

Credit Opinion

2 July 2025

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) manageable financial leverage supported by increased capital strength.

However, the rating is constrained by the Company's (1) low yield on assets resulting from large projects investment and asset transfer; and (2) relatively fast debt growth.

The rating also reflects a high likelihood of support from its parent, Shandong Zhengfang Holding Group Co., Ltd. ("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.

The stable outlook on ZFHI's rating reflects our expectation that the Company will maintain its regional competitiveness and importance in 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 steam and heating supply, park operation and human resources services in Zoucheng EDZ
- Manageable financial leverage supported by increased capital strengths
- Low yield on assets resulting from large projects under construction
- Improving credit metrics along with moderate liquidity
- High likelihood of support from the parent company

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

	2022FY	2023FY	2024FY
Total Assets (RMB billion)	1.0	3.4	6.9
Total Equity (RMB billion)	0.5	2.7	5.3
Total Revenue (RMB million)	280.2	371.3	484.5
Net Profit (RMB million)	7.5	25.0	33.2
EBIT Margin (%)	5.4	9.8	17.0
Return on Assets (%)	1.5	1.7	1.6
Total Debt/Total Capital (%)	35.5	13.9	19.5
Total Debt/EBITDA (x)	14.0	10.7	6.2
EBITDA/Interest (x)	2.0	2.2	5.2
FFO/Total Debt (%)	8.3	5.8	12.1

All ratios and figures are calculated using CCXAP's adjustments. Indicators marked with "-" are not applicable or not comparable.

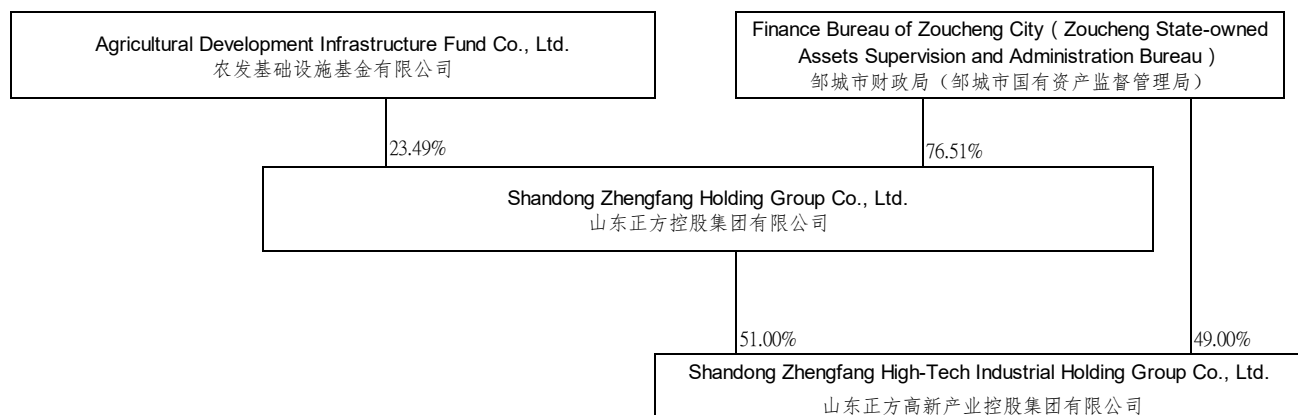
Source: Company data, CCXAP research

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, the parent company, SDZF, transferred and integrated the equity of several subsidiaries into ZFIH. Moreover, SDZF transferred the equity of 2 subsidiaries and several operating rights assets to the Company in 2024, further enhancing its capital strength. After asset reorganizations, ZFIH's total assets reached RMB6.9 billion at the end of 2024. The shareholding of ZFIH was 51.0% held by SDZF and 49.0% held by the Finance Bureau of Zoucheng City as of 31 December 2024, and the Finance Bureau of Zoucheng City is the ultimate controller of the Company. SDZF is a key local

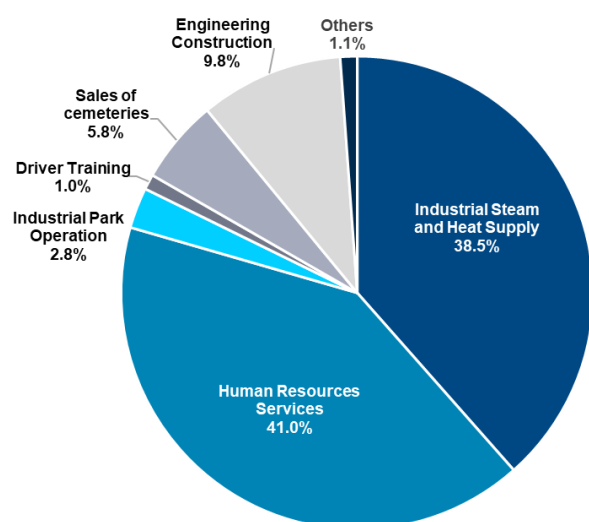
infrastructure investment and financing company ("LIIFC") in Zoucheng City and is mainly responsible for infrastructure construction in the Zoucheng EDZ. As of 31 December 2024, The Company's business scope mainly includes industrial steam and heating supply, human resources services, industrial park operation, driver training, sales of cemeteries and engineering construction.

Exhibit 1. Shareholding chart as of 31 December 2024



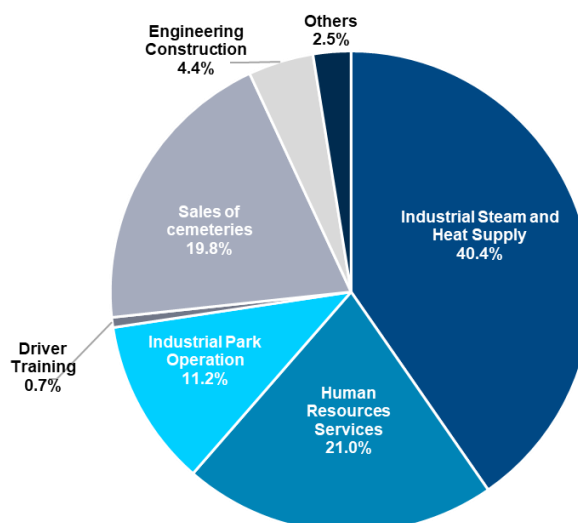
Source: Company information, CCXAP research

Exhibit 2. Revenue structure in 2024



Source: Company information, CCXAP research

Exhibit 3. Gross profit structure in 2024



Rating Considerations

Business Profile

Strong regional competitiveness in industrial steam and heat supply, park operation and human resource services in Zoucheng EDZ

ZFIH is the main local state-owned enterprise engaged in market-driven businesses, including industrial steam and heat supply, human resources services and industrial park operation in Zoucheng EDZ. These businesses together accounting for over 80.0% of the Company's total revenue in 2024. Some of these businesses are essential to investment attraction and economic promotion in the region. On the back of the local government and its parent company, 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 2024, it had approximately 42 kilometers of steam supply pipelines with an annual capacity of 3.0 million tons, and 200 kilometers of heat supply pipelines with an annual heat supply capacity of 1.54 million GJ and coverage area of around 5.0 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 2024, revenue from industrial steam and heat supply was RMB186.4 million, representing a 13.2% YoY growth, and the gross profit margin was up from 15.8% in 2023 to 17.3%. The increasing revenue and gross profit were mainly due to the lower heat source procurement prices and increase in pipeline utilization. In accordance with the government's planning for the heat supply within Zoucheng City, the Company's revenue may increase along with the development of the region.

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, referring to the Company receiving requests from businesses to have them hire and manage labor according to the labor dispatch agreement. Key customers are industrial and mining enterprises, service companies and community service stations, with low concentrations. The Company helps pay the fees including the dispatched employees' social insurance premiums and salary and charges the customers such payments plus management fee, which are booked as cost and revenue, respectively. The management fee charges a fixed price per person, usually RMB60.0 to RMB95.0, or a percentage, usually 10.0%, based on the total salary of dispatched employees. The revenue from the human resources services business maintained steady growth, with revenue of RMB198.6 million in 2024, representing 10.4% year-on-year ("YoY") growth. However, due to the nature of this business, its profitability is limited, reflecting a gross profit margin of 8.5% in 2024.

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 2024, the Company operated 10 leasable properties including industrial parks and supporting facilities with a total leasable area of 404.6 thousand square meters and rented them to 53 enterprises. 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 2024, the Company realized RMB13.5 million of revenue from this business, representing a 13.1% YoY growth. Due to relatively low rental fees, this business currently generates a modest revenue

scale. However, as the Company expands its portfolio of industrial parks, the industrial park operation revenue is expected to grow in the future.

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

As of 31 December 2024, the key projects under construction included water pollution management project, water supply capacity upgrading project, and distributed photovoltaic construction project, with a total investment of RMB2.0 billion and an uninvested amount of RMB1.5 billion. Meanwhile, the Company had 4 heat and gas supply projects under construction, with total investment of RMB973.3 million, and unsettled amount of RMB43.0 million. The Company also had 1 renewable energy charging pile project under planning, with total planned investment of RMB294.0 million. These projects will achieve funding balance through the lease of assets as well as water, electricity, heat and industrial steam supply. 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 and planning as of 31 December 2024

Project Type	Budgeted Amount (RMB million)	Invested Amount (RMB million)	Outstanding Amount (RMB million)
Projects Under Construction			
Water pollution management project	657.2	142.2	515.0
Distributed photovoltaic construction project	306.0	10.3	295.7
Water supply capacity upgrading project	1,000.0	285.0	715.0
Heat and gas supply projects	973.3	930.3	43.0
Projects Under Planning			
Renewable energy charging pile project	294.0	0.0	294.0
Total	3,230.5	1,367.8	1,862.7

Source: Company information, CCXAP Research

Financial Profile

Low yield on assets resulting from large project investment and asset transfer

ZFIH's yield on assets was at a relatively low level these two years. In 2024, the human resources service was the main contributor to ZFIH's revenue accounting for 41.0% of its total revenue, followed by industrial steam and heat supply (38.5%), engineering construction (9.8%) and sales of cemeteries (5.8%). At the same time, the revenue and EBIT were RMB484.5 million and RMB82.3 million, increasing by around 30.5% and 125.2%, respectively. The Company's EBIT margin has grown for three consecutive years, which is mainly resulted from higher profits in the heat and steam supply business and the human resources services. As of the end of 2024, the return on average assets was 1.6%, slightly decreased from 1.7% as of the end of 2023. The lower return on total assets is due to the large-scale asset injection by the Company's parent company SDZF in 2024, which contains many operating rights that have not yet generated income. Besides, the Company's industrial parks and self-operated projects are still in the early stage of development with relatively small scale of revenue.

As of 31 December 2024, the Company's assets mainly consisted of long-term equity investment (19.7%), intangible asset (17.0%), construction in progress (7.3%), other receivables (2.2%) and inventories (2.7%). The other receivables are generated from transactions with its parent company, while the construction in progress and inventories are mainly generated from the projects under construction. Meanwhile, other equity instruments

accounted for 6.6% of total assets, which were mainly investments invested through funds in private enterprises in Zoucheng City, and the return on investment was limited.

Manageable financial leverage supported by increased capital strength

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 RMB1.3 billion as of 31 December 2024, which is about 4.6 times of the RMB280.0 million at the end of 2022. However, the ongoing capital injection from the parent company keeps the capitalization leverage ratio, measured by total debt to total capital, at a manageable level in recent years, which was 19.5% by the end of 2024. As of the same date, the Company's paid-in capital amounted to RMB65.6 million, which is all funded by shareholder cash injections in 2024.

Improving credit metrics along with moderate liquidity

ZFIH's stand-alone debt servicing metrics improved in 2024 given its moderate profitability. The better credit metrics in 2024 pulled up the average quality of the Company's debt service metrics over the past three years. The Company's 3-year average EBITDA coverage ratio (EBITDA/interest expense) was around 3.1x and the average total debt/EBITDA ratio was around 10.3x. ZFIH's core business cash generation capacity is relatively good with a cash-to-revenue ratio around 1.0x during the past three years, and its FFO/total debt ratio increased to 12.1% in 2024. As of 31 December 2024, ZFIH's debt consisted of bank borrowing (98.1%) and financial leasing (1.9%). Its access to financing was moderate as its financing channels concentrated on regional banks such as city commercial banks, which may have higher costs and higher regional concentration risks. The Company has decreasing short-term debt burdens as seen by its short-term debt to total debt ratio of 24.5%, which was primarily due to the Company increased its long-term bank borrowings in 2024. However, the cash to short-term debt ratio was 0.2x as of 31 December 2024, which means cash is insufficient to cover short-term debt. As of same date, the Company has obtained total credit facilities of around RMB456.0 million from banks, of which RMB29.0 million remained unused. Meanwhile, the Company had pledged assets of RMB330.8 million for loans as of 31 December 2024, accounting for 4.8% 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-subsidiary 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 RMB110.4 billion in 2024, accounting for the GRP of 18.8% of Jining City. In 2024, its general budgetary revenue increased by 5.5% YoY to RMB9.6 billion, of which tax revenue accounted for 53.9% of its general budgetary revenue, indicating moderate fiscal quality. Meanwhile, the Zoucheng City Government has good financial self-sufficiency with fiscal balance ratios above 95% over the past three years.

SDZF is one of the key local LIIFCs in Zoucheng City, mainly responsible for infrastructure construction in the Zoucheng EDZ. SDZF engages in diversified businesses, including infrastructure construction, bus operation, gas filling, industrial park operation, trading, and electricity and heat sales. SDZF was ultimately controlled by the Finance Bureau of Zoucheng City. As of 31 December 2024, the Finance Bureau of Zoucheng City held 76.5% of SDZF's shares, and Agricultural Development Infrastructure Fund Co., Ltd. held the remaining 23.5% of the shares. 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 67.0% 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 mainly through SDZF. Besides, from 2023 to 2024, the Company received subsidies of RMB13.6 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.

Rating Methodology

The methodology used in this rating is the Rating Methodology for [General Corporate \(April 2019\)](#).

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