Article Title: ARCHIVE | Criteria | Insurance | Health: Capitalization Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by "Analysis Of Insurer Capital Adequacy," which was published on April 22, 2009.) Standard & Poor's Ratings Services analysis of capitalization focuses on a company's current and prospective capital requirements. Capitalization, while an important part of Standard & Poor's analysis, is not the sole factor in determining the rating. Standard & Poor's analysis of capitalization includes quantitative and qualitative factors, including the quality of capital that can affect future capitalization trends. Standard & Poor's capital model is the starting point for the analysis of capitalization. An insurer's capital adequacy is examined in relation to its investment risk, lines-of-business risk, and exposure to guaranty fund assessments. By integrating increasingly available investment information into the model, Standard & Poor's has been able to quantify asset-related loss expectations. How Standard & Poor's Capital Adequacy Model Works Although Standard & Poor's has long had a capital model for life/health insurers that incorporated charges for health insurance products, the growing market share of various types of managed-care products and providers necessitated adapting the model to reflect the different risk inherent in various types of managed-care products. Standard & Poor's capital adequacy model plays a significant role in the assessment of the capital strength of managed-care providers and health insurers. The most significant charges in Standard & Poor's capital model relate to the factors applied to premiums for major medical and hospital-type coverage. Standard & Poor's applies lower factors to managed-care products than to traditional coverage types; the greater the degree of managed care, the lower the risk-based capital requirement will be in the model. Lower factors are also applied to property and equipment used to deliver health care than for investment real estate. Capital adequacy will also be an integral part of evaluating a group of HMOs owned by a holding company. As part of the group analysis, Standard & Poor's aggregates the capital, assets, liabilities, and lines-of-business charges and evaluate the group's capital adequacy ratio. In addition, a simplified capital model is used for each group member to determine if each unit is capitalized adequately. The model produces a capital adequacy ratio. The ratio compares adjusted capital and surplus minus realistic expectations of potential investment losses with a base level of surplus appropriate to support liabilities and lines of business at a secure rating level (the 'BBB' range). Adjustments to capital include items such as voluntary investment reserves, hidden equity, and adjustments for surplus notes included in capital. To receive equity credit, surplus notes or other hybrid instruments must satisfy certain criteria. In addition, hybrid instruments given equity credit are amortized beginning in Year 10 prior to maturity or potential call by the holder at 20% per year. As a result, by Year 5 prior to maturity, there is no equity credit for these instruments. In determining asset charges, Standard & Poor's examines investment portfolio quality to establish a reasonable estimate of expected losses over several years. This charge will also be adjusted to recognize any explicit statutory reserves that might have already been set aside for such losses. Charges for credit risks of bonds are based on expected defaults during a 10-year period. In addition, depending on the relative rating on the bond, a recovery rate of 35%-50% will apply to the charge. For example, bonds rated 'A' or higher assume a 50% recovery rate, while bonds rated 'CCC' assume a 35% recovery rate. There are separate factors for preferred stocks that are about double those used for bonds. No recovery assumption is applied for preferred stocks. The surplus notes of other issuers held as assets are treated as preferred stock in Standard & Poor's capital adequacy analysis. The model incorporates liability factors that recognize differences in risk by product, with lower factors for lower-risk products. The specific factors applying to the various types of assets and liabilities are listed in Tables 1, 2, and 3. Table 1 Asset Default/Loss-Risk Factors (C-1) RATING INCIDENCE OF DEFAULT ASSUMPTION NET FACTOR DISCOUNT RATE (%) RECOVERY RATE (%) BONDS Exempt obligations 0% 0.0000 ‘A’ or higher 1.30% gross charge 0.130% evenly over 10 years 0.0051 6 50 ‘BBB’ 9.11% gross charge 0.911% evenly over 10 years 0.0391 6 45 ‘BB’ 20% gross charge 2.4% Years 1-5; 1.6% Years 6-10 0.0936 6 40 ‘B’ 35% gross charge 5% Years 1-5; 2% Years 6-10 0.1740 6 40 ‘CCC’ 50% gross charge 8% Years 1-5; 2% Years 6-10 0.2756 6 35 In or near default 30% net charge 0.3000 PREFERRED STOCK Exempt obligations 0% 0.0000 ‘A’ or higher (including FHLB stocks) 0.0101 6 0 ‘BBB’ 0.0711 6 0 ‘BB’ 0.1560 6 0 ‘B’ 0.2900 6 0 ‘CCC’ 0.4239 6 0 In or near default 0.6000 INTEREST RATE RISK Assessed for MBS, callable corporates, and other securities, determined individually for each portfolio. Default factor is 0.05 for MBS, 0.020 for home equity, and 0.010 for ABS. COMMERCIAL/FARM

MORTGAGES Problem 18% gross charge, 6% Years 1-3, 8% discount rate. 0.1700; 0.02x experience adjustment factor Performing 2% on average, adjusted for experience relative to industry experience adjustment factor = co. problem mortgage % divided by 14%. Minimum experience adjustment factor: 0.5. INSURED MORTGAGES In good standing 0.001 90 days overdue 0.002 RESIDENTIAL MORTGAGES In good standing 0.005 90 days overdue 0.01 DUE AND UNPAID TAXES On overdue (90 days) mortgages and mortgages in foreclosure. 1 COMMON STOCK Nonaffiliated 0.15 Affiliated Parent: exclude. 1 Insurance subsidiary: consolidate. All others: 100% (analyst may adjust). REAL ESTATE Investment 0.18 Foreclosed encumbrances 0.15 Property used to deliver health care 0.1 SCHEDULE BA Bonds, preferred, or common Use the factor for the asset category Schedule BA mortgages and real estate 0.2 Other Schedule BA assets 0.3 OTHER ASSETS Surplus in nonguaranteed separate accounts. 0.1 Assets in separate accounts backing guaranteed separate accounts Pro forma treatment for assets as if in general account. Cash, short-term investments, and nongovernment money market funds not qualifying for Schedule BA treatment. 0.003 Premium notes; collateral loans; write-ins. 0.05 (not in life) Net reinsurance recoverable Minimum charge: 0 0.005 Noncontrolled assets 0.01 OFF-BALANCE-SHEET ITEMS Contingent liabilities (e.g., bond guarantees, guarantees for MIPs) 0.05 (not in life) Long-term leases (present value, discounted at 6%) 0.05 Asset size factors: Multiply asset charges by asset size factor (minimum asset size factor is 1). Size factor = total weighted dollar amount divided by total invested assets. Size factor = ((first $100 million invested assets x 2.5) + (next $100 million x 1.5) + (over $200 million x 0.8))/total invested assets. Table 2 Health Insurance—Liability Risk Factors (C-2) LIABILITY LEVEL OF PREMIUMS FACTOR COMPREHENSIVE MEDICAL AND HOSPITAL OR MEDICAL/DENTAL ONLY Traditional indemnity Earned premium, first $25 million 0.1700 Earned premium, more than $25 million 0.1000 Indemnity with retrospective experience rating Earned premium 0.1000 Contractual fees Earned premium, first $25 million 0.1400 Earned premium, more than $25 million 0.0850 Bonus/withhold arrangements Earned premium, first $25 million 0.1300 Earned premium, more than $25 million 0.0750 Capitation Earned premium, first $25 million 0.0750 Earned premium, more than $25 million 0.0500 Noncontingent salaries Earned premium, first $25 million 0.0550 Earned premium, more than $25 million 0.0360 Administrative services only contracts Premium equivalent, first $500 million 0.0200 Premium equivalent, more than $500 million 0.0075 Stop loss Earned premium 0.3300 Federal Employee Health Benefit Program Earned premium 0.0400 Medicare supplement Earned premium, first $25 million 0.1200 Earned premium, more than $25 million 0.0800 Dental Earned premium, first $25 million 0.1000 Earned premium, more than $25 million 0.0700 Hospital indemnity, accidental death and dismemberment, and other limited benefits not anticipating rate increases Earned premium 0.0800 Other limited benefits anticipating rate increases Earned premium 0.1200 DISABILITY Noncancellable individual disability Earned premium, first $50 million 0.4500 Insurance products Earned premium, more than $50 million 0.1800 Other individual disability Earned premium, first $50 million 0.3000 Earned premium, more than $50 million 0.0900 Group long-term Earned premium, first $50 million 0.1800 Earned premium, more than $50 million 0.0400 Group short-term Earned premium, first $50 million 0.0600 Earned premium, more than $50 million 0.0400 Credit—monthly outstanding balance Earned premium, first $50 million 0.2500 Earned premium, more than $50 million 0.0400 Credit—single premium with unearned premium reserve Earned premium, first $50 million 0.1200 Earned premium, more than $50 million 0.0400 Credit-single premium without unearned premium reserve Earned premium, first $50 million 0.1800 Earned premium, more than $50 million 0.0400 OTHER Long-term care (individual and group) Earned premium, first $50 million Earned premium, more than $50 million CLAIM RESERVES Exhibit 9 individual and group and credit claim reserves 0.0500 For all the above, add 2.4% to base factors if rates are guaranteed for 15-36 months; add 6.4% if rates are guaranteed for more than 36 months. Table 3 Business Risk Factors (C-4) PREMIUMS SUBJECT TO GUARANTY FUND ASSESSMENT FACTOR U.S. life and annuity premiums (excluding separate account deposits) 0.0200 U.S. accident and health premiums 0.0050 U.S. separate account liabilities 0.0005 Standard & Poor's capital adequacy model differs from the NAIC model in a number of ways: The factors applied to medical and hospital insurance products are generally greater than those used by the NAIC. In addition, the factors are applied to premiums, rather than to claims. Although there is no explicit adjustment to Standard & Poor's factors incorporating recent claims experience, analytical judgment may be used in adjusting factors to appropriately reflect risk levels. Standard & Poor's formula places asset risks in the numerator rather than in the denominator. There is no covariance adjustment, which is consistent with all other Standard & Poor's capital adequacy models. Interpretation of the ratio. Standard & Poor's sets standards for relative capital strength based on the capital adequacy ratio, as shown in Table 4. Table 4 Capital Adequacy Benchmarks Capital adequacy ratio Less than 100% 100%-124% 125%-149% 150%-174% 175% and higher Assessment of capital adequacy Weak Good Strong Very Strong Extremely Strong Indicative rating level BB or lower BBB A AA AAA The ratio is only a starting point for judging capital adequacy. Qualitative and quantitative enhancements are applied as warranted to derive a more complete picture of an organization's capital position. The analyst plays a critical role in adjusting Standard & Poor's model to best assess risks that are unique to any given company, although still maintaining a standard of comparability between companies. The model is considered dynamic and may be changed to better reflect risks. Although considerable attention is focused on risk-based capital ratios, Standard & Poor's assessment of capital adequacy is only one of many factors employed in arriving at a financial strength rating for a company. The rating process will continue to be predicated on the belief that capital adequacy ratios are not a substitute for broad-based analysis of a company's credit quality. Strengths or weaknesses in other key areas—such as management and corporate strategy, competitive profile, operating performance, liquidity, and financial flexibility—can more than offset relative strengths or weaknesses in capital adequacy. How Standard & Poor's Looks at Interest Rate Risk Standard & Poor's risk-based capital model for health plans and insurers captures both asset and liability risks undertaken by health insurance companies. On the asset side, Standard & Poor's capital model has historically charged insurers for credit risk in their bond portfolios, underwriting risk for commercial mortgages and real estate, and market risk for stock equities. Standard & Poor's also analyzes insurers' investment portfolios to look at the inherent convexity risk. In the model, capital is charged for potential credit defaults based on Standard & Poor's credit default matrices. These credit default matrices show the probability of bonds defaulting. The charge provides a capital cushion for bond defaults. The capital required for option risk is allocated for potential interest volatility. Clearly, over the average life of an investment held by a health plan or insurer, this is inevitable. More importantly, the level of capital will be specific to a particular company's overall mortgage portfolio. All planned amortization class bonds and sequentials are not alike. Nor are all companies' risk appetites alike. Large Subsidiary/Affiliate Capital Charge Where large subsidiaries/affiliates constitute more than 10% of total adjusted capital and are viewed as Other under Standard & Poor's group ratings methodology, Standard & Poor's will apply its equity volatility charge (as applicable in that market) plus a 15% concentration charge on the total subsidiary investment in a capital model. In the U.S., this means the charge will be a 15% equity volatility charge plus a 15% concentration charge (see Table 5), equaling a 30% charge on the entire investment in the subsidiary/affiliate. Standard & Poor's further stipulates that this total charge is a minimum charge, and the analyst can increase the charge if he or she believes there is greater-than-normal volatility in the subsidiary holding, the holding is overvalued, or if the holding is expected to devalue significantly. Table 5 Single Issuer Concentration* PERCENTAGE OF TOTAL ADJUSTED CAPITAL FACTOR (MAXIMUM TOTAL CHARGE: 1.0) 10%-25% (15%-25%) 0.20 + base asset factor 26%-50% 0.40 + base 51%-75% 0.60 + base 76%-100% 0.80 + base More than 100% 1 * Graded factors are applied to concentrations above 10% of total adjusted capital (15% if asset is investment-grade bond). Combine all investments in a single issuer. Capital credit for subsidiaries with publicly traded minority interests. As a result of several health plans or insurers recently deciding to partially spin off subsidiaries, Standard & Poor's has adopted a new policy for capital credit for subsidiaries and strategic affiliations with publicly traded minority interests. This policy will apply to subsidiaries and affiliates that are considered core or strategically important under Standard & Poor's group ratings criteria. Subsidiaries and affiliates that are considered Other under Standard & Poor's group ratings criteria are excluded. Companies that are considered Other and that have publicly traded minority interests will be included at full market value, just as any other equity investment would be. These investments would be subject to Standard & Poor's capital charge for market volatility (typically 15% globally) and would be subject to Standard & Poor's concentration risk charges if the investment constituted more than 15% of group capital. Standard & Poor's accepts that capital credit be given within any group capital model, using the following guidelines: Capital credit for the market value of a subsidiary or strategic affiliate can only be given where there is a public valuation of shares of the subsidiary. There must be sufficient outstanding shares to constitute a liquid market for the stock with a credible share price (that is, there are a sufficient number of bids or offers to develop a market price). Capital credit for the excess of market value over book value of the subsidiary or strategic affiliate will not exceed credit given by the regulators in the jurisdiction of the parent insurer's domicile (applies only where regulatory capital guidelines exist). Capital credit for the excess of market value over book value of the subsidiary or strategic affiliate will not exceed 25% of the difference between market value and book value. Capital credit for the excess of market value over book value of the subsidiary or strategic affiliate will not exceed 10% of total adjusted capital (including this capital credit) in the group capital model.