Q4 2011 EARNINGS CONFERENCE CALL

February 7, 2012

Chris O’Kane
Chief Executive Officer

Richard Houghton
Chief Financial Officer

Aspen Insurance Holdings Limited

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 US 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.co

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 US 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," “do not believe,” “aim,” "project," "anticipate," "seek," "will," "estimate," "may," "continue," “guidance,” and similar expressions of a future or forward-looking nature.

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 possibility of greater frequency or severity of claims and loss activity, including as a result of natural or man-made (including economic and political risks) catastrophic or material loss events, than our underwriting, reserving, reinsurance purchasing or investment practices have anticipated; the reliability of, and changes in assumptions to, natural and man-made catastrophe pricing, accumulation and estimated loss models; evolving issues with respect to interpretation of coverage after major loss events and any intervening legislative or governmental action; the effectiveness of our loss limitation methods; changes in the total industry losses, or our share of total industry losses, resulting from past events and, with respect to such events, our reliance on loss reports received from cedants and loss adjustors, our reliance on industry loss estimates and those generated by modeling techniques, changes in rulings on flood damage or other exclusions as a result of prevailing lawsuits and case law; the impact of acts of terrorism and related legislation and acts of war; decreased demand for our insurance or reinsurance products and cyclical changes in the insurance and reinsurance sectors; any changes in our reinsurers’ credit quality and the amount and timing of reinsurance recoverables; changes in the availability, cost or quality of reinsurance or retrocessional coverage; the continuing and uncertain impact of the current depressed economic environment in many of the countries in which we operate; the level of inflation in repair costs due to limited availability of labor and materials after catastrophes; changes in insurance and reinsurance market conditions; increased competition on the basis of pricing, capacity, coverage terms or other factors and the related demand and supply dynamics as contracts come up for renewal; a decline in our operating subsidiaries’ ratings with Standard & Poor’s (“S&P”), A.M. Best Company, Inc. (“A.M. Best”) or Moody’s Investor Service (“Moody’s”); our ability to execute our business plan to enter new markets, introduce new products and develop new distribution channels, including their integration into our existing operations; the persistence of the global financial crisis and the Eurozone debt crisis, changes in general economic conditions, including inflation, foreign currency exchange rates, interest rates and other factors that could affect our investment portfolio; the risk of a material decline in the value or liquidity of all or parts of our investment portfolio; changes in our ability to exercise capital management initiatives or to arrange banking facilities as a result of prevailing market changes or changes in our financial position; changes in government regulations or tax laws in jurisdictions where we conduct business; Aspen Holdings or Aspen Bermuda becoming subject to income taxes in the United States or the United Kingdom; loss of key personnel; and increased counterparty risk due to the credit impairment of financial institutions. For a more detailed description of these uncertainties and other factors, please see the "Risk Factors" section in Aspen's Annual Report on Form 10-K as filed with the U.S. Securities and Exchange Commission on February 25, 2011. 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.

In addition, any estimates relating to loss events involve the exercise of considerable judgment in the setting of reserves 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. The actuarial range of reserves and management's best estimate represents a distribution from our internal capital model for reserving risk based on our then current state of knowledge and explicit and implicit assumptions relating to the incurred pattern of claims, the expected ultimate settlement amount, inflation and dependencies between lines of business. Due to the complexity of factors contributing to the losses and the preliminary nature of the information used to prepare these estimates and reserves, there can be no assurance that Aspen’s ultimate losses will remain within the stated amounts.

FINANCIAL HIGHLIGHTS: Q4 2011

($ millions, except per share data)

QUARTER ENDED DECEMBER 31	2011	2010	CHANGE
Gross written premiums	458.7	412.8	11.1%
Net written premiums	431.2	395.2	9.1%
Net earned premiums	489.4	499.7	(2.1)%
Underwriting income / (loss)	(68.8)	23.2	NM
Net investment income	54.2	57.0	(4.9)%
Net income / (loss) after tax	13.5	92.7	(85.4)%
Operating income / (loss) after tax	6.1	75.8	(92.0)%
FINANCIAL RATIOS			
Loss ratio	80.6%	61.5%	
Policy acquisition expense ratio	17.5%	18.1%	
General, administrative and corporate expense ratio	16.0%	15.7%	
Combined ratio	114.1%	95.3%	
Annualized operating ROE*	0.0%	10.8%	
Operating EPS*	0.01	1.02	(99.0)%
Diluted book value per share	38.43	38.90	(1.2)%

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

FINANCIAL HIGHLIGHTS: YEAR END 2011

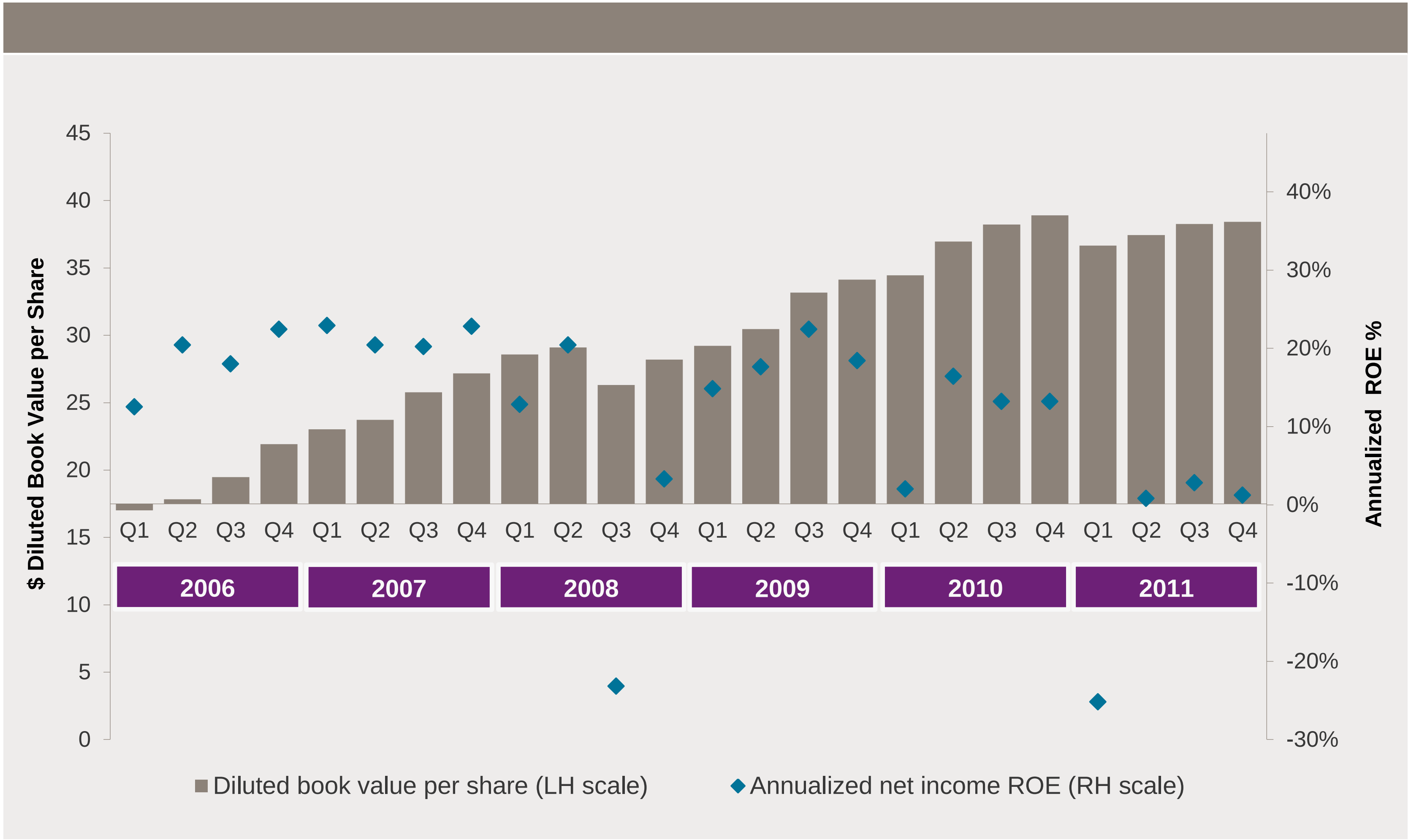
($ millions, except per share data)

YEAR ENDED DECEMBER 31	2011	2010	CHANGE
Gross written premiums	2,207.8	2,076.8	6.3%
Net written premiums	1,929.1	1,891.1	2.0%
Net earned premiums	1,888.5	1,898.9	(0.5)%
Underwriting income / (loss)	(294.7)	63.1	NM
Net investment income	225.6	232.0	(2.8)%
Net income / (loss) after tax	(105.8)	312.7	(133.8)%
Operating income / (loss) after tax	(66.1)	258.9	(125.5)%

FINANCIAL RATIOS			
Loss ratio	82.4%	65.8%	
Policy acquisition expense ratio	18.4%	17.3%	
General, administrative and corporate expense ratio	14.8%	13.6%	
Combined ratio	115.6%	96.7%	
Annualized operating ROE*	(3.7)%	9.1%	
Operating EPS*	(1.26)	2.94	(142.9)%
Diluted book value per share	38.43	38.90	(1.2)%

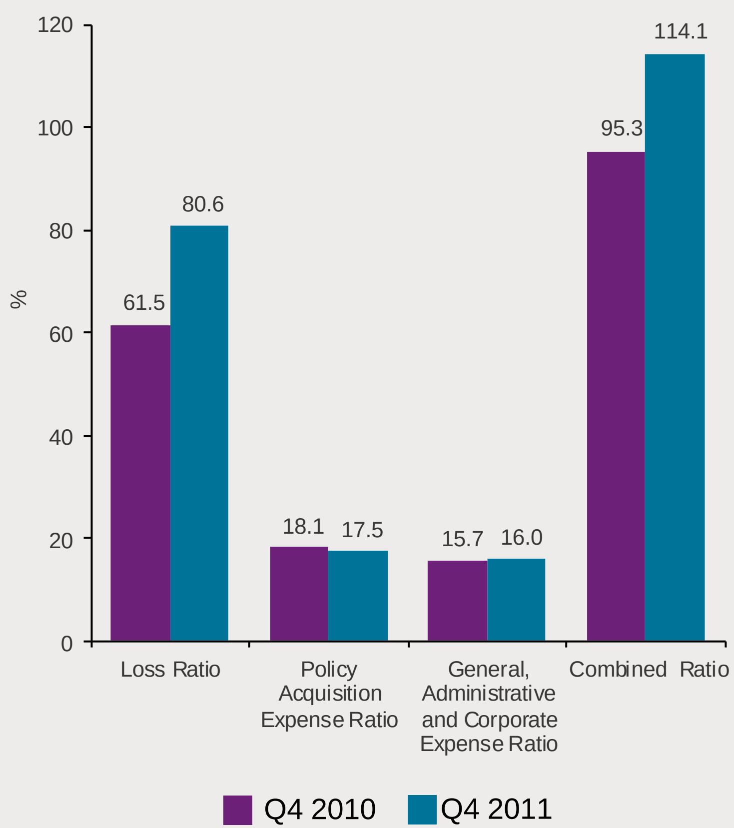
(*) Note: See Aspen's quarterly financial supplement for a reconciliation of operating income to net income, average equity to closing shareholders' equity and diluted book value per share to basic book value per share in the Investor Relations section of Aspen's website at www.aspen.co

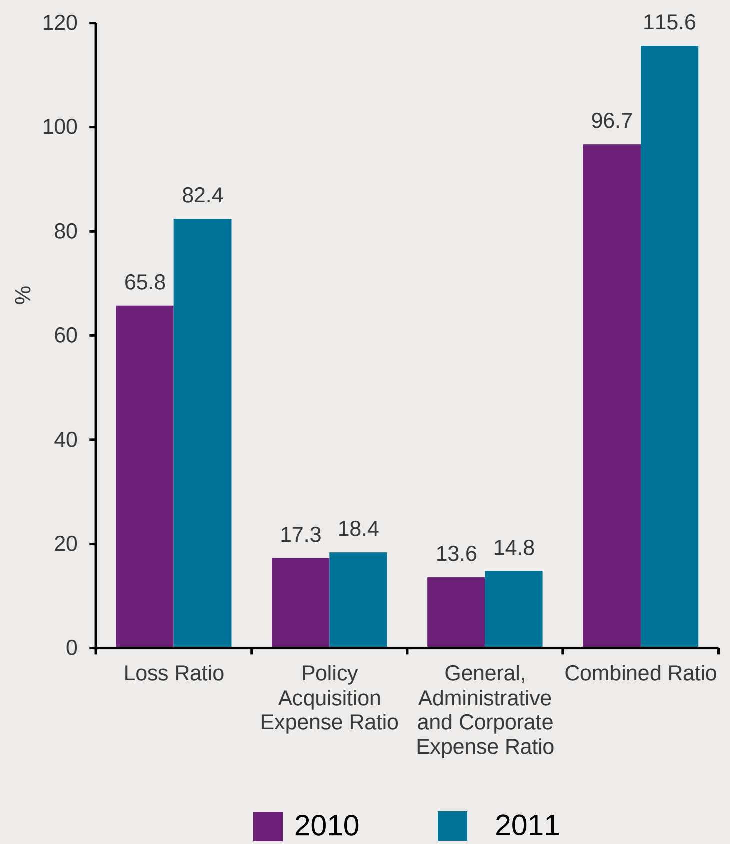
GROWTH IN DILUTED BOOK VALUE PER SHARE AND NET INCOME ROE



KEY PERFORMANCE METRICS: Q4 2011 AND YEAR END 2011

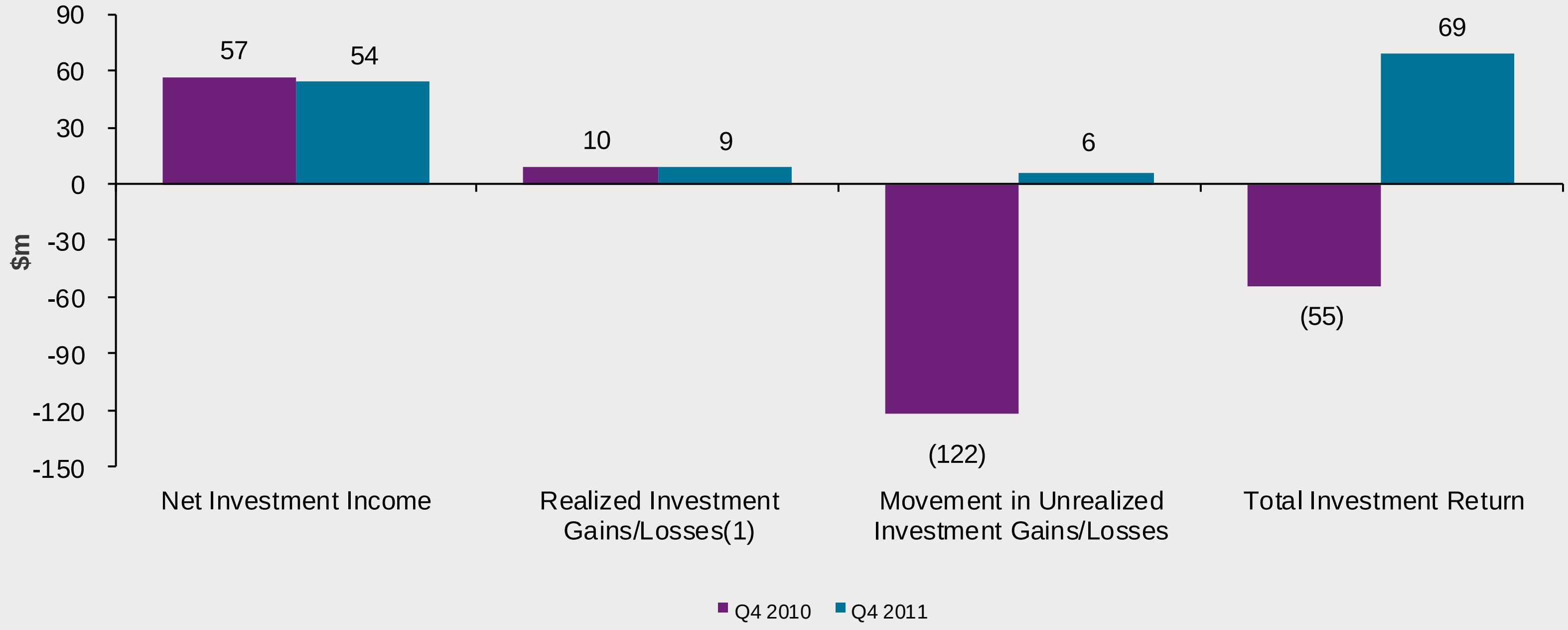
RATIO ANALYSIS





FINANCIAL HIGHLIGHTS: TOTAL INVESTMENT RETURN Q4 2011

TOTAL INVESTMENT RETURN



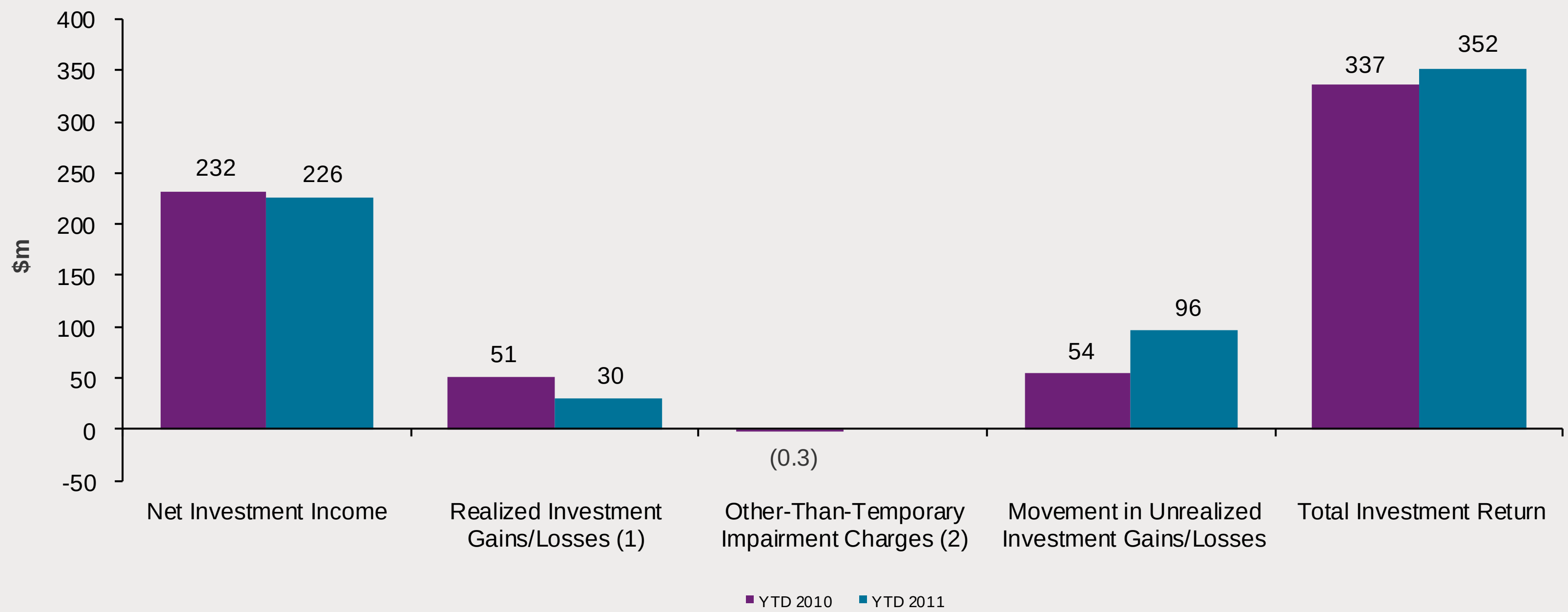
Annualized investment return for the quarter of 4.7% (1)

Note: There are no other-than-temporary impairment charges for the quarters ended December 31, 2010 and 2011

(1) Excludes net realized and unrealized gains/(losses) from the interest rate swaps

FINANCIAL HIGHLIGHTS: TOTAL INVESTMENT RETURN YEAR END 2011

TOTAL INVESTMENT RETURN



Annualized investment return for the year of 4.7% (1)

(1) Excludes net realized and unrealized gains/(losses) from the interest rate swaps
(2) There were no other-than-temporary impairment charges for the twelve months ended December 31, 2011

INVESTMENT PORTFOLIO BY ASSET TYPE

TOTAL INVESTMENT PORTFOLIO AT MARKET VALUE ($ millions): $7,574.2

CASH, SHORT-TERM SECURITIES AND EQUITIES		GOVERNMENT / AGENCY		STRUCTURED SECURITIES		CREDIT SECURITIES	
Short-term securities	302.3	US government	964.7	Asset-backed securities	61.7	Corporate bonds	1,697.1
Equities	179.5	Agency debentures	297.3	Agency rated mortgage-backed securities (GNMA, FINMA, FHLB)	1,268.3	FDIC guaranteed corporate bonds	72.9
Cash and cash equivalents	1,239.1	Foreign governments	667.8	Non-agency rated commercial mortgage-backed securities	85.4	Foreign corporates	498.7
Other investments (Iris Re)	33.1					Bonds backed by foreign government	167.8
						Municipal bonds	38.5
Q4 2011	**1,754.0**	**Q4 2011**	**1,929.8**	**Q4 2011**	**1,415.4**	**Q4 2011**	**2,475.0**
Q3 2011	**1,530.8**	**Q3 2011**	**1,881.4**	**Q3 2011**	**1,472.8**	**Q3 2011**	**2,638.6**

Overall portfolio asset allocations have not changed significantly during the fourth quarter of 2011

EUROZONE FIXED INCOME EXPOSURE

($ in millions)

	Ratings						
INVESTMENT	AAA	AA	A	BBB OR LESS (INC NR)	MARKET VALUE	MARKET VALUE %	UNREALIZED PRE-TAX GAIN
Austria	0%	100%	0%	0%	13.0	5%	0.4
Belgium	0%	0%	39%	61%	2.2	1%	0.2
Finland	100%	0%	0%	0%	6.9	3%	0.3
France	16%	63%	19%	2%	92.5	33%	3.7
Germany	70%	8%	18%	4%	80.2	29%	4.9
Italy	0%	0%	0%	100%	0.7	0%	-
Luxembourg	0%	0%	0%	100%	1.4	1%	-
Netherlands	43%	48%	9%	0%	76.5	28%	4.0
Spain	0%	0%	20%	80%	3.3	1%	-
Eurozone Exposures Q4 2011	**40%**	**41%**	**15%**	**4%**	**276.7**	**100%**	**13.5**

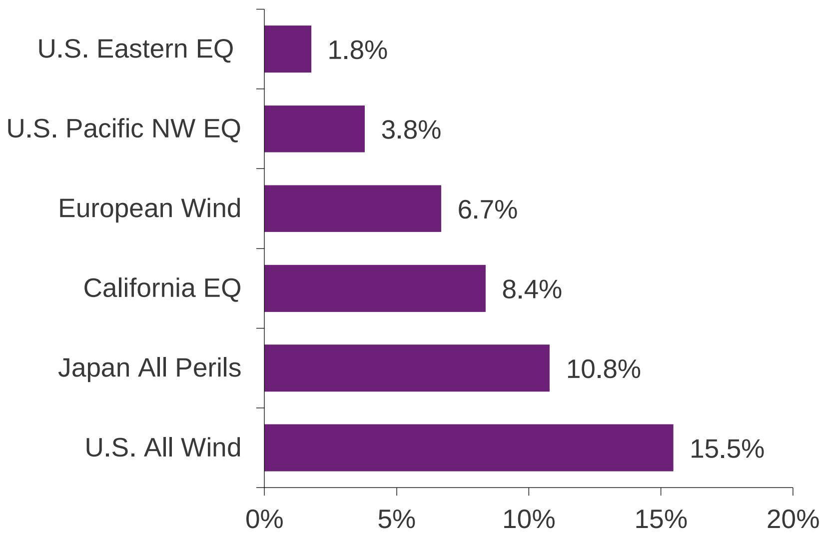
Eurozone exposures consist of sovereigns and high quality corporates with 96% having a rating of “A” or above, with de minimis exposure to Italian and Spanish corporate bonds

Note - Aspen takes the lower of the Moody’s and S&P ratings.

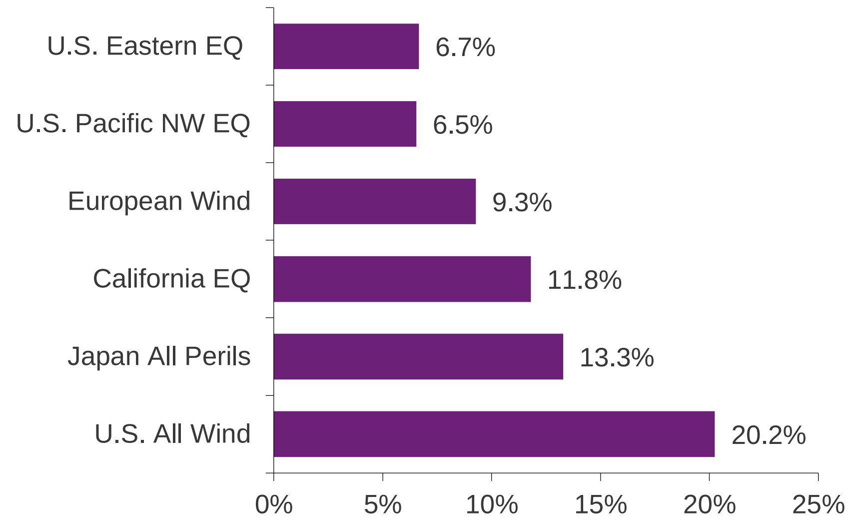
CATASTROPHE LOSS SUMMARY

CATASTROPHE LOSS SUMMARY AS AT DECEMBER 31, 2011 ($ millions)	AUSTRALIA	NEW ZEALAND	JAPAN	US TORNADOES	THAI FLOODS	OTHER CAT LOSSES	TOTAL
GROSS LOSSES							
Property catastrophe reinsurance	14	113	172	26	35	25	385
Other property reinsurance	8	10	73	75	80	4	250
Specialty reinsurance	-	-	9	18	16	5	48
Insurance	-	-	1	6	-	8	15
TOTAL GROSS LOSSES	22	123	255	125	131	42	698
NET LOSSES							
Property catastrophe reinsurance	14	67	172	26	15	25	319
Other property reinsurance	8	6	73	61	35	4	187
Specialty reinsurance	-	-	9	18	16	5	48
Insurance	-	-	1	5	-	8	14
TOTAL NET LOSSES	22	73	255	110	66	42	568
Inwards reinstatement receipts	(2)	(7)	(7)	(8)	(7)	(2)	(33)
TOTAL LOSS	**20**	**66**	**248**	**102**	**59**	**40**	**535**
Less estimated tax credits	(2)	(7)	(24)	(8)	(5)	(3)	(49)
TOTAL LOSS NET OF TAX 2011	**18**	**59**	**224**	**94**	**54**	**36**	**486**
TOTAL LOSS NET OF TAX Q3 2011	**21**	**65**	**188**	**81**	**N/A**	**29**	**384**

ASPEN'S MODELLED WORLDWIDE NATURAL CATASTROPHE EXPOSURES: MAJOR PERIL ZONES



100 year return period as % of total Shareholders' Equity



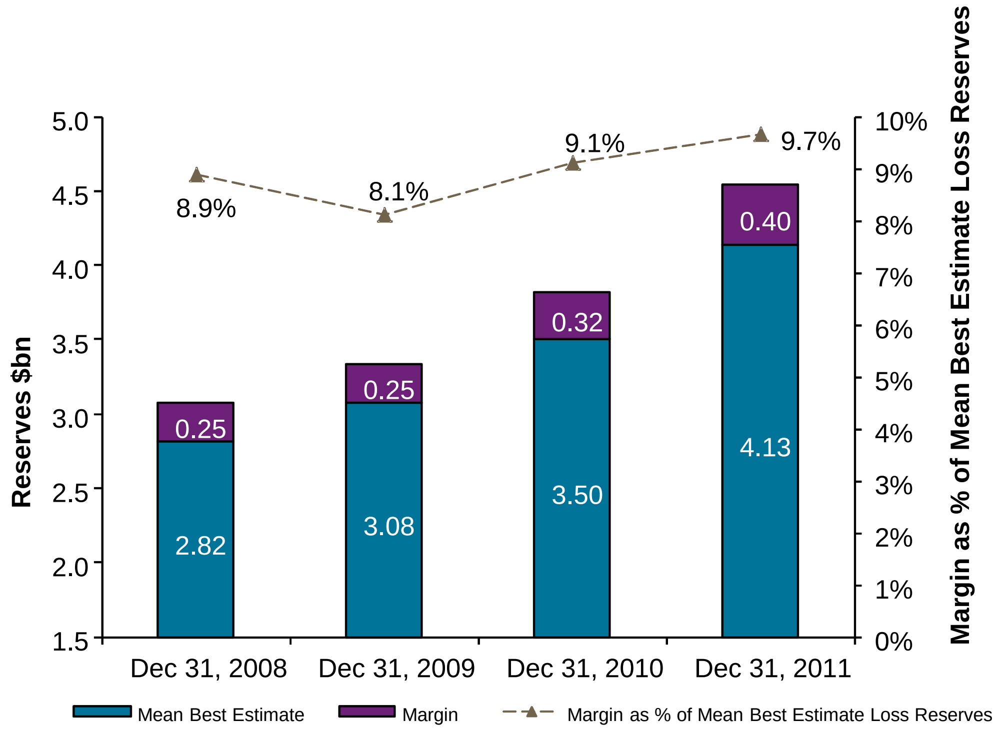
250 year return period as % of total Shareholders' Equity

1 in 100 year tolerance: 17.5% of total shareholders' equity

1 in 250 year tolerance: 25.0% of total shareholders' equity

Source: Aspen analysis using RMS v11 occurrence exceedance probability as at January 1, 2012 and Shareholders' Equity of $3,172.0 million at December 31, 2011. U.S. Wind is a blend of RMS v11 and AIR v13 weighted 50% for each model.

RESERVES AND RESERVING PHILOSOPHY: CONSISTENT LEVELS OF RESERVE ADEQUACY



Relative level of reserve margin has remained consistent

Note: Refer to our 2010 annual report on Form 10-K for a discussion of assumptions and uncertainties relating to the Company's reserves.
Source: Aspen Company Data

RESERVES AND RESERVING PHILOSOPHY: RESERVE POSITION

AS AT DECEMBER 31, 2011 ($ millions)

	ACCOUNTED	PERCENTILE	10TH	25TH	MEAN BEST ESTIMATE	75TH	90TH
Reinsurance (total pre diversification)	2,953.5	75%	2,244.8	2,423.6	2,700.8	2,941.5	3,240.2
Insurance (total pre diversification)	1,571.7	75%	1,138.3	1,245.5	1,426.8	1,570.2	1,770.9
Diversification			402.5	250.8	-	(205.0)	(482.0)
GROUP TOTAL POST DIVERSIFICATION	**4,525.2**	**90%**	**3,785.6**	**3,919.6**	**4,127.6**	**4,306.7**	**4,529.1**

AS AT DECEMBER 31, 2010 ($ millions)

	ACCOUNTED	PERCENTILE	10TH	25TH	MEAN BEST ESTIMATE	75TH	90TH
Reinsurance (total pre diversification)	2,343.8	74%	1,691.9	1,879.5	2,132.4	2,355.2	2,614.2
Insurance (total pre diversification)	1,476.7	72%	1,108.0	1,210.9	1,371.9	1,499.9	1,669.7
Diversification			379.7	225.2	-	(184.7)	(413.8)
GROUP TOTAL POST DIVERSIFICATION	**3,820.5**	**88%**	**3,179.6**	**3,315.6**	**3,504.3**	**3,670.4**	**3,870.1**

Overall reserve position at 90th percentile at year end 2011 vs. 88th percentile at year end 2010

Note: Refer to our 2010 annual report on Form 10-K for a discussion of assumptions and uncertainties relating to the Company's reserves.
Source: Aspen Company Data

2012 GUIDANCE

	ACTUAL 2011 RESULTS	2012 GUIDANCE
Gross written premiums	$2.2 billion	$2.3 billion ± 5%
% premiums ceded	12% of GEP	10% - 12% of GEP
Combined ratio	115.6%	93% - 98%
Tax rate	26%	8% to 12%
Catastrophe-load		$190 million (assuming normal loss experience)