

MOODY'S

INVESTORS SERVICE

RATING METHODOLOGY

Table of Contents:

INTRODUCTION	1
SCOPE OF THIS METHODOLOGY	2
OUR GENERAL FRAMEWORK FOR RATING TITLE INSURANCE COMPANIES	2
DISCUSSION OF THE SCORECARD FACTORS – BUSINESS PROFILE	6
DISCUSSION OF THE SCORECARD FACTORS – FINANCIAL PROFILE	8
OPERATING ENVIRONMENT	13
OTHER SCORECARD CONSIDERATIONS IN DETERMINING THE STANDALONE CREDIT PROFILE: NOTCHING FACTORS	17
MOVING FROM THE STANDALONE CREDIT PROFILE TO THE IFSR — ASSESSING SUPPORT	19
OTHER RATING CONSIDERATIONS	20
ASSIGNING INSURANCE FINANCIAL STRENGTH AND INSTRUMENT RATINGS	22
ASSUMPTIONS	22
LIMITATIONS	23
APPENDICES	24
MOODY'S RELATED PUBLICATIONS	32

Analyst Contacts:

NEW YORK	+1.212.553.1653
Michael Dion	+1.212.553.1897
Vice President - Senior Analyst	
michael.dion@moody's.com	
Jasper Cooper	+1.212.553.1366
Vice President - Senior Credit Officer	
jasper.cooper@moody's.com	
Sarah Hibler	+1.212.553.4912
Associate Managing Director	
sarah.hibler@moody's.com	
Marc Pinto, CFA	+1.212.553.4352
Managing Director - Financial Institutions	
marc.pinto@moody's.com	

Title Insurers Methodology

This rating methodology replaces the *Title Insurers* methodology published in November 2019. In this update, we have clarified the presentation of the scoring thresholds in the Summary of Relevant Metrics table in the discussion of the Operating Environment component. We have also clarified the presentation of the Operating Environment weights in Appendix 1. The updates do not change our methodological approach.

Introduction

In this rating methodology, we explain our general approach to assessing credit risk for issuers in the title insurance industry globally, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector.

We discuss the scorecard used for this sector. The scorecard¹ is a relatively simple reference tool that can be used in most cases to approximate credit profiles in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to companies in this sector. The scorecard factors may be evaluated using historical or forward-looking data or both.

We also discuss other rating considerations, which are factors that may be important for ratings but are not included in the scorecard, usually because they can be meaningful for differentiating credit profiles, but only in some cases. In addition, some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.² Furthermore, since ratings are forward-looking, we often incorporate directional views of risks and mitigants in a qualitative way.

As a result, the scorecard-indicated outcome is not expected to match the actual rating for each company.

Our presentation of this rating methodology proceeds with (i) the scope of this methodology; (ii) our general framework for rating title insurers; (iii) a discussion of the scorecard factors; (iv) other scorecard considerations; (v) assessing support; (vi) other rating considerations; (vii) assigning entity-level and instrument ratings; (viii) methodology assumptions; and (ix) limitations. In Appendix 1, we describe how we use the scorecard. Appendix 2 shows the scorecard factors and metrics. In Appendix 3, we describe how we incorporate stress testing in our analysis.

¹ In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.

² A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Scope of This Methodology

Long-term Insurance Financial Strength Ratings (IFSRs³) for title insurance companies are assigned at the legal entity level to insurance operating companies.

In addition to long-term IFSRs, we may assign short-term IFSRs⁴ to provide institutional investors and financial intermediaries with opinions about an insurance company's ability to pay punctually its short-term senior policyholder claims and obligations. We use the same prime rating symbols for these ratings that we use for other short-term instruments and obligations.⁵

This methodology also applies to the title insurance business of diversified insurers, which engage in other insurance operations in addition to title insurance. Other ratings that may be assigned within the group (e.g., on senior unsecured debt issued by the insurer or its parent company) are typically determined in relationship to the IFSRs of the group's main subsidiaries.⁶

Our General Framework for Rating Title Insurance Companies

Our general approach to assessing the credit risk of the various obligations of title insurance companies is based on an assessment of the financial strength of the main operating units within that organization. This methodology is, therefore, intended primarily to explain our approach to assigning IFSRs to operating insurers. Specifically, the methodology describes our general approach to assigning a financial strength rating of a standalone entity before consideration of support. We also describe how we incorporate affiliate⁷ support to move from the standalone credit profile to the assignment of the IFSR.⁸

In rating title insurance companies on a standalone basis, we focus on qualitative and quantitative characteristics in relation to the company's business and financial profile, as well as on the operating environment in which it conducts its business. Regulatory, accounting and product characteristics can vary widely from country to country, as can a country's insurance operating environment, and our rating approach considers these differences.

EXHIBIT 1

Business Profile	Financial Profile	Operating Environment
Factor 1: Market Position and Brand	Factor 3: Asset Quality	Insurance Systemic Risk Factor
Factor 2: Product Focus and Diversification	Factor 4: Capital Adequacy	Insurance Market Development Factor
	Factor 5: Profitability	
	Factor 6: Reserve Adequacy	
	Factor 7: Financial Flexibility	

Source: Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on ratings.moodys.com for the most updated credit rating action information and rating history.

³ IFSRs are opinions of the ability of insurance companies to pay punctually senior policyholder obligations and claims and also reflect the expected financial loss suffered in the event of default. Please refer to *Rating Symbols and Definitions* for more details; a link can be found in the "Moody's Related Publications" section.

⁴ Please refer to our methodology that discusses global short-term ratings. A link to an index A list of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

⁵ Please refer to *Rating Symbols and Definitions* for more details; a link can be found in the "Moody's Related Publications" section.

⁶ Please see our cross-sector methodology that discusses how we assign instrument ratings for insurers. A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

⁷ "Affiliate" includes parents, cooperative groups and significant investors.

⁸ The standalone credit profile is an opinion of an insurer's standalone intrinsic strength, absent any extraordinary support from an affiliate or government. An analytic unit generally comprises all the operating companies with common analytic and credit characteristics operating in a single country or geographic region. An analytic unit could include a group of companies operating outside of a single geographic region if significant inter-company support arrangements exist, or if there is a high degree of integration in the management, systems, distribution and operations of the group of companies.

In the following sections, we describe the key factors underlying a title insurance company's business and financial profiles, as well as factors that affect its operating environment. 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 these scorecard components are meaningful for an insurer's standalone credit profile, what the relevant financial metrics are in analyzing these factors, including regional/supplemental metrics, and how we interpret those metrics. Overall country risk and characteristics of the local insurance operating environment also play an important role in our rating analysis, as do other factors, such as management, governance, and accounting policy and disclosures.

Given the inherent cyclicity of the title insurance industry, a company's financial profile may be somewhat stronger than the scorecard-indicated outcome during cyclical peaks and somewhat weaker during cyclical troughs.

We employ the same analytic approach to evaluating title insurance companies worldwide, incorporating the business, financial profile and operating environment dimensions discussed in this methodology. However, each of the various regions has its own market nuances that reflect the local political, social and economic climates. These include the regulatory environment, governance and capital structures, taxation, accounting rules and public reporting requirements, and laws and the litigation environment. If these regional factors are not already captured in the Operating Environment component, we may incorporate them qualitatively into our analysis.

Title insurance groups often consist of subsidiaries operating in more than one geographic region. Where this is the case, we typically consider the largest and most significant units of the group (in terms of revenues and earnings, capital, assets or other key metrics), and, where relevant, apply the quantitative metrics in the methodology to this group of key subsidiaries to arrive at weighted average ratios. In some instances, this group of key subsidiaries may be less than 100% of the analytic unit. Also, in some instances, more than one group of subsidiaries, called analytic units, exist within a title insurance group. Each analytic unit is typically analyzed separately.

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. Many of the financial ratios are calculated based on a five-year average. 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 historical and expected future performance for individual periods or periods of several years or more.

Scorecard Framework

This methodology includes a scorecard, which is used in our analysis and reflects our opinion and judgment on each of the broad factors within the rating methodology. Information we use in the scorecard may include proprietary, non-public data. Business Profile factors represent 30% of the overall fixed scorecard weights, and the Financial Profile factors represent 70%; however, weights shown for each factor in the scorecard represent an approximation of their importance for rating decisions, and actual importance may vary substantially. The Operating Environment component, described in more detail later in this report, has a variable weight depending on the assigned score.

The scorecard-indicated outcome calculates an unadjusted score for each factor, and analysts typically populate the scorecard with an adjusted score, which can range from Aaa to C. The score is derived from the raw metrics, and the adjusted score is based on analytical judgment. The scorecard also factors in the operating environment. We also consider a pre-defined severe stress case scenario.

To arrive at the standalone credit profile for the analytic unit, we may assess the company's management, governance and risk management, accounting policy and disclosures, sovereign and regulatory environment as well as any special rating situations. To move from the standalone credit profile to the rating, we consider any explicit or implicit support from affiliates, as well as other rating considerations. Scorecard factors and weights can be found below.

EXHIBIT 2

Title Insurers Rating Methodology Scorecard Factors and Weights⁹

	Aaa	Aa	A	Baa	Ba	B	Score	Adjusted Score
Business Profile								
Market Position and Brand (15%)								
Market Share Ratio								
Total Revenue								
Product Focus and Diversification (15%)								
Insurance Subsidiary Product Focus and Diversification								
Geographic Diversification								
Financial Profile								
Asset Quality (10%)								
High-Risk Assets % of Shareholders' Equity								
Goodwill & Intangibles % of Shareholders' Equity								
Capital Adequacy (10%)								
Underwriting Leverage								
Profitability (20%)								
Return on Capital (5 yr. avg.)								
Sharpe Ratio of ROC (5 yr. avg.)								
Reserve Adequacy (10%)								
Total Reserves to 3 yr. avg Paid Losses								
Financial Flexibility (20%)								
Financial Leverage								
Earnings Coverage (5 yr. avg.)								
Cash Flow Coverage (5 yr. avg.)								
Operating Environment								
Preliminary Standalone Outcome								

Source: Moody's Investors Service

⁹ See Appendix 1 for sub-factor weight detail.

Notching Factors and Support Considerations:

- » Management, Governance and Risk Management
- » Accounting Policy and Disclosures
- » Sovereign and Regulatory Environment
- » Standalone Credit Profile
- » Nature and Terms of Explicit Support
- » Nature and Terms of Implicit Support
- » Scorecard-Indicated Outcome

Standard Adjustments in the Analysis of Financial Statements

The financial statements we use in our analysis generally have a consistent basis of accounting depending upon the region (e.g., Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS)). Different accounting conventions can affect – sometimes materially – comparisons among companies operating in different jurisdictions. Accordingly, we make standard and non-standard adjustments, as described below. The qualitative analysis that we employ may also consider accounting system differences, including when we do not have sufficient information to make specific adjustments. To the extent that other accounting conventions are used by a company, we may also use that data for a more direct comparison to global peers.

All of the quantitative credit metrics incorporate our standard adjustments to income statement, cash flow statement and balance sheet amounts for items such as underfunded pension obligations and operating leases. We may also make other analytical adjustments that are specific to a particular company.

For an explanation of our standard adjustments, please see the cross-sector methodology that describes our financial statement adjustments in the analysis of financial institutions. A link to an index of our sector and cross-sector methodologies can be found in the “Moody’s Related Publications” section.

In addition to the standard adjustments we may also make non-standard adjustments to financial statements for other matters to better reflect underlying economics and improve comparability among peers. For example, we may adjust financial statements in order to reflect estimates or assumptions that we believe better reflect an issuer’s sustainable forward-looking credit profile. We may also make non-standard adjustments where local GAAP or the interpretation of IFRS in a particular country or region differs from the norm in an area that would affect our analysis.¹⁰ Our adjustments may incorporate non-public information.

Incorporating Scenario Analysis and Stress Testing for Title Insurance Companies

Developing a forward-looking assessment of an insurer’s financial performance under an expected case and stress case is important to our assessment of financial strength. Our expectations of an insurer’s results over the medium term reflect our opinion of current and projected market conditions. The nature of an insurer’s operating and business profile, as well as its product offerings, mean that we may have differing levels of confidence in a particular expected case or stress case scenario.

In addition, our credit analysis includes an assessment of the downside risks faced by insurers and their creditors. Because challenging economic and financial events do occur – with potentially adverse effects on

¹⁰ See our cross-sector rating methodology on financial statement adjustments in the analysis of financial institutions for a discussion of our adjustments. A link to an index of our sector and cross-sector credit rating methodologies can be found in the “Moody’s Related Publications” section.

the financial and business profiles of insurers – we typically include an analysis of stress scenarios as part of our analysis.

Stress analysis can take different forms. To assess the impact of stress on an insurer, we may employ a number of different approaches as each situation dictates, including assessing insurers' own capital models and performing pre-defined and ad hoc scenario analysis. Please refer to Appendix 3 for a discussion of the pre-defined stress scenarios we use in our stress test. Our ratings reflect an expected scenario, but also take into consideration the impact of the pre-defined stress scenarios on a company's credit profile. We generally expect an insurer to be able to withstand moderate stress while maintaining a credit profile consistent with its assigned rating and that the application of the pre-defined stress scenarios (the stress test) would result in a credit profile deterioration of no more than a few notches below the assigned rating.

Discussion of the Scorecard Factors – Business Profile

Factor 1: Market Position and Brand

Why It Matters – Market Position and Brand

Market position, brand, scale and franchise strength are key factors that represent a company's ability to develop and sustain competitive advantages in its chosen markets. Market position incorporates the firm's sustainable advantages in its key lines of business and considers market share; barriers to entry; economies of scale; control over pricing; and control of distribution. Additionally, a firm's brand encompasses image and reputation in the market, brand recognition, and perception by distributors, intermediaries, and customers.

We believe that size makes it easier to develop other important credit characteristics such as pricing power, efficiencies of scale, management depth, access to talent, brand recognition, influence with regulators, intermediaries and other market participants, technological sophistication, diversification, and access to financial markets. Size also indicates a past record of capital generation, and general business success in the marketplace.

A strong market position helps a company to withstand prolonged difficult market conditions, while also enabling it to better capitalize on new opportunities. Conversely, a weak business franchise can contribute to financial stress at a company if it leads to a loss of market share or key customers, or if management is tempted into entering unfamiliar businesses, or taking on new and untested risks. Additionally, a weak franchise tends to force a company to follow industry pricing, without maintaining pricing discipline, making it more susceptible to cyclical volatility.

Metrics – Market Position and Brand

Market Share: Total premium written as a percentage of total title industry premium

Total Revenue: Consolidated total revenue

EXHIBIT 3

	Aaa	Aa	A	Baa	Ba	B
Market Share Ratio	$\geq 50\%$	$50\% > x > 30\%$	$30\% \geq x > 10\%$	$10\% \geq x > 5\%$	$5\% \geq x > 2\%$	$\leq 2\%$
Total Revenue (billions)	$\geq \$20$	$\$20 > x > \8	$\$8 \geq x > \2	$\$2 \geq x > \0.75	$\$0.75 \geq x > \0.1	$\leq \$0.1$

Source: Moody's Investors Service

Interpreting the Metrics – Market Position and Brand

As discussed above, we believe that an insurer's market share and overall size are highly correlated with competitive market position, brand strength and overall franchise value. We use title insurance market share to identify the company's position within its chosen market segment, and because there are a relatively small number of national title insurers, we also use total revenue in order to benchmark title insurers more broadly against other corporations regardless of industry.

Factor 2: Product Focus and Diversification

Why It Matters – Product Focus and Diversification

A company's chosen lines of business are important to its creditworthiness because individual product segments and classes of business exhibit different volatility and risk attributes. In addition, overall diversification in product line and geography reduces a company's aggregate risk profile and volatility. Title insurance in particular, given its importance to consumers, tends to draw a fair amount of regulatory and legal scrutiny so that state-specific legal or regulatory developments can have a meaningful financial impact. Geographic diversification helps moderate this risk.

Metrics and Criteria – Product Focus and Diversification

Product Characteristics: A qualitative assessment of title insurers' business risk and product diversification, within the context of all insurance types

Diversification by Geography: Measured or estimated by the level of premium concentration originating from a single regulated region (e.g. a state)

EXHIBIT 4

	Aaa	Aa	A	Baa	Ba	B
Insurance Subsidiary Product Focus and Diversification	Not applicable	Not applicable	Not applicable	Offers title policies and ancillary services	Title insurance only, with no ancillary services	Not applicable
Geographic Diversification	Not applicable	No single state generates more than 10% of premium	No single state generates more than 20% of premium	No single state generates more than 40% of premium	No single state generates more than 80% of premium	One state generates more than 80% of premium

Source: Moody's Investors Service

Interpreting the Metrics:

Product focus and diversification characteristics are evaluated based only on a company's title insurance operations. Title operations can exist within larger corporate entities that may include other types of insurance operations or non-insurance operations such as technology or services units. To the extent that a corporation has diversified operations other than just title insurance, we recognize the diversification benefit in analyzing the parent company's debt ratings; however, this benefit is typically not reflected in the title insurer's IFSR.

Product Focus and Diversification

Title insurance has a number of unique risk characteristics which we believe make the sector as a whole somewhat higher risk than most other insurance sectors. These characteristics include its: mono-line nature with poor product diversification; volatile revenue and earnings characteristics due to the industry's dependency on transactions rather than recurring revenue; dependence on housing cycles; high exposure to regulatory and legal risks; and the difficulty of accurately predicting future title insurance loss claims. These risk characteristics are offset by strengths that include: the industry's fundamental role and importance within housing markets; requirement within the real estate transfer process; importance in ensuring the

integrity of property ownership; significant barriers to entry; relatively flexible cost structures; and low exposure to catastrophic losses.

In addition to their core title insurance product, the national title insurance companies typically offer various ancillary services that are able to generate fee income without taking on insurance risk. Overall, when comparing the product focus characteristics of the national title insurance companies to other types of insurance, the title sector's product focus features have been consistent with a Baa score for even the most diversified title insurer.

Geographic Diversification

In assessing the benefits of geographic diversity, we consider factors such as the overall number of regions¹¹ a company operates in, its largest exposures to individual regions, and the specific regulatory and legal characteristics of the regions in which a company does business. We also consider potential regulatory or legal factors that may have a broad national impact so that state-specific diversity may not be a meaningful benefit.

Measurements of geographic diversity differ among title companies. State level diversity, however, is somewhat offset by the relative lack of international diversity, and by the potential for regulatory and legal decisions to apply on a national basis.

Discussion of the Scorecard Factors – Financial Profile

Factor 3: Asset Quality

Why It Matters – Asset Quality

Title insurance companies' investments are typically concentrated in high-quality liquid assets in recognition of the uncertainty of their liability payout stream, both as to timing and amount. In many cases, however, companies allocate a portion of their investment portfolios to higher-risk assets, such as equities or alternatives. Assessing asset exposures is important, because changes in the market environment, especially during periods of stress, can depress asset values, earnings, and ultimately, the company's capital base.

Goodwill and intangible assets are derived from acquisitions and new business production. The economic value of these assets is often uncertain and may not be realizable to the extent expected at the time of acquisition.

Write-downs of intangible assets are typically an indication that the potential profits of a book of business or a subsidiary are lower than what had originally been contemplated by management. Furthermore, although charges related to intangible assets are non-cash in nature, they signal reduced future earnings and capital generation, potentially hurting investor confidence and reducing financial flexibility.

Metrics – Asset Quality

High-Risk Assets % of Shareholders' Equity:¹² All invested assets other than investment-grade bonds and short-term investments as a percentage of shareholders' equity

Goodwill & Intangibles¹³ % of Shareholders' Equity¹⁴: Total goodwill plus other intangible assets (including deferred acquisition costs) as a percentage of shareholders' equity

¹¹ For purposes of our analysis of title insurers, a geographic region is generally considered to be any market with a single regulator.

¹² Where applicable, we supplement shareholders' equity with other forms of capital, which, although not reported as equity, are nevertheless loss-absorbing.

¹³ We use gross intangible assets, instead of net of applicable deferred taxes, to simplify this ratio.

¹⁴ This metric is typically calculated on a consolidated basis if the analytic unit being considered is part of a larger group because goodwill due to acquisitions is not typically pushed down to the analytic unit for financial statement reporting purposes.

EXHIBIT 5

	Aaa	Aa	A	Baa	Ba	B
High-Risk Assets % of Shareholders' Equity	$x \leq 25\%$	$25\% < x < 50\%$	$50\% \leq x < 100\%$	$100\% \leq x < 175\%$	$175\% \leq x < 250\%$	$\geq 250\%$
Goodwill & Intangibles % of Shareholders' Equity	$x \leq 20\%$	$20\% < x < 30\%$	$30\% \leq x < 40\%$	$40\% \leq x < 55\%$	$55\% \leq x < 75\%$	$\geq 75\%$

Source: Moody's Investors Service

Interpreting the Metrics:

High-Risk Assets

High-risk assets include all investment portfolio categories other than investment-grade fixed income securities and short-term investments. In addition to below-investment grade securities, this includes common equities, real estate and various alternative investments. These are assets that carry increased risks, including default, liquidity, and price volatility.

In addition to total high-risk assets, we also consider investment concentration risk, exposure to sectors or instruments known to be under stress, investment management philosophy, a company's long term investment performance track record, and the sustainability of historic investment returns.

As part of our analysis, we typically consider an insurer's investment risk. Our investment stress tests, which vary by asset type, are typically conducted on holdings in equities, alternative investments, real estate, mortgage loans, sovereign/sub-sovereign bonds, corporate bonds and structured securities.

Intangible Assets

This measure provides an indication of the quality of a company's equity capital base. Large goodwill amounts usually indicate extensive growth through acquisitions, often elevating credit risk because of the integration challenges and the uncertainty about ultimate costs and benefits. Some title insurance companies have had fairly aggressive acquisition strategies leading to high levels of intangible assets. In addition to considering ratios of intangibles to equity, we develop an opinion of the true economic value of goodwill and other intangibles by looking at the ongoing earnings power of the assets. In evaluating an acquisition, we also look at strategic fit, integration challenges, the quality of the acquired business, and the implications for market position and diversification.

We also analyze other assets such fixed assets and deferred tax assets for reasonableness. As such assets have less liquidity than investments and other financial assets, significant levels of these assets relative to total assets may be discounted when assessing asset quality.

Factor 4: Capital Adequacy

Why It Matters – Capital Adequacy

A title insurance company's capital is available to absorb unfavorable deviations in results, particularly those caused by higher-than-expected title insurance claims. We measure a company's leverage in terms of business volume generated and size of liabilities relative to the company's capital. In addition to the increased likelihood of threats to solvency, capital constraints can negatively impact the ability to grow.

Metric – Capital Adequacy

Underwriting Leverage: Total net premiums written plus total liabilities divided by the insurance operating subsidiaries' equity

EXHIBIT 6

	Aaa	Aa	A	Baa	Ba	B
Underwriting Leverage	$x \leq 3x$	$3x < x < 6x$	$6x \leq x < 10x$	$10x \leq x < 15x$	$15x \leq x < 20x$	$x \geq 20x$

Source: Moody's Investors Service

Interpreting the Metric – Capital Adequacy

A title company's underwriting leverage (or operating leverage) is a measure of the capitalization of the group's underwriting entities in relation to the amount of risk assumed. In general, the higher a company's underwriting leverage, the more business and risk it is assuming in relation to capital, and the greater the impact on its capital position of any variations in financial performance. Additionally, in evaluating subsidiary capitalization, we consider the quality of capital (i.e., operating company capital as stated vs. capital excluding affiliated investments), the riskiness of investment portfolios, and reserve adequacy.

Factor 5: Profitability**Why It Matters – Profitability**

Title insurance typically exhibits volatile and strongly cyclical revenue and earnings characteristics due to the industry's dependence on the number of real estate transactions, which fluctuates based on interest rate trends and general housing market conditions. One of the primary risks faced by title insurance companies is a revenue contraction caused by an industry-wide decline in total transactions.

We place an emphasis on a title insurer's earnings profile due to the importance of maintaining adequate margins, or at least minimizing losses, during periods of industry contraction. Strong earnings reflect disciplined expense management, good cash generation in order to meet underwriting and financial obligations, and a "margin of safety" for dealing with stress scenarios.

Metrics – Profitability

Return on Capital (ROC): Net income before non-controlling interest expense as a % of average financial debt + shareholders' equity¹⁵ + non-controlling interest (5-year average)

Sharpe Ratio of Return on Capital: The mean of the company's annual return on capital (5-year average) divided by the standard deviation of return on capital (5-year period)

EXHIBIT 7

	Aaa	Aa	A	Baa	Ba	B
Return on Capital (5-yr avg)	$\geq 15\%$	$15\% > x > 8\%$	$8\% \geq x > 4\%$	$4\% \geq x > 0\%$	$0\% \geq x > (-4)\%$	$x \leq (-4)\%$
Sharpe Ratio of ROC (5-yr avg)	$\geq 300\%$	$300\% > x > 200\%$	$200\% \geq x > 100\%$	$100\% \geq x > 0\%$	n/a	n/a

Source: Moody's Investors Service

Interpreting the Metrics – Profitability

In general, companies with higher scores for this factor tend to have stronger profitability and less volatility. We would note, however, that this may not be the case in instances where the level of capitalization itself is very strong. For instance, a well-capitalized company may report a relatively low return on capital (ROC) simply because of the high level of equity capital that appears in the denominator of the ratio.

In assessing title insurance profitability, we use ROC, rather than return on equity (ROE), in order to discount any apparent profitability benefit that a company could gain by simply leveraging up its balance sheet through the use of debt (which by itself would be a credit negative). The use of ROC helps separate a

¹⁵ Note that while many accounting regimes include non-controlling interest in shareholders' equity, Moody's does not.

company's financing decisions (i.e., the balance of debt and equity in the capital structure) from the underlying profitability of its business (although because net income is used in the numerator, a company's ROC reflects the earnings drag of a large interest expense associated with debt).

In evaluating profitability, we look at both the quality and sustainability of earnings, considering diversification, the presence of counter-cyclical lines of business, general market conditions, and projections for future real estate related business volume. We also note that net income can be meaningfully influenced by non-recurring items, most notably realized gains or losses. For groups with large investment-related gains or losses, we also consider metrics excluding these items.

The Sharpe ratio calculated on return on capital gauges the inherent volatility in a company's returns in relation to average profitability and helps us to formulate an opinion about the predictability and sustainability of a company's earnings. The ratio considers net income since a company's capital generation is driven by its net income but we recognize that some capital gains/losses and taxes can at times be somewhat volatile and unpredictable or at other times used to reduce underlying operational volatility. This ratio's analytic value is of limited use if the numerator is zero or negative, in which case the sub-factor weighting for the Sharpe ratio is allocated to the ROC metric, and within the overall profitability factor, the ROC reverts to 100%.

We use five years of data to attempt to capture business cycles. However, we would note that business cycles in title insurance typically last longer than five years, so that our opinion of the economic volatility of the business could differ significantly from that implied by the computed ratios.

Factor 6: Reserve Adequacy

Why It Matters – Reserve Adequacy

Inadequate loss reserves can lead to large, unexpected charges and can contribute to the underpricing of insurance policies. We analyze loss reserve adequacy because of its importance to both capitalization (unexpected reserve charges can quickly deplete capital) and earnings quality. Under-reserving during a specific time period overstates both earnings and equity capital over that period. Over the longer term, it also leads to earnings and capital volatility as reserve inadequacies need to be corrected.

Metric – Reserve Adequacy

Total Reserves / 3-year Average Paid Losses: Total reserves, including statutory premium reserves, divided by the average yearly paid loss over the last three years

EXHIBIT 8

	Aaa	Aa	A	Baa	Ba	B
Total Reserves to 3 yr. avg Paid Losses	$\geq 20x$	$20x > x$ $> 10x$	$10x \geq x$ $> 5x$	$5x \geq x$ $> 3x$	$3x \geq x$ $> 2x$	$\leq 2x$

Source: Moody's Investors Service

Interpreting the Metric – Reserve Adequacy

The assessment of loss reserve adequacy for title insurers is challenging, primarily because a title insurer is typically unable to determine whether or not policies written in the past are still in effect. Unlike traditional forms of insurance that apply for a specific, defined time period, a title insurance policy remains in effect from the closing of a transaction (sale or mortgage refinancing) until a new transaction takes place on the property. This time period could be a matter of months, or of decades. Also, there is no central clearing house that alerts a title company as to whether or not a new transaction has taken place that results in a new title policy replacing the old one.

To estimate the reserve strength of a title insurer, we use total reserves (including both known claim reserves and statutory premium reserves) over average paid claims. While a ratio of reserves to paid claims is a good proxy for reserve adequacy, we note that results can be distorted by such things as changes in premium growth rates, unusual fluctuations in claims payments, changes in business mix, or changes in claims settlement practices.

Factor 7: Financial Flexibility

Why It Matters – Financial Flexibility

Financial flexibility includes the total level of financial leverage, the ability to service that leverage, and the ability to raise new capital (debt or equity) in financial markets. Financial leverage at a company has significant implications for the insurance subsidiary's ability to retain capital. High levels of leverage place high cash demands on insurance subsidiaries, thereby weakening their credit profile.

To have a strong credit profile, it is important that a company demonstrates its ability to not only fund business growth but also to service various obligations without stress. Additionally, insurers generally benefit from having the capacity to raise capital externally for additional growth or acquisitions, and to meet unexpected financial demands.

Metrics – Financial Flexibility

Financial Leverage: Adjusted debt divided by (adjusted debt + shareholders' equity)

Earnings Coverage: Earnings before interest and taxes divided by interest expense and preferred dividends (5 year average)

Cash Flow Coverage: Dividend capacity of insurance subsidiaries divided by interest expense and preferred dividends (5 year average)

EXHIBIT 9

	Aaa	Aa	A	Baa	Ba	B
Financial Leverage	$x \leq 15\%$	$15\% < x < 30\%$	$30\% \leq x < 45\%$	$45\% \leq x < 55\%$	$55\% \leq x < 65\%$	$\geq 65\%$
Earnings Coverage (5 yr. avg)	$\geq 12x$	$12x > x > 8x$	$8x \geq x > 4x$	$4x \geq x > 2x$	$2x \geq x > 0x$	n/a
Cash Flow Coverage (5 yr. avg)	$\geq 7x$	$7x > x > 5x$	$5x \geq x > 3x$	$3x \geq x > 1.5x$	$1.5x \geq x > 0x$	n/a

Source: Moody's Investors Service

Interpreting the Metrics

Financial Leverage

Financial leverage measures the total consolidated company debt (whether issued at holding company or operating company) in relation to capital. The calculation considers all forms of financial debt (short- and long-term) used to fund the company's operations (with hybrids adjusted for the Moody's debt/equity continuum¹⁶), plus unfunded pension obligations and operating leases (operating debt however is excluded). In addition to our standard adjustments to financial leverage and earnings coverage, other adjustments are sometimes necessary. For example, we may add as debt an off-balance-sheet obligation because we believe that the company will support the obligation, if necessary, because of reputation or economic incentives.¹⁷

Shareholders' equity in the adjusted financial leverage calculation includes accumulated other comprehensive income (AOCI) as we believe that reported equity and the impact of changes in AOCI, primarily from changes in value of investment securities, can impact the markets' perception of an insurer's

¹⁶ We believe that it is appropriate for our credit analysis to limit the amount of total equity credit that is derived from the issuance of hybrid securities within a capital structure. A link to our cross-sector methodology for hybrid equity credit can be found in the "Moody's Related Publications" section.

¹⁷ Please refer to our cross-sector rating methodology that discusses how we assess operating debt used by insurance companies. A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

ability to access capital markets at attractive funding costs. Consideration is also given to leverage metrics calculated using shareholders' equity without AOCI, especially during periods of volatile interest rate changes or where assets are reported at fair value but liabilities are reported at book value.

Also incorporated into our opinions of a firm's financial leverage profile is management's target level for leverage relative to its current position, past use of debt, the debt maturity profile, the complexity of the capital structure itself, and double leverage (i.e., investments in subsidiaries funded by parent company debt or a stacked ownership structure).

Coverage

The debt capacity of an insurer is defined by its earnings and dividend capacity relative to interest expense and preferred dividends. As is the case with leverage, our earnings coverage calculations include adjustments for pensions and leases.

Because there can be regulatory restrictions on dividend capacity from an operating company to its holding company (which is typically where the debt obligations reside), coverage is also evaluated in the context of flexibility in terms of cash available to the holding company. To assess the cash flow coverage at the parent company level, we use the maximum allowable dividend (unrestricted) from regulated subsidiaries (subject to the condition that capital adequacy is maintained at the operating company). In evaluating the cash coverage at the holding company level, we also consider cash and other liquid investments held directly by the holding company and any operating cash flow that may be available through unregulated non-insurance company operating subsidiaries. The cash flow coverage ratio cannot be calculated in all jurisdictions due to varying disclosures. If we are unable to calculate cash flow coverage due to a lack of disclosure, we allocate the weight assigned to this sub-factor to our earnings coverage sub-factor.

In addition to these metrics, we may also consider holding company liquidity in terms of the ability to meet near-term financial debt obligations (both interest and upcoming debt maturities) with readily realizable assets (e.g., cash, investment-grade bonds, and publicly-traded equities), and any other sources of liquidity which could be drawn upon if necessary (e.g., credit facilities).

We also may assess a company's ability to access capital markets. It may be necessary to raise capital after a severe unexpected event, to fund an acquisition, to fund internal growth plans, or simply to meet maturing debt obligations. Difficulty in accessing capital markets at suitable terms can significantly impair a company's financial flexibility in the event of a liquidity crisis or the need to rebuild capital.

We additionally may consider a company's back-up lending facilities and letter of credit arrangements and the conservatism of covenants, if any, embedded in borrowing arrangements. Strong back-up facilities with limited restrictive covenants enhance financial flexibility for a company, particularly in times of stress.

Operating Environment

Why It Matters

Although our analysis of title insurers is focused predominantly on company-specific characteristics and on business and financial parameters in the context of an insurer's operations within its industry sector, an important component of our analysis – particularly in developing markets – is the extent to which external conditions can exert a meaningful influence on insurers' credit profiles.

The Operating Environment serves to capture relevant economic, social, judicial, institutional and general business conditions in a particular country as regards the insurance sector. Country-specific trends and developments can over time have as much of a bearing on insurers' long-term viability as the intrinsic strength of their own operations. Considerations can include the trajectory of economic development

relative to other countries, major social or political developments, and the degree of utilization, recognition and acceptance of insurance as a legitimate vehicle for asset accumulation and wealth-protection.

Relevant Metrics:

The Operating Environment incorporates scores for multiple factors in two categories – Insurance Systemic Risk, and Insurance Market Development – by country, based on the country in which an insurer operates. For insurers that have meaningful operations in multiple countries or jurisdictions, we consider a blended approach to evaluating the overall Operating Environment score.

Three of the five country-specific components of the Operating Environment score that pertain to Insurance Systemic Risk are based on macro-level indicators from our sovereign rating methodology¹⁸ and country research. The remaining two components – pertaining to Insurance Market Development – assess the degree of development of the insurance sector in a given country.¹⁹

Insurance Systemic Risk

Economic Strength: We use our published factor score for a sovereign's Economic Strength.

Institutions and Governance Strength: We use our published factor score for a sovereign's Institutions and Governance Strength.

Susceptibility to Event Risk: We use our published factor score for a sovereign's Susceptibility to Event Risk.

In each case, the broad alpha or alphanumeric sovereign factor score is mapped to a numeric as described below.

Insurance Market Development

Insurance Penetration (%): *Total (life and non-life) industry-wide insurance premiums (excluding cross-border business) as a percentage of GDP.* Insurance penetration assesses the significance of a country's insurance market in the national economy.

Insurance Density (percentile rank): *Percentile rank, worldwide, of total (life and non-life) industry-wide insurance premiums (excluding cross-border business) per capita.* Insurance density assesses the extent of utilization of insurance protection in a given country.

Interpreting the Operating Environment Metrics

In our view, the better the operating environment, the less it impinges on the intrinsic strength of a title insurer's credit profile. To the extent that the operating environment is considered more favorable than the title insurer's own intrinsic credit profile, it is typically not a material consideration in the rating analysis. Furthermore, operating environments at the A or higher rating level are considered to be sufficiently strong so as to be neutral with respect to title insurers' credit profiles, and are therefore not considered. Consequently, operating environments have only a neutral-to-negative impact on our ratings for title insurers. Additionally, we believe that the weaker the operating environment is, the greater influence it has on a title insurer's overall credit profile, as the structural strength of the insurance industry and contractual agreements increasingly come into question.

¹⁸ For more details on our sovereign methodology, a link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

¹⁹ We generally assess the degree of development of the insurance sector in a given country from indicators such as through data captured by Moody's.

Insurance Systemic Risk

Economic Strength – The intrinsic strength of an economy provides critical indications of a sovereign's resilience to external shocks. A sovereign's ability to generate sufficient revenue to service debt over the medium term relies on sustained economic growth and prosperity, i.e., wealth.

Institutions and Governance Strength—The strength of institutions and governance are important determinants of a sovereign's creditworthiness because they influence the predictability and stability of the legal and regulatory environment. Institutions and governance provide a strong indication of a government's willingness to repay its debt. They influence the sovereign's capacity and willingness to formulate and implement economic, fiscal and monetary policies that support growth, socioeconomic stability and fiscal sustainability, which in turn protect the interests of creditors over the long term.

Susceptibility to Event Risk – Susceptibility to sudden, extreme events that could severely impact a country's economy or its institutions, or strain public finances is an important indicator of a sovereign's creditworthiness. Event risks are varied and typically include domestic political and geopolitical risks, government liquidity risk, banking sector risk and external vulnerability risk. We believe that such events could have significant negative implications for financial institutions such as insurance companies.

Insurance Market Development

Insurance Penetration and Density – Insurance markets around the world vary significantly in their degree of development with respect to the range of product offerings, utilization, and the significance of insurance as a means of risk mitigation and asset protection. Whereas Insurance Penetration considers the importance of the industry sector relative to the overall national economy, Insurance Density considers its importance relative to the population base of a country, thereby providing a helpful demographic perspective. Taken together, these two measures offer a more balanced perspective than either one taken in isolation. Broadly speaking, and all other things being equal, the higher the penetration and density levels, the more highly developed the insurance market, including the scopes of coverage provided, and the greater the perceived utility of the product. We also note that the particularities of different countries' insurance market structure and insurance accounting can significantly influence their penetration and density levels. Nevertheless, we believe that insurance penetration and density provide a meaningful basis of macro-level differentiation among countries, with respect to the utilization and development of insurance.

Calculating the Operating Environment Score

The Operating Environment score is derived by combining the scores for Insurance Systemic Risk composed of Economic Strength (25%), Institutions and Governance Strength (50%) and Susceptibility to Event Risk (25%); with Insurance Market Development, composed of Insurance Penetration (50%) and Insurance Density (50%).

For Insurance Systemic Risk, we start with the published factor scores for the sovereign's Economic Strength and Institutions and Governance Strength, which are expressed on an alphanumeric scale, and Susceptibility to Event Risk, which is expressed on a broad alpha scale.²⁰ We then convert these scores to numeric scores using the two Mapping Sovereign Rating Methodology Scoring tables below (Exhibits 10 and 11), and we combine them according to the weights described in the prior paragraph. Specifically, the numeric equivalent score for each sovereign methodology factor assigned score is multiplied by its weight, with the results then summed to produce a numeric Insurance Systemic Risk factor score.

²⁰ Broad alpha scores ranging from Aa to Caa are mapped at the midpoint of the associated alphanumeric scores; e.g., for an Aa broad alpha score, we would use Aa2, which maps to a numeric equivalent of 1.71 using the exhibit for Mapping Sovereign Rating Methodology Scoring for Susceptibility to Event Risk.

EXHIBIT 10

Mapping Sovereign Rating Methodology Scoring for Economic Strength and Institutions and Governance Strength*

Economic Strength and Institutions and Governance Strength	Numeric Equivalent
aaa, aa1	2.00
aa2, aa3	1.71
a1	1.43
a2	1.14
a3	0.86
baa1	0.57
baa2	0.29
baa3	0.00
ba1, ba2	-0.29
ba3	-0.57
b1	-0.86
b2	-1.14
b3	-1.43
caa1, caa2	-1.71
caa3, ca	-2.00

*The effect of this mapping is to compress the alphanumeric sovereign factor scores and convert them to a numeric score for use in the scorecard for title insurers.

Source: Moody's Investors Service

EXHIBIT 11

Mapping Sovereign Rating Methodology Scoring for Susceptibility to Event Risk

Susceptibility to Event Risk	Numeric Equivalent
aaa	2.00
aa	1.71
a	1.43
baa	0.57
ba	0.00
b	-0.86
caa	-1.71
ca	-2.00

Source: Moody's Investors Service

The Insurance Systemic Risk score is then mapped back to an alphanumeric score as shown in the table below (Exhibit 12).

The Insurance Market Development factor is based on a simple averaging of separate indicators for Insurance Penetration (total premiums – life and non-life – as a percentage of GDP) and Insurance Density (total premiums – life and non-life – per capita). Insurance Market Penetration is mapped to the global rating scale directly as indicated in the table below. Insurance Density is assessed by country, and then measured or estimated on a worldwide percentile-rank basis, with premiums denominated in US dollars. The Insurance Market Development factor is calculated using three-year averages. These results are then mapped to our global rating scale as shown in the table below.

Modifiers (1, 2, 3) for broad alpha categories from Aa to Caa are produced by interpolating the numerical result to the upper, middle and lower tercile of each factor range as indicated in the following table.

EXHIBIT 12

Summary of Relevant Metrics:

Indicator	Factor Weights	Sub-Factor Weights	Aaa	Aa	A	Baa	Ba	B	Caa
Insurance Systemic Risk	2/3		2.0	2.0-1.0	1.0-0.5	0.5-0	0-(0.5)	(0.5)-(1.0)	<(1.0)
Insurance Market Development	1/3								
Insurance Penetration (% GDP)		50%	>=6.5%	5.5%-6.5%	4.5%-5.5%	3.5%-4.5%	2.5%-3.5%	1.5%-2.5%	<1.5%
Insurance Density (percentile-rank)		50%	>=90%	75%-90%	60%-75%	45%-60%	30%-45%	15%-30%	<15%

* An indicator's alphanumeric scoring bands are based on an equal-width partition of the corresponding broad alpha scoring band for the indicator.

Source: Moody's Investors Service

Having calculated the Insurance Systemic Risk and Insurance Market Development indicators, and mapping each to our global rating scale, these two factors are, in turn, mapped to Aaa to Caa3 (1-19; please see the first table in Appendix 1, which shows alphanumeric and numeric equivalents). The final Operating Environment score is then determined by averaging these numeric scores with a 2/3 weight for Insurance Systemic Risk and a 1/3 weight for Insurance Market Development, and then mapping the result (rounded to the nearest whole number between 1 and 19) to Aaa to Caa3, using the first table in Appendix 1. Absent extraordinary systemic (e.g., economic, social, institutional, political, and judicial) or market development considerations that may not be adequately reflected in these metrics, we generally expect to apply the Operating Environment result without further modification.

Other Scorecard Considerations in Determining the Standalone Credit Profile: Notching Factors

Management, Governance and Risk Management

We evaluate an insurer's management, governance, and risk management processes as part of our credit assessment. However, an insurer's management, governance and risk management only affect the scorecard-indicated outcome to the extent we believe they are not reflected in the Preliminary Standalone Outcome derived from the Business Profile, Financial Profile and Operating Environment discussed above. Notching for these factors has typically been limited. That said, in some instances, further assessment of management, governance or risk management may lead to upward or downward notching. Considerations in this factor include:

- » Key person risk. A high dependence on a single executive or group of executives can pose increased risks, because the loss of a single person could adversely affect the insurer's future fundamentals. For example, an insurer whose corporate customers closely associate the chief executive with the institution itself could suffer loss of business, earnings and ultimately reduced capital if the chief executive were to leave, absent adequate succession planning.
- » Strategy and management. A radical departure in strategy, a shake-up in management, or an untested team can all herald sudden change that increases the uncertainty about risk profile. An aggressive growth plan can also signal an elevated risk appetite, while clear weaknesses in risk management can increase exposure to adverse developments. Any concerns regarding the rigor of Board or management oversight may also be considered here.
- » Dividend policy. An aggressive dividend policy may imply reduced financial flexibility. Management teams are often slow to reduce established dividend levels out of concern over negative signaling and adverse share price impact. (The same can be said of share buybacks, although to a lesser extent, as the

timing and certainty of execution of even announced buyback programs leave greater management discretion).

- » Compensation policy. Similarly, an aggressive compensation policy, for example, widespread use of high bonus payments relative to salaries, and skewed towards cash, may encourage short-term risk-taking behavior to the detriment of bondholders.

We may reduce our Preliminary Standalone Outcome if we judge that any of these factors has a material bearing on the insurer's overall risk profile. Typically, this would be one notch but could be more if we perceive multiple and/or more deep-seated and serious issues. We may also adjust our Preliminary Standalone Outcome upwards, for example, where we perceive sustained exemplary stewardship over time, or exceptional risk management and controls, with a tangible impact on the insurer's risk profile.

Accounting Policy and Disclosures

Relevant and timely financial information is a critical part of any financial analysis. The consistent application of financial information is a fundamental presumption of financial analysis. Many insurers prepare financial information under generally accepted accounting principles either developed by their home country or based on international standards. Financial information is also generally prepared on a regulatory basis of accounting that may be different from generally accepted accounting principles. The presence of a strong government/independent body for financial standards is considered a positive factor when evaluating an accounting regime.

Disclosure of financial information varies widely on a global basis and within regions. In certain locations, regulatory bodies provide access to financial information, although the depth of that information also varies. Some companies have chosen to provide market participants with easy access to their own financial data, which we view favorably.

The consistent application of financial information is a fundamental presumption of financial analysis. When evaluating accounting principles, we consider how well financial reporting mirrors economic reality. Where we believe the economics of a transaction are not consistent with financial reporting, we may make analytic adjustments to metrics derived from financial statements to facilitate our analysis.

Sovereign and Regulatory Environment

Deterioration in sovereign credit quality can directly affect the credit standing of insurers domiciled within the sovereign, and, more generally, tends to be associated with macroeconomic and financial market trends that are unfavorable for all.²¹ Issuers in the same sovereign environment are exposed to some degree to the transmission of shocks across sectors in the economy and the domestic banking system. In addition, they are subject to defensive sovereign actions that can include austerity measures, changes in tax or regulatory policies, and interference during a crisis. Given this linkage, sovereign credit quality can constrain the IFSR of an insurer.

Our cross-sector methodology that discusses how sovereign credit quality can affect other ratings describes how we consider the insurer's geographic diversification, direct exposure to government debt and product characteristics in analyzing these impacts. Insurers with high geographic diversification, low direct exposure to government debt and product characteristics less sensitive to sovereign risks can have an IFSR above the sovereign rating, but generally no more than two notches above.

²¹ See our methodology that discusses how sovereign credit quality can affect other ratings. A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

Moving From the Standalone Credit Profile to the IFSR — Assessing Support

While the above factors are critical in order to determine the standalone credit profile of title insurers, the analytic consideration of support - explicit or implicit - from a parent company or affiliate is necessary to determine the IFSR, which can be higher than the company's standalone credit profile. It is important to note that a well-capitalized, profitable insurance operating company with a highly leveraged parent or a weak affiliate has a lower IFSR than it would have were it a free-standing company because of the pressure those factors can place on its earnings and capital.

Support from a Parent Company or Affiliate

The credit rating of an insurer can ultimately be affected by its relationship to its parent, a subsidiary, or affiliate companies through either explicit or implicit support.²² We incorporate support from a parent company or affiliate into the rating by narrowing the spread (expressed in number of rating "notches") between the standalone credit profile of the entity/security and the rating of the entity providing the support.²³

Ultimately, our assessment of the extent to which the affiliation benefits the rating is based on a number of variables, including the supporting company's level of commitment to the country or region of the affiliate, brand-name sharing, our assessment of how important this entity is to the overall enterprise business model, its size relative to the whole, its geographic proximity to the supporting entity, existence of shared regulatory oversight, full or partial ownership, and its integration with the rest of the organization from a management, distribution, and operating perspective, as well as our view of the company's ability and willingness to support that entity. Support is evaluated incorporating an assessment of past actions of the support provider, current public statements of support and our assessment of the outlook for future support.

Our judgment of how the prospective supporting entity is likely to behave in the future is strongly influenced by our assessment of its prospective economic motivations. Accordingly, strong public statements of support would not be a persuasive reason to raise the rating of a weaker subsidiary if a sound economic rationale for doing so seems lacking. Although support may provide uplift to a company's rating, it may not necessarily raise it to the same level as that of the supporting entity.

While, in most instances, support is incrementally positive, there are instances where group affiliation may constrain the rating of an entity/security relative to its standalone level. For example, if the insurer is affiliated with weak or highly leveraged entities, such associations usually, in turn, weaken the insurer. Capital often flows from stronger to weaker companies within a controlled group, and frequently before regulatory action can occur.

Explicit support is usually intended to transfer the credit of the supporting entity to the supported affiliate or obligation. Explicit support is generally in the form of a capital maintenance agreement, minimum net worth agreement, or some type of direct guarantee. It can also take the form of management contracts, marketing arrangements, reinsurance agreements or tax-sharing agreements.

In analyzing explicit support, we consider the specific legal nature and enforceability of the support, as well as its possible termination. Explicit support, depending on its structure, can achieve credit transference and bring the affiliate's rating up to that of the supporting entity. However, we also make an assessment as to

²² For additional discussion of our rating guidance related to support, see our cross-sector methodology on rating non-guaranteed subsidiaries, which includes credit considerations for assigning subsidiary ratings in the absence of legally binding parental support. A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section. In addition, affiliate companies generally refer to companies outside of the analytic unit being rated.

²³ When this occurs, our research typically describes the relationship between the analytic unit and the supporting organization and provides a discussion of the standalone credit profile of the analytic unit.

whether the extension of this support (as well as with implicit support) will weaken the credit profile of the parent or affiliate.

Where support is present, the IFSR typically receives one or two notches of uplift from the standalone credit profile. Although rare, three or more notches of uplift is possible, although typically only when strong explicit support is provided. In addition, uplift such that the supported entity's rating is equal to the supporter's rating is rare without meaningful explicit support. This can be the case even where the company's management states that the subsidiary is core to its ongoing strategy and operation, primarily due to the risks that the supporter may change its strategy or the supporter's regulator may constrain support in times of stress, particularly if support is to be provided outside of their own jurisdiction.

Where the owner-supporter is a government and we are using this methodology to assign a BCA, to incorporate support we use our methodology that discusses government-related issuers and the joint default analysis approach described therein. For clarity, support from a non-government owner is incorporated using the support portion of the title insurers scorecard, whereas support from a government owner is considered outside of the Title Insurers scorecard.

Factoring in Support from Other-Than-Related Entities

Our ratings of title insurers do not typically reflect an expectation of government support. Based on our observations, we believe government support would neither be widely offered nor sufficiently reliable nor predictable to be routinely incorporated into our title insurance ratings. In the limited cases where such support is received, we consider its credit implications on a case-by-case basis. If we believe government support is long term in nature, or if the insurer is directly owned by the government, we may apply the rating methodology for government-related issuers when evaluating the credit profile of the insurer.²⁴ (Please see the Assigning Insurance Financial Strength and Instrument Ratings section below).

Other Rating Considerations

Ratings may include additional factors that are not in the scorecard, usually because they may have a meaningful effect in differentiating credit quality, but only in some cases. Such factors include financial controls and the quality of financial reporting; the quality and experience of management; environmental and social considerations; 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.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

Special Rating Situations

In a few, very special – and typically adverse – situations, a single rating factor or sub-factor may be so important to a company's financial health and solvency, that it overrides all of the others, despite its nominal weighting in the scorecard. This would typically occur in highly adverse situations, where a company's solvency or liquidity is at stake. Examples of this would include the breach of local capital-solvency or risk-based capital thresholds that precede regulatory intervention, or concerns of a looming liquidity crisis – e.g., a material holding company debt maturity with a highly uncertain source of repayment.

²⁴ A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

If a rated entity has cliff-like rating triggers,²⁵ its susceptibility to events may be exacerbated.

Special Rating Situations often deal with information that is not necessarily captured by point-in-time ratios, or annual / quarterly regulatory or reporting requirements. For this reason, we may stress critical solvency ratios and liquidity needs to identify potentially severe pressure points, and the resultant scenario may be considered in an additional view of the scorecard.

Financial Institutions with Limited Financial History

Most rated insurers have many years of financial history and lengthy operating track records that generally act as the basis for our forward-looking credit analysis. Insurers with limited financial history may undergo rapid evolution initially, before developing readily distinguishable and stable operating characteristics. Financial institutions are highly confidence-sensitive. A demonstrable track record can be instrumental in building customer and market trust, which creates franchise value and supports the institution's performance during a down cycle.

The franchise value of start-up insurers is usually weak, and most tend to lack product depth, market share, operating experience as an institution (rather than as a collection of individuals) and a record of resilience through a full credit cycle. Their systems, policies and procedures tend to be less robust than those of established insurers.

For start-ups that lack a financial history of at least several years and in cases of a material transformation in an insurer's business, such that its financial history does not provide a good indication of future results (collectively, insurers with limited financial history), existing financial history provides less insight into the future credit profile. In these cases, our baseline projections may reflect more-conservative expectations than management's projections. In addition, we are likely to make downward adjustments to several factors in our scorecard in order to reflect the considerable uncertainty around our baseline expectations of future operations and financial profile. To the extent these risks and uncertainties are not fully captured in the scorecard, they may be reflected in an assigned IFSR that is lower than the scorecard-indicated outcome.

Insurers with limited financial history may benefit from external support. When material, we incorporate that support into our ratings. In assessing the level of expected support, we generally consider whether the company's status as a start-up could affect the willingness of the support provider to step in should support be needed. For a highly publicized start-up subsidiary of a parent with a solid credit profile, we may expect a high level of support. Certain parent companies and affiliates, conversely, could be less willing to provide support if the reputational and financial risks attached to failure of an early-stage business venture were lower than for subsidiaries with long track records and entrenched businesses in their home markets. We generally expect that governmental support for start-ups, typically small players in the early years of operations that are not systemically important, to be low. Exceptions could include government-owned start-ups and start-up insurers of long-term strategic importance to government policy initiatives.

Regulation and Litigation

Political, regulatory and legal risks are high for title insurers. Largely because of its importance to real estate markets, and its consumer-oriented nature, title insurance attracts political, legal and regulatory scrutiny. Regulatory and legal issues that have affected the title industry include agent incentives and marketing activities, foreclosure documentation, the ceding of reinsurance to captives, rates, rebates and general business practices. As is the case with other insurance segments, title insurance remains vulnerable to regulatory actions that could result in fines, settlements or other negative events.

²⁵ Rating triggers are typically used in credit agreements covering funded bank loans and unfunded credit lines (providing back-stop liquidity) and in bond indentures and reinsurance contracts. Creditors often use rating triggers in an attempt to protect themselves in the event of credit deterioration. A rating trigger typically provides creditors with certain rights in the event that a borrower's credit ratings change to predetermined levels. These rights run the gamut from step-ups in loan pricing (not very risky) to events of default that would enable the creditor to "put" or accelerate the debt (very risky).

In our assessment, we consider any such contingent exposure. We assess regulatory issues and lawsuits and their potential impact on a title company's earnings, capital and business practices.

Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. The quality of financial statements may be influenced by internal controls, including the proper tone at the top, centralized operations, and consistency in accounting policies and procedures. Auditors' comments in financial reports and unusual financial statement restatements or delays in regulatory filings may indicate weaknesses in internal controls.

Additional Metrics

The metrics included in the scorecard are those that are generally most important in assigning ratings to companies in this industry; however, we may use additional metrics to inform our analysis of specific companies. These additional metrics may be important to our forward view of metrics that are in the scorecard or other rating factors.

Environmental Considerations

Title insurers cover mortgagee and in some cases mortgagor losses that occur when the mortgagor does not have clear ownership rights to the mortgaged property; they typically do not cover damages related to decreases in property value, natural and man-made disasters, pre-existing environmental conditions, pollution or water shortages.

Social Issues

For issuers in this sector, we also consider social issues that could materially affect the likelihood of default and severity of loss, for example through adverse impacts on business reputation, brand strength and employee relations.

Assigning Insurance Financial Strength and Instrument Ratings

IFSRs are opinions of the ability of insurance companies to pay punctually senior policyholder obligations and claims and also reflect the expected financial loss suffered in the event of default.²⁶ IFSRs are assigned to legal entities.

In contrast, our long-term debt and preferred stock ratings are assigned to specific instruments issued by either a holding or operating company. The relationship between IFSRs and instrument ratings depends on the legal and regulatory framework in a particular jurisdiction and the relative standing of policyholders and instrument holders in the event of insolvency, bankruptcy, reorganization or liquidation of the entity. The relationship between the ratings for these different classes of creditors is discussed in our cross-sector methodology providing guidance on assigning ratings to instruments issued by insurers.²⁷ For issuers that benefit from rating uplift from government ownership or other government support, we may assign a Baseline Credit Assessment.²⁸

Assumptions

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

²⁶ Please refer to *Rating Symbols and Definitions* for more details; a link can be found in the "Moody's Related Publications" section.

²⁷ A link to an index of our sector and cross-sector credit rating methodologies can be found in the "Moody's Related Publications" section.

²⁸ For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for government-related issuers. A link to an index of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's Related Publications" section.

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.

Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions.

Limitations

In the preceding sections, we have discussed the scorecard factors, many of the other rating considerations that may be important in assigning ratings, and certain key assumptions. In this section, we discuss limitations that pertain to the scorecard and to the overall rating methodology.

Limitations of the Scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard in this rating methodology is a relatively simple tool focused on indicators for relative credit strength. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds, causing scorecard-indicated outcomes to be less likely to align with ratings for issuers at the upper and lower ends of the rating scale.

The weights for each sub-factor and factor in the scorecard represent an approximation of their importance for rating decisions across the sector, but the actual importance of a particular factor may vary substantially based on an individual company's circumstances.

Factors that are outside the scorecard, including those discussed above in the "Other Rating Considerations" section, may be important for ratings, and their relative importance may also vary from company to company. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.²⁹ Examples of such considerations include the following: how sovereign credit quality affects non-sovereign issuers, the assessment of credit support from other entities, the relative ranking of different classes of debt and hybrid securities, and the assignment of short-term ratings.

We may use the scorecard over various historical or forward-looking time periods. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

General Limitations of the Methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Companies in the sector may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as scorecard inputs or in other rating considerations, typically diminishes. In any case, predicting the future is subject to substantial uncertainty.

²⁹ A link to an index of our sector and cross-sector methodologies can be found in the "Moody's Related Publications" section.

Appendix 1: Using the Scorecard

This appendix describes how we use the scorecard to arrive at an alphanumeric scorecard-indicated outcome.

Alphanumeric categories from Aaa to C are mapped to numeric values of 1 through 21, as follows.

Alphanumeric Categories	Numeric Value
Aaa	1
Aa1	2
Aa2	3
Aa3	4
A1	5
A2	6
A3	7
Baa1	8
Baa2	9
Baa3	10
Ba1	11
Ba2	12
Ba3	13
B1	14
B2	15
B3	16
Caa1	17
Caa2	18
Caa3	19
Ca	20
C	21

Source: Moody's Investors Service

Qualitative sub-factors are scored on a broad alpha scale based on the scoring description (with an equivalent numeric score based on the midpoint of that alpha category), and these sub-factor scores are combined to produce an alphanumeric factor score. A numeric value for each score is mapped from the table above. A numeric value between 1 and 18 is established for each financial metric through linear interpolation. For example, a company with a debt-to-capital ratio of 33% would map to a numeric score of 5.1, and fall within the A range for that metric. The weightings per the table below are then applied to arrive at an overall numeric value for each scorecard factor. The numeric value by scorecard factor is mapped back to the Aaa through C rating scale shown above.

Each scorecard factor is assessed and then weighted according to its importance within our rating approach for the industry. The Operating Environment score, to the extent it corresponds to a broad alpha category of Baa or below, is accorded a weight as shown in the following table. These weights apply regardless of the modifier (1, 2 or 3). The Operating Environment's weight is variable and increases toward the lower end of the rating scale for scores at the Baa level or below. Importantly, the Operating Environment component is reflected in an insurer's credit profile only to the extent that it exerts a downward influence.

	Aaa	Aa	A	Baa	Ba	B	Caa
Operating Environment Weights	n/a	n/a	n/a	20%	40%	60%	80%

Source: Moody's Investors Service

Once the weighted average result (based on the company-specific business and financial factors) is calculated, it is multiplied by one minus the Operating Environment weight, and then added to the result of the Operating Environment weight multiplied by the numeric value associated with the Operating Environment component. Using those weightings, a weighted average is calculated, which is then mapped back to the Aaa through C scale shown above. The result is oriented to the IFSR in the local or foreign currency. This scorecard-indicated outcome may be different from the final rating because it does not consider the analyst's input to the individual factors, or management and governance, special rating situations, and accounting policy and disclosures, as well as implicit/explicit support.

The weightings shown below are our assessment of the typical relative importance of the company-specific factors and sub-factors, and of the Operating Environment for title insurers, but in assigning ratings, individual factors or sub-factors may have greater or lesser weight, depending on the specific characteristics of the insurer. The metrics are primarily calculated based on public information. Non-public financial data or public financial data modified due to accounting and reporting formats in other than US GAAP or IFRS may also be used.

	Factor Weights	Metric Weights (relative to the factor weights)
BUSINESS PROFILE		
Factor 1: Market Position and Brand	15%	
Market Share		50%
Total Revenue		50%
Factor 2: Product Focus and Diversification	15%	
Insurance Subsidiary Product Focus and Diversification		60%
Geographic Diversification		40%
FINANCIAL PROFILE		
Factor 3: Asset Quality	10%	
High-Risk Assets % of Shareholders' Equity		50%
Goodwill & Intangibles % of Shareholders' Equity		50%
Factor 4: Capital Adequacy	10%	
Underwriting Leverage		100%
Factor 5: Profitability	20%	
Return on Capital (5 yr avg)		50%
Sharpe Ratio of ROC (5 yr avg)*		50%
Factor 6: Reserve Adequacy	10%	
Total Reserves to 3 yr. avg Paid Losses		100%
Factor 7: Financial Flexibility	20%	
Financial Leverage		50%
Earnings Coverage (5 yr. avg.)		20%
Cash Flow Coverage (5 yr. avg.)**		30%
OPERATING ENVIRONMENT	Variable (see above)	

* When calculating the Sharpe ratio, if the average ROC of the analytic unit is 0 or negative, this ratio is not meaningful, and the weight of this sub-factor is reallocated to ROC sub-factor.

** If we are unable to calculate cash flow coverage due to lack of disclosure, we allocate the weight assigned to this sub-factor to our earnings coverage sub-factor.

Source: Moody's Investors Service

Differences between the scorecard-indicated outcome and the standalone credit profile may exist due to analytic judgment regarding the weighting of the factors, the importance of other analytic considerations, or other unique fundamentals of the company not appropriately captured or weighted by the scorecard. Furthermore, the standalone credit profile may be different from the actual rating due to affiliate support or sovereign considerations.

Adjustments to key factor scores are especially important for a cyclical industry such as title insurance. For example, late in a positive industry cycle, we would generally expect a company's raw unadjusted score to be higher than the adjusted score. The lower adjusted score would reflect our opinion that prospective results are likely to be worse than historical results. Similarly, during a cyclical trough, a company's unadjusted score may be lower than the adjusted score based on our belief that conditions are likely to improve once a stress period has passed.

Appendix 2: Summary of Scorecard Factors and Metrics

	Weight (By factor and sub-factor)	Aaa	Aa	A	Baa	Ba	B
BUSINESS PROFILE							
Market Position	15%						
Market Share	50%	≥ 50%	50% > x > 30%	30% ≥ x > 10%	10% ≥ x > 5%	5% ≥ x > 2%	≤ 2%
Total Revenue (billions)	50%	≥ \$20B	\$20B > x > \$8B	\$8B ≥ x > \$2B	\$2B ≥ x > \$0.75B	\$0.75B ≥ x > \$0.1	≤ \$0.1B
Diversification	15%						
Insurance Sub Product Focus and Diversification	60%	N/A	N/A	N/A	Offer title policies and ancillary services	Title Insurance only, with no ancillary services	N/A
Regulatory Diversification	40%	N/A	No state is more than 10% of premium	No state is more than 20% of premium	No state is more than 40% of premium	No state is more than 80% of premium	One state is more than 80% of premium
FINANCIAL PROFILE							
Assets Quality & Liquidity	10%						
High Risk Assets % of Shareholders' Equity	50%	x ≤ 25%	25% < x < 50%	50% ≤ x < 100%	100% ≤ x < 175%	175% ≤ x < 250%	≥ 250%
Goodwill & Intangibles % Shareholders' Equity	50%	x ≤ 20%	20% < x < 30%	30% ≤ x < 40%	40% ≤ x < 55%	55% ≤ x < 75%	≥ 75%
Capital Adequacy	10%						
Underwriting Leverage	100%	≤ 3x	3x < x < 6x	6x ≤ x < 10x	10x ≤ x < 15x	15x ≤ x < 20x	≥ 20x
Profitability	20%						
Return on Capital - 5 yrs avg.	50%	≥ 15%	15% > x > 8%	8% ≥ x > 4%	4% ≥ x > 0%	0% ≥ x > (-4)%	x ≤ (-4)
Sharpe Ratio on ROC	50%	≥ 300%	300% > x > 200%	200% ≥ x > 100%	100% ≥ x > 0%	n/a	n/a
Reserve Adequacy	10%						
Total Reserves / 3 yrs avg. paid losses	100%	≥ 20x	20x > x > 10x	10x ≥ x > 5x	5x ≥ x > 3x	3x ≥ x > 2x	≤ 2x
Financial Flexibility	20%						
Financial leverage	50%	x ≤ 15%	15% < x < 30%	30% ≤ x < 45%	45% ≤ x < 55%	55% ≤ x < 65%	≥ 65%
Interest Coverage - 5 yrs avg	20%	≥ 12x	12x > x > 8x	8x ≥ x > 4x	4x ≥ x > 2x	2x ≥ x > 0x	n/a
Cash Flow Coverage - 5 yrs avg.	30%	≥ 7x	7x > x > 5x	5x ≥ x > 3x	3x ≥ x > 1.5x	1.5x ≥ x > 0x	n/a

Source: Moody's Investors Service

Appendix 3: Incorporating Stress Testing in Our Analysis — The Pre-defined Stress Scenario

In order to capture the risk to an insurer's credit profile posed by potentially volatile economic and financial conditions, we typically consider stress scenarios as a fundamental part of our rating analysis. This appendix explains our approach and, more specifically, our pre-defined stress scenarios.

Combining results of a pre-defined stress scenario with an expected case allows us to gauge the impact of stress on capital of an individual insurer and relative to a group of insurers. Our stress scenario is generally focused on short- to medium-term shock losses to earnings/capital and not on every risk faced by insurers. We also perform supplemental insurer-specific stress tests when an insurer's business profile does not lend itself well to the pre-defined stress scenario.

Our ratings reflect our assessment of the insurer's relative credit profile in a forward-looking expected scenario, but also considers the volatility of a company's credit profile implied by the results of our stress scenario. We generally expect that an insurer can withstand moderate stress while maintaining a credit profile consistent with its assigned rating. In cases where a more severe stress scenario indicates that the company's credit profile would deteriorate dramatically (e.g., by the equivalent of three or more rating notches), we would in most cases assign a rating lower than indicated by our analysis of the expected case scenario.

Our Stress Test Scenario Analysis Focuses on Common Near-to-Medium-Term Risks

We apply a specific stress scenario that is generally focused on short- to medium-term shock losses to earnings/capital and not on every risk faced by insurers (e.g., not on particularly long-term risks, such as prolonged low interest rates). While we recognize the lack of complete coverage of all risks, we typically assess shock events that offer the insurer limited time to correct for and manage through over a short time horizon. We consider long-term risks faced by insurers and we may additionally undertake insurer-specific stress analysis when an insurer's business profile does not lend itself well to the pre-defined stress test. However, we do not typically consider stress scenarios where the outcome is subject to meaningful variability that is contingent on management's future actions.

Our stress scenario analysis, when combined with an expected case, allows us to gauge the relative impact of stress on the capital and credit profile of an insurer compared to the performance of a group of insurers.

Key Risks Subject to the Stress Scenarios

In the table below, we identify the key "shock" risks we assess. In addition, we summarize the stress scenario we postulate for each key risk. Rather than trying to create stress scenarios that mimic specific historical events, we develop scenarios by specifying defined stresses to key financial attributes. This uniform application of stress analysis facilitates peer comparison.

Although we attribute no specific event probability to our stress scenario, we consider each scenario to be severe.

Key Risk Area	Risk	Stress Scenario ³⁰
Investments	The risk that investments perform worse than expected	See table below
Premiums shock	The risk of a significant drop in premiums	20% drop in one-year projected mortgage volume

Source: Moody's Investors Service

Our investment stress analysis is based on economic loss instead of market value because of the industry's strong liquidity profile and the nature of its (mostly) non-puttable liabilities (or puttable with a meaningful penalty to the policyholder in terms of amount reimbursed or coverage forfeited). That said, we generally supplement our economic-loss-based investment scenarios analysis by considering the sensitivity of those results to actual market value losses in times of severe market dislocation. In certain instances, we may use the greater of actual market value losses or economic losses for our analysis of investment stress.

Investment Economic Loss Percentages

Investment Category	Stress Scenario Loss Percentages
Cash	0%
Fixed maturities³¹	
Aaa/Aa/A	0.5%
Baa	3.5%
Ba	11.7%
B	32.5%
Caa and below	50%
Mortgage/real estate	
Commercial mortgage loans	3.5%
Other mortgage loans	3.5%
Real estate investments	20%
All other	
Non-redeemable preferred securities	5%
Other equity securities	25%
Alternatives	25%
Derivatives	10%
All Other (including corporate and other loans)	10%

Source: Moody's Investors Service

³⁰ The information necessary to complete the stress test is sourced from public and private sources. When full information is not available, estimates may be used. In addition, adjustments to information may be warranted upon review.

³¹ Our fixed income factors are derived from the two-year expected loss after notching down from current rating levels. We adjust for material impairments taken for the lowest-rated instruments.

Adding Up Stress for the Stress Test Scenario

Once stress losses from all sources are derived, we assess the impact on capital adequacy. While we recognize that the likelihood of each risk occurring simultaneously is low, historical results have shown cycles in insured losses and the potential for confluent events to affect investment returns. For this scenario analysis, each risk is summed without the benefit of diversification³² to create a severe stress scenario. The diversification benefit is less relevant given our objective to look for those insurers whose results deviate materially from the average.

In interpreting the results of the stress test on a subsidiary of a larger group, we consider the extent to which unencumbered “excess”³³ cash available at an unregulated holding company or affiliate would likely be made available to the operating company(ies)³⁴ as a capital contribution, if necessary. Our analysis of excess cash considers the ongoing permanence of funds maintained outside of the operating company that is above and beyond any amount that would lead to a narrowing of standard debt notching practices for the holding company.

Below is our pre-defined stress scenario template for a title insurance company. In this scenario, investment losses are based on idealized expected losses. When the actual market value of investment losses (calculated as the unrealized loss excluded from opening equity) exceeds severe stress economic investment loss, we may replace the economic loss with the market value of investment loss.

Pre-defined Stress Scenario - Equity Impact Analysis

Beginning Reported Surplus or Equity

Exclude Unrealized Gains or Losses on Investments

Adjusted Beginning Surplus or Equity

Equity Roll Forward:

Recurring Operating Income Before Taxes

Less Stress Losses:

Premiums Shock

Investment Losses

Total: Stress Losses

EBIT

Tax Expense (Benefit)

Net Income

Preferred Dividends

Net Income to Common Shares

Change in Surplus or Equity

% Change in Adjusted Beginning Surplus or Equity Due to Stress Losses

Source: Moody's Investors Service

³² We do consider losses after tax benefits, although we reduce the tax benefit from local statutory rates to reflect recoverability risk.

³³ E.g., after interest expense and other debt service coverage needs as well as expected shareholder dividend needs

³⁴ Scenario testing is performed on an analytic unit basis, which may include more than one legal operating company.

How Ratings Reflect Stress

We typically prepare an alternate view of the scorecard that shows the pre-defined stress scenario analysis. Each insurance scorecard includes an adjusted score for each scorecard factor. We combine the adjusted factor scores to arrive at the scorecard-indicated outcome.³⁵

While a company's expected performance is already reflected in the adjusted scores, a separate set of adjusted scores are typically prepared for our pre-defined stress scenario (which is severe). The adjusted scores for this severe scenario are generally lower than our expected case adjusted scores. Lower adjusted scores are typical for several financial profile key factors such as asset quality, capital adequacy, profitability, and financial flexibility. In addition, some Business Profile scores may be lower under the pre-defined stress scenario. In many cases, the magnitude of the difference is directly influenced by the relative results of our stress testing.

In cases where the pre-defined stress scenario indicates that the company's credit profile would deteriorate dramatically (e.g., by the equivalent of three or more rating notches), the assigned rating would typically be lower than the expected case scorecard-indicated outcome, in recognition of the potential downside risk to the insurer's credit profile if the stress case were to occur over the medium term.

³⁵ In certain instances, assigned ratings may reflect uplift where warranted from support from a parent or affiliate. Our scenario testing is performed on a standalone basis before consideration of support.

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](#).

Author
Michael Dion
Pano Karambelas

Report Number: 1330525

CLIENT SERVICES:

Americas:	+1.212.553.1653
Asia Pacific:	+852.3551.3077
Japan:	+81.3.5408.4100
EMEA:	+44.20.7772.5454

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.