

Chinese Engineering Machinery Leaders Take on Global Giants, Aggressive Financial Strategies Imply Credit Risks

Chinese and Foreign Leaders Comparison: Engineering Machinery

June 17, 2024

Key Takeaways

- In our view, with the technological gap between Chinese and foreign engineering construction leaders gradually filled, domestic manufacturers, represented by Xugong Group and SANY Group, have seen their global competitiveness significantly enhanced.
- We think a sole price advantage would not be enough for Chinese engineering machinery companies to win the competition across global markets, and they would seek major breakthroughs in electrification and intelligentization.
- Financial risks facing Chinese and overseas companies vary significantly, and high leverages and substantially volatile financial profiles may bode credit risks for the former.
- Weak profitability, aggressive investment strategies, and reliance on credit sales lead to noticeably higher financial risks for Chinese companies relative to overseas leaders.

ANALYSTS

Huang Wang
Beijing
+86-10 6516 6029
Huang.wang@spgchinaratings.cn

Zhiang Li
Beijing
+86-10 6516 6055
Zhiang.li@spgchinaratings.cn

Ren yuan Zhang
Beijing
+86-10 6516 6028
Ren yuan.zhang@spgchinaratings.cn

Chinese engineering machinery manufacturers have seen their competitive strengths and influence significantly enhanced in the global markets, underpinned by accelerated technological innovation, diversified product mix, and economies of scale led by vast market space in China. In our view, in the context of intensifying global price competition over the next few years, Chinese manufacturers may not gain an upper hand over its global peers if depending solely on price competition, and they will rely on electrification and intelligentization to gain a competitive edge in the competition.

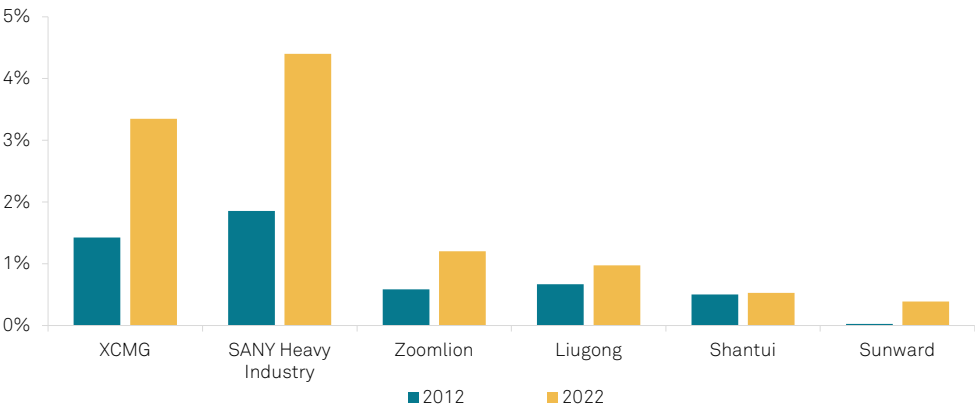
Chinese and foreign manufacturers differ remarkably from a financial risk perspective. The elevated leverage and high financial volatility may induce certain credit risks for Chinese manufacturers. Chinese engineering machinery leaders' financial risks are typically reflected by their weak profitability, aggressive investment strategies, and reliance on credit sales. To the contrary, international giants, leveraging their solid ability to generate free cash flow and maintain nearly a net cash position, enjoy strong resilience against risks despite operating in an industry featuring strong cyclicalities.

Chinese Engineering Machinery Manufacturers’ Global Competitiveness Rises Materially Amid Narrowing Technological Gap

Chinese engineering machinery manufacturers’ global influence has improved significantly, along with narrowing technological and quality gap relative to overseas giants. In 2012-2022, major Chinese manufacturers saw their overseas market shares expanding remarkably and achieved progress in core technologies, and product quality and innovation, laying the foundation for winning more shares in the global markets.

Chart 1

Sampled Chinese Manufacturers' Overseas Market Shares in 2012 and 2022

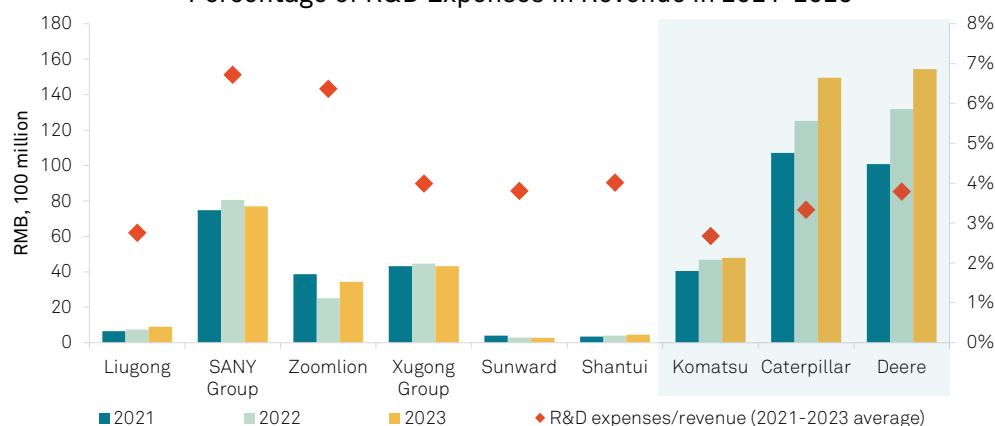


Note: 1. Overseas market share = the company's overseas revenue/total sales amount in overseas markets. 2. Total sales amount in overseas markets is our estimate; 3. Foreign currencies are converted using historical exchange rates.
Source: Company announcements, China Construction Machinery Industry Yearbook, Wind, S&P Global (China) Ratings.
Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

The increasing shares for Chinese manufacturers across global markets are mainly attributable to their technological innovation, diversified product mix, and price advantages driven by economies of scale. Over the past decades, Chinese manufacturers have resolved numerous technological bottlenecks in the engineering machinery sector and significantly boosted the production capacity for key components, exhibiting world-leading technological innovation capabilities. The enormous market size and diversified product needs in China have encouraged Chinese manufacturers to produce a comprehensive universe of products, spanning micro- to extra-large-sized machines. China’s sizable market has also formed the ground for Chinese manufacturers to achieve economies of scale. Production at scale and cost advantages have reinforced competitiveness of “Made in China” products. In developing economies featuring weak infrastructure, customers may prioritize price factor when making purchase decisions. As such, Chinese products are likely to stand out due to their stable quality and sound cost efficiency.

Chart 2

Chinese and Foreign Sampled Entities's R&D Expenses and Percentage of R&D Expenses in Revenue in 2021-2023



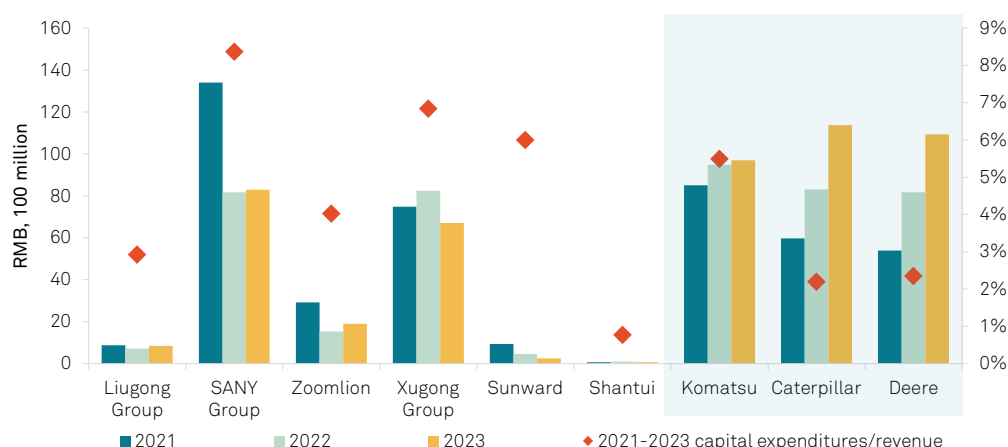
Note: 1. Foreign currencies are converted using historical exchange rates. 2. Komatsu's fiscal year begins on April 1 and end on March 31 of the next calendar year, applied throughout. 3. Deere's financial data for the current period as of October 31, applied throughout.

Source: Annual reports of company, CIQ, Wind, S&P Global (China) Ratings.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Chart 3

Chinese and Foreign Sampled Entities's Capital Expenditures and Percentage of Capital Expenditures in Revenue in 2021-2023



Note: Foreign currencies are converted using historical exchange rates.

Source: Annual reports of companies, CIQ, Wind, S&P Global (China) Ratings.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Price Advantage Alone Not Enough to Win Global Competition, Major Breakthroughs to Emerge for Electrification and Intelligentization

In our view, amid fiercer price competition across the global markets, Chinese manufacturers may find it hard to sustain a solid market share worldwide hinging solely on price advantages. International big names such as Komatsu and Caterpillar have set out targeted strategies to compete with China, with plans to launch cost efficient products to solidify their market position.

These globally renowned brands have built competitive edges through wide market recognition, well-established customer base and distribution channels, and mature and stable marketing and services networks across the global markets after decades of development. These would become the obstacles unlikely to be circumvented by Chinese companies in the process of expanding overseas market shares and building brand reputation. Chinese companies still need to adapt better to the sales habits of local markets, reinforce after-sales services, and stick to a long-term commitment to improving product quality and reputation.

China is a global pioneer in developing electrified products, either from the perspective of development speed or of eagerness. We consider electrification a critical initiative for Chinese manufacturers to make a breakthrough in international competition. The development of electrified products would compensate Chinese manufacturers' disadvantages in engine manufacturing, and the complete industry chain and price strengths of the battery sector provide good support for the development and commercialization of electrified engineering machinery products. Chinese manufacturers have seen certain progress regarding the indigenous development in motor control unit, battery control unit, and transmission system of electrified products, paving the way for these companies to realize electrification. According to public information about electrification progress for global leaders in 2023, Chinese manufacturers rolled out electrified products at a faster pace and sustained greater volume of existing products. In addition, they have begun to make electrified products at scale and already seen a portion of revenue contributed by these products. Conversely, global giants stay more conservative on becoming electrified. In our view, domestic engineering machinery manufacturers have made more vigorous moves in introducing new electrified products, so that they are more likely to capture the emerging opportunities in the global markets.

Table 1

New Energy Product Development Progress for Chinese and Foreign Sampled Entities			
Komatsu		XCMG	
1.	Unveiled four electric construction equipment models in 2023.	1.	New energy products contributed nearly 10% of total revenue in 2023.
2.	Acquired ABS, a U.S. battery solution provider.	2.	BYD partnered with Xugong Group to set up Xuzhou Fudi Battery Technology Limited.
3.	Collaborated with General Motor to jointly develop hydrogen fuel cell modules for Komatsu 930E electric mining trucks.	3.	Developed 10 new energy components, 15 hydraulic parts, 18 transmission components, and 3 motor control parts in 2023.
4.	Developed a concept model for medium-sized hydraulic excavator powered by hydrogen fuel cell and commenced PoC test.		
Caterpillar		SANY	
1.	Launched four electric engineering machinery prototypes as of early 2023.	1.	Rolled out over 130 new energy engineering machinery products in 2023.
2.	The prototype for the first electric mining truck – 793 large-sized mining truck debuted in November 2022.	2.	Reported 3.15billion RMB in revenue from electric and hybrid products and 130 million RMB from hydrogen powered products.
Deere		Zoomlion	
1.	Acquired the majority of stake in German battery maker Kreisell in January 2022.	1.	Launched 49 new energy products in 2023.
2.	644X and 944X four-wheel drive loaders powered by electric motor and diesel engine were put into production.	2.	177 new energy products were for sale as of 2023, comprising those powered by battery, hybrid power, and hydrogen fuel.
Liugong Machinery			
		1.	Completed the development of 39 new electric products in 2023.
		2.	Achieved breakthroughs in core technologies relating to cell and battery control unit.

Sunward

Developed the largest range extend electric rotary drilling rig and the innovative hydraulic hybrid rotary drilling rig and intelligent deep water well truck-mounted drilling rig in the sector.

Source: Annual reports and announcements of companies, public information, complied by S&P Global (China) Ratings.

We think intelligentization represents a key direction for the sector's development going forward. The shared and complementary technologies enjoyed by Chinese manufacturers through partnerships with domestic internet and technological companies are expected to drive breakthroughs in intelligentization. Leveraging their prolonged history and rich experience, Caterpillar and Komatsu have built solid technological edges in the fields of automation and intelligentization. Yet, we believe Chinese manufacturers will benefit from their collaboration with leading internet and technological companies to obtain shared and complementary technologies. In addition, they would achieve economies of scale rapidly in their sales of new equipment thanks to the enormous market size in China. This could compensate the massive investments at initial R&D phase for developing intelligent products and encourage companies to make investment.

Table 2

Intelligentization Progress for Chinese and Foreign Sampled Entities	
Komatsu	XCMG
<ol style="list-style-type: none"> In FY2022, 2,448 units of ICT-powered equipment were sold across overseas markets. As of the end of February 2024, over 700 units of Komatsu FrontRunner AHS were deployed on Komatsu's autonomous driving off-highway mining trucks. 	<p>Xugong XDE240 autonomous mine dumpers commenced operation.</p>
Caterpillar	SANY Heavy Industry
<p>Command remote control technology is applied to 60 products, covering mining sprinkler, driller, bulldozer, wheel loader, and LHD loader, allowing these machines to be controlled remotely rather than manually in the cockpit.</p>	<ol style="list-style-type: none"> Launched the first batch of autonomous electric loaders, and mixing plants were delivered for commercialized operation. First rescue robot was delivered.
Deere	Zoomlion
<p>Released automated 8R farming excavator, equipped with GPS navigation system and 3D camera to enable autonomous farming</p>	<p>The company acquired Luchang Technology via tender offer in 2022, with major products comprising smart cockpits, intelligent driver assistance system, and autonomous driving solutions.</p>
	Liugong Machinery
	<p>Autonomous loaders and road rollers are at promotion and trial use phase.</p>
	Sunward
	<p>Completed various autonomous and intelligent emergency rescue equipment such as modularized forest fire vehicles and demolition robots.</p>

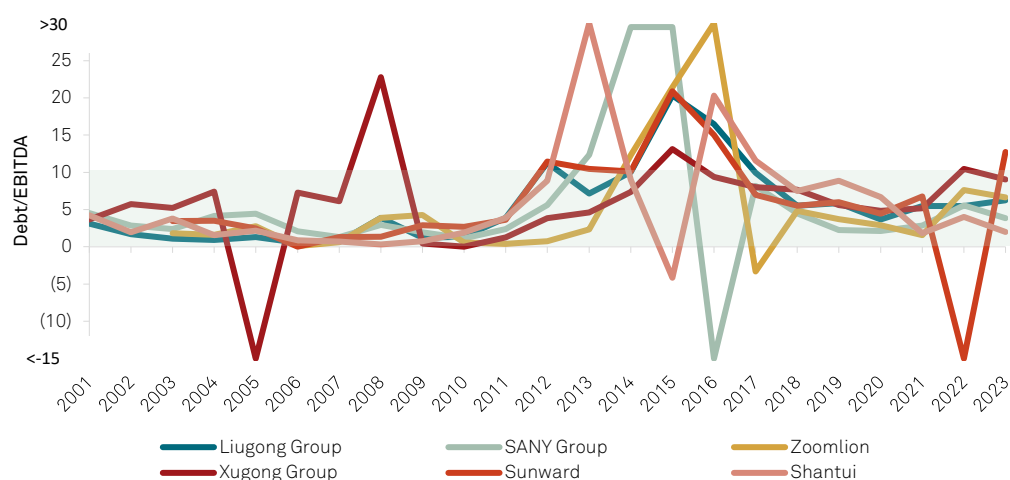
Source: Annual reports and announcements of companies, public information, complied by S&P Global (China) Ratings.

Significantly Differentiated Financial Risks for Chinese and Foreign Manufacturers, High Leverage and Great Financial Volatility May Fuel Credit Concerns

Chinese companies follow comparatively aggressive financial strategies, giving rise to their high leverage levels and volatile financial profiles, which contribute to the diverging creditworthiness between Chinese and foreign engineering machinery leaders. The three global giants – Komatsu, Caterpillar, and Deere – have maintained their leverage ratios between 0.1-0.6 over the past three years, thanks to their solid ability to generate free cash flow steadily, which helps them sustain a roughly net cash position. The sound financial profiles make these companies highly resilient against risks despite operating in an industry showing strong cyclicalities. By contrast, domestic manufacturers maintain higher leverage relative to their global peers even during the sales-booming periods, and their leverage levels have exhibited substantial fluctuation over the past two decades. We view stable financial policy and sound financial metrics as a key premise for cyclical companies to withstand the cyclical trough.

Chart 4

Chinese Manufacturers' Leverage Volatility in 2001-2023

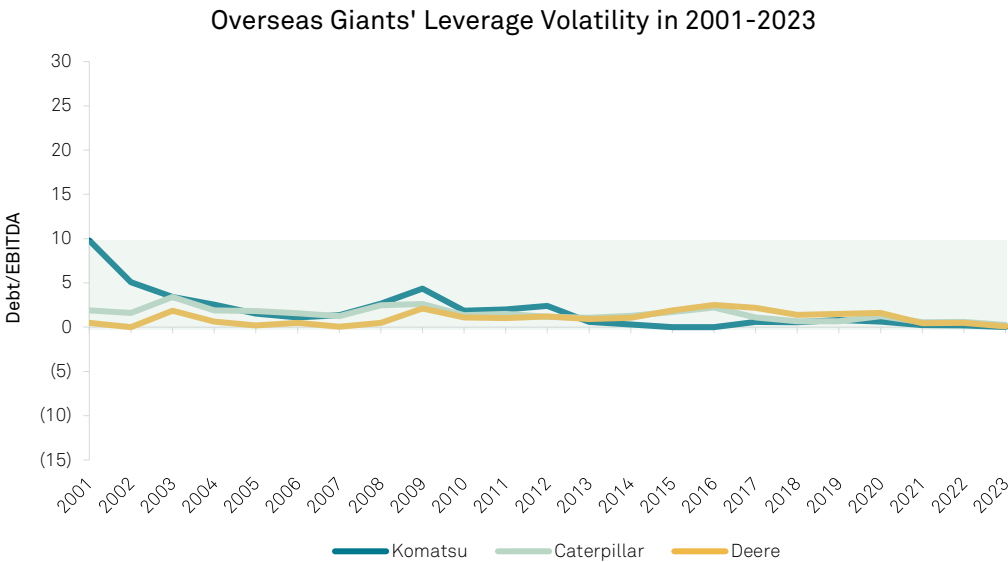


Note: 1. Debt data in this chart does not include guaranteed repurchase responsibilities; 2. 2001-2005 data for Liugong Group is substituted with Liugong Machinery data due to data omission. 3. 2001-2005 data for Xugong Group is substituted with XCMG data due to data omission. 4. All metrics in this chart are adjusted by S&P Global (China) Ratings.

Source: Public information, Wind, S&P Global (China) Ratings.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Chart 5



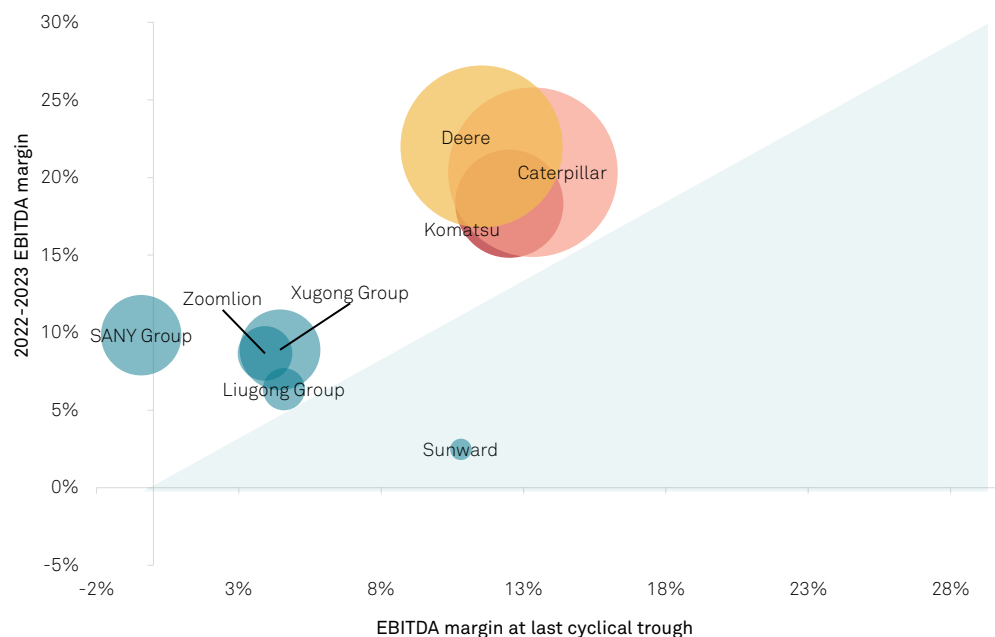
Note: All data adjusted by S&P Global (China) Ratings.
Source: CIQ.
Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Weak Profitability, Aggressive Investment Strategies, and Reliance on Credit Sales Raise Chinese Manufacturers’ Financial Risks Considerably

Although sampled entities’ profitability has improved during the present industrial cycle, marked earnings gap still exists between them and international mega companies. Komatsu’s profit bottomed in 2008-2009 and Caterpillar and Deere’s earnings hit the trough in 2015-2016, with an average EBITDA margin ranging between 11%-13%. In 2022-2023, their profitability improved significantly, lifting their EBITDA margin to 18%-22%. By contrast, domestic manufacturers typically maintain a much lower EBITDA margin, generally below 10%, or even below 5% for certain weaker companies. The compressed margin is owing to the intense price competition across the sector in China.

Chart 6

Chinese Leaders' Profitability is Stable Relative to Last Cycle But Significantly Weaker Compared to International Mega Companies

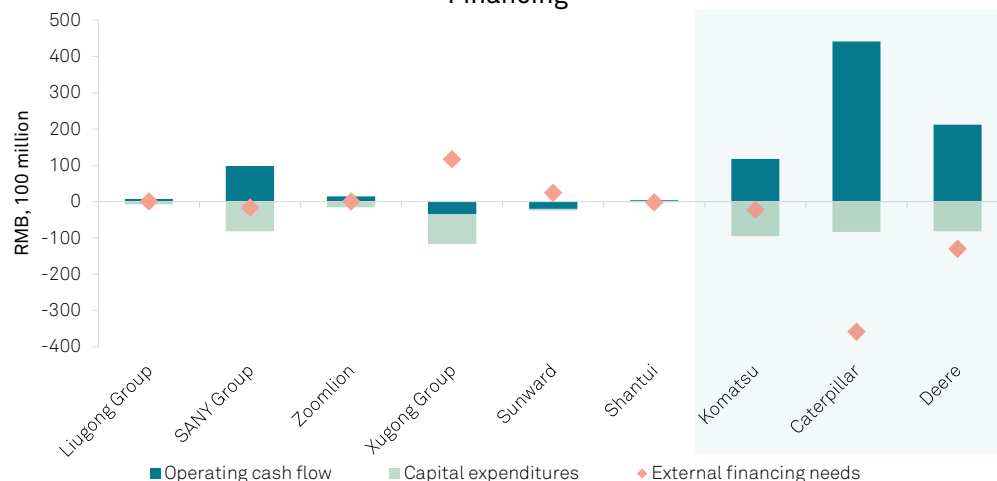


Note: 1. Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings. 2. We take the latest earnings bottom as the last cyclical trough. Cyclical troughs for Chinese and foreign manufacturers are not fully overlapped. 3. Bubble size represents revenue scale. 4. Xugong Group's data at the last cyclical trough is substituted with XCMG data due to data insufficiency. Source: Public information, CIQ, S&P Global (China) Ratings. Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Chinese engineering machinery companies' cash flow coverage for their capital expenditures is relatively weak, which may further dampen their financial stability. We have observed over the past two years that Chinese companies' liquidity profiles have deteriorated somewhat, causing capital expenditures to be inadequately covered by operating cash flow. In this case, companies are urged to seek external financing, increasing the debt size as such. Their capital expenditures are aimed for plant construction and purchase of equipment. In our view, their relatively aggressive financial strategies, albeit having fostered more vigorous business patterns, have led to some potential risks which may hinder their ability to reinforce global competitiveness consistently in the long run. Given the strong cyclicity of the engineering machinery sector, elevated debt level may render a company more vulnerable during the cyclical trough. Comparatively, global giants maintain a cash flow much higher than their capital expenditure needs, leading to limited demand for external financing. Cash flow surplus constitutes a stable source for them to accumulate cash.

Chart 7

Chinese Manufacturers See Limited Coverage of Operating Cash Flow for Capital Expenditures in 2022, Still in Need of External Financing



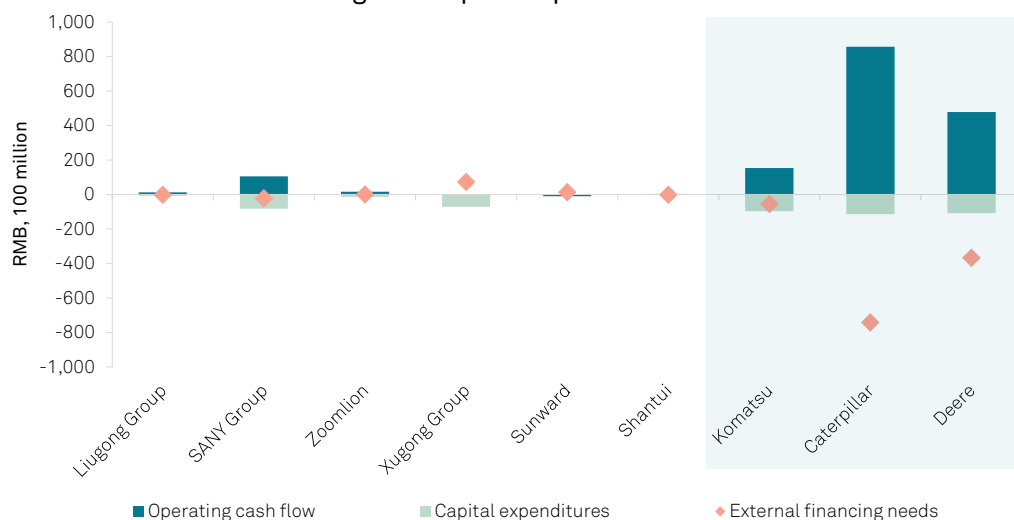
Note: 1. Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings. 2. Foreign currencies are converted using historical exchange rates.

Source: Public information, CIQ, S&P Global (China) Ratings.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Chart 8

Chinese Manufacturers' Operating Cash Flow Still Provided Weak Coverage for Capital Expenditures in 2023



Note: 1. Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings. 2. Komatsu's operating cash flow is our estimate. 3. Foreign currencies are converted using historical exchange rates.

Source: Public information, CIQ, S&P Global (China) Ratings.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

The heavy reliance on credit sales by Chinese manufacturers may add to potential financial risks. We include off-balance-sheet guarantee into debt since we believe guaranteed repurchase may make these companies obliged to repay debt on behalf of its franchisers and customers. Data collected during the last industrial cycle suggests that these companies made repurchase at a substantial scale and booked bad debts accordingly amid the industrial trough. These led to rising

liquidity needs for the period and thus a weakened liquidity profile. Responsibilities pertaining to guaranteed repurchase are a primary contributor to the high leverage of Chinese manufacturers.

Chart 9

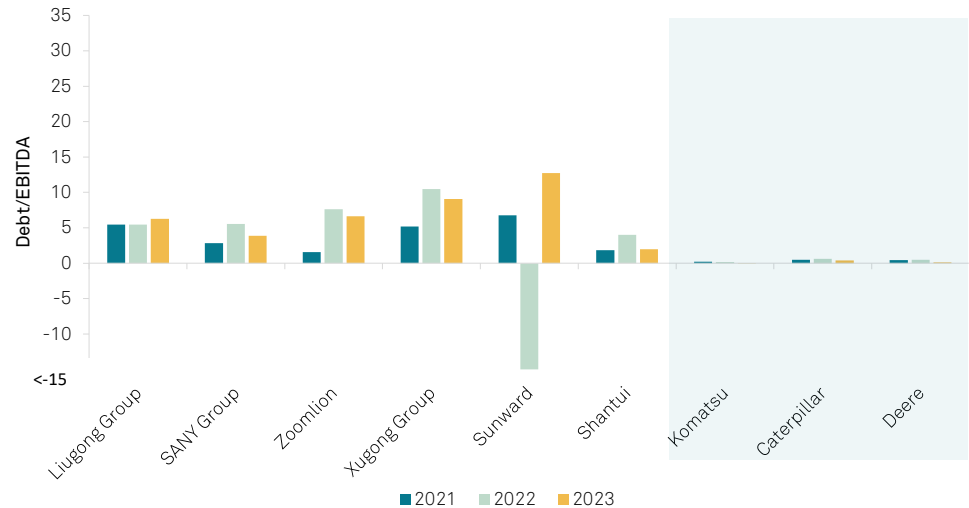
Chinese Manufacturers' Leverage Levels in 2021-2023 (Including Guarantee-related Responsibilities)



Note: Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings.
Source: Public information, CIQ, S&P Global (China) Ratings.
Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Chart 10

Chinese Manufacturers' Leverage Levels in 2021-2023 (Excluding Guarantee-related Responsibilities)



Note: Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings.
Source: Public information, CIQ, S&P Global (China) Ratings.
Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

Comprehensive Creditworthiness Comparison Between Chinese and Foreign Leaders under Our Credit Assessment Framework

We take into account a company's business risk profile and financial risk profile to determine its creditworthiness.

We think Chinese and foreign leaders differ in terms of business scale, global presence, operating efficiency, and profitability. Global giants' revenue scales are still multiple times the sizes of Chinese manufacturers. While Chinese leading companies see the percentage of their overseas revenue approaching that for global mega names, marked difference still exists when it comes to absolute revenue scale. Comparatively, international leaders have developed a more extensive business coverage along the industry chain and achieved deep market penetration through global distribution networks. Caterpillar significantly outperforms Chinese companies in terms of accounts receivables and inventory turnovers, while Komatsu and Deere don't have notable turnover advantages. Concerns over Chinese companies' operating efficiency lies more in their guaranteed repurchase responsibilities associated with the high proportion of their credit sales. As the brand premiums and intensity of price competition differ across domestic and overseas markets, Chinese companies' profitability contrast significantly with that for overseas companies, whose average EBITDA margin nearly doubles that of their Chinese peers.

Table 3

Business Risk Profile: Peer Comparison for Sampled Entities (RMB: 100 million, 2023)				
	Caterpillar	Komatsu	Deere	Xugong Group / XCMG ²
Revenue	4,529	1,845	4,144	1,027
Percentage of revenue from after-sales services and products	About 30%	About 40%	-	-
Product diversification	High, over 3,000 machines and more than 1,200 accessories	High	High	High
Global market share ³	16.8%	10.4%	6.1%	5.3%
Global ranking ³	1st	2nd	3rd	4th
Degree of diversification at end market	High	High	Moderate, concentrated revenue sources with 58% of revenue contributed by agricultural equipment	High
Overseas capacity	Overseas plants distributed across 16 countries and 54 regions	69 global production bases	Nearly 60 overseas plants	11 overseas manufacturing bases
Number of overseas franchisers	43 franchisers in U.S.; 113 franchisers outside U.S. to	A global network comprising 211 distributors	Products sold across over 100 countries	300 overseas franchisers and 2000 overseas services centers

	serve 191 countries	across 150 countries		
Overseas revenue scale	230.1 billion RMB ⁵	164.2 billion RMB	198.6 billion RMB	37.2 billion RMB
Percentage of overseas revenue	48.4% ⁵	88.7%	44.3%	40.1%
Accounts receivable days	Excluding financial receivables: 54 Including financial receivables: 105	111	Excluding financial receivables: 47 Including financial receivables: 364	167
Inventory days	148	184	85	172
R&D expenses	149	48	159	43
R&D expenses/revenue	3.3%	2.6%	3.8%	4.2%
Gross margin (2022-2023 average)	33.6%	30.3%	34.1%	23.6%
EBITDA margin (2022-2023 average)	20.3%	18.3%	22.0%	8.9%

Business Risk Profile: Peer Comparison for Sampled Entities (RMB: 100 million, 2023) (cont.)

	SANY Group / SANY Heavy Industry ²	Zoomlion	Liugong Group/ Liugong Machinery ²	Sunward	Shantui
Revenue	1,020	471	281	72	105
Percentage of revenue from after-sales services and products	-	-	-	-	-
Product diversification	High	High	Moderate	Moderate	Moderate
Global market share ³	4.2%	2.4%	1.6%	0.3%	0.6%
Global ranking ³	6th	12th	19th	41st	31st
Degree of diversification at end market	High	High	Moderate	Moderate	Moderate
Overseas capacity	4 overseas manufacturing bases (U.S., Germany, India, and Brazil)	Production bases located in Italy, Germany, Mexico, and Brazil	4 overseas manufacturing bases (Poland, Brazil, and Argentina)	-	-
Number of overseas franchisers	Over 400 overseas subsidiaries, joint ventures, and franchisers	-	Partnerships with over 300 franchisers and 2700 stores in overseas markets	Collaboration with over 60 overseas franchisers	Over 100 overseas franchisers and distributors
Overseas revenue scale	43.2 billion RMB	17.9 billion RMB	11.5 billion RMB	4.1 billion RMB	5.9 billion RMB
Percentage of	58.4%	38.0%	41.7%	56.8%	55.8%

overseas revenue					
Accounts receivable days	122	201	101	285	107
Inventory days	165	194	136	233	75
R&D expenses	77	34	9	3	5
R&D expenses/revenue	7.5%	7.3%	3.2%	3.9%	4.3%
Gross margin (2022-2023 average)	26.4%	26.5%	19.6%	28.6%	18.1%
EBITDA margin (2022-2023 average)	10.0%	8.7%	6.4%	2.5%	6.8%

Note: 1. Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings. 2. Part of business data for SANY Group, Xugong Group, and Liugong Group comes from their listed subsidiaries. 3. Global market shares and revenue rankings come from Yellow Table published by KHL in 2024. 4. Foreign currencies are converted using historical exchange rates. 5. Due to restriction on data disclosure, Caterpillar's overseas revenue is the revenue generated outside U.S. and Canada.

Source: Company announcements, CIQ, KHL, Wind, S&P Global (China) Ratings.

In our view, Chinese and foreign leaders' financial strategies, cash flow generating ability, and financial stability vary considerably. Compared to their overseas peers, Chinese manufacturers have weaker ability to generate cash flow, reflected by their significantly different FFO, CFO, and FOCF metrics. In spite of inadequate cash flow, Chinese manufacturers, represented by Xugong Group and SANY Group are not taking a more prudent stance when it comes to capital expenditures. Their capital expenditures are made primarily for plant construction and equipment procurement, which still need to be financed by more external funds.

Table 4

Financial Risk Profile: Peer Comparison for Sampled Entities (RMB: 100 million, 2023)

	Caterpillar	Komatsu	Deere	Xugong Group
Capital expenditures	98	96	96	75
Debt/EBITDA (x)	0.4	0.1 ³	0.3	17.1
FFO/Debt	216.2%	389.3% ²	462.0%	4.7%
CFO/Debt	225.5%	204.2% ²	264.9%	-1.2%
FOCF/Debt	192.6%	38.9% ²	199.3%	-6.0%
EBITDA interest coverage (x)	23.5	18.1 ²	33.6	4.4

Financial Risk Profile: Peer Comparison for Sampled Entities (RMB: 100 million, 2023) (cont.)

	SANY Group	Zoomlion	Liugong Group	Sunward	Shantui
Capital expenditures	82	17	8	4	1
Debt/EBITDA (x)	6.9	9.0	10.3	-8.6	3.3
FFO/Debt	9.1%	10.0%	7.6%	-0.9%	30.0%
CFO/Debt	14.9%	4.4%	5.2%	-9.3%	16.4%
FOCF/Debt	2.9%	0.1%	0.8%	-11.6%	12.3%
EBITDA interest coverage (x)	2.6	5.1	3.9	0.5	24.0

Note: 1. Data of Komatsu, Caterpillar, and Deere adjusted by S&P Global (China) Ratings; domestic sampled entities' data adjusted by S&P Global (China) Ratings. 2. Due to data unavailability, Komatsu's FFO to debt ratio, CFO to debt ratio, FOCF to debt ratio, and EBITDA interest coverage are actual values in FY2022. 3. Komatsu's debt to EBITDA ratio is the average of the actual value in 2022 and our estimated value for 2023. 4. Foreign currencies are converted using historical exchange rates.

Source: Company announcements, CIQ, Wind, S&P Global (China) Ratings.

Appendix: List of Sampled Entities

Company Name	Abbreviation
Guangxi LiuGong Group Co., Ltd.	Liugong Group
SANY Group Co., Ltd.	SANY Group
Zoomlion Heavy Industry Science & Technology Co., Ltd.	Zoomlion
Xuzhou Construction Machinery Group Co., Ltd.	Xugong Group
Sunward Intelligent Equipment Co., Ltd.	Sunward
Shantui Construction Machinery Co., Ltd.	Shantui
SANY Heavy Industry Co., Ltd.	SANY Heavy Industry
XCMG Construction Machinery Co., Ltd.	XCMG
Guangxi Liugong Machinery Co., Ltd.	Liugong Machinery
Komatsu Ltd.	Komatsu
Caterpillar Inc.	Caterpillar
Deere & Co.	Deere

This report does not constitute a rating action.

Please follow our WeChat Official Account to explore more:



This document is an English translation of the Chinese original and is provided for reference purposes only at the discretion of S&P China. This translation is not required by law or any regulation, and should not be used for any regulatory purpose. While reasonable efforts have been made to ensure the consistency of this translation with the Chinese original, certain elements may not be translated accurately due to fundamental linguistic differences between the two languages. The Chinese version will prevail in the event of any inconsistency between the English version and the Chinese version.

Copyright © 2024 by S&P Ratings (China) Co., Ltd. All rights reserved.

S&P Ratings (China) Co., Ltd. ("S&P Ratings") owns the copyright and/or other related intellectual property rights of the abovementioned content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content). No Content may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Ratings. The Content shall not be used for any unlawful or unauthorized purposes. S&P Ratings and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively "S&P Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P Ratings' opinions, analyses, forecasts and rating acknowledgment decisions (described below) are not and should not be viewed as recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Ratings assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and / or clients when making investment and other business decisions. S&P Ratings does not act as a fiduciary or an investment advisor except where registered as such. While S&P Ratings has obtained information from sources it believes to be reliable, S&P Ratings does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

S&P RATINGS IS NOT PART OF THE NRSRO. A RATING ISSUED BY S&P RATINGS IS ASSIGNED ON A RATING SCALE SPECIFICALLY FOR USE IN CHINA, AND IS S&P RATINGS' OPINION OF AN OBLIGOR'S OVERALL CREDITWORTHINESS OR CAPACITY TO MEET SPECIFIC FINANCIAL OBLIGATIONS, RELATIVE TO THAT OF OTHER ISSUERS AND ISSUES WITHIN CHINA ONLY AND PROVIDES A RANK ORDERING OF CREDIT RISK WITHIN CHINA. AN S&P RATINGS' RATING IS NOT A GLOBAL SCALE RATING, AND IS NOT AND SHOULD NOT BE VIEWED, RELIED UPON, OR REPRESENTED AS SUCH. S&P PARTIES ARE NOT RESPONSIBLE FOR ANY LOSSES CAUSED BY USES OF S&P RATINGS' RATINGS IN MANNERS CONTRARY TO THIS PARAGRAPH.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Ratings disclaims any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof.

S&P Ratings keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P Ratings may have information that is not available to other S&P Ratings business units. S&P Ratings has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P Ratings may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Ratings reserves the right to disseminate its opinions and analyses. S&P Ratings' public ratings and analyses are made available on its Web site www.spgchinaratings.cn, and may be distributed through other means, including via S&P Ratings' publications and third-party redistributors.