

Article Title: ARCHIVE | Criteria | Insurance | General: Refined Methodology For Assessing An Insurer's Risk Appetite Data: (EDITOR'S NOTE: — This criteria article is no longer current. It has been superseded by the article titled "Criteria | Insurance | General: Enterprise Risk Management," published on May 7, 2013.) Standard & Poor's Ratings Services is refining its methodology for assessing an insurer's risk appetite framework. We are publishing this article to help market participants better understand our approach to reviewing the risk appetite of insurers. This article is related to our criteria articles: "Methodology: Assessing Management's Commitment To And Execution Of Enterprise Risk Management Processes," published on Dec. 17, 2009; "Management And Corporate Strategy," published on April 22, 2009; and "Refining The Focus Of Insurer Enterprise Risk Management Criteria," published on June 2, 2006. SCOPE OF THE CRITERIA Standard & Poor's is refining its criteria for risk appetite to clarify our approach to assessing an insurer's risk appetite framework and, in particular, our view on insurer risk appetite, risk preferences, risk tolerance, and risk limits. SUMMARY OF CRITERIA UPDATE In our opinion, the financial crisis exposed a number of weaknesses in insurers' risk appetite frameworks with some insurers having been quite active in seeking risks that they may not have fully understood and could not manage within their specified risk tolerances. While most insurers have set risk limits, many insurers found, in hindsight, that these did not adequately reflect their risk appetite or were poorly understood. Standard & Poor's believes the main reason such issues have arisen in the past is because insurers were unable to reconcile their risk limits and risk tolerances, which in our view is the difference between controlled risk taking and controlled risk taking aligned with strategy and risk appetite. We believe enterprise risk management (ERM) is fundamentally about containing risk of loss within the risk tolerance of the company and maximizing returns from risks taken within that risk tolerance. A company that cannot articulate its risk appetite, risk preferences, and risk tolerance or that does not assess on an ongoing basis the appropriateness of its risk limits, given its risk appetite, would generally be viewed by Standard & Poor's as likely having no better than an adequate assessment of risk culture, which, in turn, could negatively affect our assessment of the overall ERM score for the insurer. For this reason, we are updating our criteria used to analyze insurers' risk appetite within our evaluation of their ERM framework, identifying those practices we view as more favorable or less favorable in our analysis. This article partly amends "Refining The Focus Of Insurer Enterprise Risk Management Criteria," published on June 2, 2006. Notable changes include elaboration on those practices we view as more favorable or less favorable in our analysis. In addition, we have included Standard & Poor's view on the meaning of the terms risk appetite, risk preferences, risk tolerance, and risk limits (see chart 1). We recognize that there is inconsistency in the marketplace regarding the meaning of these terms. We have also included a nonexhaustive list of examples of some of the types of risk tolerances used by insurers that we have observed. IMPACT ON OUTSTANDING RATINGS We do not expect any outstanding ratings to be affected. EFFECTIVE DATE AND TRANSITION These criteria are effective immediately for all ratings reviews. METHODOLOGY The purpose of an ERM framework is to facilitate the identification, measurement, selection, and management of risks. These activities form a cycle in which the lessons learned from successful and unsuccessful attempts to manage risks are continuously fed back into the other activities. All businesses generally take calculated risks and this is especially true of insurers. We expect insurers with strong ERM frameworks to have a well-defined risk appetite framework that supports the effective selection of risks establishing the risks that the insurer wishes to acquire, avoid, retain, and/or remove. An insurer that cannot articulate its risk tolerance or that cannot provide comfort that it is able to stay within any particular risk tolerance would generally be viewed by Standard & Poor's as likely having no better than an adequate assessment of risk culture, which, in turn, could negatively affect our assessment of the overall ERM score for that insurer. An insurer's risk appetite framework that has demonstrably constrained risk exposures and losses within its risk tolerances, in particular in extreme risk environments, will generally be regarded by Standard & Poor's as more favorable in its analysis than a framework that remains relatively untested, or too frequently experiences losses outside of its stated risk tolerances. We believe that recent experience, however, evidences the need for further investment in, and development of, insurers' risk appetite frameworks. In our view, the financial crisis exposed a number of weaknesses in insurers' risk appetite frameworks with some insurers having been quite active in seeking risks that they may not have fully understood and could not manage within their specified risk tolerances. While most

insurers have set risk limits, many have found, in hindsight, that these did not adequately reflect their risk appetite or were poorly understood, leading to losses from unexpected sources. Examples that we observed include the risks associated with complex variable annuities and credit products as well as impairment losses on investments for many insurers. Similarly, a number of property/casualty insurers and reinsurers had underestimated their exposure to both single and multiple catastrophic events that aggregated to levels beyond management and investor expectations. In our view, one of the fundamental reasons such issues arise is because some insurers are unable to reconcile their risk limits and risk appetite, which we believe is the difference between controlled risk taking and controlled risk taking aligned with strategy and risk appetite. For this reason, we are updating our criteria used to assess Standard & Poor's ratings for insurers' risk appetite frameworks within the ERM rating category. The aggressiveness or conservatism of an insurer's risk appetite is related, but separately considered under the financial risk tolerance criteria detailed in "Management and Corporate Strategy," published on April 22, 2009. In order to understand this subtlety, we consider that an insurer may have a robust risk appetite framework that forms part of their strong ERM framework, but may or may not have an aggressive risk appetite, and vice versa. However, where an insurer's risk appetite is aggressive, we believe the robustness of the risk appetite framework, and strength of their wider ERM framework, is critical to the management of risks within the specified risk tolerances. Risk culture Standard & Poor's considers risk culture to be an important factor supporting the success or otherwise of an insurer's risk appetite framework, as we believe this can underpin an insurer's buy-in and use of the risk appetite framework consistently across the insurer. Risk culture is closely related to our assessment of the communication and awareness of the risk appetite framework across the insurer. We generally regard an insurer's risk culture as more favorable in our analysis where the risk appetite framework has the buy-in of the board of directors and business units, as this is, in our opinion, more likely to lead to a well-defined risk appetite that reflects the views of the different stakeholders, striking a balance between any conflicting views. In this case, we also expect that business units are likely to be actively engaged in specifying the risk appetite framework and working to see that the framework is consistent with their responsibilities and supports them in their decisions on the selection of risks. To this end, in our analysis we may seek examples of the active use of an insurer's risk appetite framework in the business units' risk limits, risk policies, governance structure, and compensation structure. Conversely, we generally regard an insurer's risk culture as less favorable in our analysis when the risk appetite has limited buy-in of the board and business units. Further, we typically regard the risk culture as less favorable in our analysis where the risk appetite has not been clearly and comprehensively communicated across all business units and/or business units are managed to a set of objectives determined remotely from the risk appetite. In such cases, we believe that it is unlikely that the insurer's risk appetite framework is reflected in the business units' risk limits, risk policies, governance structure, and remuneration. We generally regard an insurer's risk culture as more favorable in our analysis when insurers regularly report internally and externally on their risk appetite and risk profile providing, for example, market, credit, insurance, operational, and business unit exposures, both current and forecast, versus risk tolerances. Standard & Poor's believes such risk reporting may enable stakeholders to align themselves to insurers that share their view on risk. We believe it is helpful when an insurer's risk reporting clearly highlights those risks included in their risk profile and risk appetite that are systematic, since these risks may not be diversifiable. The above information along with additional risk reporting on the potential correlations of earnings with macroeconomic trends, risks to franchise value, and sources of model risk within the insurer, are factors that we analyze in assessing an insurer's risk culture. We generally regard an insurer's risk culture as less favorable in our analysis when insurers do not regularly report, at least internally, on their risk appetite and risk profile. Risk preferences Standard & Poor's in its analysis typically reviews an insurer's risk appetite framework to assess how the insurer is delivering risk preferences, risk tolerances, risk policies, and risk limits. In our analysis, we assess whether qualitative risk appetite statements have been established by the insurer to describe the board's risk preferences. These qualitative risk appetite statements may or may not be risk specific. For example, a board may articulate a number of qualitative risk appetite statements that, while not risk specific, establish the underlying principles for the selection of risks. A board may state, for example, that: "The Group has no appetite for unrewarded risk". A board may then articulate a

number of qualitative risk appetite statements that show prejudice for and against specific risks. A board may, for example, articulate that: "The Group has an appetite for insurance risks as these are expected to be value additive". We view these statements as fundamental processes that help to inform the strategic positioning in terms of the economies, markets, products, and customers to which exposure is sought by an insurer. Standard & Poor's generally assesses the process by which insurer risk preferences are established. We generally regard the process of establishing risk preferences as more favorable in our analysis when the board links its risk preferences to the organization's goals and the value proposition offered by the enterprise. Further, we typically regard those insurers who align their risk preferences with their ability to manage those risks as more favorable in our analysis. Standard & Poor's believes the establishment of risk preferences to be an important factor in its analysis, as it may support consistency between the selection of risks and the risks that insurers are best placed to manage. We believe this process may help an insurer to employ its scarce resources more optimally, which could result in a departure from the current risk profile of the insurer. Therefore, we generally regard the process of establishing risk preferences as more favorable in our analysis when insurers are able to demonstrate that, with regards to the risks they are seeking, they appear to have an in-depth understanding of their characteristics, they have undergone detailed risk analyses, and they are able to quantify these risks. Conversely, we typically regard the process of establishing risk preferences as less favorable in our analysis when the factors that give the insurer a competitive advantage in the management of certain risks appear to not be fully explored and/or captured by the process of establishing risk preferences. We also generally regard the process of establishing risk preferences as less favorable in our analysis when insurers are unable to demonstrate that, with regards to the risks they are seeking, they have an in-depth understanding of their characteristics, they have undergone detailed risk analyses, and/or they are able to quantify these risks. In our analysis, we assess the extent to which insurers can in our view demonstrate that they have the capabilities to efficiently and effectively manage and mitigate the risks that they are taking. As part of this assessment, we analyze the extent to which in our view the board's views are supported by strategic risk and reward analyses that justify their long-term risk preferences. We also typically assess the extent to which insurers have in our view considered the needs of their external stakeholders--investors/owners, regulators, customers, distributors, bankers, analysts and business community--and internal stakeholders--management and staff--in constructing their risk preferences. Standard & Poor's believes this consideration to be an important factor in its analysis, as it may support consistency between the selection of risks and the risk appetite of an insurer's stakeholders. To the extent that this cannot be evidenced, we would generally view the process as less favorable in our analysis. Risk tolerances We view risk tolerances as quantitative risk appetite statements. We believe that they may help an insurer to translate the board's risk preferences into action through constraining the insurer's exposure to risks. In our analysis, we generally assess the extent to which in our view an insurer's risk tolerances place a ceiling on the level of exposure to particular risks. We believe these tolerances can have implications for economic and regulatory reporting, capital management, financial planning and budgeting, and risk monitoring. The use of risk tolerances is in our view not new for many insurers. It is only recently, however, that we have observed insurers using a wider range of risk measures when setting their risk tolerances. Risk tolerances are often probabilistic statements that relate to, for example, the solvency, earnings, and/or dividend distribution ability of the insurer over a specified period. Such statements are typically probabilistic in nature reflecting that insurers can have different levels of risk appetite and that breaches of certain risk tolerances cannot be prevented altogether. In addition, some insurers may attempt to reverse engineer their risk tolerances by investigating the stress scenarios (and the root causes modeled in those scenarios) that lead to breaching of the risk tolerance. The period of time could be a year, in order to coincide with the operational budgeting and financial reporting process; several years, to overlap with the strategic planning process; or concurrent with certain other objectives of the insurer. We generally regard the process of establishing risk tolerances as more favorable in our analysis when the insurer sets several risk tolerances, explicitly linked to its key risk measures over a specified period. We set out below a nonexhaustive list of examples of some of the types of risk tolerances used by insurers that we have observed: Maintaining capital adequacy consistent with target economic capital adequacy following a 1 in "X" year event over the following year. Maintaining

regulatory solvency following a 1 in "X" year event over the following year. Constraining losses to within one-quarter's budgeted earnings following a 1 in "X" year event over the following year. Maintaining the ability to pay a percentage of current dividends following a 1 in "X" year event over the following year. Maintaining a particular target risk profile. In our analysis, we generally assess the extent to which in our view insurers are able to monitor the actual risk profile relative to their defined risk tolerances. We generally expect to do this by reviewing documentary evidence as described in the article, "Methodology: Assessing Management's Commitment To And Execution Of Enterprise Risk Management Processes," published on Dec. 17, 2009. We generally view those insurers that manage their risk profile using a set of risk measures that captures the risk and reward trade-offs of the firm as more favorable in our analysis. Conversely, we generally regard the process of establishing risk tolerances as less favorable in our analysis when the insurer does not have a clear or actionable set of risk measures that captures the relevant risk measures and/or are not established on a probabilistic basis. In addition, we note there may be separate risk tolerances for specific risks, for example, to limit losses as a result of hurricanes to "X%" of capital to a specific confidence level. We generally regard the process of establishing risk tolerances as more favorable in our analysis when there are risk tolerances expressed in terms of specific scenarios that cannot be captured adequately by probabilistic metrics or where management is seeking comfort that the insurer will remain solvent following a particular event, for example, a pandemic similar to the 1918 Spanish flu pandemics. Those insurers viewed by us as more favorable would generally be expected to have a prospective identification of scenarios where different metrics could require conflicting actions and a clear framework on how to respond in these situations. To the extent that this is not the case, we would generally view the process as less favorable in our analysis. We generally regard the process of establishing risk tolerances as more favorable in our analysis when there are several trigger levels set for each risk measure, for example, a system of hard and soft limits, or a traffic light system. We generally expect insurers with strong risk cultures to have a clear action plan agreed prospectively that details the steps to be taken when each trigger is breached, as we expect this could help the insurer to react rapidly to a changing risk environment. To the extent that the insurer does not employ several trigger levels or have action plans agreed prospectively we would generally view the process as less favorable in our analysis. Risk limits We view a risk limit as a quantitative boundary that serves to constrain individual risk-taking activities in line with the insurer's risk tolerance(s). The risk appetite is usually effected at an operational level within the business through the use of risk limits. Once the risk tolerances have been agreed, the next step typically involves designing risk policies that clearly translate the risk tolerances into risk limits. We generally regard the process of establishing risk limits as more favorable in our analysis when the risk limits are derived referencing the risk tolerances, and in our view there is a clear link between the aggregate groupwide risk tolerance; the market, credit, insurance, operational, and business-unit level risk tolerances; and subsequently the respective risk limits, with allocation of diversification benefits. For example, when risk limits are expressed relative to maximum percentage of total investments in equities, maximum duration mismatch, or maximum insurance exposure by type of risk, we would generally regard the risk limits as more favorable in our analysis if, when aggregated, these risk limits appear to demonstrably satisfy the firm's risk tolerance(s). To the extent that this is not the case we would generally view the process as less favorable in our analysis. We generally regard the process of establishing risk limits as more favorable in our analysis when the insurer has established several levels of risk limits, for example, hard and soft limits with different levels of actions agreed prospectively, consistent with those set for the risk tolerance framework. We expect that these actions will likely include a clearly defined escalation and exception processes for the reporting and management of breaches, as we believe this may facilitate the management of an insurer's risk profile within its risk tolerances more proactively. To the extent that this is not the case we would generally view the process as less favorable in our analysis.

RELATED CRITERIA AND RESEARCH

Methodology: Assessing Management's Commitment To And Execution Of Enterprise Risk Management Processes, Dec. 17, 2009 Management And Corporate Strategy, April 22, 2009 Refining The Focus Of Insurer Enterprise Risk Management Criteria, June 2, 2006 These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Rating Services'

assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.