MOODY'S
INVESTORS SERVICE

RATING METHODOLOGY

European Social Housing Providers

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This rating methodology replaces "European Social Housing Providers", last revised on July 6, 2016. We have updated some outdated links and removed certain issuer-specific information.

Summary

This rating methodology explains our approach to assessing credit risk for social housing providers (SHPs) in Europe. It provides general guidance that helps issuers, investors, and other interested market participants understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for SHPs. 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.

Our ratings assigned to European social housing providers is generally based on a two-step approach, because these entities are almost always government-related issuers (GRIs). We typically first assign a Baseline Credit Assessment (BCA) that represents our opinion of the SHP's standalone credit strength[1]. We then apply our government-related issuers methodology,[2] which typically involves an assessment of the probability of the supporting government providing special measures to prevent the SHP from defaulting on its financial obligations. This European Social Housing Providers methodology focuses solely on the factors that relate to the BCA[3].

This report includes a detailed scorecard. The scorecard is a reference tool that can be used to approximate credit profiles within the sector in most cases. The scorecard provides summarized guidance for the factors that are generally most important in assigning BCAs to SHPs. 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. In addition, ratings are based on our forward-looking expectations. As a result, the scorecard-indicated outcome is not expected to match the actual BCA of each SHP.

THIS RATING METHODOLOGY WAS UPDATED ON OCTOBER 10, 2019. WE HAVE UPDATED SOME OUTDATED REFERENCES AND ALSO MADE SOME MINOR FORMATTING CHANGES.

1 BCAs are expressed on a lower-case alpha-numeric scale that corresponds to the alpha-numeric ratings of the global long-term rating scale (e.g. aaa represents the equivalent to Aaa, aa1 the equivalent to Aa1, etc.).

2 A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section. As outlined in that methodology, BCAs may not be assigned to GRIs in all circumstances.

3 In the rare circumstance that a European SHP is not a GRI, this methodology would be used to assign the rating rather than the BCA.

The scorecard details five broad factors that are important in our assessment of an SHP:

1. Institutional Framework
2. Market Position
3. Financial Performance
4. Debt and Liquidity
5. Management and Governance

Our analysis may also be guided by additional publications describing our approach for analytical considerations that are not specific to a 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, the impact of sovereign ratings on government-related borrowers, and the assessment of credit support from other entities.[4]

About the Rated Universe

This methodology is applicable to social housing providers in Europe that have strong financial links to government (national, regional or local), that are regulated and whose primary objective is to deliver social housing. While typically operating independently of the sponsor government as a not-for-profit or similar type of entity[5], the core mission of an SHP is to fulfill a government policy mandate to provide social housing.

Government support for social housing takes various financial forms across Europe. The most common forms include the payment of housing benefits directly or indirectly to SHPs, free or discounted land, capital grants, and support for borrowing through interest rate subsidies or explicit government guarantees.

The entities covered have two primary activities. They are:

1) landlords, providing subsidized social rental housing

2) developers, facilitating the construction of new social housing

Some SHPs are also involved in non-social housing activities[6]. SHPs may engage in development of housing for market sale and use the profits to cross-subsidize the development of social housing. Providing services for socially or medically disadvantaged tenants is another common diversification of activities. These endeavors generally add operating complexity and credit risk to the basic social housing business model, because they can erode the stability of cash flows and/or margins.

The European SHP sector encompasses a wide range of organizations, and reflects historical differences in social housing provision across Europe. The result is disparate proportions of social housing across the continent. Government policy and funding conditions will exert a critical influence on whether SHPs will issue public debt.

4 A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

5 In some cases, SHPs are specifically designated by the government or formed under a special enabling statute.

6 For clarity, a for-profit developer that happens to create some social housing units, for instance as an accommodation in order to obtain development rights or approvals, would not be rated under this methodology. SHPs engage in real estate development other than SHP to further their core mission of fulfilling government policy.

The more limited issuance of rated debt outside of England reflects direct government funding for the sector in continental Europe. However, as governments grapple with growing fiscal challenges, the funding of these organizations is likely to change. A combination of government spending cuts, low interest rates, and tighter bank lending, will likely make debt markets a more important source of funding for European SHPs.

About This Rating Methodology

This report explains the rating methodology for SHPs, summarized in the four following sections:

1. Identification and Discussion 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.

EXHIBIT 1

European Social Housing Providers Methodology Scorecard

Broad Factors	Factor Weighting	Sub-Factors	Sub-Factor Weighting
Institutional Framework	20%	Operating Environment	10%
		Regulatory Framework	10%
Market Position	10%	Units Under Management	10%
Financial Performance	25%	Operating Margin	5%
		Social Letting Interest Coverage	10%
		Cash Flow Volatility Interest Coverage	10%
Debt and Liquidity	25%	Debt to Revenue	5%
		Debt to Assets	10%
		Liquidity Coverage	10%
Management and Governance	20%	Financial Management	10%
		Debt and Investment Strategy	10%
		Total Scorecard-Indicated Outcome	100%

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 (See "The Scorecard Factors" section).

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. Quantitative credit metrics may incorporate adjustments to income statement, cash flow statement and balance sheet amounts that Moody's makes on a sector or cross-sector basis. Moody's may also make analytical adjustments as appropriate for comparability or transparency.

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. Financial ratios, unless otherwise indicated, are typically calculated based on an annual or 12-month period. 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.

After estimating or calculating the sub-factor scores for each sub-factor, the scores are mapped to a broad Moody's rating categories (Aaa, Aa, Baa, Ba, B, Caa, or Ca, also called alpha categories), as shown in the scorecard, and to a numeric value, as described below.

3. Determining the Overall Scorecard-Indicated Outcome

Quantitative factors are scored on a linear continuum. For each metric, the scorecard shows the range by alpha category. We use the scale below and linear interpolation to convert the metric, based on its placement within the scorecard range, to a numeric score, which may be a fraction[7]. In the text or footnotes, we define the end points of the line (i.e., the value of the metric that constitutes the lowest possible numeric score, and the value that constitutes the highest possible numeric score).

aaa	aa	a	baa	ba	b
0.5-1.5	1.5-4.5	4.5-7.5	7.5-10.5	10.5-13.5	13.5-16.5

Qualitative factors are described in broad alpha categories, but within that broad description, they may be scored as strong (receiving the lower numeric value in the alpha category), medium (receiving the middle numeric value in the alpha category) or weak (receiving the higher numeric value in the alpha category). The numeric value of each qualitative score is a whole number - see scale below. The factor score is typically assigned to the alpha category for which the issuer has the greatest number of characteristics. In most cases, the degree to which the characteristics falling outside the preponderant category are in lower alpha categories is more likely to result in a weak positioning of the score within the alpha category. Conversely, the degree to which the characteristics falling outside the preponderant category are in higher alpha categories is more likely to result in a strong positioning of the score within the alpha category. However, there may be cases in which one characteristic is sufficiently important to a particular issuer that it is determinative of the factor score (including the positioning within the alpha category). For example in assessing the debt and investment strategy of an issuer with many characteristics in the aa category that has limited covenant headroom, our scoring of the factor would likely be below baa.

aaa	aa	a	baa	ba	b
1	2 ,3, 4	5 ,6 ,7	8, 9, 10	11, 12, 13	14, 15, 16

The numeric score for each sub-factor is multiplied by the weight for that sub-factor, with the results then summed to produce an aggregate weighted factor score. The aggregate weighted factor score is then mapped back to an alphanumeric outcome based on the ranges in the table below.

Scorecard-Indicated Outcome

Scorecard-Indicated Outcome	Aggregate Weighted Total Factor Score
aaa	$x \leq 1.5$
aa1	$1.5 < x \leq 2.5$
aa2	$2.5 < x \leq 3.5$
aa3	$3.5 < x \leq 4.5$
a1	$4.5 < x \leq 5.5$
a2	$5.5 < x \leq 6.5$

7 As a result, the positioning of the metric within the alpha category has an impact on the final score. For instance, if the operating margin of an issuer were to improve but remain within the range for the same alpha category, the improvement could result in a net positive movement in the issuer's overall scorecard-indicated outcome.

Scorecard-Indicated Outcome

Scorecard-Indicated Outcome	Aggregate Weighted Total Factor Score
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 8.2 would have a baa1 scorecard-indicated outcome.

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

This section, which follows the section on the detailed description of the scorecard factors, discusses limitations in the use of the scorecard to map against actual BCAs and 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 scorecard and the overall methodology.

The Scorecard Factors

The scorecard is comprised of five main factors (institutional framework, market position, financial performance, debt and liquidity and management and governance). In total, these factors are comprised of eleven sub-factors. The factors and their weights are described in the following section. A complete scorecard can be found in Appendix A.

Factor 1: The Institutional Framework - 20%

Why it matters:

The institutional framework of the social housing sector constitute the 'rules of the game' under which individual SHPs operate. The regulation and laws governing SHPs determine the benefit of oversight, the degree of stability provided by links with the government and the level of risk in which an SHP can engage. Also important to the SHP's strategic direction are the governmental approach to funding, the regulation of own-source revenues, spending flexibility and government policies that affect borrowing. We view an effective and active regulatory environment as one that de-risks the operating environment and reduces the likelihood that an SHP will experience financial distress. Our assessment of this factor will usually be consistent for all SHPs operating in the same legal/regulatory jurisdiction.

How We Assess It for the Scorecard:

Factor 1A. The Operating Environment – 10%

For this sub-factor, we assess the impact of government policy on the choices and opportunities of SHPs. Predictable policy allows SHPs to make strategic decisions with relative certainty about future revenues, housing demand and capital support. Policy stability is evaluated using both the historical and projected regulatory and oversight support that are important to an SHP's financial position. The financial strength of the supporting government typically informs our view of direction and stability of policy. This is particularly true for governments facing significant budgetary pressures, which we believe are more likely to reduce social housing support.

The laws and policies establishing and governing rents and subsidy levels are fundamental to our analysis because rents generally make up the majority of an SHP's revenues and are typically the most stable source of recurring cash flows. Government policies strongly influence the stability and predictability of rental income. The degree of flexibility over expenditure can also be affected by government policy in areas such as housing quality and environmental standards.

Factor 1B. The Regulatory Framework- 10%

For this sub-factor, we assess the scope and effectiveness of the regulation under which social housing providers operate. A regulator with effective oversight (via ongoing monitoring) and broad powers to intervene in cases of distress, is viewed as strengthening an SHP's credit quality. Prescribed disclosure requirements that lead to transparent reporting and regulatory limits on the level of risk taken on by SHPs are also favorable characteristics for scoring this sub-factor.

Factor 1A. The Operating Environment – 10%

		aaa	aa	a	baa	ba	b
Operating Environment	10%	Social housing plays or is expected to play a critical role in housing policy and represents a significant (over 30%) share of housing. Housing policy is very stable and predictable. Strong and increasing government capital support. Government funder has very strong financial health and there are no pressures on housing budgets. SHPs have: Very high level of revenue flexibility including ability to raise rents without government consent and a long history of rent increases. Ability to engage in ventures outside of core mission to generate revenue. Very strong ability to cut costs in times of financial need.	Social housing plays or is expected to play an important role in housing policy and represents a very high (over 20%) share of housing. Housing policy is stable and predictable. Strong and moderately increasingly government capital support. Government funder has strong financial health and there are no pressures on housing budgets. SHPs have: High level of revenue flexibility including ability to raise rents without government consent and a history of rent increases. Ability to engage in ventures outside of core mission to generate revenue. Strong ability to cut costs in times of financial need.	Social housing plays or is expected to play an important role in housing policy and represents a high (over 15%) share of housing. Housing policy is generally stable and changes are made in consultation with housing providers and done with ample notice. Strong and stable government capital support or support increasing from a low level. Government funder has strong financial health and adequate funding of housing budgets. SHPs have: Moderate revenue flexibility including ability to raise rents without government consent. Ability to engage in ventures outside of core mission to generate revenue. Reasonably strong ability to cut costs in times of financial need.	Social housing plays or is expected to play a role in housing policy and represents a modest (over 5%) share of housing. Housing policy is generally stable and when changes are made they a done with adequate notice. Moderate and generally stable government capital support. Government funder has adequate financial health and adequate funding of housing budgets. SHPs have: Modest revenue flexibility including ability to raise rents with government consent and a history of obtaining approval for rent increases. Moderate ability to cut costs in times of financial need.	Social housing plays or is expected to play limited role in housing policy or represents a limited (3-5%) share of housing. Housing policy is generally stable, but when changes are made it is with limited notice; or policy is evolving, but changes are made with adequate notice. Limited government capital support or materially declining. Government funder has adequate financial health, but there are pressures on housing budgets. SHPs have: Limited level of revenue flexibility including the ability to raise rents with government consent and an inconsistent history of receiving approval for rent increases. Limited ability to cut costs in times of financial need.	Social housing plays or is expected to play little or no role in housing policy. Housing policy is evolving and changes are made with limited notice. No projected government capital support or rapidly declining support. Government funder has generally adequate financial health but there are pressures on housing budgets. SHPs have: Very limited level of revenue flexibility. Raising rents has been or is expected to be difficult. Very limited ability to cut costs in times of financial need

Factor 1B. The Regulatory Framework- 10%

Regulatory Framework	10%	Active and legislatively mandated public regulator with predictable and enumerated powers. Ability to intervene early in cases of suspected mismanagement or liquidity distress and a track record of early and effective intervention. Extremely strong oversight, including approval of and limits on borrowing.	Active and legislatively mandated public regulator with enumerated powers. Ability to intervene early in cases of mismanagement or liquidity distress and a track record of timely and effective intervention. Very strong oversight, including approval of borrowing.	Legislatively mandated public regulator with enumerated powers. Ability to intervene in cases of mismanagement or liquidity distress and a track record of effective intervention. Strong oversight, including restrictions on borrowing.	Legislatively mandated public regulator with limited enumerated powers. Ability to intervene in cases of mismanagement or liquidity distress and a reasonable track record of intervention. Good oversight including restrictions on borrowing.	Legislatively mandated public regulator with tools of intervention based in precedent or similar non-codified sources. A precedent for intervention, but limited legal powers or a limited track record of effective intervention. Good oversight including practical limits on debt levels.	Public regulator with weak or changing powers. Where there is a regulator, it has very limited powers and or no history of intervening in cases of struggling social housing providers. Minimal oversight with some limits on borrowing.

Factor 2: Market Position - 10%

Why it matters:

The breadth and scope of an SHP's operations, as well as relevance in its market, shape its operating risks and practices. The size of an SHP is a proxy for a number of aspects of an issuer's market position. Larger SHPs potentially carry more influence in negotiations with local and national governments and other key players in the sector. Larger balance sheets provide resilience to financial stresses, including a housing downturn. Furthermore, larger organizations have higher expenditure flexibility with room to increase operational efficiency, and the ability to take advantage of economies of scale during economically challenging times. Greater size also typically implies broader geographic diversification.

How We Assess It for the Scorecard:

Factor 2. Units Under Management -10%

		aaa	aa	a	baa	ba	b
Units Under Management*1	10%	≥150,000	<150,000 ≥ 60,000	<60,000 ≥ 20,000	<20,000 ≥ 5,000	<5,000 ≥ 1,000	<1,000 ≥ 600

*1 For the linear scoring scale, the aaa end point value is 300,000 units. A value of 300,000 or better equates to a numerical score of 0.5. The b end point value is 600 units. A value of 600 or worse equates to a numerical score of 16.5.

Factor 3: Financial Performance – 25%

Trends in operating performance provide insight into an SHP's financial strength and resilience. The ability to consistently generate cash from primary business activities helps ensure a sustainable business model. A financially healthy SHP will generate sufficient income to maintain its housing assets and service debt obligations. Financial performance also gives an indication of an SHP's ability to align revenue and expenditure, and manage financial resources. Weak operating results in a single year may not indicate elevated credit risk. Consecutive years of weak financial performance usually indicate a failure of management to respond adequately to a changing operating environment.

Factor 3A. Operating Margin - 5%

Why it matters:

The operating margin is a key factor in assessing the underlying financial health and sustainability of an SHP. A strong operating margin provides assurance that the SHP can meet its financial obligations, namely interest expense, and mitigates against other shocks. A high operating margin usually leads to reserves growth, which improves balance sheet strength, as well as a steady stream of internally-generated funds, which can minimize the need for increased debt to support capital spending.

How We Assess It for the Scorecard:

Operating Margin compares operating surplus to operating revenue. It is a measure of the profitability of the ordinary operations of the business.

» Operating revenue less operating expenditure, divided by operating revenue.
   - Operating revenue generally includes rental and contract income, proceeds from market sales, and excludes proceeds from the disposal of assets and other extraordinary items.
   - Operating expenditure broadly includes management, maintenance and depreciation expense. It excludes interest costs, property development costs and capitalized repairs.

		aaa	aa	a	baa	Ba	b
Operating Margin*2	5%	≥55%	<55% ≥ 35%	<35% ≥ 25%	<25% ≥ 10%	<10% ≥ 5%	<5% ≥ 3%

*2 For the linear scoring scale, the aaa end point value is 75%. A value of 75% or better equates to a numerical score of 0.5. The b end point value is 3%. A value of 3% or worse equates to a numerical score of 16.5.

Factor 3B. Social Letting Interest Coverage - 10%

Why it matters:

We view the ability to repay interest from low-risk core social housing activities as a key indicator of financial strength. This metric allows us to assess the ability of the SHP to pay net interest from surpluses derived purely from social housing rental income, the majority of which come directly or indirectly from the government. When this ratio is consistently above 1.0x, this implies that the SHP can cover its annual financing costs from its lowest-risk activities, an important component of maintaining a solid standalone credit profile.

How We Assess It for the Scorecard:

Social Letting Interest Coverage captures the ability of the surplus from the low-risk social housing letting landlord business to cover net interest expense. This metric reflects the ability of the core operations to service interest payments on debt.

» Revenues from social rent less social rent expenditure divided by net cash interest paid (cash interest paid net of interest income received).

		aaa	aa	a	baa	Ba	b
Social Letting Interest Coverage*3	10%	≥3.0x	<3x ≥ 2x	<2x ≥ 1.5x	<1.5x ≥ 1x	<1x ≥ 0.9x	<0.9x ≥ 0.5x

*3 For the linear scoring scale, the aaa end point value is 4x. A value of 4x or better equates to a numerical score of 0.5. The b end point value is 0.5x. A value of 0.5x or worse equates to a numerical score of 16.5.

Factor 3C. Cash Flow Volatility Interest Coverage (CVIC) – 10%

Why it matters:

The CVIC captures the ability of pre-interest cash flow from operations, adjusted by historical volatility, to cover net cash interest expense. Volatility in operating cash flow can impair the certainty with which interest payments can be made. Entities that demonstrate a consistent ability to meet net cash interest expense from pre-interest cash from operations before capital investment have a stronger credit profile than those whose ability to do so is low or fluctuates. This is an increasingly important consideration as SHPs diversify into non-traditional business activities, especially those that require significant upfront cash investments, such as market sales activity.

How We Assess It for the Scorecard:

CVIC reflects the ability of pre-interest cash flow from operations, adjusted by the historical volatility (using *the standard deviation of pre-interest cash flow from operations over the last three years*) to cover net interest. This ratio includes the volatility in operating cash flow associated with social housing letting and activities outside the typical social rental business.

» Pre-interest cash flow from operations in the year, less the standard deviation of pre-interest cash flow from operations over the last three years, divided by net cash interest paid in the year[8].

- Pre-interest cash flow from operations is the net cash generated from operating activities (before payment of interest), which are typically property letting, market sales of properties and care provision (which is generally limited in scope). It does not include any capital expenditure or financial investments, funds from the disposal of fixed assets or capital grants received.

		aaa	aa	a	baa	Ba	b
Cash Flow Volatility Interest Coverage*4	10%	≥4x	<4x ≥ 3x	<3x ≥ 2x	<2x ≥ 1x	<1x ≥ 0.9x	<0.9x ≥ 0.25x

*4 For the linear scoring scale, the aaa end point value is 5x. A value of 5x or better equates to a numerical score of 0.5. The b end point value is 0.25x. A value of 0.25x or worse equates to a numerical score of 16.5.

Factor 4: Debt and Liquidity – 25%

The provision of housing is a capital intensive activity and tends to result in high debt on SHP balance sheets. An SHP's debt burden and access to existing or potential liquidity are important indicators of financial flexibility and long-term viability. Readily available liquidity acts as a first line of defense against a housing market downturn, regulatory changes or unexpected costs. A low debt burden is an important consideration, especially when readily available liquidity starts to run out, as it indicates a good capacity to access additional funds through borrowing. The debt burden is also a proxy for how much future capital investment an SHP may fund over time. Our debt profile analysis includes the amount of debt, the relative burden it poses, its structure and composition, as well as past trends and future borrowing needs. We typically also assess the terms and conditions for debt issuance and payment, as well as any limits set on the amount or structure of the debt.

Factor 4A. Debt to Revenue – 5%

Why it matters:

This ratio allows us to compare an SHP's debt burden to the volume of recurring resources it generates, while also serving as a proxy for long-term debt-servicing capacity. A high debt to revenue ratio indicates a limited capacity for new borrowing over the long term, even if interest coverage ratios suggest that debt is easily affordable in the near term.

How We Assess It for the Scorecard:

Debt to Revenues compares an SHP's debt burden to the volume of operating resources it generates. It is an indicator for long-term debt-servicing capacity.

» Total debt (long- and short-term debt, including finance leases), divided by operating revenue.

		aaa	aa	a	baa	ba	b
Debt to Revenue*5	5%	≤1x	>1x ≤ 2x	>2x ≤ 3x	>3x ≤ 4x	>4x ≤ 5x	>5x ≤ 6.5x

*5 For the linear scoring scale, the aaa end point value is 0x. A value of 0x or better equates to a numerical score of 0.5. The b end point value is 6.5x. A value of 6.5x or worse equates to a numerical score of 16.5.

8 As an example, if we were calculating the ratio as of the end of fiscal 2015: The numerator would be pre-interest cash flow from operations for 2015 less the standard deviation of pre-interest cash flow from operations over the years 2013, 2014 and 2015. The denominator would be net cash interest paid in 2015.

Factor 4B. Debt to Assets (gearing) – 10%

Why it matters:

This is an indicator of financial leverage that measures the proportion of a company's assets that has been funded with debt rather than capital grants or retained surpluses. As most of the debt in the sector is secured by housing assets, a high debt to asset ratio indicates that the SHP might have limited capacity to draw additional funds. In these circumstances, the SHP's financing flexibility and ability to cope with sudden cash requirements may be impaired, especially if it lacks a strong liquidity buffer.

» *How We Assess It for the Scorecard:* Debt to Assets measures the proportion of an SHP's assets that has been funded with debt rather than capital grants or retained surpluses. In the denominator of the ratio, we use a historical cost proxy for assets, which is generally calculated as net debt plus capital grants and revenue reserves. In some circumstances, it may be necessary to use a somewhat different method of arriving at a historical cost proxy (for instance if the underlying components are substantively different due to jurisdictional nuances or variations in accounting) in order to maintain underlying comparability across jurisdictions. Market value is not typically used, because the long-term nature of SHPs and restrictions on disposing of housing stock, means that there are often limitations on market value being realized.

» Net debt (long- and short-term debt, including finance leases, less cash and liquid short-term investments), divided by historical cost proxy, (generally calculated as net debt plus capital grants and revenue reserves).

		aaa	aa	a	baa	ba	b
Debt to Assets*6	10%	≤10%	>10% ≤ 20%	>20% ≤ 30%	>30% ≤ 40%	>40% ≤ 50%	>50% ≤ 70%

*6 For the linear scoring scale, the aaa end point value is 0%. A value of 0% or better equates to a numerical score of 0.5. The b end point value is 70%. A value of 70% or worse equates to a numerical score of 16.5.

Factor 4C. Liquidity Coverage -10%

Why it matters:

The ability of an SHP to meet its net cash needs over the near-term horizon without access to additional (i.e. not already committed) sources of liquidity is an important benchmark of its financial health.

How We Assess It for the Scorecard:

We assess an SHP's liquidity position by comparing immediately available liquidity to the expected net cash needs of the SHP over the next two years. Immediately available liquidity consists of cash, deposits, money market funds and undrawn facilities eligible for an immediate drawdown. We believe a two-year time horizon is an appropriate proxy for committed development projects. A score of '1.0x' implies that an entity has sufficient liquidity to cover two years' projected cash needs. We note that SHPs can have a negative net cash need, which favorably implies that all requirements are fully covered by net cash flow from operations, although this is rare.

» Cash on hand, plus secured facilities on which the SHP may draw immediately, divided by two years of projected net cash need.

- Projected net cash need is defined as pre-interest cash from operations less interest and capital expenditure outflows, adding back capital grants

		aaa	aa	a	baa	ba	b
Liquidity Coverage*7	10%	≥5x	<5x ≥ 2x	<2x ≥ 1x	<1x≥0.5x	<0.5x≥0.25x	<0.25x≥0.15x

*7 For the linear scoring scale, the aaa end point value is 10x. A value of 10x or better equates to a numerical score of 0.5. The b end point value is 0.15x. A value of 0.15x or worse equates to a numerical score of 16.5. The score for a value below 0x caused by a negative denominator in the ratio would also be assigned a score of 0.5.

Factor 5: Management and Governance – 20%

Why it matters:

Management capability, longer term planning, risk appetite and risk management of an SHP are key determinants of its credit profile over the longer term. Two key aspects of management and governance are: 1) financial management practices and execution; and 2) policies and practices with respect to debt and liquidity management. Established and well-articulated policies to support financial and operational stability help to ensure that strong outcomes are institutionalized, rather than dependent on individuals.

How we assess it for the scorecard:

Factor 5A. Financial Management - 10%

In assessing this sub-factor, we consider a broad array of qualitative characteristics including risk appetite, past performance, future planning and execution of plans, risk management and robustness of stress testing, as indicators of management's ability to respond to adverse circumstances. The ability of management to formulate plans and execute them in a timely and efficient manner can be a very important determinant of an SHP's credit profile and rating, and it also gives context for the financial metrics.

Factor 5B. Debt and Investment Strategy – 10%

In assessing this sub-factor, we consider a range of factors including tolerance for refinancing and interest rate risk, the nature and complexity of hedging strategies, sophistication of debt management, and rigor of loan covenants monitoring. An SHP's debt structure reflects its strategy, as well as management's risk tolerance and available financing options. Our assessment of liquidity management typically includes liquidity buffer requirements, investment counterparty criteria, and ability to deploy liquid resources to all parts of the group, if needed.

Factor 5A. Financial Management – 10%

		aaa	aa	a	baa	ba	b
Financial Management	10%	Clear business focus with structured, effective and consistently applied decision-making framework. Risk appetite is minimal. Well-thought-out and defined risk register including remediation activities. Frequent, bespoke and comprehensive reports to the board including key performance indicators. A culture of board challenge. Well-communicated, effective and timely response to adverse financial information or events. Extremely conservative financial policies, strong adherence to clear procedures and highly effective internal controls. Simple, clear and well-organized group structure. Bespoke, multi-factorial stress testing, including readily achievable mitigation strategies. Compliance with regulatory requirements. Very strong alignment of policies, procedures, and practice.	Clear business focus with effective and consistently applied decision-making framework. Risk appetite is limited. Comprehensive risk register including remediation activities. Frequent and comprehensive reports to the board including key performance indicators. A strong track record of board challenge. Effective and timely response to adverse financial information or events. Very conservative financial policies, adherence to clear procedures and effective internal controls. Clear and well-organized group structure. Multi-factorial stress testing, including easily achievable mitigation strategies. Compliance with regulatory requirements. Strong alignment of policies, procedures, and practice.	Clear business focus with effective decision-making framework. Risk appetite is modest. Frequent and comprehensive reports to the Board including key performance indicators. A track record of board challenge. Timely response to adverse financial information or events. Conservative financial policies and procedures. Effective internal controls. Well-organized group structure. Stress testing of business plans, including achievable credible mitigation strategies. Compliance with regulatory requirements. Alignment of policies, procedures, and practice.	Defined business focus; when decision-making framework is not adhered, to it is explicitly overridden by board. Risk appetite is well-managed, but may grow with respect to change in strategy, organization or development risks. Comprehensive reports to the Board including key performance indicators. Track record of board challenge. Generally timely response to adverse financial information or events. Clear and reasonably conservative financial policies. Documented procedures. Effective financial controls. Some complexity in group structure, but agreements and policies provide clarity in operations. Stress testing of business plans, including reasonably achievable mitigation strategies. Compliance with regulatory requirements, but regulator has highlighted some minor weakness. Alignment of policies, procedures, and practice.	Defined business focus with some elements of opportunism and weak adherence to or no decision-making framework. Risk appetite is growing with respect to change in strategy, organization or development risks. Key performance indicators are included in Board reporting. Some track record of board challenge. Responsive to adverse financial information or events. Financial policies may have some weakness and/or inconsistent compliance. Documented procedures and adequate financial controls. Some complexity in group structure; agreements and policies generally provide clarity. Or group structure in transition adding some change management risks. Limited stress testing of business plans. Mitigation strategies highlight some weaknesses in management response. Compliance with regulatory requirements, but regulator has highlighted significant weaknesses or concern with entity. Limited alignment of policies, procedures, and practice.	Opportunistic approach to managing the business and decision-making. Risk management not tailored to the entity and risk appetite introduces challenges which are difficult to manage. Performance metrics lack focus or are not well-aligned to business objectives. Limited board challenge. Limited response to adverse financial information or events. Ineffective financial policies and/or failure to follow policies and procedures. Limited financial controls, or lapses/exceptions highlighted by internal or external audit/review. Complex group structure introducing additional risks. No stress testing of business plans or mitigation ineffective. Regulator is intervening with entity. No alignment of policies, procedures, and practice.

Factor 5B. Debt and Investment Strategy – 10%

		aaa	aa	a	baa	ba	b
Investment and Debt Strategy	10%	Very strong and detailed annually reviewed treasury policies and procedures that include extremely conservative liquidity and investment guidelines and explicitly incorporate organizational risks. Very simple debt portfolio with either less than 5% variable rate exposure or exceptionally strong mitigants against risks, including cash holdings and unencumbered assets that far exceed potential collateral calls. Very low refinancing risk (typically with no more than 5% of debt due within five years) and unquestioned access to capital markets. Unquestioned headroom against covenants.	Strong and detailed annually reviewed treasury policies and procedures that include very conservative liquidity and investment guidelines and incorporate organizational risks. Simple debt portfolio with either less than 10% variable rate exposure or extremely strong mitigants against risks including cash holdings and unencumbered assets that exceed potential collateral calls. Low refinancing risk (typically with no more than 10% of debt due within five years) and very strong access to capital markets. Very strong headroom against covenants.	Strong annually reviewed treasury policies and procedures that include conservative liquidity and investment guidelines and incorporate organizational risks. Simple debt portfolio with either less than 20% variable rate exposure or very strong mitigants against risks including cash holdings and unencumbered assets that generally exceed potential collateral calls. Moderate refinancing risk (typically with no more than 20% of debt due within five years) and strong access to capital markets. Strong headroom against covenants.	Annually reviewed treasury policies and procedures that include generally conservative liquidity and investment guidelines and incorporate organizational risks. Debt portfolio with some complexity, typically including more than 30% variable rate exposure with strong mitigants against risks including cash holdings and unencumbered assets, which meet potential collateral calls. Modest refinancing risk (typically with no more than 30% of debt due within five years) and good access to capital markets. Sufficient headroom against covenants.	Treasury policies and procedures that include adequate liquidity and investment guidelines and generally incorporate organizational risks. Debt portfolio with complexity, typically more than 50% variable rate exposure or with mitigants against risks including cash holdings and unencumbered assets that are just equal to potential collateral calls. Elevated refinancing risk (typically with no more than 40% of debt due within five years). Historically has comfortably met all covenants, but forecast demonstrates limited headroom.	Treasury policies and procedures that include weak or unclear liquidity and investment guidelines, which are reflective of some organizational risks. Complex debt portfolio, typically with more than 70% variable rate exposure or limited mitigants against risks including cash holdings and unencumbered assets that are less than potential collateral calls. High refinancing risk (typically with 50% or more of debt due within five years). Very limited headroom against covenants on a current or forecast basis.

Group Structures

In assigning issuer ratings to SHP parent companies, we typically consider the overall resources of the SHP group. Generally, we expect the parent's control will allow resources to be sufficiently fungible across the group to address financial pressures in any one subsidiary. Our analysis typically includes an assessment of the legal and governance relationships across the group as well as the centrality and effectiveness of the parent's controls. In addition, we take into consideration any structural subordination issues, which typically increase when there are meaningful restrictions on movement of cash within the group, when the operating subsidiaries have their own debt service obligations, and when the parent is dependent on cash flows that are concentrated at a small number of operating subsidiaries, especially when those entities are levered. In assigning ratings to financial obligations of a member of the group, we typically assess the stand-alone operating and financial position of that entity, without any benefit of wider group resources, in addition to considering the ability and willingness of the group to provide support when needed.

Assumptions, Limitations and 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 SHPs. In addition, our ratings incorporate expectations for future performance. 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 or other factors. In either case, predicting the future is subject to the risk of substantial inaccuracy.

Truncation of the scorecard at 'b'. The scoring ranges in the scorecard describe characteristics for BCAs that range from 'aaa' to 'b', which reflect the current overall credit characteristics of the rated universe. However, assigned BCAs or ratings could be lower than 'b'/B, for a variety of reasons. For instance, the actual situation of the SHP with respect to a particular factor may be materially worse than would be expected to occur for an SHP. Thus, even if the score for that factor score were 'b' because it is the lowest possible score in the scorecard, that material weakness could cause the assigned BCA or rating to be worse than the scorecard-indicated outcome. In addition, a material weakness is a reason that the factor may have greater importance in the rating than the standard factor weight would imply.

As a more specific example, an institutional framework might show extraordinary weakness. For instance, a supporting government in severe financial distress might demand back investments grants or other funds, putting considerable negative pressure on an SHP's financial and liquidity profile. Other factors that could push a BCA lower than 'b' include: a development strategy which is inconsistent with resources and availability of security; a high risk appetite, especially the addition of new business risks to an entity; a treasury policy which does not appropriately address financing risk or extremely weak liquidity; or financial performance, particularly if it resulted failure to comply with debt covenants.

Non-core activities. Involvement in non-social housing activities, most commonly development for market sale or private market rent, negatively impacts the overall risk profile of an SHP by reducing revenue predictability and increasing cash flow volatility. Engaging in social services, most commonly by providing services for socially or medically impaired persons or through neighborhood regeneration, tends to depress margins. While these considerations are captured in certain scorecard factors, a high level of risk in these areas could cause the actual rating to be below the scorecard-indicated outcome.

Demand. Demand for an SHP's services gives insight into future financial viability. The dynamics of the local housing market are a key consideration, particularly for those SHPs engaging in market sales activity, because strong demand may mitigate the accompanying risks. Status as the dominant provider in a local area can yield benefits in the form of preferential treatment from local authorities. The level of empty properties (voids) over the course of a year can be an effective indicator to assess demand at the macro and micro level. A very positive demand profile may cause the actual rating to be above the scorecard-indicated outcome. A weakening demand for social housing in a particular market would typically be an unusual circumstance, and one that could cause the actual rating to be below the scorecard-indicated outcome.

Multi-year trends. The momentum and direction of credit trends are integral to our forward-looking analysis. Trend analysis helps inform our evaluation of the assumptions and forecasts provided, and demonstrates the outcomes of management decisions. It sometimes also reveals underlying credit issues not evident from an analysis of a single fiscal period.

Pension and long-term liabilities. A high level of pension obligations and other long-term liabilities limits immediate operating profitability and impairs long-term financial flexibility and could cause actual ratings to be below scorecard-indicated outcomes. The extent of obligations are assessed and compared to peers and to the SHP's overall indebtedness.

Off-balance Sheet Risks from Joint Ventures. Some SHPs enter into joint-ventures such as with private developers to spread construction and sales risk and facilitate the creation of mixed-developments of public and private housing. Joint-venture agreements may require the SHP to provide conditional commitments for new capital to complete developments, or to meet other shortfalls. Even when no formal commitment exists and the venture could, in theory, be left to fail, the collapse of a high-profile development with a substantial share of social housing could pose significant reputational and financial risk to the SHP. When the exposure to joint venture risk is high, actual ratings may be lower than scorecard-indicated outcomes.

The Impact of the Sovereign or Other Supporting Government's Rating

Compared to many other sectors, the credit profiles of SHPs are more likely to be impacted by the sponsoring government's credit quality and actions. Based on these strong links with the government, their credit quality is exposed to similar pressures as the supporting government, which may not be fully captured in the scorecard. Deterioration or (to the extent the SHP's credit profile is constrained by the sponsoring government) strengthening in sovereign or other supporting government credit quality can directly affect the credit standing of SHPs within the jurisdiction.[9]

[9] For more information, see our cross-sector methodology that describes our general approach for assessing the impact of sovereign credit quality on other ratings. A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Appendix A: Scorecard for European Social Housing

		aaa	aa	a	baa	ba	b
Factors	**Weight**						
Institutional framework	**20%**						
Operating Environment	10%	Social housing plays or is expected to play a critical role in housing policy and represents a significant (over 30%) share of housing. Housing policy is very stable and predictable. Strong and increasing government capital support. Government funder has very strong financial health and there are no pressures on housing budgets. SHPs have: Very high level of revenue flexibility including ability to raise rents without government consent and a long history of rent increases. Ability to engage in ventures outside of core mission to generate revenue. Very strong ability to cut costs in times of financial need.	Social housing plays or is expected to play an important role in housing policy and represents a very high (over 20%) share of housing. Housing policy is stable and predictable. Strong and moderately increasingly government capital support. Government funder has strong financial health and there are no pressures on housing budgets. SHPs have: High level of revenue flexibility including ability to raise rents without government consent and a history of rent increases. Ability to engage in ventures outside of core mission to generate revenue. Strong ability to cut costs in times of financial need.	Social housing plays or is expected to play an important role in housing policy and represents a high (over 15%) share of housing. Housing policy is generally stable and changes are made in consultation with housing providers and done with ample notice. Strong and stable government capital support or support increasing from a low level. Government funder has strong financial health and adequate funding of housing budgets. SHPs have: Moderate revenue flexibility including ability to raise rents without government consent. Ability to engage in ventures outside of core mission to generate revenue. Reasonably strong ability to cut costs in times of financial need.	Social housing plays or is expected to play a role in housing policy and represents a modest (over 5%) share of housing. Housing policy is generally stable and when changes are made they a done with adequate notice. Moderate and generally stable government capital support. Government funder has adequate financial health and adequate funding of housing budgets. SHPs have: Modest revenue flexibility including ability to raise rents with government consent and a history of obtaining approval for rent increases. Moderate ability to cut costs in times of financial need.	Social housing plays or is expected to play limited role in housing policy or represents a limited (3-5%) share of housing. Housing policy is generally stable, but when changes are made it is with limited notice; or policy is evolving, but changes are made with adequate notice. Limited government capital support or materially declining. Government funder has adequate financial health, but there are pressures on housing budgets. SHPS have: Limited level of revenue flexibility including the ability to raise rents with government consent and an inconsistent history of receiving approval for rent increases. Limited ability to cut costs in times of financial need.	Social housing plays or is expected to play little or no role in housing policy. Housing policy is evolving and changes are made with limited notice. No projected government capital support or rapidly declining support. Government funder has generally adequate financial health but there are pressures on housing budgets. SHPs have: Very limited level of revenue flexibility. Raising rents has been or is expected to be difficult. Very limited ability to cut costs in times of financial need.

		aaa	aa	a	baa	ba	b
Regulatory Framework	10%	Active and legislatively mandated public regulator with predictable and enumerated powers. Ability to intervene early in cases of suspected mismanagement or liquidity distress and a track record of early and effective intervention. Extremely strong oversight, including approval of and limits on borrowing.	Active and legislatively mandated public regulator with enumerated powers. Ability to intervene early in cases of mismanagement or liquidity distress and a track record of timely and effective intervention. Very strong oversight, including approval of borrowing.	Legislatively mandated public regulator with enumerated powers. Ability to intervene in cases of mismanagement or liquidity distress and a track record of effective intervention. Strong oversight, including restrictions on borrowing.	Legislatively mandated public regulator with limited enumerated powers. Ability to intervene in cases of mismanagement or liquidity distress and a reasonable track record of intervention. Good oversight including restrictions on borrowing.	Legislatively mandated public regulator with tools of intervention based in precedent or similar non-codified sources. A precedent for intervention, but limited legal powers or a limited track record of effective intervention. Good oversight including practical limits on debt levels.	Public regulator with weak or changing powers. Where there is a regulator, it has very limited powers and or no history of intervening in cases of struggling social housing providers. Minimal oversight with some limits on borrowing.
Market Position	**10%**						
Units Under Management*1	10%	≥150,000	<150,000 ≥ 60,000	<60,000≥20,000	<20,000≥5,000	<5,000≥1,000	<1,000 ≥ 600
Financial performance	**25%**						
Operating Margin*2	5%	≥55%	<55% ≥ 35%	<35% ≥ 25%	<25% ≥ 10%	<10% ≥ 5%	<5% ≥ 3%
Social Letting Interest Coverage*3	10%	≥3x	<3x ≥ 2x	<2x ≥ 1.5x	<1.5x ≥ 1x	<1x ≥ 0.9x	< 0.9x ≥ 0.5x
Cash Flow Volatility Interest Coverage*4	10%	≥4x	<4x ≥ 3x	<3x ≥ 2x	<2x ≥ 1x	<1x ≥ 0.9x	<0.9x ≥ 0.25x
Debt and Liquidity	**25%**						
Debt to Revenue*5	5%	≤1x	>1x ≤ 2x	>2x ≤ 3x	>3x ≤ 4x	>4x ≤ 5x	>5x ≤ 6.5x
Debt to Assets*6	10%	≤10%	>10% ≤ 20%	>20% ≤ 30%	>30% ≤ 40%	>40% ≤ 50%	>50% ≤ 70%
Liquidity Coverage*7	10%	.≥5x	<5x ≥ 2x	<2x ≥ 1x	<1x ≥ 0.5x	<0.5x ≥ 0.25x	<0.25x ≥ 0.15x

		aaa	aa	a	baa	ba	b
Management and Governance	20%						
Financial Management	10%	Clear business focus with structured, effective and consistently applied decision-making framework. Risk appetite is minimal. Well-thought-out and defined risk register including remediation activities. Frequent, bespoke and comprehensive reports to the board including key performance indicators. A culture of board challenge. Well-communicated, effective and timely response to adverse financial information or events. Extremely conservative financial policies, strong adherence to clear procedures and highly effective internal controls. Simple, clear and well-organized group structure. Bespoke, multi-factorial stress testing, including readily achievable mitigation strategies. Compliance with regulatory requirements. Very strong alignment of policies, procedures, and practice.	Clear business focus with effective and consistently applied decision-making framework. Risk appetite is limited. Comprehensive risk register including remediation activities. Frequent and comprehensive reports to the board including key performance indicators. A strong track record of board challenge. Effective and timely response to adverse financial information or events. Very conservative financial policies, adherence to clear procedures and effective internal controls. Clear and well-organized group structure. Multi factorial stress testing, including easily achievable mitigation strategies. Compliance with regulatory requirements. Strong alignment of policies, procedures, and practice.	Clear business focus with effective decision-making framework. Risk appetite is modest. Frequent and comprehensive reports to the Board including key performance indicators. A track record of board challenge. Timely response to adverse financial information or events. Conservative financial policies and procedures. Effective internal controls. Well-organized group structure. Stress testing of business plans, including achievable credible mitigation strategies. Compliance with regulatory requirements. Alignment of policies, procedures, and practice.	Defined business focus when decision-making framework is not adhered to it is explicitly overridden by board. Risk appetite is well-managed, but may grow with respect to change in strategy, organization or development risks. Comprehensive reports to the Board including key performance indicators. Track record of board challenge. Generally timely response to adverse financial information or events. Clear and reasonably conservative financial policies. Documented procedures. Effective financial controls. Some complexity in group structure, but agreements and policies provide clarity in operations. Stress testing of business plans, including reasonably achievable mitigation strategies. Compliance with regulatory requirements, but regulator has highlighted some minor weakness. Alignment of policies, procedures, and practice.	Defined business focus with some elements of opportu-nism and weak adherence to or no decision-making framework. Risk appetite is growing with respect to change in strategy, organization or development risks. Key performance indicators are included in Board reporting. Some track record of board challenge. Responsive to adverse financial information or events. Financial policies may have some weakness and/or inconsistent compliance. Documented procedures and adequate financial controls. Some complexity in group structure; agreements and policies generally provide clarity. Or group structure in transition adding some change management risks. Limited stress testing of business plans. Mitigation strategies highlight some weaknesses in management response. Compliance with regulatory requirements, but regulator has highlighted significant weaknesses or concern with entity. Limited alignment of policies, procedures, and practice.	Opportunistic approach to managing the business and decision-making. Risk management not tailored to the entity and risk appetite introduces challenges which are difficult to manage. Performance metrics lack focus or are not well-aligned to business objectives. Limited board challenge. Limited response to adverse financial information or events. Ineffective financial policies and/ or failure to follow policies and procedures. Limited financial controls, or lapses/exceptions highlighted by internal or external audit/review. Complex group structure introducing additional risks. No stress testing of business plans or mitigation ineffective. Regulator is intervening with entity. No alignment of policies, procedures, and practice.

		aaa	aa	a	baa	ba	b
Investment and Debt Strategy	10%	Very strong and detailed annually reviewed treasury policies and procedures that include extremely conser-vative liquidity and investment guidelines and explicitly incorporate organizational risks. Very simple debt portfolio with either less than 5% variable rate exposure or exceptionally strong mitigants against risks, including cash holdings and unencumbered assets that far exceed potential collateral calls. Very low refinancing risk (typically with no more than 5% of debt due within five years) and unquestioned access to capital markets. Unquestioned headroom against covenants	Strong and detailed annually reviewed treasury policies and procedures that include very conservative liquidity and investment guidelines and incorporate organizational risks. Simple debt portfolio with either less than 10% variable rate exposure or extremely strong mitigants against risks including cash holdings and unencumbered assets that exceed potential collateral calls. Low refinancing risk (typically with no more than 10% of debt due within five years) and very strong access to capital markets. Very strong headroom against covenants.	Strong annually reviewed treasury policies and procedures that include conservative liquidity and investment guidelines and incorporate organizational risks. Simple debt portfolio with either less than 20% variable rate exposure or very strong mitigants against risks including cash holdings and unencumbered assets that generally exceed potential collateral calls. Moderate refinancing risk (typically with no more than 20% of debt due within five years) and strong access to capital markets. Strong headroom against covenants.	Annually reviewed treasury policies and procedures that include generally conservative liquidity and investment guidelines and incorporate organizational risks. Debt portfolio with some complexity, typically including more than 30% variable rate exposure with strong mitigants against risks including cash holdings and unencumbered assets, which meet potential collateral calls. Modest refinancing risk (typically with no more than 30% of debt due within five years) and good access to capital markets. Sufficient headroom against covenants.	Treasury policies and procedures that include adequate liquidity and investment guidelines and generally incorporate organizational risks. Debt portfolio with complexity, typically more than 50% variable rate exposure or with mitigants against risks including cash holdings and unencumbered assets that are just equal to potential collateral calls. Elevated refinancing risk (typically with no more than 40% of debt due within five years). Historically has comfortably met all covenants, but forecast demonstrates limited headroom.	Treasury policies and procedures that include weak or unclear liquidity and investment guidelines, which are reflective of some organizational risks. Complex debt portfolio, typically with more than 70% variable rate exposure or limited mitigants against risks including cash holdings and unencumbered assets that are less than potential collateral calls. High refinancing risk (typically with 50% or more of debt due within five years). Very limited headroom against covenants on a current or forecast basis.

*1 The definition for the metrics used in this scorecard can be found in Appendix B.
For the linear scoring scale, the aaa end point value is 300,000 units. A value of 300,000 or better equates to a numerical score of 0.5. The b end point value is 600 units. A value of 600 or worse equates to a numerical score of 16.5.

*2 For the linear scoring scale, the aaa end point value is 75%. A value of 75% or better equates to a numerical score of 0.5. The b end point value is 3%. A value of 3% or worse equates to a numerical score of 16.5.

*3 For the linear scoring scale, the aaa end point value is 4x. A value of 4x or better equates to a numerical score of 0.5. The b end point value is 0.5x. A value of 0.5x or worse equates to a numerical score of 16.5.

*4 For the linear scoring scale, the aaa end point value is 5x. A value of 5x or better equates to a numerical score of 0.5. The b end point value is 0.25x. A value of 0.25x or worse equates to a numerical score of 16.5.

*5 For the linear scoring scale, the aaa end point value is 0x. A value of 0x or better equates to a numerical score of 0.5. The b end point value is 6.5x. A value of 6.5x or worse equates to a numerical score of 16.5.

*6 For the linear scoring scale, the aaa end point value is 0%. A value of 0% or better equates to a numerical score of 0.5. The b end point value is 70%. A value of 70% or worse equates to a numerical score of 16.5.

*7 For the linear scoring scale, the aaa end point value is 10x. A value of 10x or better equates to a numerical score of 0.5. The b end point value is 0.15x. A value of 0.15x or worse equates to a numerical score of 16.5. A value below 0 due to a negative denominator would also be assigned a numerical score of 0.5.

Appendix B: Metric Definitions

Market Position

Factor 2: Units under management indicates the scale of the SHP's operations.

Financial Performance

Factor 3A: Operating Margin compares operating surplus to operating revenue. It is a measure of the profitability of the ordinary operations of the business.

» Operating revenue less operating expenditure, divided by operating revenue.

- Operating revenue generally includes rental and contract income, proceeds from market sales, and excludes proceeds from the disposal of assets and other extraordinary items.
- Operating expenditure broadly includes management, maintenance and depreciation expense. It excludes interest costs, property development costs and capitalized repairs.

Factor 3B: Social Letting Interest Coverage captures the ability of the surplus from the low-risk social housing letting landlord business to cover net interest expense. This metric reflects the ability of the core operations to service interest payments on debt.

» Revenues from social rent less social rent expenditure divided by net cash interest paid (cash interest paid net of interest income received).

Factor 3C: Cash Flow Volatility Interest Coverage reflects the ability of pre-interest cash flow from operations, adjusted by the historical volatility (using *the standard deviation of cash flow from operations over the last 3 years*) to cover net interest. This ratio includes the volatility in pre-interest operating cash flow associated with social housing letting and activities outside the typical social rental business.

» Pre-interest cash flow from operations in the year, less the standard deviation of pre-interest cash flow from operations over the last three years, divided by net cash interest paid in the year.

- Pre-interest cash flow from operations is the net cash generated from operating activities (before payment of interest), which are typically property letting, market sales of properties and care provision (which is generally limited in scope). It does not include any capital expenditure or financial investments, funds from the disposal of fixed assets or capital grants received.
- As an example, if we were calculating the ratio as of the end of fiscal 2015: The numerator would be pre-interest cash flow from operations for 2015 less the standard deviation of pre-interest cash flow from operations over the years 2013, 2014 and 2015. The denominator would be net cash interest paid in 2015.

Debt and Liquidity

Factor 4A: Debt to Revenue compares an SHP's debt burden to the volume of operating resources it generates. It is an indicator for long-term debt-servicing capacity.

» Total debt (long- and short-term debt, including finance leases), divided by operating revenue.

Factor 4B: Debt to Assets measures the proportion of an SHP's assets that has been funded with debt rather than capital grants or retained surpluses. In the denominator of the ratio, we use a historical cost proxy for assets, which is generally calculated as net debt plus capital grants and revenue reserves. In some circumstances, it may be necessary to use a somewhat different method of arriving at a historical cost proxy (for instance if the underlying components are substantively different due to jurisdictional nuances or variations in accounting) in order to maintain underlying comparability across jurisdictions. Market value is not typically used, because the long-term nature of SHPs and restrictions on disposing of housing stock, means that there are often limitations on market value being realized.

» Net debt (long- and short-term debt, including finance leases, less cash and liquid short-term investments), divided by historical cost proxy, (generally calculated as net debt plus capital grants and revenue reserves).

Factor 4C: Liquidity Coverage reflects a point in time liquidity position of the SHP and measures it against two years of anticipated net cash need.

» Cash on hand, plus secured facilities on which the SHP may draw immediately, divided by two years of projected net cash need.

  - Projected net cash need is defined as pre-interest cash from operations less interest and capital expenditure outflows, adding back capital grants.

Moody's Related Publications

Credit ratings are primarily determined by 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. An index 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.

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