

Taiwan Ratings Corporation Rating Criteria Life Insurance Ratings Methodology

Note:

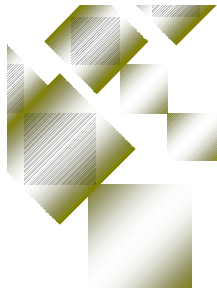
The ratings methodology described in the following pages is used by TRC and Standard & Poor's, primarily to rate U.S. life insurance companies. Since the Taiwanese life insurance market does not have the same level of deregulation or maturity compared to the U.S., several of the more advanced and detailed analytical considerations may not be applicable or appropriate in analyzing Taiwanese life insurance companies. Nevertheless, as a general concept, TRC does follow the same basic approach and methodology as detailed below.

Interactive Rating Methodology

Rating methodology

TRC and Standard & Poor's rating methodology measures and compares the financial risks of entities undertaking a wide range of business activities. For life insurance companies, these analytical techniques evaluate the financial risks associated not only with historical business activities, but new business initiatives as well. A key factor in the effectiveness of our methodology is its attention to qualitative factors and future risks facing an insurer. Through our discussions with management, we can better understand how an organization's business, operating, and financial strategies affect its financial strength. TRC and Standard & Poor's use projections in assigning its ratings after extensive discussions with management to understand the underlying factors.

TRC and Standard & Poor's can gain insight into future financial performance by looking at current and historical performance. However, our evaluation of a management's strategies, operations, efficiencies, and risk tolerance, as well as the insurer's competitive advantages in the marketplace, will most influence our opinion of future financial performance.



Ultimately, the rating decision is a synthesis of important issues that are unique to each company and will drive future financial performance. Even highly rated companies may not score well in some categories of analysis. A rating is not so much a scorecard that shows how well a company did in each analytical category, as it is a judgment made about the most important rating factors that will affect a company prospectively. The decision about an insurer's future financial strength is based on our evaluation of the key issues.

TRC and Standard & Poor's rating methodology profile is used for all insurance rating analyses and is uniform across all types of insurance companies. The profile covers industry risk, business review, management and corporate strategy, operational analysis, investments, capitalization, liquidity, and financial flexibility.

Industry risk

Industry risk is the environmental framework in which an insurance company operates. TRC and Standard & Poor's evaluate industry risk based on the types of insurance written (line of business or sector) and geographic profile. We consider how a national or local factor could affect the insurer's operations. For insurance companies that are part of a larger, more diversified group, TRC and Standard & Poor's also looks at noninsurance-related activities to assess how favorable or unfavorable these industry conditions may be and the potential effect on the group's overall operations.

Key points we consider in our analysis of insurance company industry risk are:

- Potential threat of new entrants into the market;
- Threat of substitute products or services;
- Competitiveness and volatility of the sector;
- The potential "tail" of liabilities (i.e., ease or difficulty in exiting a market) or risk of large losses. In some cases,

It may not be possible to exit certain lines of business due to state regulations that require approval or impose penalties for doing so;



- The bargaining power of insurance buyers and suppliers; and
- The strength of regulatory, legal, and accounting frameworks in which the insurer operates.

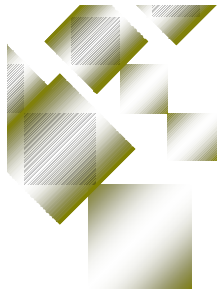
Broadly speaking, the lower the industry risk, the higher the potential rating of companies in that sector or line of business. Low industry risk implies a favorable operating environment for life insurance companies and annuity writers from a competitive standpoint, a regulatory framework conducive to insurer solvency, and conservative accounting standards. Under these conditions, life insurers would be expected to generate more favorable and less volatile operating results. Although a high industry risk profile does not automatically limit a rating, it is more difficult to demonstrate the earnings strength and stability that characterize highly rated companies.

In summary, the industry risk analysis describes;

- How much the industry earns as a return on invested capital;
- If historic patterns of return on equity (ROE) will continue;
- How individual companies make money in this business; and
- If the industry earns a risk-adjusted ROE above, at, or below market rates of return.

Business review: Evaluating insurers' business positions

In assessing future financial strength, it is critical to identify an insurer's fundamental characteristics and its source of competitive advantage or disadvantage. Business review can prove to be one of the decisive factors underlying a final rating decision, as the analyst defines the key characteristics of organizational structure and activity that constitute competitive strengths and weaknesses. These strengths and weaknesses are intricately tied to the insurer's strategy and operational effectiveness and will strongly influence its financial profile. It is through our review of a company's business position that we determine whether a company has sustainable competitive advantages.

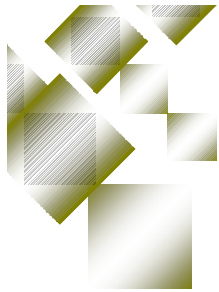


Evaluating a company's business position involves substantial subjective analysis. However, an insurer's strengths and weaknesses in the marketplace are often vital to the company's future performance. The relative strength of the business review can frequently offset other positive or negative factors used in Standard & Poor's analysis.

We assess the success of a company's portfolio of business units and product lines, distribution systems, degree of business diversification, and appropriateness of niche strategies. Our analysis includes aspects of the business that affect the absolute level, growth rate, and quality of the revenue base. Ultimately, to demonstrate competitive advantage, an insurer must show superior operating performance to the industry, strong growth characteristics, or both. TRC and Standard & Poor's ratings also incorporate an evaluation of the financial strength and business strategies of important subsidiaries and affiliates.

We are often asked, "How does a company's rate of revenue growth affect its rating?" Clearly, a strategy of "growth for growth's sake" can be a road to ruin and is inappropriate in soft markets where excess growth can be obtained only by underpricing business. Nor is size alone equated with credit strength. Over an intermediate to long-term horizon, we would expect strong companies to have good growth prospects. This view is always balanced against a belief that there are times when no growth or slow growth is better to preserve earnings and capital. In making our evaluation, a clear link exists between the strength of an insurer's business position and its corporate strategy. On the other hand, an insurer's business position must be evaluated in the context of the financial performance expected of the company. We expect strong companies to maintain sound levels of capital and earnings. Companies with sustainable competitive advantages in niche markets can receive high ratings if they can demonstrate a record of strong earnings performance that is expected to continue.

To illustrate the degree to which a company enjoys strong, defensible franchises, or to which it is prudently diversified across a variety of profitable or potentially profitable sectors, we undertake an appropriately detailed analysis of its business units. We

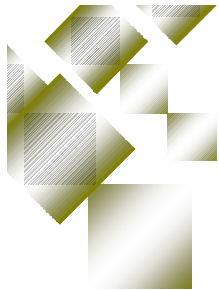


examine the company's ownership structure, market stature, and product distribution, even of specific product lines if they are felt to be particularly significant. In taking a prospective view, we also analyze features and trends in the general market environment, particularly where these represent a possible opportunity or threat to the rated entity.

Attribute	Most favorable	Favorable	Least favorable
Distribution	- Has loyal distribution system providing high-quality business. Company has clear control over product distribution.	- Company maintains average control over distribution, which provides good-quality business. Persistency is average, and the company is usually the preferred provider of products to this distribution system.	- Distribution system has low level of loyalty to company, often sells competitors' products, and produces poor-quality business leading to poor persistency.
..	- Uses multi-distribution systems and/or has strong control over a distribution system that has good access to a variety of markets.	- Distribution system has good access to a couple of markets.	- No apparent distribution strengths in any market.
..	- Distribution system is highly cost-efficient.	- Distribution system does not place company at competitive disadvantage due to high cost structure, nor does it give the insurer a competitive advantage.	- High cost of distribution places company at a competitive disadvantage.

The following are examples of the type of information used in evaluating a firm's business review:

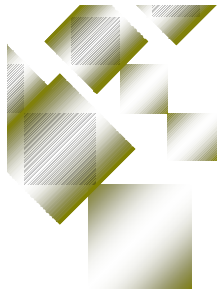
- The degree of competitive advantage enjoyed by the organization due to distribution capabilities, product structure, investment capabilities, quality of service, cost structure, and market segment dominance. It is vital to a company's long-term success to differentiate itself from its competitors. Companies without a sustainable competitive advantage are viewed less favorably.
- Diversification of revenue by business unit, geographic location, product, and distribution channel. The most favorable scenario is to have a national presence and offer multiple products over a broad range of business lines, with each product line maintaining competitive advantages in its market, thus offering long-term profitability. In addition, a significant international presence is often



- viewed favorably.
- Market share of the total firm and by major product lines. Certainly, a high market share in significant markets is most desirable. However, high market share that is sustainable over the long term in product or geographic niches is also consistent with strong ratings. Equally important is how a company obtains and maintains its market share. Clearly, the
 - More favorable and sustainable situation is when market share has been obtained through a company's competitive advantage, rather than simply through price-cutting.
 - Efficiency of distribution system. The types of distribution channels a company uses are examined to determine their cost-effectiveness. It is important to use the most appropriate distribution channel for each product line to maximize sales efficiency.

Insurance Company Scoring Guidelines Business Review			
Attribute	Most favorable	Favorable	Least favorable
II. Market Advantages/ Market Share	- High market share in significant markets.	- High market share in smaller markets or 'middle of the road' competitor in larger markets.	- Low market share.
.	- Maintains cost advantages or sustainable product advantages over competition. Alternatively, maintains extremely strong competitive advantages in niche markets.	- Competitive product structure.	- No sustainable competitive advantages.
.	- Operates in markets that afford strong financial performance.	- Operates in competitive markets, but can still produce good financial performance.	- Operates in highly competitive or irrational markets.
.	- Low threat of potential competitors disrupting the insurer's financial performance.	- Moderate threat of potential competitors disrupting the insurer's financial performance.	- High threat of potential competitors disrupting the insurer's financial performance.
.	- Favorable regulatory environment exists.	- Moderately favorable to neutral regulatory environment exists.	- Unfavorable regulatory environment exists.

- For example, a direct marketing effort will likely entail less cost than maintaining career agents, but for relatively complicated products that require a



higher degree of explanation, the additional cost of a career agent is likely justified. Failure to fully harness and utilize its chosen distribution channel(s) can be a negative rating factor.

- The markets chosen. If an insurer caters to a particular niche market, the growth trend of that market and the underlying factors driving the growth are examined to determine their likely future course. Although maintaining or expanding market share in growing markets is viewed favorably, participation in markets that afford strong financial performance is also a key consideration. - Growth of revenue during the past five years and projected growth for the next several years. An insurer's growth is evaluated in the context of the market(s) in which it operates. Although long-term growth would appear to be consistent with high ratings, growth must be balanced against market fundamentals when constraining it leads to sound profitability.

Analytic guidelines for evaluating the business review in evaluating an insurer's business position; we have established guidelines for the analyst. The guidelines should not be construed as a benchmark, given that any company that scores well in some categories may be maintaining its competitive position by constraining itself in other categories due to market conditions. Hence, we are not constructing a grid that dictates the business profile of highly rated companies by requiring them to fit a range of specific characteristics. Instead, we expect companies with strong business reviews to have some characteristics that give them a sustainable competitive advantage and maintain a strong financial profile. Management and corporate strategy

Insurance Company Scoring Guidelines Business Review			
Attribute	Most Favorable	Favorable	Least favorable
III. Product Diversification	_ Offers multiple products over a broad range of business lines.	_ Offers a small range of products over one or two lines.	_ Narrow product focus over one or two product lines.
.	_ Most product lines maintain competitive advantages in their markets and offer long-term profitability.	_ Only a couple of product lines offer good prospects of long-term viability.	_ The long-term viability of most products and lines of business is in question.
.		_ One product line accounts for more than 50% of long-term company profitability.	_ One product line accounts for more than 80% of long-term company profitability.



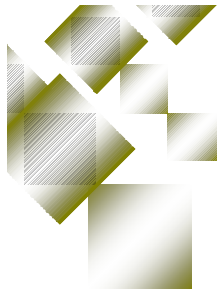
Insurance Company Scoring Guidelines Business Review			
Attribute	Most Favorable	Favorable	Least Favorable
IV. Geographic Diversification	_ Maintains national presence over a broad range of product lines (i.e., competes in 40-50 states).	_ Maintains strong regional presence (competes in 20-40 states).	_ Local presence only (competes in less than 20 states).
.	_ Developed some significant international presence.	_ Little or no international presence.	_ Little or no international presence.
.	_ Top five states represent less than 35% of premiums.	_ Top five states represent less than 50% of premiums.	_ Top five states represent in excess of 50% of premiums.
.	_ Top 10 states represent less than 60% of premiums.	_ Top 10 states represent less than 85% of premiums.	_ Top 10 states represent in excess of 15% of premiums.
.	_ No unusual concentrations.	_ Only minor concentrations.	_ Clear concentration risks exist.

Although management has little control over industry risk, altering the company's competitive position to its advantage and managing its resources and finances in a prudent and ultimately profitable way are internal factors over which

Management can exert significant influence. Therefore, no company analysis would be complete without an assessment of a company's formulation and implementation of the strategy dictated by its management.

TRC and Standard & Poor's consider management and corporate strategy a key element of the criteria that forms the foundation of the financial strength rating process. An organization's strategy, operational effectiveness, and financial risk tolerance will shape its competitiveness in the marketplace and the strength of its financial profile.

It can be argued that the analysis of management and corporate strategy is the most subjective area of any rating methodology. Therefore, we have developed a process that is applicable to all rated insurance and reinsurance companies. Although the element of subjectivity cannot be avoided entirely due to the qualitative nature of this variable, it is precisely the analysts' opinion of the human element that gives further



valuable insights not provided by quantitative measures alone. This insight also distinguishes the process from a mere quantitative assessment that does not include meeting with the company's senior team members to ask them questions that can be extremely revealing and can add substantial depth to our analysis and conclusions. This area of inquiry consists of a review of:

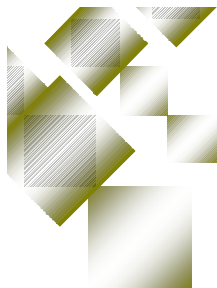
- Strategic positioning,
- Operational effectiveness,
- Financial risk tolerance, and
- Organization structure and how it fits the company's strategy.

When assessing the company's strategic positioning, it is important to establish what management's goals are and how its strategy was developed. The analyst must discern whether the goals and objectives are market share-oriented, financial, or traditional, and whether they are internally consistent. The analyst then projects what their implications are for the company's future.

To develop a formal and well-articulated strategy, a planning process needs to be in place. Therefore, questions such as how strategic milestones are developed and updated and how compensation systems are designed to support them are relevant. Our task is to evaluate whether the strategy management has chosen is consistent with the organization's capabilities and whether it makes sense in its marketplace. We also want to know management's record of converting plans into action and if effective systems are in place to communicate plans to lower management and assess performance versus plans.

Operational effectiveness essentially involves assessing a company's ability to execute the chosen strategy. We evaluate management's expertise in operating each line of business, as well as assessing the adequacy of audit and control systems. How have they performed compared with expectations? What type of internal audit controls do they use? Is the corporation centralized or decentralized, and does this structure improve efficiencies? Does the company's organization fit with the strategy chosen?

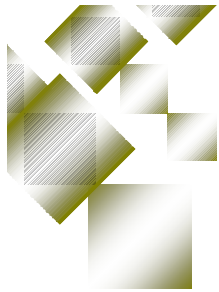
Evaluating financial risk tolerance allows us to understand management's views on financial goals, capital structure, financial and accounting conservatism, board oversight, and risk acceptance. What are their specific financial goals? What are the



amount and types of capital in the capital structure and the level of leverage employed? What are the quality and allocation of invested assets and measures of capital adequacy such as risk-based capital? What are the reserving practices and use of reinsurance? Does the company have predetermined limits for acceptable levels of risk? Are these guidelines detailed or general? Do they apply to many areas of the operation or just a few? Does the company generally operate "on the edge," or conservatively? Is the board of directors involved in the management of the company, or is it just a "rubber stamp"? Is the company run for management, the owners, the policyholders, or the agents? Responses to these questions reveal management's conservative or aggressive posture in managing the balance sheet and form the basis of our opinion.

Insurance Company Scoring Guidelines			
Management & Corporate Strategy			
Attribute	Most favorable	Favorable	Least favorable
I. Operational	_ Management has considerable expertise in operating lines of business company is engaged in and has demonstrated an ability to exercise strong control over its operations.	_ Management lacks expertise in operating some of its lines of business, but maintains good control over its business.	_ Management lacks ability to understand and control its business.
.	_ Audit and control systems are extensive.	_ Audit and control systems are average.	_ Audit and control systems are weak and/or are ignored.
.	_ Company has performed well against plan.	_ Company usually performs well against plan.	_ Company often misses plan.
.	_ Management has good depth and breadth.	_ Some holes exist in management depth or breadth.	_ Many holes exist in management depth or breadth.
.	_ Management has demonstrated a stable history of financial performance without interference of unusual items, i.e. few surprises.	_ Unusual items that disrupt the balance sheet or income statement occur from time to time.	_ Unusual items that disrupt the balance sheet or income statement occur commonly.
.	_ Organizational structure fits strategy.	_ Organizational structure does not fully foster strategy.	_ Organizational structure impedes implementation of strategy.

Organization structure must support the strategy to produce the desired results. Who are the senior managers? What are their functional backgrounds? How long has the "team" been together? We typically ask an insurer to provide us with a managerial



organization chart. Who reports to whom? Is the company organized?

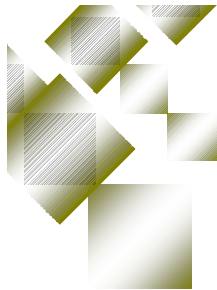
- Functionally (marketing, underwriting, claims, actuarial, etc.);
- By product (whole life, term life, single-premium annuities, disability insurance, etc.);
- By market (individual, small business, national accounts, etc.);
- Geographically (the South, California, etc.); or

By distribution channel (agents, brokers, direct marketing, etc.)? This process allows us to develop an organized review of each company's management and corporate strategy, which, in turn, provides the needed perspective as we evaluate a company's business review and the more objective areas of operating performance and capitalization.

Analytic guidelines for evaluating management and corporate strategy in evaluating an insurer's management and corporate strategy, we have a list of guidelines for the analyst.

Operational analysis

By analyzing operating results. TRC and Standard & Poor's determine a company's ability to capitalize on its strategy and business strengths. Operating results are analyzed independently of a firm's capital strength. The analysis of earnings focuses on both historical trend analysis and prospective earnings. In addition, our analysts assess the stability and quality of earnings. Accordingly, the focus is on evaluating earnings based on pretax return on assets as the most comprehensive ratio that is not distorted by unique leverage considerations. For health insurance operations and other pure mortality/ morbidity lines of business, which are not of an asset-accumulation nature, a return-on-revenue ratio is also employed.



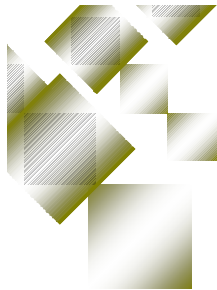
Insurance Company Scoring Guidelines			
Management & Corporate Strategy			
Attribute	Most Favorable	Favorable	Least favorable
II. Financial	_ Has set of financial standards in place.	_ Has set of financial standards in place.	_ Has no defined set of financial standards.
.	_ Has set of above-average standards for operational performance.	_ Company's standards for operational performance are similar to industry levels of performance.	_ Company lacks standards for operational performance or has low standards.
.	_ Maintains very conservative operating performance.	_ Company has no commitment to maintaining conservative operating and/or financial leverage.	_ Company disregards any reasonable standards for operating and/or financial leverage.
.	_ Company has conservative reserving practices and uses reinsurance judiciously.	_ Reserving practices are acceptable, and use of reinsurance is not aggressive.	_ Company is aggressive in setting reserves and in its use of reinsurance.

Key determinants of a life insurer's operational efficiency include a review of its persistency, expense structure, mortality and morbidity experience, effective tax rate, and pricing policies. The earnings trend and degree of stability are also important considerations.

Finally, the participating dividend feature offered by some life insurers further complicates measuring operating performance. A significant part of dividend payments made to policyholders is at management's discretion, but in practice, the maintenance of dividend payments is an important marketing feature from the consumer's perspective. Therefore, TRC and Standard & Poor's treat dividends to policyholders as a cost of doing business and evaluate return on assets on the basis of the gain from operations after policy-holder dividends have been paid.

Earnings adequacy ratio

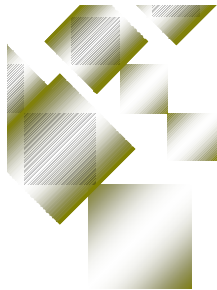
Although much has been written about capital as a valuable indicator of financial strength, a company's earnings represent its lifeblood and future vitality. For an insurer, a strong earnings stream is still the most attractive source of capital formation and is often the benchmark for management's performance. Most management includes some measure of earnings as a key strategic goal, and achieving this goal is



often a principal driver of a company's overall strategy. In evaluating an insurer's financial strength, TRC and Standard & Poor's have long used earnings measurements as an important component of our analysis. We developed an earnings adequacy ratio to help us make our ratings decisions by differentiating a company's key operational performance aspects.

Insurance Company Scoring Guidelines			
Management & Corporate Strategy			
Attribute	Most favorable	Favorable	Least favorable
III. Strategic	_ A formal process for strategic analysis exists.	_ The strategic planning process is informal or lacks depth.	_ No strategic planning process exists or plans are very superficial.
..	_ Entire management team thinks strategically and has a record of converting plans into action.	_ Only some managers are capable of thinking strategically. In many cases, company is unable to convert strategic decisions into positive action.	_ Most managers are not capable of thinking strategically. In most cases, company is unable to convert strategic decisions into positive action.
.	_ Strategy chosen is consistent with the organization's capabilities and makes sense in its marketplace.	_ Strategy includes some contradictions with the organization capabilities. Achievement of some objectives appears unlikely.	_ Strategic thinking includes many contradictions with the organization's capabilities, and many goals appear to be unattainable.
.	_ The company has an effective system in place to communicate its plans to lower levels of management.	_ The communication of strategic decisions to lower levels of management is incomplete.	_ Little, if any, communication of strategic planning to lower levels of management exists.
.	_ Board is independent, highly qualified, and willing to exercise proactive judgment.	_ Board is independent.	_ Board is heavily populated with insiders.

Since the business of life insurance is principally an asset-accumulation business. TRC and Standard & Poor's uses after-tax return on assets (ROA) as the principal measurement of operating performance. Many product segments in the industry are spread-driven; that is, life insurers are looking to achieve some targeted spread between the rate they earn on their investments and the rate they credit their policyholders.



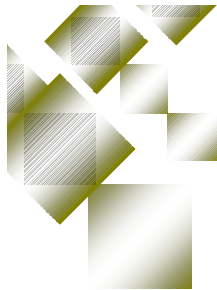
Although ROA is useful as a broad measure of earnings adequacy, it has its drawbacks. ROA does not differentiate between various product lines that often have different risks, some of which require higher levels of ROA than others to achieve a certain standard of performance. ROA is also oriented toward asset-accumulation lines of business such as whole life insurance, annuities, and pension products; but it does not work well 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 (plus reserves for future claims) in addition to expenses.

TRC and Standard & Poor's earnings adequacy ratio measures 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 may occur due to industry cyclicalities, competitive pressures, repricing strategies, expense actions, and nonrecurring events. This benchmark ratio has associated standards of performance across all levels, from weak ('B') to good ('BBB') to extremely strong ('AAA').

The ratio is actual earnings divided 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 the reserves for that line or by 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 to produce a level of earnings considered good for the company.

The numerator of the earnings adequacy ratio is the company's earnings before interest and taxes. The measure is calculated before interest expense because the intent is to evaluate the earnings performance of an insurer's operations irrespective of a company's choice of capital structure.

TRC and Standard & Poor's prefer to use pretax generally accepted accounting principles (GAAP) earnings as its measure of operating performance for life insurance

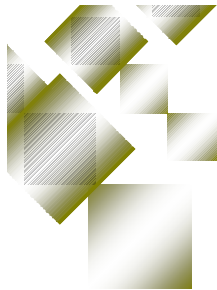


companies. GAAP accounting presents a more accurate picture of the ongoing economic earnings capabilities of a company than statutory accounting, which presents a view of the company as if it were to be liquidated as of the statement date. Such differences in accounting treatment as the inclusion of deferred policy acquisition costs and 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 if GAAP or GAAP-like earnings are not available. TRC and Standard & Poor's will continue to use statutory accounting as the primary source of information for balance sheet-oriented models such as our capital adequacy model and our liquidity model.

The earnings adequacy model then compares the company's pretax earnings (excluding interest expense) with its earnings target. Companies considered to have good earnings capabilities will just cover their earnings target, while companies with stronger operational capabilities will have earnings that are some multiple of an adequate earnings target.

The earnings adequacy model time-weights a company's earnings performance over five years. Current years are more heavily weighted than other years. TRC and Standard & Poor's adds 20% of the most recent year's earnings adequacy ratio, plus 30% of the average of the past three years' ratios, plus 50% of the average of the past five years' ratios to arrive at a time-weighted average of the company's earnings adequacy.

Earnings Adequacy Ratio Calculation



Numerator = GAAP earnings before interest and taxes (excluding realized gains/losses)

Denominator = Individual life reserves - 60 basis points (bp)

+ Fixed annuity reserves - 50bp

+ GIC reserves - 40bp

+ Variable annuity reserves - 14bp

+ Disability reserves - 100bp

+ Group life revenue - 300bp

+ Health revenue (at risk) - 200bp

+ Self-insured health (prem. equivalents) - 20bp

+ Other revenue (mainly credit) - 300bp

+ (Total assets - reserves) - 75bp

Reserves = Annual statutory statement, page 3, lines 1+2+10.2+27.

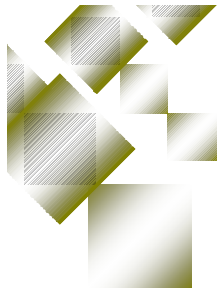
Conversions for GAAP figures: Use GAAP pretax, preinterest operating income (excluding realized gains/losses) in the numerator and substitute GAAP total assets for statutory total assets in the denominator. All other inputs may remain on a statutory basis.

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 is 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

The first table shows the calculation of the earnings adequacy ratio. The earnings targets that are multiplied against each line of business are levels considered adequate for that line of business. GAAP earnings before interest and taxes (excluding realized gains and losses) are used in the numerator. The denominator is constructed by using statutory reserves and revenue as the measure of line of business volumes to be



multiplied against the earnings targets and adding the difference between GAAP total assets and total statutory reserves, which is then multiplied by an earnings target for miscellaneous items of 75 basis points. 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 the use of average assets and average reserves for each year. Calculations based on GAAP assets exclude the effects of Financial Accounting Standards (FAS) 115, which marks assets to market value. The second table shows the standards used to evaluate a company's earnings adequacy ratio for each level of operational performance.

Earnings Adequacy Ratio Standards	(%)
Extremely strong	250+
Very strong	200-249
Strong	150-199
Good	100-149
Marginal	50-99
Weak	Less than 50

In TRC and Standard & Poor's interactive rating process, analysts can adjust the raw data used in these models to reflect unique situations at particular companies. As an example, if any year's earnings are considered out of the norm due to nonrecurring events, analysts adjust the earnings used in the model to more normal levels. Likewise, the earnings targets applied to each line of business are considered adequate for the industry in aggregate. To the extent that a specific company's products are considered more or less risky, the analyst can adjust the target up or down.

Given that our rating process takes a prospective view of a company's financial performance, our analysts often construct earnings adequacy ratios that include their projections of an insurer's earnings. Although a company's past performance is often a good indicator of its future, industry conditions or management's strategies can often significantly alter a company's earnings profile.

Related risks that our 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. Companies that achieve high earnings due to a higher risk profile may be viewed as having weaker financial security than our earnings adequacy suggests. It is our view that strong companies will achieve high earnings through competitive advantages they have established in the marketplace. These advantages should lead to favorable pricing, low crediting rates or policyholder dividends, or an expense advantage.

Investments

Asset quality and investment performance are integral to an insurer's operations and to remaining competitive in today's environment. Premiums and deposits invested today must provide a yield sufficient to cover tomorrow's claims. Historically, accident and health companies have managed more conservative investment portfolios due to the less predictable timing and nature of their claims. Annuity and life companies generally have taken greater advantage of the predictable nature of their claims to take more risk in return for higher yields. Accordingly, TRC and Standard & Poor's evaluation of the investment portfolio considers policyholders' competing and often conflicting demands for higher yields versus safety and liquidity.

By far, the key element of the analysis is understanding the process by which the company allocates cash flows to various asset classes.

Different classes of assets have customary risk profiles and accompanying returns; thus, by choosing which asset to emphasize, a company preordains a large part of the return on the portfolio.

TRC and Standard & Poor's review begins with the insurer's allocation of assets among investments such as bonds, mortgages, preferred stock, real estate, common stock, collateralized mortgage obligations, derivative instruments, and other invested assets. The assets are evaluated for credit quality and diversification. Of concern are asset concentrations by type and maturity, low credit quality, industry, geographic location, and within single issuers. An insurer's asset allocation is also examined to determine how appropriate it is to support policyholder liabilities. Guaranteed rate



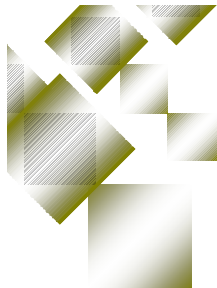
produces generally require fixed-income assets, while participating policies allow for a greater proportion of equity investments.

Fundamental changes in the life insurance industry and the products it sells require us to judge a company's investment objectives and the liability structure they support. Investment risk and the degree of matching between the maturity and duration of the investment portfolio with an insurer's liability structure are critical to our evaluation of management's risk tolerance. The importance of interest rate risk management and the need to closely match assets to liabilities depends on the type of products sold. The growth in investment-oriented insurance products and annuities, guaranteed investment contracts (GICs), and universal life policies have exponentially increased the need for asset and liability matching. TRC and Standard & Poor's review an insurer's asset and liability management by identifying the specific asset and liability durations and cash flows of interest rate-sensitive portfolios.

We also review the implicit derivative options within fixed-income portfolios. Asset-backed portfolios are reviewed for their sensitivity to interest rate risk, including prepayment and extension risk. The degree of interest rate risk in the investment portfolio is then compared with the company's product structure.

Portfolio diversification

Once the asset allocation strategy is understood, we review any unusual concentrations, such as by asset type, industry sector, or individual companies. The essence of building a portfolio is diversification, and any accumulations can subvert diversification. Examined closely are issues that might not look correlated, but in fact are, such as common and preferred stock issued by the same entity and perhaps convertible debt also issued by the same entity or a closely related family member. In this case, for instance, the nominal issuer might not be the same company, but if they are all part of the same family and control, a clear concentration can be developed. Another example would be to look at the overall real estate concentration, which would include mortgage-backed securities, commercial and residential mortgages, and equity real estate. In a low interest rate environment, all these assets could suffer, as TRC and Standard & Poor's saw a few years ago.



Invested asset credit quality

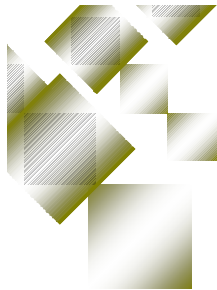
Credit risk is measured normally by TRC and Standard & Poor's default studies and credit risk changes in our capital model. Nevertheless, it is important to understand how and why the company has invested in issues that might contain credit risk so we can form an opinion of the future disposition of cash flow. Does management have a tendency to invest in issues with credit risk, or are current assets with credit risk "fallen angels"? Does management invest in nonrated paper, perhaps, to hide its credit risk appetite?

Interest rate risk

TRC and Standard & Poor's are concerned about insurers' interest rate risk. We look at the management of asset duration versus liability duration, as well as analyzing the interest rate optionality that exists in the investment portfolio. As mentioned above, we review asset and liability durations and cash flows of interest-sensitive portfolios. We also examine a firm's interest rate sensitivity test results for these portfolios as well as their New York Regulation 126 opinion results.

To address the noncredit risk insurers may face in their investment portfolios, we added an interest rate risk component to our life insurance capital model. In particular, we analyze the option risk inherent in certain assets such as callable bonds, asset-backed bonds, and mortgage-backed securities (including pass-throughs, collateralized mortgage obligations [CMOs], whole loans, and so on). As a result of the increase in these assets, life insurers' exposure to option risk has significantly increased in recent years.

Option risk in mortgage-backed securities can be defined as the prepayment or extension risk implicit in this asset class. It can be a two-edged sword: when interest rates go up, these assets can extend mortgagees' minimum payments, and there are fewer refinancing. Investors, therefore, have less money to invest at the then-higher rates. Conversely, when interest rates go down, these assets tend to prepay (refinancing increase), and investors have more cash to invest at lower rates. This reinvestment risk can create issues from both a cash management and an asset and



liability management perspective.

The capital required for option risk is allocated for potential interest volatility, that is, in case interest rates change. Clearly, this is inevitable over the average life of an investment. More important, the level of capital will be specific to a company's overall mortgage portfolio. Three key factors in evaluating this risk for insurers are the overall percentage of mortgage-backed assets, the volatility of an insurer's portfolio, and the amount of option risk relative to the capital base. Not all planned amortization class (PAC) bonds and secondaries are alike, nor are all companies' risk appetites alike. In evaluating mortgage-backed interest rate risk, it is important to emphasize that it is one component of the overall financial strength rating process for insurance companies. This risk must be considered in the context of each company's liability structure. The nature of the liabilities will help determine the relative extent to which the risk will likely be absorbed by the insurer or policyholders. It will also put in a broader context whether an upward or downward change in interest rates will be more damaging to an insurer.

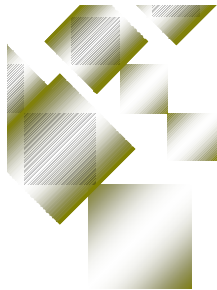
Liquidity

Relatively speaking, almost all life insurer portfolios are somewhat liquid, but TRC and Standard & Poor's reviews the portfolio with regard to overall liquidity because insurers may need to liquidate assets quickly to pay claims, especially if significant catastrophe exposures are present. Key considerations regarding liquidity include:

- The percentage of public versus private assets;
- How much of the portfolio is short term versus long term;
- How long the portfolio is, and if it is subject to additional market risk;
- The percentage, duration, and type of mortgage-backed securities; and _ the percentage, type, and quality of equity.

Market risk

The final element of risk that insurers can normally be expected to accept is market risk, or the risk that the market value of assets, commonly equity securities, can fluctuate with the market. Because many health insurance and some life insurance



companies invest relatively heavily in common equities, they can often incur significant market risk. Although TRC and Standard & Poor's capital model has asset charges for the volatility, we are also interested

TRC and Standard & Poor	Capital Adequacy
Ratio $\frac{\text{Adjusted capital \& surplus} - \text{asset-related risk}}{\text{charges}}$	
Charges for mortality/morbidity/expense risk	
+ interest rate risk + general risk	
+ other lines of business	

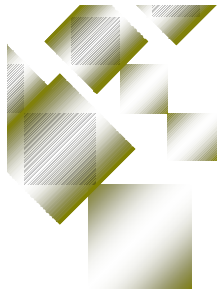
In understanding the investment policies with regard to equity securities or other securities whose values are marked to market daily, and in projecting future investments of cash flow.

Return (current yield and total return) by analyzing each of these broad areas and the effective tax rates. TRC and Standard & Poor's can identify and explain how a given level of ROA is generated. We then look at the trend in ROA over time and relative to the industry. The objective of this phase of the analysis is to gain a clear understanding of the company's ongoing profitability.

Capitalization

TRC and Standard & Poor's capital adequacy model plays a significant role in our assessment of the capital strength of a life/health insurer. The model produces a "capital adequacy ratio" that compares adjusted capital and surplus, minus realistic expectations of potential investment losses, with a base level of surplus appropriate to support liabilities at a secure rating level (i.e., 'BBB'). Our standards for superior, excellent, good, and adequate capital strength are based on this ratio. To be minimally secure ('BBB'), the capital adequacy ratio must be at least 100%.

The capital adequacy ratio is only a starting point for fudging capital adequacy. Qualitative and quantitative enhancements are applied as warranted to derive a more complete picture of an insurer's capital position. The analyst plays a critical role in



adjusting the model to best assess risks that are unique to a company while maintaining a standard of comparability between companies,

Interest Rate Risk (C-3) Factors

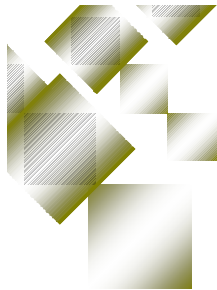
Low Risk category	Factor
- Life insurance reserves net of reinsurance and policy loans	0.005
- Annuity reserves with market-value adjustments (credit rate guaranteed for up to 1 year)	0.010
Medium-risk category	Factor
- Annuity reserves not withdrawable (excl. structured settlements)	0.020
- Annuity reserves with surrender charges	0.020
- Exhibit 10 reserves not captured elsewhere	0.020
- CICs* or annuity reserves with market-value adjustments and crediting rate guaranteed for more than 1 year	0.020
High-risk category	Factor
- Annuity reserves with no adjustments	0.030
- Structured settlements	0.030
- SPIAs (such as pension close-outs)	0.030

Separate accounts with guarantees: pro forma treatment as if in general account; factors applied will depend on the nature of the guarantee.

*GIC ?Guaranteed investment contract

How the model works

The numerator of the capital adequacy ratio is total adjusted capital (defined below) minus realistic expectations of potential investment losses. The total asset risk ('C-1') charge is adjusted by multiplying by a portfolio size factor and adjusting for any single-issuer concentration risk. The denominator of the ratio is arrived at by going through the same process for liabilities, i.e., by applying risk factors to each type of liability ('C-2' and 'C-3' risks). The last ingredient in the denominator is a general business risk charge ('C-4') that is assessed against U.S. premiums.



Insurance Risk (C-2) Life insurance net amount at risk	Individual and industrial	Group & credit
First \$500 mm	0.0020	0.0016
Next \$4,500 mm	0.0013	0.0011
Next \$20,000 mm	0.0010	0.0008
Over \$25,000 mm	0.0008	0.0007
Nonguaranteed separate account liabilities		Factor
First \$5 billion of reserves		0.0025
Over \$5 billion of reserves		0.0010

Business Risk factors (C-4)

Premiums subject to guaranty fund assessment Factor

U.S. life and annuity
premiums

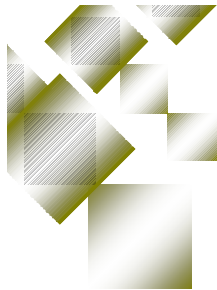
0.020

U.S. health premiums

0.005

Determining total adjusted capital

Total adjusted capital is statutory capital and surplus, plus the asset valuation reserve (AVR), plus voluntary reserves, plus half of the policy-holder dividend liability. Analysts may add or subtract to this to incorporate items, such as surplus notes, that meet our criteria as capital. If surplus notes (or other hybrid instruments being given equity credit) represent more than 15% of total capital, TRC and Standard & Poor's will give less equity credit for the note. Surplus notes (or other hybrid instruments being given equity credit) are amortized at 20% per year beginning 10 years prior to maturity or potential call by the holder. As a result, these instruments have no equity credit by the fifth year prior to maturity.



Evaluating asset risks

TRC and Standard & Poor's looks at the quality of an insurer's investment portfolio to establish a reasonable estimate of expected losses over several years. The present value of these anticipated losses is charged against surplus, but we also adjust for any explicit statutory loss reserves that an insurer may have already set aside.

Bonds. Charges for credit risks vary with the bond's credit rating. Expected default losses are assumed to occur over 10 years and are given a present value at an 8% discount rate starting in year two (no discount is given in year one). These gross charges are adjusted for an assumed 50% recovery rate. Although the expected incidence of default used in the model for most rating classes agrees fairly well with recent experience. TRC and Standard & Poor's use a conservative 9% incidence of default for 'BBB' rated bonds. We believe recent history, during a benign economic period, is not indicative of the long-term risk associated with this rating category. Charges for collateralized bond obligations are based on the ratings of the tranches provided the company retains less risk than it would by holding the underlying securities. Analytical judgment is used in determining appropriate charges for bonds of a parent or affiliate company. In the absence of the information necessary to make this judgment, such bonds are assessed a risk charge of 100% of their carrying value.

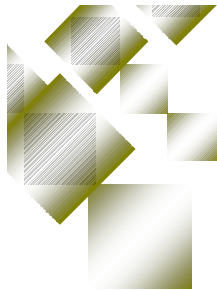
TRC and Standard & Poor's model incorporates charges for interest rate risk associated with bonds, particularly mortgage-backed securities, but also including other negatively convex securities such as callable corporates, asset-backed securities, and commercial mortgage-backed securities. Relative to a life insurer's positively convex liabilities, these negatively convex assets can and have created shortfalls that we try to capture in the capital model. The stress scenarios we use in testing these securities depend on the interest rates at year-end. In most cases, we base these charges on modeling and testing of the insurer's actual portfolio. Where modeling or other means of testing the underlying interest rate optionality of an asset class is not practical, we assess a charge of 4.5% for mortgage-backed securities, 2% to 4% for home equity and manufactured housing asset-backed securities, and 1% for other asset-backed securities.



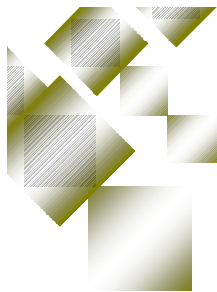
Preferred stock. Preferred stock is treated similar to bonds, except that no recovery is expected in the event of default.

Equity assets. TRC and Standard & Poor's analysis of stock market movements indicates that a 15% risk factor is appropriate for unaffiliated common stock holdings. This represents one standard deviation in the S&P 500 Stock Index year-to-year change, as calculated since 1945.

Commercial and agricultural mortgages. Separate charges are applied to performing and problem loans. The factor for performing commercial and agricultural mortgages is 0.02 times (x) an experience adjustment factor, but the minimum factor applied to performing mortgages is 0.01 regardless of experience. The experience adjustment factor is the ratio of the company's problem mortgages to the industry average and is applicable only when the company has a seasoned portfolio of mortgage investments. The factor for performing commercial and agricultural mortgages was derived as an estimate of the present value of the incidence of default, offset by expected recoveries. Problem mortgages include foreclosed, those in the process of foreclosure, those that are 30 days overdue, and those that have been restructured or modified. A watch list initially totaling the larger of the company watch list or 33% of "actual" problem mortgages is calculated as a starting point, then adjusted as necessary to reflect individual portfolio strengths or weaknesses. A separate charge is applied to actual problem loans plus the watch list: a 6% annual charge applied for three years and given a present value at an 8% discount rate starting in year two (no discount is given in year one). Mortgage data is extracted from each insurer's response to TRC and Standard & Poor's periodic real estate and mortgage questionnaire. Recent data for companies with interactive financial strength ratings indicates that problem mortgages (not including any watch list) represented approximately 14% of the mortgage portfolio. However, this does not account for the recent increase in aggressive issuance of mortgages by insurers following a period of relatively conservative mortgage lending; Mortgages issued by insurers today may well carry inherent default rates closer to 18%, which prevailed a few years ago. The 2% factor we adopted reflects a conservative assumption that, over the long term, problem mortgages will be 18% of the average company's portfolio. Similarly, the average watch list for companies with interactive financial strength ratings was approximately 17% of problem mortgages in recent years, but we believe 33% more accurately reflects what watch list mortgages will be in the long term.



Asset Default/Loss-Risk Factors (C-1)				
Bonds	Rating	Incidence of default assumptions		.
.	Exempt Ratings	0%	0.115% evenly over 10 years	0
	A or higher	1.15% gross charge	0.9% evenly over 10 years	0.0042
	BBB	9% gross charge	2.4% years 1-5; 1.6% years 6-10	0.0326
	BB	20% gross charge	5% years 1-5; 2% years 6-10	0.0752
	C	35% gross charge	8% years 1-5; 2% years 6-10	0.1372
	CCC	50% gross charge		0.2018
	In or near default	30% net charge		0.3
Preferred stock	Same as bonds, except no recovery in event of default. Net factors are exactly double those for bonds.			.
Interest rate risk	Assessed for mortgage-backed securities, callable corporates, and other securities, determined individually for each portfolio			(default factor 0.045 MBS. 0.020 home equity, 0.010ABS)
Commercial/ farm mortgages	Problem Performing	18% gross charge, 6% years 1-3, 8% discount rate 2% on average, adjusted for experience relative to industry experience adjustment factor = co. problem mortgage % divided by 14%.		0.1670 .02 x exper. adj. Min. exper. adj. 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		Parent: exclude insurance subsidiary: consolidate all others: 100% (analyst may adjust)	0.15
	Affiliated			1
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
	Sch.BA mortgages and real estate			0.2
	Other Sch. BA assets			0.3
Other assets	Surplus in nonguaranteed separate accounts			0.1
	Assets in separate accounts backing guaranteed separate accounts:			0.003
	pro forma treatment for assets as if in			0.05

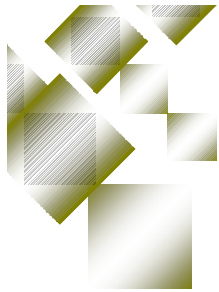


	general account Cash, short-term investments, nongovernmental money market funds not qualifying for Sch. DA treatment Premium notes; collateral loans; write-ins Net reinsurance recoverable min. charge 0 Noncontrolled assets Off-balance-sheet items Contingent liabilities (e.g., bond guarantees, guarantees for MIPs) Long-term leases (present value, discounted at8%)	0.005 0.01 0.05 0.05
Asset size factors	Multiply asset charges by asset size factor(min. asset size factor= 1): Size factor= Total weighted dollar amount divided by Total invested assets. Size factor ;[(1st\$100 million inv. assets x2.5)+(next \$100 million x 1.5) + (over \$200 million x 0.80)]/[total inv. assets].	

Affiliated common stock. Common stock of a parent is assessed a 100% charge. Insurance subsidiaries are analyzed to determine whether they are strategically important; if so, their assets and liabilities are consolidated into the parent company's capital model. When such risk charges are assessed, the 15% factor for common stocks does not apply, full equity credit is given for the affiliate's stock, and adjustments are made to the parent's total adjusted capital to reflect the subsidiaries' AVR, policyholder dividend liability, and so on. The treatment of affiliates deemed not strategically important involves a 'C-' charge representing the capital deemed necessary for their ratings, if a stand-alone rating exists, or at the 'BBB' level if it does not. The analyst consults with other departments within TRC and Standard & Poor's to determine the appropriate capitalization levels for noninsurance subsidiaries.

Real estate. TRC and Standard & Poor's apply an 18% risk factor to this asset class, reflecting our opinion that real estate, on average, presents a greater risk than common stock.

Schedule BA. (other assets) The risk charges for this category reflect the range of asset types in this schedule.



Surplus in nonguaranteed separate accounts. This item is assessed a 10% charge; the factor may be adjusted to reflect the actual risk of the underlying assets.

Assets in separate accounts with guarantees. The charges used depend on the nature of the underlying assets and should correspond to the charges that would be made if the assets' supporting guaranteed liabilities were in the general account.

Size factor. We incorporate a "size" factor based on total invested assets, which is multiplied against the insurer's total asset default risk charge, subject to a minimum level of 1x, meaning the largest insurers would still be subject to the full asset charges determined by TRC and Standard & Poor's.

Concentration risk. All assets with credit risk associated with a single issuer are aggregated to assess concentration risk. Graded charges are assessed when single-issuer concentrations exceed 15% of total adjusted capital for investment-grade bonds, or 10% for other types of assets.

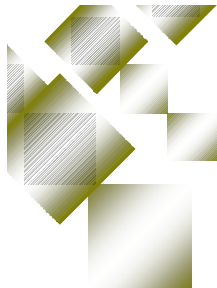
Evaluating liability risks. The factors applied to liabilities reflect our assumptions about the threshold level of capital necessary to absorb in aggregate mortality,

Single Issuer Concentration*

Percentage of TAG	Factor (max. 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
Over 100%	1.00

*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. TAC - Total adjusted capital.

Morbidity, lapsation, expense, and interest rate-mismatch risks for securely rated companies.



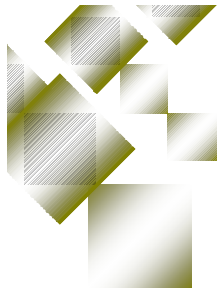
Life and health. For the most part, TRC and Standard & Poor's evaluation of 'C-2.' risks for life insurance (mortality, expense, persistency, and other pricing risks) is similar to the National Association of Insurance Commissioners' (NAIC's) approach, although most of our factors are more conservative. In the health insurance line, TRC and Standard & Poor's incorporates liability factors that recognize differences in risk by product, for example, the degree of managed care inherent in medical products. No credit is applied for the premium stabilization reserve. For companies that assume life reinsurance, we generally apply a surcharge of 25% to 50% of the standard applicable factors, reflecting our opinion that the reinsurer has less control over the risk than the issuing company.

Annuities. Annuity lines are considered low, medium, or high risk and are assessed charges of 1%, 2%, and 3%, respectively. Annuity reserves with market-value adjustments and short-term guarantees are considered low risk. The medium-risk category includes annuity reserves with surrender charges. We assume the surrender charges on an insurer's block of annuities are fairly evenly distributed among the standard range for surrender charges. Model adjustments may be appropriate when this assumption is not valid. Other products viewed as medium-risk include annuity reserves that cannot be withdrawn, annuity reserves with market-value adjustments and rates guaranteed for more than a year, and guaranteed investment contracts (GICs). The high-risk category includes structured settlements and single-premium immediate annuities, which are often long-tail liabilities that can present difficult asset/liability management challenges. Our capital model does not include any reduction in its risk factors based on the company's having an unqualified actuarial opinion on the appropriateness of the asset/liability management process.

Separate accounts with guarantees. The charges we use depend on the type of guarantee and should correspond to the charges that would be made if these liabilities were in the general account.

General business risk factor

The model incorporates a charge for general business risk that is based on the company's premiums written in the U.S., as reported in the annual statutory statement.



TRC and Standard & Poor's uses this measurement as a proxy for business risk, mirroring the NAIC's approach.

Adjustments to the model

Our capital adequacy model creates a reasonably consistent initial approach to measuring insurers' capital adequacy. Still, results are primarily guideposts, not absolute benchmarks, by which to gauge capital adequacy. A vital part of the assessment of capital adequacy incorporates adjustments - both qualitative and quantitative - to the model. These adjustments may consider:

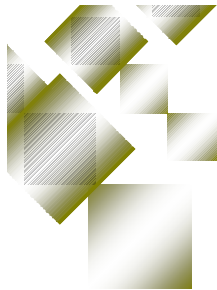
- A company's ability to internally generate capital and self-fund growth through statutory earnings. All else being equal, TRC and Standard & Poor's views companies with long track records of consistently good earnings as having a stronger capacity for reliable surplus development than companies with more volatile performance. We also consider an insurer's prospective growth plans in conjunction with management's commitment to maintaining or enhancing surplus adequacy

Health Insurance - Liability Risk Factors

Capital needs of a parent, affiliate, or subsidiaries. We consider potential calls on capital by affiliates that may look to the rated entity for future capital support, or by a parent's potentially increasingly aggressive appetite for dividends. Conversely, a parent's, subsidiary's, or affiliate's ability to provide future surplus support may have a positive effect on how we view an insurer's capital strength.

Quality of asset/liability management techniques. TRC and Standard & Poor's views companies willing to accept incremental risk less favorably than those adhering to more prudent practices. A company's demonstrated understanding of the risks undertaken also influences our assessment.

The amount of reinsurance used to support aggressive growth and reported capital strength, expected timing of treaty recapture, and quality of assuming reinsurers.



Other contingent liabilities. Bond guarantees or similar contingent liabilities that may warrant a charge against capital are also considered.

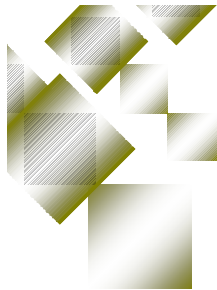
Although considerable attention is focused on risk-based capital ratios, our assessment of capital adequacy is only one of many factors used in arriving at a company's financial strength rating. Our rating process will continue to be based on the belief that capital adequacy ratios are not a substitute for a broad-based analysis of insurer credit quality. Strength or weakness in other key areas, such as a company's management and corporate strategy, business profile, operating performance, liquidity, and financial flexibility, can more than offset relative strength or weakness in capital adequacy.

How TRC and Standard & Poor's looks at interest rate risk

In the 1990s, life insurers have shifted from credit risk to option risk. This was partially due to the performance and liquidity issues for commercial mortgages that surfaced during the real estate downturn, and credit quality concerns brought on by a deterioration in credit of high-yield bonds. Another reason was that insurers were trying to maximize their NAIC risk-based capital ratio, which does not have an explicit charge for convexity (option risk). In fact, interest rate risk has largely been ignored by the insurance industry, swept under the carpet of book-value accounting.

TRC and Standard & Poor's risk-based capital model captures both asset and liability risks undertaken by life insurance companies. On the asset side, our 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. In 1994, TRC and Standard & Poor's began analyzing insurers' investment portfolios to look at the inherent convexity risk. We have now more clearly defined our approach to this category of asset risk.

In the model, capital is charged for potential credit defaults based on our credit default matrices that 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, that is, in case interest rates change. Clearly, this is



inevitable over the average life of an investment. More important, the level of capital will be specific to a company's overall mortgage portfolio. Not all PAC bonds and sequentials are alike, nor are all companies' risk appetites alike.

Methodology - TRC and Standard & Poor's interest rate risk test

The goal of this methodology is to extract the option risk in mortgage-backed securities by stressing interest rates and comparing them with 'A' noncallable corporates under the same conditions. TRC and Standard & Poor's is looking to isolate the prepayment and extension risks of these assets, i.e., the unpredictability caused by rate swings that may or may not occur. It is assumed for purposes of this calculation that an insurer's assets are matched to its liabilities: this is not the case for the overall rating process. The asset and liability management part of the rating process separately addresses the duration mismatch risk component and the asset and liability fit.

Our methodology typically applies parallel rate swings of plus 300 bps and minus 300 bps to the mortgage-backed portfolio, although the magnitude of the shifts may vary from year to year depending on year-end yield curves. For 1998, based upon the position of the Dec. 31, 1997, yield curve, TRC and Standard & Poor's is utilizing a scenario of plus 350 bps and minus 250 bps. Most companies already run this type of sensitivity analysis on their entire portfolios to comply with New York State's Regulation 126. TRC and Standard & Poor's are requiring insurers to model their mortgage-backed portfolios separately. The first part, and an important part, of the evaluation of the insurer's use of this asset class is the insurer's ability to model these assets.

TRC and Standard & Poor's creates a synthetic asset from a basket of 'A' rated noncallable corporate bonds, which is duration matched to the effective duration of the company's mortgage-backed portfolio. This synthetic 'A' asset is then priced with the same parallel shifts in the yield curve which are typically plus and minus 300 bps. These results are compared to the mortgage-backed portfolio at the same levels to derive the level of capital needed. That is, the market value of the mortgage-backed portfolio at year-end plus 300 is subtracted from the corresponding market value of

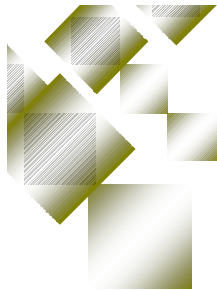


the synthetic 'A' asset. The same equation is calculated for minus 300 bps. The greater of these two numbers is used for the capital charge. As is the case in 1998, the magnitude of the shifts used in this calculation may vary from year to year depending on year-end yield curves.

For 1997, mortgage-backed securities risk capital needed is the greater of: 1) @ +350 bp = ('A' rated corporate portfolio (duration matched) - MBS portfolio) 2) @ -250 bp = ('A' rated corporate portfolio (duration matched) - MBS portfolio) Examples of mortgage-backed securities issued in 1997:

1. Pass-Through Duration-matched 'A' corporate versus a GNMA 7.00% coupon:
Duration: 3.3 yrs. (midget) @ +350bp = (-10.9%) - (-13.7%) = 2.8% @ -250bp = (8.4%) - (4.4%) = 4.0%
2. Pass-Through Duration-matched 'A' corporate versus a GNMA 7.00% coupon:
Duration: 4.3 yrs. @ +350bp = (-14.0%) - (-17.3%) = 3.3% @ -250bp = (11.4%) - (6.0%) = 5.4%
3. PAC CMO Duration-matched 'A' corporate versus a PAC 6.25% coupon:
Duration: 3.2 yrs. @ +350bp = (-10.2%) - (-10.4%) = 0.2% @ -250bp = (5.5%) - (2.6%) = 2.9%
4. Sequential Pay CMO Duration-matched 'A' corporate versus a SEQ 6.50% coupon:
Duration: 2.5 yrs. @ +350bp = (-8.3%) - (-11.6%) = 3.3% @ -250bp = (6.7%) - (0.8%) = 5.9%
5. Z-Bond Duration-matched 'A' corporate versus a Z-bond 7.00% coupon:
Duration: 10.8 yrs. @ +350bp = (-29.1%) - (-37.3%) = 8.2% @ -250bp = (32.9%) - (13.5%) = 19.4%

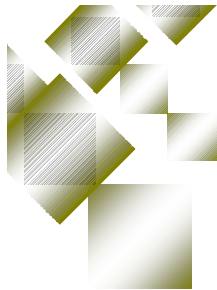
This methodology does not require capital for changes in price of a "vanilla" bond as interest rates move. That is why we are comparing the corporate changes in price, that is, one TRC and Standard & Poor's can reasonably predict as interest rates move. The potential for rate swings and shortening or lengthening of mortgage-backed assets is why investors are paid additional spread relative to rating. Whether the performance of these assets exceeds those of a more predictable nature will depend on how much interest rates do move. For TRC and Standard & Poor's, the challenge has been



quantifying these charges as they relate to different insurers' portfolios. As with credit risk, it may be possible for insurers to pass some of this risk to policyholders; however, TRC and Standard & Poor's believe the competitive environment limits an insurer's ability to do so. The relatively low level of interest rates may also limit insurers' ability to pass this risk along because they may be bumping up against an acceptable lower threshold (5%). TRC and Standard & Poor's are looking for a capital cushion to offset this reinvestment risk. If the liability allows rates to reset, the cushion is to give insurers time to gradually lower crediting rates and not incur increased lapses. Whether partial hedges offset this capital charge is dependent on whether they make economic sense, and whether they have been strategic and in place over time. For much of this asset class the economics are not in hedging; in fact, over time an insurer might be better served in the 'A' rated noncallable corporate. However, TRC and Standard & Poor's thinks this is a valid asset class and one that helps balance credit risk. In evaluating portfolios, TRC and Standard & Poor's is first and foremost looking for asset balance, i.e., not putting all your eggs in one basket,

To determine our capital charge, the portfolio will be modeled in aggregate, thereby giving credit for assets that work well together. TRC and Standard & Poor's analysis focuses on the overall portfolio effect. This is a different approach than the NAIC's flux which looks at assets individually.

Three key factors in evaluating this risk for insurers are the overall percentage of mortgage-backed assets, the volatility of an insurer's portfolio, and the relative capital base. It is important to look at the impact this charge has on TRC and Standard & Poor's view of the capital base, that is the absolute movement before and after the option risk charge. The impact on the capital base, however, is not the sole determinant of how option risk may affect an insurer's rating. In evaluating mortgage-backed interest rate risk, it is important to emphasize that it is one component of the overall financial strength rating process for insurance companies. This risk must be considered in the context of each company's liability structure. The nature of the liabilities will help determine the relative extent to which the risk will likely be absorbed by either the insurer or policyholders. It will also put in a broader context whether an upward or downward change in interest rates will likely be more

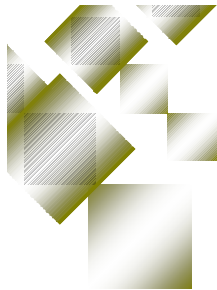


damaging to an insurer at any point in time. We do believe a level of protection for the variance in performance that can occur in this asset class is needed.

How TRC and Standard & Poor's looks at an insurance company's equity real estate portfolio TRC and Standard & Poor's looks at real estate in a variety of ways to determine its impact in the overall rating process. Equity real estate plays an important role in determining the quality and level of capital the insurer needs to support its liability structure. Moreover, a company's liquidity and earnings potential are also evaluated, at least in part, by reference to the management of real estate assets. Because of the market turnaround, companies no longer need to offer large upfront tenant enhancement practices, such as lease incentives and custom designs, which in the past have had a negative impact on bottom-line results. It should be noted that equity real estate is given no asset credit in TRC and Standard & Poor's liquidity model which measures an insurer's ability to pay claims under severe liability surrender and withdrawal scenarios.

The flowchart in Figure I summarizes the methodology used to value an Insurance company's equity real estate portfolio and which will determine the charges used in our capital adequacy model. The following explanations are numbered to match the flowchart.

- 1.Home office properties. These properties are not included in the analysis.
- 2.Unimproved land. If the asset yield is greater than the minimum target yield, it is analyzed by the same method as other properties. If the asset yield is lower than the minimum target yield, there is a fixed charge of two times the base charge. A fixed charge of either 30% or 50% is applied for the ongoing or liquidation reserve, respectively.
- 3.Unseasoned office properties. These are properties built or redeveloped in the last three years. If the adjusted net operating income from such properties produces the minimum target yield, they are analyzed in the same fashion as other properties. If not, a fixed charge of either 25% or 35% for the ongoing or liquidation reserve, respectively, is applied.
- 4.Foreclosure. Properties that are in the process of foreclosure are not included in



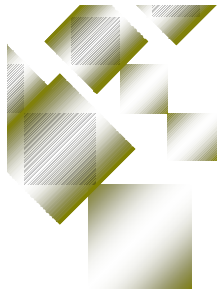
the analysis.

5. Acquired by foreclosure. If the property had been acquired within the last 12 months, a fixed charge of either 15% or 21% for the ongoing or liquidation reserve, respectively, is applied. Otherwise, the property is valued in the same fashion as other properties.

Insurance Company Scoring Guidelines Business Review			
Attribute	Most favorable	Favorable	Least favorable
II. Market Advantages/Market Share	- High market share in significant markets.	- High market share in smaller markets or 'middle of the road' competitor in larger markets.	- Low market share.
	- Maintains cost advantages or sustainable product advantages over competition. Alternatively, maintains extremely strong competitive advantages in niche markets.	- Competitive product structure.	- No sustainable competitive advantages.
	- Operates in markets that afford strong financial performance.	- Operates in competitive markets, but can still produce good financial performance.	- Operates in highly competitive or irrational markets.
	- Low threat of potential competitors disrupting the insurer's financial performance.	- Moderate threat of potential competitors disrupting the insurer's financial performance.	- High threat of potential competitors disrupting the insurer's financial performance.
	- Favorable regulatory environment exists.	- Moderately favorable to neutral regulatory environment exists.	- Unfavorable regulatory environment exists.

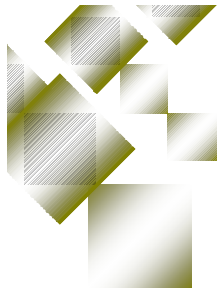
6. Ongoing or liquidation. The analysis assumes that an ongoing business can sustain a lower return than a liquidation program. An ongoing program will benefit from cyclical recovery in the property markets, whereas a liquidation effort will incur the costs of the current unfavorable property market and the need to sell many properties.

7. Target yield: T-Bond + spread (ongoing). The "ongoing" target yield represents the minimum sustainable yield on an office property. Office properties are used as the benchmark because the industry's holdings are concentrated in that



sector.

8. Target yield: T-Bond + spread (liquidation). "Liquidation" target yield represents the minimum yield required to sell an office property quickly.
9. Adjust target yield by property type. Target yields are adjusted for nonoffice properties to reflect market conditions by property type.
10. Adjust NOI for debt service: partial years. For leveraged properties add debt service payments to reported income and evaluate the property on an unleveraged basis. For investment properties that have been owned less than a year, annualize income on a straight-line basis and evaluate property using annualized income. For foreclosed properties owned less than a year, calculate ongoing reserves with a 15% charge, and liquidation reserve with a 21% charge.
11. Target value = NOI/target yield. On a property-by-property basis, target yield is calculated by capitalizing the property's most recent net income at the adjusted target yield. In real estate terms, the target yield is the property's "cap rate," which is equal to net cash flow divided by price.
12. Adjust target value by market statistics. Real estate markets are ranked according to supply and demand data generated by F.W. Dodge. If a property's market is "strong" or "very strong," target value is increased 10% to 20%, respectively. If the market is "weak" or "very weak," values are reduced 10% or 20%, respectively.
13. Property's net area available? Maximum and minimum valuations are computed as described in 14 and 15 below if a property's square footage (or, for apartments or hotels, number of units) is available.
14. Constrain target value by maximum and minimum valuations. If net area is available, valuation is constrained by maximum and minimum values per square foot or unit, based on existing market conditions. Liquidation basis will be 20% less than ongoing basis. Maximum value is further limited in that no property will be valued in excess of its book value unless its yield exceeds the target market yield plus 50 basis points.
15. Constrain target value: Minimum = Book cost/3. If net area is not available, minimum valuation is set at one-third of book cost. As in 14 above, maximum value is limited in that no property will be valued in excess of book value



unless its yield exceeds the target market yield plus 250 basis points. The maximum valuation is constrained to 1.5 times cost.

16. Answer = Target value as adjusted. Each property's value is estimated according to steps 1-15. Additional reserves (if any) may be added in the analyst's discretion.

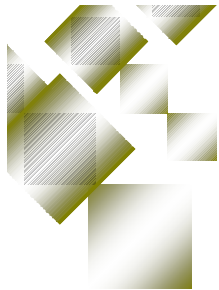
Large subsidiary/affiliate capital charge

Where large subsidiaries/affiliates represent more than 10% of total adjusted capital (TAC) and are viewed as "non-strategic" under our group ratings methodology. TRC and 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 15% equity volatility charge + 15% concentration charge equaling a 30% charge on the entire investment in the subsidiary/affiliate. It should be noted that this total charge is a minimum charge, and that the analyst can increase the charge if it is believed there is greater than normal volatility in the subsidiary holding, the holding is overvalued, or if the holding is expected to significantly devalue.

Capital credit for subsidiaries with publicly traded minority interests

As a result of several insurers recently deciding to partially spin off subsidiaries. TRC and Standard & Poor's have adopted an approach for capital credit for subsidiaries and strategic affiliations with publicly traded minority interests. This approach will apply to subsidiaries and affiliates that are considered core or strategically important under TRC and Standard & Poor's group ratings criteria.

Subsidiaries and affiliates that are considered non-strategic under TRC and Standard & Poor's group ratings criteria are excluded. Those companies that are considered non-strategic 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 TRC and Standard & Poor's capital charge for market volatility (typically 15% globally) and would be subject to TRC and Standard & Poor's concentration risk charges if the investment represented more than 15% of group capital.

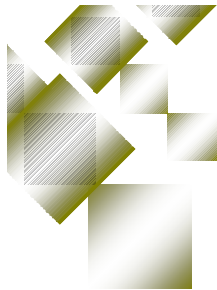


TRC and Standard & Poor's accept that capital credit is given within any group capital model using the following guidelines:

- 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 (this 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 over 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.

Liquidity

As some of the more notable insurer insolvencies of the past decade have demonstrated, the perceived lack of liquidity was the key factor leading to regulatory intervention. In retrospect, many of those insurers had sufficient assets to satisfy most policyholder and creditor claims. Policyholders are increasingly apt to surrender policies if they perceive their insurer is experiencing financial difficulty. However, despite its importance, liquidity has not received nearly the prominence that risk-based capital has - a measure regarded by many, including the NAIC, as the prime measurement of solvency. Having appropriate liquidity means being able to meet maturing obligations promptly and take advantage of market opportunities. As such, liquidity risk is most visible when a company's business position is under stress. In the widely publicized failures of Mutual Benefit Life Insurance Co. and Executive Life Insurance Co. of California, policyholders were surprised by these companies' lack of liquidity. Although liquidity is generally improving as insurers continue restructuring investment portfolios, Standard & Poor's believes it remains an



important challenge for the life insurance industry and that this area will have a major effect on rating assessments.

TRC and Standard & Poor's liquidity model

TRC and Standard & Poor's liquidity model measures an insurer's liquidity under both immediate and ongoing "stress" scenarios, with the lower measurement of the two used for rating purposes. As with our capital adequacy model, however, this process may involve substantive analytic adjustment, reflecting that although liquidity may be heavily influenced by overall investment

Profile and product surrenderability characteristics, other factors, such as distribution channels and target markets, may also play key roles. Liquidity analysis focuses on the interrelationship between an insurer's liquid assets and liabilities that are subject to a sudden shortening of term, rather than focusing on an insurer's total of liquid assets in isolation. Insufficient liquidity occurs only if the two become unbalanced.

In formulating its liquidity strategy, management faces a trade-off with respect to investment return because maintaining a high level of liquidity typically necessitates investing in larger amounts of short-term, low-yield assets. Recently, to mitigate liquidity requirements, insurers have built in features to their policies, such as market-value adjustments and penalties, to discourage surrender activity. However, this remains a challenge in today's extremely competitive business environment with the need to maintain high credit rates and consumer pressures for surrenderability features. TRC and Standard & Poor's believe that, in general, the industry's liabilities are far more liquid than many companies realize.

During a large part of the 1980s, product structure basically ignored liquidity because many companies wrongly assumed policyholders could not or would not leave their insurers. As the direct ties between consumers and insurers have begun to break down, and a wide variety of savings alternatives such as mutual funds have become available, we believe policyholders' propensity to shift their policies to another carrier -to achieve higher credit rates or in times of perceived insurer financial stress - has risen dramatically.



TRC and Standard & Poor's review of a company's liquidity encompasses several factors:

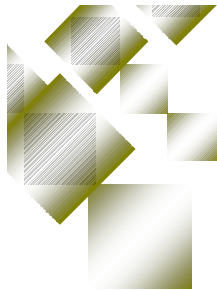
- Reserves and deposit fund liabilities;
- Surrenderability, provisions, and restrictions associated with these liabilities;
- Asset portfolio, to determine convertibility to cash under a variety of stress scenarios;
- Ongoing operational cash flow; and
- Other influences on a company's cash flow, such as debt obligations, dividend needs of the parent, or potential contingent liabilities.

In some cases, individual companies may be able to dispose of assets more quickly than is generally expected in a particular market. However, our experience has shown that the potential for unscheduled withdrawals varies significantly, both by retail and especially wholesale classes of business, and by the importance of accumulated cash value relative to the premium or deposit paid. In addition, this potential can be affected in differing degrees by surrender charges and market-value adjustments.

Risk-adjusted liquidity of liabilities

TRC and Standard & Poor's liquidity model compares a life insurer's liquid assets with a risk-adjusted calculation of its liabilities subject to scheduled and unscheduled withdrawals. The model examines an insurer's liquidity under two stress scenarios: immediate and ongoing. Each establishes a base time frame during which a company must meet its obligations. In addition, each scenario assumes a company must hold acceptably liquid assets to meet potential and existing obligations for an additional year beyond the base time frame.

The immediate scenario implies a "drop-dead" situation (similar to that experienced by Confederation Life Insurance Co.), in which a company experiences immediate and unforeseen stress from withdrawals and surrenders within a month. The ongoing scenario, which instead assumes a base time frame of one year, implies a similarly stressful situation, although spread over the course of a year. When analyzing the



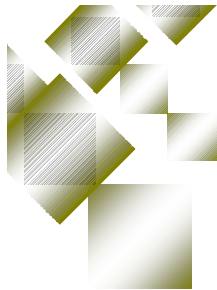
model's results, we focus on the scenario that produces the ratio showing lower liquidity.

In applying our model, TRC and Standard & Poor's receives a breakdown by product category of a company's liabilities, and for each category, applies various risk factors that reflect the potential for withdrawals. These risk factors represent our belief of the percentage of policy-holders who would actually remove funds under each scenario if such withdrawals were completely unrestricted. We view traditional life policyholders as slower to respond to company news and market conditions than other types of customers. Therefore, the related liabilities are given a 30% risk factor in the immediate scenario, meaning only 30% of traditional life policyholders who can surrender freely will do so within one month. However, we increase the factor to 50% in the ongoing scenario (with a one-year base time frame), similar to the factor for interest-sensitive life. Although traditional life policyholders are less likely than universal life policyholders to surrender or exchange their policies immediately, they have become more aware of the risks of potential insurance company vulnerability due to the highly publicized failures of the past few years. In addition, the movement in the industry away from career agents may lead to less loyalty among policy-holders during financially stressful times.

Interest-sensitive life receives a higher risk factor in the immediate scenario (50%) compared with traditional life due to the different profiles of individuals who buy these products. Some interest-sensitive life policyholders may not require the insurance feature and may buy these products for investment purposes. Therefore, they may be faster to react to adverse conditions than traditional life buyers. However, ultimately, those who buy traditional or universal life insurance for insurance purposes should behave in the same manner.

Surrenderability Factor

Provision	Factor
No surrenders allowed	0
Market-value adjustment	50
Surrender charges greater or = 5%	50
Surrender charges less than 5%	100
No surrender charges	100



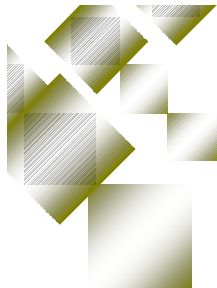
Pension plans, GIGs, and annuities are most likely to be a company's "hottest" liabilities if they are fully surrenderable because they are purchased purely for investment purposes. TRC and Standard & Poor's believe investors in these products are the most financially aware of a life insurer's customers. Therefore, under a stress scenario of any sort, we assume that 100% of those contract holders who could surrender with little or no penalty would do so. Variable products, as part of the insurer's separate accounts, are not charged with other general account products. However, any funds invested in fixed buckets of variable products are captured in the general account categories.

Regarding products that have no cash value build-up, such as term life, group life, accident and health, and disability insurance, we apply only a 50% risk factor to any unearned premium reserve or premium stabilization reserve that may need to be refunded. However, certain individual disability products are structured to build some cash value. For these products, a separate charge on any cash value involved, not on the entire reserve, is applied, similar to the charges on traditional life business. In addition, a 100% risk factor is applied to health claims reserves because these obligations mature within one year and represent a call on liquid assets.

Withdrawal provisions and restrictions

TRC and Standard & Poor's consider the withdrawal characteristics of the liability portfolio at the same time we apply the above risk factors. Liabilities that are not surrenderable receive no liquidity charge because the risk factor is multiplied by zero. Conversely, a 100% surrenderability factor is applied to liabilities with little or no withdrawal restrictions that, as a result, receive the full risk-factor charge. If a product carries a market-value adjustment of some sort, we consider the company to have some protection, as certain provisions and market conditions can cause policyholders to bear a loss on their original investment. Policyholders who might sustain a loss would be less likely to surrender in these cases. Similarly, significant surrender charges (5% or greater) also provide protection to a company undergoing stress because policyholders may decide to wait out such a situation in light of a large penalty. Therefore, for liabilities with these provisions, the model reduces the company's amount at risk by half. For example, a universal life policy with a market-value adjustment provision would receive a 50% risk factor multiplied by a 50% surrenderability factor, resulting in an overall 25% charge. Smaller surrender charges are less likely to stem policyholder withdrawals and do not earn any such credit.

The application of the risk and surrenderability factors provides an indication of a company's total potential obligations under the stress scenarios. These scenarios

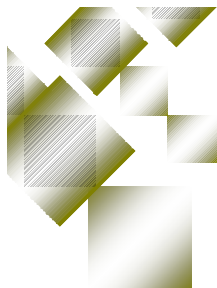


assume that everyone who could logically retrieve cash from the company would do so. However, recognizing that some potential surrenders will not occur, we built a measure of convenience into the model by multiplying the potential obligations by 70%. This assumes that the other 30% of the company's potential obligations remain with the company through the stress period.

Determining liquid assets

TRC and Standard & Poor's examine the liquidity of an insurer's investment portfolio to establish an estimate of the level of coverage of its potential liability requirements. In this process, assumptions must be made as to which assets can be counted on to be readily convertible to cash at all times. Cash and short-term securities receive full credit, as do U.S. government securities and publicly traded, investment-grade corporate and municipal bonds. Our model gives credit only for investment-grade issues because credit- or market-driven factors may affect the liquidity of noninvestment-grade securities at any time.

Because mortgage-backed securities have become one of the most prominent classes of investments in the U.S., and given the extremely diverse nature of this grouping, TRC and Standard & Poor's separates our treatment of different classes of these securities for liquidity purposes. Agency pass-throughs and government-guaranteed securities receive 90% credit, as do the most tightly structured classes, while others receive varying degrees of credit, down to zero for classes we do not consider liquid. The private placement market has substantial liquidity due to the required rating of these instruments by the Securities Valuation Office of the NAIC. However, a wide variation exists in the credit quality among investment-grade securities in this market. TRC and Standard & Poor's has established different treatments for investment-grade issues usually designated "1" and "2" by the NAIC. We consider NAIC 1 private placements to be more liquid than those designated NAIC 2, which may include some whose investment-grade characteristics could be questionable. Similarly, as it is easier to find buyers for securities with readily available information, bonds issued registered under Rule 144A are also viewed as having higher liquidity. The model also gives more credit in the ongoing scenario because a company may find buyers for some of its specialized private placements after potential buyers perform a detailed credit analysis. Regarding equities, most insurance companies invest in preferred stock as they would bonds. Therefore, TRC and Standard & Poor's treats publicly traded preferred stock like corporate bonds, giving 100% credit for those that are investment-grade and publicly traded. Publicly traded common stock is also fairly liquid, as companies could likely sell most of their portfolios if under pressure to raise cash. However, with the potential for market shocks, 30% declines in the stock market in short periods are not unheard of. Therefore, the model gives 70% credit to

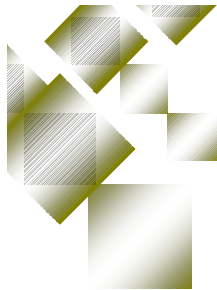


unaffiliated, publicly traded common stock in the immediate scenario, and 85% in the ongoing scenario, allowing for some market recovery. Assets involved in securities lending programs are not immediately available to a company because they are not under the insurer's strict immediate control. These assets are excluded from credit in the immediate scenario, but are allowable in the ongoing scenario because these programs usually have fairly short terms. Funds withheld that back liabilities reinsured with another company are excluded from the primary company's liquidity-calculations because the related liabilities are not considered obligations of the primary company.

Liability Risk Factors		
Liability	Immediate scenario (%)	Ongoing scenario (%)
Traditional life	30	50
Term life	50% of UEPR	50%ofUEPR
Interest-sensitive life	50	50
Single-premium deferred annuities	100	100
Tax-sheltered annuities	100	100
Flexible-premium deterred annuities	100	100
Single-premium immediate annuities	100	100
Other individual annuities	100	100
Supplementary contracts	30	50
Variable life and annuities	0	0
Individual accident and health	50% of UEPR	50% of UEPR
Individual disability	50% of any cash value	50% of any cash value
Structured settlements	100	100
Guaranteed investment contracts	100	100
Group annuities and other deposit funds	100	100
Group accident and health	50% of PSR and UEPR	50% of PSR and UEPR
Group life	50% of PSR and UEPR	50% of PSR and UEPR
Group long-term disability	50% of PSR and UEPR	50% of PSR and UEPR
Health claims reserves	100	100
UEPR - Unearned premium reserve.	.	.
PSR--Premium stabilization reserve.		

Certainty of maturing obligations

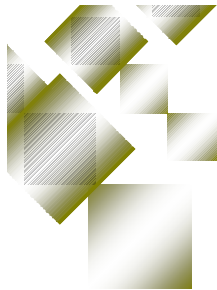
The model also deals with maturing obligations. These include any outstanding debt



at the insurance company; GIC maturities; single-premium, immediate annuity, lump-sum payments; and any other scheduled lump-sum payments. These obligations do not receive the benefit of the 70% covariance factor because these are contractual payouts. It is assumed that a company holds acceptably liquid assets to meet potential and scheduled obligations for an additional year beyond the base time frame. Therefore, in the immediate scenario, a company should have ready liquidity for one full year of maturing obligations, while in the ongoing scenario, the requirement is for 100% of all obligations maturing in two years or less. Debt obligations include any publicly issued or private-placement debt, bank debt, or commercial paper outstanding, and any repurchase agreement or dollar-roll activity, as well as lump-sum payment obligations such as those under structured settlements or immediate annuities. Given the certainty of the liquidity needs associated with scheduled maturing obligations, secure companies (regardless of their ratings) need have only a small redundancy of liquid assets to cover these obligations. Such obligations require 125% liquid assets to back them, regardless of the rating category. The need for 25% redundancy of liquid assets for scheduled maturities takes into account such risks as market-value and book-value differences, asset deterioration, and potential losses due to asset and liability mismatches. TRC and Standard & Poor's liquidity model first subtracts the 125% of liquid assets from allowable assets to cover scheduled maturing obligations and then compares the adjusted potential obligations with allowable assets for both scenarios.

Liquidity standards

The final calculation in the model compares the allowable assets under both scenarios with the adjusted potential and maturing obligations under both scenarios. However, a vital part of an insurer's liquidity assessment incorporates adjustments specific to individual companies, both qualitative and quantitative, that may stem from contingent noninsurance liabilities or concentrations among certain allowable assets. Using the scenario that produces the lower result. TRC and Standard & Poor's developed the following rating scale based on our belief that when a company's liquidity under the model just covers potential obligations, the company may have adequate liquidity to cover the stress scenarios, but may be susceptible to adverse economic, market-related, or company-related circumstances. Unlike the capital



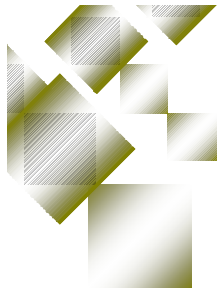
adequacy model, however, under which an insurer is unlikely to be rated materially higher than its level of capitalization, for liquidity purposes, all insurers in the "secure" range are expected to maintain at least 'BBB' level liquidity, or 140%, while those rated 'AAA' must be at least 'A' level, or 180%. It should be stressed that, although this model is a tool to help analyze a company's liquidity. TRC and Standard & Poor's recognizes other factors that need to be considered when analyzing liquidity, such as the quality of operating cash flow or the dividend needs of a holding company. Nevertheless, TRC and Standard & Poor's clearly expect highly rated companies to maintain high levels of liquidity.

Rating Standards Rating level	Liquidity ratio (%)
AAA (Extremely strong)	260 plus
AA (Very strong)	220 to 259
A (Strong)	180 to 219
BBB (Good)	140 to 179
BB (Marginal)	100 to 139

Financial flexibility

This last element is predominantly qualitative. It is broken down into capital requirements and capital sources. Capital requirements refer to factors that may give rise to an exceptionally large need for long-term capital or short-term liquidity. Almost by definition, these exceptional requirements tend to relate to the company's strategic objectives and thus often involve acquisition or recapitalization plans.

Capital sources involve an assessment of a company's ability to access an unusually large amount of short-term and long-term capital. Typically, these sources consist of demonstrated access to multiple types of capital markets such as the long-term public debt market, the commercial paper market, and the Euromarkets. In addition, a company may hold assets with significant unrealized capital gains that could be sold without affecting the basic enterprise. The ability or demonstrated willingness to raise common equity capital is another important source of financial flexibility, as is the ability to obtain reinsurance in adequate amounts from a variety of high-quality markets. One common source of financing for insurance companies is reinsurance. Although prudent use of reinsurance is often advisable, it can be misused in many



fashions. A characteristic to be analyzed is the degree of reinsurance leverage as measured by the ratio of net reserves to gross reserves, as well as net written premium to gross written premium. Reinsurers' creditworthiness is always a concern, but it becomes more relevant as this ratio falls. Pure coinsurance of risks can be a valuable source of capital and financial flexibility, while surplus relief transactions with little risk transfer have little value.

A review of Schedule S for life and health insurance companies is necessary to identify the reinsurers being used. Among the items we review is the creditworthiness of the names, the use of brokers with no real name behind them, large cessions to poor-quality names, and so on. Reinsurance protection is also reviewed in discussions with management. It is normally important for the company to have routine procedures for review and acceptance of all reinsurers. Companies that abdicate the responsibility are asking for trouble.

By far, the best source of long-term flexibility is created through generating good returns. Therefore, the returns on equity, assets, and permanent capital are evidence of the company's long-term access to sources of financing.

The most important element is the interrelationship between an organization's needs for long-term capital and the sources available to it. Companies with modest needs may be quite successful with few sources other than retained earnings, while those with a voracious appetite for acquisitions might not be able to satisfy these needs, even with all the above-identified sources available to it.