Health 2: A critical look at the solvency and investment regulations governing medical schemes

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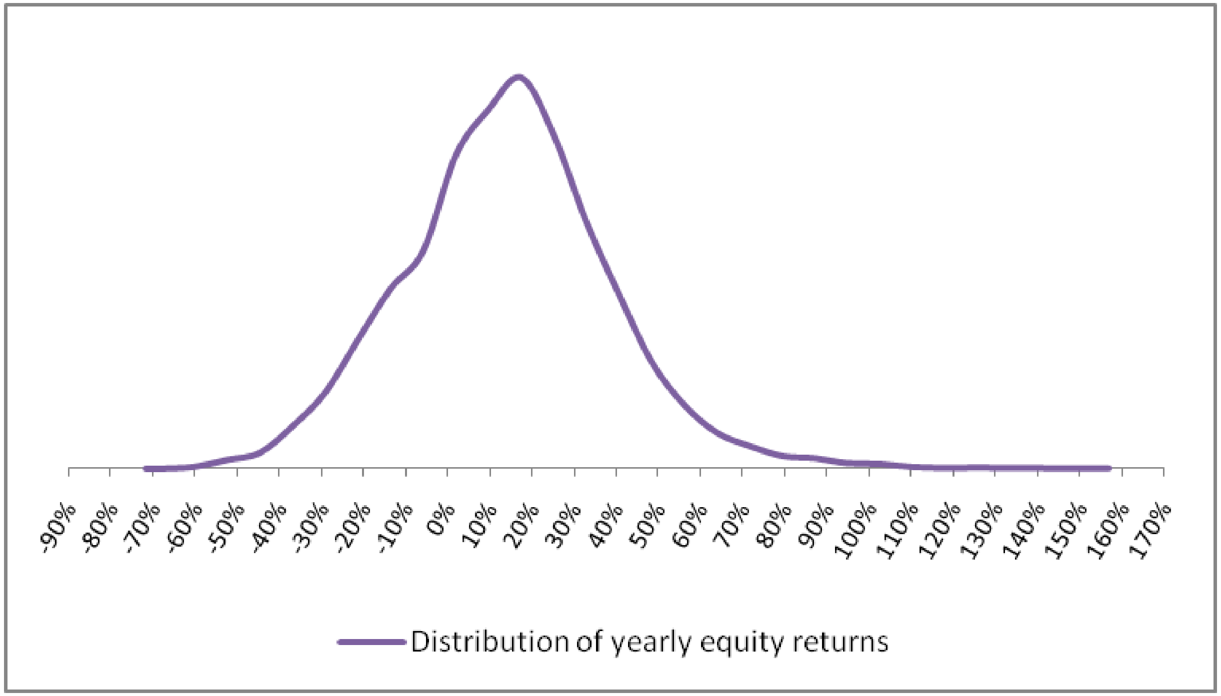
Agenda

1. Recap of investment regulations
2. Investment risk and return
3. Investment risk/return and solvency
4. Comparisons with Accident and Health insurance
5. Some thoughts for the future
6. Questions

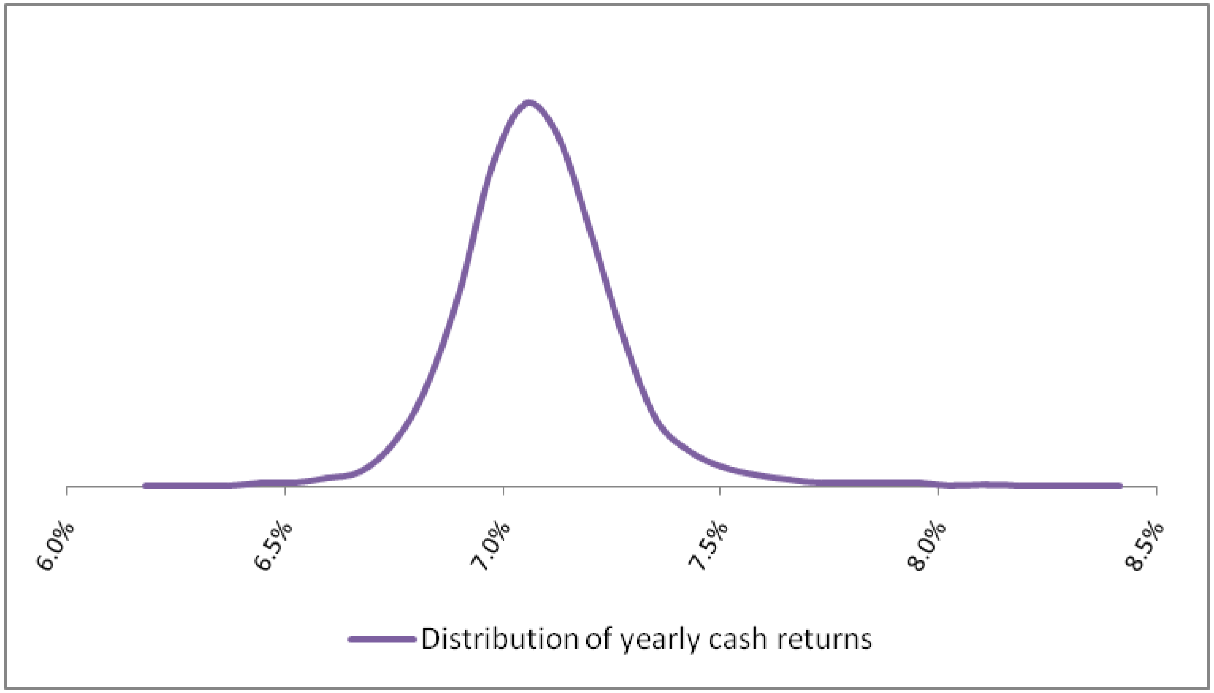
Investment Regulations

- Regulation 30 and Annexure B governs investment restrictions:
  - Market risk:
    - 40% maximum in SA equities
    - No investment permitted in Foreign equities
  - Credit risk:
    - 35% in any large bank (net capital and reserves of R5bn)
    - 7.5% in any single share of large company (market cap of R50bn)
  - Liquidity risk:
    - 20% minimum in cash
- Regulation 30(3A) contains a provision for exemption

Investment risk and return



Investment risk and return



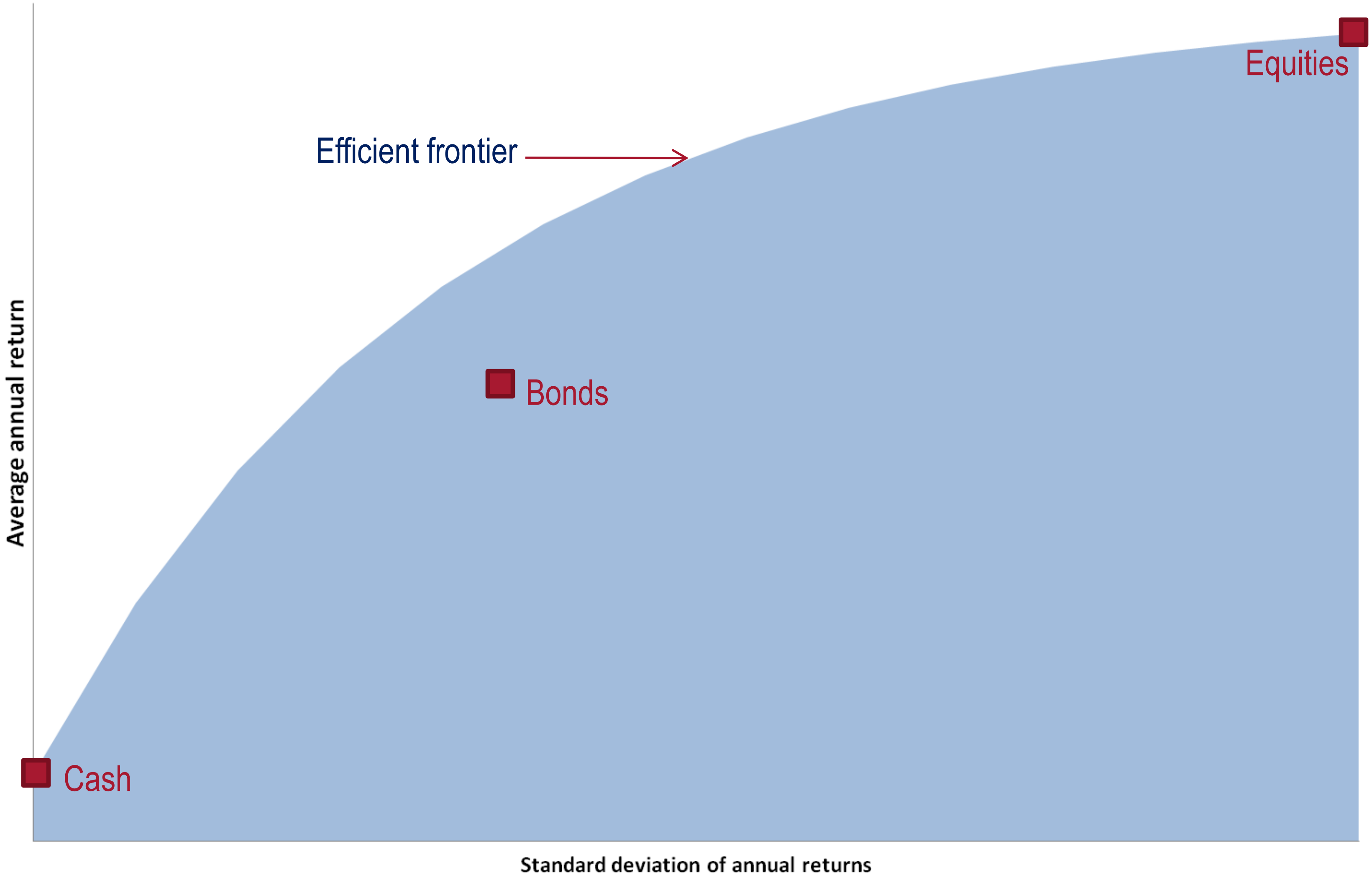
Asset Classes

ACTUARIAL SOCIETY OF SOUTH AFRICA

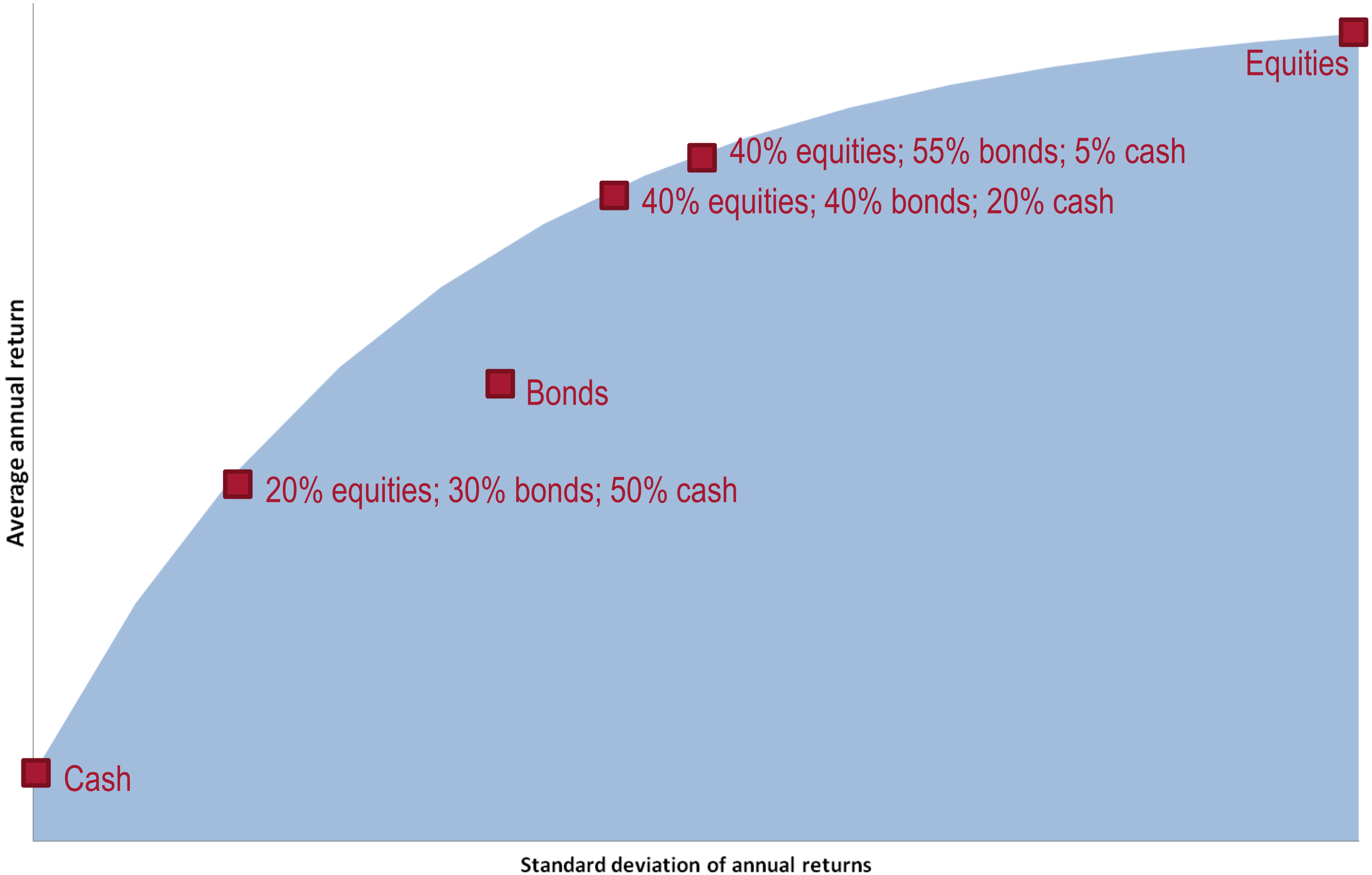
1000 simulations of annual returns

Asset Classes	Minimum	Maximum	Average	Standard deviation
Cash	6.3%	8.5%	7.1%	0.2%
Bonds	-32.5%	44.6%	8.1%	9.2%
Equities	-63.9%	168.6%	14.3%	24.8%
40% Equity 60% Cash	-21.3%	71.7%	10.0%	9.9%

Portfolio construction



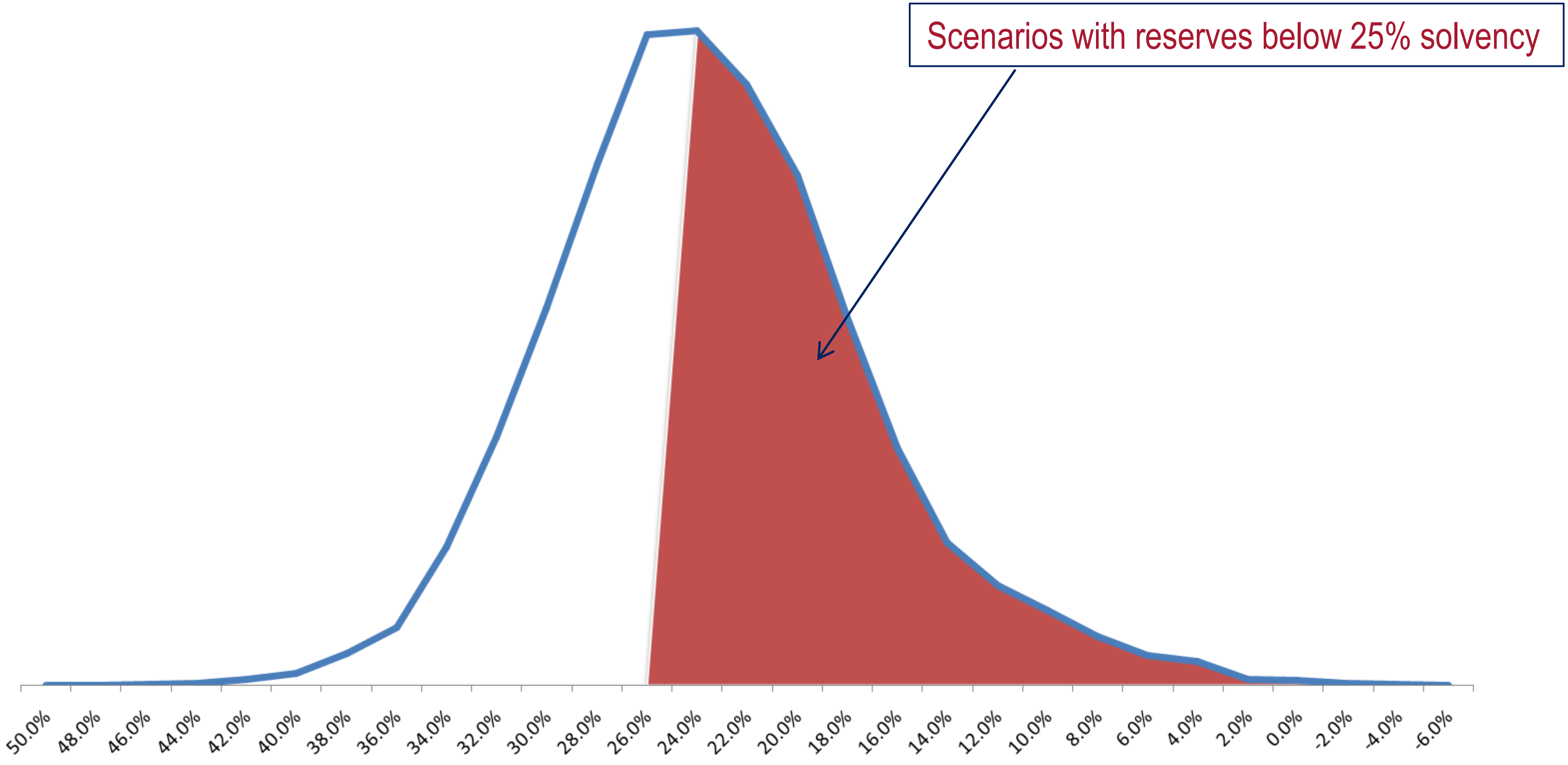
Portfolio construction



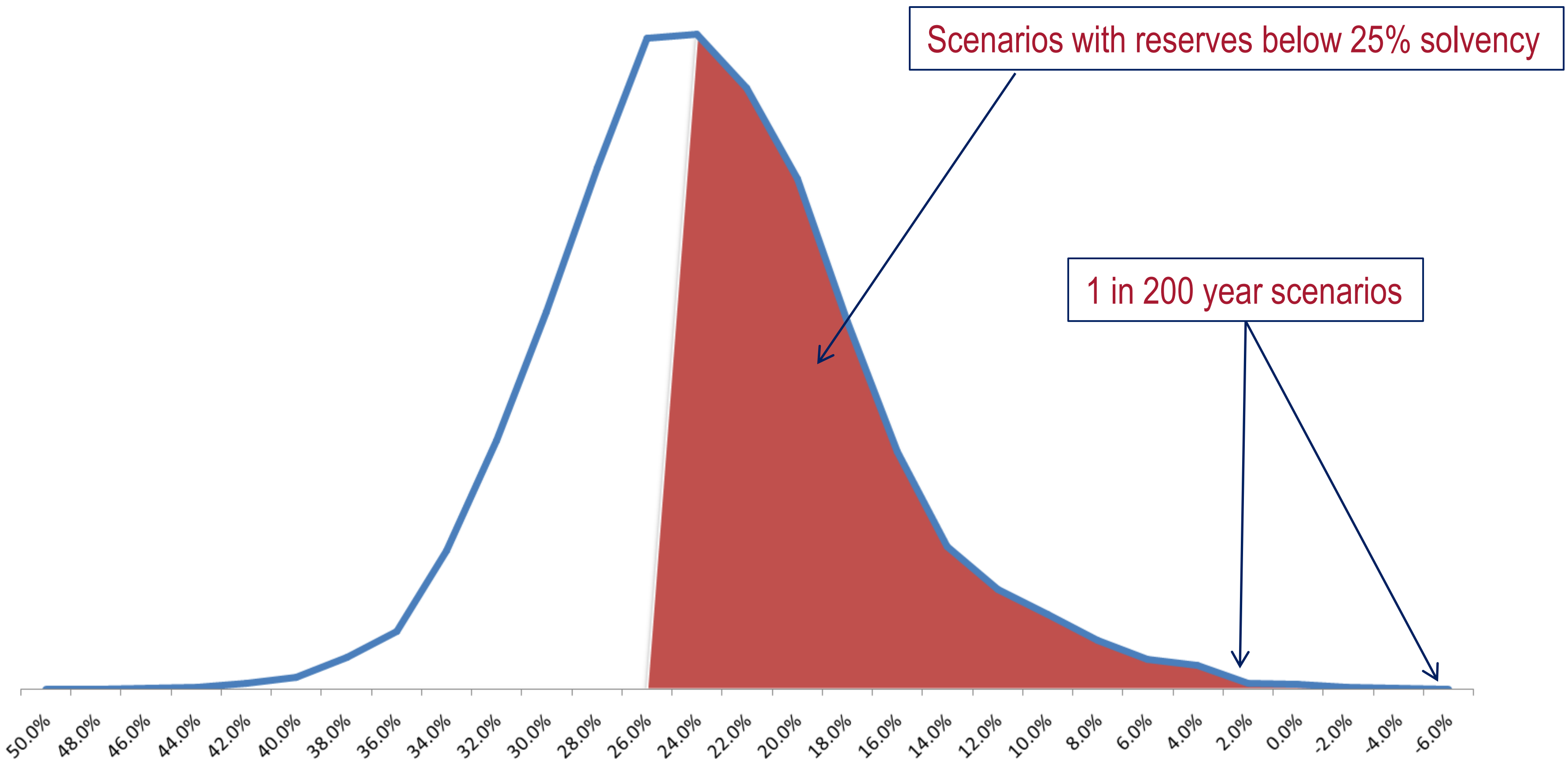
Investment risk/return and solvency

- Towers Watson internal model for capital adequacy:
  - Liability risk
    - Variance of actual operating performance against budget
    - Liquidity risk due to claims seasonality
  - Asset risk
    - Market risk
    - Credit risk

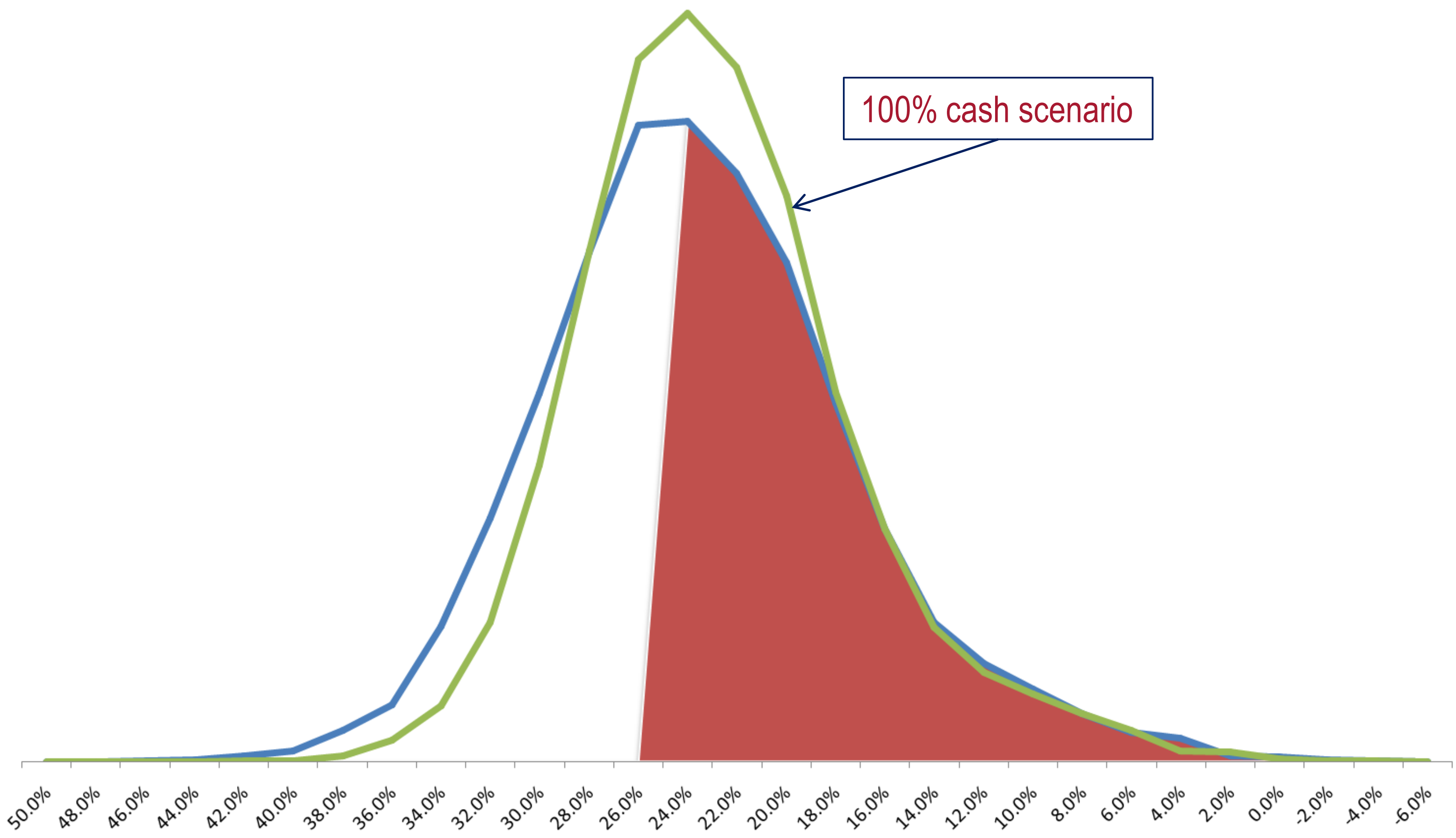
Liability risk modelled



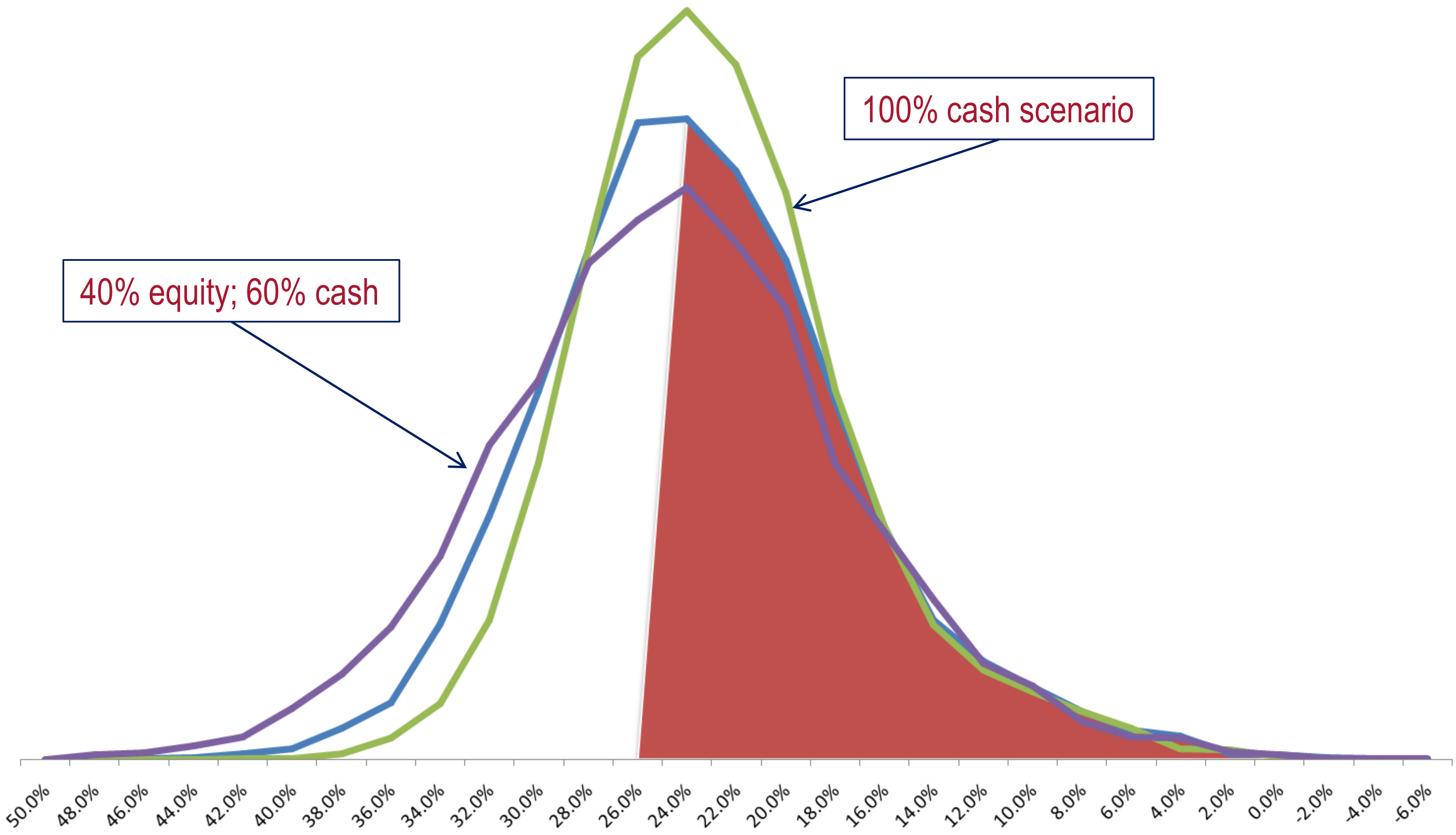
Liability risk modelled



Liability and Asset risk modelled



Liability and Asset risk modelled



Isolating asset risk

Probability of Reserves < 25% in a year

Risk of < 25% reserves	Liability risk	Asset risk	Total risk
100% Cash	57.8%	+5.6%	63.4%
40% Equity; 60% Cash	57.8%	-5.3%	52.5%
60% Equity; 40% Cash	57.8%	-8.5%	49.3%

Isolating asset risk

Probability of Reserves < 0% in a year

Risk of < 0% reserves	Liability risk	Asset risk	Total risk
100% Cash	0.16%	-0.09%	0.07%
40% Equity; 60% Cash	0.16%	-0.02%	0.14%
60% Equity; 40% Cash	0.16%	+0.09%	0.25%

Accident and Health Insurance

Short-term Insurance capital adequacy requirement

	Liability risk	Asset risk	Combined
Basic Solvency Capital Requirement (BSCR)	33%	5%	33.4%

Some thoughts for the future

- Asset regulations should not restrict the use of investment portfolios as a risk mitigation tool
- Paradigm shift needed: "100% Cash" is more risky than "40% Equity; 60% Cash" portfolio for most scenarios
- Credit Risk should be regulated separately from Market Risk
- CMS should consider following FSB approach to asset risk in the capital adequacy requirement for short-term insurers

Questions?