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Rating Methodology for Real Estate Development Industry

Summary

This rating methodology adopted by China Chengxin (Asia Pacific) Credit Ratings Company Limited ("CCXAP") applies to the real estate development industry, which includes companies whose main business is in the development and sales of residential and commercial properties. Residential properties include single- and multi-family houses and apartments, while commercial properties include offices, shops and logistics warehouses. It does not apply to companies that derive most of their revenues from rental incomes of commercial or other properties, whose ratings covered under the "Rating Methodology for REITs and REOCs" adopted by CCXAP.

This methodology replaces the "Rating Methodology for Real Estate Development Industry" published in April 2019. The new version amends the key rating factors that are used to assess the overall credit qualities of global real estate development companies ("REDCs"). REDCs refer to companies that derive over 50% of their revenues from the sale of residential, commercial properties.

We are publishing these criteria to help market participants better understand our approach in reviewing the key rating factors of this industry. The information of the rating changes is available on our website or by clicking on the following link: [link].

Introduction of Rating Methodology

This rating methodology incorporates the key, but not exhaustively discuss all, of rating factors considered in our rating. As a result, the rating indicated by the grid may not match the final rating of each company.

Rating Factors	Sub-factors
Scale	Total Assets
	Contracted Sales
	Land Reserve
Profitability and Efficiency	Net Profit Margin
	Contracted Sales to Total Debt
Financial Flexibility	Net Gearing Ratio
	Cash/Short-Term Debt

We consider 3 rating factors comprising of 9 quantitative and qualitative sub-factors, as follows:

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Adjusted EBIT/Interest	
Access to Capital	
Access to Capital	

Key Rating Determinants

This section discusses the rating factors and sub-factors in detail, including their rationale, measurement and how they will affect the industry rating.

1. Scale

Scale is an important factor that reflects the business strength of REDCs. In an established market, the market leaders can cooperate with reputable contractors and acquire high-quality land banks, having stronger bargaining power and lower costs of capitals. Companies with larger operating scale and better competitive position show risk resistance capability during economic downturns, while smaller-scaled companies may be taken over by the larger ones. In the evaluation of operating scale, CCXAP reviews the total assets of the rated company, as well as its contracted sales and land reserves.

(1) Total Assets

In assessing the scale of a real estate developer, CCXAP considers the total asset size, which reflects directly the relative ranking of the company in the industry. A larger size of assets under management can enhance operating stability throughout the economic cycle.

(2) Contracted Sales

Given the time lag between property sales and revenue recognition, CCXAP uses the contracted sales to assess the business performance of a real estate developer. This indicator measures the company's business scale as well as its market share, and reflects the market demand for the company's developing projects. In real estate markets without pre-sale model, revenue is used to substitute contracted sales.

(3) Land Reserves

The scale and quality of land reserves could significantly affect REDCs' development. In examining the scale of land reserves, CCXAP assesses the de-stocking process of land reserves under the premise of maintaining sales performance or keeping certain growth rates. To meet demand of operating expansion, real estate developers must maintain sufficient land reserves and work-in-progress inventories.

In the evaluation of land quality, CCXAP emphasizes geographic diversification, development prospects of regional real estate markets and average acquiring cost of land reserves. The geographically diversified companies can better resist the downturn risks of the real estate sub-market within a single region. These well-positioned companies with geographic footprint in line with market development can meet market demand accurately. Conversely, companies whose scope of business is limited to individual or a small number of cities are exposed to the risks of changes in local economic environment. The key factors related to development prospects of regional real estate markets include economic conditions, population size and mobility, per capita disposable income, supply and demand

of commercial houses. In the meanwhile, CCXAP investigates the acquiring cost and potential profitability of projects by referring to the floor prices and house prices of comparable projects in the overall market.

2. Profitability and Efficiency

CCXAP evaluates the company's financial strength by reviewing a series of financial factors. The net profit margin indicates the company's cost control ability as well as its sustainability, while the contracted sales to total debt reflects the company's operational efficiency and leverage.

(1) Net Profit Margin

CCXAP uses the net profit margin in assessing the cost control ability of REDCs. It measures the profitability of the company, after deducting expenses and taxes. Companies with higher net profit margin tend to have better quality management to control operating costs. Net profit margin calculates earning power of current delivered projects for REDCs under the pre-sale model, which indicates the homebuilders' land acquisition, project operation and cost management to some extent.

(2) Contracted Sales to Total Debt

A higher ratio of contracted sales to total debt indicates better asset efficiency and debt-servicing capabilities. The faster a homebuilder can generate cash with the same level of leverage, the more flexibility it has to manage its liquidity. CCXAP uses contracted sales/total debt to assess a company's operational efficiency. If a company does not disclose contracted sales, revenue to debt is an alternative indicator to reflect whether a property company can effectively use debt leverage to execute its business growth plan.

3. Financial Flexibility

Since real estate industry is capital intensive by its business nature, solvency and funding are especially important for REDCs. In the evaluation of this factor, CCXAP considers the company's net gearing ratio, cash /short-term debt, adjusted EBIT/Interest and access to capital.

(1) Net Gearing Ratio

CCXAP uses net gearing ratio, as measured by the total interest-bearing debt net of cash over the net assets, to measure the static leverage of the company. Net gearing ratio is a good gauge of how the company has chosen to fund its operations. A real estate developer with a low debt leverage ratio is less risky.

(2) Cash/Short-Term Debt

Short-term liquidity is vital to real estate developers based on the capital-intensive feature of the industry. A company which does not have enough cash for repayment of short-term liability may have higher risk as a going concern, reflecting a weaker credit profile. CCXAP uses cash to short-term debt to evaluate how much cushion the company has to sustain its short-term liquidity.

(3) Adjusted EBIT/Interest

CCXAP uses the adjusted EBIT interest coverage ratio to assess the company's ability to cover its

interest payments. The indicator manifests a company's ability to meet ongoing debt service requirements and to maintain sufficient financial flexibility when market or regulatory environments lead to shocks to their business.

(4) Access to Capital

In addition to internal cash flow, REDCs also rely on external cash flow as liquidity buffer. In general, listed companies have better access to capital markets and can raise funds more easily. CCXAP appraises the company's capability of using different types of financial instruments to raise funds in the capital markets. Besides, CCXAP evaluates the access to capital of REDCs by considering whether the company can obtain additional liquidity at a reasonable cost.

Other Rating Considerations

In assessing the overall creditworthiness of the company, other than the factors and sub-factors discussed above, CCXAP considers corporate governance and management, quality of financial statement, liquidity management, event risk, financial policy and business diversification.

Corporate Governance and Management

Corporate Governance and management refers to the rules and regulations, management experiences, processes, etc., which are important factors for credit rating consideration. Companies with better corporate governance and management show higher transparency and fairness, and all the stakeholders share the common interests.

Quality of Financial Statement

As comprehensive manifestation of business operation and management, the quality and reliability of financial data are the basis of credit risk analysis. In addition, companies in the same industry may vary in the choice of accounting policies. CCXAP reviews the relevance, timeliness and reliability of accounting policies and financial statements, but made no guarantee of the legality, authenticity, integrity and accuracy of the information provided by the rated companies.

Liquidity Management

CCXAP compares the sources and purposes of liquid funds over the next 12-18 months to analyze the company's expected cash flows. Sources of liquidity include operating cash flows, credit lines, cash balances and asset sales. Liquidity is needed for debt repayments (interests and principals), dividend payments, and capital expenditures.

Event Risk

The credit quality of the rated companies is also affected by special events including but not limited to mergers and acquisitions, unplanned large-scale purchase of land, sale of assets and litigation. CCXAP takes into consideration the extent of which special events affect the companies' debt servicing capabilities.

Financial Policy

Financial policy reveals the risk appetite of the corporate management, and directly influences the

capital structure and credit quality of the company. CCXAP takes into consideration the establishment and execution process of the financial policy of a company, and monitors whether the board of directors and the management of the company has accomplished its financial targets.

Business Diversification

CCXAP considers property leasing, primary land development and other multiplex segments of the rated companies, which could generate synergies with their real estate development businesses. Companies with diversified business portfolios have greater stability of revenue as it can balance the regulatory and seasonal changes.

External Support

From the perspective of external support, CCXAP considers both shareholder support and government support that a company would rely on to avoid default.

Shareholder Support

The support from shareholders benefits the company's future development and overall credit strength. In terms of shareholder strength, CCXAP considers the nature of the holding company, industry competitiveness and financial status. On the other hand, CCXAP uses development strategy, market position, ownership structure and the importance of the subsidiary company to evaluate the availability of shareholder support.

Government Support

Government support can help improve the credit quality of the company. In assessing the sustaining power from the government, CCXAP mainly examines the administrative level, economic environment, financial strength and debt burden of the government. In the aspect of support willingness, we consider the following factors such as the company's economic and political importance to the government, the legal requirements and degree of oversight from the government, and its support and bailout histories.

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