

Meeting the investment challenges of Solvency II

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Solvency II - background

- Review of the capital adequacy regime for the European insurance industry.
- Establish consistent set of EU-wide capital requirements and risk management standards
- Adopted by all 28 EU Member States
- Applies to all (re)insurance firms with gross premium income exceeding €5m or gross technical provisions in excess of €25m.
- Solvency II came into force on 1 January 2016



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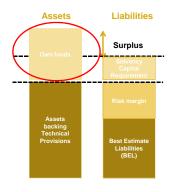
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Solvency II Balance Sheet

SII introduces balance sheet items relevant for investment management

- The Best Estimate Liabilities (BEL) are a provision for insurance liabilities, valued on a market-neutral basis.
- The Risk Margin (RM) is an additional provision held to reflect the cost of absorbing "non-hedgeable" risks intended to ensure that technical provisions reflect a realistic, arms-length transfer value.
- The Solvency Capital Requirement (SCR) is a riskbased minimum capital requirement to cover losses with 99.5% confidence over a 12 month horizon.

Value of the RM and SCR are expected to be sensitive to interest rates, credit and equity market movements.





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ALM Strategy in Context

ALM Strategy forms a part of an insurers wider risk management framework

- As part of ERM framework set Risk Appetite Statements, which in turn drive target risk balances.
- Maintain a Capital Management Policy, which defines target capitalisation ranges
- Provides the framework to enable Investment Decisions to be made, ensuring that these decisions are consistent with the risk appetite and capital management policy.





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ALM Objectives and Investment Strategy

Objective - Maximise risk-adjusted return on capital subject to risk appetite

ALM strategy provides framework to assess alternative investment decisions.

Typical plan compares options using a Risk-adjusted return on Capital metric.

- Capital includes SCR.
- Higher risk investments can add to the SCR and dilute expected return.
- Diversification can help optimise risk-adjusted return
- Return on Capital target does not override the need to remain within Risk Appetite and capital targets.



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Liability Portfolios

We propose to define matching asset portfolios separately for the following portfolios

Portfolio	Scope	Objectives				
Non-Profit Liabilities	Immediate Annuities subject to Matching Adjustment Deferred annuities Protection	Eliminate interest rate risk by close matching. Optimise return through illiquidity premium Maintain Matching Adjustment to eliminate spread risk				
Unitised Liabilities	Unitised Life and Pensions business Platform	Invest policyholder money in selected funds. Address fee income volatility from market risks Note value of future premiums and fixed expenses are not subject to market risks.				
Surplus Assets	All surplus assets including those covering SCR and Risk Margin Includes surplus units (VIF)	Ensure sufficient capital to cover Risk Margin and SCR. Minimise RM and SCR wherever possible. Minimise volatility of solvency position				
		Institute and Faculty of Actuarie				

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Asset Universe

For the purpose of analysis, we classify the available universe of investments into three high-level categories

"Cash"

Any investment with a degree of capital security and not subject to interest rate volatility.

- Cash and money market funds
 Short dated fixed coupon bonds
 Longer date floating rate bonds
 Absolute return strategies

"Fixed Income"

Investments subject to long-term interest rate exposure.

- Corporate bonds, ABS and other fixed income Index linked bonds
- Index linked bonds
 Swaps and swaptions

"Equity"

Real assets and associated instruments

- · Direct equity
- PropertyUnit-linked funds and other
- collective investments

 Forwards, options and other equity derivatives.



Target Matching: RM/SCR

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	SCR Allocation			RM Allocation				Benchmark Portfolio				
	Non-Profit	Unitised	Surplus	Total	Non-Profit	Unitised	Total	Total	Fixed Interest	Equity	Cash	Total
Credit	300	100	50	450				450		50	400	450
Equity	0	300	0	300				300		200	100	300
Interest Rates	20	50	20	90				90		50	40	90
Longevity	200		-	200	150	0	150	350	350		0	350
Persistency	0	150	-	150	0	25	25	175		75	100	175
Expenses	10	20	-	30	15	10	25	55			55	55
Other	15	20	-	35	0	5	5	40			40	40
Diversification				-300			-100	-400			-400	-400
Total				955			105	1,060	350	375	335	1,060

- We have analyzed the components of the Risk Margin and SCR in order to derive target asset allocations.

 SCR and RM arising in respect of market and persistency risks from unitised business are expect to rise in line with the value of the underlying units, and so are best matched with the units themselves.

 SCR and RM arising from longevity risk is expected to be exposed to long term interest rates, and so should be matched using fixed-interest.

 Other risks should be covered with cash



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"Cash" Exposure Options

Assets not earmarked for "Equity" or "Fixed Income" invested in "Cash" i.e. any asset offering a degree of capital stability.

This reduces the SCR and stabilise solvency.

Earning a reasonable return on these assets will be a key objective, and subject to a range of other risk appetite constraints.

• As well as capital constraints we will have minimum liquidity requirements.

Currently invest in Absolute Return Funds as a cash alternative. We would expect to continue with this strategy under SII.





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Survey of European insurance companies

Q: What is your top priority?

	% of respondents
Proactively managing capital to improve returns	28%
2. Strengthening distribution model	23%
3. Enhancing product offerings	22%
4. Expanding into new geographic markets	16%
5. Optimising business lines and products	12%

Solvency-capital-intensive asset classes being replaced by less intensive instruments

Q: Which portfolio risks are you most concerned about?

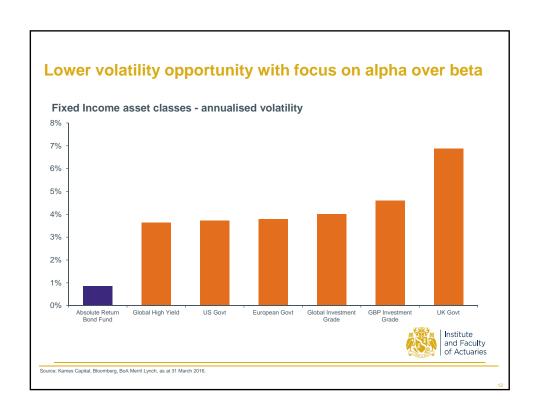
1. Low yields	54%
2. Credit spreads widening	28%
3. Rising interest rates	15%
4. Equity market volatility	4%
5. Liquidity risk	0%

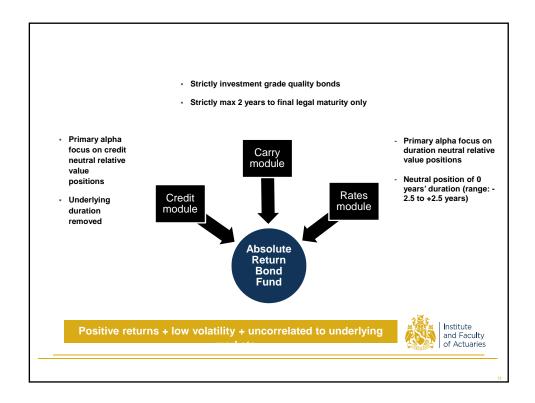
As insurers diversify to meet regulatory pressures and search for yield, allocations to non-core strategies will increase

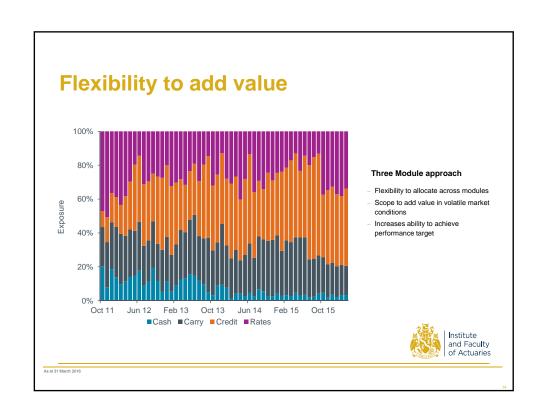


Source: Spence Johnson , 'Deeper Perspectives': Number 27, 2015

	Porformance torget and rick	Llink
Low	Performance target and risk	High
Market neutral		Market directional
Aspires to be neutral	Market exposure	Longs and shorts
Typically low	Volatility	Can be significant
Fundamental	Managing downside risk	Manager judgement
Should be low	Market correlation	Can be significant







Balancing need to maximise yield and diversify risk with an attractive cost of capital

As at 31 December 2015	Return Bond	5-year Gilts	10-year Gilts	30-year Gilts	10-year BBB Credit	Property	Type 1 equity**	Type II equity**
Total Standard Formula SCR*	6.2%	4.4%	9.0%	20.7%	21.2%	25.0%	39.0%	49.0%
Illustrative yield / target return	2.5%	1.1%	1.8%	2.6%	4.1%	5.0%	6.0%	6.0%



*1% parallel shift in yield curve. ** +/-10% adjustment depending on current market levels relative to previous 36 month

Delivering returns uncorrelated to the underlying market Total Returns vs 10yr US Treasury yields Total Returns vs credit market spreads 1.3% 9% 100 9% 8% 120 8% 1.6% 140 6% 6% 160 ¹⁸⁰ හු 200 5% 2.2% Total 4% 3% 2.5% 240 2.8% 260 1% 1% 280 Oct 11 Oct 12 Oct 13 Oct 14 Oct 15 Oct 11 Oct 12 Oct 13 Oct 14 Oct 15 -Kames Absolute Return Bond Cumulative Returns (LHS) -Kames Absolute Return Bond Cumulative Returns (LHS) -10yr UST yields (RHS) Institute and Faculty of Actuaries Correlation = -0.16 Correlation = 0.12

Helping insurance clients to meet their investment

- 1. Attractive investment characteristics
- Stable profile of returns relative to cash
- ✓ Diversified portfolio
- ✓ Low correlation to underlying bond markets
- ✓ Attractive liquidity compared to alternative investments
- 2. Attractive Solvency II characteristics
- Low absolute duration and predominately investment grade holdings reduces the capital requirement
- No active currency risk, with all exposure hedged back to base currency
- No equity holdings
- ✓ Ability to meet data and reporting needs
- Attractive SCR per unit of risk/return and relative to alternative investments



Summary

- As insurers diversify to meet regulatory pressures and search for yield, allocations to non-core strategies will increase
- Solvency-capital-intensive asset classes being replaced by less intensive instruments
- Absolute return strategies can balance the need to maximise yield and diversify risk with an attractive cost of capital

