (340 gigawatt hours in fiscal 2022), the group still consumed about 68 terawatt hours of energy. We recognize Thyssenkrupp's strong technological capabilities in providing hydrogen technologies.

Governance factors are a negative consideration. The group 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 think 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: 2028
- EBITDA at emergence: €1.4 billion (we assume maintenance capex at 2.5% of revenue; cyclical adjustment of 5.0% and operational adjustment of 10.0%, 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: €4.2 billion
- First priority claims: €0.1 billion
- Value available for senior unsecured claims: €4.1 billion
- Senior unsecured claims: €3.5 billion

- Recovery range: 50%-70% (capped at 65%)
- All debt amounts include six months of prepetition interest

Rating Component Scores

Foreign currency issuer credit rating	BB/Stable/B
Local currency 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+
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)
Stand-alone credit profile	bb

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
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria | Corporates | General: Corporate Methodology, 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 Detail (as of December 22, 2023)*

Thyssenkrupp AG	
Issuer Credit Rating	BB/Stable/B
Senior Unsecured	BB
Issuer Credit Ratings History	
21-Dec-2022	BB/Stable/B
13-Dec-2021	BB-/Stable/B
20-Jan-2021	BB-/Negative/B
06-Oct-2020	BB-/Stable/B
04-Mar-2020	BB-/Positive/B
19-Aug-2019	BB-/Developing/B

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings credit ratings on the global scale are comparable across countries. S&P Global Ratings credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.