



Quantitative Analysis Report

User's Guide – Property/Casualty Edition

Introduction

The Quantitative Analysis Report (QAR), developed by A.M. Best Co., was designed to provide the user with fundamental quantitative information, presented in a high-powered analytical format to evaluate an insurance company's financial strength, operating performance, and ability to meet its current and future obligations to policyholders. Best's QARs provide users the basic quantitative framework from which A.M. Best approaches and evaluates a company's historic operating performance and financial condition, both in absolute terms as well as relative to appropriate industry composites.

Best's QAR contains a summary analysis followed by 14 pages of comprehensive quantitative information detailing key financial and operating performance measures within three critical evaluation areas: Profitability; Investments and Liquidity; and Leverage/Capitalization, which includes an analysis of reinsurance utilization and reserve development trends. The five-year financial presentation (ten years for loss reserves) has been designed for company analysts as a helpful management tool for trend analysis, financial planning and review, and competitive benchmarking. In addition, QAR is an excellent tool for security analysts who are interested in assessing the creditworthiness and financial strength of an insurance company.

Best's QARs, which are available for individual companies, groups, product line sectors and the entire Property/Casualty industry, can be used as an invaluable source for comparing a company's operating performance and financial condition to specific peers and industry composites. Consistent with Best's rating approach, Best's QARs are also generated for rating unit entities. Rating units represent either a single operating company or several affiliated member companies that share common rating assignments due to internal pooling or reinsurance arrangements, or strategic affiliations that financially link individual insurers together. Best has included industry composite benchmarks that enable analysts to make relevant financial comparisons between rating unit entities and the industry and/or industry segments comprised of companies conducting similar underwriting activities.

While Best's QAR is an important analytical tool used in the rating process, several other significant tools are utilized by Best's insurance analysts, including Best's proprietary Loss Reserve Adequacy Model and Best's proprietary Capital Adequacy Model (BCAR). Further, Best's QAR does not incorporate company-specific adjustments, such as equity adjustments related to a company's loss reserves, unearned premiums or assets. In addition, other quantitative considerations drawn from Supplemental Rating Questionnaires, which contain critical and confidential information provided by companies, are factored into Best's quantitative rating evaluation. Lastly, Best's QAR does not incorporate any qualitative considerations, such as a company's market profile, its future business plans or management competence, all of which play a critical role in Best's overall assessment of an insurer's financial strength and operating performance.

Together, our quantitative and qualitative evaluations form the basis of Best's Ratings. For a detailed explanation of Best's Rating system, along with a complete discussion of our quantitative and qualitative evaluations, refer to the Preface of the Current editions of Best's Insurance Reports® or Best's Key Rating Guide®– Property/ Casualty. A complete QAR is presented in this publication for Total US PC Industry and Reinsurance.



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QAR Overview pages are presented in this publication for the following industry composites:

- Total US PC Stock
- Total US PC Lloyds
- Total US PC Reciprocal
- Total US PC State Funds
- Total US PC Agency
- Total US PC Direct
- Total US PC Other Org. Type
- Total US PC Other Market Type
- Total US PC Risk Retention Groups
- Reinsurance Composite
- Private Passenger Non-Standard Auto
- Surplus Lines Composite
- Fidelity & Surety Composite
- Commercial Lines Segment
- Personal Lines Composite
- Accident & Health Composite
- Commercial Automobile Composite
- Commercial Casualty Composite
- Commercial Property Composite
- Credit Composite
- Financial Guaranty Composite
- Medical Professional Liability Composite
- Mortgage Guaranty Composite
- Private Passenger Standard Auto & Homeowners Composite
- Private Passenger Standard Automobile Composite
- Personal Property Composite
- Workers' Compensation Composite
- Warranty Composite

Definitions for most of the financial statistics shown on the Overview page are provided later within the relevant QAR sections. Two measures that are unique to the summary page are defined below:

AY Comb. (Accident Year Combined Ratio): Examines a company's accident year underwriting results. This ratio represents the current estimate of the accident year loss and loss adjustment expense ratio plus the calendar year expense ratio.

CY-AY (Calendar Year Combined Ratio Less Accident Year Combined Ratio): Measures the point impact associated with prior accident year loss reserve deficiencies (+) or redundancies (-) recognized in a company's reported combined ratio.

Quantitative Evaluation of Profitability Importance of Profitability

Profitable insurance operations are essential for a company to operate as an ongoing concern. Profit is a measure of the competence and ability of management to provide viable insurance products at competitive and sound prices and maintain a financially strong company for both policyholders and stockholders. Operational profitability (underwriting and investment income) is the single most important source of surplus growth. Surplus represents additional security for policyholders and is an important safety cushion for protection against catastrophes and other unexpected underwriting and/or investment events, and onerous regulatory actions.

In order to assess a company's profitability, A.M. Best Co. recommends an analysis of the components of a company's statutory earnings over the past five-year period to make an evaluation of the source(s) of profits and the degree and trend of various profitability measures. The areas reviewed include underwriting, investments, capital gains/losses and total operating earnings, both before and after taxes. Profitability measures are easily distorted by operational changes; therefore, a review of by-line earnings, the mix and trends of premium volume, investment income, net income and surplus is necessary.

An analysis of premium volume is important to determine changes in the amount, geographic distribution, diversification and volatility of the types of coverage written by a company, which can have either a beneficial or adverse effect on a company's profitability. Underwriting income, investment income and, consequently, surplus also can be significantly affected by external changes in the economic, regulatory, judicial and financial market environments, as well as by natural and man-made catastrophes. Internally generated changes affecting profitability include levels of growth, taxes, expenses, persistency, loss and unearned premium reserves, reinsurance coverage, asset mix and concentrations, and statement vs. market value of assets.



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Key Profitability Measures Analyzed Sources of Earnings and Surplus Growth

(Refer to Page 1 of QAR)

This section examines the sources, trends, and quality of a company's annual change in surplus by reviewing its operating earnings, investment gains, net contributed capital and other surplus changes. This analysis is important in assessing a company's ability to generate capital from recurring internal sources, including operating income before and after taxes, rather than having to rely on non-recurring external sources such as realized and unrealized capital gains, contributed capital or other surplus changes. Internal capital generation from operating earnings, as measured by Pretax Operating Income/Loss, is comprised of Net Underwriting Income, Other Income/Expense and Net Investment Income. Definitions for key components of surplus growth are detailed below.

Net Underwriting Income: Pretax earnings from all underwriting activities calculated as Net Premiums Earned less Incurred Losses and Loss Adjustment Expenses, Incurred Underwriting Expenses and Policyholder Dividends. These components of underwriting earnings, along with a five-year trend, are reflected on page 2 of QAR.

Other Income/Expense: Miscellaneous sources of operating income or expenses that principally relate to premium finance income or charges for uncollectible premium and reinsurance balances.

Net Investment Income: Investment income earned during the year less investment expenses and depreciation on real estate. An additional analysis detailing gross investment income (before investment expenses and depreciation) and gross investment yields by major asset class is detailed on page 8 of QAR.

Pretax Operating Income/Loss: Pretax operating earnings, before capital gains, generated from underwriting, investment and other miscellaneous operating sources.

Realized Capital Gain/Loss: Net pretax capital gain or loss realized on the sale of bonds, common stock, preferred stock, real estate and other invested assets during the year. An additional analysis detailing realized capital gains or losses by major asset class is detailed on page 8 of QAR.

Net Income/Loss: Total after-tax earnings generated from operations and realized capital gains.

Unrealized Capital Gain/Loss: Net unrealized market appreciation or depreciation on the carrying value of invested assets, principally equity securities, from the prior year or from date of purchase if held less than one year. An additional analysis detailing unrealized capital gains or losses by major asset class is detailed on page 8 of QAR.

Total Return: After-tax operating earnings plus realized and unrealized capital gains. This amount is used in certain return measures.

Contributed Capital: Paid-in capital and surplus funds contributed from outside the company. These contributions include proceeds from the sale of newly issued preferred and common stock and other additions or deductions to paid-in capital and surplus.

Stockholder Dividends: Distribution of earnings to the owner(s) of the company. Generally, such distributions are used to service outstanding debt or fund shareholder dividend requirements at the holding or parent company level and can place a drag on an insurance company's future earnings, surplus accumulation and cash flows.



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Other Surplus Gain/Loss: Miscellaneous sources of non-income changes to surplus, including changes in non-admitted assets, changes in conditional reserve balances, foreign exchange adjustments, prior period adjustments and other statutory line items. In some instances, this category may include A.M. Best adjustments to the surplus of a group due to the sale, purchase or transfer of a property/casualty subsidiary in a particular year.

Change in Policyholders' Surplus: Represents the annual change in a company's policyholders' surplus derived from operating earnings, investment gains, net contributed capital and other miscellaneous sources.

Quality of Year-End Surplus

(Refer to Page 1 of QAR)

This section examines the composition of a company's year-end surplus over the past five years. This analysis is important to assess the permanence and quality of a company's capital structure at the insurance operating level. Generally, companies whose assigned surplus is largely comprised of debt-like capital requiring some form of debt service, including surplus notes or other special surplus funds, maintain a more encumbered and lower quality capital structure than companies with permanent capitalization in the form of capital stock and contributed capital. In addition, a company that maintains a greater proportion of its year-end surplus in unassigned surplus, which principally includes accumulated earnings, generally reflects a more seasoned, profitable operation. In contrast, a company whose surplus composition is heavily dependent upon contributed capital may be in the early stages of its operation or may have required capital infusions to offset accumulated operating losses. Caution should be exercised in analyzing the composition of Property/Casualty groups' surplus due to current consolidation procedures.

Dividend Requirements: Examines the portion of a stock company's pretax operating income and after-tax net income that is distributed to its owner(s).

Earnings and Surplus Growth Analysis

(Refer to Page 1 of QAR)

This section examines the sources and trends of a company's one-year and five-year growth in earnings and surplus. Companies with higher quality surplus growth will show Strong internal capital generation from pretax operating income rather than having to rely on investment capital gains and other surplus gains.

Return Analysis

(Refer to Page 1 of QAR)

This section examines three key return statistics that measure a company's profitability: Return on Invested Assets (ROIA), Return on Revenue (ROR) and Return on Equity (ROE) on a one-year and five-year basis. Each of these three return measures is further split between pretax operating returns, after-tax operating returns including realized capital gains, and total after-tax operating returns including all investment capital gains. Within Best's rating evaluation, greater emphasis is placed on pretax Return on Revenue and Return on Equity operating returns, which are based on recurring internal earnings before investment gains and taxes.

Major factors affecting a company's returns include its level and mix of business writings, its geographic orientation and regulatory environment, its investment philosophy, its financial market environment and other internal factors including growth, taxes, expenses, persistency, reinsurance coverage and premium and loss reserve adequacy. Definitions for key operating return measures are detailed below.

Net Investment Yield: Measures the average return on a company's invested assets by dividing the company's annual net investment income by the mean of cash and net invested assets. This return measure is before capital gains/losses and before income taxes.

Pretax Operating Income to Net Premiums Earned: Measures a company's operational profitability and is calculated as pretax



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operating income divided by net premiums earned. This return measure is before capital gains/losses and before income taxes.

Pretax Operating Income to Policyholders' Surplus: Measures a company's operational profitability and is calculated as pretax operating income divided by the mean of prior and current year-end surplus. This return measure is before capital gains/losses and before income taxes.

Return on Policyholders' Surplus: Measures a company's overall profitability from underwriting and investment activity after-tax divided by the mean of prior and current year-end surplus.

Overall Underwriting Experience

(Refer to Page 2 of QAR)

This section examines the components and five-year trend of a company's total pretax underwriting profit or loss generated by underwriting activities. A growth analysis, which gives insight into the incurred loss and loss adjustment expense activity relative to net premiums earned and whether or not expense levels are being managed relative to net premiums written, is presented. In addition, this section illustrates the components and trend of a company's Combined Ratio, which is the most widely recognized measurement of underwriting profitability, and Operating Ratio, which measures the combined profitability of underwriting and net investment income. Definitions for key components of the Operating Ratio are detailed below.

Loss and Loss Adjustment Expense Ratio: Measures the company's underlying profitability, or loss experience, on its total book of business by dividing its annual net losses (Pure Loss) and loss adjustment expenses (LAE) incurred by earned premiums. Other sections on pages 2 and 3 examine in greater detail a company's Pure Loss experience on a product, state and regional basis. Finally, an additional analysis detailing both allocated and unallocated loss adjustment expenses is reflected on page 4 of QAR.

Total Underwriting Expense Ratio: Measures the company's operational efficiency in underwriting its book of business by dividing its annual commissions and other underwriting expenses incurred by net premiums written. Greater detail about the composition and five-year trends of a company's commission expenses and other underwriting expenses can be found on page 4 of QAR.

Combined Ratio after Policyholders' Dividends: Measures the company's overall underwriting profitability. It is the sum of the Loss and Loss Adjustment Expense Ratio, the Total Underwriting Expense Ratio and, where applicable, the Policyholder Dividend Ratio. This ratio does not reflect investment income or income taxes. A combined ratio of less than 100 indicates a company is making an underwriting profit.

Net Investment Income Ratio: Measures the relationship between net investment income on assets and current premium volume by dividing the company's annual net investment income by its net premiums earned. This ratio is considered the investment income component of a company's overall profitability.

Operating Ratio: Measures a company's overall operating profitability from investment and underwriting activity but does not include other operating income/expense, capital gains or income taxes. It consists of the Combined Ratio after Policyholders' Dividends minus the Net Investment Income Ratio. An operating ratio of more than 100 indicates a company is unable to generate profits from its underwriting and investment activities.

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Product Line Loss Experience

(Refer to Page 2 of QAR)

This section details a company's pure loss experience for its top 10 product lines, as ranked by its 2020 by-line net premiums earned, on both a one-year and five-year basis. In addition, a company's by-line pure loss ratios are compared to property/casualty industry averages for each of the past five years. This comparison is an excellent tool to measure a company's level of performance relative to industrywide loss experience and provides insight into its competitive underwriting position.

State Distribution and Loss Experience

(Refer to Page 3 of QAR)

This section details a company's premium distribution and direct pure loss experience for its top-20 states, as ranked by its 2020 by-state direct premiums written, for the past five years. An analysis of a company's changing geographic mix of writings provides insights into understanding changes in operating performance and potential exposure to adverse geographic and regulatory environments. A further analysis of companies writing predominantly property coverages in California and coastal states along the Gulf of Mexico and Eastern Seaboard, particularly Florida, should be scrutinized for their potentially higher than expected losses generated from natural catastrophes, including hurricanes and earthquakes.

Gross Underwriting Experience

(Refer to Page 3 of QAR)

This section examines the components and five-year trend of a company's pretax gross underwriting profit or loss generated by gross underwriting activities. Gross underwriting results are derived by combining the direct and assumed results. The gross ratios provide insight on a company's dependence, or lack thereof, on reinsurance to drive net underwriting results. These gross ratios appear on a calendar year basis.

Expense Analysis

(Refer to Page 4 of QAR)

This section examines the components and five-year trend of a company's predominant operating expenses, comprised of Loss Adjustment Expenses (LAE) and Underwriting Expenses, both in terms of dollar amounts and combined ratio points. A company's overall expense ratio, which combines claim adjustment and underwriting expenses, will vary considerably based on premium and reserve mix, distribution and operating efficiency. An analysis of expense growth within the claims and underwriting functions, which gives insight into whether or not expense levels are being managed relative to business volume, is presented.

In addition, a more detailed composition analysis is presented which splits a company's claim adjustment expenses between allocated and unallocated LAE and its underwriting expenses between net commissions and all other underwriting expenses. Generally, a company that writes short-tail property lines will have lower LAE levels than one that writes long-tail casualty lines; and a company that maintains a direct distribution system, such as a captive agency force or direct marketing operation, will have lower underwriting expense levels than one that distributes its business through independent agents.

Allocated LAE: Claim adjustment expenses which can be attributed to specific claims, such as external legal and adjuster fees, that are incurred by a company.

Unallocated LAE: Claim adjustment expenses which cannot be attributed to specific claims, principally claim department overhead, incurred by a company.

Commission Expenses: Compensation paid by an insurance company to agents or brokers for placing insurance cover- age. This expense varies directly with a company's premium production. Additional detail is presented showing the components of commission



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expenses, including direct, assumed, ceded, contingent and net commissions which are related to appropriate premium production statistics.

Other Underwriting Expenses: General expenses arising from the company's underwriting operations, which typically do not vary directly with premium production. Additional detail is presented showing some of the components of other underwriting expenses such as premium taxes, management/agent allowances, salaries, rent/equipment with the remaining overhead expenses included in all other expenses, all of which are related to net premiums written.

Quantitative Evaluation of Liquidity Importance of Liquidity

Liquidity measures a company's ability to meet its anticipated short-term and long-term obligations to policyholders and other creditors. A company's liquidity depends upon the degree to which it can satisfy its financial obligations by holding cash and investments which are sound, diversified and liquid. A high degree of liquidity enables an insurer to meet unexpected needs for cash without the untimely sale of investments or fixed assets which might result in substantial realized losses due to temporary market conditions and/ or tax consequences.

In order to measure a company's ability to satisfy its financial obligations without having to resort to selling long-term investments or affiliated assets, A.M. Best recommends a review of a company's quick liquidity, which measures the amount of cash and quickly convertible investments which have a low exposure to fluctuations in market value. In addition, current liquidity which measures the proportion of a company's total liabilities that are covered by cash and unaffiliated invested assets should be reviewed. Operational and net cash flows should also be reviewed since they, by themselves, can meet some companies' liquidity needs provided their cash flows are positive, large and stable relative to their cash needs. Finally, the quality, market value and diversification of assets, particularly the exposure to large single investments relative to surplus, should be reviewed.

Key Liquidity Measures Analyzed Asset Composition

(Refer to Page 5 of QAR)

This section examines the components and five-year trend of a company's admitted assets which have been grouped into three broad asset categories: Non-affiliated Invested Assets, Affiliated Investments and Other Assets.

Non-affiliated Invested Assets: Typically, this broad asset category accounts for nearly 76% of a company's total admitted assets with such investment holdings subject to default, illiquidity, valuation and interest rate risk. Important asset classes that have been separately reflected include: Long-term Bonds, Preferred Stocks, Common Stocks, Real Estate and Mortgage Loans, Cash, Short-term Investments and Other Invested Assets. A more detailed analysis of a company's bond composition is presented on page 7 of QAR with key portfolio characteristics displayed, including public vs. private splits, a comparison of market vs. statement values, average maturity, quality distribution and a multi-class securities analysis. Finally, an additional analysis detailing changes in the statement values of a company's total investment portfolio, including capital gains, as well as investment income generation by key asset classes, is presented on page 8 of QAR.



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Affiliated Investments: On average, this asset category consists of over 9% of a company's total admitted assets which includes investments held in the form of affiliated securities, consisting of fixed income or equity securities, as well as company-occupied real estate. For a Property/Casualty Group, property/casualty affiliated holdings are eliminated through consolidation accounting.

Other Assets: This asset category, which averages over 15% of a company's total admitted assets, largely relates to receivable balances that may pose a credit risk to the company.

This category is comprised of Agents/Premiums Receivable Balances, Paid Loss Reinsurance Recoverables and All Other Assets.

Asset Allocation

(Refer to Page 5 of QAR)

This section examines the major components of a company's balance sheet, expressed as a percentage of total admitted assets, over the past five years.

Asset Growth Analysis

(Refer to Page 5 of QAR)

This section examines the sources and five-year trend of a company's growth in admitted assets, with particular emphasis on long-term bond and stock growth.

Asset Leverage

(Refer to Page 5 of QAR)

This section examines key components of a company's asset leverage over the last five years. Asset leverage, which measures the exposure of a company's surplus to investment and credit risk, is analyzed for asset classes that are generally more risky and capital-intensive. Asset classes reflected in this analysis include Non-Investment Grade Bonds, Common Stocks, Real Estate Investments and Mortgage Loans, Other Investments (principally Schedule BA Assets), Affiliated Investments (including company-occupied property) and Gross Agents' Balances (line 15.1 of a company's Statutory Balance Sheet)..

Liquidity Ratios and Cash Flow Analysis

(Refer to Page 6 of QAR)

Examined in this section are key liquidity measures for the last five years, including: Quick Liquidity, Current Liquidity, Overall Liquidity, Underwriting Cash Flow and Operating Cash Flow. The Quick Liquidity Ratio is an important measure of a company's short-term liquidity, while the Current and Overall Liquidity Ratios indicate a company's ability to cover net liabilities with non-affiliated invested assets and total assets, respectively. In addition, a company's Operating Cash Flow and Net Cash Flow should be reviewed, since these cash flows can meet some short-term liquidity needs provided cash flows are positive, large and stable over time.

Quick Assets: Defined as the sum of cash, unaffiliated short-term investments, unaffiliated bonds maturing within one year, government bonds maturing within five years and 80% of unaffiliated common stocks. These assets can be readily converted into cash without a material effect on statutory surplus.

Current Assets: Represents the sum of cash and unaffiliated invested assets excluding real estate.



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Net Liabilities: Equal to total liabilities, less conditional reserves, plus encumbrances on real estate, less the smaller of receivables from or payable to affiliates, less any negative liabilities.

Quick Liquidity Ratio: An important measure of a company's short-term liquidity. This ratio represents quick assets divided by net liabilities plus ceded reinsurance balances payable, expressed as a percent. This ratio measures the proportion of net liabilities covered by cash and investments which can be quickly converted to cash. Quick liquidity may indicate a company's ability to settle its liabilities without prematurely selling long-term investments or borrowing money.

Current Liquidity Ratio: Represents current assets divided by net liabilities plus ceded reinsurance balances payable, expressed as a percent. This ratio measures the proportion of liabilities covered by unencumbered cash and unaffiliated investments excluding real estate. If this ratio is less than 100, the company's overall liquidity may be dependent on the collectability or marketability of premium balances and investments in affiliates.

Overall Liquidity Ratio: Total admitted assets divided by total liabilities less conditional reserves, expressed as a percent. This ratio indicates a company's ability to cover net liabilities with total assets. This ratio does not address the quality and marketability of premium balances, affiliated investments and other non-invested assets.

Cash Flow Composition

(Refer to Page 6 of QAR)

Underwriting Cash Flow: Measures a company's funds generated from insurance operations attributable to underwriting activities, including premium collections less loss and loss adjustment expense payments, underwriting expense payments and policyholder dividends.

Operating Cash Flow: Measures a company's funds generated from insurance operations and invested assets attributable to underwriting activities, net investment income and federal income taxes. This measure excludes cash flows related to stockholder dividends, capital gains/losses, depreciation, amortization or capital contributions.

Net Cash Flow: Measures a company's overall cash flow attributable to its insurance operations and additional funding sources, excluding valuation changes related to unrealized capital gains, depreciation and amortization.

Underwriting Cash Flow Ratio: Measures premiums collected net of reinsurance, and other underwriting income generated from insurance operations related to loss and loss adjustment expenses, underwriting expenses paid, other underwriting expenses and policyholder dividends, expressed as a percent. A ratio above 100% indicates positive cash flows generated from underwriting activities. A ratio lower than 100% indicates negative cash flows and may indicate unprofitable underwriting results.

Operating Cash Flow Ratio: Measures premiums collected net of reinsurance, and other underwriting income generated from insurance operations, investment income and other income related to loss and loss adjustment expenses, underwriting expenses paid, other underwriting expenses and policyholder dividends, expressed as a percent. A ratio above 100% indicates positive cash flows generated from operations. A ratio lower than 100% indicates negative cash flows and is considered below the accepted norm for this test and may indicate unprofitable underwriting results and/or lowyielding assets.

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Bond Portfolio Composition

(Refer to Page 7 of QAR)

This section examines a company's bond portfolio by investment segment, along with key portfolio characteristics, over the past five years. These characteristics are important to assess the diversification, liquidity, quality and average maturity of a company's bond holdings portfolio. Definitions for key bond characteristics are detailed below.

Bonds by Investment Segment: Represents the distribution of the company's total bond portfolio between four different investment segments: Government Bonds; Political Subdivisions, Government Agency and Authority Bonds; Corporate Bonds; and Parent, Subsidiaries and Affiliated Bonds. The percentage of the total bond portfolio represented by each segment is provided for each of the past five years.

Bonds Issuer: This analysis reflects the composition of a company's bond portfolio split between Publicly Traded and Private Placement Issues. A company that holds a high proportion of private placement bonds can show a higher investment yield, but may be exposed to greater valuation and illiquidity risk than a company that holds a higher proportion of publicly traded bond issues.

MV to SV: Represents the percentage difference between the reported market value (MV) of a company's long-term bonds as reported in Schedule D, and the amortized value (SV) of those bonds for statutory reporting purposes. This measure can be very important for a company that has a poor liquidity profile and is susceptible, particularly following a catastrophic loss, to premature liquidation of portions of its long-term bond portfolio at an economic loss, as indicated by a negative MV to SV percentage.

Bond Maturity: Represents the average contractual maturity (in years) of a company's bond portfolio. This measure, which may not accurately depict the real duration of a company's bond portfolio due to call or prepayment features, can be compared to the duration, or average claims payout, of its loss reserves in an asset/liability matching analysis. Maturity values are provided for each individual segment as well as the total bond portfolio.

Bond Quality: Represents the quality distribution of a company's bond portfolio split between Investment Grade and Non-investment Grade Bonds. This composition analysis, which utilizes the six NAIC bond quality classifications, distinguishes between lower-risk bonds that are considered Investment Grade Bonds (U.S. Government obligations, Class 1 and Class 2 Bonds) and higher-risk bonds that are considered Non-investment Grade Bonds (Classes 3 through 6 Bonds). The NAIC bond quality classifications coincide with different bond ratings assigned by major credit agencies. In addition, a company's exposure to the higher default and illiquidity risks associated with Non-investment Grade Bonds is shown as a percentage of Class 3 through 6 Bonds to Surplus. This Bond Quality analysis is provided for each individual segment as well as the total bond portfolio.

Mortgage-Backed Securities: This analysis reflects the amount, composition and leverage of a company's holdings of mortgage-backed securities. Mortgage-backed securities, which are split between Residential Mortgage-Backed Securities (RMBS) and Commercial Mortgage-Backed Securities (CMBS), represent certain types of bonds that are secured by mortgage loans that are structured so that all, or substantially all, of the collections of principal and interest are paid through to the holders of the bonds. There are a variety of risks inherent in these structured securities such as prepayment and extension risks related to dramatic decreases and increases in interest rates, whereby the securities would be subject to repayment of principal earlier or later than anticipated, causing a potentially sizable capital loss when sold by the company, or revaluation or default risks as the loans underlying these securities are defaulted on for a variety of financial or economic reasons. A more thorough composition analysis of these holdings may be required to ascertain their sensitivity to interest rate changes or revaluation



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Investment Valuation and Income Analysis

(Refer to Page 8 of QAR)

This section examines the annual changes in the statement values of a company's investment portfolio, a distribution of gross investment income, and gross investment yields for four investment categories over the past five years. The four invested asset categories include: Non-affiliated Long-term Bonds; Non-affiliated Preferred and Common Stocks; Other Non-affiliated Investments consisting of cash, short-term investments and other invested assets; and Affiliated Investments. Definitions for key valuation and investment income analysis are detailed below.

Statement Value Changes: This analysis details the annual changes in the value of a company's investment portfolio split between net new purchases (net additional funds invested) and Capital Gains/Losses. This analysis provides insight into the company's ability to sustain growth in invested assets through internal fund generation rather than through capital gains.

Total Invested Asset Allocation: Represents the major components of a company's investment portfolio, expressed as a percentage of total invested assets over the past five years.

Gross Investment Composition and Yield: This analysis details the distribution of a company's gross investment income before expenses and depreciation on real estate, between four investment categories. The calculation for gross investment yield relates gross interest, dividends or other investment income to a company's average investment held during the year in each category.

Quantitative Evaluation of Leverage Importance of Leverage

Leverage, or capitalization, measures the exposure of a company's surplus to the various operating and financial practices of the company. A highly leveraged company can show a high return on surplus, but may be exposed to a high risk of instability. A conservative level of leverage enables an insurer to better withstand catastrophes, adverse changes in underwriting results, investment returns, regulatory or economic conditions, but generally at the cost of lower returns on surplus.

Operating leverage is generated from four general sources: current premium writings; reinsurance; loss and LAE reserves; and assets. (Asset leverage is discussed in the Liquidity Section of Best's QAR.) Another form of leverage is termed financial leverage which involves the use of debt, or debt-like instruments, to leverage a company's capital. Similar to operating leverage, excessive financial leverage can lead to instability as well. Therefore, an analysis of a company's financial leverage in conjunction with its operating leverage is very important in assessing its overall capitalization.

A.M. Best recommends a review of the four forms of operating leverage over the last five years to analyze changes in trends and magnitudes. To measure a company's exposure to pricing errors in its book of business, review the ratio of direct and net premiums written to surplus, gross and net of reinsurance. To measure the company's credit exposure and dependence on reinsurance, review the credit quality of a company's reinsurers as well as leverage and retention measures relating to its use of reinsurance. To measure the company's exposure to unpaid obligations, unearned premiums and exposure to reserving errors, analyze the ratio of net liabilities to surplus.

Operating leverage is a relative measure. In order to assess whether or not an individual company's leverage is prudent, a number of factors unique to the company should be taken into consideration. Some of a company's unique features that should be reviewed in conjunction with analyzing leverage are: spread of risk; type of business written; credit quality and appropriateness of the reinsurance program; quality and diversification of assets; and adequacy of loss reserves.



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Premium Composition

(Refer to Page 9 of QAR)

This section examines the composition and five-year trend of a company's premium volume as measured by Direct Written, Assumed Written, Ceded Written, Net Written and Net Earned Premiums. Within the Assumed and Ceded Written components, a further breakdown is provided between internal and external reinsurance which is reflected as Affiliated and Non-affiliated, respectively. An analysis of a company's premium composition will help determine whether or not a company is predominantly a primary company or reinsurer and how much underwriting risk it assumes and retains.

Liability Composition

(Refer to Page 9 of QAR)

This section examines the composition and five-year trend of the key components of a company's liabilities relative to surplus. Key liability components shown are: Loss and Loss Adjustment Expense (LAE) Reserves; Unearned Premiums; Reinsurance Funds Held; All Other Liabilities; and Conditional Reserves. Typically, for a casualty writer, a company's Loss and LAE Reserves comprise about two-thirds of its total liabilities. Carried loss reserves are subject to potential short-falls from unfavorable claims emergence, as well as a degree of uncertainty, particularly for long-tail casualty lines, including those subject to emerging asbestos and environmental claims. For casualty companies with sizable reserve balances, unfavorable reserve development could materially impact surplus levels. Unearned Premium Reserves, which represent approximately 20% of the industry's total liabilities, do not represent a source of meaningful leverage for most companies. Other liability categories are detailed below.

Reinsurance Funds Held: The amounts due to affiliated and unaffiliated reinsurers as a result of the normal provisions of a company's reinsurance contract(s). Excessive amounts may indicate the use of non-admitted reinsurers.

Conditional Reserves: Supplemental Schedule F Reserves established by companies which are mandated by NAIC regulations. The Schedule F Reserve relates to reinsurance recoverable balances due from unauthorized reinsurers which have not been collateralized, as well as to portions of past due recoverable balances due from authorized reinsurers.

Premium Written Retention & Liability Allocation

(Refer to Page 9 of QAR)

This section analyzes key components of a company's gross written premium with percentage splits shown between direct and assumed volume. Also shown is a five-year trend of a company's Net Premium Written Retention, which measures the percentage of gross premium volume that is retained by the company. In addition, the major components of a company's liabilities, expressed as a percent of Total Liabilities, is shown over the last five years.

Premium and Liability Growth Analysis

(Refer to Page 9 of QAR)

This section examines the sources and five-year trend of a company's growth in Net Premiums Written and Total Liabilities. Companies should be able to demonstrate their ability to support controlled premium and reserve growth with quality surplus growth from strong internal capital generation.



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Underwriting Leverage Ratios

(Refer to Page 9 of QAR)

This section examines the components and five-year trend of a company's Gross Underwriting Leverage, which is grouped into three broad categories: Net Premiums Written; Net Liabilities; and Ceded Reinsurance Leverage. A company's Gross Underwriting Leverage Ratio, which combines the measures of the three leverage groupings, varies considerably among companies based on their growth strategies, business mix, prior year reserve development and reinsurance utilization. An analysis of a company's gross underwriting leverage will provide insight into its relative exposure to pricing errors in its book of business, to errors of estimating its liabilities and to the exposure of its reinsurance. Definitions for key components of Gross Underwriting Leverage are detailed below.

Net Premiums Written Leverage Ratio: Represents the ratio of the company's net retained writings, after reinsurance assumed and ceded, in relation to its surplus. This ratio measures the company's exposure to pricing errors in its current book of business. A more detailed analysis of a company's product line mix and retention, as measured by net premiums written, is provided on page 10 of QAR.

Loss & LAE Reserve Leverage Ratio: Represents the ratio of the company's loss and loss adjustment expense reserves in relation to its surplus. This ratio measures a company's exposure to errors of estimation in its loss reserves. The higher the loss reserve leverage, the more critical a company's solvency depends upon having and maintaining reserve adequacy. A more detailed analysis of the key components, by-line mix and calendar and accident year development trends of a company's loss reserves is reflected on pages 12 through 14 of QAR.

Net Liability Leverage Ratio: Represents a company's net liability leverage, which relates a company's unpaid obligations to its surplus. Net liabilities are concentrated in Loss Reserves, LAE Reserves and Unearned Premium Reserves. This ratio measures the company's exposure to errors of estimation in its liabilities.

Net Leverage Ratio: Represents the sum of a company's Net Premiums Written and Net Liability Ratios. This ratio measures the combination of a company's exposure to pricing errors and errors of estimation in its liabilities in relation to surplus.

Ceded Reinsurance Leverage Ratio: Measures the company's dependence upon reinsurers and its potential exposure to uncollectible reinsurance recoverables. This ratio is the sum of reinsurance premiums ceded, ceded reinsurance balances for paid losses, unpaid losses, incurred but not reported (IBNR) losses, unearned premiums and commissions, ceded reinsurance balances payable, less funds held from reinsurers, divided by surplus. This ratio excludes ceded reinsurance related to U.S. affiliates to remove distortions associated with internal pooling or reinsurance arrangements. A more detailed analysis of the components and sources of reinsurance leverage is reflected on page 11 of QAR.

Gross Leverage Ratio: This ratio is the sum of the Net Premiums Written Ratio, Net Liability Ratio, and Ceded Reinsurance Leverage Ratio. This ratio measures the company's exposure to pricing errors in its current book of business, to errors of estimating its liabilities and to ceded reinsurance.

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Product Line Mix (Refer to Page 10 of QAR)

This section details a company's net premiums written mix over the past five years, ranked by its top-ten product lines in 2020. This analysis reflects both net premiums written amounts as well as percentages. An analysis of a company's changing product mix and trends provides insights into understanding changes in its underwriting leverage, loss reserves, profitability and liquidity measures. Distribution of a company's net premiums written is also shown split between broad industry segments: personal vs. commercial lines and property vs. liability lines of business.

Personal and Commercial Segment: Personal lines includes homeowners and private passenger automobile liability and physical damage business. Commercial lines consists of commercial multiple peril, medical professional liability, workers' compensation, excess workers' compensation, other liability, products liability, commercial auto liability and physical damage, ocean and inland marine, aircraft, burglary, warranty, boiler and machinery and allied lines.

Both personal and commercial lines combined include fire, farm owners and earthquake business. Reinsurance includes non-proportional assumed property, liability and financial lines. Other lines of business consist of mortgage and financial guaranty, accident and health, fidelity, surety, credit, warranty and international.

Property and Casualty Segment: Property lines are considered to be of a short-tail nature and demand more rapid settlements. These product lines can be greatly impacted by exposures to natural hazards, such as hurricanes, tornadoes, hail, windstorms, winter freezes or earthquakes. Property lines include fire, allied, farm owners multiple peril, homeowners multiple peril, commercial multiple peril (non-liability), inland marine, earthquake, automobile physical damage, warranty and burglary. Casualty lines are considered to be of a long-tail nature that generally have a longer payout pattern, with claim settlements that could extend beyond ten years. Casualty lines can be greatly impacted by emerging asbestos and environmental liabilities. Long-tailed lines include commercial multiple peril (liability), medical professional liability, workers' compensation, excess workers' compensation, other liability, products liability, private passenger and commercial automobile liability.

Reinsurance includes non-proportional assumed property, liability and financial lines. Combined includes ocean marine, aircraft, and boiler and machinery which tend to be both property and liability lines of business. Other lines of business consist of accident and health, fidelity, surety, financial and mortgage guaranty, credit, warranty and international.

Premium Distribution and Growth Analysis (Refer to Page 10 of QAR)

This section displays current year direct and net premiums written by line ranked by direct premiums written. This analysis provides insight into a company's reinsurance program and net business retained by line.

Ceded Reinsurance Analysis (Refer to Page 11 of QAR)

This section provides an analysis of a company's overall dependence upon reinsurers and its potential exposure to uncollectible reinsurance recoverables over the last five years by examining: the key components of a company's reinsurance recoverables due from external reinsurers; the key components of a company's total ceded reinsurance (loss recoverables and premiums written) related to external reinsurers; and a company's dependence upon reinsurance as measured by three key ratios: Reinsurance Recoverables to Surplus, Total Ceded Reinsurance Leverage, and Surplus Aid. Definitions for these three reinsurance dependence ratios are detailed below. To facilitate comparisons between companies, this section excludes ceded reinsurance related to U.S. affiliates to remove distortions associated with internal pooling or reinsurance arrangements.



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Reinsurance Recoverables to Surplus: Represents total ceded loss recoverables due from non-U.S. affiliated reinsurers expressed as a percentage of surplus. Total loss recoverables is calculated as the sum of Ceded Paid Losses, Ceded Unpaid Losses, Ceded IBNR Losses, Ceded Unearned Premiums and Ceded Commissions less Funds Held From Reinsurers. This ratio measures a company's dependence upon its reinsurers and the potential exposure to reinsurance collectability problems.

Total Ceded Reinsurance Leverage: Represents the sum of Total Ceded Loss Recoverables and Ceded Premiums Written plus Ceded Balances Payable (related to non-U.S. affiliated reinsurers) expressed as a percentage of surplus. This test measures a company's potential exposure to adjustments on such reinsurance and its dependence upon the security provided by its reinsurers.

Surplus Aid: Represents the estimated decline in a company's surplus if all reinsurance were canceled due to the resulting return of ceding commissions. Generally, the more leveraged a company becomes with its reinsurers the greater the impact on its surplus in the event reinsurance contracts are canceled.

Ceded Reinsurance By Source

(Refer to Page 11 of QAR)

This section provides a composition analysis detailing current year ceded reinsurance generated from five reinsurance sources including: U.S. Affiliates; Foreign Affiliates; U.S. Insurers; Pools and Associations; and Other Foreign Reinsurers. This section enables an analyst to better assess a company's potential reinsurance collection exposure since reinsurance collections can be highly dependent upon the types of reinsurers involved. In addition, a trend analysis is reflected which details a company's ceded loss recoverables by reinsurance source over the past five years..

Loss Reserve Analysis

(Refer to Pages 12-14 of QAR)

This three-page section analyzes in detail: the principal components and trend of a company's total loss reserves over the last five years and their magnitude relative to net premiums earned and surplus; a three-year trend of a company's by-line reserves allocated between Case Loss Reserves, IBNR Loss Reserves, and LAE Reserves; a Loss & ALAE Reserve Development analysis which compares a company's Original Reserves against its Developed Reserves as of year-end 2020 for the last ten years, on both a calendar-year and accident-year basis; and a By-Line Reserve Development analysis that details total One-Year and Two-Year Calendar Year Development as a percent of the original reserves established and current net premiums earned. Key items and definitions of the loss reserve section are detailed below.

Loss Reserve Composition

(Refer to Page 12 of QAR)

Case Loss Reserves: The liability established for payment on reported claims.

IBNR Reserves (Incurred But Not Reported): The liability for future payments on losses which have already occurred but have not yet been reported to the company. This liability is particularly large for reinsurers or companies writing lines of business with longer claim development patterns. IBNR also includes bulk reserve amounts for future development on already reported claims. One of the most important factors to consider in determining the reliability of a company writing casualty business is the adequacy of the reserves set up for losses incurred but not yet paid, whether actually reported or incurred but not reported.

Allocated Loss Adjustment Expense Reserves: The liability established to meet expenses of settling claims, such as fees for legal services and claims adjusters.

Loss & Allocated Loss Adjustment Expense Reserves: Represents the total reserves for unpaid losses and allocated loss adjustment



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expenses, including reserves for incurred but not reported losses, if any, and supplemental reserves established by the company. It is the total for all lines of business and all accident years.

Loss Reserves to Policyholders' Surplus: Measures the trend and magnitude of a company's total loss reserves to surplus over the last five years. The higher the multiple of loss reserves to surplus, the more critical is a company's solvency dependent upon having and maintaining reserve adequacy.

Loss Reserves to Net Premiums Earned: Measures the trend of a company's loss reserves to net premiums earned. If a company has maintained a consistent reserving posture with no material prior year development and no significant change in business mix, this ratio should be relatively stable.

IBNR to Total Loss Reserves: Measures the trend of a company's IBNR reserves as a percent of total reserves over the last five years. Increases in this ratio may indicate either a strengthening of reserves (rather than adverse development) or a greater proportion of casualty business being written.

Statement Year Reserve Analysis

(Refer to Page 13 of QAR)

Original Reserves: Reserve amounts for all unpaid loss and allocated loss adjustment expenses (ALAE) as originally established at the end of each statement or calendar year. The unpaid loss and allocated loss adjustment expenses shown are to be reported on an undiscounted basis whereby the reserves are expected to represent the ultimate amounts to be paid, including anticipated inflation.

Developed Reserves: Fully developed calendar year reserves through year-end 2020. These developed reserves represent what the company's original calendar year reserves would have been had subsequent development been known at that time.

Calendar Year Development through 2020: Amount of calendar year reserve deficiency (+) or redundancy (-) the company reported through 2020.

Development in 2020: Measures the effect that loss development has had on the company's 2020 incurred losses and identifies which years produced the loss reserve development. **Calendar Year Development through 2020:** The amount of calendar year deficiency (+) or redundancy (-) the company has reported through 2020 for all prior years. This is the sum of the two preceding columns.

Calendar Year Development to Original Loss Reserves: Reflects the degree to which the company's original reserves were either understated (+) or overstated (-) in each of the last nine years, if the original reserves had been restated to reflect subsequent development through year-end 2020.

Calendar Year Development to Original Surplus: Reflects the degree to which year-end surplus was either understated (+) or overstated (-) in each of the last nine years, if the original reserves had been restated to reflect subsequent development through year-end 2020.

Developed Reserves to Net Premiums Earned: Represents the total calendar year reserves developed through year-end 2020, expressed as a percent of the respective calendar year's net premiums earned.



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Paid in 2020: A company's cumulative loss and ALAE paid in 2020 for all prior years. For each preceding year, it represents cumulative loss dollars paid in 2020 for that year and preceding years.

Percent of Developed Reserves Paid in 2020: The amounts shown in the Paid in 2020 column divided by the company's calendar year Developed Reserves, expressed as a percent. This ratio is an indication of a company's claims payment pattern, or tail, on business written.

Reserves Unpaid at Year-End 2020: A company's carried loss and ALAE reserves that still remain unpaid at year-end 2020, shown for the last ten calendar years. This statistic indicates the magnitude of the loss reserves still outstanding for the indicated year and all preceding years, which is related to the claims settlement time, or tail, on business written.

Unpaid to Developed Reserves: Reserves in each calendar year that remain unpaid as a percent of the developed reserves through year-end 2020. The trend of this ratio indicates the tail of a company's book of business.

Accident Year Reserve Analysis

(Refer to Page 13 of QAR)

Original Reserves: Reserves for unpaid Loss and ALAE related to each accident year.

Developed Reserves: Fully developed accident year loss and ALAE reserves through year-end 2020. This represents how the company's originally established accident year reserves have developed through year-end 2020.

By-Line Loss Reserve Development

(Refer to Page 14 of QAR)

This table shows calendar year Loss and ALAE reserve development for each of the twenty-two reserve lines reflected in a company's Schedule P. The one-year and two-year development amounts indicate the adequacy of the original reserves that were established one and two years ago. The one-year development is further related to each line's earned premiums in the current year. This table excludes unallocated LAE reserves, or reserves for claims department overhead, which typically is not subjected to a development analysis.

NAIC IRIS Ratio

(Refer to Page 14 of QAR)

This section shows three years of the company's IRIS Solvency Test Ratios, along with the minimum and maximum ranges of acceptable values promulgated by the National Association of Insurance Commissioners (NAIC). The NAIC developed these 13 IRIS, or NAIC Ratios, as an early warning system to identify companies that may be experiencing financial difficulty. If a company's ratio falls outside the "acceptable" range shown, the company is considered to have "failed" that test. Generally, a company can fail up to three tests before further regulatory action is triggered. The Number of Failures shown is the total number of ratios that fell outside the "acceptable" range for each of the last three years. Care should be used in reviewing these tests as some ratios falling outside the acceptable range may be considered as favorable. Such examples include a sizable increase to a company's surplus or a decrease in its premium writings.