Article Title: ARCHIVE | Criteria | Insurance | General: Risk-Based Insurance Capital Model Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by "Analysis Of Insurer Capital Adequacy," which was published on April 22, 2009.) Standard & Poor's Ratings Services risk-based capital (RBC) adequacy model is an integral and quantitative tool in analyzing the capital adequacy for life, property/casualty (P/C), health, insurance, and reinsurance companies worldwide. Insights drawn from this model are evaluated in conjunction with more qualitative factors--including composition of a company's capital structure (reliance on hybrid securities and debt to fund its operations), asset quality, reserve adequacy, contingent assets and liabilities, and level of reinsurance dependency to form a comprehensive opinion on the level of capitalization. Varying global accounting standards and complex legal entity structures present challenges in the analysis of insurance company capitalization, but we have taken a global approach noting regional exceptions throughout. The opinion will be expressed in terms of adjusted capital being either redundant or deficient across targeted levels of risk-adjusted capitalization consistent with the rating level. The capital adequacy outcome from the model is only a starting point for judging capital adequacy. Qualitative and quantitative enhancements are applied as warranted to derive a more complete picture of an 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. Summary The model seeks to determine the amount of capital that is necessary to cover losses at varying confidence intervals from disparate risks in excess of reserves over the expected life of a company's portfolio. In the model, each risk variable is stressed using confidence levels that Standard & Poor's deems appropriate given the company's targeted rating category and our empirically observed cumulative five-year defaults across ratings. Although the impact of the stressed risk variables is measured over the expected lives of the assets and liabilities, the volatility used to create the stressed scenarios is based on potential movements expected over a one-year period. In other words, we are seeking to capture the present value of expected economic losses (change in shareholder equity/policyholder surplus) experienced over an annual period, to a degree of certainty that is commensurate with the rating. The confidence levels establishing the degree of certainty for each individual risk are: 97.2% for 'BBB', 99.4% for 'A', 99.7% for 'AA', and 99.9% for 'AAA'. Standard & Poor's gives explicit credit for diversification within the capital model, albeit at more conservative levels than those used by many insurers in their internal models. The approach reflects our conservative view on correlations in the tail through correlation matrices specifically designed for this model. It also partly reflects the limitations on the fungibility of diversification credits across a consolidated group. In addition, implicit diversification credit is embedded in many of the charges (e.g., equity, mortality) where indices and industry level data are being used. The diversification credit calculated brings the sum of the capital requirement for each risk at the various rating levels to a level commensurate with the target rating. The conservatism in the diversification credit also reflects some implicit diversification in the chosen confidence intervals for each risk charge. These were generated from five-year default data that was deemed a more appropriate measure to calibrate each charge than the more onerous one-year horizon that we see applied in some regulatory regimes and where, as a result, a higher diversification credit is generated. Capital Model In Context Although considerable attention is focused on RBC adequacy, our assessment of capital adequacy is only one of many factors used in arriving at a company's credit rating. Our rating process will continue to be based on the belief that the results from the model are not a substitute for a broad-based analysis of an insurer's credit quality. Strength or weakness in other key areas, such as a company's competitive position, management and strategy, investment risk, liquidity risk, operating performance, enterprise risk management (ERM), and financial flexibility can more than offset relative strength or weakness in capital adequacy. The areas of analysis are interconnected and their importance and influence on a rating will differ depending on company specific circumstances. This report does not explore the individual areas of analysis, but it is important to recognize the capital model, in itself, does not define a rating. Furthermore, the capital adequacy model is only one component of capitalization analysis, albeit an important one. The model creates a consistent initial approach to measuring an insurer's 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: An insurer's ability to internally generate capital and self-fund growth through earnings. All else being equal, we view companies with long track records of consistently good earnings as having a stronger capacity for reliable capital 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 or running a leaner capital structure. We consider potential calls on capital by affiliates that might 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 capital support may have a positive effect on how we view an institution's capital strength. Quality of asset/liability management techniques. Generally, 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 the assessment. In addition, Standard & Poor's introduced new criteria in 2005 that seek to assess the strength of ERM (see "Criteria | Insurance | General: Evaluating The Enterprise Risk Management Practices Of Insurance Companies," published on Oct. 17, 2005, on Ratings Direct) within a group. The insight this new tool provides into management techniques used to assess, quantify, and manage risk provides an important element of our analysis of capital adequacy. In particular, the sophisticated risk models now employed by insurance groups as part of their ERM framework will complement the factor-based approach of Standard & Poor's capital model. Although the factor-based model is less sophisticated, it benefits from simplicity and global consistency and helps to cut through the myriad assumptions that drive the result in the more complex economic capital models. By assessing the output of both Standard & Poor's capital model and the insurer's own model, Standard & Poor's expects to derive an informed opinion of capital adequacy. Ultimately, we expect our capital adequacy analysis to quantitatively blend the results of our model with insurers' internal models (where they have strong or excellent ERM assessments and undergo economic capital model analysis). Capital model framework Standard & Poor's capital model is designed under a globally consistent framework. Regional factors are applied to reflect features unique to a local market. The factor-based model reflects observed volatility in the past 15-plus years. The model improves the analytical value of our ratings process by more accurately linking expected capital adequacy to risk. It provides transparency to the marketplace as to the level of stress that is applied and clearly defines the risks encompassed. We believe the model parallels advances in risk management and measurement currently being made in the insurance industry, which will make it easier to apply the model in conjunction with internal (economic) capital models. Consistent with the direction of the industry, the model applies a well-defined and consistent framework to measure exposure across all categories of risk (e.g., mortality risk, credit risk, financial market risk). The model calculates a target level of RBC at each rating level, based on the company's specific risk profile. The target capital captures market, credit, and recoverability risks as well as insurance business-related risks of adequate pricing, interest rate movements relative to interest-rate sensitive products, mortality/morbidity, catastrophic risks, and adequate loss reserving. An insurance company's total adjusted capital is compared with the level of target capital. For each rating level, a redundancy or deficiency can be quantified against the target capital. Defining Capital: A Global Approach Total adjusted capital--IFRS/GAAP model Standard & Poor's calculates total adjusted capital (TAC) on a globally consistent basis. In addition, economic capital available (ECA), is calculated globally. TAC is the measure used for capital available to meet a company's capital requirements in Standard & Poor's capital adequacy model. TAC is a narrower capital measure reflecting a nearer term view on the realization of assets. It reflects, for example, the ability to partly realize the off-balance-sheet value of in force life insurance business through reinsurance or securitizations in a relatively short timeframe. It is also influenced more by the current regulatory views of capital rather than an economic view. TAC includes non-owner capital that can absorb losses such as hybrid capital and forms of policyholder capital such as discretionary funds backing participating life insurance policies that can be used to absorb risk across an organization. ECA is a broader, more economic view of owner (shareholders, or policyholders in the case of mutuals) capital with a longer term view on crystallizing value. It reflects, for example, the ability to partly realize the value of goodwill over the long term through asset sales or enhanced earnings. ECA is used in Standard & Poor's leverage measures reflecting the more economic view of the way the capital needs

of companies are funded. Standard & Poor's provides ratings on companies in many parts of the world. In so doing, even with the advent of International Financial Reporting Standards (IFRS), we encounter many different accounting frameworks. One of the objectives of both TAC and ECA is to normalize the resulting measures of owner equity onto a more consistent basis. Generally accepted accounting principles or statutory? For companies or groups producing financial statements in accordance with generally accepted accounting principles (GAAP such as U.S. GAAP, IFRS), TAC, and ECA should normally be drawn from information contained in those statements. However, some companies in certain countries (e.g., the U.S.) only produce financial statements in accordance with the local regulators' basis (statutory basis) of accounting. TAC and ECA may be drawn from information contained in the statutory basis financial statements if there are no GAAP financial statements or if the statutory basis financial statements provide greater depth and breadth of financial information. Increasingly, many companies in jurisdictions that focus on statutory solvency have subsidiaries and affiliates that operate offshore--either as local companies conducting business in international jurisdictions or as offshore captive reinsurers. In those cases, a pure statutory analysis might lose sight of significant risks to the group. Therefore, Standard & Poor's will be expanding its use of GAAP capital models on a consolidated group basis. This analysis will not replace statutory analysis, which is still important to assure local statutory solvency. But the primary measure of group capital adequacy will focus on GAAP/IFRS analysis to capture all group risks on a more appropriate economic basis. Consolidated or unconsolidated? Standard & Poor's insurance group rating methodology outlines criteria for evaluating insurance groups. This is founded initially on an analysis of a consolidated group, treating it as if it were a stand-alone company, and determining a rating for the group (the notional group operating company rating--NGOR). Then, in assigning ratings to its insurance operating company subsidiaries, determinations are made as to whether each subsidiary is either core, strategically important, or nonstrategic to the group. For determining the NGOR (which would normally be assigned to core members of a group) Standard & Poor's prefers to base its analysis on a group's consolidated financial statements because it captures better a group's capital profile (for example, by including all the operations of the group, eliminating the effect of double leverage and eliminating intra group transactions). The ratings on individual group subsidiaries are influenced in part by the company's individual financial statements (which may or may not be consolidated) and, where applicable, adjustments for double leverage may be made. Components of TAC TAC is reported statutory surplus or GAAP reported common shareholder equity adjusted for certain items that affect the quality of the surplus/equity. Table 1 Components Of Total Adjusted Capital REPORTED SHAREHOLDERS EQUITY/POLICYHOLDER SURPLUS Plus Equity minority interests* Plus Equalization/catastrophe reserves* Plus Prudential margins included in reserves Minus Proposed shareholder dividends not accrued Minus Standard & Poor’s impairment of goodwill Minus Other intangible assets Minus On-balance-sheet unrealized gains/(losses) on life bonds*¶ (post tax§) Plus Off-balance-sheet unrealized gains/(losses) on investments other than life bonds* (post tax§) Minus Off-balance-sheet pension deficits (post tax§) Minus On-balance-sheet pension surpluses (post tax§) Plus Up to 100% of off-balance-sheet life value of in-force (post tax§) Plus Property/casualty loss reserve surpluses/(deficits) (post tax§) Plus Property/casualty loss reserve discount Plus Discounted unearned premium reserve Plus/Minus Analyst adjustments = ECA (ECONOMIC CAPITAL AVAILABLE) Minus Remaining goodwill after Standard & Poor's impairment Minus Investment in unconsolidated subsidiaries, associates, and other affiliates Minus Investments in own shares/treasury shares Minus 50% deducted of off-balance-sheet value of in-force (post tax) Minus 50% deducted of life deferred acquisition costs (post tax) Minus 100% deducted of property/casualty deferred acquisition costs Minus 50% deducted of property/casualty loss reserve surpluses Minus 33% deducted of property/casualty loss reserve discount Minus 50% deducted of discounted unearned premium reserve Plus Policyholder capital available to absorb losses Plus/Minus Analyst adjustments = TAC BEFORE HYBRID CAPITAL ADJUSTMENTS Plus Hybrid capital (subject to tolerance limits) Minus Excess over hybrid tolerance = TOTAL ADJUSTED CAPITAL *Where not already included in shareholders' equity. ¶Subject to fair value exception. §Where tax effect not disclosed use effective tax rate. For those jurisdictions where statutory accounting remains the primary basis for capital evaluation by Standard & Poor's, the statutory definitions of TAC will continue to be used. Description Of TAC And ECA

Adjustments Equity minority interests Equity minority interests will often already form part of shareholder equity, but if not, it will be added to TAC as it constitutes capital that is under the control of a group's management. Equalization/catastrophe reserves Equalization and catastrophe reserves are not permitted under U.S. GAAP or IFRS because they relate to future unexpected events. However, they still remain in some national GAAPs and statutory accounting. Standard & Poor's regards these reserves as equity. Prudential margins included in reserves In some countries, such as Australia, explicit margins are required as part of reported liabilities. A proportion of these margins are added back to equity for TAC and ECA purposes. That proportion varies depending on the margin of sufficiency included in the liabilities. Proposed shareholder dividends not accrued If the financial statements include a proposed level of shareholder dividend relating to the past financial year that is not accrued in the balance sheet, this should be deducted from shareholder equity in deriving TAC. Goodwill Goodwill is subject to a Standard & Poor's impairment charge in the calculation of ECA, and deducted in full from shareholder's equity to derive TAC. Unrealized gains on investments Treatment of unrealized gains will depend on the balance sheet treatment of liabilities. TAC may include full credit for the market value of investments, except for bond investments matched with nonlinked (or general account) life insurance liabilities. However, bond investment market values may be included in TAC and ECA if matching balance sheet liabilities are valued on a market consistent basis (that is, where movements in interest rates affect both asset and liability values). Accordingly, where unrealized gains/losses are on balance sheet, gains/losses on bonds matched with nonlinked (or general account) life insurance liabilities should be removed from TAC and ECA. However, if liabilities are valued on a market consistent basis, no adjustment is required. Conversely, where unrealized gains/losses are off balance sheet, gains/losses on investments other than bonds matched with nonlinked (or general account) life insurance liabilities should be added to TAC and ECA. For non-life and shareholder, the market value of bonds will normally be added to TAC if off balance sheet. The above comments provide a base position for the analysis. However, the issues arising from different accounting standards in different regulatory regimes mean further analytical judgment may be required to better reflect the economic position. We have therefore published extended guidance on possible adjustments that may be appropriate in particular circumstances (see "Application: Standard & Poors's GAAP/IFRS Capital Model" published on Sept. 11, 2008 on RatingsDirect). Pensions Defined benefit employee pension (or long-term health care) scheme deficits are increasingly deducted on balance sheets in arriving at shareholders' equity. Where such deficits are off balance sheet, they should be fully reflected in TAC. This includes off-balance-sheet deficits remaining where the corridor method is used. All on-balance-sheet amounts related to defined benefit employee pension (or long-term health care) scheme surpluses should also be removed from TAC, given the lack of fungibility of such surpluses. Where the capital adequacy models of subsidiaries are based on statutory basis financial statements, pension deficits are rarely capable of being allocated to those subsidiaries. Pension adjustments will only be made as part of the consolidated group's GAAP basis capital analysis. To reflect the debt-like characteristics of pension deficits, leverage calculations are analyzed, including and excluding pension deficits. The predominant measure of leverage will depend on several factors including the company's proposed funding timetable for the deficit and any plans in place to renegotiate employees' benefits. Value of in-force life insurance business and life deferred acquisition costs (GAAP model) Balance sheets tend to understate the economic value of life insurance business globally, although the degree of understatement varies. Where available and audited, Standard & Poor's uses embedded value analysis to normalize its balance sheet analysis (and more importantly its earnings analysis) across the globe. Increasingly embedded values are disclosed in supplementary financial statements, but are generally not included in balance sheets shown in the primary financial statements. Standard & Poor's will credit up to 50% of value in force (VIF) in its calculation of TAC. Adjustments will be made to avoid any double counting of the credit given on balance sheet for VIF, deferred acquisition costs (DAC), value of business acquired (VOBA) and goodwill. If embedded value information is not available, life DAC will be included up to 50% of its statement value assuming reasonableness of the DAC recoverability. Further adjustments to exclude more of the DAC could be applied if the company assumptions are not sufficiently conservative. Property/casualty deferred acquisition costs P/C DAC is deducted 100% in the calculation of TAC. P/C loss reserve deficits/surpluses Where Standard & Poor's

determines that a company's loss reserves are either deficient or in surplus (by our own reserve analysis, external actuarial review, or other means), we will adjust TAC accordingly. For the purposes of TAC, surpluses are normally haircut by 50%. There should be no double counting of credits for loss reserve surpluses and prudential margins in reserves. For the purposes of calculating capital requirements for P/C loss reserves, and the discount calculation below, reserves are adjusted to a level consistent with the TAC measurement. This avoids a disincentive that would otherwise exist for companies to reserve conservatively. Discount on P/C loss reserves TAC is adjusted to eliminate any explicit or implicit discount of P/C loss reserves. Standard & Poor's then calculates its own estimate of the time value of money based on the non-life reserve duration and the relevant 10-year government bond yield (a weighted average for companies with reserves denominated in more than one currency). The loss reserve discount is computed as: Non-life loss reserves (net of reinsurance) x (1-(1/(1+r)^n)) where r = applicable long term government bond yield. n = mean term of claim liabilities in years. As a level of prudence, the above computation is haircut by 33%. The discount calculation is applied to loss reserves after any adjustments for deficits/surpluses referred to above. Discounted unearned premium reserve (UPR) Standard & Poor's deducts 100% of non-life deferred acquisition costs when it calculates TAC. As a result, we recognize that value will often be embedded in the unearned premium reserve. We recognize this value by giving partial credit for the time value of the unearned premium reserve. TAC is adjusted to reflect the discounted value of the UPR, based on the company's reserve duration (subject to a two-year maximum) and the relevant 10-year government bond yield (or a weighted-average for companies with reserves denominated in more than one currency). We calculate the UPR discount as: UPR reserves x (1-(1/(1+r)^n)) Where: r = applicable long-term government bond yield n = estimated duration of reserves, subject to a two-year maximum We apply a 50% haircut to capture an allowance for expenses, taxes, and general conservatism over the timing of future claims. We will continue to reflect pricing risk elsewhere in the model through our premium charges. Policyholder capital available to absorb losses Certain forms of policyholder capital may be included in TAC to the extent that they are available to absorb losses (notably investment losses) across the organization. This could include the unallocated divisible surplus in the U.K. and free Rückstellung für Beitragsrückerstattung (RfB) in Germany. Policyholder capital is generally excluded from the hybrid equity ratio, with the notable exception of mutuals. Deferred tax No routine adjustments will be made for on-balance-sheet deferred tax assets and liabilities, although analysts may make adjustments where asset recoverability is questionable or distant. All adjustments to TAC that would result in a tax charge or credit should be adjusted for the tax impact. This typically applies to the value of off-balance-sheet life insurance in force, off-balance-sheet pension adjustments, unrealized investments gains and deferred acquisition costs. In the absence of disclosed tax effects, adjustments should be made using the effective tax rate determined from the income statement. Subsidiaries, associates, and other affiliates Unconsolidated investments in subsidiaries are subject to a 100% capital charge. This recognizes that the asset and liability risks associated with such subsidiaries are not consolidated in the reported financials and, therefore, the capital model. The 100% capital charge assumes that the subsidiary has sufficient capital to meet its requirements. If the subsidiary is material, the company should either be consolidated into the group capital model or a stand-alone analysis should be performed. The 100% capital charge should then be adjusted up or down for any redundancy or deficiency of capital resources relative to requirements, with appropriate consideration of any capital fungibility constraints. Standard & Poor's may give partial credit where the book value of listed affiliates is understated relative to their market value. Haircuts are applied to the excess of market over book value of core or strategically important affiliates to recognize Standard & Poor's view that these holdings are unlikely to be fully realized and also the potential liquidity risks. Full value will be recognized for the excess of market over book value of listed nonstrategic affiliates, subject to a standard 20% equity volatility charge. Analysts should make appropriate adjustments to the default charge of 20% if these investments are material or domiciled in higher risk equity markets. This adjustment can be made through additional asset risk charges. Quality of capital Standard & Poor's measures the quality of capital on its various dimensions such as debt leverage, hybrid leverage, reinsurance leverage, investment leverage, and the extent of intangibles, overdue receivables, asbestos reserves, and deferred tax assets on the balance sheet. Within our investment analysis, the

extent of unlisted equity investments, property investments, private equity investments, hedge funds, and speculative-grade bonds will also affect our view of the quality of capital. Leverage calculations Leverage is calculated globally as follows: Pension scheme deficits may also be included in the numerator and denominator (see Pensions segment). Leverage Analysis Hybrid capital A thorough description of hybrid capital is given in the criteria article titled, "Criteria | Financial Institutions | General: Hybrid Capital Handbook", published on May 12, 2008, on RatingsDirect.) Standard & Poor's employs a simple methodology for analyzing hybrid securities that parallels the regulatory approach, classifying hybrids into three categories, reflecting their relative degree of equity strength. We include hybrid capital in our published total capital measures up to limits established in relation to the following categories: Table 2 summarizes the criteria for inclusion of hybrid capital securities in Standard & Poor's published total capital measures for insurance companies. The limits for inclusion by category broadly parallel the regulatory policy of capping the inclusion of hybrids in regulatory capital, and allow for global comparisons of capital measures. Table 2 Classification Of Hybrid Securities For Financial Services Companies CATEGORY EXAMPLES HIGH EQUITY CONTENT Short-dated mandatory convertible securities (less than three years). High-quality hybrids with participating coupons. INTERMEDIATE EQUITY CONTENT STRONG Perpetual preferred shares. Most bank and insurer undated deferrable Tier 1 instruments. Insurance long-dated hybrid instruments (residual maturity of 20 years or more) with coupon deferability. ADEQUATE Most, but not all, bank Upper Tier 2 instruments. Limited life preferred shares (e.g. U.S. trust preferred). Eligible funded contingent capital for insurers. LOW EQUITY CONTENT Dated hybrid instruments with a residual maturity of five years or less. Auction-preferred securities. Nondeferrable subordinated debt. Instruments with put options. Hybrid Capital/Double Leverage Tolerance To better reflect the often significant regional variations in the nature of insurance regulation as well as the many local differences in the regulatory eligibility of diverse forms of capital, Standard & Poor's operates differentiated criteria in respect of its hybrid capital and double leverage tolerances. The focus is on two analytic variables that are used to establish appropriate tolerances for hybrid capital and for the proceeds of ordinary debt-funded double leverage. The two analytic variables depend on the extent to which structural subordination is likely to be enforced by regulators on a company-by-company basis, and also the local regulatory tolerance of debt capital in eligible solvency. The use of debt and hybrid capital to fund operating company capital is evaluated in the context of local regulation. Double leverage calculations are based on Standard & Poor's view of the local regulatory enforcement of structural subordination. In light of a growing trend by regulators to limit the use of debt and hybrid capital to fund insurance operating company capital, double leverage calculations are expressed as a percentage of group consolidated capital, which better captures these regulations. Where the level of structural subordination is high and regulators allow holding-company debt to fund operating company capital, Standard & Poor's double leverage tolerances will be greater. Where the level of structural subordination is low and regulators exclude holding company senior debt from group solvency capital, Standard & Poor's double leverage tolerances will be lower. For capital models that are based on operating company statutory balance sheets, the excess over the double leverage tolerances are deducted from TAC. For capital models that are based on consolidated GAAP balance sheets, qualifying hybrid capital is added to TAC, subject to the tolerances referred to in Table 3. However, any hybrid capital issuance in excess of 15% is included in the numerator of our leverage calculations. We treat hybrids issued by operating subsidiaries as senior debt in consolidated capital models and leverage analysis. Table 3 Maximum Tolerances For Double Leverage And/Or Hybrid Equity Usage CASES WHERE ENFORCEMENT OF STRUCTURAL SUBORDINATION IS HIGH AND REGULATORS ALLOW HOLDING-COMPANY DEBT TO FUND OPERATING-COMPANY CAPITAL (E.G., U.S. AND BERMUDA) CASES WHERE ENFORCEMENT OF STRUCTURAL SUBORDINATION IS LOW AND REGULATORS EXCLUDE HOLDING COMPANY SENIOR DEBT FROM GROUP SOLVENCY CAPITAL (E.G., EUROPE AND CANADA) CATEGORY MAXIMUM TOLERANCE CATEGORY MAXIMUM TOLERANCE Total double leverage tolerance Up to 45% of capital Total double leverage tolerance Up to 35% of capital Debt-funded double leverage Up to 20% of capital Debt-funded double leverage 0% High Equity Content Up to 25% of capital High Equity Content Up to 35% of capital Intermediate Equity Content Up to 15% of capital Intermediate Equity Content Up to 25% of capital Low Equity Content 0% credit Low Equity Content 0% credit

Diversification There is limited data to credibly model and project tail correlations. Study of company- and industry-level correlation matrices has highlighted numerous methodologies and factors being employed, and these have led to significant variation in the amount of diversification credit being assumed by companies in their models. Standard & Poor's has taken a more conservative view on how to project correlations in the tail than that generally observed in insurers' models. The matrices have been specifically designed for this model. This credit is in addition to the implicit diversification credit embedded in many of the charges (e.g., equity, mortality) where indices and industry level data are being used. The diversification credit calculated brings the sum of the capital requirement for each risk at the various rating levels back to a level commensurate with the target rating. No explicit credit is currently given for the geographic spread of business. The conservatism in the explicit diversification credit also reflects some implicit diversification in the chosen confidence intervals for each risk charge. These were generated from five-year default data that was deemed a more appropriate measure to calibrate each charge than the more onerous one-year horizon that we see applied in some regulatory regimes, where higher diversification credit is permitted. There are four simple matrices applied in the model: P/C captures correlation between different lines of business. These have been clustered into six main product groupings. Life matrix looks through product types and captures the underlying risks, e.g., mortality, morbidity. These have been categorized into four risk types. The third matrix looks to provide credit for the high level diversification derived from writing life and P/C risks. Asset risk correlation matrix focuses on the three core investment classes. Given the uncertainties around tail correlations, a 50% haircut is applied to the resulting diversification credit. Standard & Poor's will continue to study the effects of diversification as part of its evolving analysis of economic capital models and ERM (see table 4). Table 4 PROPERTY/CASUALTY CORRELATION MATRIX ACCIDENT AND HEALTH MOTOR MAT PROPERTY LIABILITY CREDIT Accident and health 1.00 0.50 0.50 0.25 0.50 0.75 Motor 0.50 1.00 0.75 0.75 0.50 0.50 Marine, aviation, and transportation 0.50 0.75 1.00 0.75 0.75 0.50 Property 0.25 0.75 0.75 1.00 0.50 0.25 Liability 0.50 0.50 0.75 0.50 1.00 0.75 Credit 0.75 0.50 0.50 0.25 0.75 1.00 LIFE CORRELATION MATRIX MORTALITY MORBIDITY LONGEVITY OTHER LIFE RISKS Mortality 1.00 0.50 0.25 0.75 Morbidity 0.50 1.00 0.25 0.75 Longevity 0.25 0.25 1.00 0.75 Other life risks 0.75 0.75 0.75 1.00 RISK TYPE CORRELATION MATRIX LIFE PROPERTY/CASUALTY Life 1.00 0.25 Property/casualty 0.25 1.00 ASSET RISK CORRELATION MATRIX EQUITIES REAL ESTATE BONDS Equities 1.00 0.75 0.75 Real estate 0.75 1.00 0.75 Bonds 0.75 0.75 1.00 Diversification haircut 50% MAT--Marine, aviation, and transportation. Asset-Related Risks Credit risk charges Losses relating to credit are largely a result of credit defaults and changes in value resulting from ratings transitions, and systemic credit spread movements. The sources of these credit risks at insurance companies can include fixed-income assets, credit derivatives, commercial mortgages, and counterparty credit exposure relating to reinsurance contracts, deposits, and over-the-counter (OTC) derivative contracts. We apply factors to all the major sources of credit default risk, including credit default swaps and OTC counterparty credit exposure, where significant. Because losses on risk relating to systemic credit spread movements are largely related to asset-liability risks, exposure to this risk will be captured in the factors for risk relating to asset-liability mismatches (refer to asset/liability management section). Based on our research on the potential economic impact of ratings transitions on insurance company portfolios, Standard & Poor's decided the magnitude of this risk did not warrant separate specific risk factors. In calculating the expected capital adequacy for credit default risk, Standard & Poor's applies a default charge relevant to the tenor and rating of the security. Methodology for computing default factors.Standard & Poor's has tracked and studied default rates on each annual pool of ratings since 1981. Cumulative default statistics are published annually based on data taken from S&P; CreditPro. These cumulative default studies were used to compute the annual marginal default rate for each rating and tenor. The marginal default rates were discounted--using a spot curve based on term structure of U.S. dollar interest rate swaps plus 200 basis points (bps)--and then the discounted marginal default rates occurring on or before each tenor for each rating were aggregated for each separate pool to derive the discounted cumulative default rates. Standard & Poor's computed the average and standard deviation of the discounted cumulative default rates across each pool. To create the credit risk factors, we selected the mean of the discounted cumulative defaults experienced across the pools and added a standard deviation movement based on an established confidence level

commensurate with the targeted capital level. Recoveries were applied to the stressed discounted cumulative default rates, which varied based on credit quality of the exposure. Fixed-income securities Credit risk factors for fixed-income securities were formulated for each rating level and for five tenor groupings: (one year and less, one–five years, five–10 years, 10–20 years, more than 20 years). In the U.S., filing conventions require assets to be grouped according to NAIC (National Assoc. of Insurance Commissioners) classifications. To determine which rating(s) to assume for the stressed cumulative default factors applied to each NAIC bucket, Standard & Poor's researched the fixed-income holdings across a spectrum of U.S. insurance companies and analyzed the breakdown of ratings in each NAIC category. From this review, we weighted the ratings within the NAIC classification band. Standard & Poor's assumes NAIC 6 assets are impaired and the company has experienced a commensurate reduction in capital. Therefore, a charge of 30% on assets categorized as NAIC 6 across all tenors largely reflects a further potential impairment on the residual value. Unaffiliated preferred shares In deriving the credit default factors for preferred shares, the same methodology was used as described in the Fixed-Income Securities section with the exception that a lower recovery rate (10%) was used across all rating classes. Based on available reporting, Standard & Poor's bases the factor it applies to holdings of preferred shares of U.S. life insurance companies on NAIC classification and an assumed tenor of 10 years. It bases the factor it applies to holdings of preferred shares of U.S. non-life insurance companies (where the reporting convention does not require preferred holdings to be broken out by NAIC classification) on an assumed ratings spectrum and a tenor of 25 years. We follow a similar approach outside the U.S. Standard & Poor's assigns a preferred stock rating one notch lower than senior debt to account for subordination in recovery when determining ratings on preferred shares. Because of this, when creating the factors, we raised the ratings on our assumed holdings by one notch to more closely align it with the probability of default. Sovereign debt and government agencies and government-sponsored enterprises Standard & Poor's does not apply credit default risk factors to direct sovereign debt that we have rated 'AAA'. For all other direct sovereign debt, we apply the same default factors that we apply to corporate obligations (default probabilities and recoveries will be assumed equivalent to the pools of corporate debt). Standard & Poor's treats federal agencies of the U.S. government, and of other sovereigns that we rate 'AAA', and direct obligations of the national government (such as obligations of GNMA) in a manner consistent with the sovereign debt of the country. We treat government-sponsored enterprises (GSEs) of national agencies, which have an implied, but not direct guarantee from the U.S. government, like corporate debt when modeling capital adequacy for credit risk (GSE-issued transactions that are securitizing mortgages will be treated differently from corporate debt in our credit concentration risk model). OTC derivative counterparties In situations where Standard & Poor's determines that the counterparty credit exposure relating to OTC derivative contracts for an insurance company is material, we will calculate expected capital adequacy relating to such exposure. The determination of materiality will be based on the company analyst's discretion. To determine the expected capital adequacy relating to such exposure, Standard & Poor's will apply the stressed discounted cumulative default factors described earlier based on the average tenor of the exposure and the rating on the counterparty to the related unrealized gains of the insurance company. The analyst has the discretion to apply credit for counterparty netting and risk mitigation techniques, such as collateralization provisions, where applicable. Credit default swaps Also, in situations where Standard & Poor's determines that credit exposures relating to credit default swaps held by an insurance company are material, we will calculate expected capital adequacy relating to such exposure. To determine the level of exposure when the company has "long" credit exposure, Standard & Poor's will apply the stressed discounted cumulative default factors described previously based on the tenor of the swap and the rating on the referenced party to the notional amount of the swap. Exposure to counterparties resulting from "short" positions (purchased protection), will be analyzed in the same fashion as previously described for OTC counterparties. In cases where companies purchase credit default swaps to mitigate other credit exposures, the analyst has the discretion to factor this into the capital modeling. Commercial mortgage loans (U.S.) Methodology for computing default factors.Standard & Poor's has tracked and studied default rates on the more than 30,000 commercial mortgage loans that were originated in the U.S. since 1993 and pooled for Standard & Poor's rated commercial mortgage-backed securities (CMBS). We've tracked and recorded the

occurrences of default relative to passage of time (loan age) since the vintage year (that is, year of origination). We have also studied the loss severity (recovery) relating to this pool of loans. Unlike the individual credits in the pools previously described relating to our cumulative default studies, it is important to note that Standard & Poor's has not assigned a rating to the individual commercial loans, but instead assigns a rating to the structured security that securitizes the pool of commercial mortgages (that is, CMBS). For practical reasons, Standard & Poor's assumed that the percentage of commercial loans for each sector-type (e.g., office buildings, industrial space, and retail) in the insurance company portfolio is identical to that observed in the Standard & Poor's studies referenced earlier. This is a conservative view, as we believe that insurance companies are actually more concentrated in the sectors experiencing the lower defaults. Although conservative, it is lower than the capital charge used for financial institutions where deterioration in value has warranted higher charges. Marginal default rates for commercial mortgage loans.Expected losses for defaults on commercial mortgage loans were computed by using the cumulative default rates to derive the marginal default rates. A series of marginal default rates were derived for each vintage year. Once the marginal default rates were determined for each of the vintage years across the various loan ages, they were discounted using the tenor appropriate discount rate. For each loan age (tenor), the average and standard deviation of the discounted cumulative default rates was calculated across the vintage pools. Standard & Poor's took the mean of the discounted cumulative defaults experienced across the vintage pools and added a standard deviation movement based on confidence intervals for the rating level. The same technique (referenced tenors) described earlier was used to derive the confidence levels. As in the case of other risks, higher rated companies will be expected to hold more capital for a given level of exposure to commercial mortgage loans. A recovery assumption of 70% was applied across all tenors. Capital charges for performing commercial mortgage loans.For insurance companies, where reporting by mortgage tenor is available, five factors based on tenor buckets have been established for performing commercial mortgage loans. Standard & Poor's will apply the same factor to all the loans within each tenor bucket. For insurance companies, where reporting by mortgage tenor is not available, Standard & Poor's will apply a single factor to holdings of performing commercial mortgage loans. The single factor is based on the discounted net cumulative default factors that coincide with the assumed individual tenors used above and are weighted in accordance with the notional amounts described above, which results in a weighted tenor of roughly 10 years. Capital charges for nonperforming commercial mortgage loans.Standard & Poor's will define nonperforming loans as defaulted loans that are at least 90 days late in payment and that have not been resolved. Standard & Poor's research has determined that an average loss of roughly 30% has been experienced on the CMBS-related loans. Consequently, a capital charge factor of 30% on all nonperforming commercial mortgage loans for all target capital levels (without regard to company rating) will be applied. (In other words, unlike other types of charges, RBC adequacy for nonperforming loans will be the same regardless of the rating on the insurance company that owns the loans.) Mortgages (Europe) Standard & Poor's recognizes that the capital risk to an insurer holding a mortgage asset depends on the degree to which that mortgage is backed by collateral. Since 2003, our capital model for Germany, Switzerland, and Austria has differentiated its charges on mortgages, based on their loan to value (LTV) ratio. We are now applying this approach to all European markets. The charges will still be distinguished between performing and nonperforming loans, however, at this time no distinction is being drawn between commercial and residential mortgages in the model. Other Asset Credit Risk Charges Reinsurance receivables plus reinsurance recoveries, less reinsurance deposits and letters of credit The risk inherent in reinsurance recoverables is often the largest asset based risk for P/C companies; particularly those writing longer tailed lines of business. In that case, the primary company will estimate and record a reserve for notified outstanding claims and incurred but not reported claims and will offset any reinsurance arrangement that it believes will bear a portion of those claims. However, the reinsurer will not settle these potential obligations until the insurers have settled the gross claim, which may be a lengthy period. For this reason, Standard & Poor's selected a single tenor of 10 years for non-life insurance companies in computing the credit default factor. In the U.S., because this lag phenomenon in the life insurance sector is substantially reduced, a single tenor of one year was applied for life insurance companies. Methodology for computing default factors.A single tenor of 10 years across the rating range for non-life insurers and

one year across the rating range for life insurers was selected. The factor applied to the recoverables from reinsurers will be subject to the specific reinsurer rating. To the extent that letters of credit from a financially secure financial institution or suitable trust assets are available to offset the recoverability risk, credit for up to 100% of the collateral could be used to offset the reinsurance recoverable credit risk charge. A surcharge of 20% on reinsurance recoverable balances related to asbestos and environmental pollution losses will be computed to reflect the prospective impact on capital due to disputed coverage. This surcharge will not apply to intragroup reinsurance recoverables where the reinsurer is highly rated. Capital charge for fixed assets, including home office real estate The charge applied against owner-occupied property will reflect a 5% liquidity premium at 'BBB' (and then scaled up at higher ratings) over the real estate charge for the specific market in which the property is held. No capital charge is assigned to investment income due and accrued interest because experience shows that this is not a material risk. Deposits with credit institutions Standard & Poor's will apply a charge to cash and bank deposits to reflect the counterparty risk associated with these assets. In most developed markets, a standard flat rate charge will be applied. This charge is derived from Standard & Poor's corporate default studies and is consistent with the methodology for deriving credit risk charges on corporate bonds. As bank deposits are short-term assets, Standard & Poor's has assumed a duration of less than one year for these assets. Recovery assumptions, however, are higher than for corporate bonds. This reflects the potential support of the sovereign for depositors with financial institutions, owing to the importance of confidence in the banking system for financial stability. In less developed markets where the local currency sovereign rating is lower than 'A-', the charge applied to bank deposits will be higher to reflect the additional credit risk. The sovereign rating will be used as a proxy for the credit risk associated with bank deposits. Standard & Poor's will also apply a concentration charge to bank deposits, in line with the approach for other asset classes. Loans For unsecured loans, Standard & Poor's has again looked to its default statistics. The assumed rating for loans is 'B+', with an assumed outstanding duration of five years. If loans represent a material asset on the balance sheet, Standard & Poor's will conduct additional analysis to refine the charge. Policy loans are usually secured against an underlying policy liability, so no charge is applied to these assets. Any provisions for bad debts or recoveries should be offset against any loan balance. Unit-linked assets Standard & Poor's does not apply an explicit charge to unit-linked assets. Expense risk, lapse risk, operational risk, and risks associated with embedded options in the contract (e.g., guarantees) are captured through liability-based reserve charges. Other assets Other assets not explicitly mentioned, or captured in the calculation of TAC, are subject to a 5% other-asset charge for 'BBB' which is scaled using the same confidence levels previously described. Volatility Risk Unaffiliated common stock Methodology for computing volatility risk factors.Equity charges in the capital model have been derived for each market using a log-normal regime-switching approach. The base model was taken from work carried out at the University of Toronto and the Society of Actuaries in the U.S. Monthly price data were then taken from the local Morgan Stanley Capital International (MSCI) indices for each country for the past 30 years (or the longest possible period, if less). The model was then parameterized to these data and the tail returns were estimated over 40,000 simulations to each of our defined confidence levels. Historically, a common assumption in equity price models was that equity prices followed a geometric Brownian motion. This is equivalent to the assumption that price changes follow the log-normal distribution and continuously compounded returns follow the normal distribution. This commonly came with the additional assumption that volatility was a constant. These days, the limitations of this simple model, particularly in the tail, are more widely appreciated. The regime-switching model is one way to incorporate the observed fat tails and negative skew implied by the historical data, and also allows for nonconstant volatility to be assumed, providing a closer fit to observed returns. The regime-switching model chosen by Standard & Poor's assumes two distinct periods (regimes), generally a stable period, characterized by a relatively higher mean return and relatively lower volatility, and a less stable period, characterized by a relatively lower mean return and relatively higher volatility. Within each regime, returns are assumed to follow a log-normal distribution with regime-specific parameters. Given that the process is in either regime at any one time, there exists an associated probability of transitioning between regimes. The transition process is assumed to be Markovian, in that the probability of transition depends only on the current state, and not on previous states. The process randomly

switches between the two log-normal processes, with the probabilities of switching regimes given by the estimated transition probabilities. This process not only produces the desired fatter tails, but also captures stochastic volatility in a simple, yet effective, manner. For each country under consideration, the model was parameterized to 30 years of monthly returns data (where possible) from the respective MSCI index for the country. The parameters estimated were the mean return for each regime, the volatility for each regime, and the two transition probabilities of switching between regimes. The parameters were estimated using maximum likelihood estimation. We then simulated 10,000 monthly equity returns paths, making use of the estimated parameters and a high-quality random number generator. For each target rating, the associated confidence levels were mapped to percentiles of the one-year returns distribution of the 10,000 simulated paths to produce the capital charges. The average of the resulting charges from four 10,000-path simulations was calculated and constituted the final charge. The simulation technique involved the generation of monthly returns paths. For each path, the initial regime was selected using the unconditional probabilities pi1 and pi2. Once the initial regime was chosen, the algorithm simulated monthly returns by randomly drawing from the regime-specific estimated distribution. After the return value for the month was drawn, the algorithm compared a random draw from the uniform distribution with the appropriate transition probability to select the regime assumed for the following month. Analyst adjustments were applied to the final charges to group countries displaying similar characteristics into seven distinct charging buckets (see "Criteria | Insurance | General: Revised Insurance Risk-Based Capital Model Charge Methodology For Common Equities," published on Nov. 21, 2006, on RatingsDirect.) Diversification within cross-border equity portfolios has been recognized through applying this method to regional equity indices. Again, monthly data were taken from the MSCI, and insurers that can demonstrate that they maintain a broadly based portfolio will be able to apply the index charge to that portfolio, rather than the individual country-specific charges. Some judgment will be required in deciding whether a portfolio is sufficiently well balanced to justify the regional charge. As an example, the MSCI Europe index has about 50% of its weight over two countries (U.K., France) and about 75% of its weight over five countries (plus Germany, Switzerland, Spain). An equity portfolio would need to broadly mirror the proportions and geographic split to warrant the regional index charge. Real estate Standard & Poor's has assumed that property prices follow a lognormal distribution (that is, that compound returns follow the normal distribution) and that volatility of prices is constant over time. For selected countries, the model was parameterized with reference to quarterly or annual capital value data over periods of 10, 20, and 30 years. The primary data sources were publicly available data published by Investment Property Databank and various local indices. Given the lack of reliable data available for most countries, Standard & Poor's took the view that it would apply one property investment charge for all countries, based on its multiperiod analysis of several selected countries. The exceptions to this were Germany, for which there were sufficient data available to support Standard & Poor's long-held view that domestic property prices were somewhat less volatile than in other European countries and the Netherlands. The final charge for each rating level was then determined using the appropriate confidence levels for the parameterized model. Schedule BA invested assets, including bond, mortgages, real estate, and common stock--U.S. For companies filing U.S. statutory financial statements and reporting invested assets in Schedule BA, Standard & Poor's will--at the discretion of the analyst--apply a higher capital charge. Because these assets are usually of a higher risk or a less liquid secondary market, the range of the charge will likely be 20%–50%. For companies that employ a hedge fund-of-fund investment strategy, Standard & Poor's acknowledges that the default capital charge (20%-50%) might not reflect the reduced volatility of a fund-of-fund investment strategy. As an alternative to the general capital charge, Standard & Poor's has developed a tailored analytical approach for forecasting the likely volatility for any hedge fund-of-fund investment strategy. For the fund-of-fund investment strategies that are analyzed under this enhanced analytical approach, Standard & Poor's will use a volatility charge that reflects the risk-mitigating techniques employed by the fund manager, at a 'BBB' level of confidence using a one-year time horizon. Invested asset concentration risk This adjustment is for single issuer concentrations of more than 10% of TAC. Assets associated with a single issuer that exceed the applicable concentration are assessed a graded charge based on the size of the concentration. All assets of a single-issuer are aggregated for this assessment. Therefore, the total of

all equity, bond, loan, and derivative exposures to a single counterparty should be combined, together with any direct property investments, to assess the top 10 exposures. Any exposure greater than 10% of TAC will be subject to a concentration risk charge based on a sliding scale (see table 5). Table 5 Invested Asset Concentration Charge EXPOSURE RELATIVE TO TAC (%) CONCENTRATION CHARGE (%) 10-25 20 25-50 40 50-75 60 75-100 80 >100 100 The following example illustrates how the concentration charge is applied in practice. An exposure equal to 100% of TAC would be subject to a concentration charge of 48% [15% x 20% + 25% x 40% + 25% x 60% + 25% x 80%] of the exposure, on top of any applicable credit or market risk charges. Note that concentration charges will not be applied to sovereign debt (or debt issued by sovereign-sponsored entities that are deemed to carry a guarantee from the sovereign). Investment in sovereign debt by companies domiciled in a different sovereign jurisdiction will apply the concentration charges on the same basis as any other issuer. Size factor A size factor is incorporated in the asset risk charges. This incorporates the risk associated with the size of a company's portfolio, that is, the larger the portfolio, the more likely it is diversified and will withstand various risks. The factor is based on total invested assets and is multiplied by the total asset risk charge for the insurer, subject to a minimum of 1x. This means the largest insurer would still be subject to the full asset charges determined in the model, but would not be subject to a surcharge related to lack of portfolio diversification. Liability Related Risks P/C (Non-Life) Charges Evaluation of U.S. P/C (non-life) underwriting and reserve risks The fundamental risk associated with underwriting and reserving is that in setting both the premium and reserve levels, the emergence of a claim and its actual cost will vary from the expected cost by line of business. The risk exists not only on all present and future business but also on past business not already settled. Although internal frequency and severity estimations account for a large part of the variability, changes in economic, legal, and social conditions can add further variability to claim costs. The underwriting risk is that the company's business will be unprofitable and that underwriting losses will need to be covered by capital. Methodology for computing risk charge factors.Standard & Poor's methodology is adapted from the NAIC methodology that was first applied by U.S. regulators in the early 1990s for their RBC model. The charges reflect 20 years of experience covering at least two full underwriting cycles. Premium risk To gauge premium risk for primary and proportional reinsurance, Standard & Poor's first analyzed Schedule P data from 1994-2003 (10 years). This information is filed with the U.S. regulators and offers line-of-business accident and calendar year loss data. The risk associated with business written but not yet earned was not charged in the model, as the equity in the unearned premium reserve was judged to be sufficient to cover the risk. Accident year loss data was captured from individual companies that constituted 90% or more of the U.S. market share for each line of business. The second-highest observed accident year loss ratio (1994-2003) was selected. Investment income resulting from the time lag between premium collection and loss payment is an important consideration in insurer profitability. An average expense ratio for all years by business line was then selected. By adding the accident year loss ratio with the selected expense ratio, a combined ratio (CR) was computed. The underwriting risk factor (representing observed volatility from 1994-2003) was computed by subtracting 100% from the CR. The final premium factor (reflecting volatility over a 20-year period--both hard and soft underwriting cycles) was computed by taking a simple average of the factors for each line of business for each 10-year period. This factor is applied to the net written premium for each line of business. The factor was scaled to ratings higher than 'BBB' according to the confidence levels established in the default work on fixed-income securities. The charges for proportional reinsurance continue to reflect the underlying primary insurance charges. The data on nonproportional reinsurance is less meaningful because the information is aggregated into just three groupings: short-tailed lines of business (property); long-tailed lines of business (casualty); and financial lines referred in the U.S. statutory filings as Reinsurance A, B, and C, respectively. To provide some granularity, Standard & Poor's has chosen to base its charges on the primary charges with a surcharge for the non-proportional longer-tailed lines. The incremental charge was deemed prudent as experience has shown that reinsurers in excess of loss positions sufficiently above the working layer covers of proportional and primary business are not as aware of the unexpected emerging volatility and have less time to change pricing and terms and conditions. No surcharge is applied to property lines as the period of uncertainty is greatly reduced and a separate property-catastrophe charge is applied. We also did our analysis on a

net of reinsurance basis. Because reinsurance can reduce underwriting volatility and risk, we compared net and gross worst accident year results for all lines of business and did not find a meaningful distinction. With respect to the workers' compensation line, Standard & Poor's was concerned that there may be a downward bias in our data since some workers' compensation funds might not be part of the data set. A separate analysis was performed and our calculated factors were modestly increased. Reserve risk Reserve risk is the risk that balance sheet loss reserves will become deficient due to unexpected variability in estimating frequency and severity trends as well as changes in economic, legal, and social conditions that can add further variability to claim costs. The reserve risk charge does not attempt to measure the adequacy of current loss reserves. This is done elsewhere in the financial strength analysis and any adjustment to set the reserves at an adequate level is done in TAC. The reserve risk charge measures only the variability a company would expect to encounter in its reserve levels given its lines of business and ensures that capital is sufficient to cover this expected variability at different levels of confidence. Methodology for computing risk charge factors.Standard & Poor's used a loss development metric (LDM) methodology, where the LDM measures changes in ultimate incurred loss from one calendar year date to the next by line and accident year. The LDM measures the magnitude of adverse or favorable loss reserve development over time. The LDM was developed from Standard & Poor's database containing 20 years (1984-2003) of loss data. Volatility in LDM ratios by lag is an indicator of reserve volatility. An LDM greater than one indicates adverse reserve development from one period to the next and an LDM less than one indicates favorable reserve development. Data triangles of LDM ratios (current accident year ultimate net loss divided by ultimate accident year net loss in the prior annual time periods) were created for each company group using Schedule P lines of business. These LDM ratios, for all lines of business, were discounted using one of three LIBOR discount factors that varied with the expected line of business duration. The discounted LDM ratios were calculated by line of business, company, and accident year and a percentile distribution was established to measure adverse scenario loss development. Higher percentiles indicate more adverse scenarios. The risk charge is produced by taking a company's indicated adverse scenario ultimate incurred loss minus the carried ultimate incurred loss. The LDM factors at the 75th percentile were selected for all lines except workers' compensation, medical malpractice claims made, passenger auto liability, and homeowners'/farm owners'. Although the individual lines could be more volatile relative to other lines of business, all were stable in its volatility at the 75th percentile. The noted volatility rose more quickly and/or more steeply for some lines of business. To capture this risk, a higher percentile (ranging from 80th to 90th percentile) was used on a selected basis. The factor was scaled to the rating levels higher than 'BBB' according to the confidence levels established in the default work on fixed-income securities. The factors are the same for all primary, proportional, and non-proportional covers. Standard & Poor's will be seeking further breakdown of the Reinsurance A-C into comparable lines of business reported on proportional reinsurance. Premium and reserve charges outside the U.S. Premium and reserve charges outside the U.S. are adapted for relevant regional markets and conditions. However, in view of the dearth of public information outside the U.S., the U.S. charges, suitably mapped to regional definitions of lines of business, provide significant input to setting regional charges. Other influencing factors are: Perceptions of volatility relative to the U.S. (particularly for liability lines of business where non-U.S. experience has been significantly better); Public domain regulatory charges; The charges embedded in insurers' own capital models; and The observations derived from rating insurance securitizations. For reinsurers, U.S. exposed business will be captured using U.S. statutory lines of business and associated charges. Non-U.S. business will be captured using European accounting classes and associated charges. Exposure-driven property catastrophe charge Standard & Poor's incorporates a tax-adjusted net (of reinsurance and other forms of mitigation such as catastrophe bonds) aggregate 1-in-250-year property-line-only probable maximum loss catastrophe capital charge. This probable maximum loss must include demand surge, fire following (attached to earthquake and fire policies), sprinkler leakage, storm surge, and secondary uncertainty losses. The capital charge covers global catastrophe exposures: hurricanes (wind), flood, earthquake, tornadoes, and hail. The charge should capture the impact of investments in catastrophe bonds as well as those issued by the insurer. There are two premium adjustments. Standard & Poor's will remove the catastrophe load premium embedded in the premium risk charge so as not to double-count required

capital. In the absence of catastrophe loading computed by the insurer, a 5% premium adjustment will be made. The second adjustment is to reduce the net aggregate 1-in-250-year modeled loss by 70% of the associated net written premiums given the short-tail nature of property catastrophe risk. This charge will also be net of any applicable tax relief. Standard & Poor's believes that this charge represents an extreme event risk and if it occurs, those that are taxpayers would receive this benefit and it would absorb some of the surplus impact. The charge is not scaled up for higher target rating levels, that is, given its materiality, the 1-in-250-year standard will be applied to all insurers and reinsurers. Liability Related Risks Life Charges A fundamental risk in pricing life insurance products is that the mortality/longevity, expense, and persistency assumptions built into the products are not sufficient. Methodology for mortality risk charge Standard & Poor's measured the volatility of actual to expected ratios for the top 100 U.S. life companies. In this review, some adjustments were made to remove outliers; typically related to merger and acquisition activity. A standard deviation of actual to expected ratios was calculated and translated into a percentage of the net amount of insurance at risk. Relative factors were computed by using the confidence levels. The factors are applied to several net amount at-risk groupings: less than $1 billion, $1 billion-$5 billion, $5 billion-$10 billion, $10 billion–$50 billion, $50 billion–$100 billion, more than $100 billion. The in-force bands were created to provide credit for higher levels of diversification. Credit for catastrophic reinsurance, assuming no significant risks are excluded (nuclear, biological, and chemical) will be permitted up to 20% of the base charge. These factors would be applied for products sold in the highly developed life insurance markets: (defined as Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Italy, Japan, Republic of Korea, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Swiss Confederation, Taiwan [Republic of China], U.K., and the U.S.). The mortality factors applied in highly developed markets would be increased by 25% for those in medium developed life insurance markets: (defined as remainder of the EU, Argentina, Brazil, Chile, Israel, Malaysia, Mexico, and South Africa). The mortality factors would be increased by 50% for all other nations where a less developed life insurance market is anticipated. A relatively new product offering in many markets is critical illness coverages. Because actual loss experience is still too much in its infancy to be meaningful, Standard & Poor's used a multiple of 3x the mortality risk charges across the same band of in-force groupings denoted previously. As the data develops, it is our intention to re-evaluate the risk and assign a capital risk charge that is more reflective of the underlying volatility. In many cases critical illness cover is offered as a rider to a base life insurance policy. In these cases, only the critical illness charge is to be applied, as it is the dominant risk, and should incorporate the mortality-related volatility. Methodology for longevity risk charge The longevity charge was derived by measuring the actual life expectancy data and its development for each major European market in the past 10, 15, and 20 years. The volatility of change in life expectancy around the mean trend was then calculated and assumed to be normally distributed around that trend. The implied charge at each rating level was then calculated using the defined confidence intervals. Some additional assumptions underlie the setting of this charge. The first is that however prudent an insurer's longevity assumptions are currently, that level of prudence will be maintained in the event of a change in underlying life expectancy. The same charge is applied to an insurer that has large margins in its assumptions as to one that uses small margins, the differences in prudence of reserving will be captured elsewhere in the rating analysis. The second is that reserves for longevity are not, in practice, adjusted every year, as it typically takes several years for a trend to be distinguished from random fluctuations. Standard & Poor's observes such reserve additions occurring at approximately five-year intervals. Consequently, the longevity charge in the capital model reflects our opinion of the likely reserve strengthening that would be carried out in the coming year, rather than the actual incremental cost of one year's improvement in mortality. Life reserve risks-other Standard & Poor's also applies a life reserve charge to pick up residual risks within product types. Expense risk, lapse risk, operational risk, and risks associated with embedded options in a contract (e.g., guarantees) are captured through liability-based reserve charges. ALM Evaluating asset/liability mismatch ALM risk--U.S. Standard & Poor's has developed factors that address the increasing complexity of traditional life products. These asset-liability management (ALM) factors will be applied to insurance products, where spread income is generated between the cost of funding and the yield on assets including traditional participating

business, fixed annuities, indexed annuities, funding agreements, guaranteed investment contracts (GICs), medium-term notes (MTNs), and structured settlements. Each of the ALM factors will consist of an aggregation of various subfactors that capture the different types of risks embedded in each type of liability. All of the ALM factors will consider mismatch risk, systemic spread volatility risk, and guarantees and options. The factors for ALM risk will be applied to the statement value of liabilities. Although foreign exchange risk will not be directly addressed in the model, the analyst may make adjustments to the ALM factors to account for such risk, if applicable. Methodology for computing asset/liability mismatch factors in the U.S.The ALM factors consider expected capital requirement for durational mismatch risk, which is calculated comprising two components: an assumed durational mismatch and an applied interest rate movement (interest rate volatility). The simple durational mismatch Standard & Poor's assumes provides a proxy for the net percentage change in market value, between the combined assets, liabilities and hedge instruments, given a 100 bps change in rates (sometimes known as modified duration). Standard & Poor's also makes an assumption for the applied interest rate movements (volatility), which are stressed according to a confidence level that is commensurate with the rating's spectrum. Standard & Poor's designates a financial instrument in each international locality to act as a proxy benchmark to use when determining volatility based on empirical data. The proxies are chosen based on tenor and other characteristics, which Standard & Poor's feels best link the interest rate volatility to our assessment of company data and practices. Once the proxy benchmark asset is chosen, we determine the annualized standard deviation of monthly percentage movements (change in yield divided by previous yield) in rates observed over a representative time period, which would typically not be less than five years. The standard deviation is then multiplied by the year-end yield on the proxy benchmark asset to equate the standard deviation to an applied basis point shift. Standard & Poor's rationale for deriving standard deviations based on percentage movements, rather than actual basis point movements, and then converting back to basis points, is to allow us to take observed volatility under different rate scenarios and calibrate it to current rate levels. The ALM factors also consider capital required to support systemic spread volatility risk, which is also calculated comprising two components: an assumed spread duration mismatch and an applied proxy for spread movement (spread volatility). Standard & Poor's assumes each of the nonindexed funding type liabilities in a given international jurisdiction will be exposed to the same amount of systemic spread volatility risk for a given targeted rating category. Our factor for determining systemic spread volatility risk is designed to capture the amount of capital adequacy that is required to cover the impact of asset spreads widening relative to that of the liability or hedge instrument in cases where assets are longer than the liabilities (or market value [MV] sensitivity of assets is greater than MV sensitivity of liabilities) and spreads tightening in cases where assets are shorter than the liabilities (or MV sensitivity of assets is less than MV sensitivity of liabilities). In both cases, we seek to determine capital requirement for such losses only over the period of time where a mismatch exists and make the determination that the mismatch can be due to either case. Standard & Poor's uses the same assumed durational mismatch as developed for mismatch risk. To develop an applied proxy for spread movement, Standard & Poor's compared the empirically observed monthly spread differential between a U.S. dollar 'A' rated bond index created with a constant 10-year maturity and the 10-year constant maturity U.S. dollar swap index, over a representative time period. The spread differentials were separated by observation month to create 12 different sets of data (e.g., spread differential observed in January of each year over the entire observed period). For each set of data, Standard & Poor's calculated the change in spread observed over each of the annual periods and divided it by initial yield at the start of each year to derive the annual percentage change in spread relative to the asset yield. The standard deviation of the percentage change in spread was calculated for each of the 12 sets of data (a one-year period coincides with our targeted period for expected capital sufficiency). To calibrate the percentage change to current markets and convert to basis points, the product of the percentage change in spread and the current rate on the bond index was used as the applied standard deviation. Although Standard & Poor's is aware that various sectors (e.g., asset-backed securities, mortgage-backed securities), ratings, and tenors will produce varying statistical spread relationships, we are comfortable that this methodology provides reasonable estimates of expected spread volatility given the targeted confidence levels. The last risk the ALM factors consider is the structural features

embedded in insurance company investment products, such as payout schedules based on mortality, book value surrenders upon death, minimum guarantees, and benefit responsive withdrawals. When present, Standard & Poor's will view these risks as additive, and we have developed incremental risk factors for each of the major types of structural features that have the potential to create adverse economic losses. The appropriate incremental risk factors will be aggregated with the mismatch and spread volatility risk factors to compute a single risk factor for each product. In most cases, Standard & Poor's has made reasonable industrywide assumptions based on the extensive data available, but we realize that each company varies in its practices, and additional analytic services can be provided to refine company-specific assumptions. Variable annuity guarantees Standard & Poor's has revised its capital charges for variable annuities where some fixed or indexed guaranteed living or death benefit exists on underlying equity funds. The criteria responds to product developments which increase the risk of these benefits in varying market conditions over a long period of time and the relatively new regulatory requirements (the C-3 Phase II requirement implemented in the U.S. for year-end 2005 statutory reporting) which assesses these long-term risks to insurers through sophisticated stochastic modeling. The C-3 Phase II regulatory requirement provides a stochastic approach to modeling the risk in variable annuity guarantees. Standard & Poor's will review the stochastic results provided by companies and will apply the stochastically generated capital charges where the results are considered reasonable. The capital required will be based on the difference of the total assets required (TAR) at various conditional tail expectations (CTE) levels minus the reserves held, and it allows 50% credit for the value of hedging. The CTE-based data should be based on the American Academy of Actuaries prepackaged scenarios to ensure reasonably comparable results. As a result, CTE(90), CTE(95), CTE(97), and CTE(99) correlate with 'BBB', 'A', 'AA', and 'AAA' capital requirements, respectively. For companies with demonstrated robust hedging programs, Standard & Poor's may eventually give a higher level of credit for hedging. In cases where a company's stochastic modeling is not as robust, capital charges will be assessed through static charges applied to the related account balances associated with variable annuities with death or living benefit riders. These charges were developed using a series of more than 150 stress tests applied to a typical portfolio for each benefit type at the same confidence levels. Charges on this basis at the 'AA' level range from 0.56% for a simple return-of-premium death benefit to 3.46% for a guaranteed withdrawal benefit. ALM: Europe Life The ALM charge in Standard & Poor's capital model consists of two elements. The first is an estimate of the percentage divergence between asset and liability values, assuming that they are mismatched by one year, for interest rate and spread movements associated with each confidence level ('BBB', 'A', 'AA', 'AAA'). In the GAAP version of the model, this element of the charge is based on British pound sterling and euro data, rather than swap curves and credit spreads of the U.S. dollar market. The second element is an assumed durational mismatch between assets and liabilities. For life insurance, this ranges between one and four years, depending on the market and the structural features within it. For traditional life insurance business, where bonuses are paid on top of guaranteed benefits, credit has been given to the flexibility inherent in these discretionary benefits. Example: Germany. The modified durations of assets and guaranteed benefits typically differ by about seven years (market average). However, the current yield on those assets is greater than the current average guarantee on the matching liabilities, and therefore bonuses are being paid. If interest rates were to fall by a small amount, then the value of the guaranteed benefits would increase by more than the value of the assets, but the impact of this would be borne almost exclusively by the policyholders, in the form of lower bonuses. Only in the event of an interest rate shock greater than the current margin of asset yield over average guarantee would the insurer's capital suffer. Standard & Poor's has made assumptions about the typical spread between yields on assets and average guarantees and compared them with the assumed interest rate shocks at different rating levels. For simplicity in the model, the impact of this loss-absorbing cushion is translated into an effective reduction in the assumed mismatch for the market. In the case of Germany, the effect has been to turn the seven-year observed mismatch into an implied three-year mismatch, on average. Asset-liability management adjustment For life insurers, the application of country-specific duration settings within the model captures what we consider to be a reasonable proxy for each market and are intentionally conservative to account for risks not captured in the simple duration mismatch measure. Although these charges are appropriate in most cases, they

are most likely not appropriate for companies that use more-sophisticated tools and methods for ALM. Therefore, an adjustment to the model is possible in instances where the company can demonstrate tighter management of its ALM. We will determine the amount of credit that will be given through our assessment of the insurer's ALM risk controls, which we measure within our ERM process. For companies with Strong or Excellent ALM risk controls, as demonstrated through a review of the tools and reports that they use and some current portfolio and historical measures, we could lower the charge below the standard for their market, as shown: For those with Strong ALM risk controls, we will apply a factor of the average of the standard factor, and a factor based on the company's actual maximum target mismatch. The average will be subject to a floor of one year. For those with Excellent ERM risk controls, we will base the charge on the company's actual target mismatch, subject to the one-year floor. We will continue to apply the standard model charges for companies with Adequate or Weak ALM risk controls. Example: Company XYZ, based in Germany, operates an ALM policy that has an upper fixed income investment policy limit equivalent to a one-year duration mismatch. The capital model applies a three-year duration setting for Germany Under the four scenarios for ALM risk control assessments, we would adjust the duration setting as follows: Excellent: lower to one year. Strong: lower to two years. Adequate: remain at three years, with no offset. Weak: remain at three years, with no offset. For the U.S., the U.K., Spain, and Canada, where we already assume a one-year mismatch, no adjustment to the base factors will be necessary. The ALM methodology (linked to the ERM assessment) extends to the non-life ALM charges. This approach will be the starting point for the capital model. The fungibility of capital to cover ALM risks that may arise in different legal entities, regions, or simply between the policyholder and shareholder fund will form a key part of any analytical adjustment. The resulting capital charges will be the baseline for any credibility adjustment for an economic capital model assessment. Non-life For non-life insurance, the ALM charge is still applied, to reflect the risk to capital from movements in yields and spreads on the market value of bonds and the potential reinvestment risk associated with a mismatch between asset and liability durations. Although Standard & Poor's gives partial credit for discounting of loss reserves in its definition of capital, changes in the market value of bonds is unlikely to be offset by an equivalent change in the value of liabilities. Standard & Poor's has used the same underlying methodology to derive capital requirements for shareholder and non-life bond volatility risk as that used to derive equivalent charges on bonds backing life insurance business, however, there is no possibility of credit for discretionary benefits. Although the underlying methodology to determine interest rate and spread volatility was the same, the approach to the assumed mismatch was different. Investments in long-term bonds are subject to additional risk for non-life insurers, recognizing the greater uncertainty around liability cash flows, particularly for long-tail lines of business. To simplify the analysis and information requirements, Standard & Poor's has decided to use the same duration buckets for bonds backing non-life insurance liabilities as that used to assess credit risk. Recognizing that the weighted-average duration of fixed-income securities in each bucket is likely to be less than the midpoint of the range--and the challenges associated with matching non-life liabilities--Standard & Poor's has assumed the duration mismatch is 50% of the midpoint of each bond duration bucket. As an example, the assumed duration mismatch on bonds with one-five years until maturity is 50% of the midpoint of the range (three years), or 1.5 years. In other words, the cash flow from the asset (maturity proceeds) are assumed to emerge in three years, whereas the liability cash flows are assumed to emerge between 1.5 and 4.5 years, reflecting uncertainty around the timing of claims settlement. The longer the liability duration (and, therefore, the longer the duration of the assumed matching asset), the greater the potential mismatch and exposure to changing yields and spreads. Consequently, capital requirements are set at a higher level for longer duration assets. Shareholder The assumed duration mismatch for bonds backing shareholders' equity is the outstanding duration of the fixed-income security, as changes in yields and spreads will directly affect net assets. Like all charges in the capital model, analyst adjustments will be made to the extent that Standard & Poor's determines that the capital requirements for non-life and shareholder bond volatility are inappropriate for a particular business line or country. For example, in certain jurisdictions, accident and health and motor third-party liability reserves can have very long tails. This often reflects the structure of claims settlements which are more akin to a payout annuity than an uncertain future lump sum. Where the reserves relate to annuity-type liabilities and Standard & Poor's determines that the risks are similar

to equivalent life reserves, the charges will be adjusted accordingly. However, the capital model recognises that the impact of an interest rate shock on a portfolio where assets are shorter than liabilities has the opposite effect to the same interest rate shock on a portfolio where the assets are longer than the liabilities. Consequently, the model tests the aggregate impact of a downward shock on life, non-life and shareholder bonds and also the aggregate effect of an upward interest rate shock. The capital charge for ALM is then the greater of these two tests. Capital charges for participating business For life insurers, the mismatch between assets and liabilities is a key risk factor. It is also a risk that can be difficult to accurately measure based on public information. For participating business, the mismatch can be even more challenging to assess owing to the structure of liabilities and impact of management actions. Moreover, in some jurisdictions, participating business is written in separate funds placing certain restrictions on the movement of surplus assets around companies and groups. Consequently, Standard & Poor's approach to assessing capital adequacy for group's writing participating business will vary by market and corporate structure, to reflect the different regulatory, product, and legal issues at play. In general, public disclosure of information to accurately quantify the risks on participating business is limited. One exception to this is the U.K., which has introduced the concept of realistic balance sheets to more accurately value the complexity of risks (that is, cost of options and guarantees) faced by insurers. In this example, Standard & Poor's will adjust the information provided under the realistic reporting framework, to derive an appropriate capital charge within the model. In those markets where a robust assessment of the risks associated with participating business is not publicly available, Standard & Poor's will apply its standard charges. These capital requirements may, however, be subject to analyst adjustments to recognize any additional flexibility a company may have to adjust its liabilities in a stress scenario. U.S. Accident And Health Charges Evaluation of accident and health insurance risks In light of several structural changes that had taken place in the health insurance sector, a review of historical loss ratios demonstrates that volatility has been effectively reduced. Negotiated reimbursement fees became widespread by the late 1990s and essentially locked in the cost side of claim volatility, leaving only utilization. Many companies engage in active utilization management and disease management for many chronic conditions. These high utilizers are said to dominate the claim experience in the 80/20 rule. The migration to contracted fees had the effect of changing practice patterns regardless of insurance product. Capitated arrangements were seldom global in nature. Claims were paid more quickly and accurately--creating better opportunity to adjust pricing when experience trends differently than expected. Those with concentrations in Medicare and Medicaid will require more capital due to concentration to one payor/sponsor, uncertainty of future changes in reimbursement levels, lock-in periods to premium/benefit bids, and political ramifications of dropping out of selected geographic areas. Methodology for computing factors.Standard & Poor's undertook a study of historical loss ratio volatility (1992-2004) as a proxy for actual to expected results. Actual to expected data is not available on an aggregated industry basis. The data was aggregated by legal enterprise or rated group and a standard deviation of loss ratios for each group over the 13-year period was calculated. A natural split in volatility between large and small consolidated organizations was not found, therefore the midpoint in terms of size was selected. The median of standard deviation for consolidated companies with more than $2.5 billion medical premium was 2.8% while the median standard deviation of small companies was 3.6%. These serve as the basis for our new factors. Standard & Poor's assumed a normal distribution and applied Z-scores developed from the 2005 default statistics to develop volatility factors by various rating classes. All medical factors were increased by 20% reflecting additional catastrophic volatility not experienced in the past 13 years. Dental products have benefit limits, such that Standard & Poor's will use the medical factor before loading for catastrophic margin. Volatility is not expected to vary materially by reimbursement methodology. This assumption is based on 65% of reported comprehensive major medical premiums (excluding administrative services only [ASO] and federal employee health benefits) paid by contracted fees. Standard & Poor's expects that experience under Medicare and Medicaid risk contracts will be more volatile--not only based on recent actual experience--but also by virtue of concentration in one payor, legislated reimbursement levels, lag between bidding deadlines and effective periods of up to 18 months, and the political difficulty of exiting from a market when reimbursement is no longer adequate. These premiums are reported on health statutory filings and will be loaded by 15% additional charge.

Multiyear rate guarantees on underwritten business, if they exist, will be increased by analyst adjustment 200 bps-600 bps depending on duration of the guarantee. Administrative services business will have added benefits to scale by adding a third factor for volume more than $5 billion premium and equivalents. These factors will apply to disability as well as medical ASO business. Federal Employee Health benefits will also reflect proportionately lower volatility such that the factor (currently based on premium) is reduced to 3% from 4%. Factors for StopLoss, Hospital Indemnity, other limited benefits, and Medical Supplement coverage continue to remain unchanged are based on premium. These products are generally not influenced by negotiated rates, utilization management, and other managed care factors that have contributed to more rate stability in the sector. These products also tend to issue more opportunistically and therefore are more subject to swings in underwriting cycles. The risk factors specific to long-term care (LTC) insurance have been developed to capture the pricing risk--all the more challenging given its relatively recent emergence as a product--and an ALM risk. Standard & Poor's reviewed the changes made to the NAIC RBC formula for longer-term care insurance (effective year-end 2005) where both percentages of incurred claims and premiums were utilized. It is our opinion that a heavier weighting should be applied on the premium factor because it will result in a smoother build-up of required capital. More importantly, the incurred loss ratio for a typical LTC block of business is not expected to reach 50% until about the 10-year duration. Standard & Poor's believes that the insurance risk begins when a potentially mispriced LTC product is brought to market (e.g., a severely underpriced priced policy that is heavily marketed and sold) and not only when claims begin to emerge. Consequently, we have opted to increase the percentage of premium factor by an additional 20% over the regulatory RBC factors. Standard & Poor's applied an additional charge for LTC and individual disability to recognize the difficulty in matching assets and liabilities, given the products long liability duration. Standard & Poor's assigned risk charges for Standard Medicare Part D prescription drug benefit offered in the U.S. (effective Jan. 1, 2006). Because the product is new, Standard & Poor's has reviewed the December 2005 report published by the American Academy of Actuaries (the Academy) on behalf of the NAIC. We agreed with the Academy's approach and added a 20% surcharge to the base factor reflecting the higher threshold expected at the 'BBB' level from the RBC company action level. Factors for the target capital levels at 'A' through 'AAA' were then scaled to the confidence levels determined for fixed-income securities. Appendix 1 U.S. Life And Health Capital Adequacy Factors (%) ASSET CREDIT RISK AAA AA A BBB CONFIDENCE LEVEL LESS THAN 1 YEAR NAIC1 0.13 0.12 0.11 0.09 NAIC2 0.81 0.73 0.68 0.55 NAIC3 2.87 2.61 2.44 2 NAIC4 12.6 11.7 11 9.3 NAIC5 35.2 32.7 31.1 26.7 NAIC6 30 30 30 30 1.01 TO 5 YEARS NAIC1 0.31 0.28 0.26 0.21 NAIC2 2.3 2.1 1.97 1.63 NAIC3 9.16 8.48 8.02 6.81 NAIC4 24 22.3 20.8 18.1 NAIC5 37.7 35.4 32.9 29.8 NAIC6 30 30 30 30 5.01 TO 10 YEARS NAIC1 1.01 0.94 0.87 0.71 NAIC2 4.33 4.12 3.84 3.35 NAIC3 13.9 13.2 12.5 11.1 NAIC4 26.9 25.8 24.2 21.8 NAIC5 40.4 38.6 36.8 33.4 NAIC6 30 30 30 30 10.01 TO 20 YEARS NAIC1 1.45 1.34 1.22 1.04 NAIC2 5.29 4.98 4.66 4.15 NAIC3 15.7 14.9 14.1 12.8 NAIC4 28.9 27.3 25.8 23.2 NAIC5 42.9 41.6 39.7 35.8 NAIC6 30 30 30 30 MORE THAN 20 YEARS NAIC1 1.8 1.64 1.5 1.33 NAIC2 6.64 6.13 5.64 5.03 NAIC3 17.1 16.1 15.2 13.8 NAIC4 31.2 29.2 27.7 24.5 NAIC5 48.3 45.6 43.7 38.8 NAIC6 30 30 30 30 UNAFFILIATED PREFERRED STOCK NAIC1 3.6 3.4 3.1 2.5 NAIC2 6.4 6.1 5.7 5 NAIC3 22.3 21.1 19.6 16.9 NAIC4 36.8 35.4 33.8 31.4 NAIC5 61.9 59.3 56.2 51.1 NAIC6 30 30 30 30 COMMERCIAL MORTGAGES (TENOR N.A.) Problem commercial and farm mortages 30 26.6 21.6 13.3 Performing commercial and farm mortgages 2.9 2.7 2.5 2.2 COMMERCIAL MORTGAGES (TENOR BASED) Less than five years 1.37 1.27 1.21 1.03 Five to ten years 2.42 2.27 2.14 1.84 Ten to 20 years 3.1 2.95 2.75 2.39 20 plus years 4.45 4.05 3.72 3.3 Problem commercial and farm mortages 30 26.64 21.64 13.3 RESIDENTIAL MORTGAGES Insured mortgages In good standing 0.13 0.12 0.11 0.1 90 days overdue 0.26 0.25 0.23 0.2 Other Residential Mortgages In good standing 0.65 0.62 0.57 0.5 90 days overdue 1.31 1.23 1.15 1 CORPORATE-OWNED LIFE INSURANCE (COLI) ASSETS General account COLI with insurer rated A or higher 1.8 1.64 1.5 1.33 GA COLI with insurer rated BBB 6.64 6.13 5.64 5.03 SCHEDULE BA ASSET CHARGES Schedule BA Mortgage Loans and Real Estate 32.6 29 26.4 20 SCHEDULE BA ASSET CLASSIFIED AS BONDS Standard & Poor's rating of 'A' and above 1.01 0.94 0.87 0.71 Standard & Poor's rating of 'BBB' and above 4.33 4.12 3.84 3.35 Standard & Poor's rating of 'BB' and above 13.9 13.2 12.5 11.1 Standard & Poor's rating of 'B' and above 26.9 25.8 24.2 21.8 Standard & Poor's rating of 'CCC' and above 40.4 38.6 36.8 33.4

Standard & Poor's rating of 'CC' and above 30 30 30 30 SCHEDULE BA ASSET CLASSIFIED AS PREFERRED STOCK Standard & Poor's rating of 'A' and above 3.6 3.4 3.1 2.5 Standard & Poor's rating of 'BBB' and above 6.4 6.1 5.7 5 Standard & Poor's rating of 'BB' and above 22.3 21.1 19.6 16.9 Standard & Poor's rating of 'B' and above 36.8 35.4 33.8 31.4 Standard & Poor's rating of 'CCC' and above 61.9 59.3 56.2 51.1 Standard & Poor's rating of 'CC' and above 30 30 30 30 Affiliated life asset valuation reserve 100 100 100 100 SCHEDULE BA ASSET CLASSIFIED AS COMMON STOCK Unaffiliated common stock 43 37 32 20 Affiliated common stock 100 100 100 100 Other schedule BA assets 48.9 43.5 39.6 30 ASSET MARKET RISK COMMON STOCK Unaffiliated 43 37 32 20 Affiliated 100 100 100 100 CONVEXITY RISK (USED WHERE COMPANY-SPECIFIC MODEL NOT AVAILABLE) Mortgage-backed securities 8.1 7.2 6.6 5 Callable corporate bonds 3.3 2.9 2.6 2 Home equity ABS 3.3 2.9 2.6 2 All other ABS 1.6 1.4 1.3 1 REAL ESTATE EQUITY AND LONG-TERM ASSETS Investment real estate 29.3 26.1 23.8 18 Owner-occupied (home office) real estate 34.3 31.1 28.8 23 Foreclosed encumbrances 24.5 21.8 19.8 15 Investment encumbrances 16.3 14.5 13.2 10 Property and equipment used to deliver health care cervices 16.3 14.5 13.2 10 REINSURANCE CREDIT RISK REINSURANCE RECOVERABLES AAA rated reinsurer 0.11 0.1 0.09 0.07 AA rated reinsurer 0.11 0.1 0.09 0.07 A rated reinsurer 0.21 0.19 0.17 0.13 BBB rated reinsurer 0.88 0.08 0.71 0.54 BB rated reinsurer 2.5 2.2 2 1.5 B rated reinsurer 15.1 13.4 12.2 9.3 CCC rated reinsurer 43.5 38.7 35.2 26.7 Nonrated reinsurer 40.7 36.1 33.1 25 Regulatory Supervision 50 50 50 50 MISCELLANEOUS ASSET RISK Premium notes 8.1 7.2 6.6 5 Cash and equivalents 0.03 0.03 0.03 0.02 Short-term Investments 0.03 0.03 0.03 0.02 Write-ins for invested assets and other than invested assets 8.1 7.2 6.6 5 NONCONTROLLED ASSETS FHLB 0 0 0 0 Other 1 1 1 1 Surplus in nonguaranteed separate accounts 0.1 0.1 0.1 0.1 SEPARATE ACCOUNT EXPENSE ALLOWANCE UNDER COMMISSIONERS' RESERVE VALUATION METHOD/ COMMISSIONERS' ANNUITY RESERVE VALUATION METHOD Current surrender charge based on fund balance 0.1 0.1 0.1 0.1 Current surrender charge based on fund contribution 0.02 0.02 0.02 0.02 OFF BALANCE SHEET ITEMS Contingent liabilities 8.1 7.2 6.6 5 Long-term leases 8.1 7.2 6.6 5 ACCIDENT, HEALTH, AND MORTALITY RISK (MORTALITY RISK) (Excluding life policies with critical illness acceleration riders) Net amount at risk less than $1 bil. 0.372 0.331 0.302 0.229 $1 bil. to $5 bil. 0.248 0.22 0.202 0.152 $5 bil. to $10 bil. 0.186 0.165 0.151 0.114 $10 bil. to $50 bil. 0.155 0.138 0.126 0.095 $50 bil. to $100 bil. 0.124 0.11 0.101 0.076 More than $100 bil. 0.093 0.083 0.076 0.057 ACCIDENT, HEALTH, AND MORTALITY RISK (CRITICAL ILLNESS) (Including riders to life insurance policies) Net amount at risk less than $1 bil. 1.117 0.992 0.907 0.686 $1 bil. to $5 bil. 0.745 0.661 0.605 0.457 $5 bil. to $10 bil. 0.558 0.496 0.454 0.343 $10 bil. to $50 bil. 0.465 0.413 0.378 0.286 $50 bil. to $100 bil. 0.372 0.331 0.302 0.229 More than $100 bil. 0.279 0.248 0.227 0.172 ACCIDENT, HEALTH, AND MORTALITY RISK (MORBIDITY) Comprehensive medical and dental earned premiums FULL RISK AND EXPERIENCE RATED GROUP AND INDIVIDUAL HEALTH First $2,500 mil. 13.3 11.9 10.9 8.2 More than $2,500 mil. 10.4 9.3 8.5 6.4 FEDERAL EMPLOYEE HEALTH BENEFIT PROGRAM All premiums 5.3 4.5 3.8 3.0 MEDICARE AND MEDICAID First $2,500 mil. 15.4 13.7 12.5 9.5 More than $2,500 mil. 11.9 10.7 9.7 7.4 DENTAL All premiums 11.1 9.9 9.1 6.9 ADMINISTRATIVE SERVICES ONLY/ADMINISTRATIVE SERVICES CONTRACT(PREMIUM EQUIVALENTS) First $500 mil. 3.5 3.0 2.5 2.0 More than $500 mil. 1.3 1.1 0.9 0.8 More than $5,000 mil. 0.35 0.3 0.25 0.2 Other accident and health earned premiums Stop Loss Reinsurance 57.8 49.5 41.3 33.0 MEDICARE SUPPLEMENTAL First $25 mil. 21.0 18.0 15.0 12.0 More than $25 mil. 14.0 12.0 10.0 8.0 Hospital indemnity, accidental death and dismemberment, and other limited benefits not antic rate increases 14.0 12.0 10.0 8.0 Other limited benefits anticipating rate increases 21.0 18.0 15.0 12.0 FOR MEDICARE PART D (WITH STANDARD BENEFITS) First $25 mil. 9.6 8.3 6.9 5.5 More than $25 mil. 7.4 6.3 5.3 4.2 FOR MEDICARE PART D (WITH RISK CORRIDOR PROTECTION ONLY) First $25 mil. 12.7 11.3 10.3 7.8 More than $25 mil. 9.8 8.7 7.9 6.0 All Other Medicare Part D 19.5 17.3 15.9 12.0 Disability income earned premiums NONCANCELABLE DISABILITY INCOME First $50 mil. 73.4 65.3 59.4 45.0 More than $50 mil. 29.3 26.1 23.8 18.0 OTHER INDIVIDUAL INCOME First $50 mil. 48.9 43.5 39.6 30.0 More than $50 mil. 14.7 13.1 11.9 9.0 GROUP LONG TERM First $50 mil. 29.3 26.1 23.8 18.0 More than $50 mil. 6.5 5.8 5.3 4.0 GROUP SHORT TERM First $50 mil. 9.8 8.7 7.9 6.0 More than $50 mil. 6.5 5.8 5.3 4.0 CREDIT MONTHLY O/S BALANCE First $50 mil. 40.8 36.3 33.0 25.0 More than $50

mil. 6.5 5.8 5.3 4.0 CREDIT SINGLE PREMIUM WITH UNEARNED PREMIUM RESERVE First $50 mil. 19.6 17.4 15.8 12.0 More than $50 mil. 6.5 5.8 5.3 4.0 CREDIT SINGLE WITHOUT UNEARNED PREMIUM RESERVE First $50 mil. 29.3 26.1 23.8 18.0 More than $50 mil. 6.5 5.8 5.3 4.0 OTHER DISABILITY INCOME First $50 mil. 48.9 43.5 39.6 30 More than $50 mil. 14.7 13.1 11.9 9.0 Long-term care CLAIMS First $35 mil. 40.8 36.3 33.0 25.0 More than $35 mil. 13 11.6 10.6 8.0 EARNED PREMIUM First $50 mil. 19.6 17.4 15.8 12.0 More than $50 mil. 5.9 5.2 4.8 3.6 Accident and health claim reserves All accident and health lines 8.2 7.3 6.6 5.0 ASSET/LIABILITY RISK Applied against policy reserves FUNDING LIABILITIES WITH NO EMBEDDED OPTIONS Medium-term notes 2.9 2.6 2.4 1.8 Funding agreements 2.9 2.6 2.4 1.8 Funding agreement-backed MTNs 2.9 2.6 2.4 1.8 STRUCTURED SETTLEMENTS With life contingencies 3.8 3.3 3.1 2.3 Without life contingencies 2.9 2.6 2.4 1.8 BENEFIT RESPONSIVE GUARANTEED INVESTMENT CONTRACTS Window guaranteed investment contracts 3.8 3.3 3.1 2.3 Nonwindow guaranteed investment contracts (deposits certain) 3.2 2.8 2.6 2.0 INSTITUTIONAL FIXED RATE DEFERRED ANNUITIES Institutional fixed rate deferred annuities with life contingencies 4.9 4.4 4.0 3.0 FIXED RATE DEFERRED ANNUITIES - RETAIL Partial market value adjustment (with surrender charge) 4.4 3.9 3.6 2.7 Full market value (with surrender charge) 4.4 3.9 3.6 2.7 No market value (with surrender charge) 4.5 4 3.6 2.8 Partial partial market value (without surrender charge) 5.0 4.4 4.0 3.1 Full market value (without surrender charge) 4.9 4.4 4.0 3.0 No market value (without surrender charge) 5.1 4.5 4.1 3.1 FIXED RATE IMMEDIATE PAYOUT ANNUITIES (SPIA) Retail SPIAs with life contingency 4.3 3.8 3.5 2.7 Retail SPIAs without life contingency 3.5 3.1 2.8 2.1 Pension Annuities - with life contingency 4.3 3.8 3.5 2.7 Pension Annuities - without life contingency 3.5 3.1 2.8 2.1 Indexed annuities 2.5 2.2 2.0 1.5 2-tier annuities Indexed deferral period 3.3 2.9 2.7 2.0 Fixed rate deferral period 4.4 3.9 3.6 2.7 ACCIDENT AND HEALTH ACTIVE LIFE RESERVES Disability income 2 1.7 1.6 1.2 Long-term care 2 1.7 1.6 1.2 SYNTHETIC GUARANTEED INVESTMENT CONTRACTS No credit risk retention 0.38 0.2 0.19 0.13 With credit risk retention 0.7 0.49 0.35 0.24 OPERATIONAL RISK Total liabilities 0.2 0.2 0.2 0.2 VARIABLE ANNUITY GUARANTEE RISK (WHERE STOCHASTIC RESULTS NOT AVAILABLE) Return of premium death benefits 0.77 0.56 0.42 0.18 Death benefits enhanced (roll-up or ratchet) 3.99 3.37 2.85 1.61 Withdrawal benefits 5.52 3.46 2.73 1.37 Accumulation benefits 2.29 1.66 1.24 0.52 Income benefits 2.67 2.11 1.62 0.71 Others 3.05 2.23 1.77 0.88 N.A.--Not available. Appendix 2 U.S. Non-Life Capital Adequacy Factors (%) ASSET CREDIT RISK AAA AA A BBB CONFIDENCE LEVEL LESS THAN 1 YEAR NAIC1 0.13 0.12 0.11 0.09 NAIC2 0.81 0.73 0.68 0.55 NAIC3 2.9 2.6 2.4 2.0 NAIC4 12.6 11.7 11.0 9.3 NAIC5 35.2 32.7 31.1 26.7 NAIC6 30.0 30.0 30.0 30.0 1.01 TO 5 YEARS NAIC1 0.31 0.28 0.26 0.21 NAIC2 2.3 2.1 2.0 1.6 NAIC3 9.2 8.5 8.0 6.8 NAIC4 24.0 22.3 20.8 18.1 NAIC5 37.7 35.4 32.9 29.8 NAIC6 30.0 30.0 30.0 30.0 5.01 TO 10 YEARS NAIC1 1.01 0.94 0.87 0.71 NAIC2 4.3 4.1 3.8 3.3 NAIC3 13.9 13.2 12.5 11.1 NAIC4 26.9 25.8 24.2 21.8 NAIC5 40.4 38.6 36.8 33.4 NAIC6 30.0 30.0 30.0 30.0 10.01 TO 20 YEARS NAIC1 1.5 1.3 1.2 1.0 NAIC2 5.3 5.0 4.7 4.2 NAIC3 15.7 14.9 14.1 12.8 NAIC4 28.9 27.3 25.8 23.2 NAIC5 42.9 41.6 39.7 35.8 NAIC6 30.0 30.0 30.0 30.0 MORE THAN 20 YEARS NAIC1 1.8 1.6 1.5 1.3 NAIC2 6.6 6.1 5.6 5.0 NAIC3 17.1 16.1 15.2 13.8 NAIC4 31.2 29.2 27.7 24.5 NAIC5 48.3 45.6 43.7 38.8 NAIC6 30.0 30.0 30.0 30.0 UNAFFILIATED PREFERRED STOCK WHERE RATINGS AVAILABLE NAIC1 5.7 5.2 4.8 4.3 NAIC2 10.8 9.8 8.9 7.7 NAIC3 28.4 26.5 24.8 22.7 NAIC4 41.9 39.9 38.3 34.4 NAIC5 72.5 68.4 65.6 58.3 NAIC6 30.0 30.0 30.0 30.0 Composite change if breakdown not available 10.8 9.8 8.9 7.7 MORTGAGE LOANS First liens 8.1 7.2 6.6 5.0 Other than first liens 8.1 7.2 6.6 5.0 ASSET MARKET RISK COMMON STOCK Unaffiliated 43 37 32 20 Affiliated 100 100 100 100 CONVEXITY RISK Mortgage-backed securities 8.1 7.2 6.6 5.0 REAL ESTATE AND LONG-TERM ASSETS Real estate investment for income 29.3 26.1 23.8 18.0 Owner-occupied (home office) real estate 34.3 31.1 28.8 23.0 REINSURANCE CREDIT RISK REINSURANCE RECOVERABLES AAA rated reinsurer 0.8 0.7 0.6 0.5 AA rated reinsurer 1.3 1.2 1.1 0.8 A rated reinsurer 2.3 2.0 1.8 1.4 BBB rated reinsurer 5.0 4.4 4.1 3.1 BB rated reinsurer 18.4 16.3 14.9 11.3 B rated reinsurer 34.1 30.3 27.7 21.0 CCC' rated reinsurer 55.5 49.3 45.1 34.1 Nonrated reinsurer 40.7 36.1 33.1 25.0 Regulatory supervision 50.0 50.0 50.0 50.0 MISCELLANEOUS ASSET RISK Cash 0.03 0.03 0.03 0.02 Schedule BA part 1 bonds plus mortgage plus real estate plus common stock 32.6 29.0 26.4 20.0 Other Schedule BA invested assets (excluding Cap 17) 48.9 43.5 39.6 30.0 Aggregate write-ins for invested assets plus receivable for securities 8.1 7.2 6.6 5.0 Federal income tax

recoverable 8.1 7.2 6.6 5.0 Amounts receivable relating to uninsured accident and health plans 8.1 7.2 6.6 5.0 Aggregate write-ins for other than invested assets 8.1 7.2 6.6 5.0 Net deferred tax asset 8.1 7.2 6.6 5.0 OFF BALANCE SHEET ITEMS Contingent Liabilities 8.1 7.2 6.6 5.0 Long-term leases 8.1 7.2 6.6 5.0 PROPERTY/CASUALTY PREMIUM RISK DIRECT BUSINES AND PROPORTIONAL REINSURANCE Homeowners' multi-peril 34.6 30.7 28.1 21.3 Farm owners' multi-peril 34.6 30.7 28.1 21.3 Private passenger auto liability 14.5 12.9 11.8 8.9 Fire 14.6 13.0 11.9 9.0 Allied lines 14.6 13.0 11.9 9.0 Mortgage guaranty 53.7 47.7 43.6 33.0 Financial guaranty 53.7 47.7 43.6 33.0 Inland marine 14.6 13.0 11.9 9.0 Earthquake 14.6 13.0 11.9 9.0 Burglary and theft 14.6 13.0 11.9 9.0 Accident and health 53.7 47.7 43.6 33.0 Credit 53.7 47.7 43.6 33.0 Auto physical damage 17.5 15.6 14.2 10.8 Fidelity and Surety 14.6 13.0 11.9 9.0 International 44.8 39.8 36.4 27.5 Commercial auto liability 30.7 27.3 25 18.9 Medical malpractice-occurrence 87.5 77.7 71.1 53.8 Medical malpractice-claims made 63.9 56.7 51.9 39.3 Ocean marine and aircraft 24.7 22.0 20.1 15.2 Boiler and machinery 24.7 22.0 20.1 15.2 Other liability-occurrence 49.2 43.7 40.0 30.2 Other liability-claims made 37.6 33.4 30.6 23.1 Products liability-occurrence 52.9 46.9 42.9 32.5 Products liability-claims made 40.5 36.0 32.9 24.9 Commerical multiple peril 21.3 18.9 17.3 13.1 Workers' compensation 29.2 26.0 23.8 18.0 NONPROPORTIONAL REINSURANCE (TREATY AND FACULTATIVE) Homeowners' multi-peril 43.3 38.4 35.1 26.6 Farm owners' multi-peril 43.3 38.4 35.1 26.6 Private passenger auto liability 18.1 16.1 14.7 11.1 Fire 14.6 13.0 11.9 9.0 Allied lines 14.6 13.0 11.9 9.0 Mortgage guaranty 67.1 59.6 54.5 41.3 Financial guaranty 67.1 59.6 54.5 41.3 Inland marine 14.6 13.0 11.9 9.0 Earthquake 14.6 13.0 11.9 9.0 Burglary and theft 14.6 13.0 11.9 9.0 Accident and health 53.7 47.7 43.6 33 Credit 67.1 59.6 54.5 41.3 Auto physical damage 17.5 15.6 14.2 10.8 Fidelity and surety 18.3 16.3 14.9 11.3 International 55.9 49.7 45.5 34.4 Commercial auto liability 30.7 27.3 25.0 18.9 Medical malpractice-occurrence 109.4 97.1 88.9 67.2 Medical malpractice-claims made 79.9 70.9 64.9 49.1 Ocean marine and aircraft 30.9 27.5 25.1 19.0 Boiler and machinery 24.7 22.0 20.1 15.2 Other liability-occurrence 61.5 54.6 50.0 37.8 Other liability-claims made 47 41.8 38.2 28.9 Products liability-occurrence 66.1 58.7 53.7 40.6 Products liability-claims made 50.6 45.0 41.1 31.1 Commerical multiple peril 26.6 23.6 21.6 16.3 Workers' compensation 36.6 32.5 29.7 22.5 PROPERTY/CASUALTY RESERVE RISK RESERVE RISK CHARGE LINES OF BUSINESS Homeowners'/Farm owners' 18.6 16.5 15.1 11.4 Private passenger auto liability/medical 15.8 14.0 12.8 9.7 Special property 45.6 40.5 37.0 28.0 Auto physical damage 45.6 40.5 37.0 28.0 Fidelity/surety 45.6 40.5 37.0 28.0 Other (credit, accident and health, write-ins) 45.6 40.5 37.0 28.0 Financial guaranty/mortgage guaranty 45.6 40.5 37.0 28.0 International 24.4 21.7 19.8 15.0 Commercial auto/truck liability/medical 19.5 17.3 15.9 12.0 Medical malpractice-occurrence 60.2 53.5 48.9 37.0 Medical malpractice-claims made 35.8 31.8 29.1 22.0 Special liability 26 23.1 21.2 16.0 Other liability-occurrence 22.8 20.2 18.5 14.0 Other liability-claims made 27.7 24.6 22.5 17.0 Products liability-occurrence 39.1 34.7 31.7 24.0 Products liability-claims made 21.2 18.8 17.2 13.0 Commercial multiple peril 8.5 7.5 6.9 5.2 Workers' compensation 16.4 14.6 13.4 10.1 OPERATIONAL RISK Direct premiums written factor 0.5 Appendix 3 EUROPEAN CAPITAL ADEQUACY FACTORS (%) AAA AA A BBB MARKET RISK—EQUITIES U.S, U.K., Australia, South Africa, Belgium, Hungary 43.0 37.0 32.0 20.0 Mexico, Switzerland, Netherlands, Japan, Denmark 45.0 40.0 37.0 25.0 Spain, Canada, Norway, Hong Kong, Italy, Austria, France, Sweden, Germany 53.0 47.0 43.0 30.0 Singapore, Czech Republic 62.0 56.0 52.0 40.0 Korea, Indonesia, Malaysia, Finland, Taiwan 71.0 65.0 60.0 45.0 Poland, Thailand, Russia 83.0 79.0 75.0 60.0 Europe 43.0 37.0 32.0 20.0 World 45.0 40.0 37.0 25.0 Far East 45.0 40.0 37.0 25.0 Nordic Countries 53.0 47.0 43.0 30.0 Emerging Market Far East 62.0 56.0 52.0 40.0 Hedge Funds 54.0 46.0 40.0 25.0 Private Equity 83.0 79.0 75.0 60.0 MARKET RISK—PROPERTIES Germany 10.0 8.0 7.0 5.0 Netherlands 15.0 13.0 11.0 8.0 Other Europe 20.0 18.0 15.0 10.0 Owner-occupied 28.0 25.0 22.0 15.0 CREDIT RISK—BONDS LESS THAN 1 YEAR AAA Security 0.109 0.098 0.090 0.070 AA Security 0.109 0.098 0.090 0.070 A Security 0.180 0.161 0.149 0.117 BBB Security 0.808 0.732 0.680 0.546 BB Security 2.866 2.615 2.445 2.000 B Security 12.626 11.670 11.023 9.332 CCC/C Security 35.217 32.737 31.059 26.671 Unrated 2.866 2.615 2.445 2.000 1.01 TO 5 YEARS AAA Security 0.149 0.133 0.123 0.095 AA Security 0.194 0.175 0.162 0.129 A Security 0.574 0.521 0.485 0.392 BBB Security 2.299 2.104 1.972 1.627 BB Security 9.159 8.478 8.017 6.812 B Security 23.976 22.284 20.793 18.115 CCC/C Security 37.653 35.439 32.920 29.812 Unrated 9.159 8.478 8.017 6.812 5.01 TO 10 YEARS AAA Security 0.446 0.413 0.381 0.309 AA

Security 0.761 0.713 0.668 0.560 A Security 1.887 1.758 1.620 1.312 BBB Security 4.333 4.116 3.842 3.346 BB Security 13.865 13.212 12.542 11.140 B Security 26.877 25.815 24.198 21.838 CCC/C Security 40.441 38.588 36.825 33.394 Unrated 13.865 13.212 12.542 11.140 10.01 TO 20 YEARS AAA Security 0.674 0.633 0.581 0.511 AA Security 1.374 1.287 1.183 1.033 A Security 2.491 2.290 2.066 1.713 BBB Security 5.295 4.980 4.658 4.152 BB Security 15.673 14.893 14.089 12.780 B Security 28.889 27.337 25.833 23.207 CCC/C Security 42.898 41.567 39.702 35.768 Unrated 15.673 14.893 14.089 12.780 MORE THAN 20 YEARS AAA Security 0.847 0.787 0.737 0.672 AA Security 1.636 1.511 1.407 1.271 A Security 3.117 2.816 2.537 2.201 BBB Security 6.638 6.127 5.642 5.032 BB Security 17.102 16.133 15.185 13.791 B Security 31.167 29.178 27.689 24.537 CCC/C Security 48.341 45.585 43.721 38.845 Unrated 17.102 16.133 15.185 13.791 MARKET RISK—LIFE BONDS ASSUMED DURATION MISMATCH (YEARS) U.K., U.S. 1.00 2.373 2.108 1.928 1.458 Netherlands, France, Spain, Italy, Switzerland, Belgium 2.00 4.747 4.216 3.856 2.916 Germany, Austria, Central & Eastern Europe 3.00 7.120 6.323 5.784 4.375 Nordic Countries 4.00 9.494 8.431 7.713 5.833 MARKET RISK—NONLIFE BONDS ASSUMED DURATION MISMATCH (YEARS) Bond duration (less than 1 year) 0.25 0.593 0.527 0.482 0.365 Bond duration (1-5 years) 1.50 3.560 3.162 2.892 2.187 Bond duration (5-10 years) 3.75 8.900 7.904 7.230 5.468 Bond duration (more than 10 years) 7.50 17.800 15.808 14.461 10.937 MARKET RISK—SHAREHOLDER BONDS ASSUMED DURATION MISMATCH (YEARS) Bond duration (less than 1 year) 0.50 1.187 1.054 0.964 0.729 Bond duration (1-5years) 3.00 7.120 6.323 5.784 4.375 Bond duration (5-10 years) 7.50 17.800 15.808 14.461 10.937 Bond duration (more than 10 years) 15.00 35.601 31.617 28.922 21.874 CREDIT RISK—REINSURANCE RECOVERABLES Reinsurers rated 'AAA' 0.8 0.7 0.6 0.5 Reinsurers rated 'AA' 1.3 1.2 1.1 0.8 Reinsurers rated 'A' 2.3 2.0 1.8 1.4 Reinsurers rated 'BBB' 5.0 4.4 4.1 3.1 Reinsurers rated 'BB' 18.4 16.3 14.9 11.3 Reinsurers rated 'B' 34.1 30.3 27.7 21.0 Reinsurers rated 'CCC' 50.0 49.3 45.1 34.1 Reinsurers rated 'R' 50.0 50.0 50.0 50.0 Unrated reinsurers 40.7 36.1 33.1 25.0 OTHER FUNDS UNDER MANAGEMENT (OFF BALANCE SHEET) First $2.5 bil. 0.81 0.72 0.66 0.50 Next $7.5 bil. 0.49 0.43 0.40 0.30 Next $15 bil. 0.33 0.29 0.26 0.20 Excess over $25 bil. 0.16 0.14 0.13 0.10 OTHER ASSETS MORTGAGES—PERFORMING LTV <60% 0.81 0.72 0.66 0.50 LTV 60%-85% 8.14 7.23 6.61 5.00 LTV >85% 16.28 14.45 13.22 10.00 MORTGAGES—NONPERFORMING LTV <60% 1.63 1.45 1.32 1.00 LTV 60%-85% 16.28 14.45 13.22 10.00 LTV >85% 32.55 28.91 26.44 20.00 Preference shares 9.87 9.05 8.15 7.04 Derivatives 0.76 0.71 0.67 0.56 Loans 24.41 21.68 19.83 15.00 BANK DEPOSITS A- or higher 0.030 0.027 0.025 0.019 BBB 0.147 0.133 0.124 0.099 BB 0.478 0.436 0.407 0.333 B 2.104 1.945 1.837 1.555 CCC+ or lower 5.870 5.456 5.177 4.445 Deferred tax assets 8.1 7.2 6.6 5.0 Deposits with cedents 4.9 4.3 4.0 3.0 Other assets 8.1 7.2 6.6 5.0 Fixed assets 100.0 100.0 100.0 100.0 MORTALITY—NET SUMS AT RISK (EXCLUDING LIFE POLICIES WITH CRITICAL ILLNESS ACCELERATION RIDERS) HIGHLY DEVELOPED LIFE MARKETS Less than $1 bil. 0.372 0.331 0.302 0.229 $1 bil. to $5 bil. 0.248 0.220 0.202 0.152 $5 bil. to $10 bil. 0.186 0.165 0.151 0.114 $10 bil. to $50 bil. 0.155 0.138 0.126 0.095 $50 bil. to $100 bil. 0.124 0.110 0.101 0.076 More than $100 bil. 0.093 0.083 0.076 0.057 MEDIUM DEVELOPED LIFE MARKETS Less than $1 bil. 0.465 0.414 0.378 0.286 $1 bil. to $5 bil. 0.310 0.275 0.253 0.190 $5 bil. to $10 bil. 0.233 0.206 0.189 0.143 $10 bil. to $50 bil. 0.194 0.173 0.158 0.119 $50 bil. to $100 bil. 0.155 0.138 0.126 0.095 More than $100 bil. 0.116 0.104 0.095 0.071 LESS DEVELOPED LIFE MARKETS Less than $1 bil. 0.558 0.497 0.453 0.344 $1 bil. to $5 bil. 0.372 0.330 0.303 0.228 $5 bil. to $10 bil. 0.279 0.248 0.227 0.171 $10 bil. to $50 bil. 0.233 0.207 0.189 0.143 $50 bil. to $100 bil. 0.186 0.165 0.152 0.114 More than $100 bil. 0.140 0.125 0.114 0.086 MORBIDITY—NET SUMS AT RISK (CRITICAL ILLNESS) (INCLUDING RIDERS TO LIFE INSURANCE POLICIES) HIGHLY DEVELOPED LIFE MARKETS Less than $1 bil. 1.117 0.992 0.907 0.686 $1 bil. to $5 bil. 0.745 0.661 0.605 0.457 $5 bil. to $10 bil. 0.558 0.496 0.454 0.343 $10 bil. to $50 bil. 0.465 0.413 0.378 0.286 $50 bil. to $100 bil. 0.372 0.331 0.302 0.229 More than $100 bil. 0.279 0.248 0.227 0.172 MEDIUM DEVELOPED LIFE MARKETS Less than $1 bil. 1.396 1.240 1.134 0.858 $1 bil. to $5 bil. 0.931 0.826 0.756 0.571 $5 bil. to $10 bil. 0.698 0.620 0.568 0.429 $10 bil. to $50 bil. 0.581 0.516 0.473 0.358 $50 bil. to $100 bil. 0.465 0.414 0.378 0.286 More than $100 bil. 0.349 0.310 0.284 0.215 LESS DEVELOPED LIFE MARKETS Less than $1 bil. 1.676 1.488 1.361 1.029 $1 bil. to $5 bil. 1.118 0.992 0.908 0.686 $5 bil. to $10 bil. 0.837 0.744 0.681 0.515 $10 bil. to $50 bil. 0.698 0.620 0.567 0.429 $50 bil. to $100 bil. 0.558 0.497 0.453 0.344 More

than $100 bil. 0.419 0.372 0.341 0.258 LONGEVITY RISK Longevity risk 8.104 7.236 6.604 5.000 LIFE RESERVE RISK PARTICIPATING BUSINESS Participating business (excluding annuities) 3.26 2.89 2.64 2.00 Participating annuities 3.26 2.89 2.64 2.00 NONPARTICIPATING BUSINESS (EXCLUDING ANNUITIES) Protection 1.06 0.94 0.86 0.65 Savings 3.26 2.89 2.64 2.00 Permanent health insurance 1.06 0.94 0.86 0.65 NONPARTICIPATING ANNUITIES Immediate annuities 0.73 0.65 0.60 0.45 Deferred annuities (without guarantees) 1.06 0.94 0.86 0.65 Deferred annuities (with guarantees) 3.26 2.89 2.64 2.00 Linked business with investment guarantees 3.26 2.89 2.64 2.00 Linked business with expense guarantees only 1.63 1.45 1.32 1.00 Linked business without guarantees 1.06 0.94 0.86 0.65 NONLIFE NET PREMIUM RISK PRIMARY AND PROPORTIONAL REINSURANCE BUSINESS Health-based on morbidity tables 20.0 17.0 16.0 12.0 Accident and health—other 24.0 22.0 20.0 15.0 Motor 16.0 14.0 13.0 10.0 Marine 36.0 32.0 29.0 22.0 Aviation 52.0 46.0 42.0 32.0 Transport 20.0 17.0 16.0 12.0 Property 29.0 26.0 24.0 18.0 Liability 37.0 33.0 30.0 23.0 Pecuniary 29.0 26.0 24.0 18.0 Credit 122.0 108.0 99.0 75.0 NONPROPORTIONAL REINSURANCE (TREATY AND FACULTATIVE) Health-based on morbidity tables 29.0 26.0 24.0 18.0 Accident and health—other 37.0 33.0 30.0 23.0 Motor 24.0 22.0 20.0 15.0 Marine 54.0 48.0 44.0 33.0 Aviation 78.0 69.0 63.0 48.0 Transport 29.0 26.0 24.0 18.0 Property 44.0 39.0 36.0 27.0 Liability 57.0 51.0 46.0 35.0 Pecuniary 44.0 39.0 36.0 27.0 Credit 183.0 163.0 149.0 112.5 Finite 7.0 6.0 5.0 4.0 NONLIFE LOSS RESERVE RISK PRIMARY AND PROPORTIONAL REINSURANCE BUSINESS Health-based on morbidity tables 8.0 7.0 6.0 5.0 Accident and health—other 33.0 29.0 26.0 20.0 Motor 18.0 16.0 15.0 11.0 Marine, aviation, and transport 26.0 23.0 21.0 16.0 Property 11.0 10.0 9.0 7.0 Liability 24.0 22.0 20.0 15.0 Pecuniary 33.0 29.0 26.0 20.0 Credit 41.0 36.0 33.0 25.0 NONPROPORTIONAL REINSURANCE (TREATY AND FACULTATIVE) Health-based on morbidity tables 8.0 7.0 6.0 5.0 Accident and health—other 33.0 29.0 26.0 20.0 Motor 18.0 16.0 15.0 11.0 Marine, aviation, and transport 26.0 23.0 21.0 16.0 Property 11.0 10.0 9.0 7.0 Liability 24.0 22.0 20.0 15.0 Pecuniary 33.0 29.0 26.0 20.0 Credit 41.0 36.0 33.0 25.0 Finite 10.0 9.0 8.0 6.0 U.K. WITH-PROFITS RISK CHARGES Value in force haircut 50.0 50.0 50.0 50.0 Haircut on investment in subsidiaries 100.0 100.0 100.0 100.0 Risk capital margin loading 50.0 50.0 50.0 50.0 Longevity risk charge 8.104 7.236 6.604 5.000 Reserve risk charge 0.73 0.65 0.60 0.45 Risk capital margin scaling factor 162.8 144.5 132.2 100.0 GERMAN HEALTH INSURANCE RISK CHARGES Net ageing reserves 4.1 3.6 3.3 2.5