

This methodology note stands superseded. Refer to ICRA's website www.icra.in to view the updated methodology note on the sector.



ICRA Rating Feature

Rating Methodology for Real Estate Entities

This rating methodology explains ICRA's approach to analysing credit risk profile of real estate entities (REEs)¹. The objective of the rating methodology is to provide a reference tool that can be used to evaluate the credit profiles of companies engaged in real estate development. It aims to help issuers, investors and other interested market participants understand ICRA's approach in analysing quantitative and qualitative risk characteristics that are likely to affect rating outcomes. This methodology does not include an exhaustive treatment of all factors that are reflected in ratings but enables the reader to understand the rating considerations that are most important.

This note discusses ICRA's approach for rating real estate entities where the primary business model is to construct and sell built-up area, in the residential segment or the commercial segment. While the rating approach is broadly similar for both the segments, ICRA notes that there could be differences in the demand-supply dynamics and sales / collection cycles between the two segments.

For projects in the commercial segment (including retail) which are intended to be held for leasing, ICRA analyses the project's ability to generate future lease income that is adequate to cover the debt repayments, in most cases by refinancing through lease rental discounting loans. The factors considered for the analysis therein are described in more detail in the note on "Rating Methodology for Debt Backed by Lease Rentals".

ICRA's rating approach in this sector draws upon our general corporate credit rating methodology with key rating factors grouped under three broad heads – Business Risk, Financial Position and Management Quality. However, appropriate changes have been incorporated in the rating factors to take into account the features that are specific to the real estate industry, including its execution and cash collection cycle, funding mix, the terms of typical debt sanctions and general industry practises.

Business Risk Assessment

The key rating factors evaluated under Business Risk include the REE's past track record in the industry, market standing and execution capabilities. These have a direct bearing on the REE's ability to execute, market and finance its portfolio of ongoing and planned projects. In addition, there are risk factors that are specific to these projects being developed by the REE and hence need to be analysed separately. While assessing REEs, ICRA evaluates each project in the portfolio on an individual basis; however, since there can be significant cash flow fungibility across projects, even when projects are taken up in multiple entities promoted by the REE, an evaluation of the project portfolio on an aggregate basis also becomes critical. A description of the factors assessed under Business Risk is given below.

Track Record

While evaluating an REE, ICRA lays emphasis on the developer's execution track record in terms of years of presence in the real estate sector, types of projects developed, diversity of geographical presence, number and area of projects delivered and quality and timeliness maintained in the past projects. A developer's long presence in the sector is looked at in conjunction with the scale and type of development over the years. During the rating exercise, ICRA analysts also visit some of the completed and ongoing projects and obtain feedback from execution agencies and channel partners to develop qualitative judgment about the developers' execution track record, reputation and adherence to commitments under

¹ This rating methodology updates and supersedes ICRA's earlier methodology note on the sector, published in April 2015. While this revised version incorporates a few modifications, ICRA's overall approach to rating issuers in the sector remains materially similar.

sale agreements. An REE with a successful track record of developing large size projects with required quality in adequate timelines is looked at positively as such a track record enhances market position as well as brand equity and increases the pricing power of the developer. The track record is also examined in relation to the type and scale of projects being currently undertaken vis-à-vis projects executed in the past. A limited track record in the industry can be mitigated to some extent by ICRA's expectations of continued support to the REE by a strong promoter group and / or strong systems and processes put in place to manage the risks in the business.

Systems and Management Capability

While analysis of the track record of an REE provides some insights into its historical project management capabilities, further evaluation of the REE's current systems and processes is done to assess the ability of the REE to deliver the ongoing projects within committed timelines, specifications and quality. In case the development plans of REEs are relatively more aggressive in relation to the area developed by them in the past, it could put to test their ability to scale-up the execution capabilities commensurately. Moreover, many real estate players tend to diversify into new geographies and segments; for instance, from residential space to commercial space and vice versa; from low-rise to high-rise buildings and from apartment projects to mixed-use integrated townships.

While assessing the project management capability of an REE, ICRA looks at the internal planning, management information systems and project monitoring systems. An assessment is also made of the track record of the external agencies — architects, structural engineers, civil contractors, and project management consultants, among others — engaged by the developer.

Market Standing

ICRA believes there is a positive correlation between the market position of a real estate player and its ability to attract customers / brokers, engage with key lenders/investors, and get projects approved for home loans from banks / housing finance companies. Therefore, while assessing the fundamental strength of an REE, ICRA evaluates the market position of the entity on the basis of qualitative and quantitative determinants of relative market strength, such as market share, brand equity, track record of sales / bookings, and velocity of sales. Brand equity enjoyed by the REE is reflected by the premium earned over the market rate and customer preference for the REE's projects over similar competing projects. The REE's market position is also assessed through execution track record (as described earlier), bookings / occupancies in developed projects, after-sales service and general customer feedback. With a large share of the funding mix in real estate projects met through customer advances (typically 50-70%), a better market position can translate into relatively faster sales and hence, reduced funding risks for the project.

Legal and Regulatory Compliance

Adherence to the legal and regulatory processes is assessed by ICRA to understand any deviation, which could have a bearing on an REE's ability to execute a project in a timely manner. Key areas of project assessment include an REE's clear title over the property and availability of regulatory approvals (such as building plan sanction, commencement certificate, occupancy certificate, environmental clearance, airport authority approval, fire authority approval, etc). High importance is given to the status of the regulatory approvals for the on-going projects as often delays in obtaining the requisite approvals / sanctions result in project execution delay. Further, sample sale agreement between the developer and the buyer is also examined, especially the clauses relating to commitment on timely delivery, penalty in case of delay, transfer of clear title, schedule of payment, and management of property.

The above assume significance, given the strong consumer protection framework in the Real Estate Regulatory Act of 2016, which emphasises on adherence to contractual obligations and regulatory guidelines. Developers who have strong track record in adhering to regulatory stipulations and contractual obligations will be better placed under the new framework. In recent years, there have been many instances of legal cases initiated by customers against developers who have delayed the completion and handover of residential units. Favourable orders have been won by the customers in many instances. Such developments can have an adverse impact on the reputation of the developer and its market standing, apart from the financial damages borne.

Funding Risk

The funding mix for real estate projects will typically involve equity, debt and customer advances with the latter generally forming the largest share of the mix. ICRA evaluates the adequacy of committed cash flows as the sum of balance collections from sold area and undrawn credit lines divided by the balance cost to complete and debt sanctioned. A lower ratio implies that there will be high dependence on either fresh sales (market risk) or promoter contribution (sponsor risk) to bridge the funding gap.

In the case of residential projects, it is also important to consider the profile of the customers from whom the receivables are to be realised – typically collections from end customers who fund the purchases with home loans are seen to be prompt and less vulnerable to market conditions and price movements seen in the project. In this context, the collection efficiency or the ratio of the amounts received against the demands raised to the customers is an important parameter to evaluate. The impact of any deferred payment schemes offered by the REE to boost sales is also considered while evaluating the funding risk.

For commercial real estate projects, the payment milestones could be more spread out, resulting in lumpiness in collections and potential cash flow mismatches. Hence the specific payment terms for the sale agreements also need to be evaluated to estimate the funding risks.

Since projects in the initial stage can be dependent on debt funding, the status of financial closure, conditions precedent for debt disbursement and adequacy of equity margin funding for debt disbursement are other factors which are considered. ICRA also looks at other ratios such as debt raised plus customer collections against project cost incurred to understand the deployment / withdrawal of promoter funds and evaluate the level of leveraging in projects. If this ratio is excessively high, in relation to the expecting funding mix and profitability expected from the project, it could indicate significant leveraging against the project to support the other projects of the REE.

Market Risk in Ongoing Projects

The real estate industry is cyclical in nature, having positive correlation with the macro-economic environment. Some of the key drivers of the industry are the state of the economy reflected in the growth rate of the manufacturing and the services sectors, employment levels, increase in the proportion of gainfully employed workers in the total population and the extent of rise in disposable incomes. Hence, apart from the market position of the REE, the general market trends and factors specific to the micro-market of the project also influence the sales that the REE is able to achieve.

The saleability of the REE's ongoing and upcoming residential projects is assessed by the projects' type, location, price, amenities on offer, competition from nearby projects and target customers. The saleability of commercial projects is evaluated through parameters such as expected demand for office space in the location, price competitiveness (vis-a-vis other sale projects or leased area) and suitability of construction specifications for the target customer segment (for eg, adequate parking, power back-up, etc). Market risk associated with each project is also assessed in relation to its present stage of development / construction, level of bookings, velocity of sales over the project tenure and advances collected from customers. Factors that mitigate market risks for an REE include diversity of project portfolio in terms of geography, product, price points and clientele, and presence of strong marketing channels. In ICRA's experience the market risks associated with commercial real estate properties tend to be higher on account of the narrower target customer segment and larger ticket size per transaction. Hence to this extent, from a saleability perspective, construction of commercial real estate without built-to-suit arrangement or pre-sales tends to be riskier than residential real estate.

For each of the launched projects, ICRA assesses the proportion of booked space to the total area offered. A lower proportion of booked space increases the market risk for the project and can lead to a delay in project execution as projects are largely financed from customer advances. The sales volume and pricing trend since the launch of the project are also analysed to understand the market response and is used to draw inferences on future sales which will determine the projected cash flows. The break even sales volume required to bridge the funding gap, if any, in the project is also determined and the adequacy of the current sales velocity to achieve this break even sales volume is assessed.

For residential projects, ICRA also evaluates proportion of end users to investors in a project (backed by indicators such as bookings with bank borrowings and the amount collected as a proportion of total sale value). A high percentage of end users lowers booking cancellation risk to an extent and ensures higher

collection efficiency over the project execution period. If required, the list of buyers is taken along with the payments due as per construction progress and amounts received to evaluate the customer's commitment towards the project.

Construction Risk

The stage of construction of each of the ongoing projects is evaluated from the perspective of the REE's ability to complete the project in a timely manner and with all committed specifications. Any delays in project execution can have a negative impact on collections from customers (which are generally linked to construction milestones) and saleability of projects, leading to a vicious cycle of lower funding availability that further constrains execution progress. For evaluating the construction risks, ICRA compares the physical and financial progress on the projects vis-à-vis the initial targets. Other factors which are considered include complexity of construction activities involved in the projects and the track record of the contractors engaged. Also, this is seen in conjunction with the balance customer collection potential to evaluate market risk for project completion and debt servicing ability.

Diversification

ICRA looks at the developer's presence across multiple geographical markets and product segments and consequent cash flow generating capability from each market / segment. A diversified product mix, while allowing a developer to address a wider customer market, also reduces its reliance on a single segment / project. ICRA, while making the assessment, also looks at the developer's geographical presence as that helps it mitigate the risks to its portfolio from exposure to a single region, while also enabling it to leverage on growth opportunities in other regions. Diversification reduces the REE's exposure to demand volatility and competition in any particular segment / location. Given that there is usually significant cash flow fungibility across projects, operational cash flows / leveraging in projects that are performing well can be a source of cash flows to support relatively weak ongoing projects. However, such diversification is viewed in conjunction with the REE's execution capability, management bandwidth and feasibility for such diversification; in addition, restrictive covenants in debt sanction on usage of project surpluses (through strong ring-fencing or mandatory prepayment) can also impact the assumption of fungibility and hence the terms of the debt sanction are suitably factored in.

Moreover, the Real Estate Regulatory Act of 2016 imposes a strict cash flow ring-fencing mechanism, with 70% of the collections to be maintained in the project escrow account. The impact of such regulatory constraints on the fungibility of cash flows across projects will also be evaluated. Overall, a diversified project portfolio tends to support the financial flexibility of REEs and aids them to raise capital from other sources like private equity.

Many REEs have presence across multiple business segments such as residential, commercial, retail and hospitality. Within commercial real estate, developers can follow the for-sale model or held-for-leasing model. In such cases, ICRA analyses the business model, financial profile and cash flow position of each segment separately to understand the inherent risks and determine the impact of each segment on the overall credit profile of the REE. For instance, an REE which owns a portfolio of completed and leased commercial real estate with moderate leverage levels would be assessed to have good financial flexibility, which can be a credit positive for the REE. On the other hand, a portfolio of projects in commercial real estate / hospitality segments in the nascent stage could constrain the free cash flows of the REE.

While analysing the various segments, ICRA uses the specific rating methodologies applicable for those segments – viz, Rating Methodology for Debt Backed by Lease Rentals, Rating Methodology for Hotel Industry. In the case of commercial real estate developments intended to be sold, the subject rating methodology is applied since the cash flow cycle closely matches that of a residential real estate project.

Future Expansion Plans, including Land Bank

ICRA's rating approach also evaluates the future project launch plans of the REE and the ability to tie-up land, funding and regulatory approvals for the same. ICRA assesses the quality of the land bank that is available with the REE for future development. The key parameters considered include the location of the

land bank i.e. its proximity to the city centre, any other location advantage, availability of the infrastructure in the surrounding area, zoning of the land bank and status of the approvals for development. Other factors which carry importance while assessing the land bank is its historical cost as the developers who would have acquired land at relatively lower costs will have a higher flexibility in pricing the final products.

ICRA also evaluates the land aggregation strategy with regard to the current and planned investment in land bank for future growth, as this could be a key determinant of the overall cash flows and leverage levels of the REE. A business model that focuses on joint development agreements for land tie-up can lower the upfront capital requirements and minimise large outflows on land purchase. Large surplus cash balances in projected cash flows are discussed with the management to gauge the planned utilisation of these cash balances. Such surpluses could lead to intentional slowdown in sales by the management in anticipation of better sales realisations in future or are utilised for land purchases. Accordingly the assumptions related to future sales velocity and land acquisition in the cash flow model are modified to arrive at realistic cash balances.

Management Quality

In evaluating the management quality of REEs, ICRA's approach is broadly the same as detailed in the note "Corporate Credit Ratings: A Note on Methodology". Specific factors relating to the REE that are evaluated include the management information systems and level of transparency as reflected in its sale agreements, quality of accounts, accounting disclosures, and corporate governance practices. The discipline exhibited by the management to maintain project level cash flows without diversion and/or commingling of funds is also viewed favourably. Further, an REE with strong corporate governance practises and good execution track record would find it easier to enter into Joint Development Agreement (JDA) with the landowners at favourable terms.

ICRA also assesses the strengths / weaknesses arising from the issuer being a part of a "group". Expected funding support from group entities can be a credit positive whereas large funding commitments at the group level can be a constraint on the rating for individual entities in the group, which may have relatively stronger business profiles. A discussion is held with the REE's management to understand its business objectives, plans and strategies, their risk appetite, dependence on debt funds, and its views on past performance, besides the industry outlook. The focus is particularly on the management's strategy towards future developments plans, land acquisition and diversification.

Financial Risk Assessment

The various financial metrics assessed by ICRA could be divided into four categories viz., Profitability, Leverage, Coverage and Liquidity. This document provides a brief summary of how ICRA evaluates these metrics for real estate entities. For a more detailed description, readers may refer to the note titled, "Approach for Financial Ratio Analysis" published on ICRA's website. ICRA uses direct cash flow statements to evaluate past performance as well as to estimate the debt servicing capability under various projected scenarios. The various parameters assessed under the Business Risk, Management Quality and Financial Position form the inputs for the projected cash flow statements. A description of the factors assessed under Financial Position is given below.

Scale and Diversity of Cash Flows

In assessing the sustainability of cash flows of a real estate company, ICRA looks at various aspects, including scale, diversity of cash flow streams and scope for growth. An REE that has revenues coming in from diverse projects in terms of location, type and price points may be expected to have relatively sustainable and smoother cash flows. Stable revenue streams in the form of lease rentals and diversification into commercial projects also provide steady source of cash flows. As for growth potential, the factors assessed include the number of ongoing and planned projects, the area already sold out, expected realisations and the expected appreciation in property prices along with the market risks involved. A higher scale of cash flow generation is seen to be correlated with enhanced market position, financial flexibility, higher economies of scale and access to lower cost capital.

Profitability

Profitability is assessed in the light of the real estate company's cost of operations, land cost, brand equity, and the expected realisations. While the land cost can vary based on location and book value of land and hence cannot be benchmarked across locations, the construction costs for projects with similar specifications are typically comparable. Lower than comparable costs can reflect high profitability at initial stages, however, it can lead to the scope of a cost overrun and lower eventual profitability. On the other hand, reasons for higher project costs are analysed in relation to additional features in project specifications, if any.

An REE with higher profitability margins and returns on capital has a greater ability to generate internal accruals, attract external capital, and withstand business adversity. Higher profitability margins would also aid an REE to refinance its debt. The trends in operating margin and return on capital employed are also analysed to establish the stability of cash flow generation and the sufficiency of the same vis-à-vis the REE's future debt service obligations.

Capital Structure

An REE usually requires capital in large tranches, both before and during project development. Usually, a mix of debt and equity largely meets this capital requirement. While evaluating an REE's capital structure, ICRA assesses whether the entity's debt-equity ratio is in line with the underlying business risks and with that of other companies similar business models and project portfolios. Conservative leverage ratios are viewed favourably as the same reduces the committed outflows via interest and principal repayment.

The funding in the real estate sector also comes as private equity (PE), which may assume the form of debt or quasi debt since the REE may be obligated to provide an exit to investors with assured returns. The terms of PE investment are studied to evaluate the nature of repayment obligation which may fall on the REE or its promoters resulting in refinancing risk. Though such funding will be subordinated to bank construction financing, any promised coupon / amortisation during construction period can impact the liquidity of the REE as such investments generally carry high coupons / yields.

ICRA also assesses the leverage in REE's projects by calculating the ratio of external funding received (debt plus customer collections) to the cost incurred on the projects. This ratio should ideally be in line with the proportion of external funding as per the projects' initial budgets; though in ICRA's experience it tends to be higher since the component of profits from the collections received could be deployed towards other projects. A ratio that is significantly higher could indicate that the current project portfolio is supporting high investments in future growth requirements or other business segments; whereas a ratio that is significantly lower could suggest low sales progress or inability to achieve financial closure. Weak sales levels can impact debt funding, given that banks and institutions usually disburse monies in proportion to the equity infusion and customer collections received, and hence delays / inability in bringing in the above could impair the ability of the project to draw down even the sanctioned debt. Adherence to the other operational or financial covenants that are stipulated in the debt sanction terms are also evaluated.

Project Cash Flow Adequacy and Debt Coverage

ICRA analyses the adequacy of the debt coverage ratios and the matching of the REE's future cash flows (under various sensitivity scenarios) with its debt servicing obligations. It analyses the extent of committed future outflows (on account of construction, debt obligation, etc) which can be met through committed cash flows from projects, expected cash flows from new sales, undrawn bank lines, refinancing or promoter contribution. The inherent cash flow potential of the projects to meet these committed outflows is assessed through ratios such as Adequacy of Committed Cash Flows and Cash Flow Security Cover. The higher these ratios, the lower would be the expected dependence on refinancing and promoter contribution.

$$\text{Adequacy of Committed Cash Flows} = \text{Receivables from Sold Area} / (\text{Pending Cost} + \text{Debt Outstanding})$$

$$\text{Cash Flow Security Cover} = (\text{Receivables} + \text{Value of Stock} - \text{Pending Cost}) / \text{Debt Outstanding}$$

While the above ratios are useful to assess the inherent cash flow cover available in the projects, the ability of an REE to match these future cash inflows with the schedule of outflows is analysed through detailed cash flow projections drawn for quarterly / semi-annual periods. Project-wise cash flow projections are drawn to assess relative dependence / significance of particular projects, and project-wise surplus / deficit.

Cash flows are also adjusted for the units sold under various marketing schemes such as possession linked plans, subvention plans, etc where either the cash inflows will be back-ended or interest cost will have to be borne by the developer on behalf of the customer. Sensitivity tests are performed on certain key drivers and assumptions, such as selling prices, bookings, construction schedule and sales velocity. These projections are based on the expected operating and financial performance of the issuer, ICRA's outlook on the real estate industry, and the issuer's medium / long-term development plans.

Also of particular importance are the projected capital expenditure, land acquisition outlay, and investment in group companies. While preparing the projected cash flows, the impact of any PE funding availed for the projects (which could have terms relating to distribution of surpluses in specified ratio) or cash sweep mechanisms imposed by the lenders is also considered. The ratio of available project cash flows (including undrawn debt and promoter contribution) over the committed debt servicing is analysed for each projected period and assessed whether it remains adequate for the rating category under various stress scenarios.

Liquidity and Financial Flexibility

The issuer's liquidity and financial flexibility — as reflected by its unutilised bank / credit limits, liquid investments, and its relationship with banks, financial institutions and other intermediaries — is also assessed since they can form a vital source of cash flows in case of any weakness in the operational cash flows from the projects. Though the unencumbered land base is an inherently less liquid asset, it can provide financial flexibility through debt raised against it.

A residential real estate company usually collects upfront advances from the customers, which provide liquidity over short to medium term. ICRA evaluates the level of dependence on advances from customers and the structural features put in place (such as escrow account) for managing such advances. Loan structures which require mandatory prepayment of debt using a specified proportion of the customer collections (that is appropriate for the construction stage) is viewed positively, as are debt service reserve accounts (DSRA). ICRA also considers the fund-raising ability of the REE against its ongoing projects by comparing the leverage levels in these projects to the industry trends; a lower leverage level in projects that are operationally performing well can provide financial flexibility to the REE.

Debt-Servicing Track Record

The debt-servicing track record of an REE is an important input for a credit rating exercise. Any delays or defaults in the past in the repayment of principal and/or interest payments reduce the comfort level with respect to the developer's future debt servicing capability and willingness.

Contingent Liabilities / Off-Balance Sheet Exposures

Typically, a developer has to provide a bank guarantee to the municipal authorities for its project developed under Special Purpose Vehicles (SPVs), which forms a part of the developer's contingent liabilities. ICRA, in its analysis, determines the possibility of such guarantees being invoked and the pressure that the event would exert on the REE's cash flows. In case there are any other contingent liabilities like corporate guarantees, assured returns / buyback obligations to PE investors, pending liabilities towards Government departments, etc, the impact of the same on the developer's credit profile is also assessed.

Consolidated Financial Analysis

In the case of groups consisting of companies with close financial and operational linkages, various parameters such as capital structure, debt coverage indicators, and future funding requirements are assessed at the consolidated/group level to evaluate the plausible impact on the entity being rated. The impact of regulatory constraints such as the Real Estate Regulatory Act on the fungibility of cash flows across projects will also be evaluated.

Accounting Quality

While assessing the developer's accounting quality, the Accounting Policies, Notes to Accounts, and Auditor's Comments are reviewed. Any deviation from the Generally Accepted Accounting Practises is noted and the financial statements of the issuer are adjusted to reflect the impact of such deviations. A real estate company which follows consistent, transparent and conservative policy on financial accounting is

viewed more favourably. Accounting practises like the revenue recognition method (percentage of completion versus completed), valuation of inventory and construction work-in-progress, depreciation methods and asset lives, and treatment of contingent liabilities, are reviewed and compared with the industry practises. As the revenue recognition policies may vary across entities, resulting in diverse financial statements, ICRA's assessment is based more on the adjusted cash flows and related ratios. Moreover, since the revenue recognition would rely significantly on the management estimates of the total project cost, the cost estimates are compared with that of similar projects to determine the possibility of future cost revisions and assess the stability of the profit margins going forward.

Summing Up

ICRA's credit ratings are a symbolic representation of its opinion on the relative credit risk associated with the instrument being rated. This opinion is arrived at following a detailed evaluation of the issuer's business and financial risks, its competitive strengths, its likely cash flows over the life of the instrument being rated, and the adequacy of such cash flows vis-à-vis its debt-servicing obligations. As this note highlights, for real estate companies, the analytical emphasis also include factors like the REE's ability to execute projects, its market risk derived from operating environment and its market position, its cash flows position, its land aggregation policy, and its debt-servicing obligation and financial flexibility.



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