

Article Title: ARCHIVE | Criteria | Insurance | Life: Life Insurance Earnings Adequacy Model Revised For 2001 Data: (EDITOR'S NOTE: —This article is no longer current.) The Standard & Poor's earnings adequacy model, introduced in 1997, is an excellent tool for differentiating those insurers with strong earnings performance from those with good or even weak operating characteristics. Because Standard & Poor's has reviewed a wide variety of insurance companies' earnings performances in the past few years, the model has been refined to provide improved criteria in evaluating line-of-business results and also to recognize various investment strategies employed by companies throughout the industry. Year-End 2001 Model Re-Evaluates Investment Income. The most notable change adopted for year-end 2001 revises the way investment income is evaluated. Standard & Poor's has noted sizable gains resulting from an insurance company investing a portion of its assets in limited partnership-type investments. Accounting mechanisms currently recognize this revenue as part of investment income, which can cause significant fluctuations in the level of earnings from year to year. Standard & Poor's has decided to normalize this stream of income by using a seven-year average of investment income from limited partnerships, based on the most recent seven-year period. This amount will replace the actual investment income from limited partnerships, which had been included as part of actual pretax earnings for each of the five years used in the model. The method is similar to how the model currently recognizes equity investment-realized capital gains and losses as part of pretax earnings. The following overview of the earnings adequacy model incorporates these revisions. Overview Of Standard & Poor's Earnings Adequacy Model. Although much has been written about capital as a valuable indicator of financial strength, it is a company's earnings that represent its lifeblood and future vitality. For an insurer, a strong earnings stream is still the most attractive source of capital formation, and is often the benchmark for management performance. Most companies include some measure of earnings as a key strategic goal, and it is often a principal element of a company's overall strategy. A sufficient level of earnings allows a company to increase value while sustaining internal funding for growth. Inadequate earnings levels, on the other hand, can indicate poor pricing discipline and competitive disadvantage because the company will have to compete on a pricing basis with less financial flexibility to support growth. In evaluating an insurer's financial strength, Standard & Poor's has long used earnings measurements as an important component of its analysis. In 1997, Standard & Poor's introduced its earnings adequacy model to better measure operational performance. This measure helps in making ratings decisions by differentiating companies' key performance aspects. Because the business of life insurance is principally an asset-accumulation business, Standard & Poor's has used after-tax ROA as the principal measurement of operating performance. Many product segments in the industry are spread-driven; life insurers are looking to achieve some targeted spread between the rate they earn on their investments and the rate they credit their policyholders. Although ROA has been broadly useful as a measure of earnings adequacy, it has its drawbacks. ROA does not differentiate between various product lines that often have different risks, some of which require higher levels of ROA than others for a certain standard of performance. ROA is also oriented toward asset-accumulation lines of business, such as whole life insurance, annuities, and pension products. It does not work well, however, with pure mortality or morbidity products such as health insurance or group life insurance. These products are designed to earn a spread on the revenues they receive over the claims they pay out, reserves for future claims, and expenses. Standard & Poor's earnings adequacy model is designed to measure performance across a broad array of business lines while differentiating earnings targets by business line, given the risks associated with each product class. The measure is also time-weighted, encompassing five years of earnings performance to cover yearly fluctuations that might occur because of industry cycling, competitive pressures, repricing strategies, expense actions, and nonrecurring events. This benchmark ratio has associated standards of performance across all levels, from weak ('B') to extremely strong ('AAA'). The ratio is derived by dividing actual earnings by target or expected earnings at the 'BBB' level. The denominator of the ratio multiplies an earnings target for each of the company's business lines by either the reserves or GAAP assets for that line or the line's revenues. The earnings target used is a level considered good ('BBB') for the business line. The products of these business line volumes, multiplied by their earnings targets, are then added together to produce a level of earnings that would be considered good for the company. The numerator of the earnings adequacy ratio is the company's earnings before interest and taxes. This quantity is calculated before interest

expense because the intent is to evaluate the earnings performance of an insurer's operations regardless of a company's choice of capital structure. Standard & Poor's prefers to use pretax GAAP earnings as its measure of operating performance for life insurance companies. GAAP accounting tends to present a more accurate picture of the ongoing economic earnings capabilities of a company than statutory accounting. Statutory accounting views the company as if it were to be liquidated as of the statement date. Differences in accounting treatment -- such as the inclusion of deferred policy acquisition costs and the use of more realistic reserving practices in GAAP accounting -- give a better picture of an insurer as an ongoing enterprise. Statutory earnings will be used in the model if GAAP or GAAP-like earnings are not available. Standard & Poor's will continue to use statutory accounting as its primary source of information for its balance-sheet-oriented models, such as the capital adequacy and liquidity models. The earnings adequacy model then compares the company's pretax earnings (excluding interest expense) to its earnings target. Companies considered to have good earnings capabilities will just cover their earnings target, and companies with stronger operational capabilities will have earnings that are a multiple of a good earnings target. Although Standard & Poor's believes capital gains are largely opportunistic for many companies and are a function of economic and interest-rate conditions, excluding realized capital gains and losses from the earnings model deprives those companies managing investment income on a total return basis of part of their earnings strength. By including realized gains, full credit is provided for this type of investment strategy. For purposes of this adjustment, realized capital gains will primarily include realized gains and losses from the sale of equity-type investments such as unaffiliated common stock, real estate, and certain limited partnership investments. Standard & Poor's will utilize a seven-year average of net realized capital gains/losses, based on the most recent seven-year period, to ensure credit is given to companies that truly manage on this basis, and to diminish the influence of market and economic cycles. This amount will be added to actual pretax earnings for each of the five years used in the model. The earnings adequacy model time-weights the earnings performance of a company over five years. Current years are more heavily weighted than other years. Standard & Poor's adds 20% of the most recent year's earnings adequacy ratio, 30% of the average of the past three years' ratios, and 50% of the average of the past five years' ratios to arrive at a time-weighted average of the company's earnings adequacy. Table 1 shows the calculation of the earnings adequacy ratio. The earnings targets, multiplied against each line of business, are levels considered good for that line of business. GAAP EBIT, including realized gains/losses and adjusted for investment income from limited partnership investments, is used in the numerator. The denominator is constructed by using statutory reserves and revenue as the measure of line-of-business volumes, multiplied against the earnings targets, and adding in the difference between GAAP total assets and total statutory reserves (the difference between GAAP assets and statutory reserves considered a proxy for unallocated GAAP assets by product line). The number is then multiplied by an earnings target for miscellaneous items of 75 basis points (bp). If GAAP assets, allocated by product line, are available, these will be used instead of statutory reserves as the measure of business volumes, with unallocated GAAP assets receiving a miscellaneous earnings target of 75bp. If only statutory figures are available, statutory pretax earnings, after policyholder dividend operating earnings, are used in the numerator, and statutory total assets (instead of GAAP assets) are used in the denominator. All calculations are based on average assets and average reserves for each year. Calculations based on GAAP assets exclude the effects of FAS 115, which marks assets to market value. Table 2 shows the standards used to evaluate a company's earnings adequacy ratio for each level of operational performance. As a stand-alone measure of earnings performance, the earnings adequacy measure is incomplete, given that there are various risks and other earnings assessments it does not capture. For instance, it is important to consider the different sources of revenue, both inter- and intraproduct. This includes the ability to balance spread-driven revenues with mortality/morbidity revenue and asset-based fee revenue. Table 1 Earnings Adequacy Ratio Calculation Numerator = GAAP earnings before interest and taxes (including average realized gains/losses) Denominator = individual life reserves--60 basis points (bp) + Fixed annuity reserves--50bp + GIC reserves--40bp + Variable annuity reserves--14bp + Variable life reserves --29bp + Disability and long-term care reserves--100bp + Group life revenue--300bp + Traditional indemnity health premiums--200bp + Retrospectively experience-rated indemnity health premiums--180bp + Contractual fee payment/bonus

withhold arrangement health premiums--180bp + Capitation/salaried staff health premiums--215bp + Federal employee health benefits programs/ CHAMPUS premiums--50bp + Administrative-services-only health revenue premiums equivalents--15bp + Stop loss reinsurance premiums--140bp + Medicare supplement and dental health premiums--150bp + Other not-at-risk health revenue--300bp + Other revenue (mainly credit)--300bp + (Total assets to reserves)--75bp or + Unallocated GAAP assets--75 bp Reserves are used unless GAAP assets allocated to product line numbers are available. Reserves = Annual statutory statement, page 3, lines 1 + 2 + 10.2 + 27.

Conversions for GAAP figures: Use GAAP pretax, preinterest operating income (including realized gains/losses and adjusted for investment income from limited partnership investments) in the numerator, and substitute GAAP total assets for statutory total assets in the denominator. All other inputs may remain on a statutory basis. Note: All calculations are based on the use of average assets and average reserves for each year. GAAP total assets are adjusted to exclude the effects of FAS 115. Earnings adequacy ratio = numerator/denominator time weighted as follows: 20%--the most recent year's earnings adequacy ratio + 30%--the average of the past three years' ratios + 50%--the average of the past five years' ratios In addition, Standard & Poor's seeks to understand the relationship of pricing expectations to actual results in concluding that gains are emerging as expected from all sources. The earnings adequacy ratio does not differentiate between companies with high levels of earnings volatility and those with more stable earnings performances. Companies with stable earnings streams are viewed more financially secure than companies with volatile earnings patterns, which might be subject to stress from time to time. Therefore, Standard & Poor's will analyze a company's earnings adequacy in conjunction with many other facets of earnings to measure overall earnings performance. Related risks that Standard & Poor's analysts will consider in evaluating financial strength are the investment risks, underwriting risks, and other business risks a company is taking to achieve its earnings. Those companies achieving high earnings because of a higher risk profile might be viewed as offering weaker financial security than the earnings adequacy model suggests. Companies operating with greater revenue diversity and favorable actual results compared with pricing expectations are also considered to be operating with less volatility risk. It is Standard & Poor's view that stronger companies will achieve high earnings through competitive advantages they have established in the marketplace. These advantages should translate into favorable pricing, lower crediting rates or policyholder dividends, or an expense advantage. Given that Standard & Poor's rating process is oriented toward a prospective view of a company's financial performance, analysts will often construct earnings adequacy ratios that include their projections of a insurer's earnings. Although a company's past performance is often a good indicator of its future, there are many instances where industry conditions or management's strategies are expected to alter the earnings profile of a company significantly. In Standard & Poor's interactive rating process, analysts have the ability to adjust the raw data used in these models to reflect unique situations that can exist at particular companies. For example, if any particular year's earnings are considered abnormal because of nonrecurring events, analysts have the ability to normalize the earnings used in the model. Likewise, the earnings targets applied to each line of business are considered good for the industry in aggregate. If a specific company's products are considered more or less risky, the analyst has the ability to adjust the target up or down. As is the case with all of Standard & Poor's performance measurements, the measure of earnings performance is part of a broader array of analysis that is conducted in evaluating a company's financial strength. Evaluations of the risks in the industry sectors in which the company operates, management strategies, competitive advantages and disadvantages, investment risks, capital adequacy, liquidity profile, and financial flexibility are all considered in making a rating decision. No single measure will dictate a rating decision. As life insurers position themselves to compete with other financial institutions and look to the capital markets to fund their growth, earnings performance will be a key measure by which they are gauged. Even if an insurer is well capitalized today and has no future plans to raise outside capital, strong earnings are a necessary component for success. Those companies best positioned for success will have developed competitive advantages ensuring vitality and growth. Strong earnings will be a key ingredient to sustaining that vitality and funding ongoing growth.

Table 2 Earnings Adequacy Ratio STANDARDS (%)
 Extremely Strong 270+ Very Strong 220 to 269 Strong 170 to 219 Good 100 to 169 Marginal 50 to 99 Weak Less than 50