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RATING METHODOLOGY

Homebuilding And Property Development Industry

This rating methodology replaces "Homebuilding and Property Development Industry", last revised on April 28, 2015. We have updated some outdated links and removed certain issuer-specific information.

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Summary

This rating methodology explains our approach to assessing credit risk for companies in the homebuilding and property development industry globally. This document provides general guidance that helps companies, investors, and other interested market participants understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for companies in the homebuilding and property development industry. This document does not include an exhaustive treatment of all factors that are reflected in our ratings but should enable the reader to understand the qualitative considerations and financial information and ratios that are usually most important for ratings in this sector.

This report includes a detailed scorecard. The scorecard provides a reference tool that can be used to approximate credit profiles within the homebuilding and property development sector in most cases. The scorecard provides summarized guidance for the factors that are generally most important in assigning ratings to companies in the homebuilding and property development industry. However, the scorecard is a summary that does not include every rating consideration. The weights shown for each factor in the scorecard represent an approximation of their importance for rating decisions, but actual importance may vary substantially. The scorecard-indicated outcome is not expected to match the actual rating of each company in most cases.

THIS RATING METHODOLOGY WAS UPDATED ON FEBRUARY 6, 2020. WE HAVE UPDATED SOME OUTDATED REFERENCES AND ALSO MADE SOME MINOR FORMATTING CHANGES.

The scorecard contains five factors that are important in our assessments for ratings in the homebuilding and property development sector:

1. Scale
2. Business Profile
3. Profitability and Efficiency
4. Leverage and Coverage
5. Financial Policy

Some of these factors also encompass a number of sub-factors. An issuer's scoring on a particular scorecard factor or sub-factor often will not match its overall rating.

This rating methodology is not intended to be an exhaustive discussion of all factors that our analysts consider in assigning ratings in this sector. We note that our analysis for ratings in this sector covers factors that are common across all industries such as ownership, management, liquidity, corporate legal structure, governance, and country related risks, which are not explained in detail in this document, as well as factors that can be meaningful on a company-specific basis. Our ratings consider these and other qualitative considerations that do not lend themselves to a transparent presentation in a scorecard format. The scorecard used for this methodology reflects a decision to favor a relatively simple and transparent presentation rather than a more complex scorecard that would map scorecard-indicated outcomes more closely to actual ratings.

Highlights of this report include:

» An overview of the rated universe

» A summary of the rating methodology

» A description of the scorecard factors

» Comments on the rating methodology assumptions and limitations, including a discussion of rating considerations that are not included in the scorecard

The Appendix shows the full scorecard.

This methodology describes the analytical framework used in determining credit ratings. In some instances, our analysis is also guided by additional publications which describe our approach for analytical considerations that are not specific to any single sector. Examples of such considerations include but are not limited to: the assignment of short-term ratings, the relative ranking of different classes of debt and hybrid securities, how sovereign credit quality affects non-sovereign issuers, and the assessment of credit support from other entities.[1]

About the Rated Universe

This methodology is applicable to companies that are engaged primarily in the construction and sale of finished single- and multi-family housing to large-scale residential apartments. These companies may have smaller activities in the development of commercial properties and property investment. However, companies whose largest activity is the development of commercial properties for long-term investments are covered by our rating methodology for REITs and other commercial real estate firms.[2] Companies that generate their revenues or operating cash flows from construction or refurbishing of buildings for commercial purposes (offices, warehouses) or public purposes (schools, hospitals, government buildings),

1 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

2 For more information, see our methodology for REITs and other commercial real estate firms. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

are covered by our construction industry rating methodology.[3] Building materials companies, which produce some of the raw material inputs for the homebuilding and property development industry, are also not covered by this methodology, as the credit profiles of such companies are characterized by manufacturing and distribution characteristics.[4]

We rate homebuilders and property developers globally. Homebuilders and property developers covered by this methodology represent a diverse group of issuers differentiated by scale, market position and geographic reach.

About This Rating Methodology

This report explains the rating methodology for homebuilding and property development companies in six sections, which are summarized as follows:

1. Identification of the Scorecard Factors

The scorecard in this rating methodology is comprised of five factors. Some of the five factors are comprised of sub-factors that provide further detail.

The scorecard elements are applicable for companies in markets with different market dynamics, except for the leverage sub-factor, for which we use different metrics for companies in high growth markets and companies in standard markets.

High growth markets are characterized by high growth in property sales over long periods of time, underpinned by sustained high economic growth rates, ongoing urbanization and strong demand for upgrades in living standards. Companies operating in these markets will exhibit high growth in both revenues and debt, as they tend to rely on debt to fund their growth. A revenue to debt ratio provides more current insights in these markets for assessing the degree of risk when a property company uses debt leverage to execute its business growth plan.

For companies operating in standard markets (all markets that do not fit the criteria stated for high growth markets), a ratio of debt to total capitalization ratio provides a useful indicator of leverage and provides insights on capital structure discipline.

EXHIBIT 1

Homebuilding And Property Development Industry Scorecard

Factor	Factor Weighting	Sub-Factor	Sub-Factor Weighting
1) Scale	15%	Revenue	15%
2) Business Profile	25%	Business Profile	25%
3) Profitability and Efficiency	10%	Cost Structure (Pre-Impairment Gross Margin)	10%
4) Leverage and Coverage	30%	a) EBIT Coverage of Interest	15%
		b) i. For companies in High Growth Markets:	
		- Revenue to Debt; or	15%
		ii. For companies in Standard Markets:	
		- Homebuilding and Property Development Debt to Total Capitalization	15%
5) Financial Policy	20%	Financial Policy	20%

3 For more information, see our methodology for the construction industry. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

4 For more information, see our methodology for building materials. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

2. Measurement or Estimation of Factors in the Scorecard

We explain our general approach for scoring each scorecard factor and show the weights used in the scorecard. We also provide a rationale for why each of these scorecard components is meaningful as a credit indicator. The information used in assessing the sub-factors is generally found in or calculated from information in company financial statements, derived from other observations, or estimated by our analysts.

Our ratings are forward-looking and reflect our expectations for future financial and operating performance. However, historical results are helpful in understanding patterns and trends of a company's performance as well as for peer comparisons. We often utilize historical data (typically the last twelve months of reported results). However, the factors in the scorecard can be assessed using various time periods. For example, rating committees may find it analytically useful to examine both historic and expected future performance for periods of several years or more. All of the quantitative credit metrics incorporate Moody's standard adjustments to income statement, cash flow statement and balance sheet amounts for restructuring, impairment, off-balance sheet accounts, receivable securitization programs, under-funded pension obligations, and recurring operating leases.[5] We may also make other analytical adjustments that are specific to a particular company.

3. Mapping Scorecard Factors to the Rating Categories

After estimating or calculating each sub-factor, the outcomes for each of the sub-factors are mapped to a broad Moody's rating category (Aaa, Aa, A, Baa, Ba, B, Caa, or Ca, also called alpha categories).

4. Assumptions, Limitations and Rating Considerations That Are Not Included in the Scorecard

This section discusses limitations in the use of the scorecard to map against actual ratings, some of the additional factors that are not included in the scorecard but can be important in determining ratings, and limitations and assumptions that pertain to the overall rating methodology.

5. Determining the Overall Scorecard-Indicated Outcome[6]

To determine the overall rating, we convert each of the six sub-factor scores into a numeric value based upon the scale below.

Aaa	Aa	A	Baa	Ba	B	Caa	Ca
1	3	6	9	12	15	18	20

The numerical score for each sub-factor is multiplied by the weight for that sub-factor with the results then summed to produce a composite weighted factor score. The composite weighted factor score is then mapped back to an alphanumeric rating based on the ranges in the table below.

5 For more information, see our cross-sector methodology that describes our standard adjustments in the analysis of non-financial corporations. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

6 In general, the scorecard-indicated outcome is oriented to the Corporate Family Rating (CFR) for speculative-grade issuers and the senior unsecured rating for investment-grade issuers. For issuers that benefit from ratings uplift due to parental support, government ownership or other institutional support, the scorecard-indicated outcome is oriented to the baseline credit assessment. For more information, see our cross-sector methodology for government-related issuers. Individual debt instrument ratings also factor in decisions on notching for seniority level and collateral. The documents that provide broad guidance for such notching decisions are the rating methodology on loss given default for speculative-grade non-financial companies, the methodology for notching corporate instrument ratings based on differences in security and priority of claim, and the methodology for assigning short-term ratings. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Scorecard-Indicated Outcome

Scorecard-Indicated Outcome	Aggregate Weighted Total Factor Score
Aaa	x < 1.5
Aa1	1.5 ≤ x < 2.5
Aa2	2.5 ≤ x < 3.5
Aa3	3.5 ≤ x < 4.5
A1	4.5 ≤ x < 5.5
A2	5.5 ≤ x < 6.5
A3	6.5 ≤ x < 7.5
Baa1	7.5 ≤ x < 8.5
Baa2	8.5 ≤ x < 9.5
Baa3	9.5 ≤ x < 10.5
Ba1	10.5 ≤ x < 11.5
Ba2	11.5 ≤ x < 12.5
Ba3	12.5 ≤ x < 13.5
B1	13.5 ≤ x < 14.5
B2	14.5 ≤ x < 15.5
B3	15.5 ≤ x < 16.5
Caa1	16.5 ≤ X < 17.5
Caa2	17.5 ≤ X < 18.5
Caa3	18.5 ≤ X < 19.5
Ca	x ≥ 19.5

For example, an issuer with a composite weighted factor score of 14.6 would have a B2 scorecard-indicated outcome.

6. Appendix

The Appendix provides the full scorecard.

Factor 1: Scale (15% weight)

Why It Matters

Scale reflects size, market position and brand name. There are a number of advantages to possessing large scale in this industry. Being among the largest and leading players in numerous markets can provide better access to skilled subcontractors and bank financing, first choice among land deals, greater purchasing and pricing power, while at the same time offering stronger staying power and better financial and operational flexibility during a downturn. Furthermore, large companies tend to have broad geographic coverage, which also offers them the benefits of geographic diversification.

In high growth markets, large residential property developers tend to have apparent benefits over smaller players including easier access to bank financing and strong financial power to bid for land in good locations. Many developers have grown rapidly and gained market shares by acquiring projects from small and financially weak companies.

How We Assess It for the Scorecard

Revenues in the scorecard refer to homebuilding and property development and investment revenues, which equal home and property sales, land sales and rental income over the trailing 12-month period.

FACTOR 1

Scale (15%)

	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Revenue (USD Billion)	≥ $50	$30 - $50	$15 - $30	$5 - $15	$1.5 - $5	$0.5 - $1.5	$0.2 - $0.5	< $0.2

Factor 2: Business Profile (25% weight)

Why It Matters

Business profile is evaluated on a qualitative basis, which includes a broad assessment of operating position, business and acquisition strategies, product mix, geographic diversity, and execution ability. Companies with strong execution, prudent business and acquisition strategies, and balanced product and geographic mix tend to have higher operational and cash flow stability, which strengthens their ability to buffer market volatility and manage through market downturns.

On the other hand, companies with weak execution and operating position will be more susceptible to downturns in economic growth and consumer spending. Companies with deteriorating market positions can find it difficult to attract and retain skilled employees without paying excessive compensation. They may also need to devote more time and money to promotional sales practices, and can experience greater difficulty in obtaining capital at a competitive cost.

Most companies in this industry have high operating leverage that can lead to large swings in earnings and cash flow and potential pressure on liquidity. In this industry, management needs to devote considerable attention to adjusting cost structures to minimize damage to revenue and earnings when business slows, while balancing the potential negative effects on employee morale, ability to invest in new products, and customer service quality.

Business profile is an important factor to consider in assessing property developers. The degree of impact varies depending on each company's area of operation and product mix. Companies with a business strategy focusing on end user demand are less susceptible to business volatility arising from tightening of government controls against speculative activities. Broad geographic diversity can also mitigate companies' exposure to local economic and regulatory risks.

How We Assess It for the Scorecard

The scorecard scoring for Business Profile is based on a qualitative assessment of the issuer's business strategy; market position; product, price-point and geographic diversity; inventory management; how conservative or aggressive its land strategy is, including the percentage of owned vs. optioned land; percentage of speculative construction vs. construction done under a firm contract; use of off-balance sheet structures; and execution track record vs. plan.

FACTOR 2

Business Profile (25%)

	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Business Profile	Expected volatility in results is almost non-existent. Supported by a commanding market position, effective cost management, very prudent land strategy and excellent execution track record. Well-balanced national reach.	Very low expected volatility in results. Supported by a deeply entrenched and leading market position that is highly defensible through cost control. Prudent land strategy and strong execution track record. Balanced national exposure.	Low expected volatility in results. Supported by a strong market position, visible competitive advantages and solid diversity characteristics. Cautious land strategy and solid execution track record. National exposure.	Moderate expected volatility in results. Supported by a solid market position and at least one clear competitive advantage. Good diversity characteristics provide a buffer against sudden/ unexpected shifts in demand. Land strategy balances growth vs. liquidity. Execution track record largely in line with expectations.	Results are vulnerable to periods of heightened volatility. Such exposure is tempered by a solid market position in a number of its core markets and fair diversity characteristics. Land strategy tends to be aggressive. Modest execution track record.	Results are expected to be highly volatile. Market position could quickly erode. Concentration risk. Aggressive land strategy and inconsistent execution track record.	Results are expected to be extremely volatile. High exposure to emerging trends and high concentration risk. Very aggressive land strategy and consistent under-performance in execution track record.	Results are expected to be extremely volatile. Very high exposure to emerging trends and very high concentration risk. Land strategy tends to embody very large, debt-financed land parcels. Poor execution track record.

Factor 3: Profitability and Efficiency (10% weight)

Why It Matters

Profitability is an indicator of the success of the business and effectiveness of management as well as the company's ability to support operations and business growth.

Technological innovation has been slow and infrequent for the homebuilding and property development industry, and many companies still build homes the way they have done in the past. Some companies attempt to differentiate themselves by experimenting with different materials or processes and pursue national contracts with a few major vendors of related products so as to reap purchasing economies of scale. Some property developers have increasingly standardized their product design and use of materials to reduce costs and increase purchasing economies of scale. Profitability is one indicator of the success of such efforts.

How We Assess It for the Scorecard

Cost structure is estimated by gross margins that include interest charged to cost of goods sold and exclude land impairment charges so as to focus on current profitability and efficiency.

FACTOR 3

Profitability and Efficiency (10%)

	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Cost Structure (Pre-Impairment Gross Margin)	≥ 65%	50% - 65%	36% - 50%	28% - 36%	21% - 28%	14% - 21%	7% - 14%	< 7%

Factor 4: Leverage and Coverage (30% weight)

Why It Matters

An important rating focus in this sector is the perceived ability of homebuilders and property developers to maintain sufficient financial flexibility when market or regulatory developments lead to shocks to their business and finances.

How We Assess It for the Scorecard

EBIT Coverage of Interest is an indicator of a company's ability to fund interest payments. Interest coverage is normally calculated for the scorecard as follows:

(Pretax income from continuing operations + interest expense + interest charged to cost of goods sold + impairments ± unremitted equity losses/income from off-balance sheet joint ventures + dividends received from off-balance sheet joint ventures ± extraordinary items) / (interest expense + interest capitalized).

If an issuer's financial statements do not consistently disclose interest charged to cost of goods sold, the interest coverage formula is modified to substitute "capitalized interest" in the numerator for "interest charged to cost of goods sold." Capitalized interest will generally be higher than interest charged to cost of goods sold when companies are growing rapidly but the two measures should converge over long periods of time as even a strong market will eventually experience periods of slow-down in this cyclical industry.

Revenue to Debt is a useful indicator of the use of leverage by property developers in high growth markets to generate revenue and is calculated as the company's revenue divided by total debt. Property developers in high growth markets tend to use debt extensively to fund their rapid growth and their debt to capitalization ratios are less useful in differentiating relative credit risk. In markets with persistently high growth, revenue to debt ratio can provide insights on whether a property company can effectively use debt leverage to execute its business growth plan. Moody's adjustments to total debt consider our perception of risk borne by the issuer, and may change over time if we perceive a shift in these risks.

Homebuilding and Property Development Debt to Total Capitalization is a useful way to compare the capital structures of homebuilding and property development companies in standard markets. Debt leverage provides a simple indication of the cushion and financial flexibility available to a homebuilder during a downturn. This ratio is also a good indicator of the importance that management attaches to creditor protection since management has more control over this than many other leverage measures.

Our homebuilding and property development debt measures typically exclude the debt of financial services subsidiaries (these are common in the U.S.) because the arrangements we have reviewed have been low risk to the parent company and including such finance operations on the balance sheet would mix two very different activities. The debt of these subsidiaries is almost always non-recourse to the parent homebuilding and property development company, secured by the mortgages underpinning this debt, and tends to amortize quickly, as the mortgage is usually sold within 0-60 days, with proceeds used to pay down the underlying debt.

FACTOR 4

Leverage and Coverage (30%)

	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
a) EBIT Coverage of Interest (15%)	≥ 20x	15x – 20x	10x – 15x	6x – 10x	3x – 6x	1x – 3x	0x – 1x	<0x
For companies in high growth markets								
b) i) Revenue to Debt (15%)	≥ 250%	195% - 250%	145% - 195%	115% - 145%	85% - 115%	65% - 85%	45% - 65%	<45%
For companies in standard markets								
b) ii) HB and PD Debt to Total Capitalization (15%)	< 20%	20% - 25%	25% - 30%	30% - 40%	40% - 50%	50% - 65%	65% - 80%	≥ 80%

Factor 5: Financial Policy (20% weight)

Why It Matters

Management and board tolerance for financial risk is a key rating consideration as it will directly affect debt levels and credit quality as well as the risk of adverse debt leverage movements.

Financial policies provide a guide to the appetite of a company's governing board and management for risk and the likely future direction for the company's capital structure. Key issues include debt leverage, coverage and return targets, liquidity management, cash distributions to shareholders, and acquisition strategies. A company's public commitments in these areas, the consistency of those commitments in our interactions with the company, its track record of adhering to commitments, and the degree to which its targets appear to be realistic are important considerations.

A company's financial risk tolerance can serve as a guidepost for its investments and capital allocation. Management's commitment to maintaining its existing credit profile or sustaining an improved credit profile can be an important rating consideration. Ratings consider the likelihood that management may make strategic acquisitions, distribute cash to shareholders, or complete spin-offs or other leveraging transactions. Conversely, a company's credit rating may be better able to withstand a moderate leveraging event if management has demonstrated commitment to returning credit metrics to pre-transaction levels and has a strong track record of doing so.

Some homebuilding and property development companies are controlled by a family or dominant shareholder group. The controlling shareholders exert significant influence over financial policies, and their comfort level with debt leverage – particularly as signaled by prior actions – is a key consideration in our assessment for this factor. Family-controlled companies in this sector may be more risk-tolerant but are also subject to shifts in financial policies as ownership moves through successive generations or passes out of family hands. Private equity owners in this sector are usually financially oriented, tend to use debt leverage aggressively, and have shorter holding periods than strategic owners, which create event risk.

How We Assess It for the Scorecard

We assess the issuer's capital structure goals, history of prior actions, and adherence to its commitments. Attention is paid to use of cash flow through different phases of economic cycles. Also of interest is the way in which management responds to key events, such as a tight credit market liquidity environment, legal actions, competitive challenges, regulatory pressures, and labor disputes.

Management's appetite for M&A activity is also assessed with a focus on the type of transactions (i.e., core competency or new business) and funding decisions. Frequency and materiality of acquisitions and previous financing choices are evaluated. A history of debt-financed or credit-transforming acquisitions increases risk.

We consider a company's and its owners' past record of balancing shareholder returns and bondholders' interests. A track record of favoring shareholder returns at the expense of bondholders is a negative rating consideration.

FACTOR 5

Financial Policy (20%)

	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Financial Policy	Expected to have extremely conservative financial policies; very stable metrics; public commitment to very strong credit	Expected to have very stable and conservative financial policies; stable metrics; minimal event risk that would cause a rating transition;	Expected to have predictable financial policies that preserve creditor interests. Although modest event risk exists, the effect on	Expected to have financial policies that balance the interest of creditors and shareholders; some risk that debt-funded	Expected to have financial policies that tend to favor shareholders over creditors; above average financial risk resulting from shareholder	Expected to have financial policies that favor shareholders over creditors; high financial risk resulting from shareholder	Expected to have financial policies that create elevated risk of debt restructuring in varied economic environments	Expected to have financial policies that create elevated risk of debt restructuring even in healthy

FACTOR 5

Financial Policy (20%)

	profile over the long term	public commitment to strong credit profile over the long term	leverage is likely to be small and temporary; strong commitment to a solid credit profile	acquisitions or shareholder distributions could lead to a weaker credit profile	distributions, acquisitions or other significant capital structure changes	distributions, acquisitions or other significant capital structure changes		economic environments

Assumptions, Limitations and Other Rating Considerations That are not Covered in the Scorecard

The scorecard in this rating methodology represents a decision to favor simplicity that enhances transparency and to avoid greater complexity that would enable the scorecard to map more closely to actual ratings. Accordingly, the five factors in the scorecard do not constitute an exhaustive treatment of all of the considerations that are important for ratings of companies in the global homebuilding and property development sector. In addition, our ratings incorporate expectations for future performance, while the financial information that is used for mapping in the scorecard is mainly historical. In some cases, our expectations for future performance may be informed by confidential information that we cannot disclose. In other cases, we estimate future results based upon past performance, industry trends, competitor actions or other factors. In either case, predicting the future is subject to the risk of substantial inaccuracy.

Assumptions that may cause our forward-looking expectations to be incorrect include unanticipated changes in any of the following factors: the macroeconomic environment and general financial market conditions, industry competition, or regulatory and legal actions.

Key rating assumptions that apply in this sector include our view that sovereign credit risk is strongly correlated with that of other domestic issuers, that legal priority of claim affects average recovery on different classes of debt, sufficiently to generally warrant differences in ratings for different debt classes of the same issuer, and the assumption that access to liquidity is a strong driver of credit risk.

In choosing metrics for this rating methodology scorecard, we did not explicitly include certain important factors that are common to all companies in any industry such as the quality and experience of management, assessments of corporate governance and the quality of financial reporting and information disclosure. Ranking these factors by rating category in a scorecard would in some cases suggest too much precision in the relative ranking of particular issuers against all other issuers that are rated in various industry sectors.

Ratings may include additional factors that are difficult to quantify or that have a meaningful effect in differentiating credit quality only in some cases, but not all. Such factors include financial controls, exposure to uncertain licensing regimes, and possible government interference in some countries. Regulatory, litigation, liquidity, technology, and reputational risk as well as changes to consumer and business spending patterns, competitor strategies, and macroeconomic trends also affect ratings. While these are important considerations, it is not possible to precisely express these in the rating methodology scorecard without making the scorecard excessively complex and significantly less transparent. Ratings may also reflect circumstances in which the weighting of a particular factor will be substantially different from the weighting suggested by the scorecard.

This variation in weighting rating considerations can also apply to factors that we choose not to represent in the scorecard. For example, liquidity is a consideration frequently critical to ratings and which may not, in other circumstances, have a substantial impact in discriminating between two issuers with a similar credit profile. As an example of the limitations, ratings can be heavily affected by extremely weak liquidity that magnifies default risk. However, two identical companies might be rated the same if their only differentiating feature is that one has a good liquidity position while the other has an extremely good liquidity position, unless these are very low rated companies for which liquidity can play an outsized role in avoiding default.

Other Rating Considerations

Ratings encompass a number of additional considerations. These include but are not limited to: our assessment of the quality of management, corporate governance, financial controls, liquidity management, event risk and seasonality.

Other Financial Measures

While our analysis focuses on the financial measures included in the scorecard, other financial measures can be important, particularly when these move in an unexpected way or are far out of line with measures for peer companies involved in the same business activities. For example, tangible net worth is not included in the scorecard but can often provide additional analytical insight in our assessment of the scale of homebuilders. Unlike other industries, in which highly leveraged companies with large amounts of negative tangible net worth can operate with a modicum of success, the homebuilding and property development industry typically requires an enormous amount of capital to purchase, develop, and hold large amounts of land and work-in-process inventories. As a result, a company with negative or very low tangible net worth (assuming that this is an accurate indicator for economic net worth) may have an untenable capital structure.

Management Strategy

The quality of management is an important factor supporting a company's credit strength. Assessing the execution of business plans over time can be helpful in assessing management's business strategies, policies, and philosophies and evaluates management performance relative to performance of competitors and our projections. A record of consistency provides us with insight into management's likely future performance in stressed situations and can be an indicator of management's tendency to depart significantly from its stated plans and guidelines.

Corporate Governance

Among the areas of focus in corporate governance are audit committee financial expertise, the incentives created by executive compensation packages, related party transactions, interactions with outside auditors, and ownership structure.

Corporate governance is an important consideration especially in emerging markets Developments that may be of interest in this industry, include, but are not limited to:

» Material regulatory actions against the company or its senior executives.

» Material changes in major shareholders' stakes, in particular stake reductions.

» Sudden key management changes without immediate and appropriate replacements.

» Corporate transparency and a timely management strategy to deal with event risks.

Investment and Acquisition Strategy

Our credit assessments in this industry take into consideration management's investment strategy. Investment strategy is compared with that of the other companies in the rated universe. Acquisitions can strengthen a company's business. Our assessment of a company's tolerance for acquisitions at a given rating level takes into consideration (1) management's risk appetite, including the likelihood of further acquisitions over the medium term; (2) share buy-back activity; (3) the company's commitment to specific leverage targets; and (4) the volatility of the underlying businesses, as well as that of the business acquired. Ratings can often hold after large acquisitions even if leverage temporarily climbs above normally acceptable ranges. However, this depends on our perception of (1) the strategic fit; (2) our expectations for leverage following an acquisition; and (3) our confidence that credit metrics will be restored in a relatively short timeframe.

Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. Such accuracy is only possible when companies have sufficient internal controls, including centralized operations and the proper tone at the top and consistency in accounting policies and procedures.

Weaknesses in the overall financial reporting processes, financial statement restatements or delays in regulatory filings can be indications of a potential breakdown in internal controls.

Liquidity Management

Liquidity is a critical rating factor for all homebuilders and property developers. Liquidity can be particularly important for non-investment grade issuers where they typically have less operating and financial flexibility. We form an opinion on likely near-term liquidity requirements from the perspective of both sources and uses of cash. This may include monitoring bank covenants and compliance cushion to assess whether the company is likely to require covenant relief in the event of even a modest industry downturn or an issuer-specific decline in performance.

Companies with prudent liquidity management tend to reserve sufficient cash to meet their normal and contingent funding needs. These reserves could provide the companies with financial flexibility in managing the business volatilities arising from unexpected changes in market and/or regulatory environments. Our assessment also considers the perceived adequacy of property developers' offshore resources to service their offshore obligations.

In assessing the property companies' liquidity, we evaluate the adequacy of their internal reserves (including cash on the balance sheet and operating cash flow) to cover their obligations (including committed land premium payment, debt repayments and dividend payments) in a forward-looking period of at least one year. We will also consider their cash to short term debt coverage, which reflects the companies' available cash resources to service their near-term debt obligation. Having diversified funding sources, including access to offshore funding, is a credit positive consideration, as these alternative funding channels would reduce reliance and exposure to risks associated with the availability of domestic market financing.

Event Risk

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness. Typical special events include mergers and acquisitions, large land acquisitions, asset sales, spin-offs, capital restructuring programs, litigation, regulatory and political changes, and shareholder distributions.

Appendix: Homebuilding And Property Development Methodology Scorecard

Factor	Sub Factor	Weight	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Scale	Revenue (USD Billion)	15%	≥ $50	$30 - $50	$15 - $30	$5 - $15	$1.5 - $5	$0.5 - $1.5	$0.2 - $0.5	< $0.2
Business Profile	Business Profile	25%	Expected volatility in results is almost non-existent. Supported by a commanding market position, effective cost management, very prudent land strategy and excellent execution track record. Well-balanced national reach.	Very low expected volatility in results. Supported by a deeply entrenched and leading market position that is highly defensible through cost control. Prudent land strategy and strong execution track record. Balanced national exposure.	Low expected volatility in results. Supported by a strong market position, visible competitive advantages and solid diversity characteristics. Cautious land strategy and solid execution track record. National exposure.	Moderate expected volatility in results. Supported by a solid market position and at least one clear competitive advantage. Good diversity characteristics provide a buffer against sudden/ unexpected shifts in demand. Land strategy balances growth vs. liquidity. Execution track record largely in line with expectations.	Results are vulnerable to periods of heightened volatility. Such exposure is tempered by a solid market position in a number of its core markets and fair diversity characteristics. Land strategy tends to be aggressive. Modest execution track record.	Results are expected to be highly volatile. Market position could quickly erode. Concentration risk. Aggressive land strategy and inconsistent execution track record.	Results are expected to be extremely volatile. High exposure to emerging trends and high concentration risk. Very aggressive land strategy and consistent under-performance in execution track record.	Results are expected to be extremely volatile. Very high exposure to emerging trends and very high concentration risk. Land strategy tends to embody very large, debt-financed land parcels. Poor execution track record.
Profitability and Efficiency	Cost Structure (Pre-Impairment Gross Margin)	10%	≥ 65%	50% - 65%	36% - 50%	28% - 36%	21% - 28%	14% - 21%	7% - 14%	< 7%
Leverage and Coverage	a) EBIT Coverage of Interest	15%	≥ 20x	15x – 20x	10x – 15x	6x – 10x	3x – 6x	1x – 3x	0x – 1x	<0x
	b) Leverage									
	i) Revenue to Debt (High Growth Markets)	15%	≥ 250%	195% - 250%	145% - 195%	115% - 145%	85% - 115%	65% - 85%	45% - 65%	<45%
	ii) HB and PD Debt to Total Capitalization (Standard Markets)	15%	< 20%	20% - 25%	25% - 30%	30% - 40%	40% - 50%	50% - 65%	65% - 80%	≥ 80%
Financial Policy	Financial Policy	20%	Expected to have extremely conservative financial policies; very stable metrics; public commitment to very strong credit profile over the long term	Expected to have very stable and conservative financial policies; stable metrics; minimal event risk that would cause a rating transition; public commitment to strong credit profile over the long term	Expected to have predictable financial policies that preserve creditor interests. Although modest event risk exists, the effect on leverage is likely to be small and temporary; strong commitment to a solid credit profile	Expected to have financial policies that balance the interest of creditors and shareholders; some risk that debt funded acquisitions or shareholder distributions could lead to a weaker credit profile	Expected to have financial policies that tend to favor shareholders over creditors; above average financial risk resulting from shareholder distributions, acquisitions or other significant capital structure changes	Expected to have financial policies that favor shareholders over creditors; high financial risk resulting from shareholder distributions, acquisitions or other significant capital structure changes	Expected to have financial policies that create elevated risk of debt restructuring in varied economic environments	Expected to have financial policies that create elevated risk of debt restructuring even in healthy economic environments

Moody's Related Publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found here.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to *Rating Symbols and Definitions*, which is available here.

Moody's Basic Definitions for Credit Statistics (User's Guide) can be found here.

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