

Credit Opinion

12 June 2025

Ratings

| | |
|------------------------------|------------------|
| Senior Unsecured Debt Rating | A _g - |
| Long-Term Credit Rating | A _g - |
| Outlook | Stable |
| Category | Corporate |
| Domicile | China |
| Rating Type | Solicited Rating |

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Jinan Hi-tech Holding Group Co., Ltd.

Surveillance credit rating report

CCXAP affirms the long-term credit rating of Jinan Hi-tech Holding Group Co., Ltd. at A_g-, with stable outlook.

Summary

The A_g- long-term credit rating of Jinan Hi-tech Holding Group Co., Ltd. (“JNHT” or the “Company”) reflects Jinan Innovation Zone Government’s (1) very strong capacity to provide support, and (2) very high willingness to provide support, based on our assessment of the Company’s characteristics.

Our assessment of Jinan Innovation Zone Government’s capacity to provide support reflects Jinan Innovation Zone’s vital role as one of the first batch of national high-tech zones, with good economic fundamentals and rapid development potential.

The rating also reflects the local government’s willingness to provide support, which is based on the Company’s (1) strategic importance in the social and economic development of Jinan Innovation Zone; (2) solid track record of receiving government support; and (3) high acceptance in the debt capital market and relatively low financing costs.

However, the Company’s rating is constrained by its (1) increasing exposure to market-driven commercial activities; and (2) high debt management pressure arising from ongoing investment.

The stable outlook on JNHT’s rating reflects our expectation that Jinan Innovation Zone Government’s capacity to provide support will be stable; the Company’s characteristics such as its essential role in regional development will remain unchanged over the next 12 to 18 months.

Rating Drivers

- Strategic importance in the social and economic development of Jinan Innovation Zone
- Solid track record of receiving government support
- Increasing exposure to market-driven commercial activities
- High debt management pressure arising from ongoing investment
- High acceptance in the debt capital market and relatively low financing costs

Rating Sensitivities

What could upgrade the rating?

The rating could be upgraded if (1) Jinan Innovation Zone Government's capacity to support strengthens; or (2) the Company's characteristics change in a way that strengthens the local government's willingness to provide support, such as significant reduction in risky commercial activities.

What could downgrade the rating?

The rating could be downgraded if (1) Jinan Innovation Zone Government's capacity to support weakens; or (2) the Company's characteristics change in a way that weakens the local government's willingness to provide support, such as reduced strategic significance, deteriorated assess to fundings, or significant increase in external guarantees.

Key Indicators

| | 2022FY | 2023FY | 2024FY |
|------------------------------|--------|--------|--------|
| Total Asset (RMB billion) | 102.0 | 118.3 | 120.5 |
| Total Equity (RMB billion) | 30.6 | 33.1 | 33.6 |
| Total Revenue (RMB billion) | 19.7 | 11.5 | 7.9 |
| Total Debt/Total Capital (%) | 70.4 | 71.7 | 75.1 |

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

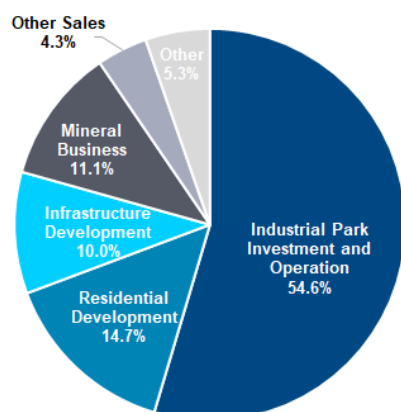
Source: Company data, CCXAP research

Corporate Profile

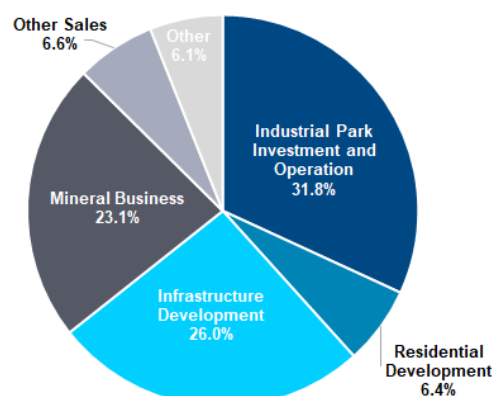
Founded in 2001, JNHT is the most important local infrastructure investment and financing company ("LIIFC") in Jinan Innovation Zone and acts as the key facilitator of Jinan Innovation Zone Committee's plan for infrastructure construction. The Company operates and manages diversified business segments and focusing on the investment and operation of industrial parks. It helps attract investments and provides facilities for industrial, scientific research and commercial purposes including office buildings, factories and industrial bases in industrial parks. It is also responsible for the construction of public infrastructure projects such as water supply and sewage treatment facilities, primary land development, and shantytown renovation. Apart from that, the Company is engaged in commercial activities such as residential property development, IT hardware and services, and financial services. As of 31 December 2024, JNHT is ultimately owned and controlled by the State-owned Assets Supervision and Administration Commission of the Jinan Hi-tech Industrial Development Zone ("Jinan Innovation Zone SASAC").

Exhibit 1. Shareholding chart as of end-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****Government's Capacity to Provide Support**

We believe the local government of Jinan Innovation Zone has a very strong capacity to provide support given its vital role as one of the first batch of national high-tech zones, with good economic fundamentals and rapid development potential.

Shandong Province is the third largest province in China by GRP, with a solid industrial foundation in industries such as logistics, shipbuilding, marine technology, chemical, automotive and agri-food. Jinan City is a sub-provincial city, the capital of Shandong Province, and the core city of the Jinan metropolitan area. Supported by the rapid development of core industries such as automobiles, pharmaceutical manufacturing, and information technology, the regional economy of Jinan City has demonstrated steady growth and its GRP had exceeded RMB1.2 trillion over the past three years. Over the same period, Jinan City has been ranking 9th by GRP among 15 sub-provincial cities in China and ranked 2nd among 16 prefecture-level cities in Shandong Province. Jinan City had a strong financial profile. From 2022 to 2024, its general budgetary revenue increased from RMB100.1 billion to RMB108.3 billion, with an average self-sufficiency ratio (general budgetary revenue/general budgetary expenditure) of 79.0%. As of 31 December 2024, the local government's outstanding debt amounted to RMB377.1 billion, accounting for 27.9% of GRP.

Exhibit 4. Key economic and fiscal indicators of Jinan City

| | 2022FY | 2023FY | 2024FY |
|---|---------|---------|---------|
| GRP (RMB billion) | 1,202.8 | 1,275.7 | 1,352.8 |
| GRP Growth (%) | 3.1 | 6.1 | 5.4 |
| General Budgetary Revenue (RMB billion) | 100.1 | 106.1 | 108.3 |
| General Budgetary Expenditure (RMB billion) | 122.6 | 136.5 | 139.7 |
| Local Government Debt (RMB billion) | 266.1 | 318.0 | 377.1 |

Source: Jinan Municipal Government, CCXAP research

Established in March 1991, Jinan Innovation Zone is one of the first batch of national high-tech zones approved by the State Council and is strategically located in Jinan City. Jinan Innovation Zone focuses on the development of three pillar industries namely big data and new generation information technology industry, intelligent manufacturing and high-end equipment industry, biomedicine and big health industry. Six industrial parks and multiple industrial bases and scientific research institutes have been formed. Jinan Innovation Zone has demonstrated increasing economic growth in recent years and it reported GRP of RMB161.9 billion, RMB176.7 billion and RMB205.4 billion in 2022, 2023, and 2024, respectively. Jinan Innovation Zone had a strong fiscal balance, as its average general budgetary revenue/general budgetary expenditure ratio from 2022 to 2024 was 155.4%. It also had a healthy debt profile with government debt/GRP ratio of 6.0% as of 31 December 2024.

Exhibit 5. Key economic and fiscal indicators of Jinan Innovation Zone

| | 2022FY | 2023FY | 2024FY |
|---|--------|--------|--------|
| GRP (RMB billion) | 161.9 | 176.7 | 205.4 |
| GRP Growth (%) | 3.3 | 7.3 | 6.5 |
| General Budgetary Revenue (RMB billion) | 15.1 | 17.1 | 17.7 |
| General Budgetary Expenditure (RMB billion) | 9.8 | 11.2 | 11.2 |
| Local Government Debt (RMB billion) | 9.3 | 11.0 | 12.3 |

Source: Jinan Innovation Zone Government, CCXAP research

Government's Willingness to Provide Support**Strategical importance in the social and economic development of Jinan Innovation Zone**

JNHT is the most important entity in regional development and aligns with the local government's strategic objectives and development blueprint for Jinan Innovation Zone. The Company is strategically important to the Jinan Innovation Zone Government, given its dominant role in the investment and operation of industrial parks in the region. As the main developer and manager in the Jinan Innovation Zone, it is responsible for attracting investment and providing related services to meet the needs of settled enterprises. Before the construction of a project begins, the Company typically enters into an agent construction agreement with the buyer company that wants to operate in the Jinan Innovation Zone. Upon project completion, the buyer company will pay JNHT at the agreed sales price. As of 31 December 2024, the Company had completed a total of 34 key projects with a total investment of RMB40.0 billion. At the same time, sufficient project reserves ensured the sustainability of the Company's business, and it had 21 projects in the planning and construction stages, with an estimated investment amount of RMB14.3 billion.

Moreover, JNHT plays an important role in providing public utility services to the community. The Company takes part in the construction of water supply and sewage treatment projects. The Company's water supply project provides water to companies and residents in Jinan Innovation Zone, with an annual water supply of

more than 14.3 million cubic meters in 2024. Under the authorization of the Jinan Innovation Zone Committee, the Company constructs sewage treatment projects through either the build-operate-transfer model or the agent construction model. As of 31 December 2024, the Company had 5 sewage treatment plants under operation, providing municipal sewage treatment services for the main areas of Jinan Innovation Zone.

In addition, JNHT principally conducts land consolidation and shantytown renovation in the region. As of 31 December 2024, the Company's land consolidations and shantytown renovation projects had been fully completed. Future revenue will be generated from government repayments for the shantytown renovation projects.

Considering JNHT's policy role in social and economic development and its close links with the local government's development blueprint, we believe that potential substitution is low and that government support is likely in the near future.

Solid track record of receiving government support

JNHT has a solid track record of receiving various forms of government support such as financial subsidies, special funds, and asset injections. As the most important LIIFC in the area, the Jinan Innovation Zone Government continued to increase the Company's capital base by direct cash injections and asset injections. For example, in 2024, the Company received cash injection with a total amount of RMB49.6 million from Jinan Innovation Zone SASAC. As of 31 December 2024, the Company's paid-in capital and capital reserve were RMB4.0 billion and RMB18.7 billion, respectively.

From the perspective of government project payments, the Company received government repayments for land consolidation and shantytown renovation projects of around RMB957.9 million in 2024. In 2024, the Company has continued to receive operating subsidies of RMB61.3 million from the local government to carry out policy support activities. In order to support the ongoing development of the industrial parks, the local government also provided special funds and loans to JNHT, with total recognized amounts of RMB20.0 million in 2022.

We believe that, considering the important position of JNHT and its close relationship with the local government, the local government will provide strong support to the Company in times of need, which will remain good over the next 12 to 18 months.

Increasing exposure to market-driven commercial activities

JNHT has a relatively high proportion of commercial activities, mainly in commercial property leasing, property development, and financial services. Although these activities are related to the Company's core business of industrial park development, they have high commercial components and are subject to higher operational risks. Considering the ongoing investment in property development, we expect the Company's exposure to commercial activities to be increasing.

JNHT participates in property development, including the construction of residential projects for employees of companies operating in the Jinan Innovation Zone as well as the residents. However, the recent volatility in China's real estate market has had a negative impact on this segment, and there are uncertainties in the sale and revenue of subsequent real estate projects. As of 31 December 2024, the Company had completed 7 real estate projects with a total investment of RMB11.5 billion, most of which have been sold. Moreover, the projects under construction require large capital expenditure for ongoing development. As of 31 December 2024, the Company had 6 key projects under construction with an uninvested amount of RMB5.9 billion. It also had 3 projects under planning with a total investment of RMB4.4 billion, exerting high investment pressure to the

Company. As of 31 December 2024, The Company owns 37 leasable properties including Dongzheng Factory, Dinghao Plaza, Shuntai Plaza, and Hanyu Jingu. In 2024, the Company's rental revenue amounted to RMB590.0 million, decreasing by 6.5% from RMB636 million in 2023, primarily due to the disposal of some leasable properties.

JNHT conducts industrial investment in the form of direct equity investment, fund investment and financial services to promote local industrial development. We believe that the return on these investments is subject to the operational and financial uncertainties of the invested companies. The Company actively invests in representative enterprises in different industries such as semiconductors, pharmaceuticals, and biotechnology. The Company also invests in different industrial development funds as a limited partner, aiming to promote the development of local high-tech industries and attract investments into its industrial parks. As of 31 December 2024, the Company had equity investment and fund investment with a total amount of RMB3.7 billion and RMB2.4 billion, respectively. Moreover, the Company participates in financial services such as small loans and guarantees and provided financial support to other state-owned enterprises and private enterprises. These financial services expose the Company to certain risks of private enterprises, which have higher operating and contingent risks during market downturn.

In 2024, the Company's shareholding in Shandong Yulong Gold Co., Ltd. ("Yulong") was transferred out to Jinan High-tech Capital Investment Co., Ltd. ("JNHC"). The revenue from commodity sales and mining business decreased by 76.4% and 31.6% to RMB330.2 million and RMB874.3 million in 2024 respectively. After the transfer of Yulong, the Company will no longer engage in trading and mining business, and the total revenue is expected to further decrease in 2025.

High debt management pressure arising from ongoing investments

JNHT demonstrated rapid debt growth and high debt burden. The Company's total debt (including perpetual bonds) increased from RMB72.4 billion as of 31 December 2023 to RMB79.0 billion as of 31 December 2024, mainly due to continuous investment in construction projects and commercial activities. Meanwhile, its total capitalization ratio increased from 71.7% to 75.1%. Moreover, the Company's short-term debt pressure is relatively high. As of 31 December 2024, the short-term debt was RMB26.2 billion, accounting for 33.1% of total debt. Furthermore, the cash to short-term debt ratio was 0.4x, which could not fully repay the short-term debt. We expect JNHT's debt burden to remain at a relatively high level as the Company has large investment plans in industrial park development and residential property development, with a large proportion of projects under construction and in the pipeline.

JNHT exhibits moderate asset liquidity, which may undermine its financial flexibility. Inventories (mainly construction cost of industrial parks and residential properties), receivables, and investment properties accounted a large proportion of the Company's total assets, all with relatively low liquidity and relatively high impairment risk. Together, these assets accounted for more than 60% of total assets as of 31 December 2024. Apart from that, JNHT has a receivable of RMB1.8 billion from Shandong Tianye Real Estate Development Group Co., Ltd., who has been listed as a dishonest judgement debtor. The Company has received properties, land, minerals as collaterals and is expected to achieve recovery by operating these assets.

High acceptance in the debt capital market and relatively low financing costs

JNHT has good access to funding sources, including bank loans and onshore and offshore bond issuance, which could partially relieve its short-term refinancing pressure. JNHT has established good long-term relationships with a number of banks and financial institutions. As of 31 December 2024, the Company had total

bank credit facilities of RMB92.4 billion, with the undrawn portion being RMB47.0 billion. These credit facilities are mainly provided by domestic banks, including policy banks, national joint-stock commercial banks, and large state-owned bank.

The Company is also an active issuer in the debt capital market, and its debt mainly comes from direct issuance of bonds (including perpetual bonds). It has issued different financial products in debt markets such as SCPs, commercial papers, MTNs, private placement notes, and offshore bonds. In 2024, the Company and its subsidiary Jinan Hi-tech Financial Investment Co., Ltd. issued 18 tranches of onshore bonds, raising RMB18.5 billion. At the same time, it issued two tranches of USD bonds with a total amount of USD430 million.

As of 31 December 2024, bonds accounted for more than 60% of JNHT's total debt, followed by bank loans and non-standard financing products. Meanwhile, the Company's weighted average financing cost was at a relatively low level of 3.92%. Considering the Company's important position as an irreplaceable platform in Jinan Innovation Zone, we expect JNHT to maintain good access to financing such as domestic bank loans and the bond markets.

Structural Consideration

JNHT's senior unsecured debts rating is equivalent to its long-term credit rating. We believe that government support will flow through the Company given its strategic role in the social and economic development of Jinan Innovation Zone, thereby mitigating any differences in an expected loss that could result from structural subordination.

ESG Considerations

JNHT assumes environmental risks through its construction projects including industrial parks and residential properties. Such risks could be mitigated by the Company through detailed planning before the commencement of projects.

The Company is also exposed to social risks as a public services provider. Demographic changes, public awareness and social priorities shape government's target for JNHT and, affect the government's propensity to support the Company.

JNHT's governance considerations are also material as the Company is subject to oversight by Jinan Innovation Zone Government and has to meet several reporting requirements, reflecting its public-policy role and status as a government-owned entity.

Rating Methodology

The methodology used in this rating is the Rating Methodology for [China's Local Infrastructure Investment and Financing Companies \(July 2022\)](#).

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