

### Multi-asset, absolute return funds for Insurers

Russ Bowdrey FIA

#### **Disclaimer and thanks**

- These are personal views, not the view of Aviva or any of its businesses
- This is not investment advice
- I'm grateful for comments and advice from my colleagues and friends at the following firms:
  - Aviva
  - Aviva Investors
  - Blue Mountain
  - EY
  - L&G
  - Taconic
- However, any errors and omissions are mine alone



## Scope

# Do absolute return funds have a place in insurance portfolios?

Definition and features

Components and construction

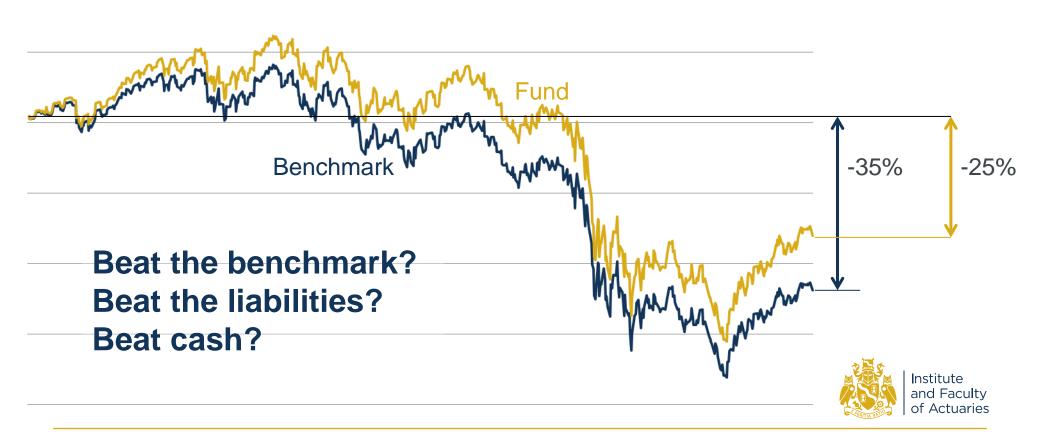
Implementation, insurers' capital and practicalities





#### Absolute return | "You can't eat relative returns"

"Superstar fund manager beats benchmark by 10% this year"



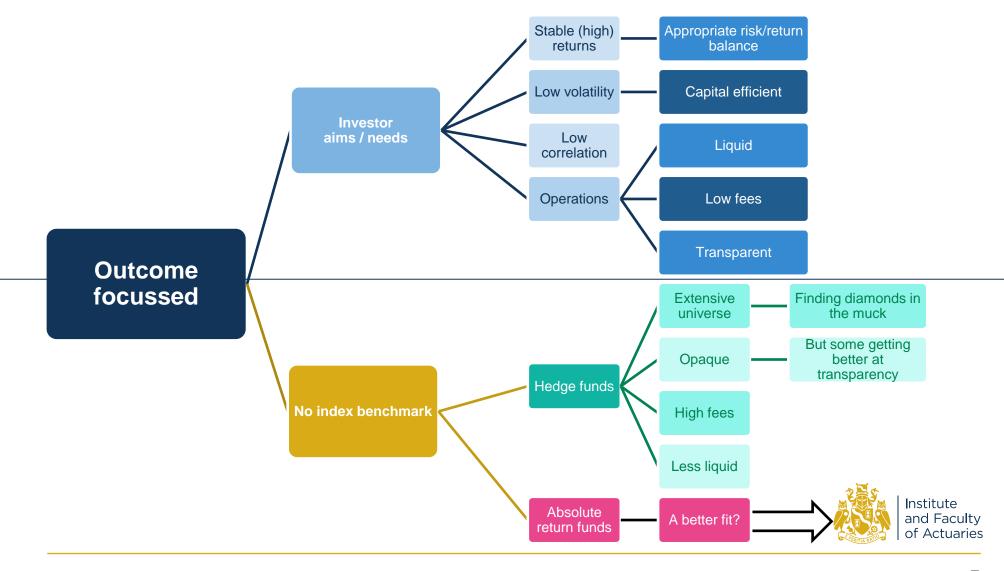
#### **Absolute return** | Outcome focused

**Unconstrained** returns No benchmark potential volatility value risk multi-strategy conditions **Outcome** portfolio idea view positive independent **Target return** opportunities losses of "market" three-year period global **Longer horizon** investing ideas **Lower volatility** 

Institute and Faculty of Actuaries

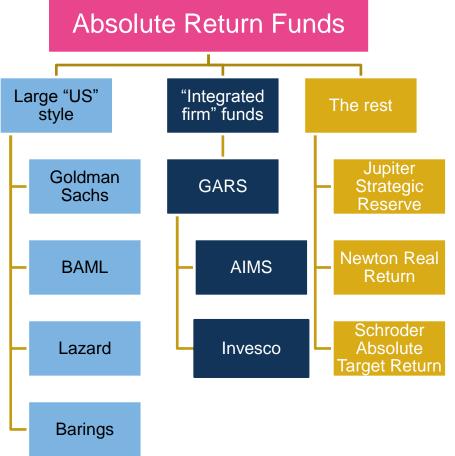
6

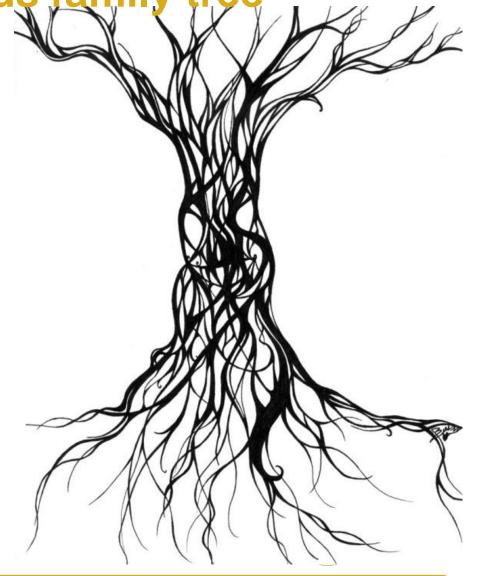
#### Absolute return | "You can't eat relative returns"



The absolute return funds family tree

Absolute Return Funds



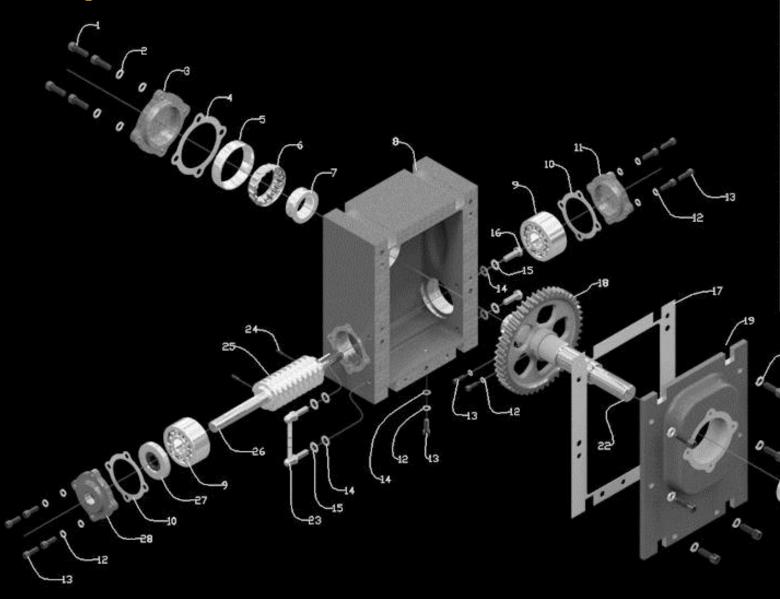


#### **Components** | Fund features

- Target return
  - Positive returns over 3 years rolling
  - Cash + c.5% | over 5 years rolling
- Aspirational trailing volatility and correlation
  - Typically 50% of MSCI World equity index volatility
  - "low" correlation
- Daily liquidity
- Flat fees (c. 80bps-150bps)
  - No performance element

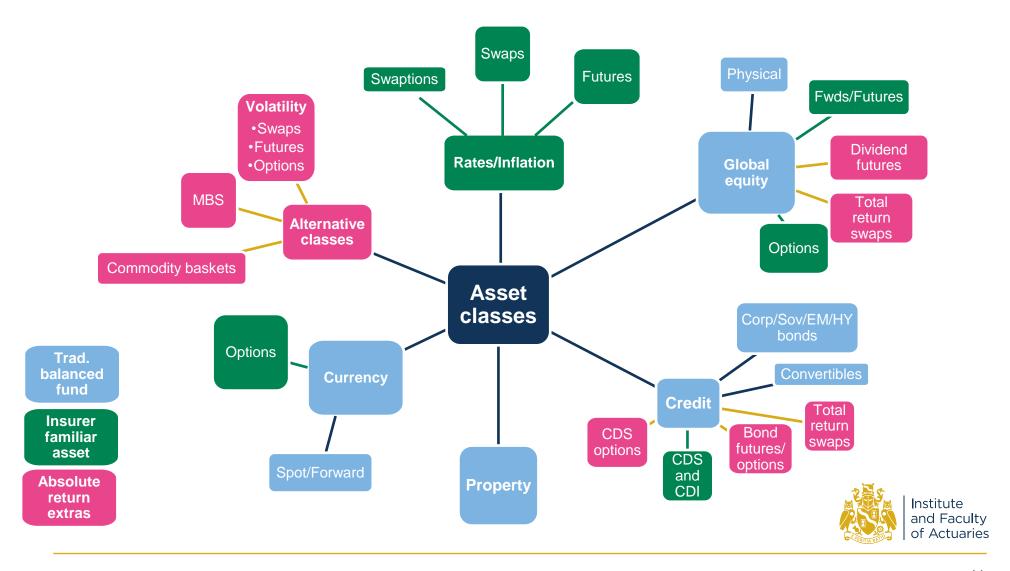


## **Components and construction**



PARTS LIST	
Port #	Description
1	1/2 x 1 Socket Head Bolts
2	1/2 Lock Vasher
3	Output Shaft Rear Cop
4	Dutput Shaft Cap Gasket
5	Tinken Bearing Duter Race
6	Tinken Bearing Roller Assembly
7	Tinken Bearing Inner Race
8	Gear Box Case
9	SKF Double Roll Ball Bearing
10	Input Shaft Rear Cap Gasket
11	Input Shaft Rear Cap
12	3/8 Lock Vosher
13	3/8 x 1 1/4 Socket Head Bolts
14	3/8 Gosket
15	3/8 Washer
16	3/8 Socket Head Bolt **
17	Gear Box Cover Gasket
18	Final Drive Gear
19	Gear Box Cover
20	Output Shaft Seal
21	Dutput Shaft Bearing Cover
SS	Output Shaft
53	UR Level Indicator
24	3/8 Worn Gear Set Screws
25	Worm Gear
26	Input Shoft
27	Input Shaft Seal
28	Input Shaft Bearing Cover
×	Quantity is at that location
**	Alternate Oil Level Indicator Location

#### **Components** | Liquid Asset classes



#### **Construction** | "US style" and the others

#### US style

- Huge asset managers
- Multi-asset team
  - SAA to allocate risk budget
- Budget allocated to specialist teams
  - eg US equity, UK credit etc
  - Teams allocate to "best-ideas"
- Potential overlap in trades
- Leverages huge infrastructure, but joined-up risk management a challenge

Lazard

#### Smaller managers – SAA led

- Multi-asset team run in isolation from other specialists
- Develop own views or express "house view"
  - "fundamental value driven"
  - Macro-economic views
- Portfolio constructed via SAA within team
- Risk management within fund and at company level

#### Construction cycle | Integrated-firm funds

Monitor risk exposures Reporting of positions

**Monitoring** 



Ideas

"Best ideas" sourced from around the business.

No constraints.

Overlaid with "house view"

Multi-asset team build diversified portfolio with well defined structure



Portfolio built and hedged Risk management central



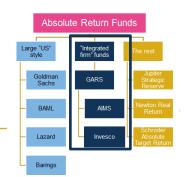
Filtered by multi-strat team

Fit with rules?
Already considered?
Impractical?



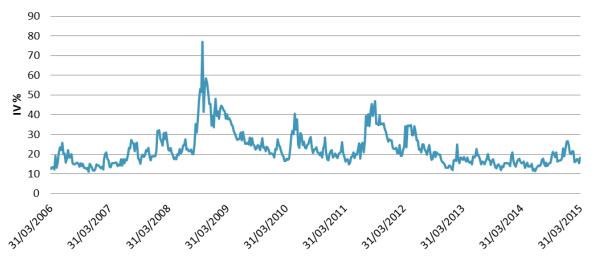
Approva

Committee of senior investors and risk managers



#### **Integrated-firm funds** | Example trades (1)

- Market/directional
  - Long European equity via call options
  - Positive house view on European recovery/QE fuelled bubble
  - Volatility at all time lows, so options look cheap
  - Option cheapness would partially offset a (small) fall in the equity index



EuroStoxx 50 Option Implied 30 day Volatility



#### Integrated-firm funds | Example trades (2)

- Relative value
  - Long German v short French equity
  - France doing badly (fiscal deficit, uncompetitive labour cost, political issues)
  - Germany doing well and holding its own globally + benefiting from increased consumption in emerging markets



#### Integrated-firm funds | Example trades (3i)

- Tail hedge/Risk reducing
  - Long US large cap vs Small cap (S&P500 vs Russell 2000)
  - Positive cost of carrying the position (difference in dividend yields)
  - In "risk-off" small cap (should) fall further



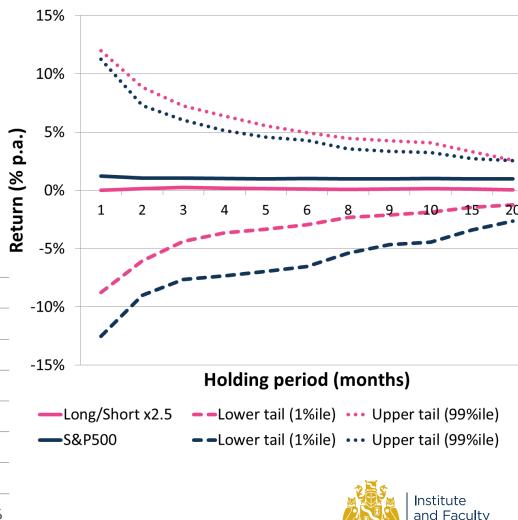


### Integrated-firm funds | Example trades (3ii)

- Time series hide too much
- Horizon plot
  - Compares different holding period returns

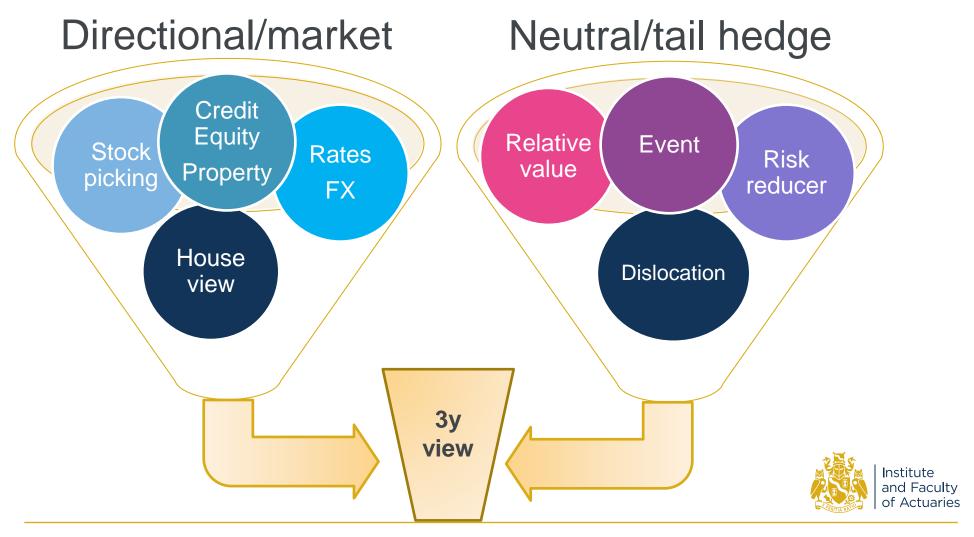
#### Conditional returns



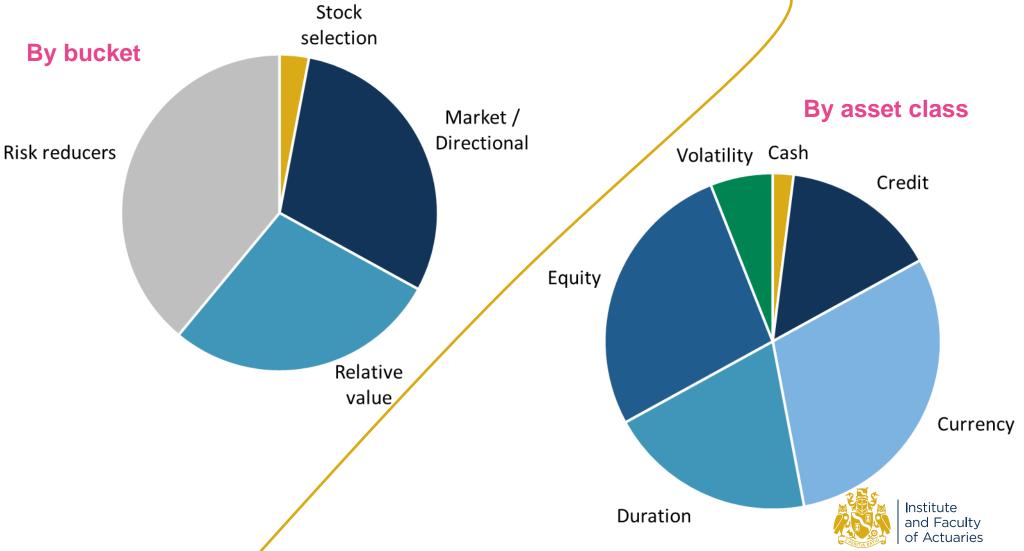


of Actuaries

#### Portfolio structure | Buckets



Portfolio structure | Top down risk contribution



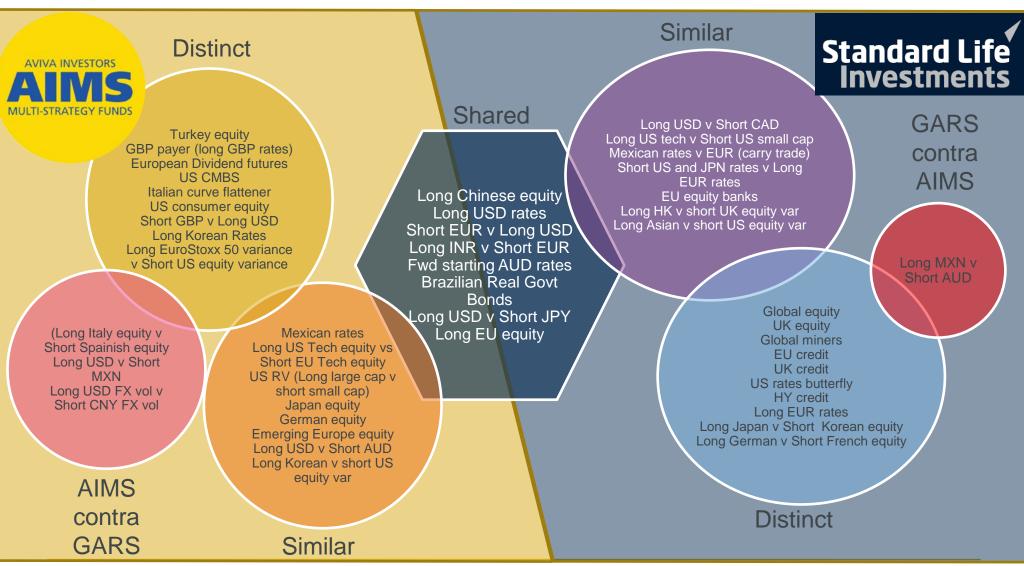
Source: Aviva Investors

#### **Composition** | Balanced and risk focused

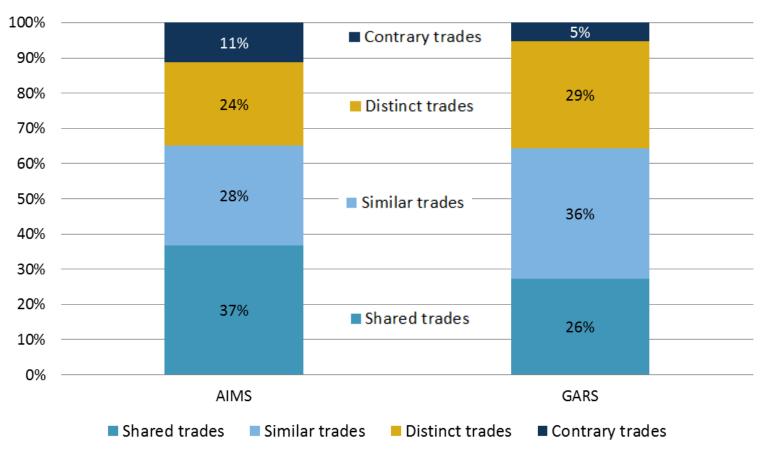
- Target return
  - Achieved via unconstrained mandate
- Balanced allocation
  - Risk categories
  - Asset classes
  - Trade types
  - Implicit/explicit risk mitigation
- Risk management
  - Drives allocation rather than being a by-product



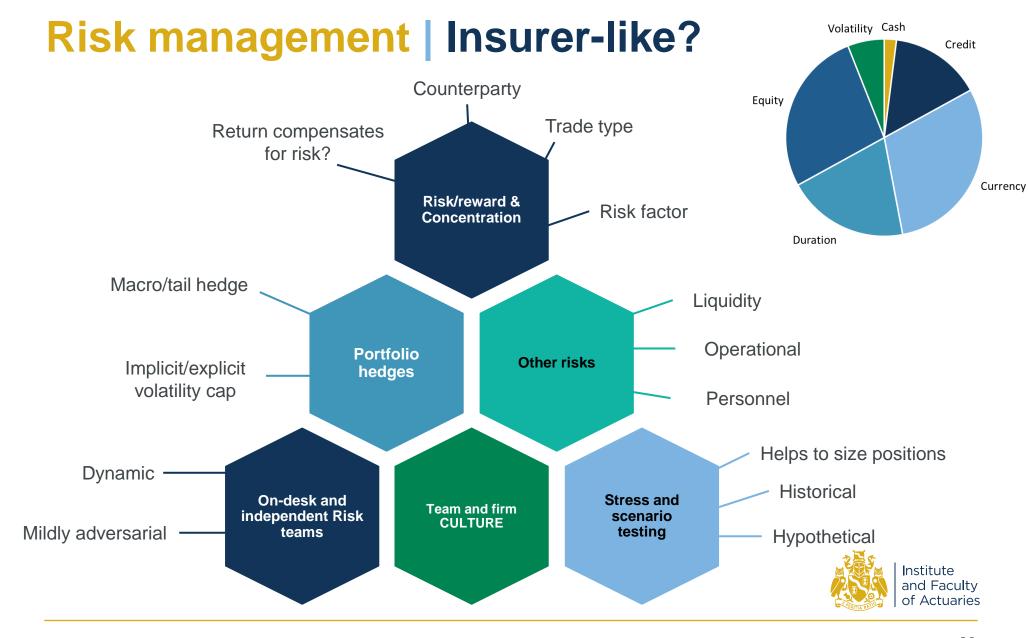
#### **AIMS and GARS | Overlapping positions?**



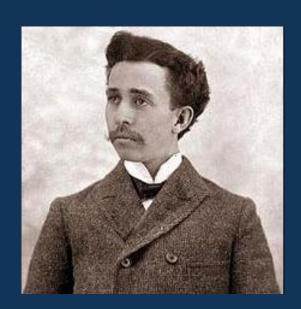
#### Overlapping positions | Risk weighted splits











# Insurance considerations "Theory is splendid but until put into practice it is valueless" JC Penney

#### **Practicalities and Implementation**

- Capital and portfolio optimisation
  - Modelling
  - Risk appetite (quantitative)
  - Reporting transparency

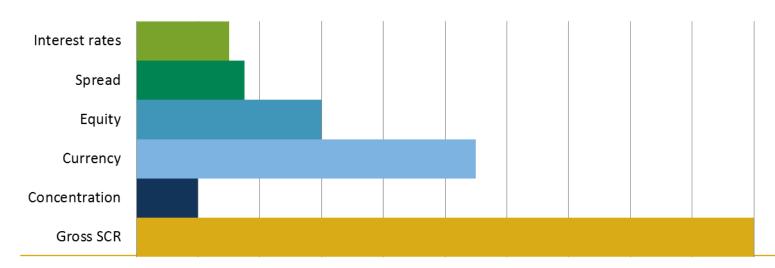
Influencing (the hard part)

- Attitudes
- Education
- Risk appetite (qualitative)
- Return on capital / fees



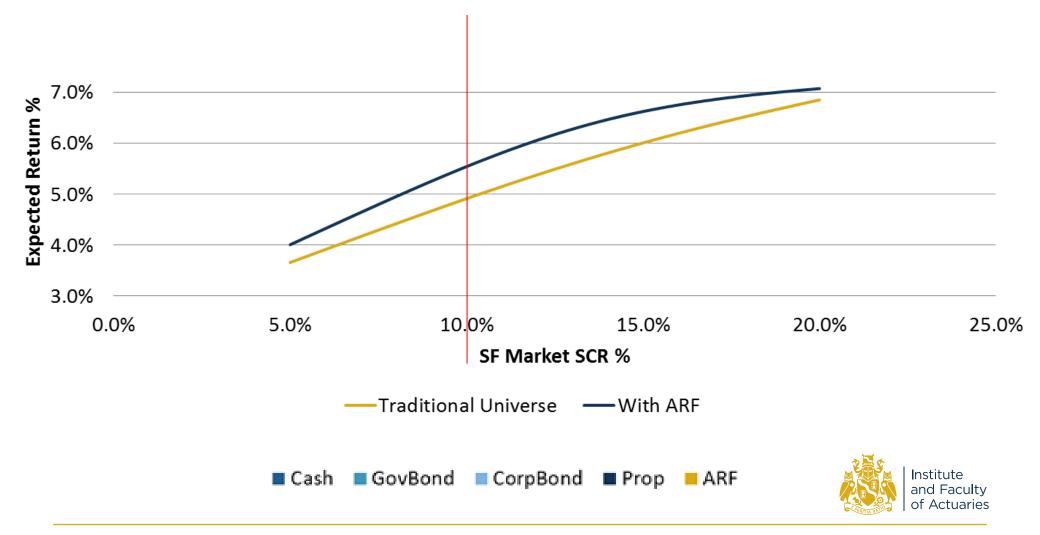
#### Capital | SII

- Must look-through into components of fund
  - Unless immaterial allocation => Type II equity c.55% shock
  - Choice is then standard formula or (partial) internal model
  - Not all risks will be reflected (volatility, for example) in standard formula
  - Justify taking credit for risk mitigation vs dynamic hedging?

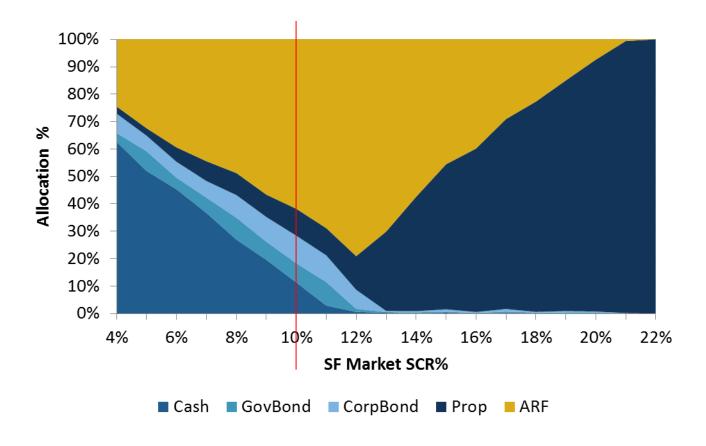




#### Capital | SII standard formula

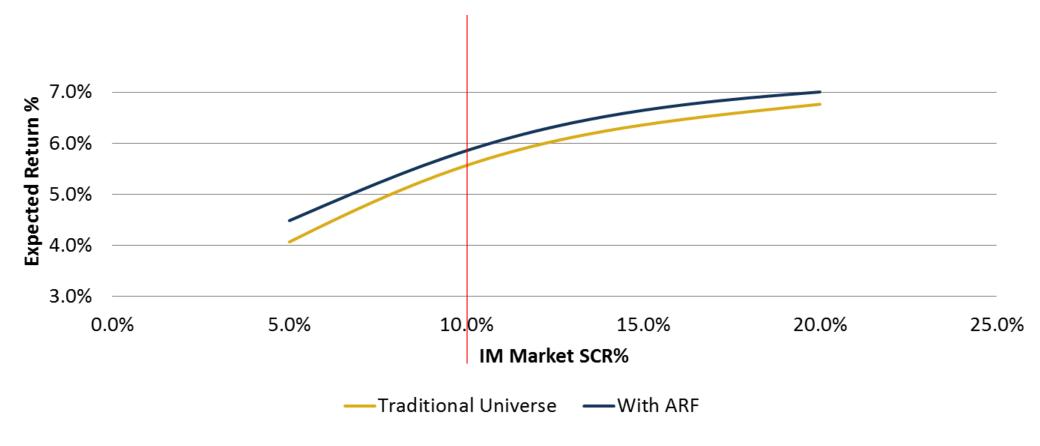


#### **Efficient frontier | S2 SF Allocations**



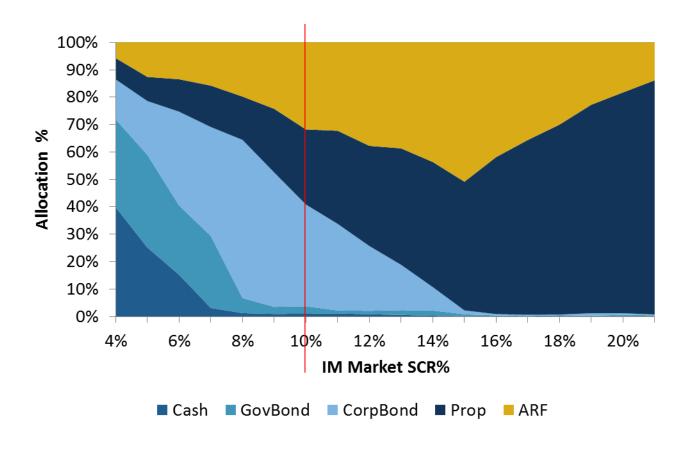


#### Capital | SII Internal Model





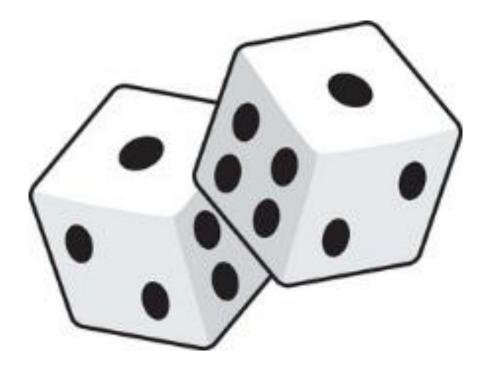
#### **Efficient frontier | S2 IM Allocations**





#### Capital | SII internal model considerations

- Look through
  - Data and time lags
  - Dynamic portfolios
- Possible modelling methods
  - Parsimonious
- Potential issues
  - Modelling of diverse/exotic risk factors
  - Data (lag and quality)
  - Refreshing the calibration





#### SII IM Modelling approach | Point in time

- Fixed portfolio
- Run single-step 1y VaR allowing for diversification

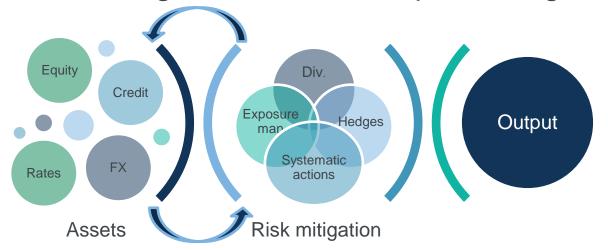


- Output stresses by risk driver or single "Absolute return" line
- No allowance for "trading actions" etc



#### SII IM Modelling approach | Enhancements

- Capture systematic trading rules? Dynamic hedging?
  - Justifiable risk mitigation?
- Run 1y VaR allowing with 1 month steps, testing for mitigations



- Considerable effort
- Likelihood of convincing PRA?



#### **Attitudes** | Too complex???

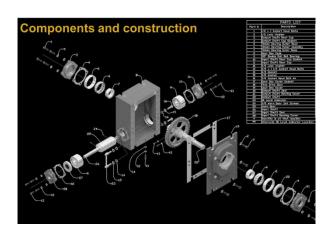
- Hitting a Cash+X target with low volatility seems like voodoo
- But is it any more complex than things we are more used to?
  - Reinsurance and hedging
  - Solvency II (!!)
  - Financial reporting
- Helps when it's "close to home"
- A lot comes down to communications, the funds would help themselves out greatly by avoiding jargon. It even confuses the professionals...
  - "US butterfly" (Wildlife? Equity? Rates? FX)
  - "Germany v France" (football?)



## Scope

# Do absolute return funds have a place in insurance portfolios?

Definition and features





Components and construction

Implementation, insurers' capital and practicalities



### **Answering the question**

# Do absolute return funds have a place in insurance portfolios?

- Yes, it may have a place, but...
  - Depends on the insurance business
  - Attitudes may have to change (a lot in some cases)
    - Decision makers need time to learn enough to make informed decision
  - Expect significant internal challenge
  - Need to find a good manager > thorough due-diligence
    - Past performance is rarely a good metric
    - Institutional fit | processes | risk management
  - Practical hurdles
    - Reporting / look-through
    - Modelling for SCR



## Questions

## Comments

The views expressed in this presentation are those of the presenter.

