

The background of the slide is a dark, abstract composition of glowing light trails. These trails are primarily in shades of bright blue and cyan, with some purple and magenta hues. They form a sense of motion and depth, curving and overlapping to create a dynamic, futuristic feel. The light trails are most concentrated in the lower right quadrant, where they appear to radiate outwards.

Amlin plc

Presentation to Analysts:
Catastrophe Underwriting and Risk
Management

July 2011

This presentation contains or may contain forward-looking statements. It is important to note that the Company's actual results could differ materially from the results anticipated or projected in any such forward-looking statements, based on a number of important factors. The Company does not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. Past performance cannot be relied on as a guide to future performance.

Catastrophe Underwriting

Kevin Allchorne, Head of Reinsurance

Catastrophe Risk Management

James Illingworth, Chief Risk Officer

Catastrophe Underwriting - Agenda

- Interaction between Amlin's reinsurance businesses
- A typical catastrophe programme, a typical client
- Gross underwriting, spread & texture
- Size and make up of account and market position
- Gross historical results
- Industry losses
- 2010 & 11 losses and lessons
- Retro & positioning for remainder of 2011
- 2012 Outlook

Interaction between Amlin's reinsurance businesses

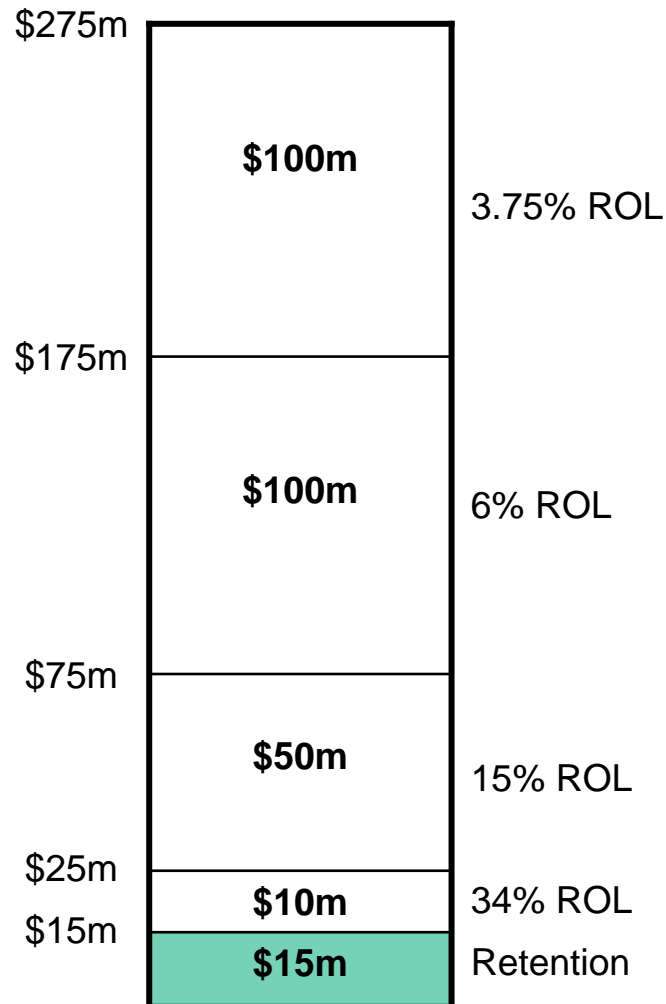
– Amlin Bermuda established 2005 post KRW

- Same distribution (Lloyd's broker) and virtually identical client base
- Successfully enabled growth in Reinsurance market share at the best possible time
- Generally following market behind London
- Independent decisions but close co-operation

– Amlin Re Europe established 2010

- Set up to access business from continental Europe which doesn't get to London and Bermuda
- Multi-line client emphasis with limited catastrophe appetite
- Leveraging London & Bermuda cat relationships where appropriate

A typical catastrophe programme, a typical Amlin client



A Texas Mutual Insurer protecting homeowners and farmowners

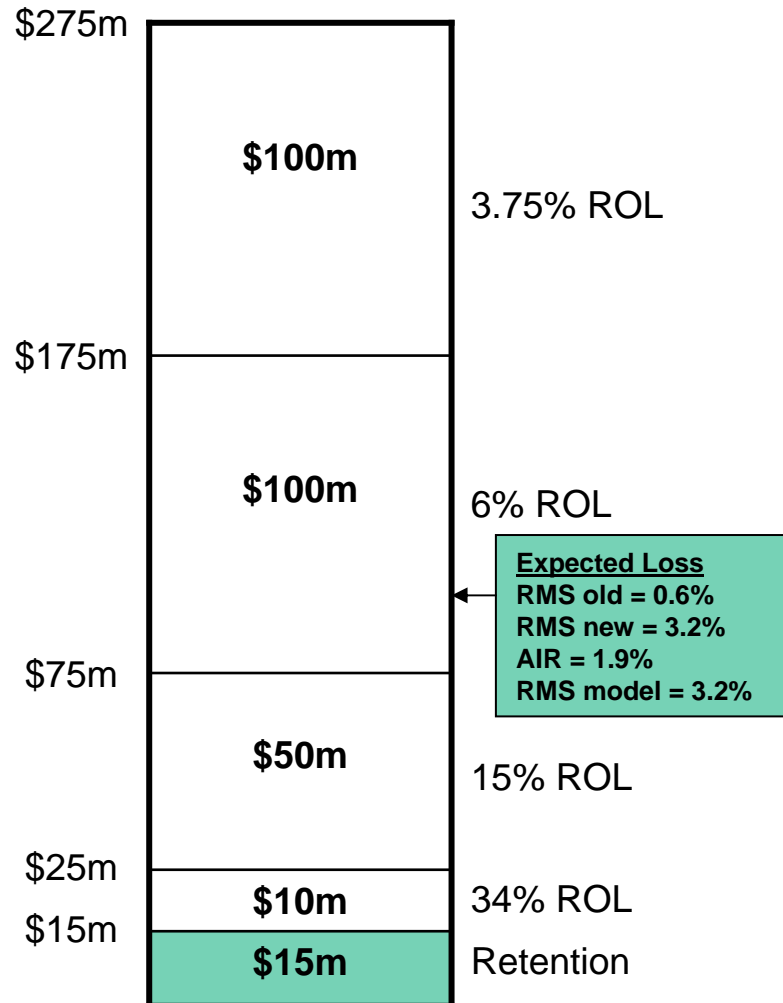
Total Insured Values – \$60,755m
Total Premium – \$231m

Spread throughout Texas with \$1,214m of insured values in Harris/Houston

Amlin Line - \$15m

Return Period	RMS v10
25	\$37m
50	\$61m
100	\$92m
250	\$144m
500	\$196m

A typical catastrophe programme, a typical Amlin client



A Texas Mutual Insurer protecting homeowners and farmowners

Total Insured Values – \$60,755m
 Total Premium – \$231m

Spread throughout Texas with \$1,214m of insured values in Harris/Houston

Ike Loss - \$117.5m

Return Period	RMSv10	RMSv11	AIR v12
25	\$37m	\$94m	\$76m
50	\$61m	\$169m	\$112m
100	\$92m	\$273m	\$164m
250	\$144m	\$463m	\$283m
500	\$196m	\$651m	\$386m

Market Share Model

Microsoft Excel - Germania_GM_2011.xls

File Edit View Insert Format Tools Data Window Help

13.3167634894735%

Format Painter

Resolution		Margin	25%
1,000,000	Deductible	15%	
		=100?	63.75

Reinstatements:		1st RI	100%
Covered Limits: 2	Recoverable: 0	2nd RI	
		3rd RI	

Information Summary											
Layer Details						Pure Rate On Line					
Layers	Limit	Excess	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Total ROL	Reinstated ROL	
1	7.5 XS	7.5	42.00%						42.00%	33.66%	
2	10 XS	15	32.15%	27.67%					59.82%	44.51%	
3	50 XS	25	13.32%	5.08%					18.39%	16.53%	
4	100 XS	75	5.00%	0.19%					5.19%	5.02%	
5	100 XS	175	2.93%	0.01%					2.93%	2.88%	
6											

Year	Details	Name	Loss	Trend
1900	Hurricane		31,876.43	2.1
1915	Hurricane		14,513.73	2.7
2008	Hurricane	Ike	8,733.04	1.0
1970	Hurricane	Cecelia	7,040.00	1.7
1932	Hurricane		5,525.00	2.1
1983	Hurricane	Atitca	4,250.00	1.9
1916	Hurricane		3,737.00	2.7
1933	Hurricane		3,427.22	2.1
2001	Windstorm	Allison	3,417.96	1.0
1961	Hurricane	Carla	3,415.01	1.5
1942	Hurricane		2,647.95	1.7
2005	Hurricane	Rita	2,614.57	1.1
1995	Windstorm		2,486.25	1.0
1992	Windstorm		1,990.55	1.0
1980	Hurricane	Allen	1,681.21	1.9
2003	Windstorm		1,633.09	1.0
1979	Windstorm		1,548.91	1.0
1967	Hurricane	Beulah	1,244.00	1.6
1981	Windstorm		1,110.68	1.0

Options		
Hurricane	PCS Data	
Innuring Prog:	None	

Data Summary		
Modifier	36.91%	
Mod Agg	22,423	
MS	0.846%	

Layer 1		
886.71	XS	886.71
0.033%	XS	0.033%
ROL	42.00%	

Layer 2		
1,182.29	XS	1,773.43
0.045%	XS	0.067%
ROL	32.15%	

Layer 3		
5,911.43	XS	2,955.71
0.223%	XS	0.111%
ROL	13.32%	

Layer 4		
11,822.86	XS	8,867.14
0.446%	XS	0.334%
ROL	5.00%	

Layer 5		
11,822.86	XS	20,690.00
0.446%	XS	0.780%
ROL	2.93%	

Options		
TornHail	Simulated Events	
Innuring Prog:	None	

Data Summary		
Modifier	112.33%	
Mod Agg	68,246	
MS	2.574%	

Layer 1		
291.33	XS	291.33
0.011%	XS	0.011%
ROL	73.17%	

Layer 2		
388.45	XS	582.67
0.015%	XS	0.022%
ROL	27.67%	

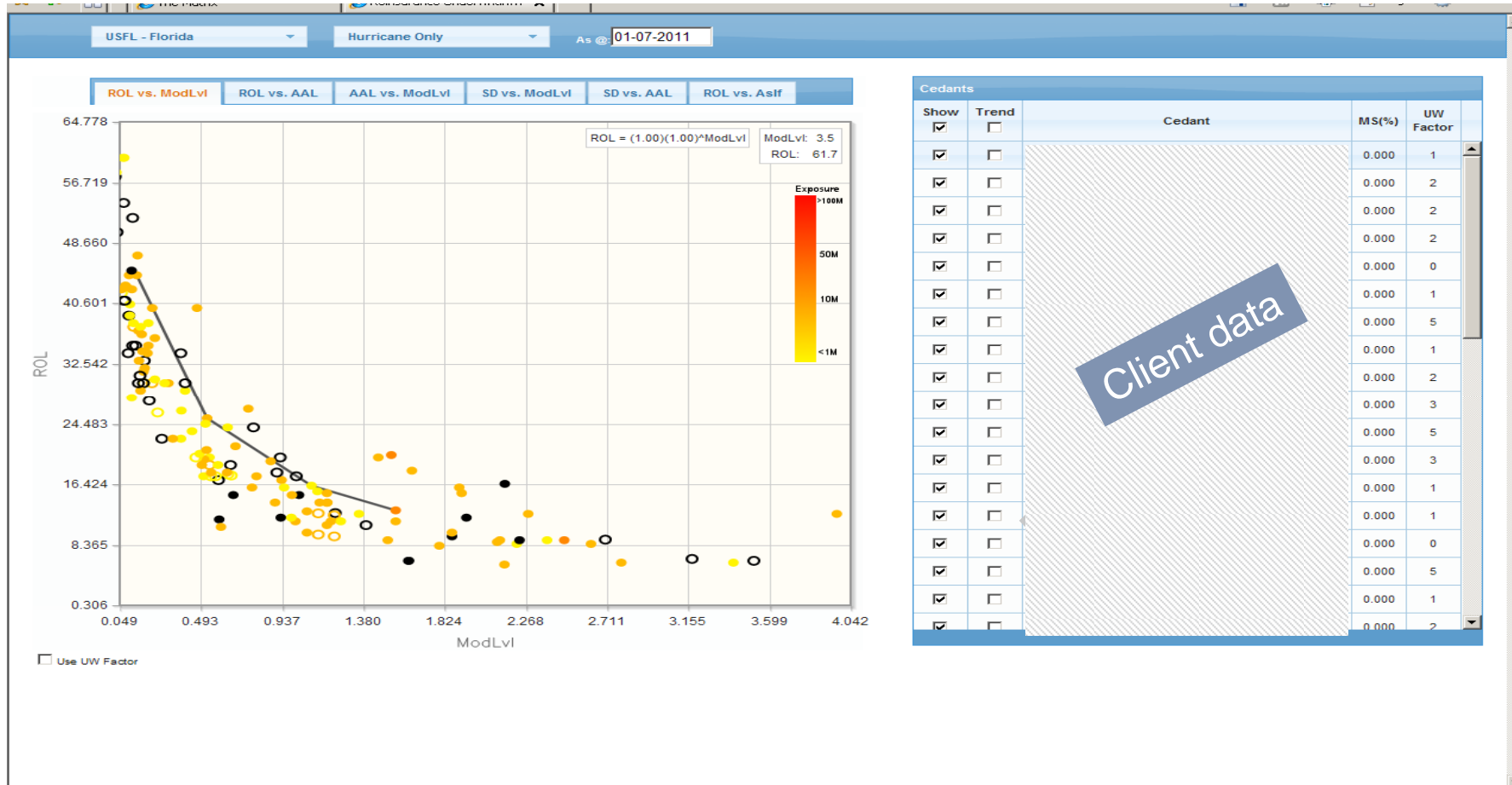
Layer 3		
1,942.23	XS	971.12
0.073%	XS	0.037%
ROL	5.08%	

Layer 4		
3,884.46	XS	2,913.35
0.147%	XS	0.110%
ROL	0.19%	

Layer 5		
3,884.46	XS	6,797.81
0.147%	XS	0.256%
ROL	0.01%	



Opportunity Cost – an intranet based layer comparison tool



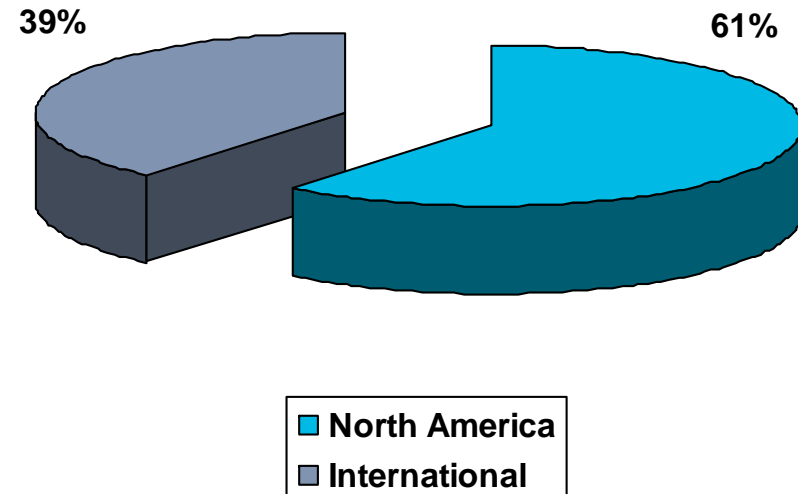
Gross underwriting, spread & texture

- Fundamental Strategic Aim when constructing a catastrophe portfolio...
 - Maximise the pool of premium income in the portfolio relative to its maximum potential losses, whilst maintaining a sufficient underwriting margin in normal loss years
- Over time gross underwriting should be viable on its own, but inherent volatility in the class means Retrocessional R/I has its place
- Pricing
 - Utilise many model outputs, proprietary and in-house + “old school” methods
 - Key is underwriter judgement in blending these approaches into a sensible price
- Where possible we aim for simplicity in the underlying business e.g., homeowners, small - mid sized commercial vs large industrial / shared and layered business
 - Homogeneity = more data, more reliable modelling + easier to apply underwriter judgement

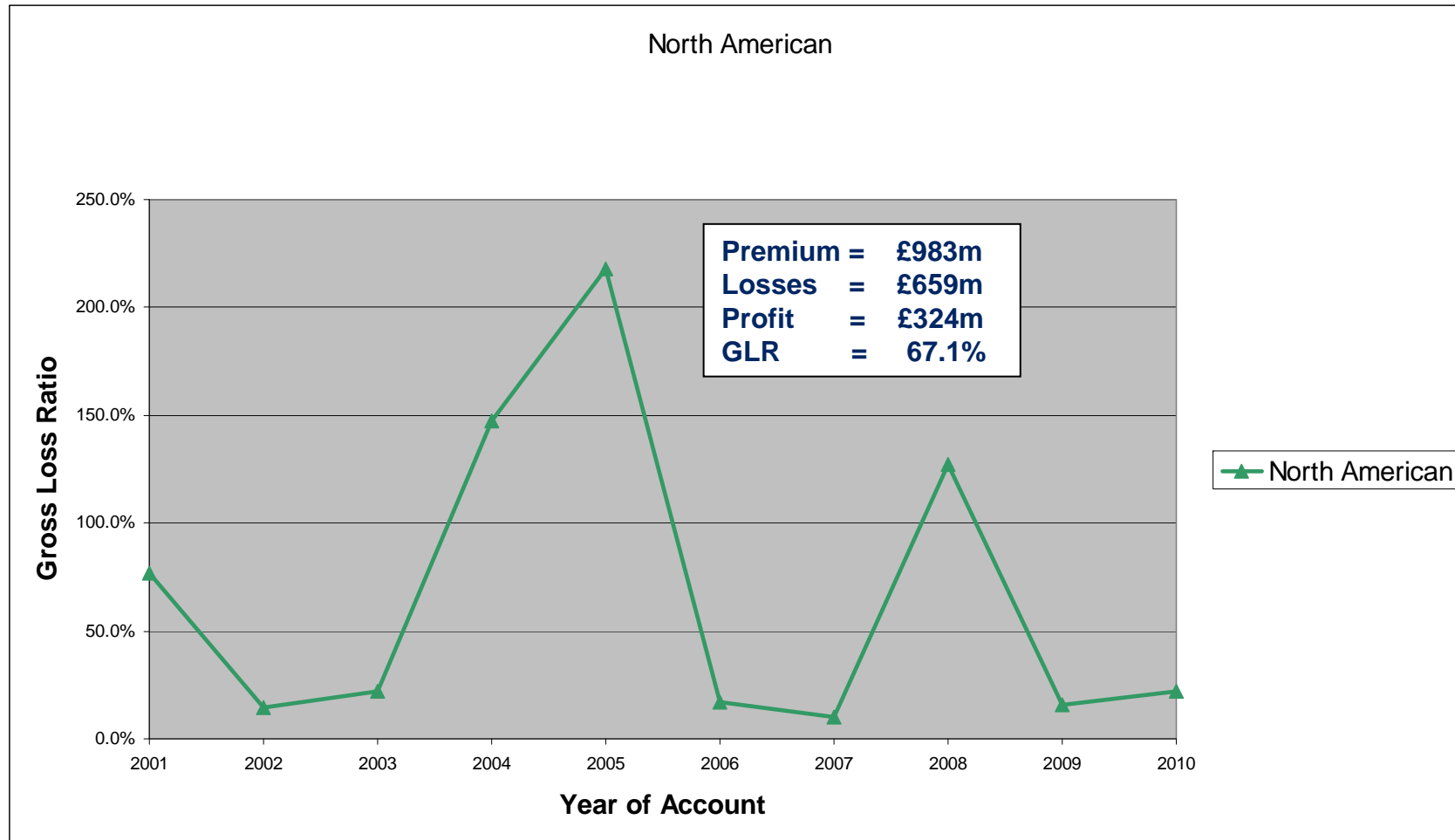
Size and make up of account and market position

- Amlin Group Catastrophe Reinsurance gross premium 2010 - £391m
- Amlin London gross Catastrophe premium 2010 - £231m
- Market leader in London and global market
- “Amlin [London] is the most used insurer for reinsurance and ranks 1st for share of mind and service leader status”
Gracechurch survey March 2011

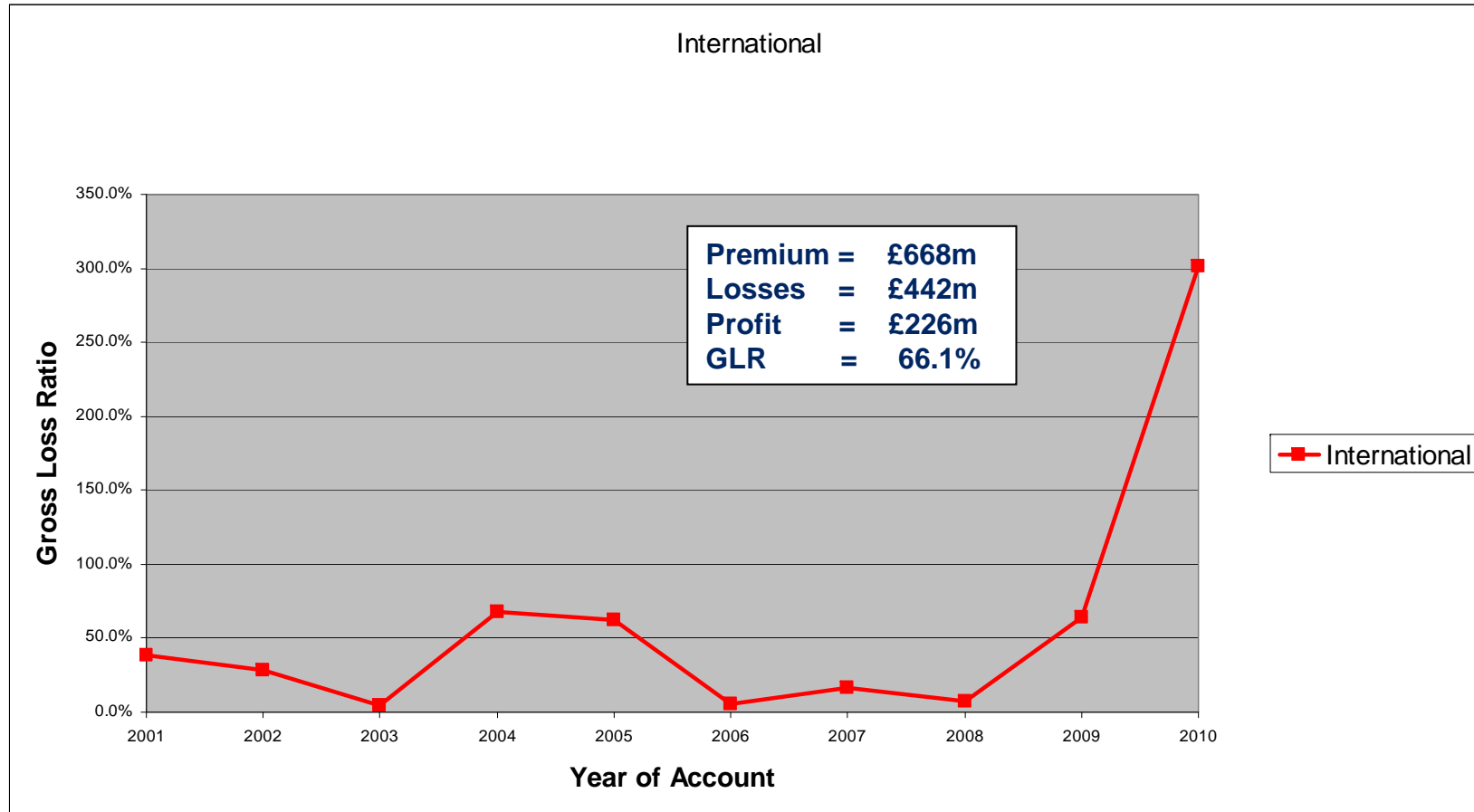
Amlin London Catastrophe Premium



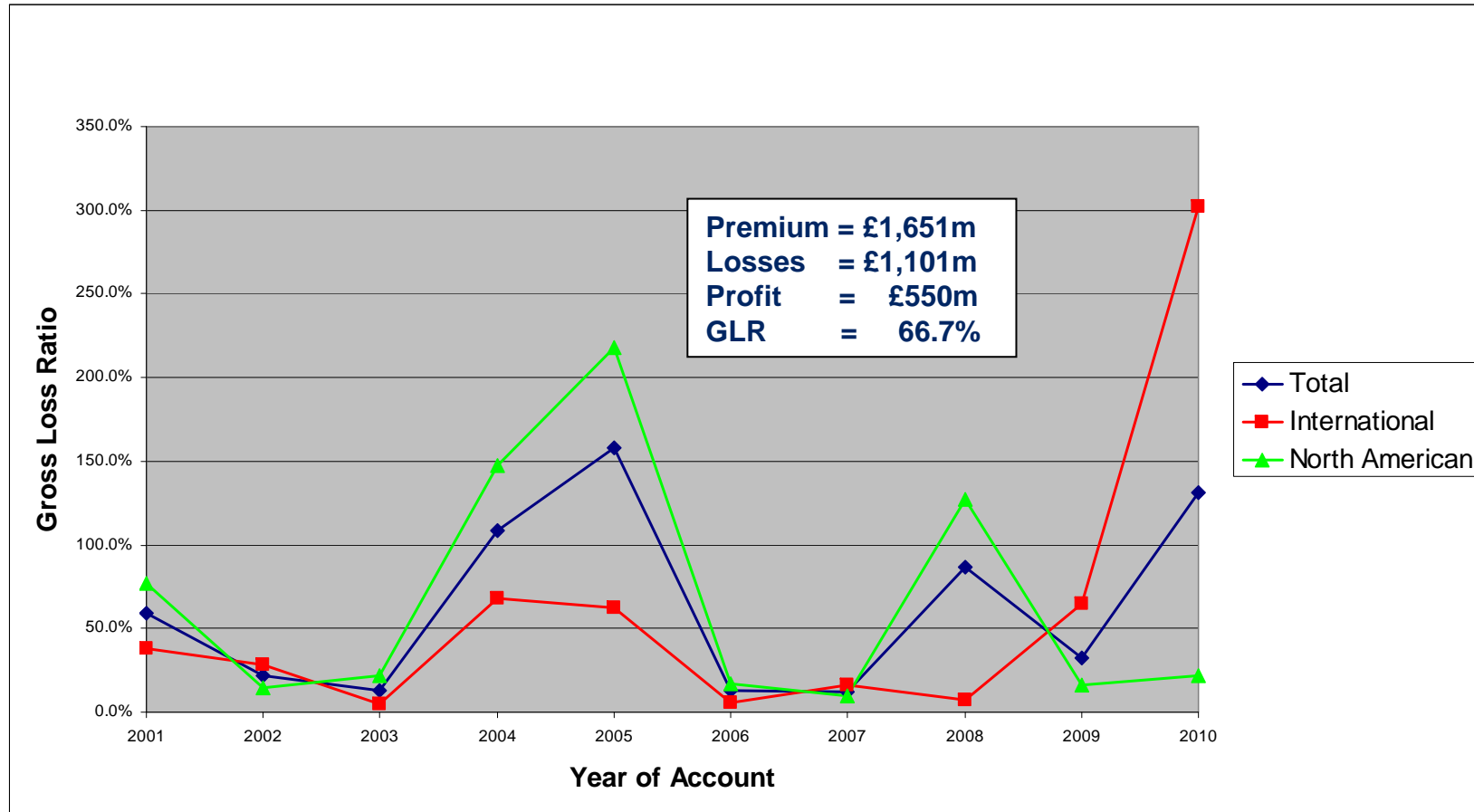
Amlin London Gross Historical Results 2001 - 2010



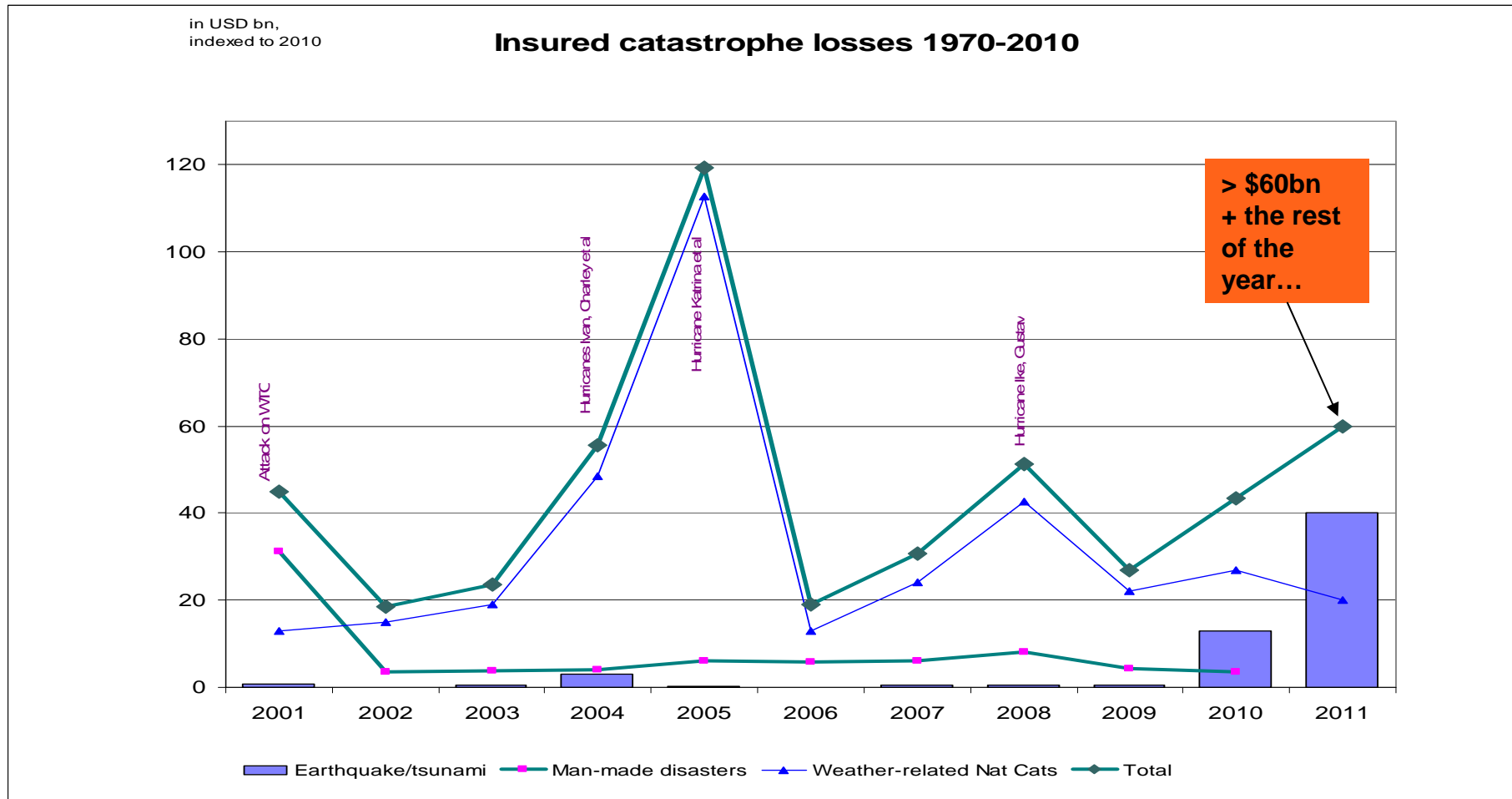
Amlin London Gross Historical Results 2001 - 2010



Amlin London Gross Historical Results 2001 - 2010

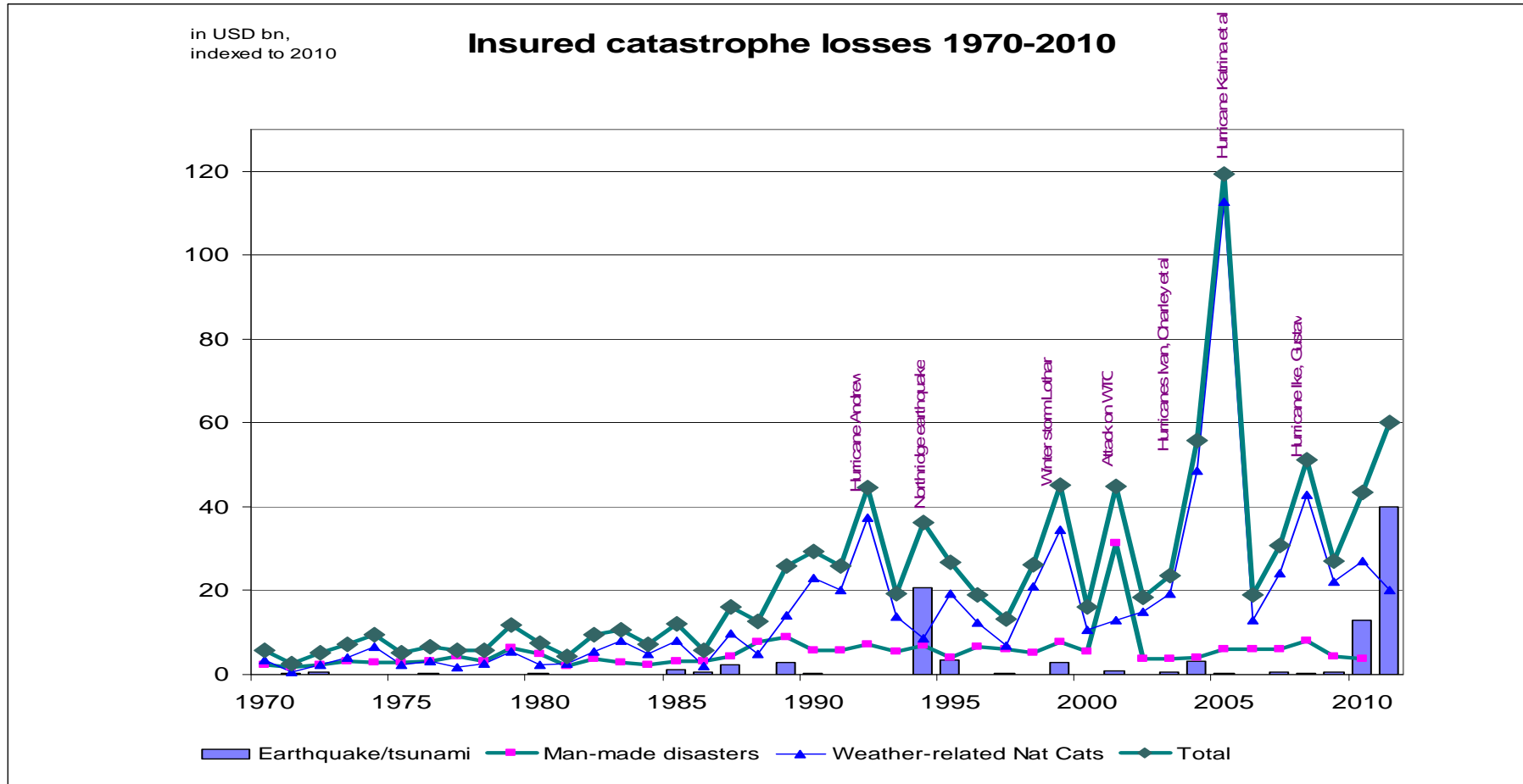


Industry losses



Source: Swiss Re sigma

Industry losses



Source: Swiss Re sigma

2010 & 11 losses...



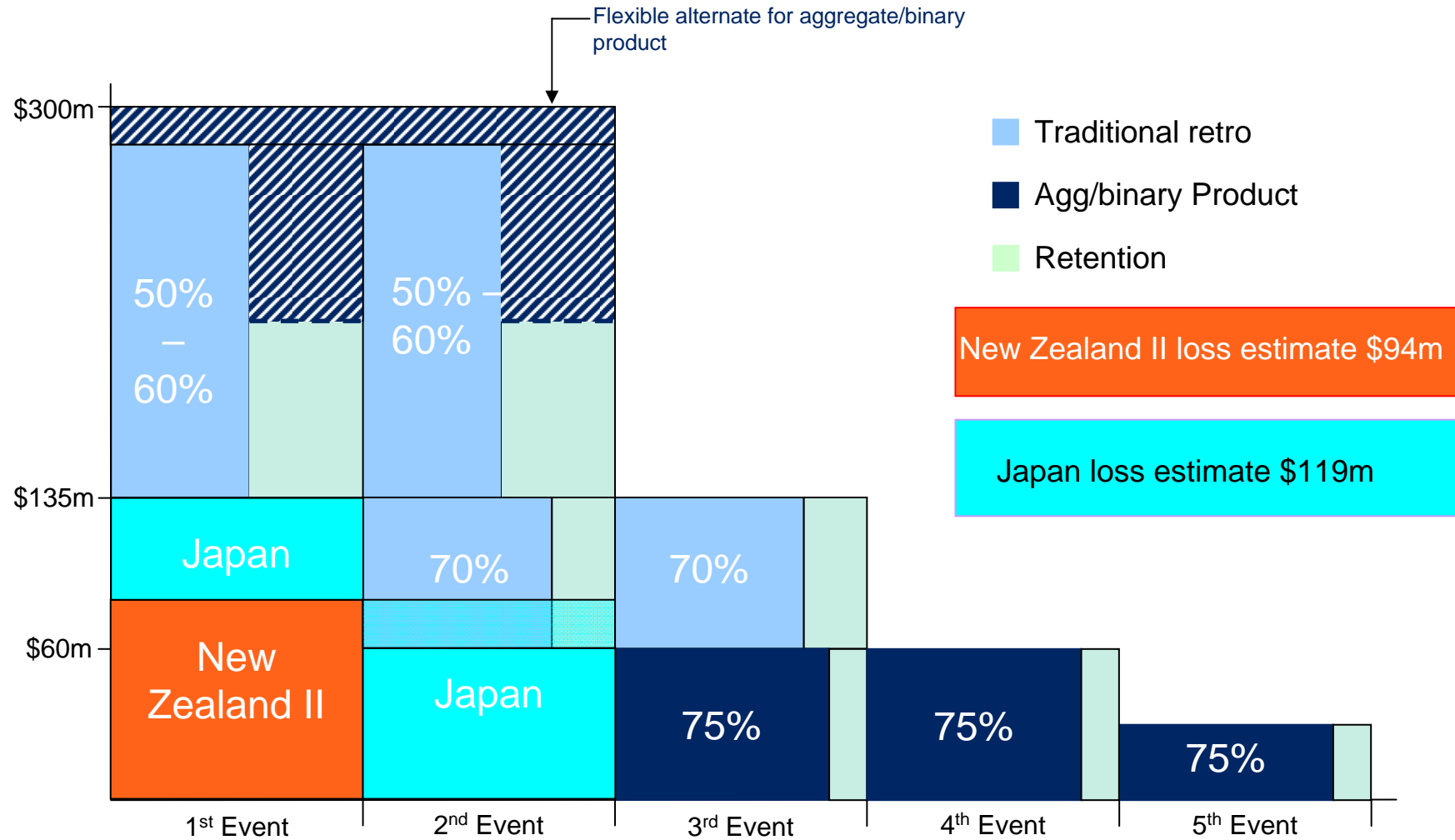
– Like London buses!

- After a fairly quiet decade, International losses have come thick and fast
- Profitability of North American portfolio in 2010 helped to offset International catastrophe claims
- Retro cover provides further protection against additional catastrophe events during the remainder of 2011

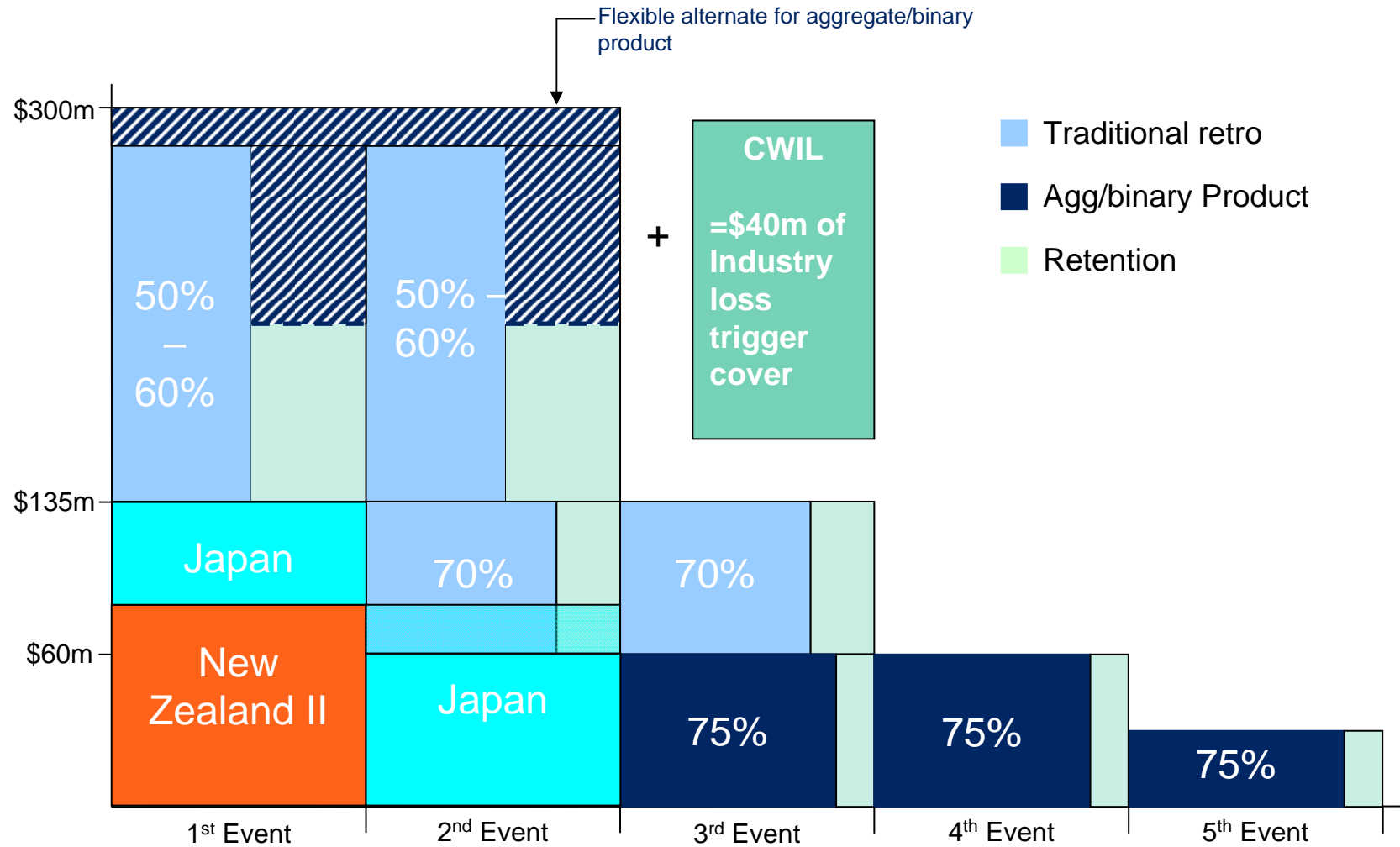
...& lessons

- Longer term view suggests strategy of maintaining a global spread of business works but large lines on low rate-on-line cat business (whatever the models say) no longer seem worthwhile
- Non peak zone losses only give rise to localised rate increase
 - Supply theoretically equal to peak zone but demand much lower
 - Reinsurer local offices empowered with cat capacity
- Localised “payback” is usually disappointing so upside for this business is minimal
- Earthquake aftershocks can happen long enough after the original event to be construed as a separate event + they can be worse
- Importance of frequency/ aggregate retro cover as well as vertical cover in a well spread portfolio

Amlin London Retrocession programme: Q1 2011



Positioning for remainder of 2011



Impact on key Realistic Disaster Scenarios (Amlin London)

– \$78bn Northeast Hurricane Net Loss at	1 st January	£142m
	1 st April	£89m (-37%)
– \$78bn LA Earthquake Net Loss at	1 st January	£154m
	1 st April	£107m (-31%)

2012 Outlook

- Rates improving currently due to International losses and, to a limited extent, RMS model change
- International should continue to improve but will it be enough?
- Will major reinsurers raise the bar on minimum ROLs?
- US Wind season or other large events will determine whether mid-year rate trends continue.

Summary

Amlin is extremely well positioned in catastrophe reinsurance:

- Stable client base and excellent brand, ratings and service reputation
- Diverse portfolio which has demonstrated resilience over time and against recent loss activity
- Experienced underwriting teams in the major catastrophe distribution centres and expertise in the ILS sector.

Group Catastrophe Risk Management - Agenda

- Appetite and tolerance
- Control framework
- Assessment and measurement

Appetite and Tolerance

- Appetite is our willingness to take risk at portfolio and transactional level
 - Risk and reward
 - Optimisation of classes and risk budget through underwriting portfolio planning and selection
 - Individual risks selection

- Tolerances are limits that we place on entities and at a Group level
 - RDS deterministic limits
 - Whole portfolio stochastic limits

Appetite

- Underwriters are responsible for portfolio management
- Risk profile varies for each class and optimisation is complex
- Diversification is a key aim
- Pricing impact on returns
- Geographical clash across lines
- Reinsurance availability

Tolerances

- At Group and allocated to divisional level
- Margins retained at Group
- Deterministic RDS process and consolidation of:
 - 35 specific scenarios
 - Net claims amounts limited to pre-agreed levels
 - Underwriting teams also retain margin

Realistic Disaster Scenarios (RDS)

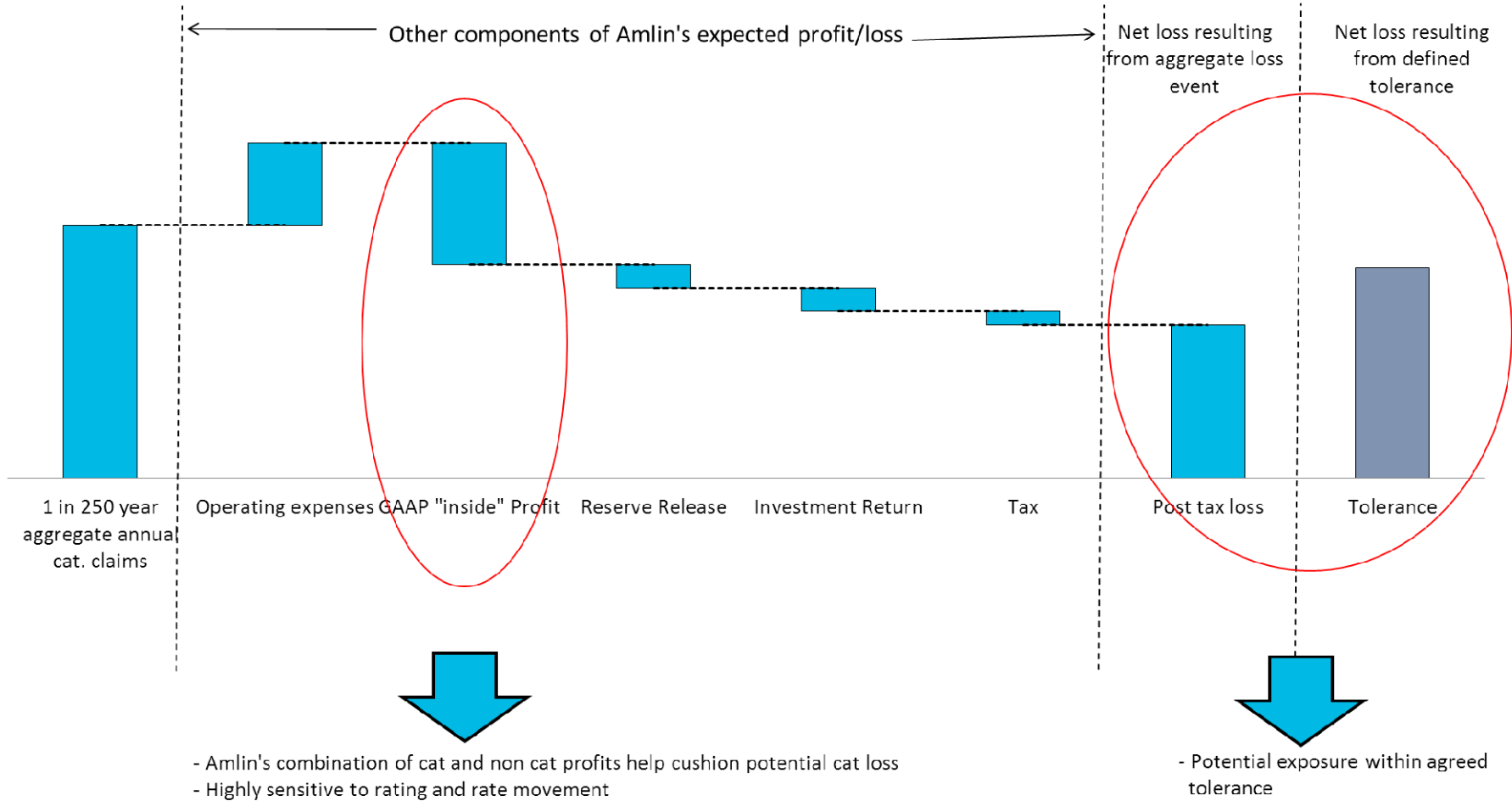
- 35 scenarios modelled across the Group
- Events considered gross and net
- Reinsurer failure considered
- Modelled losses compared with Net Tangible Assets
- Exercise run quarterly

Tolerances continued

- Stochastic tolerances
 - DFA model generated
 - Consider whole profitability and assets of the Group
 - Limits expressed as % of NTA after offsetting profit
 - Both single loss and aggregate annual basis

- Run at planning stage to allocate tolerances and tracked quarterly

Translating cat.claims to post tax loss



Control Framework

- Business Planning
 - Recognition of class characteristics and potential clash
- Line Guides
 - Differing line usage
- Aggregation limits on binders
- Event limits on risk xs and pro rata
- PML limits at portfolio level

Reinsurance Purchasing

- Direct vs retrocessional
- Retentions and co-reinsurance
- Price and availability
- Counterparty credit risk
- Modelling of P&L and capital impact
- Use of Amlin Bermuda for internalisation

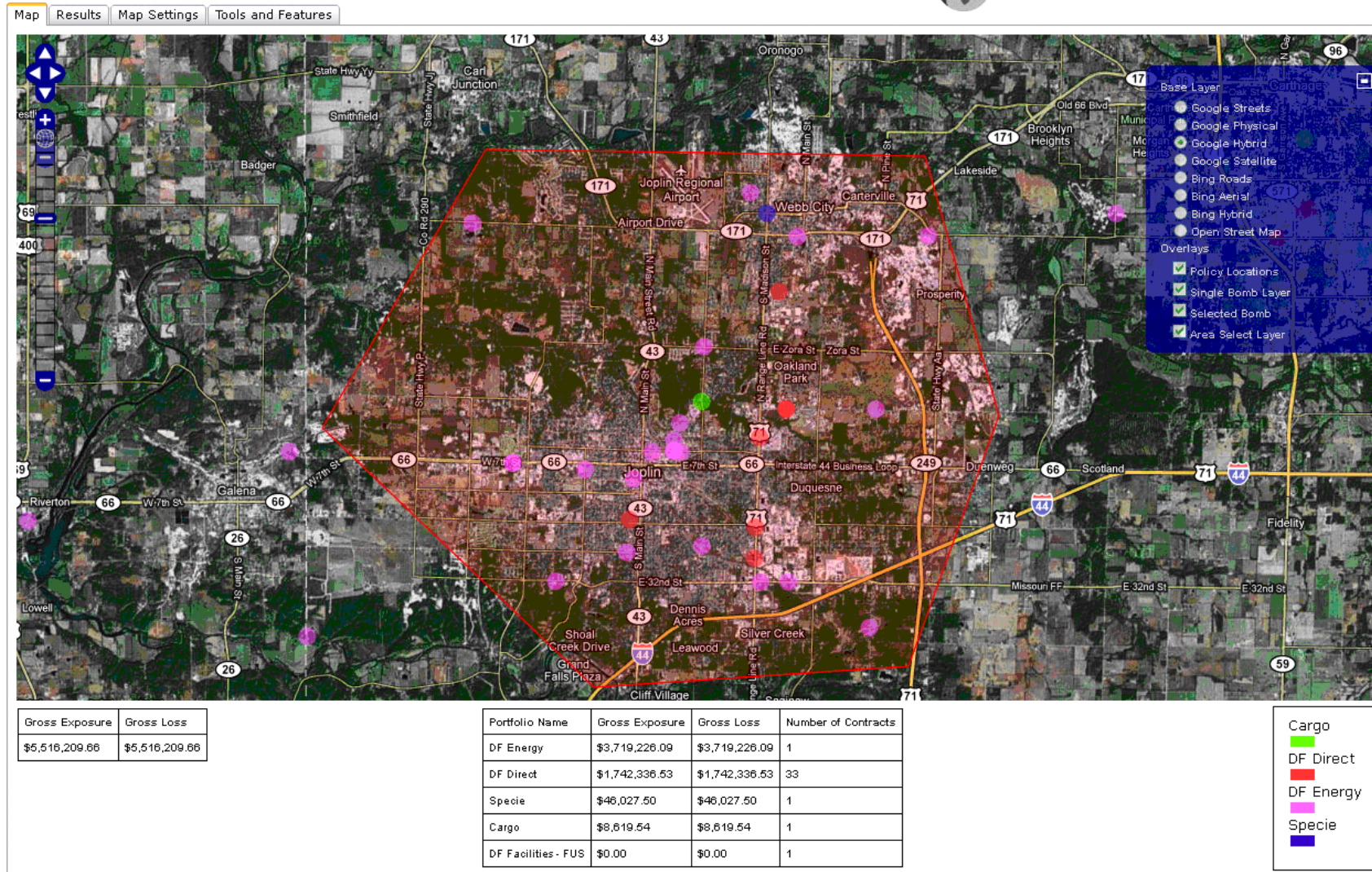
Assessment and Measurement

- Exposure reporting
 - Tools – OpenXposure, RiskManager, in-house tools
 - Mapping clash
 - Market share analysis

- Modelling
 - RMS RISKLINK for direct property, static marine and CAT XL
 - AIR CATRADER also for Cat XL
 - EQECAT for Gulf energy

- DFA combines all model output

Mapping Clash



Market Share Analysis

- Comparison of modelled Amlin loss vs. modelled Industry loss

- Highlights areas of significant Amlin loss and disproportionate market share

Catastrophe Risk - Market Share Analysis

Euro Windstorm				Proportion of RDS: 63%		Average Market Share		Largest Net Market Share Event			Largest Event		
Industry Loss (\$bn)	No of Events	Avg Industry Loss USD (bn)	Avg Net Loss GBP (m)	Gross	Net	Share	Net Loss GBP (m)	Areas Impacted	Net Loss GBP (m)	Share	Areas Impacted		
2	2,855	2.3	27.8	2.51%	1.97%	6.00%	40.3	SE,DK	80.3	3.78%	DK,SE		
5	1,648	4.6	43.2	1.88%	1.42%	3.85%	90.4	DK,SE	110.5	2.80%	DK,NL,FR,SE		
7	736	7.1	63.5	2.00%	1.34%	2.74%	112.9	DK,SE,NO	129.1	2.47%	GB,DK		
10	606	10.2	89.1	2.08%	1.31%	2.39%	152.7	GB,DK	166.4	2.03%	GB,DK		
15	378	14.7	118.6	2.01%	1.22%	1.67%	194.2	GB,DK	206.3	1.68%	GB,DK,FR		
20	200	19.7	147.0	1.92%	1.12%	1.75%	226.4	GB,DK,NL	236.8	1.65%	GB,DK,NL		
25	144	24.7	189.5	1.71%	0.97%	1.59%	242.4	GB,DK	250.0	1.42%	NL,FR,GB,DK,SE		
30	92	29.9	189.6	1.67%	0.91%	1.39%	258.8	GB,FR,DE,NL	279.7	1.32%	GB,NL		
35	70	34.9	203.7	1.62%	0.85%	1.46%	328.5	GB,DK,FR	342.9	1.35%	GB,NL,DK		
40	44	39.9	225.1	1.60%	0.89%	1.30%	351.0	GB,NL	359.2	1.30%	GB,DK,FR,SE		
45	23	44.5	247.0	1.60%	0.83%	1.12%	328.4	GB,DE,NL	329.9	1.11%	GB,NL,FR,DE,BE		
50	23	49.6	253.8	1.41%	0.77%	1.09%	348.0	FR,NL,DK,BE,DE	348.0	1.09%	FR,NL,DK,BE,DE		
>=52.5	113	80.9	319.8	1.08%	0.60%	1.23%	426.4	FR,GB,NL,DE	684.2	0.62%	GB,DE,FR		

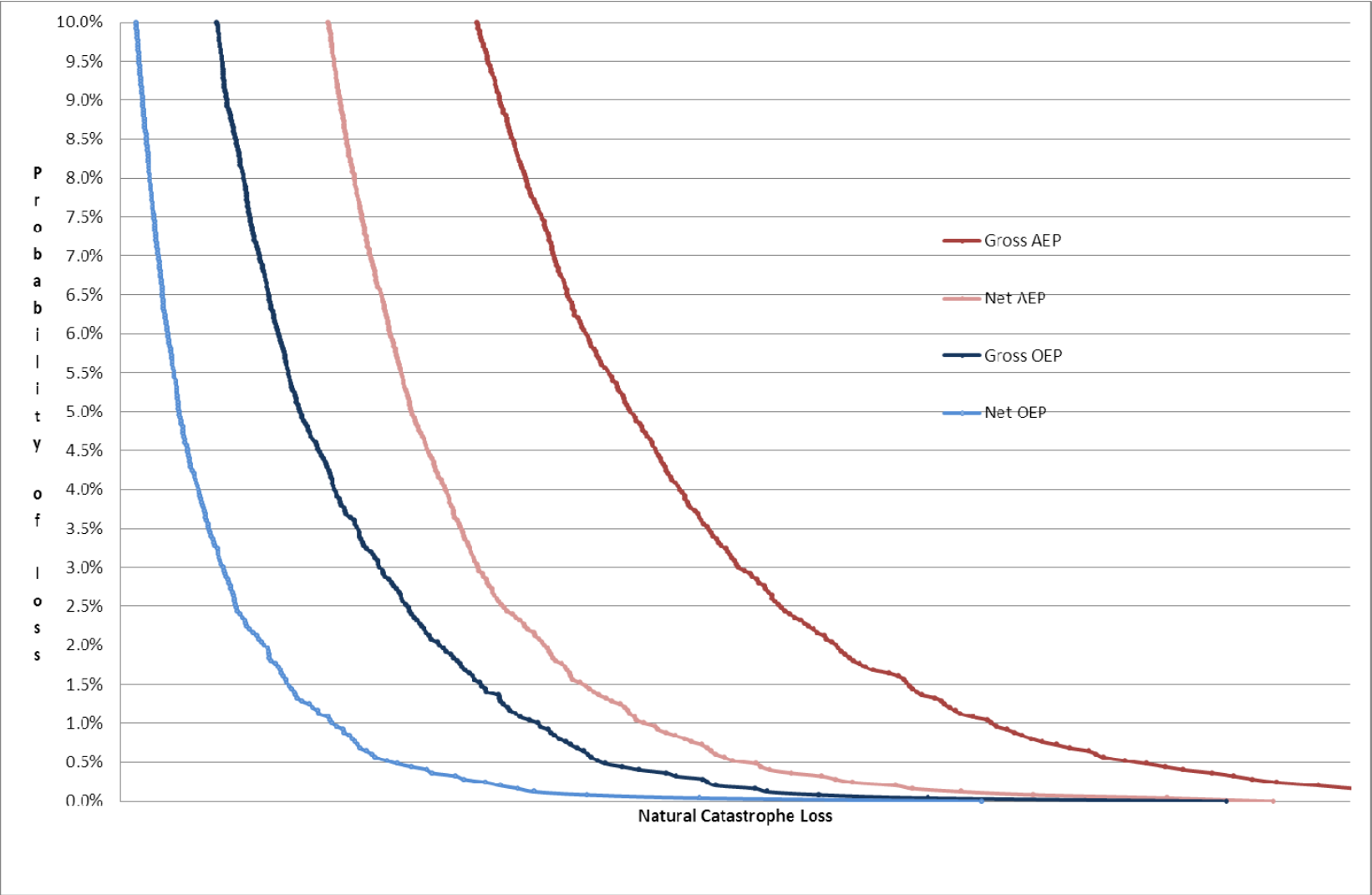
US Windstorm				Average Market Share		Largest Net Market Share Event			Largest Event		
Industry Loss (\$bn)	No of Events	Avg Industry Loss USD	Avg Net Loss GBP	Gross	Net	Share	Net Loss	Areas Impacted	Net Loss	Share	Areas Impacted
5	1,225	8.2	33.0	1.14%	0.92%	2.13%	73.8	GA,Car4	92.9	1.95%	SC,Car3,NC,Car3
10	2,343	10.8	52.8	1.09%	0.74%	2.12%	120.1	GA,Car4	155.1	1.55%	SC,Car3
20	1,335	16.4	83.1	0.95%	0.66%	1.54%	157.5	GA,Car3	212.6	1.35%	NC,Car4,RI,Car4,ME,Car4
30	707	26.5	111.4	0.83%	0.57%	1.23%	217.2	NC,Car3,NY,Car4	233.5	1.09%	MA,Car4,ME,Car3
40	481	36.8	129.9	0.72%	0.49%	1.05%	248.2	NC,Car3,NY,Car4,ME,Car4	273.7	0.95%	NC,Car4,NY,Car3
50	303	46.9	151.9	0.67%	0.45%	1.04%	340.0	NC,Car3,NY,Car4,ME,Car4	341.8	1.02%	NC,Car4,VA,Car3,NJ,Car4,NY,Car3
60	225	56.9	161.9	0.59%	0.41%	0.90%	370.2	NC,Car3,VA,Car3,NJ,Car4,NY,Car3	370.2	0.90%	NC,Car3,NJ,Car4,NY,Car3
70	152	70.1	175.7	0.55%	0.35%	0.74%	325.0	NC,Car4,NJ,Car4,NY,Car4	342.0	0.70%	NC,Car3,NJ,Car4,NY,Car4
80	117	79.8	192.3	0.52%	0.30%	0.65%	301.1	SC,Car3,MA,Car3	301.1	0.65%	SC,Car3,MA,Car3
90	88	86.4	198.7	0.44%	0.31%	0.75%	438.1	SC,Car3	438.1	0.75%	SC,Car3
100	134	102.7	219.8	0.44%	0.32%	0.76%	552.3	NC,Car4,NJ,Car3,NY,Car3,ME,Car3	552.3	0.76%	NC,Car4,NJ,Car3,NY,Car3,ME,Car3
125	107	123.6	242.2	0.40%	0.29%	0.70%	568.5	NC,Car3,NJ,Car4,NY,Car4	568.5	0.70%	NC,Car3,NJ,Car4,NY,Car4
150	74	147.3	278.2	0.38%	0.23%	0.60%	583.0	GA,Car3	583.0	0.59%	NC,Car4,NY,Car4



Model Output

- Data error risk
- Non-modelled perils/classes
- Modelling differences and choices
 - Granularity
 - Damageability
- DFA processing

DFA Loss Exceedance Curve



Summary

- Catastrophe risk is managed against balance sheet and earnings expectations driving appetite, tolerances and controls over accumulations
- Modelling of catastrophe risk is fundamentally prone to inaccuracies and can only form a part of the risk management solution
- Review of catastrophe risk status forms a major part of monitoring and reporting at Amlin

Questions

Amlin