



Aspen Insurance Holdings Limited

May 1, 2008

Q1 2008 Earnings Conference Call

AHL:NYSE



Safe Harbor Disclosure

This slide presentation is for information purposes only. It should be read in conjunction with our financial supplement posted on our website on the Investor Relations page and with other documents filed or to be filed shortly by Aspen Insurance Holdings Limited (the "Company" or "Aspen") with the U.S. Securities and Exchange Commission.

Non-GAAP Financial Measures

In presenting Aspen's results, management has included and discussed certain "non-GAAP financial measures", as such term is defined in Regulation G. Management believes that these non-GAAP measures, which may be defined differently by other companies, better explain Aspen's results of operations in a manner that allows for a more complete understanding of the underlying trends in Aspen's business. However, these measures should not be viewed as a substitute for those determined in accordance with GAAP. The reconciliation of such non-GAAP financial measures to their respective most directly comparable GAAP financial measures in accordance with Regulation G is included herein or in the financial supplement, as applicable, which can be obtained from the Investor Relations section of Aspen's website at www.aspen.bm.

Application of the Safe Harbor of the Private Securities Litigation Reform Act of 1995:

This presentation contains, and Aspen's earnings conference call will contain, written or oral "forward-looking statements" within the meaning of the U.S. federal securities laws. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements that do not relate solely to historical or current facts, and can be identified by the use of words such as "expect," "intend," "plan," "believe," "project," "anticipate," "seek," "will," "estimate," "may," "continue," "guidance," and similar expressions of a future or forward-looking nature.

In addition, any estimates relating to loss events involve the exercise of considerable judgment and reflect a combination of ground-up evaluations, information available to date from brokers and cedants, market intelligence, initial tentative loss reports and other sources. Due to the complexity of factors contributing to the losses and the preliminary nature of the information used to prepare these estimates, there can be no assurance that Aspen's ultimate losses will remain within the stated amount.

All forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. Aspen believes these factors include, but are not limited to: the impact of deteriorating credit environment created by the sub-prime crisis and global credit crunch; a decline in the value of our investment portfolio or a rating downgrade of the securities in our portfolio; changes in the total industry losses resulting from Hurricanes Katrina, Rita and Wilma and any other events, and the actual number of Aspen's insureds incurring losses from these events; with respect to events such as Hurricanes Katrina, Rita and Wilma, Aspen's reliance on loss reports received from cedants and loss adjustors, Aspen's reliance on industry loss estimates and those generated by modeling techniques, the impact of these events on Aspen's reinsurers, any changes in Aspen's reinsurers' credit quality, the amount and timing of reinsurance recoverables and reimbursements actually received by Aspen from its reinsurers and the overall level of competition and the related demand and supply dynamics as contracts come up for renewal; the impact that our future operating results, capital position and rating agency and other considerations have on the execution of any capital management initiatives; the impact of any capital management activities on our financial condition; the impact of acts of terrorism and related legislation and acts of war; the possibility of greater frequency or severity of claims and loss activity, including as a result of natural or man-made catastrophic events than our underwriting, reserving or investment practices have anticipated; evolving interpretive issues with respect to coverage as a result of Hurricanes Katrina, Rita and Wilma and any other events such as the UK floods; the level of inflation in repair costs due to limited availability of labor and materials after catastrophes; the effectiveness of Aspen's loss limitation methods; changes in the availability, cost or quality of reinsurance or retrocessional coverage, which may affect our decision to purchase such coverage; the reliability of, and changes in assumptions to, catastrophe pricing, accumulation and estimated loss models; loss of key personnel; a decline in our operating subsidiaries' ratings with Standard & Poor's, A.M. Best Company or Moody's Investors Service; changes in general economic conditions including inflation, foreign currency exchange rates, interest rates and other factors that could affect our investment portfolio; the number and type of insurance and reinsurance contracts that we wrote at the January 1st and other renewal periods in 2008 and the premium rates available at the time of such renewals within our targeted business lines; increased competition on the basis of pricing, capacity, coverage terms or other factors; decreased demand for Aspen's insurance or reinsurance products and cyclical downturn of the industry; changes in governmental regulations, interpretations or tax laws in jurisdictions where Aspen conducts business; proposed and future changes to insurance laws and regulations, including with respect to U.S. state- and other government-sponsored reinsurance funds and primary insurers; Aspen or its Bermudian subsidiary becoming subject to income taxes in the United States or the United Kingdom; the effect on insurance markets, business practices and relationships of ongoing litigation, investigations and regulatory activity by the New York State Attorney General's office and other authorities concerning contingent commission arrangements with brokers and bid solicitation activities. For a more detailed description of these uncertainties and other factors, please see the "Risk Factors" section in Aspen's Annual Reports on Form 10-K as filed with the U.S. Securities and Exchange Commission on February 29, 2008. Aspen undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the dates on which they are made.



Financial Highlights – Q1 2008

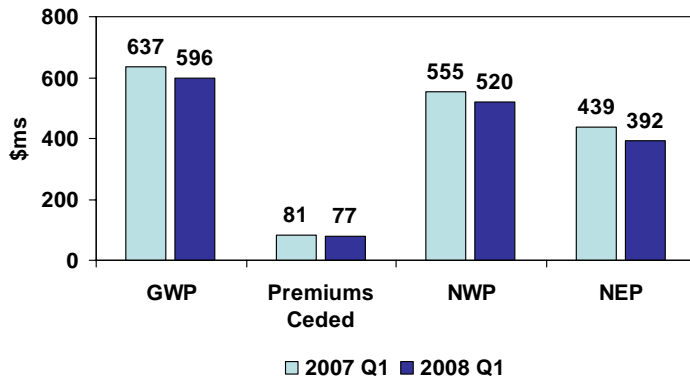
(US\$ in millions, except per share data)

| Quarter Ended March 31 | 2008 | 2007 | Change |
|-------------------------------|-------------|-------------|---------------|
| Gross Written Premiums | 596.2 | 636.5 | (6.3)% |
| Net Written Premiums | 519.6 | 555.1 | (6.4)% |
| Net Earned Premiums | 391.6 | 439.0 | (10.8)% |
| Underwriting Income | 57.2 | 90.5 | (36.8)% |
| Net Investment Income | 39.1 | 67.5 | (42.1)% |
| Net Income after tax | \$81.2 | \$121.9 | (33.4)% |
| Financial Ratios: | | | |
| Loss Ratio | 52.9% | 51.4% | |
| Expense Ratio | 32.5% | 28.0% | |
| Combined Ratio | 85.4% | 79.4% | |
| Book Value per Share | \$29.22 | \$23.62 | 23.7% |
| Diluted EPS | \$0.85 | \$1.27 | (33.1)% |
| Annualized ROE | 12.8% | 22.9% | |

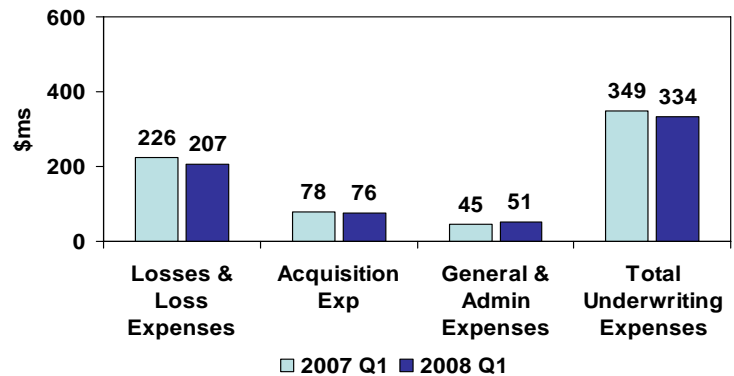


Financial Highlights – Group Summary Q1

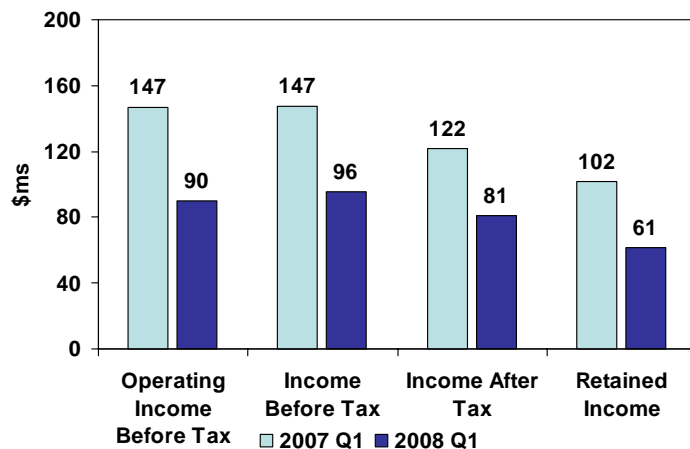
Underwriting Revenues



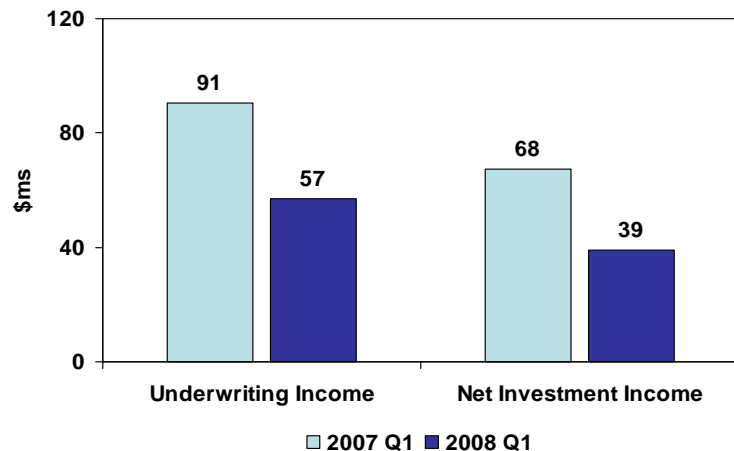
Underwriting Expenses



Income



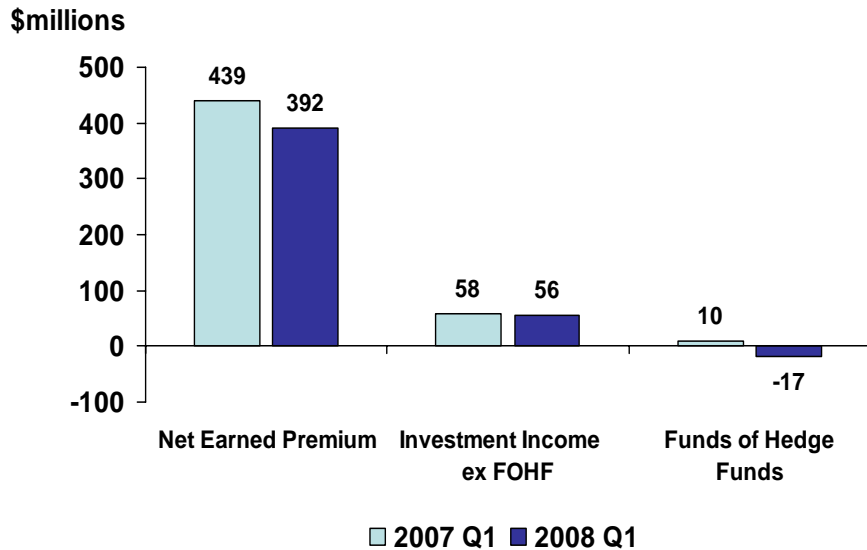
Income Contribution



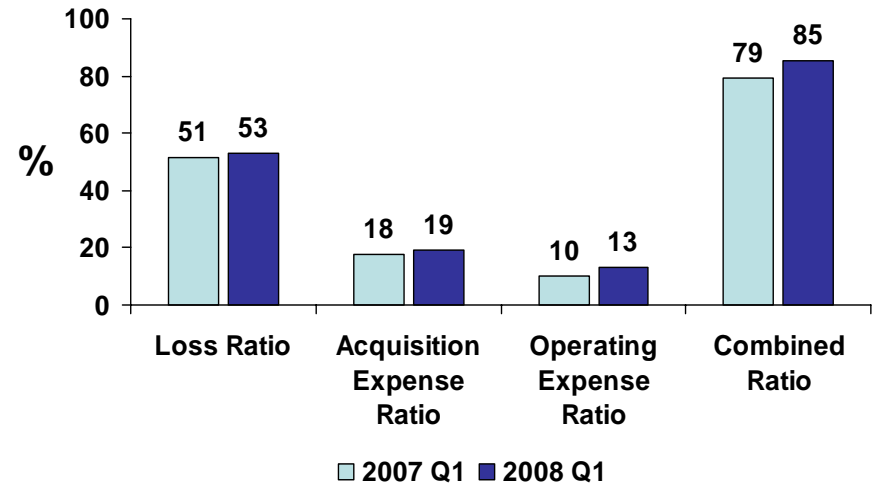


Key Performance Metrics – 1Q 2008

Revenues



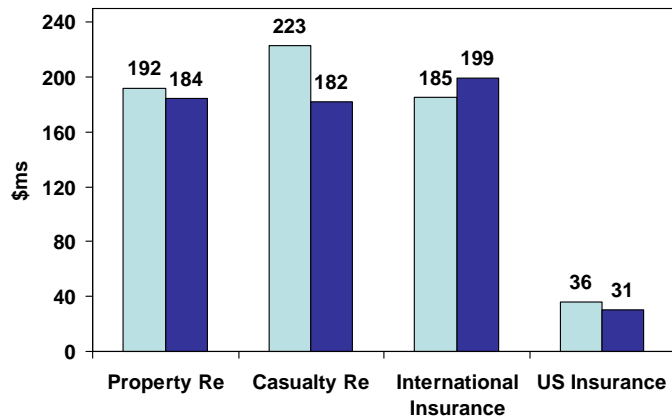
Ratio Analysis



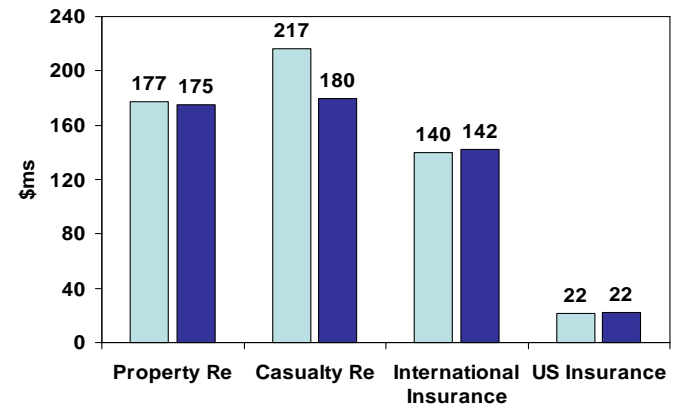


Results by Business Segment – Q1

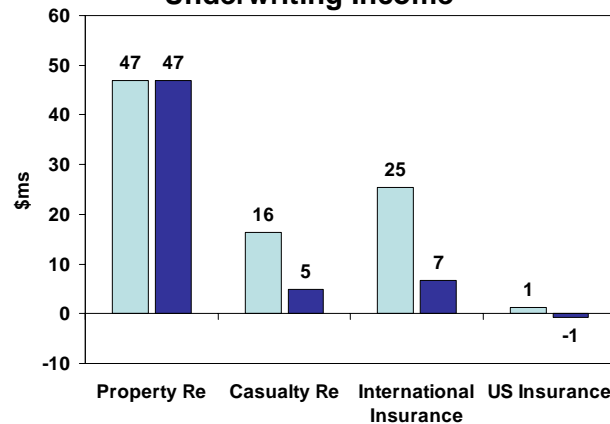
GWP



NWP



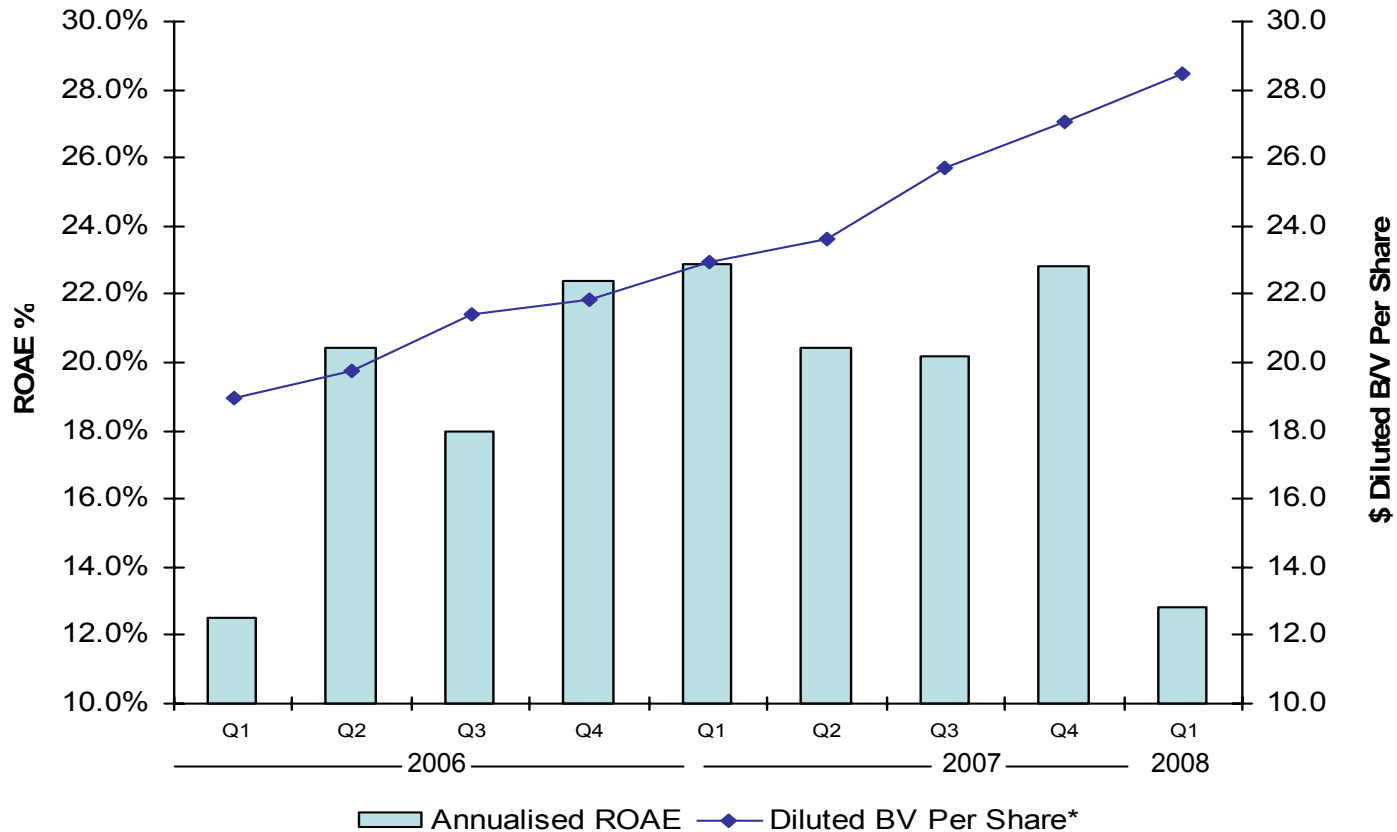
Underwriting Income



■ 2007 Q1
■ 2008 Q1



Growth in ROAE and Book Value Per Share



Compounded Annual Growth Rate in BVPS over last 8 quarters of 22.6%

(*) Note: See Aspen's quarterly financial supplement for a reconciliation of diluted book value per share to basic book value per share, reconciliation of average equity to closing shareholders' equity in the Investor Relations section of Aspen's website at www.aspen.bm



1Q 2008 Property Large Risk Loss Market Share

- Estimated industry insured large property risk losses exceeded \$4 billion in 1Q08
- Aspen's loss estimate is approximately \$16 million gross
- Aspen sustained no losses from its US and International facultative units due to stringent risk selection

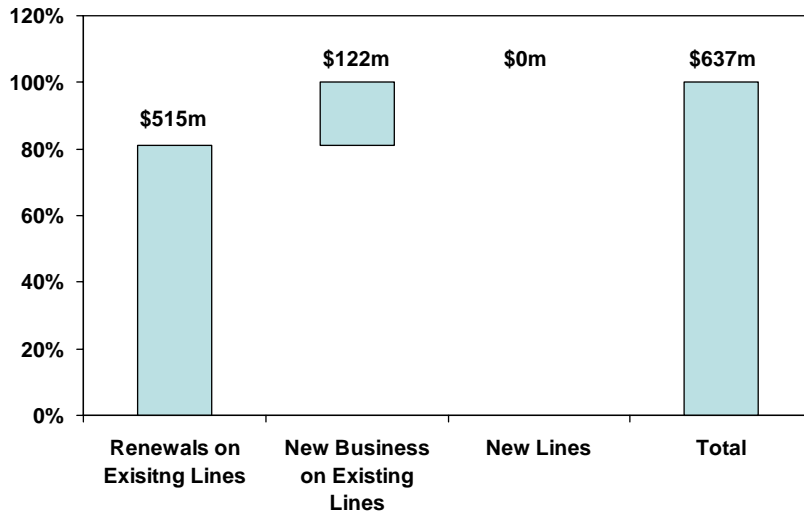
| Cause of Loss | Aspen's Market Share Of Industry Insured Loss |
|---|---|
| Fire/Explosion (Various losses) | 0.68% |
| Floods (Mainly Mines in Australia and South Africa) | 0.35% |
| Tornado (USA) | 0.05% |
| Other (Earthquake, Mechanical Failure and Utility Hazard) | 0.28% |

Aspen had less than 0.50% Industry Insured Loss

Steady Top-Line Supported by Disciplined Extension into New Lines

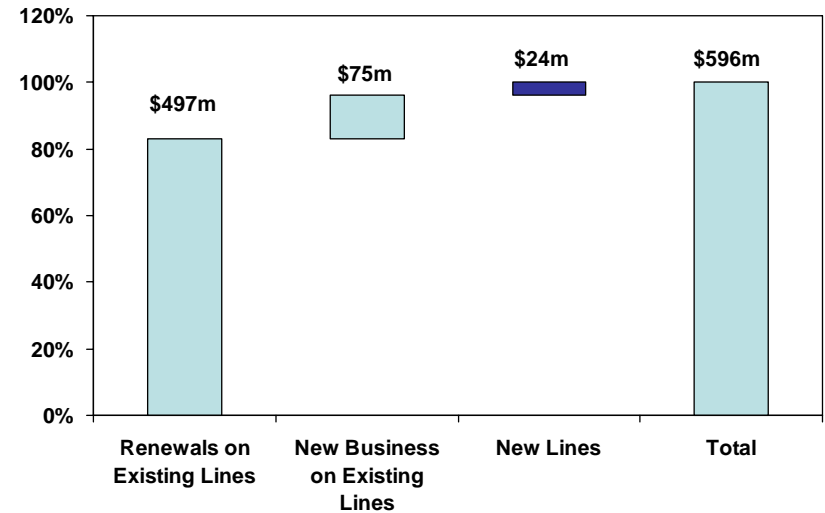


2007 Q1 New Business & Renewals



Lapsed business approximately 12%* of GWP in Q1 07

2008 Q1 New Business & Renewals



Lapsed business approximately 19%* of GWP in Q1 08

- Prudent investment in new underwriting teams offsetting reduction in “existing business”
 - New business lines introduced in 2007 to account for ~8% of expected 2008 GWP

• (*) As percentage of that year’s business

• New lines include Non-Marine Transportation Liability, Professional Lines, Excess Casualty Insurance, Political Risk and Financial Institutions

Performance of Aspen's Funds of Hedge Funds



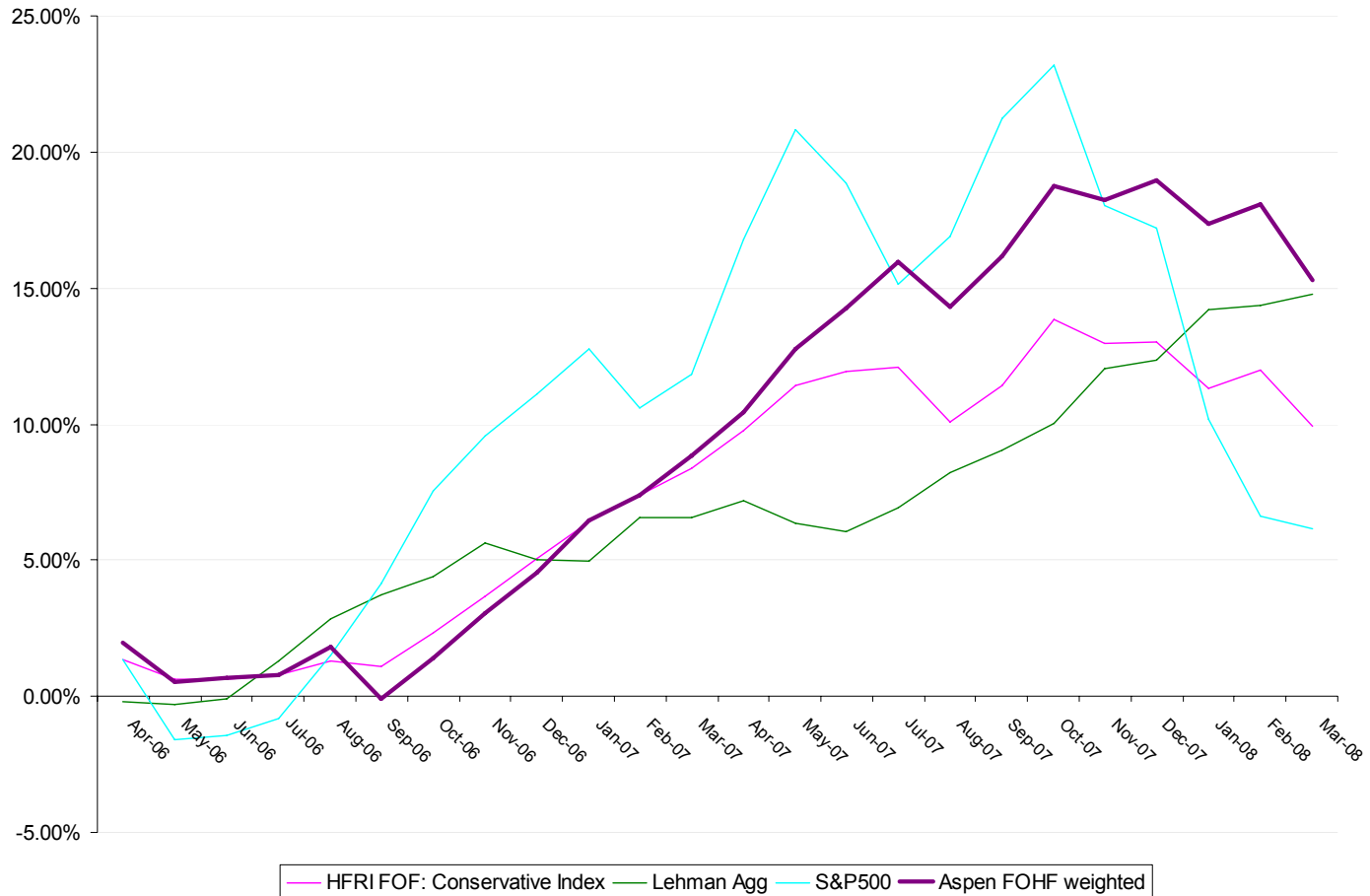
| | 1 st Quarter 2008 |
|-----------------------------------|------------------------------|
| S&P 500 Index | (9.91)% |
| Russell 2000 Index | (10.19)% |
| HFRI Fund of Fund Composite Index | (4.27)% |
| Aspen Funds of Hedge Funds | (2.73)% |

Aspen's FOHF's Outperformed Benchmarks in Q1 2008

Cumulative Return for Aspen's Funds of Hedge Fund Investments



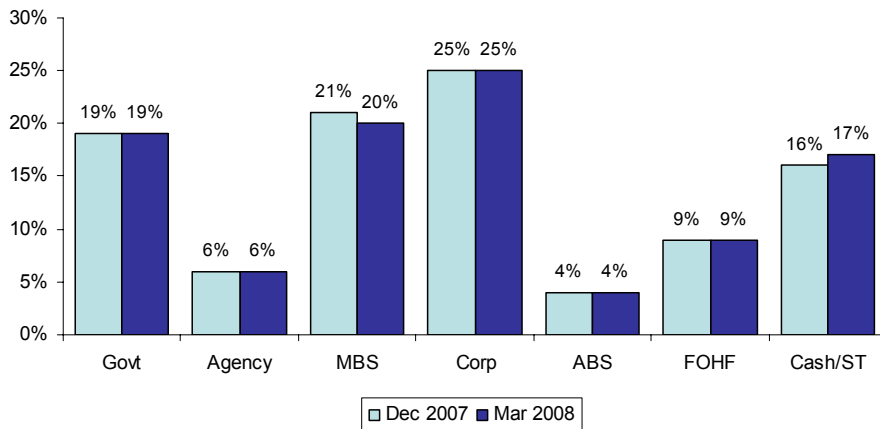
Cumulative returns



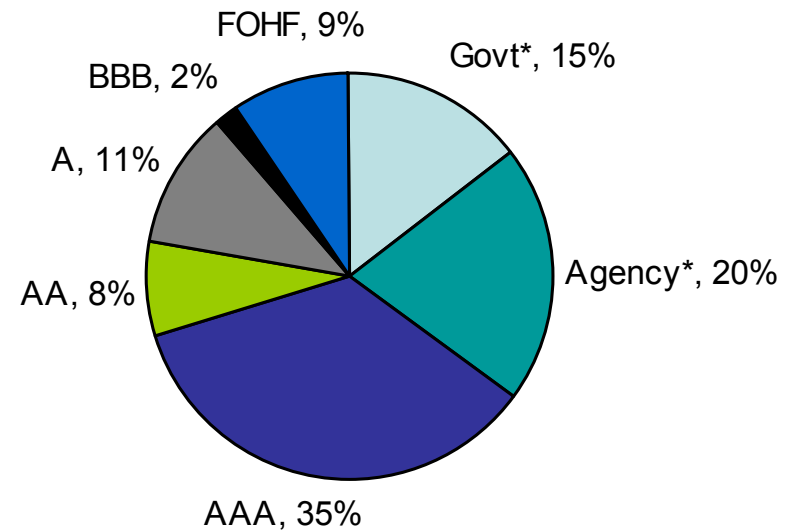


Aggregate Investment Portfolio

Asset Class Allocation



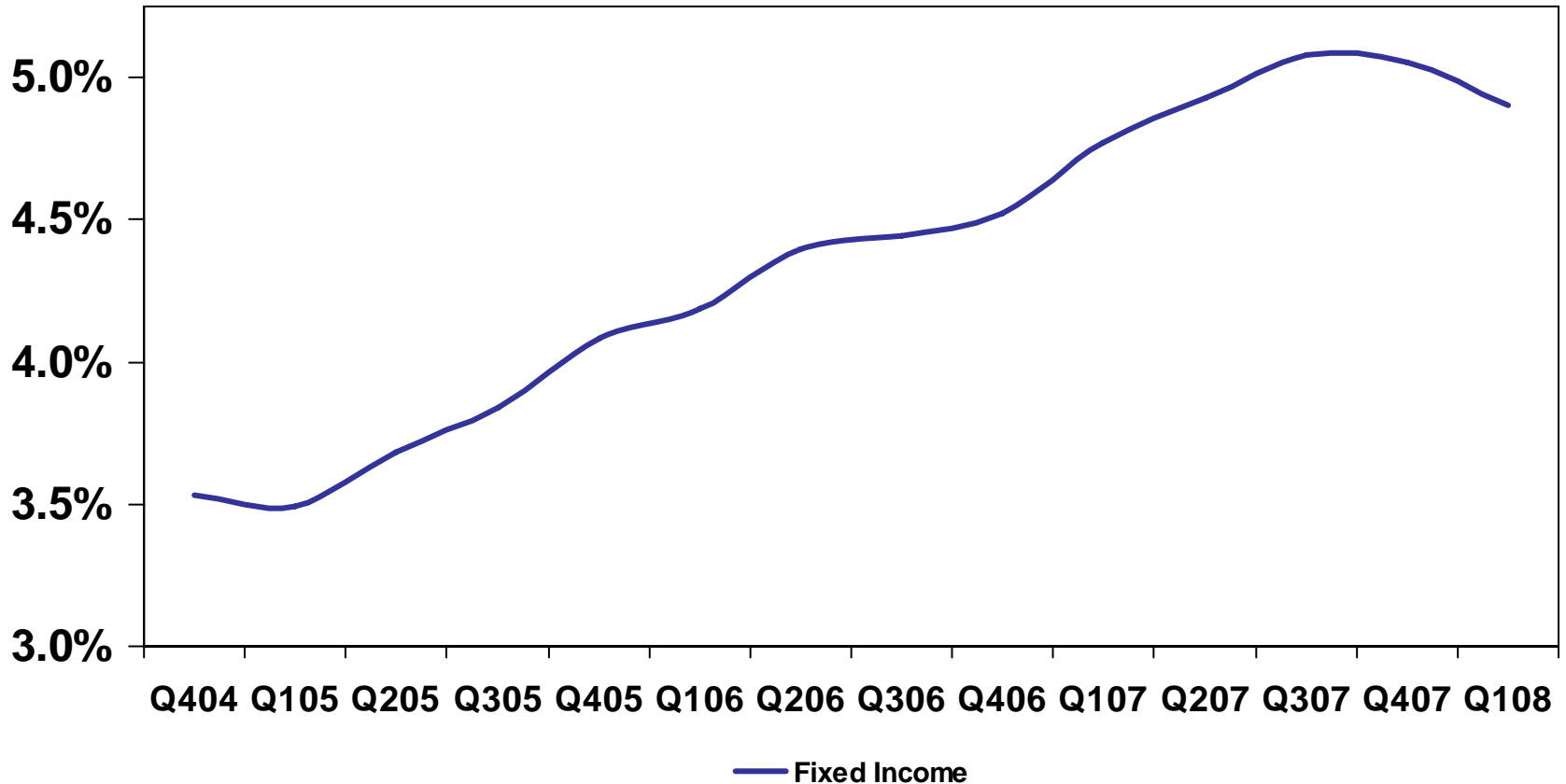
Portfolio Credit Ratings (as at March 31, 2008)



89% of Portfolio 'A' or Better, Overall Fixed Income 'AA+'



Fixed Income Book Yield



Active management of interest rate cycle resulting in stable fixed income book yield

2008 Guidance



| | Initial Guidance February 7, 2008 | Revised Guidance May 1, 2008 |
|--|--|---|
| GWP | \$1.8 billion ± 5% | \$1.8 billion ± 5% |
| % Premium Ceded | 8% - 10% of GEP | 8% - 10% of GEP |
| Combined Ratio | 88% - 93% | 88% - 93% |
| Net Investment Income on Fixed Income Securities, Short term Investments and Funds of Hedge Funds | \$290 - \$320 million | \$250 - \$285 million |
| Net Return on Fixed Income and Short term Investments | | \$240 - \$255 million |
| Net Return on Investments in Funds of Hedge Funds | | \$10 - \$30 million |
| Tax Rate | 13% to 16% | 13% to 16% |
| Assumed Cat-Load | \$135 million | \$135 million |

ROE of 13% - 16% (assuming normal loss experience)
 (Initial 2008 Guidance for ROE of 14% - 17% provided in February 7, 2008)

Market Conditions

2008 Outlook: Property Reinsurance and Casualty Reinsurance



| Property Reinsurance | | | |
|----------------------|-------------------|--------------|------------------------|
| Line | Market Conditions | Market Trend | Aspen 2008 Performance |
| Catastrophe Treaty | | | |
| Pro Rata | | | |
| Risk Excess Treaty | | | |
| Property Facultative | | | |

| Casualty Reinsurance | | | |
|----------------------|-------------------|--------------|------------------------|
| Line | Market Conditions | Market Trend | Aspen 2008 Performance |
| Intl. Casualty | | | |
| US Casualty | | | |
| Casualty Facultative | | | |

- = Absolute rate levels attractive
- = Absolute rate levels mixed
- = Absolute rate levels very challenging

- = 12 month rate trend positive
- = 12 month rate trend neutral
- = 12 month rate trend slightly downwards
- = 12 month rate trend downwards

- Strong
- Good
- Improvement Required

Market Conditions

2008 Outlook: US Insurance and International Insurance



| US Insurance | | | |
|--------------|-------------------|--------------|------------------------|
| Line | Market Conditions | Market Trend | Aspen 2008 Performance |
| E&S Property | | | |
| E&S Casualty | | | |

| International Insurance | | | | | | | |
|---------------------------------|-------------------|--------------|------------------------|--------------|-------------------|--------------|------------------------|
| Line | Market Conditions | Market Trend | Aspen 2008 Performance | Line | Market Conditions | Market Trend | Aspen 2008 Performance |
| Aviation | | | | UK Property | | | |
| Marine Hull | | | | UK Liability | | | |
| Offshore Energy Physical Damage | | | | | | | |
| Marine & Energy Liability | | | | | | | |
| Specialty Reinsurance | | | | | | | |

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