

GIRO conference October 2011 Henry Johnson, Jerome Kirk, Karen Seidel, Matt Gold – Lloyd's



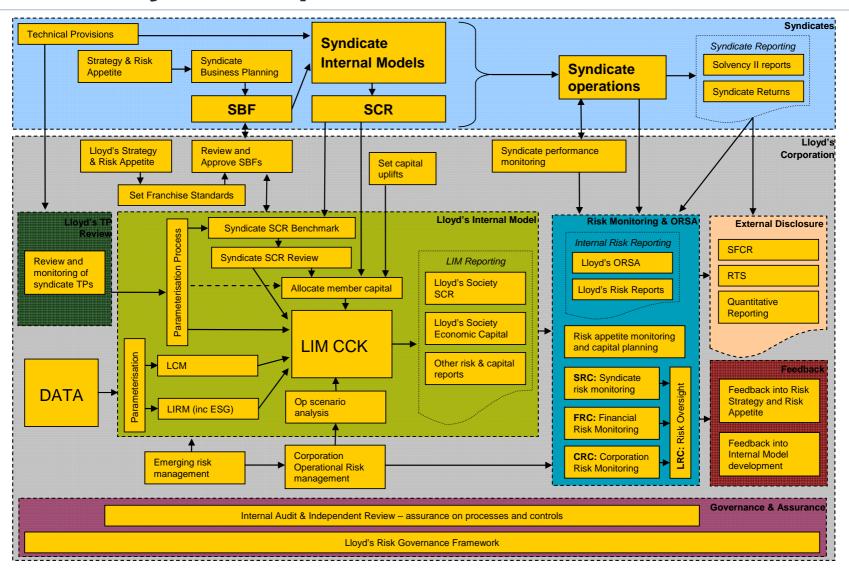
Agenda

- Three speakers today (plus me)
 - Matt Gold
 - Karen Seidel
 - Jerome Kirk
- Solvency II update
 - Central workstream
 - Scope, Governance and change, ORSA, link to syndicate models
 - Actuarial function
 - Syndicate workstream
- BAU update
 - Current issue & Interim results
 - Year End process

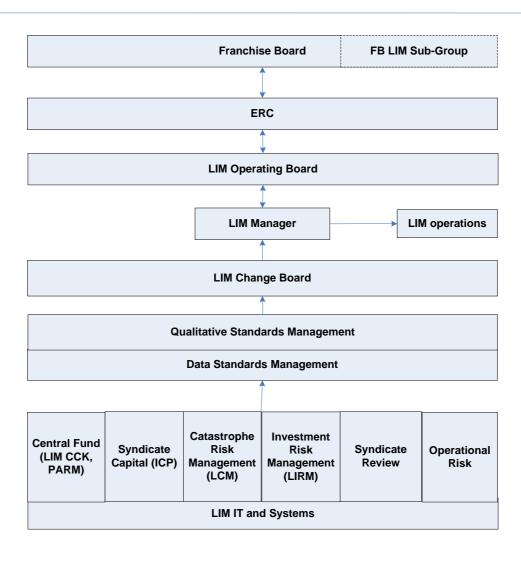
Lloyd's Solvency 2 programme is on track and progressing within published timescales

- Syndicate dry run process is on schedule
 - Majority of agents meeting the majority of deadlines
 - Close monitoring of Red and Pink agents continues
- Key syndicate deliverables are crucial for the Lloyd's Internal Model (LIM) development
 - First full calibrated run of LIM to calculate a robust SCR
 - Key for our evidencing of the internal model requirements
 - Working towards an end April submission to the FSA
 - FSA has commenced their pre-application reviews of the LIM

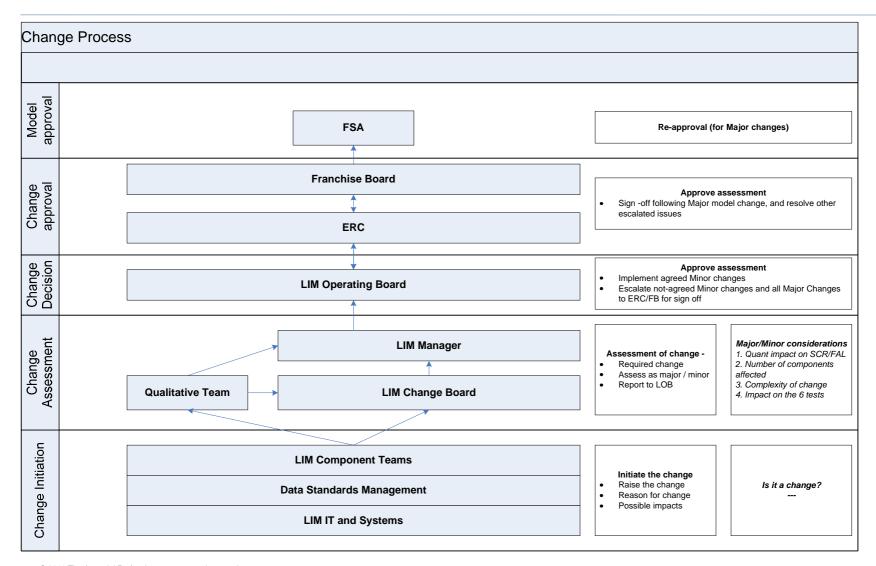
Our model includes or supports our key solvency and capital activities



We have set out how the LIM will be governed ...



... and how our Change process will operate ...



... and how the LIM is integrated within our ORSA process



LIM Supports our risk and capital framework

ORSA element					
Lloyd's strategy	 LIM supports our key activities to ensure a sound capital understanding and allows Lloyd's to demonstrate capital advantages 				
Risk Appetite	 LIM supports the measurement and monitoring of key risk appetite metrics to ensure we know where we are in relation to risk 				
Risk Management	 LIM provides further understanding of the key risks we face so we can implement effective risk management tools 				
Capital Setting	 LIM supports both member level capital setting and central fund capital assessments in a transparent and robust way 				
Solvency Assessment	 LIM provides a robust measurement of the state of the market 				

Linking the central and syndicate models

LIM High Level Model Structure

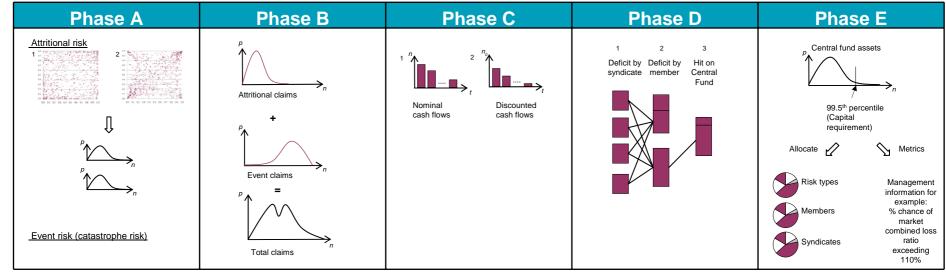
CF PTF **FAL** Calculate hit Risk Groups Simulate losses Produce Allocate to on Central Members syndicate results **Fund** RG₁ Synd 1 **Member A** RG 2 Synd 2 Central **Member B** RG 3 Synd 3 **Fund Member X** RG_n Synd 85 Simulated Attritional Member allocation losses from MCAT Catastrophe losses from LCM

Asset risk and returns from LIRM —

LIM CCK - Overview

Phase A Phase B Phase C Phase D Phase E Capital requirement Simulate losses Claims Syndicate level P&L. Member level P&L. Attritional risk drivers Attritional and event claims at Discounted cash flows · Allocation of deficit to Solvency capital requirement Allocation of capital • Dependence between risks future time periods Risk margin members Preparation for catastrophe Reinsurance SII profit and loss account Impact of deficit on members' requirement to risk types, risk aggregation with Correlation between attritional and balance sheet FAL and callable layer members, syndicates attritional risk and event claims • RI credit risk • SII balance sheet specific to central fund assets Syndicate noise Calibration to syndicate stats Op & Group risk • Op & Group risk **Treasury** Cat Model Model Asset values Natural catastrophe Yield curves claims

· Bad debt on assets



Other event claims

LIM CCK Input from LCM

- 10,000 event scenarios by Synd-YoA-Event
 - 5 perils
 - (US WS incl GOM, US EQ, Eur WS, JP WS, JP EQ)
 - Cross syndicate dependency
 - In force view supplied by syndicates
 - Projected forwards and split by Yoa
 (Proposed Year, Proposed Year -1, Proposed Year -2)
- Mapping to risk groups
- Mapping to currencies (USD, ...)

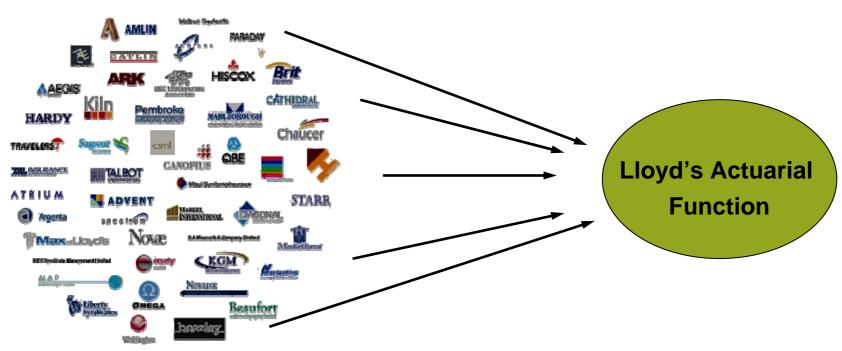
Phase B – Syndicate Claims

- 1. Calculate mean total net loss, for each synd-yoa-rg-ccy
 - Net prem * mkt avg Net ULR * payment pattern
 - Scale to syndicate's mean total net loss (submitted by synd-yoa)
- Calc mean attr net claim = mean total net loss mean cat loss (from LCM)
- 3. Simulate attr claims
 - Mean attr claim * claim volatility * syndicate noise
- 4. Simulate total net claim = sim attr claim + sim cat claim, using rank matching
- 5. Calibrate resulting distribution to mean and 99.5% net insurance loss for each syndicate, by applying a factor to attritional losses

The Actuarial Function at Lloyd's

Both Lloyd's and syndicates will require an Actuarial Function

Syndicate Actuarial Functions



... and both must meet Solvency II standards

Actuarial Function requirements are split into three areas

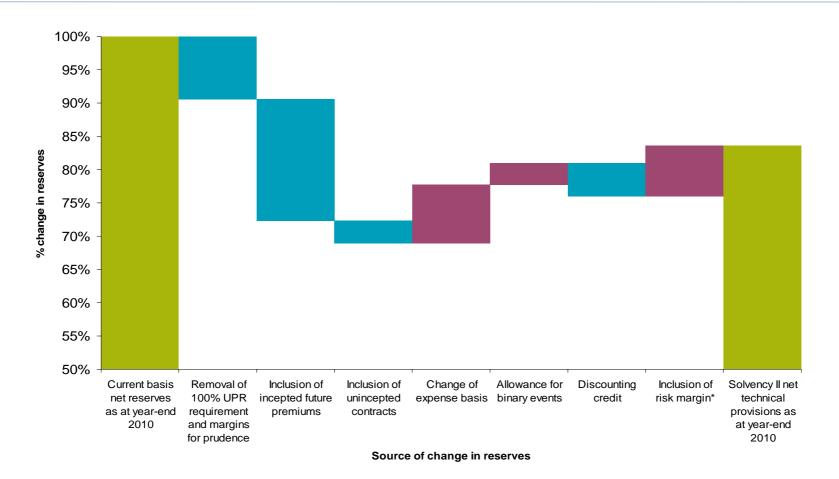
- Technical Provisions
 - including supporting data
- Underwriting
- Reinsurance

And will require (annual) formal report to the Board

Actuarial Function (1) - Technical Provisions

- Requirements are:
 - coordinate the calculation of technical provisions;
 - ensure the appropriateness of the methodologies and underlying models used as well as the assumptions made in the calculation of technical provisions;
 - assess the sufficiency and quality of the data used in the calculation of technical provisions;
 - compare best estimates against experience;
 - inform the administrative, management or supervisory body of the reliability and adequacy of the calculation of technical provisions;
 - oversee the calculation of technical provisions in the cases set out in Article 82;
- Lloyd's have been testing the requirements over the summer...

... and have seen that the impact is significant ...



Source: y/e 2010 SRD and May 2010 TP submissions

Note: excludes some syndicates so that a like for like comparison can be made

Note: Solvency II TPs include estimated risk margin of 10%

...and need to look closely at the overall impact on the balance sheet

		MARK	ET TOTAL	
ANALYSIS OF TECHNICAL PROVISIONS AND IMPACT	CURRENT	SOLVENCY II	CHANGE FROM	%CHANGE
ON BALANCE SHEET (£M)	BASIS	BASIS	CURRENT BASIS	%CHANGE
NET TECHNICAL PROVISIONS	35,422	28,123	(7,299)	(21%)
NET PREMIUM DEBTORS *	(2,612)	(238)	2,375	(91%)
DEFERRED ACQUISITION COSTS	(2,348)	-	2,348	(100%)
NET TECHNICAL PROVISIONS LESS PREMIUM DEBTORS AND DAC	30,462	27,885	(2,577)	(8%)

Note: table above shows liabilities with a positive sign and assets with a negative sign

- "Real" impact is much lower allowing for asset movements
 - direct impact on Solvency position
 - Need to ensure consistency with any Internal Model

^{*} Net premium debtors are calculated as insurance and intermediary recoverables less reinsurance accounts payable

What does this mean for the future of SAOs?

- Can potentially see the future of SAOs going one of three ways:
 - an SAO based on the TP's for solvency purposes
 - no opinion to be given
 - an opinion on a financial reporting basis and map this across to solvency figures
- Not decided and there are many considerations / interested parties. For example:
 - auditors
 - actuaries / profession
 - Lloyd's / FSA
 - international regulators

Actuarial Function (2) - Underwriting

• Doc 29/09 outlines: The actuarial function's opinion on underwriting policy must include the following issues, at a minimum:

"Sufficiency of premiums to cover future losses."

"Considerations regarding inflation, legal risk, changes in mix, anti-selection and adequacy of bonus-malus systems implemented in specific lines of business"

Lloyd's Minimum underwriting standard state:

"Managing agents are expected to have appropriate pricing methodologies which are transparent and consistent for each class of business. This is to ensure that the syndicates they manage generate sufficient premiums in the aggregate to achieve the planned levels of profitability in the business plan approved by Lloyd's."

Actuarial Function (3) - Reinsurance

• Doc 29/09 outlines: The actuarial function's opinion on underwriting policy must include the following issues, at a minimum:

"The adequacy of significant reinsurance arrangements.

Expected cover under stress scenarios in relation to underwriting policy.

The adequacy of the calculation of technical provisions arising from reinsurance."

 Lloyd's Minimum underwriting standard state: The managing agent should regularly review its reinsurance arrangements to ensure that:

"All significant risks related to the arrangements, and the residual risks borne by the firm, have been identified.

Appropriate risk mitigation techniques have been applied to manage and control those risks.

There is full and regular analysis of the effect of the reinsurance plan on its exposure to insurance risk, its underwriting strategy and business plan, and its ability to meet regulatory obligations.

Specific consideration has been given to the risks associated with the use of shared reinsurance arrangements."

Syndicate review update

Overall, the syndicate dry run has seen good progress over the summer

- Additional guidance published by Lloyd's
 - Final Application Pack, Validation Report and ORSA
- Approx 150 model walkthrough sessions held to date
 - joint meetings with FSA in many cases
- Further evidence templates submitted by agents
- Quantitative submissions on technical provisions, QIS5 and SCRs
- And still significant work until the end of the year......

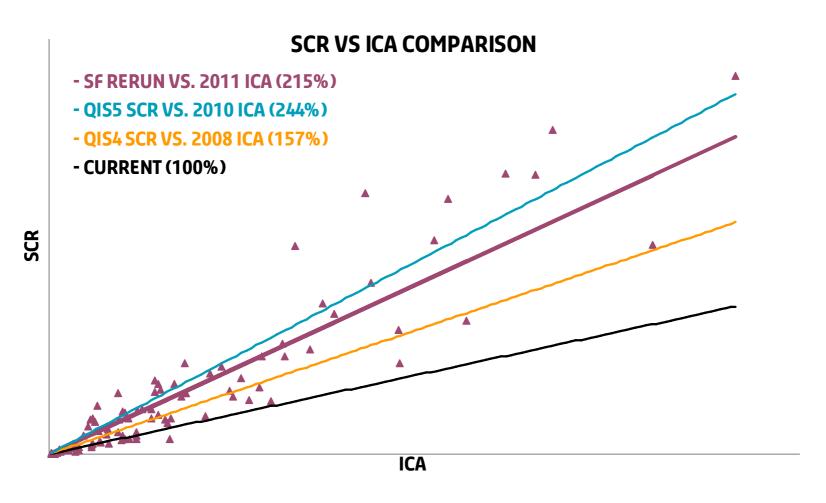
SYNDICATE TIMELINE KEY DATES



2011	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Overall	7 and 11 February Workshop February 18 2011 Plan and Guidance	March 4 Q4 2010 Self-assessment scoring sheet March 31 Updated scoring sheets for all elements		May 6 Q1 Self-assessment scoring sheet		July 25 Q2 self-assessment scoring sheet	1 and 2 August Director's Briefing		October 31 Q3 self-assessment scoring sheet	23 and 24 November Director's Briefing	
IMSCR Internal Model SCR	February 18 LCR template	March 4 High-level model questionnaire March 18 High-level model questionnaire	4 and 6 April Workshop	May 27 Evidence template	13 and 17 June Workshop	July 29 Interim SCR 1 submission	8 and 23 August Workshop August 26 Evidence template	September 16 Interim SCR Submission	October 31 Final SCR submission		December 16 Final Evidence template
VBS Valuation and Balance Sheet				May 6 Segmented assests guidance	22 and 23 June Workshop	July 29 Balance Sheet and Segmented assets submission July 29 Evidence template		14 and 15 Septembe Workshop			December 16 Final Evidence template
TPSF Technical Provisions and Standard Formula	February 18 TP template and Instructions	March 31 Technical Provisions guidance	4 and 6 April Workshop	May 27 Full year TP submission as at 31/12/10 May 27 Evidence template submission	13 and 17 June Workshop June 30 Templates and Instructions	July 29 Standard Formula SCR July 29 Evidence template	8 and 23 August Workshop	September 30 Haif year and projecte TP submissions September 30 Evidence template		November 30 TPD and GQD submission	December 16 Final Evidence template
MV Model Validation		15 and 16 March Workshop		May 6 Evidence template May 6 Validation Report guidance	June 30 Evidence template	4 and 5 July Workshop	August 26 Evidence template	1 and 2 September Workshop September 30 Draft Validation report			December 16 Final Evidence template December 16 Final Validation Report submission
GRMU Government Risk Management and Use		1 and 3 March Workshop March 31 Evidence template		17 and 18 May Workshop	June 30 Evidence template	July 29 ORSA contents guidance	9 and 24 August Workshop	September 30 Evidence template	3 and 4 October Workshop	7 and 10 November Workshop	December 16 ORSA submission December 16 Final Evidence template
RD Reporting and Disclosure					22 and 23 June Workshop	July 25 Evidence template	August 26 Reporting and implementation plan guidance	14 and 15 September Workshop	October 31 Evidence template		December 16 Reporting Implementation plan December 16 Final Evidence template
DFA Documentation and Final Application					June 30 Final application pack Guidance	19 and 20 July Workshop9	August 26 Evidence template		3 and 4 October Workshop		December 16 Final application pack December 16 Final Evidence template
			VEV [)							

Lloyd's Publication

...the level of the Standard Formula acts as a reminder of the importance of model approval



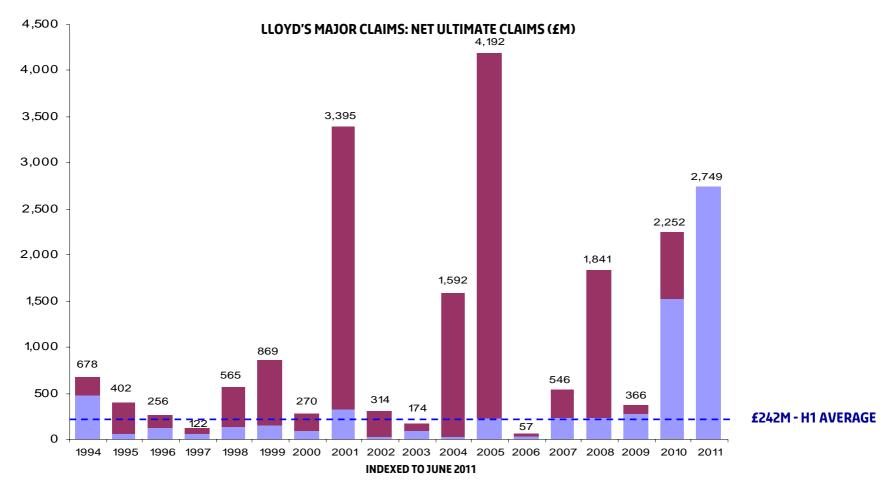
Half Year results

We have reported a loss in the first half which is heavily impacted by...

£m	June 2010	June 2011	% chg	Dec 2010
Gross written premiums	13,490	13,534	0	22,592
Net earned premiums	8,285	8,546	3	17,111
Net incurred claims	(5,403)	(6,697)	24	(10,029)
Net operating expenses ¹	(2,775)	(2,987)	8	(5,939)
Underwriting result	107	(1,138)	-	1,143
Investment return ²	597	548	(8)	1,258
Other income / expenses ³	(76)	(107)	(42)	(206)
Profit before tax	628	(697)	-	2,195
Combined ratio	98.7%	113.3%		93.3%

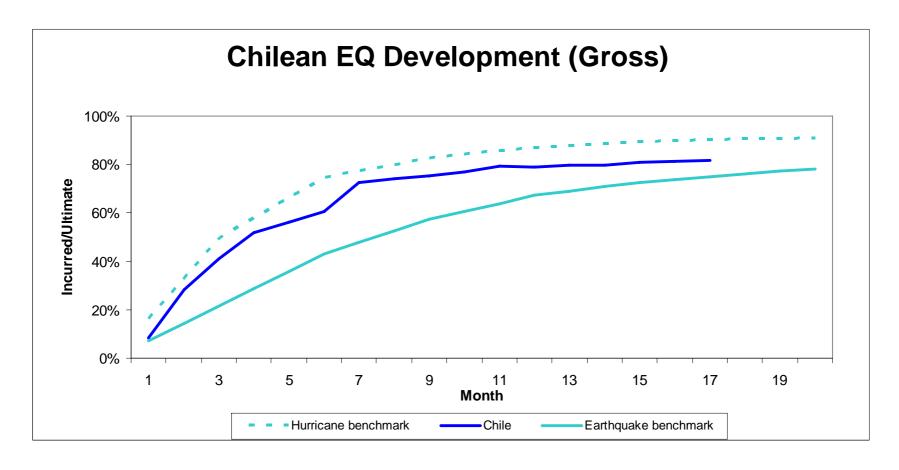
Source: Lloyd's pro forma basis, 1) Technical account 2) Return on syndicates' assets, members' funds at Lloyd's and central assets 3) Non-technical account

... unprecedented half year catastrophe claims...



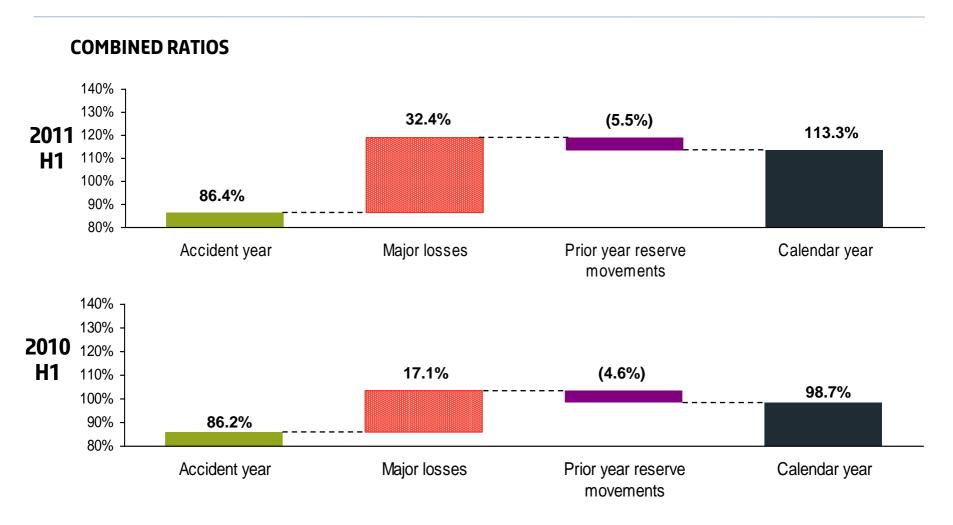
Source: Lloyd's pro forma basis

... which may not necessarily develop to historic patterns ...



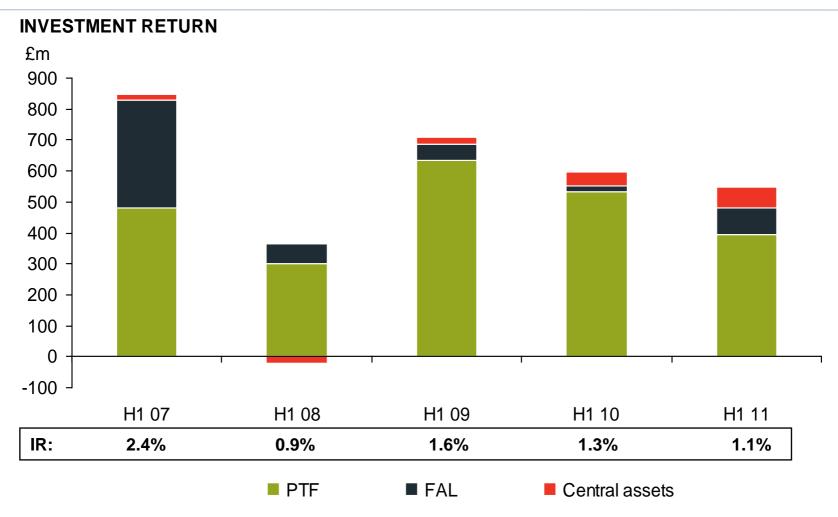
Source: Lloyd's QMR & Xchanging data

... elsewhere have seen little movement in other elements of the combined ratio



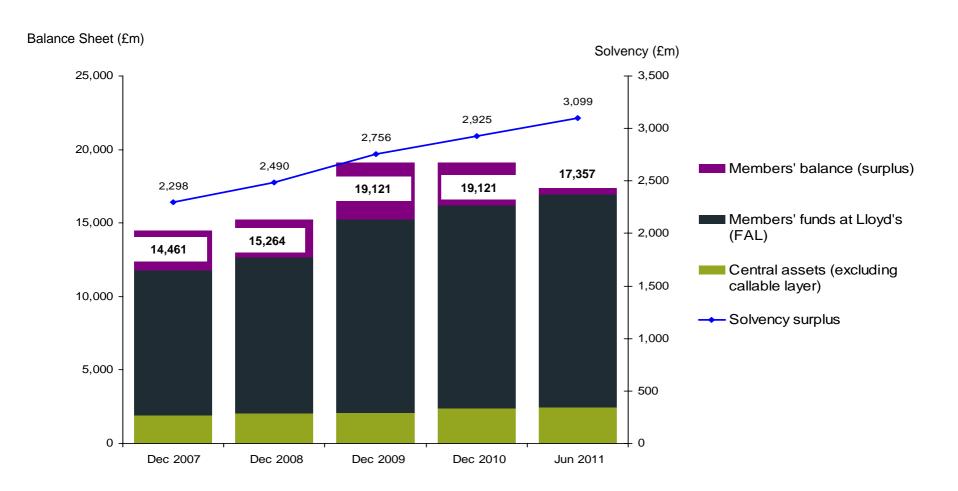
Source: Lloyd's pro forma basis

Investments in the first half were "modest"



Note: PTF – Syndicate Premium Trust Funds; FAL - Members' Funds at Lloyd's Source: Lloyd's pro forma financial statements, 30 June 2011

But solvency coverage and central assets are now at record levels



Source: Society of Lloyd's financial statements

Current Issues and Year End timetable

Looking forward to year-end

- The catastrophe losses will impact the year-end
- No new reserving "hot topics" have emerged ...
- but last year's do remain
 - UK Motor
 - Italian Hospitals
 - Casualty and the cycle
- Monitoring and understanding reserving remains vital
 - at the same time as transitioning to the new regime

Year-end - submission dates - reminder

Submission	Deadline
US Trust Fund SAOs	13 February 2012
Worldwide SAOs	23 February 2012
SAO Reports	30 March 2012 or earlier

- Please submit two copies of the SAO report
 - one of which must be a hard copy, electronic copies are encouraged
 - reports to Jerome Kirk, Market Reserving & Capital, G5, Lloyd's, One Lime Street, EC3M 7HA,
 - submit electronic copies via email to <u>SAOReports@lloyds.com</u>

Wrap up and Questions

- Central and syndicate level Solvency II projects are progressing well
 - And are closely intertwined: BOTH must succeed
 - Many requirements of the Actuarial Function should already exist
- Half Year results reflected the risks taken at Lloyd's
- Current issues and year end timetable: no major changes

