Article Title: ARCHIVE | Criteria | Insurance | Specialty: New Rating Methodology For Credit Insurers Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by "Credit And Surety Insurance Criteria: Interactive Rating Methodology," published Oct. 18, 2004.) Standard & Poor's has introduced a new approach to the rating of credit insurers in recognition of their unique characteristics. The methodology used to rate traditional property/casualty (p/c) insurers does not address the potentially very high levels of volatility in loss ratios. Conversely, the criteria for rating bond insurers was designed to follow an industry where losses are modeled to spike sharply in a depression-type scenario in contrast to credit insurers, where losses occur in the normal course of business. The new approach therefore builds on both p/c and bond insurer methodologies, while taking the special features of credit insurers into account. A credit insurer's rating will be based on the ability to demonstrate strong management and systems, and the degree of control over underwriting illustrated by the stability of earnings. Reflecting the risks inherent in the business, capital adequacy will be measured in relation to underlying risk exposure as opposed to a premiums-based analysis typically done for p/c insurers. The methodology is a combination of subjective and objective analyses, which look at both historical performance and projections. As is the case with other types of insurer, the ratings approach is segmented into eight categories of analysis, namely: industry risk, management and strategy, business review, operating performance, investments, capitalization, liquidity, and financial flexibility. Many of the issues credit insurers face are interlinked and will cross several of these categories. The final rating decision will balance the strengths and weaknesses of a company under these respective categories. Industry Risk Industry risk involves an analysis of the business in which the insurer is operating. Our assessment will depend on exactly what kind of business the company is writing. For instance, longer tail lines, such as mortgage indemnity, are likely to be more volatile and risky than short-term trade finance. Diversification is an important factor here. Management And Strategy Management and strategy could be one of the most critical factors in determining a rating; it can be seen in the variation of results between companies that are writing in essentially the same markets and a track record is always a strong indicator of the quality of management. Key factors specific to credit insurers will be the quality of systems—in the initial database that provides the source information as to whether to underwrite—and in the systems that monitor exposures. A good database might cover millions of companies and provide thorough and up-to-date information about the underlying counterparties. Standard & Poor's will examine whether the company has a quality credit scoring methodology or systematic approach to credit underwriting and determine whether the company consistently applies this approach. Standard & Poor's expects to see that the company maintains an active process of surveillance for its credits. The monitoring systems are particularly vital for credit insurers where counterparty limits are issued. How is aggregation in groups controlled and how is utilization of limits monitored? Some of the bigger companies have online links with their clients and can act very quickly to change credit limits; others rely on the phone. The key factor is the speed at which the company can access data and so make swift decisions in managing credit limits. Standard & Poor's also considers how the strategy is focused. The notable failures in the 1990s were a result of managements' diversifying out of core businesses into untested areas. While it is true that companies need to innovate and expand, those that have stuck to their core business generally have better track records. Standard & Poor's also will be looking at the management team's experience and the company's corporate structure. Standard & Poor's discusses the company's business goals and the level of risk management is prepared to take to achieve those goals, for instance in product design, but also in the financial strategies adopted. It examines management's earnings targets and its capitalization philosophy versus risk exposures. Business Review The issues are similar to those of any other insurer: distribution, brand name, competitive strengths and weaknesses, and business opportunities and threats. Can the company compete on premium rates, or does it have other competitive advantages that can be priced for such as superior client service? Size may be a significant factor when assessing diversification of risk and ability to finance systems and database development. Another element specific to credit insurers is the role of the government franchise. This will increase the market profile of a company and will also provide a stream of fee income which may complement insurance earnings and help to compensate for loss volatility. However, the role may also bring certain political influences and expectations that may impact the freedom of a company to determine its own underwriting standards. Operating Performance Standard & Poor's analysis of operating performance will focus on the level of operating earnings in relation to revenues as well as the volatility of earnings over time. While considering a range of performance measures, Standard & Poor's will also use two benchmarks together with qualitative assessments. The benchmarks relate to earnings levels using return on revenue (ROR = underwriting result plus investment income/net premium income plus investment income) and to earnings volatility using the standard deviation of the loss ratio. The ROR measure has the benefit of reflecting risks, as premiums are variable according to type of risk—for instance the term of the insurance or quality of the underlying counterparty. This is not a perfect tool, since premiums will also vary according to the expertise and the buying power of the insured. The secondary benchmark relating to earnings volatility will provide another tool in weighing the quality of operating performance. The ROR benchmarks (see table 1) are fairly conservative given the inherent risk in this line of business vis-à-vis traditional lines of business. Table 1 ROR Benchmarks RETURN ON REVENUE IMPLIED RATING Negative B 0-5% BB 5-10% BBB 10-15% A 15-20% AA Over 20% AAA ROR will be calculated on both a five- and 10-year average. Standard & Poor's primary focus will be on the five-year average, but if a country is being hit by recession, results are likely to be depressed. To achieve a stable rating and avoid up/downgrades that follow the economic cycle, Standard & Poor's will also look at the 10-year average. This would be likely to include at least one recession and so should be "normalized" across the cycle to some extent. This clearly can be seen with German companies, for which the five-year averages are depressed by the prolonged recession in the 1990s, but which look healthier over a 10-year time frame. Earnings volatility is a key feature of credit insurers. There will be an element of loss on an annual basis—perhaps a loss ratio as low as 40%-50% could be considered a "normal" loss level. This will increase, sometimes sharply, during a recession. In fact, many claims will actually arise a few months before the country moves into recession. Higher average loss ratios suggest that a company may not have priced risks properly or that rate competition is affecting the "normal" level of losses for an industry. A look at the standard deviation of loss ratios for a range of companies shows that the deviation can be as low as 9% to as high as 150% over a 15-year period. Some insurers manage to minimize this volatility through a combination of short-term actions such as managing down of counterparty limits and repricing of risks in addition to longer-term underwriting policies relating to deductibles, capping of exposures, and reinsurance protections. Those in longer tail risks will generally have less room to maneuver. Credit insurers typically reinsure a much greater proportion of premiums than traditional insurers; cessions of 50% or more are normal. The quality of reinsurers and the structure of the programs will be important. Many companies will limit the per risk loss, but may not have protection against aggregation of risks, which is perhaps the more important type of cover for many of these companies. Consequently, the initial ROR benchmark will be modified according to the volatility of the loss ratio as measured by the standard deviation of the loss ratio over the past 10 to 20 years. The underlying determinants of earnings performance are evaluated using a number of measures including loss ratios, expense levels, investment returns, and the stability of these. These measures will be used to understand what is driving ROR and volatility. The quality of earnings will be impacted by certain underwriting policies—for instance whether to underwrite individual risks or complete portfolios to prevent anti-selection. What is the normal level of deductibles? Is it sufficient to influence loss levels? Is the company insuring the risk of prolonged nonpayment or only the risk of insolvency of the counterparty? Has security been provided? If so, why? Perhaps to cover an unattractive risk or as a policy decision? What is the recovery rate on losses paid? How long after the loss are recoveries received? Investments/Liquidity Standard & Poor's assesses the quality and liquidity of assets and whether there is effective asset and liability matching. It generally would expect to see a more liquid portfolio than for traditional insurers to cope with sudden changes in loss experience. The availability of additional committed bank lines or parental support will also be taken into account. Capitalization To assess capitalization, Standard & Poor's uses a risk-based capital model plus an assessment of an insurer's reinsurance protection. It will also evaluate the company's financial flexibility—whether it needs fresh capital to finance growth for instance, or whether the company has good access to external capital markets, or a supportive parent should the need for additional capital arise. The capital model is designed to dovetail with the standard risk-based capital model used for traditional insurers, but is oriented toward an exposure-based analysis as opposed to a premiums-based analysis. Briefly, this model looks at the capital required by a company according to the types and volumes of business written and compares this to the capital available. Capital available is based on reported capital and is adjusted to take account of hidden or unreported capital, such as unrealized investment gains or conversely reserve deficiencies. Capital also is modified to reflect any investment and credit risk on the assets (a full copy of the capital model can be made available on request). For credit insurers, the capital requirement is based on a percentage of the net amount insured linked to the type of product, the duration of the risk, and the quality of the underlying counterparties insured. The model is configured assuming an acceptable diversification of risk. There will be an additional capital requirement where the company has not achieved an acceptable diversification of risk or has pockets of risk concentration. Some Important Issues Q: How does Standard & Poor's assess the quality of the portfolio insured when the underlying counterparties would not usually be rated? A: Standard & Poor's can make broad assumptions regarding domestic portfolios based on industry type data such as the number of corporate insolvencies or level of provisions raised by the banking community. It also can look at a company's underwriting criteria and how predictive they have been, for example, whether a company has graded its risks, and what the gross loss experience has been for each of the grades. Standard & Poor's will assess the insurer's credit methodologies—how consistent the credit decisions are—and then make comparisons between the company's risk ratings and its own, provided data is comprehensive. This will be supported by sampling individual cases using the expertise of Standard & Poor's corporate analysts. Q: How does Standard & Poor's take into account sovereign risk? A: Standard & Poor's will evaluate country risk using its foreign currency sovereign ratings. Q: How does Standard & Poor's account for diversification or concentration of risk? A: Standard & Poor's capital model is based on the assumption that an insurer's portfolio is well diversified. If a company has a poorly diversified portfolio, the standard capital requirement will be increased by 125%. If the portfolio is moderately diversified, this charge would be 112.5% of the standard charge. The decision as to whether the portfolio is diversified or not will be guided by the premium volume of a company and its concentration by client, industry, country, and region. To cover specific risk concentrations, the charges will be increased by 100% for exposures equal to 5% or more of an insurer's portfolio. Standard & Poor's defines a single exposure in terms of exposure to a group of companies, not just a single operating company. Q: Are capital requirements based on limits extended or average utilization? A: This is formula driven. The amount to be used is the greater of: The limit times 50%; Average utilization times 1.25; and Up to a maximum of the limit extended. A 1.25 times (x) average utilization is used because it is unlikely that an insured suddenly will increase exposure in times of recession; if anything, it will be supplying less as demand declines. There is a risk of anti-selection—an insured company may continue to supply products to its client when that client's ability to pay is in doubt if the product profit margins are high enough to cover the policy deductible and make a profit. The situation would be unusual unless the credit insurer were working with very low deductibles. The average utilization is worked using the highest six-month rolling average over the previous three years. Q: What does Standard & Poor's expect capital to cover? A: Capital should be sufficient to cover a one-year increase in claims (or longer-term increase for longer tail lines). Another way of looking at this is to see the technical reserves as being available to cover expected losses and capital available to cover unexpected losses. One year is a reasonable time frame for a short-term trade credit insurer because a company can take actions such as increasing prices and cutting limits immediately, and the impact of these actions will begin to flow through within a 12-month time frame, although it might take two years or more to recover from an economic slump. Q: How will the multiples or factors of the amounts at risk/exposed be established? A: Using Standard & Poor's default statistics stressed to represent different risk severities. The factors will vary according to risk and underlying credit quality of the portfolio. The portfolio will be broken down as far as possible according to the types and terms of risk. A basic set of factors will relate to a 'BBB-' level of stress. An example of these factors is included in table 2. To increase the stress levels, Standard & Poor's will increase these factors by a multiple such that each time there is a lower probability of a default situation's occurring which is outside of or worse than the rates of default in the table. Table 2 Risk Factors* QUALITY OF THE INSURED COUNTERPARTY YEARS AT RISK AAA AA A BBB BB B 1 0.0017 0.099 0.129 0.159 3.247 7.176 2 0.052 0.22 0.305 0.509 6.109 13.437 3 0.106 0.361 0.527 1.011 8.648 18.609 4 0.178

0.523 0.795 1.626 10.901 22.771 5 0.267 0.705 1.104 2.32 12.9 26.082 10 0.968 1.907 3.121 6.178 19.978 34.996 *Factors to be applied to the net risk exposure per class of business at the 'BBB-' level of capitalization The above factors will be more stringent for companies covering the risk of nonpayment as opposed to simple bankruptcy of the creditor—the standard charge will be doubled where companies are insuring late/nonpayment in addition to insolvency of the creditor to reflect the fact that companies will begin to stop paying creditors some time before they become officially insolvent. The end product of this process should be a matrix which looks something like table 3. The capital requirement will then be compared with capital available—if capital is greater than the capital required, the model will be re-run using the higher stress levels. If the company fails this test at an 'AA-' level of stress, but passes at an 'A+' level of stress, Standard & Poor's will view the company as having an 'A+' level of capitalization, provided it is equally comfortable with the company's debt utilization and reinsurance protection. Table 3 Sample Capital Requirements RISK TYPE NET EXPOSURE (MIL. $) COUNTERPARTY RISK TERM (YEARS) FACTOR (%) CAPITAL NEED (MIL. $) Export credit 500 BBB 1 0.159 0.795 Export credit 100 BB 1 3.247 3.247 Domestic 1000 A- 1 0.139 1.39 Domestic 1000 BBB- 1 0.373 13.73 Guarantees 200 BB+ 5 8.844 17.688 Total 2,800 36.85 Q: Is the approach the same for primary writers and reinsurers? A: The approach is very similar, because capital requirements are based on risk exposure rather than premium income. A significant amount of reinsurance protection is also provided on a proportional basis, which does not warrant a different approach. If however, a reinsurer can demonstrate that its exposure is at the very high layers and so has a smaller probability of being used, there may be a case for reducing some of the capital requirements on a case-by-case basis.