

Credit Opinion

31 July 2026

Ratings	
Category	Corporate
Domicile	China
Rating Type	Solicited Rating
Long-term Credit Rating	BBB _g -
Outlook	Stable

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Shandong Zhengfang High-Tech Industrial Holding Group Co., Ltd.

Surveillance credit rating report

CCXAP affirms Shandong Zhengfang High-Tech Industrial Holding Group Co., Ltd.'s long-term credit rating at BBB_g-, with stable outlook.

Summary

The BBB_g- long-term credit rating of Shandong Zhengfang High-Tech Industrial Holding Group Co., Ltd. ("ZFIH" or the "Company") reflects the Company's (1) strong regional competitiveness in steam and heat supply, park operation and human resources service in Zoucheng City, especially in Zoucheng Economic Development Zone ("Zoucheng EDZ"); and (2) financial leverage remains manageable but continues to escalate.

However, the rating is constrained by the Company's (1) low yield on assets resulting from substantial low-return assets and projects under construction; and (2) relatively large capital expenditure needs for business expansion.

The rating also reflects a high likelihood of support from its parent, Shandong Zhengfang Holding Group Co., Ltd. ("SDZF"), given its strong parent-subsidiary linkage with SDZF and good track record of receiving parental support. It also reflects a likelihood of receiving support from Zoucheng City Government, given its ultimate control by the Finance Bureau of Zoucheng City and track record of receiving government support.

The stable outlook on ZFIH's rating reflects our expectation that the Company will maintain its regional competitiveness and importance in market-driven activities in Zoucheng City over the next 12-18 months. We also expect that the Company will continue to receive ongoing support from its parent company and the local government.

Rating Drivers

- Strong regional competitiveness in industrial steam and heat supply, park operation, water supply and asset leasing in Zoucheng EDZ
- Financial leverage remains manageable but continues to escalate
- Low asset yields resulting from the relatively high proportion of underperforming assets and ongoing construction projects
- Moderate credit metrics and liquidity
- Relatively large capital expenditure needs for business expansion
- High likelihood of support from the parent company and the Zoucheng City Government

Rating Sensitivities

What could upgrade the rating?

The rating could be upgraded if (1) the likelihood of government or parental support for the Company improves; or (2) the Company's stand-alone credit profile improves significantly, such as improvement in debt structure and asset profitability.

What could downgrade the rating?

The rating could be downgraded if (1) the likelihood of government or parental support for the Company decreases; or (2) the Company's stand-alone credit profile weakens significantly, such as a deterioration in financial leverage or liquidity position.

Key Indicators

	2023FY	2024FY	2025FY
Total Assets (RMB billion)	3.4	6.9	8.5
Total Equity (RMB billion)	2.7	5.3	5.3
Total Revenue (RMB million)	371.3	484.5	672.6
Net Profit (RMB million)	25.0	33.2	59.4
EBIT Margin (%)	7.4	17.0	19.2
Return on Assets (%)	1.2	1.6	1.7
Total Debt/Total Capital (%)	13.9	19.5	33.7
Total Debt/EBITDA (x)	13.7	6.2	8.5
EBITDA/Interest (x)	1.7	5.2	3.4
FFO/Total Debt (%)	5.8	12.1	7.3

All ratios and figures are calculated using CCXAP's adjustments.

Source: Company data, CCXAP research

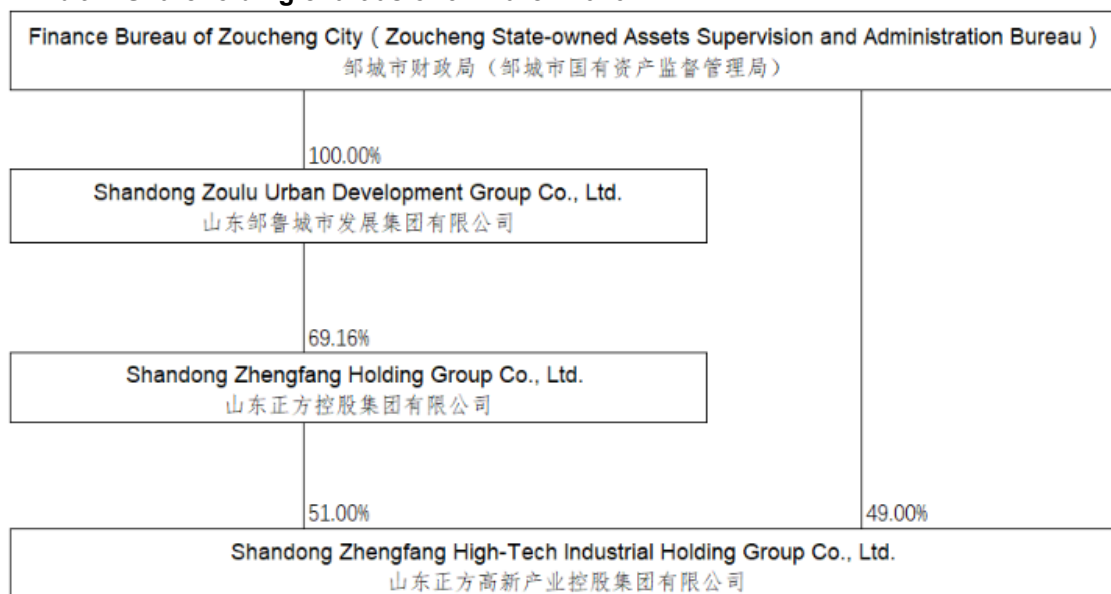
Corporate Profile

Established in December 2019, ZFIH is a local state-owned enterprise mainly operating in Zoucheng City, a country-level city in Jining City, Shandong Province. In 2023 and 2024, the parent company, SDZF, transferred and integrated the equity of several subsidiaries into ZFIH, further enhancing its capital strength. After asset reorganizations, ZFIH's total assets reached RMB8.5 billion at the end of 2025. The shareholding of ZFIH was

51.0% held by SDZF and 49.0% held by the Finance Bureau of Zoucheng City as of 31 March 2026, and the Finance Bureau of Zoucheng City is the ultimate controller of the Company.

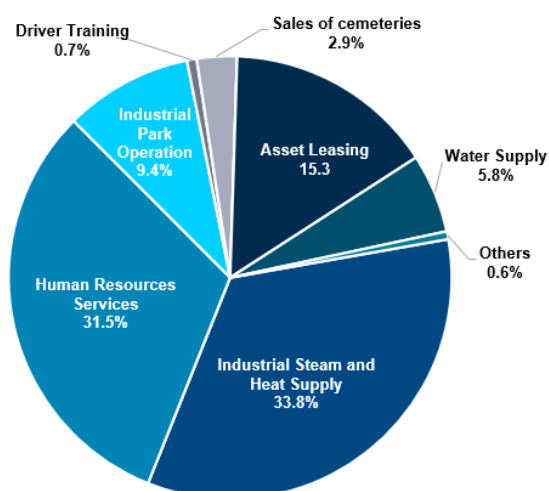
SDZF is a key entity in infrastructure construction in Zoucheng City, mainly for projects in the Zoucheng EDZ such as industrial park construction, road construction and improvement, and river course improvement.

Exhibit 1. Shareholding chart as of 31 March 2026



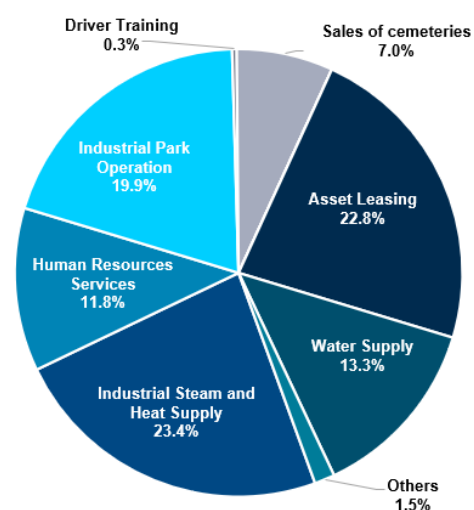
Source: Company information, CCXAP research

Exhibit 2. Revenue structure in 2025



Source: Company information, CCXAP research

Exhibit 3. Gross profit structure in 2025



Rating Considerations

Business Profile

Strong regional competitiveness in industrial steam and heat supply, park operation, water supply and asset leasing in Zoucheng EDZ

ZFIH is the main local state-owned enterprise (“SOE”) engaged in market-driven businesses, including industrial steam and heat supply, industrial park operation, water supply and asset leasing, and human resources services in Zoucheng EDZ. These businesses together accounting for over 90.0% of the Company’s total revenue in 2025. Some of these businesses are essential to investment attraction and economic promotion in the region. Benefiting from its status as a local SOE, the Company has strong regional competitiveness and stable market shares in those sectors.

ZFIH is the major industrial steam and heat supplier in Zoucheng EDZ. It purchases steam and heat from upstream based on the centralized purchasing monopsony model and delivers to customers through its own steam and heat supply pipelines. The upstream enterprise is mainly Huadian Zoucheng Thermal Power Co., Ltd, a large thermal power plant in Shandong Province and the purchase prices from the upstream were adjustable according to coal market conditions but have been stable in recent years. The Company provides steam and heat to industrial and mining enterprises located in Zoucheng EDZ and surrounding area, and residents in Dongtan, Baodian and Nantun mining areas, and Yanzhou District. As of 31 December 2025, it had approximately 50 kilometers of steam supply pipelines with an annual capacity of 3.0 million tons, and 52 kilometers of heat supply pipelines with an annual heat supply capacity of 2.15 million GJ and coverage area of around 15.0 million square meters. The heat supply has quasi-public attribution and the price was regulated by the government, which was around RMB18.0 per square meter for residents and RMB28.6 per square meter for non-residents. The sales price of industrial steam and heat to corporate customers was negotiable and the Company adopted the prepaid model for some customers. In 2025, revenue from industrial steam and heat supply grew by 22.1% year-on-year (“YoY”) to RMB227.5 million, while its gross profit margin stood at 16.5%. The increasing revenue was mainly due to the increase in the number of steam-supplied enterprises and the expansion of the heating area. In accordance with the government’s planning for heat supply within Zoucheng City, the Company’s revenue may increase along with the development of the region.

Meanwhile, in 2025, the Company established a new water supply business segment, which primarily provides reclaimed water within its self-operated industrial parks. The Company conducts its water supply business through three key projects, which are the Water Supply Capacity Upgrading Project, the Lake Water Eastward Diversion Project, and the Comprehensive Water Pollution Control in Western Zoucheng. In 2025, the water supply business recorded revenue of RMB38.9 million and a gross profit margin of 55.0%. Although still in its initial stage of development, the business delivered sound profitability. With the completion of the projects under construction, the Company’s water supply revenue is expected to increase in the future.

In addition, the Company leases water-related assets, including wastewater networks, subsidence water areas, and irrigation rights, a portion of which were obtained with allocations from the local government and its parent company in 2024. These assets maintain a 100% occupancy rate by private lessees on 1-year terms, and all were renewed until early 2027. In 2025, the leasing of these three water-related assets generated revenue of RMB103.3 million, with a gross profit margin of 35.5%. However, except some lagging rental collections, in 2025, negative credit events emerged among downstream tenants, Zoucheng Xincheng Wastewater Treatment Co., Ltd. was listed as a dishonest debtor, and shares of Shandong Guaguaxiang Duck Products Co., Ltd. were frozen. Therefore, close attention must be paid to tenants’ operational risks and the Company’s rent collection.

ZFIH is also engaged in industrial park operations in Zoucheng EDZ, including managing industrial vectors and supporting facilities in the parks. As of 31 December 2025, the Company operated 8 leasable properties including industrial parks and supporting facilities with a total leasable area of 422.8 thousand square meters and rented them to 129 enterprises, with an occupancy rate of 85.9%. The Company mainly adopts self-

operated and entrusted operation and management to carry out this business. Most of its managed properties belong to SDZF, its parent company. SDZF is the major entity that focuses on promoting industrial development and owns various type of properties in Zoucheng EDZ. The Company's income from industrial park operation are mainly the rental income and the management fee. In 2025, along with the growing number of managed parks and tenant enterprises, revenue from this business surged to RMB63.0 million from RMB13.5 million in 2024, representing a 366.8% YoY growth. With the ongoing expansion of its industrial park portfolio, the Company's industrial park operation revenue is expected to grow in the future.

ZFIH provides human resources services through its subsidiary, which has a long operating record in Zoucheng City and has established stable customer relationships. This sector mainly involves dispatched labor services, where the Company hires and manages labor according to agreements with businesses. Key customers are industrial and mining enterprises, service companies and other SOEs, with low concentration. The Company pays the dispatched employees' social insurance premiums and salaries, charging customers for these payments plus a management fee, which are booked as cost and revenue respectively. The management fee is a fixed price of RMB60.0 to RMB95.0 per person, or 10.0% of the dispatched employees' total salary. The revenue from human resources services maintained steady growth, reaching RMB211.6 million in 2025, a 6.6% YoY growth. However, due to the nature of this business, its profitability is limited, reflecting a gross profit margin of 8.9% at the same time.

The Company is also involved in other commercial activities, including driver training and cemetery sales, which expands the diversity of the Company's business and complements the Company's revenues.

Relatively large capital expenditure needs for business expansion

While ZFIH is actively expanding its business scope to diversify revenue sources, its ongoing projects still require substantial capital expenditure. As of 31 March 2026, there are 6 key projects under construction, with a total investment of RMB3.1 billion and an uninvested amount of RMB1.6 billion. These projects will achieve funding balance through the lease of assets. As of the same date, the Company had no projects under planning. Due to the large amount of investment in the projects under construction, ZFIH may face some pressure on capital expenditure in the near term.

Exhibit 4. Key projects under construction as of 31 March 2026

Project Type	Budgeted Amount (RMB million)	Invested Amount (RMB million)	Outstanding Amount (RMB million)
Projects Under Construction			
<i>Water pollution management project</i>	680.0	292.9	387.1
<i>Distributed photovoltaic construction project</i>	327.0	150.2	176.8
<i>Water supply capacity upgrading project</i>	1,000.0	400.4	599.6
<i>Heat supply project</i>	661.4	404.2	257.2
<i>Renewable energy charging pile project</i>	200.2	107.7	92.4
<i>Cemetery project</i>	200.0	79.8	120.2
Total	3,068.6	1,435.3	1,633.3

Source: Company information, CCXAP Research

Financial Profile

Low asset yields resulting from the relatively high proportion of underperforming assets and ongoing construction projects

ZFIH's yield on assets was at a relatively low level over the past three years. In 2025, the industrial steam and heat supply was the main contributor to ZFIH's revenue accounting for 33.8% of its total revenue, followed by human resources service (31.5%), asset leasing (15.3%) and industrial park operation (9.4%). At the same time, the revenue and EBIT were RMB672.6 million and RMB128.9 million, increasing by around 38.8% and 54.3% YoY, respectively. Meanwhile, the EBIT margin has also continued to rise, reaching 19.2% in 2025, which has grown for three consecutive years. This is mainly due to the expansion of the industrial park operation business, as well as the high profitability of the newly added water supply and related asset leasing businesses. However, as of end-2025, the return on average assets remains at a relatively low level of 1.7%. Although the revenue from the Company's major businesses have grown in 2025, the Company has certain amount of long-term equity investments, other equity instrument investments, and projects under construction that barely generate revenue at present. As of the end of 2025, this portion of assets accounted for approximately 44.6% of total assets.

Financial leverage remains manageable but continues to escalate

Due to the expansion of its business scope and large capital expenditure on its construction development projects, ZFIH's total debt increased rapidly from 2022 onwards. The Company's total debt increased to RMB2.7 billion as of end-2025 from RMB1.3 billion as of end-2024, leading to an increase of the total capitalization ratio (total debt/total capital) from 19.6% to 33.7% during the same period. Nonetheless, the Company's financing channels remain relatively accessible. As of 31 December 2025, ZFIH's debt consisted of bank loans (70.3%), bond issuances (24.4%), and financial leasing (5.3%). As of the first quarter of 2026, the Company had obtained a total bank credit facility of RMB3.7 billion, with an unutilized amount of RMB1.2 billion. However, city commercial banks account for a relatively large proportion, and attention should be paid to concentration risk. ZFIH also tapped into the onshore and offshore debt capital market since 2024. From 2025 to June 2026, the Company issued one tranche of onshore private placement note and one tranche of offshore bond, raising RMB500.0 million and RMB100.0 million, respectively.

Moderate credit metrics and liquidity

ZFIH's stand-alone debt-servicing metrics decreased in 2025 after an improvement in 2024, which was mainly due to a significant increase in debt driven by extensive project construction and investment in 2025. The Company's 3-year average EBITDA coverage ratio (EBITDA/interest expense) was around 3.4x and the average total debt/EBITDA ratio was around 9.5x. Meanwhile, its FFO/total debt ratio decreased to 7.3% at the same time. Nonetheless, the Company has decreasing short-term debt burdens as seen by its short-term debt to total debt ratio of 21.3%, with the cash to short-term debt ratio increased to 0.8x as of end-2025 from 0.2x as of end-2024. However, it still means cash is insufficient to cover short-term debt. The Company also had restricted assets of RMB1.1 billion as of the same date, accounting for 12.5% of total assets, which could reduce its financial flexibility.

External Support

High likelihood of support from the parent company and the Zoucheng City Government

We expect a relatively high likelihood of support from its parent, SDZF, given its strong parent-subsidary linkage with SDZF and good track record of receiving support. It also reflects a likelihood of receiving support from Zoucheng City Government, given its ultimate control by the Finance Bureau of Zoucheng City and track record of receiving support from the local government.

Zoucheng City has developed “1+5” pillar industries including digital economy, intelligent equipment manufacturing, high-end green chemicals, new energy and new materials, health medicine, and industrial robots, stimulating Zoucheng City’s economic growth in recent years. Zoucheng City is the largest county/district in Jining City by GRP. It had a GRP of RMB112.9 billion in 2025, accounting for the GRP of 18.4% of Jining City. In 2025, its general budgetary revenue increased by 4.0% YoY to RMB10.0 billion, of which tax revenue accounted for 53.3% of its general budgetary revenue, indicating relatively moderate fiscal quality. Meanwhile, Zoucheng City Government has good financial self-sufficiency with average fiscal balance ratios around 100.6% over the past three years.

SDZF is one of the key local infrastructure investment and financing companies (“LIIFCs”) in Zoucheng City, mainly responsible for infrastructure construction in the Zoucheng EDZ. SDZF engages in diversified businesses, including project construction, leasing, trading, labor services, and industrial steam and heat supply. As of 31 December 2025, Shandong Zoulu Urban Development Group Co., Ltd. held 69.16% of SDZF’s shares, while China Agricultural Development Key Construction Fund Co., Ltd. and Agricultural Development New Policy Financial Instruments Co., Ltd. held the remaining 21.23% and 9.61% of the shares, respectively. SDZF was ultimately controlled by the Finance Bureau of Zoucheng City. ZFIH is one of the key subsidiaries of SDZF, mainly responsible for urban operation and industrial development in Zoucheng EDZ. It contributes most of the commercial business revenue stream for SDZF. Meanwhile, the Company also obtained funding support from its parent company in terms of bank loans, as SDZF provided guarantees on around 62.0% of the Company’s total debt. We expect the Company will continuously receive comprehensive support from its parent. The Company also has a track record of receiving support from the local government. From 2024 to 2025, the Company received subsidies of RMB2.5 million from the local government. Meanwhile, under the arrangement of the local government, SDZF has transferred shares of more than 10 subsidiary companies to ZFIH since 2023, significantly enhancing the Company’s capital strength and broadening its business scope. Additionally, at the end of 2024, the local government transferred the subsidence water areas and irrigation rights to the Company’s indirect subsidiary Zoucheng Zhengfang Water Service Co., Ltd., expanding the Company’s leasable assets.

Rating Methodology

The methodology used in this rating is the [Rating Methodology for General Corporate \(May 2026\)](#).

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