

September 2018

# Redefining Investment for the New Insurance World

**New business models, asset classes and  
solutions-based investment approaches**

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This communication is intended for the Asian Actuarial Conference Hong Kong for educational purposes only and must not be relied on by anyone else

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# Agenda



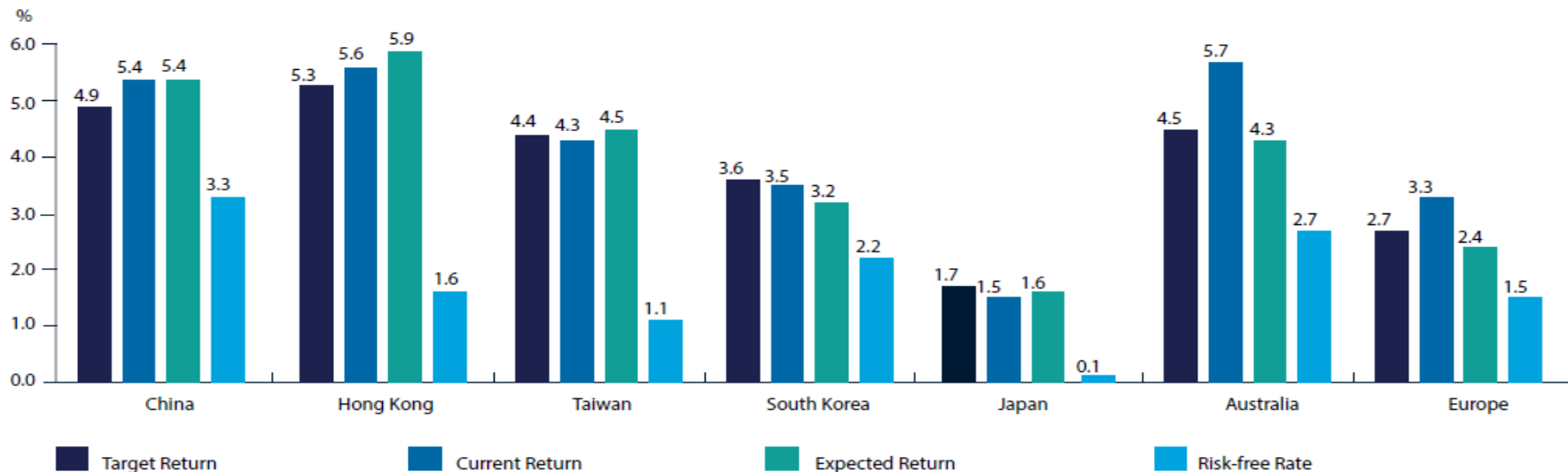
- Global Insurance Industry Challenges
- How to Manage Value and Profitability?
- Focus on Investment: Risk-Aware, Outcome-Based Solutions
- Conclusions

# 01

## Global Insurance Industry Challenges

# Industry Challenges: Low Yields

## Target, current and expected returns for guaranteed savings products

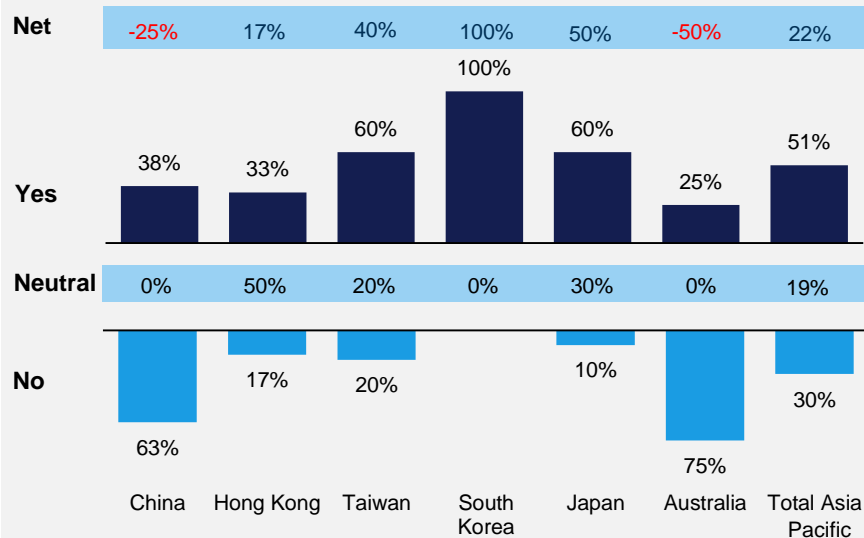


Source: Standard Life Investments European Insurance Survey 2015; Standard Life Investments Asia Pacific Insurance Survey 2017; Investing.com, 1 March 2017

# Industry Challenges: Regulatory Change

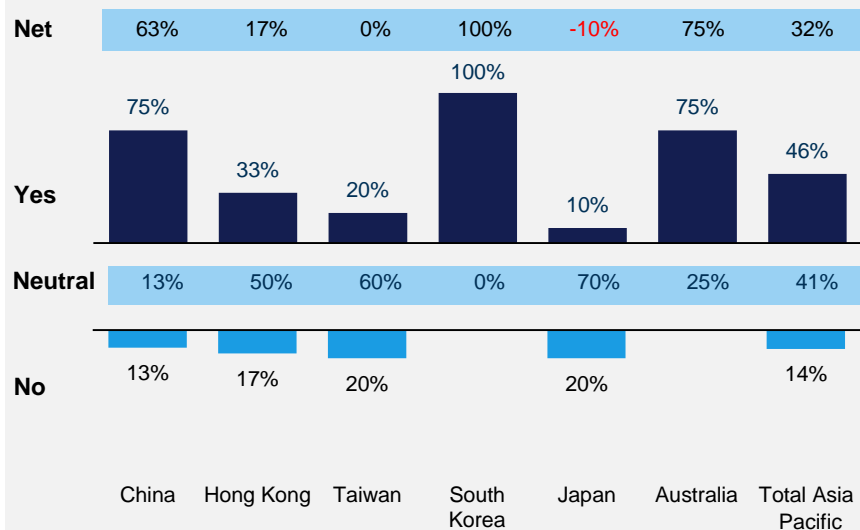
Proportion of insurers citing regulation as major challenge to investment strategy in the next three to five years

## Solvency regulation challenges investment strategy



Source: Standard Life Investments Asian Insurer Survey 2017

## Accounting regulation challenges investment strategy



Source: Standard Life Investments Asian Insurer Survey 2017

# Industry Challenges: Competition from Outside of the Industry

- **Banks**
  - Offer short term guarantee solutions
  - Insurers still trying to compete using traditional long term products
- **Traditional agency distribution business models increasingly challenged**
  - By fair value considerations, disclosure and low investment returns
- **Asset/wealth managers**
  - Broader and deeper investment capabilities?
  - Leading to wider range of (non insurance) solutions to better meet customer needs?
  - Solutions are capital-light
- **Technology Firms**
  - Better data and IT systems, direct digital interfaces that customers prefer
  - Real-time decision making and interactions
    - AI and automation => lower cost and better value for the customer

# Industry Challenges: Some Recent Consequences

- **China**
  - Anbang
  - New ALM rules
  - Merging of insurance and banking regulators
  
- **USA**
  - Emergence of acquirers of distressed life insurance assets
  - Assets managed by specialist credit teams (alternatives) in associated asset managers
  
- **Germany**
  - Generali selling its large German business

# Industry Challenges: Some Recent Consequences

- **UK**
  - Standard Life Aberdeen selling its European insurance business to Phoenix
    - The consolidator Phoenix is a distribution channel for Aberdeen Standard Investments
  - Prudential transforming to asset management in UK
    - Splitting off UK business from Asia/USA to take Asia/USA out of Solvency II
  - Equitable Life business sold and guaranteed policies converting to investment-linked
    - Guaranteed policies currently invested in non-growth assets
  
- **Asia**
  - Investors acquiring insurance licences as European insurers exit
  - Trying to create new digital insurance models



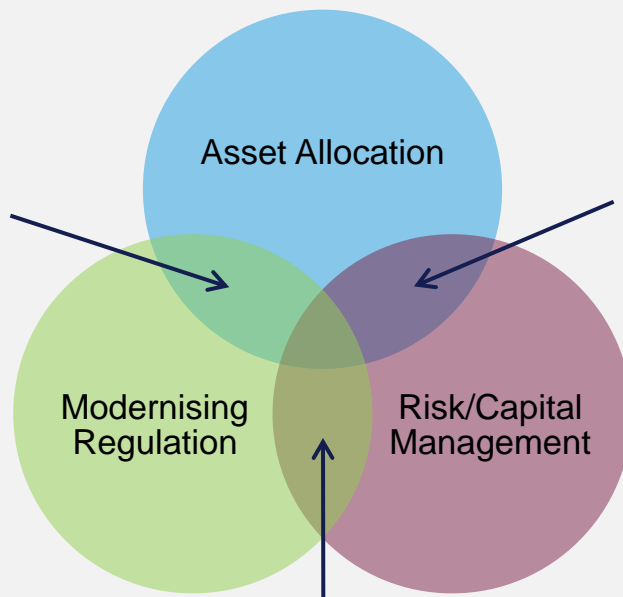
# 02

## How to Manage Value and Profitability?

# How to Manage Value and Profitability?

## Asset Allocation, Risk/Capital Management and Modernising Regulation

- **Optimal returns**
- **Eligible solution**
- **Capital inefficient**



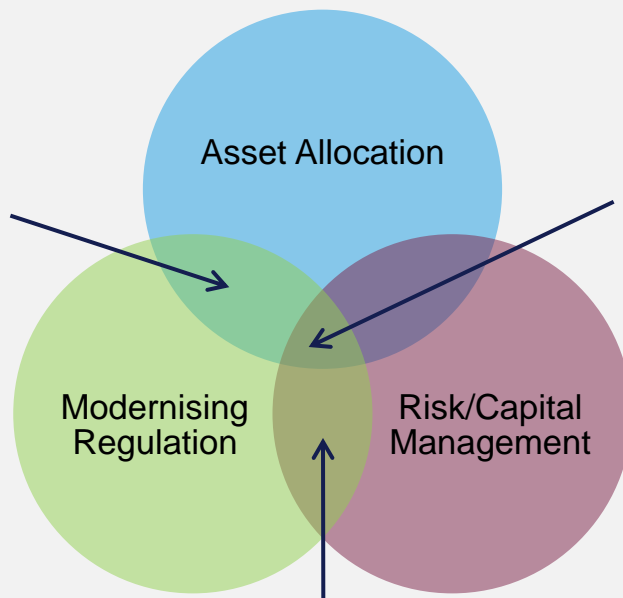
- **Optimal returns**
- **In-eligible solution**
- **Capital efficient**

- **Sub-optimal returns**
- **Eligible solution**
- **Capital efficient**

# How to Manage Value and Profitability?

## For Insurance Solutions and Business Models

- *The good old “risk-complacent” days*

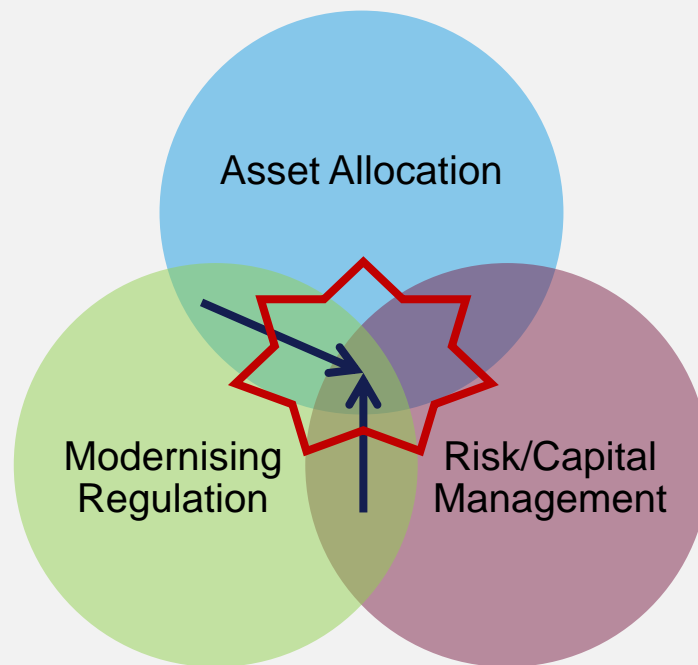


- *Optimal returns*
- *Eligible solution*
- *Capital efficient*

- *Too conservative to survive*

# How to Manage Value and Profitability?

## Survival of the Fittest



# 03

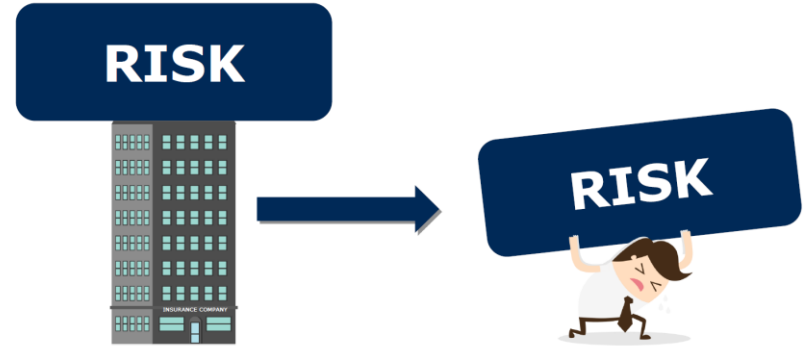
## Focus on Investment

- I. Risk-Based Funds as an Alternative to Investment Guarantees
- II. Private Market Assets and Cash Flow Matching to Meet Corporate Business Plans

# I. Risk-based Funds as an Alternative to Guarantees

# Risk-Based Funds

- Investment guarantees no longer affordable
- Transfer of risk from insurers to individuals
  - Democratisation of financial risk
- Customers need help in managing their risks
  - Understanding their own appetite for risk
  - Investment solutions that meet their needs
- Risk-based funds (considered here) and lifestyle solutions



Source: Insurance Europe

# Asset Allocation – the Difficulty of Choice...

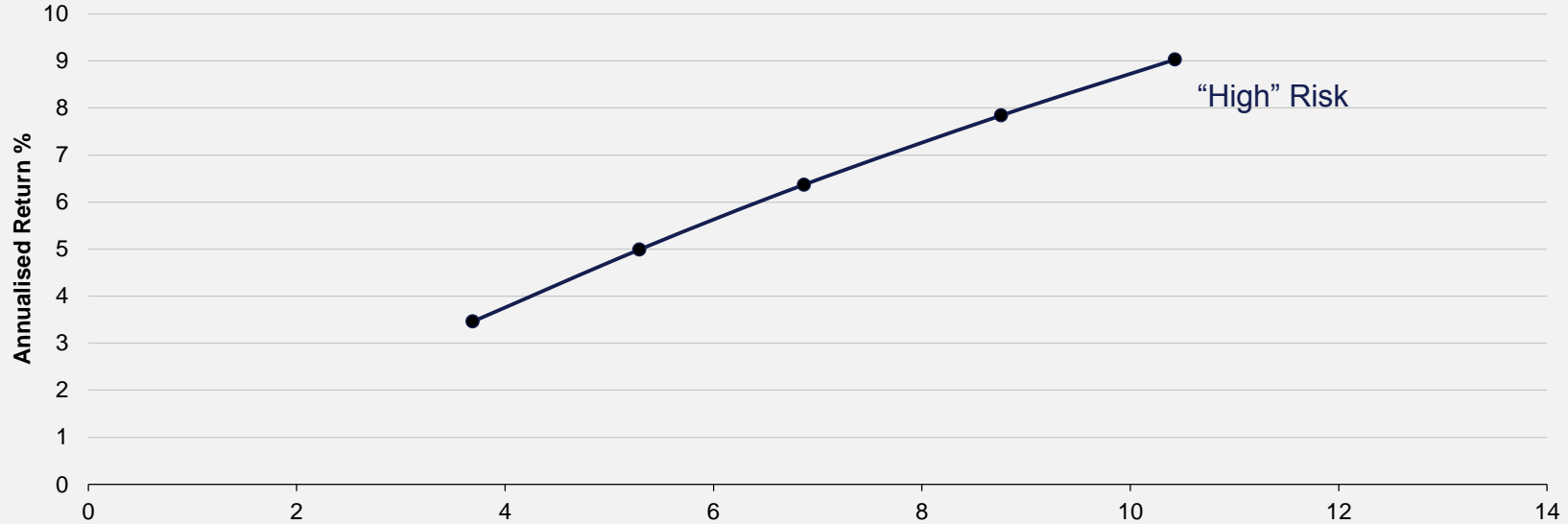
| Discrete yearly performance (%) by market |       |        |        |       |       |        |       |       |       |       |       |       |
|---|-------|--------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|
| 2005                                      | 2006  | 2007   | 2008   | 2009  | 2010  | 2011   | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  |
| 50.46                                     | 22.87 | 37.43  | 12.78  | 59.39 | 22.94 | 15.57  | 36.18 | 43.86 | 20.76 | 16.26 | 36.90 | 25.83 |
| 40.49                                     | 20.13 | 34.88  | 3.17   | 57.67 | 22.14 | 8.09   | 17.77 | 29.93 | 17.48 | 13.89 | 33.55 | 25.43 |
| 35.33                                     | 18.12 | 15.72  | -0.12  | 54.61 | 19.23 | 7.60   | 17.19 | 25.18 | 13.86 | 12.99 | 33.12 | 17.53 |
| 24.08                                     | 16.84 | 5.32   | -1.85  | 44.22 | 18.68 | 3.39   | 14.03 | 24.98 | 12.65 | 7.25  | 27.70 | 15.61 |
| 22.04                                     | 16.75 | 5.27   | -2.14  | 30.12 | 17.47 | 2.87   | 13.38 | 20.81 | 9.51  | 5.35  | 22.53 | 13.62 |
| 18.96                                     | 16.30 | 3.72   | -12.74 | 20.09 | 16.90 | 0.76   | 12.27 | 8.67  | 6.12  | 1.38  | 19.69 | 13.10 |
| 18.83                                     | 2.74  | 3.56   | -22.48 | 12.60 | 14.51 | -3.46  | 11.07 | 5.95  | 4.29  | 0.98  | 16.75 | 11.29 |
| 17.33                                     | 1.57  | 1.85   | -23.93 | 8.09  | 14.49 | -13.55 | 10.88 | 1.73  | 2.27  | 0.71  | 12.54 | 9.70* |
| 13.46                                     | 0.69  | 1.28   | -29.86 | 2.18  | 7.80  | -14.71 | 3.59  | 0.61  | 1.18  | 0.57  | 10.26 | 3.51  |
| 8.78                                      | 0.57  | -5.47  | -32.95 | 0.71  | 7.20  | -14.75 | 2.70  | -0.53 | 0.54  | 0.52  | 10.10 | 1.83  |
| 7.93                                      | -0.41 | -5.75  | -35.10 | -1.16 | 5.75  | -15.16 | 2.34  | -3.94 | 0.16  | -3.85 | 1.41  | 0.66  |
| 2.73                                      | -6.73 | -17.92 | -48.22 | -5.28 | 0.66  | -17.57 | 0.78  | -4.08 | -2.68 | -9.65 | 0.42  | 0.31  |

|                           |  |                   |  |                          |  |                   |  |
|---------------------------|--|-------------------|--|--------------------------|--|-------------------|--|
| Global High Yield Bonds   |  | UK Equities       |  | UK Direct Property       |  | Cash              |  |
| UK Investment Grade Bonds |  | European Equities |  | Asia Equities Ex Japan   |  | Japanese Equities |  |
| UK Government Bonds       |  | UK Small Cap      |  | Emerging Market Equities |  | US Equities       |  |

\* IPD figure to 30 November 2017. Source: Lipper, total returns in £ terms, 31 December 2017

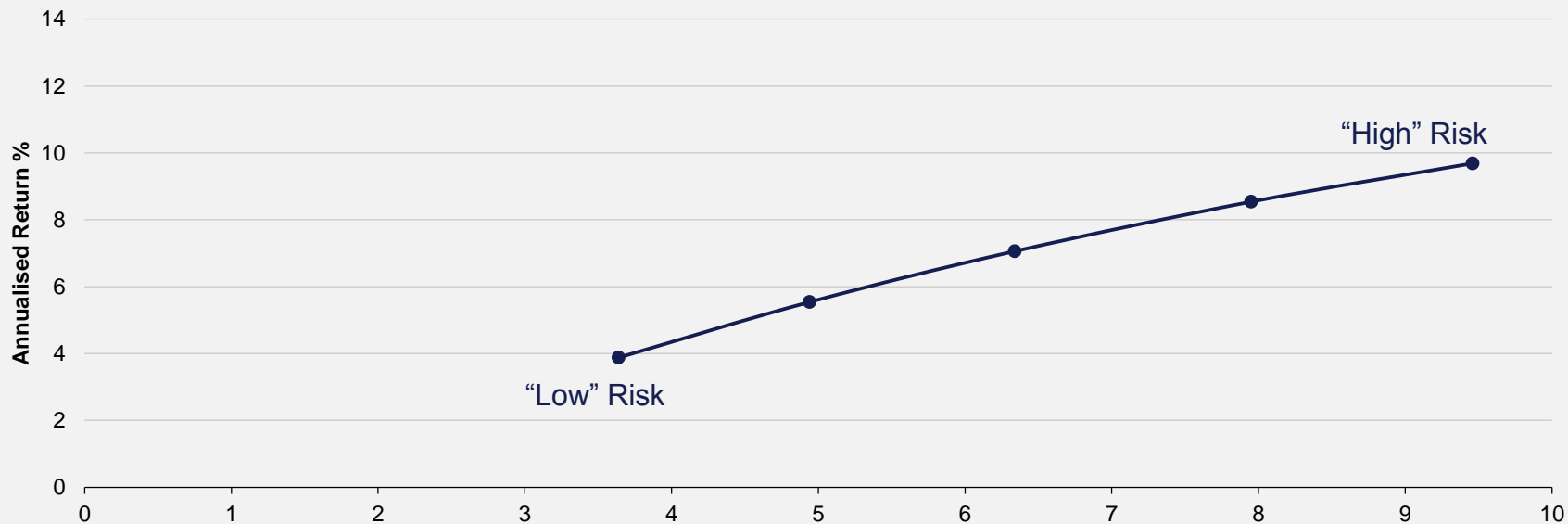


## 3 Years Risk and Return – Risk-based Funds Past Performance



Source: LipperIM, annualised risk and return figures, monthly data points, institutional accumulation share class, 3 years to 30 April 2018

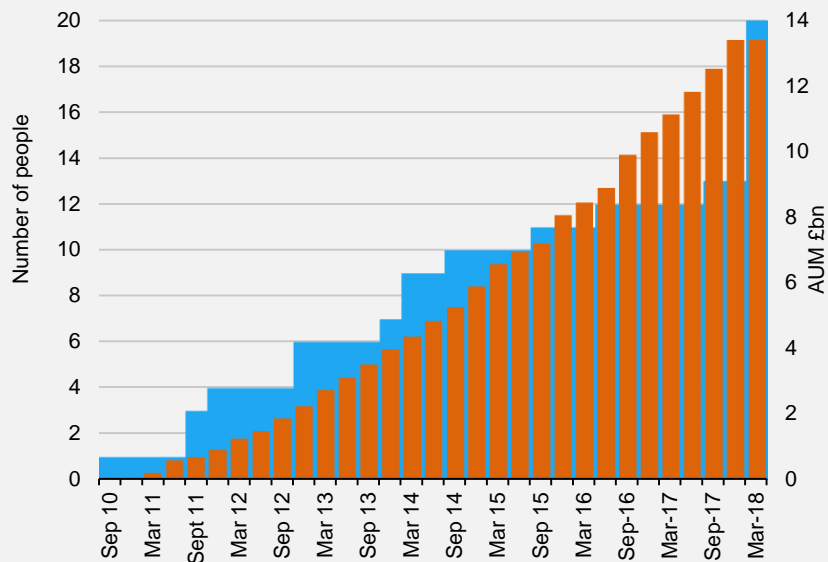
## 5 Years Risk and Return – Risk-based Funds Past Performance



Source: LipperIM, annualised risk and return figures, monthly data points, institutional accumulation share class, 5 years to 30 April 2018

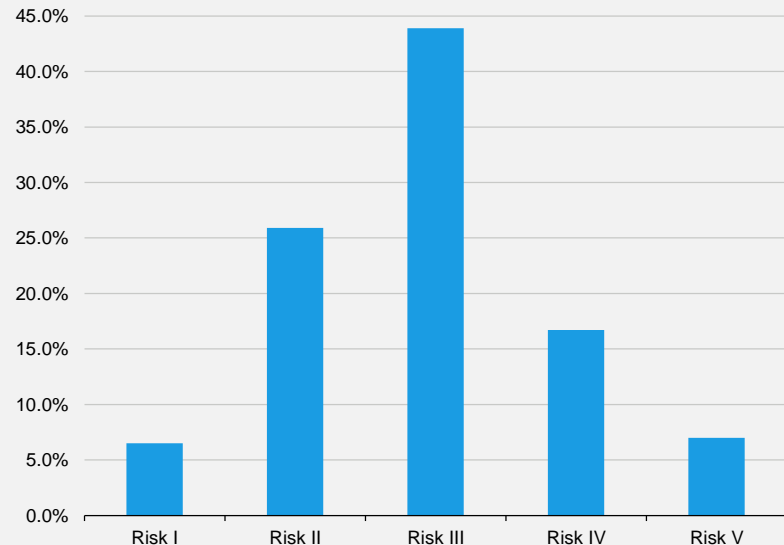
# Growth in Risk-Based Assets

## Growth of assets and team



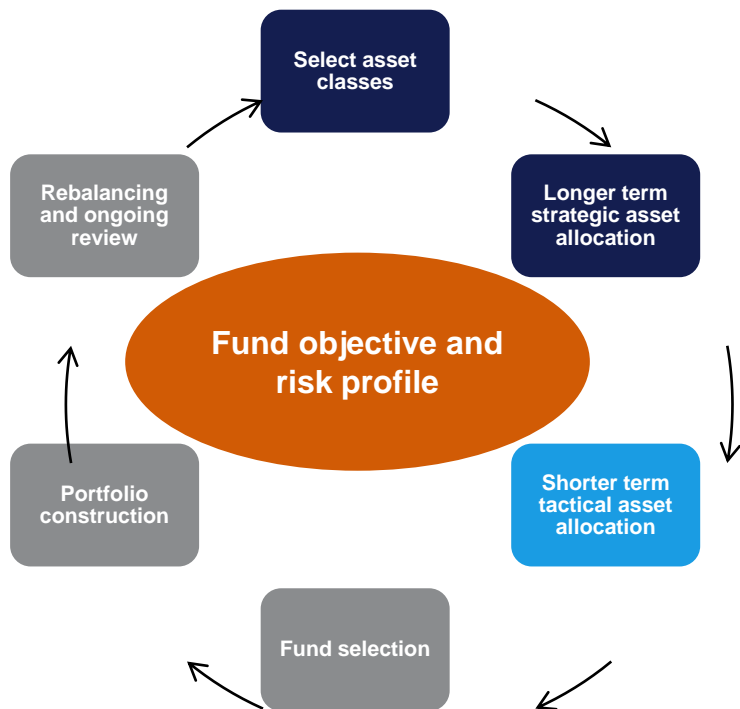
Source: Aberdeen Standard Investments, 31 March 2018

## Split by risk level



Source: Aberdeen Standard Investments, 31 March 2018

# Risk-Based Funds Investment Framework



- A quantitative and qualitative decision framework
- Consistent process across all 25 funds
- Bespoke execution depending on individual fund style and objective
- Process and inputs consistently reviewed

Source: Aberdeen Standard Investments

# Risk-Based Funds Asset Classes

## Diversification across 21 asset classes

### Defensive

Money Market including Cash

UK Government Bonds

Short dated UK Government Bonds 1-5 years

Global Index Linked Bonds

Short dated Global Index Linked Bonds 1-5 years

Sterling Corporate Bonds

Short dated Sterling Corporate Bonds 1-5 years

Global Corporate Bonds

Short dated Global Corporate Bonds 1-5 years

Absolute Return Bonds

Source: Aberdeen Standard Investments, December 2017

### Growth

UK Equities

US Equities

European Equities

Japanese Equities

Asia Pacific Equities

Emerging Market Equities

Global High Yield Bonds

Emerging Market Local Currency Bonds

UK Real Estate

Global REITS

Multi-Asset Absolute Return

Source: Aberdeen Standard Investments, December 2017

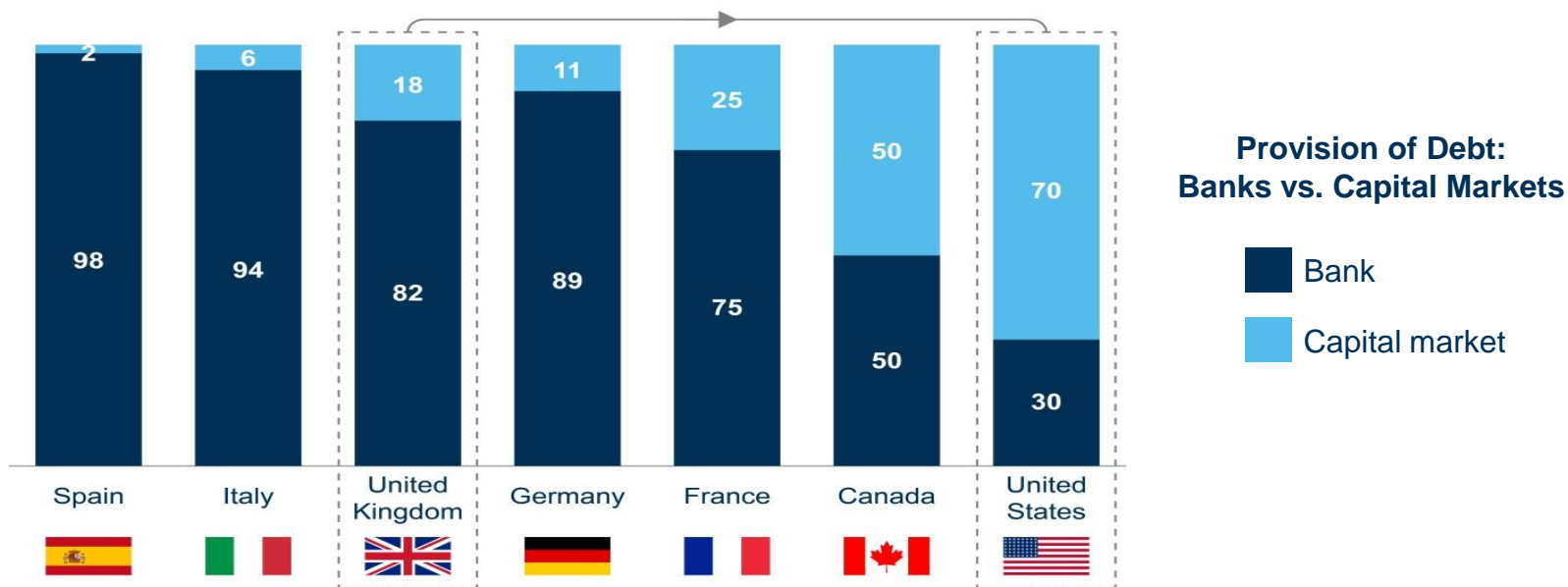
## II. Private Market Assets and Cash Flow Matching to Support Corporate Business Plans

# Opportunities are Increasing as Bank Lending May Fall Further

## Institutional investors are increasingly able to access all areas of private credit

European markets are still very bank market orientated...

...but Basel 3 regulation will accelerate the shift from bank lending to capital market funding



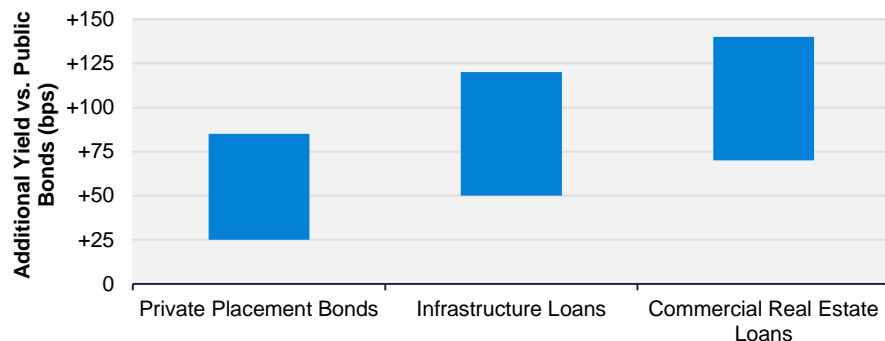
Source: Deloitte Private Debt Conference, November 2015 reporting on S&P capital IQ leveraged commentary and data and McKinsey Global Institute

# Private Credit Can Offer an Improved Risk-return Profile

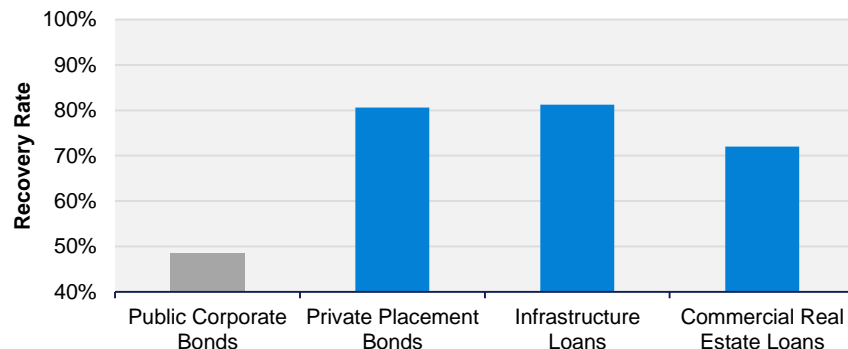
## Private credit can offer higher yield and lower risk than public corporate bonds

- **Higher yield:** Illiquidity and complexity premia can lead to a higher yield relative to public credit markets
- **Lower risk:** Security, strong covenants and in-depth due diligence can lead to lower loss rates than in the public credit markets
- **Improved diversification:** Risk is further reduced through exposure to uncorrelated and hard-to-access economic drivers

### Yield pick-up vs. public corporate bonds<sup>1</sup>



### Improved recovery rates vs. public corporate bonds<sup>2</sup>



<sup>1</sup> Source: Aberdeen Standard Investments. Yield pick-up vs. similarly rated public corporate bonds. Yield pick-ups are indicative only. Gross of fees.

<sup>2</sup> The recovery rate for "public corporate debt" is based on BBB unsecured corporate debt and the recovery rate for "private corporate debt" is based on BBB senior secured loans. Both are sourced from Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2016. The recovery rate for "infrastructure debt" is sourced from Moody's Default and Recovery Rates for Project Finance Bank Loans, 1983-2015. The recovery rate for "commercial real estate debt" is sourced from Cyclical Losses on Bank Loans by Bart Keijsers, Bart Diris and Erik Kole. Statistics based on ultimate recovery rates



# Private Credit Can Offer Diversification Across Economic Factors

## Underlying economic factors have low correlations

- **Many return drivers:** There are a variety of economic factors that should drive performance of the assets being financed
- **Low correlations among factors:** The factors have low correlations to each other, resulting in decoupled loan performance
- **Low correlations with GDP & public markets:** The factors generally have low correlations with the business cycle and public assets

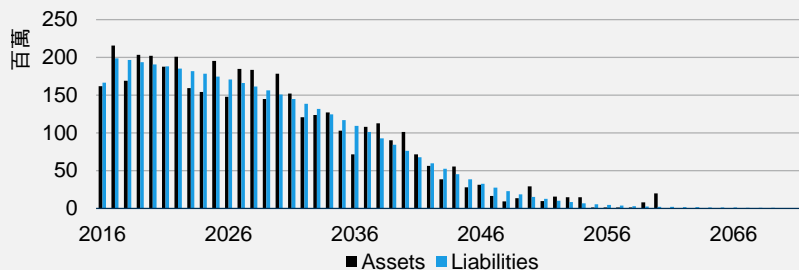
## Low correlations increase portfolio diversification and reduce business cycle sensitivity<sup>1</sup>

|  | [1]  | [2]  | [3]  | [4]  | [5]  | [6]  | [7]  | [8]  | [9]  | [10] | [11] | [12] |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| [1] Retail Property Capital Growth       | 1.0  |      |      |      |      |      |      |      |      |      |      |      |
| [2] Office Property Capital Growth       | 0.9  | 1.0  |      |      |      |      |      |      |      |      |      |      |
| [3] Industrial Property Capital Growth   | 0.9  | 1.0  | 1.0  |      |      |      |      |      |      |      |      |      |
| [4] Residential Property Capital Growth  | 0.7  | 0.7  | 0.7  | 1.0  |      |      |      |      |      |      |      |      |
| [5] UK Prime Repossession Rate           | -0.6 | -0.6 | -0.6 | -0.3 | 1.0  |      |      |      |      |      |      |      |
| [6] Credit Card Charge Off Rate          | -0.3 | -0.4 | -0.5 | -0.1 | 0.7  | 1.0  |      |      |      |      |      |      |
| [7] UK Electricity Prices                | -0.5 | -0.4 | -0.4 | -0.2 | 0.9  | 0.5  | 1.0  |      |      |      |      |      |
| [8] Motorway Annual Flow Traffic         | 0.5  | 0.5  | 0.6  | 0.5  | -0.8 | -0.7 | -0.6 | 1.0  |      |      |      |      |
| [9] Broad Europe Infrastructure Defaults | 0.4  | 0.2  | 0.3  | 0.3  | -0.1 | -0.1 | -0.3 | 0.3  | 1.0  |      |      |      |
| [10] Social housing void losses          | -0.3 | -0.5 | -0.4 | -0.4 | 0.7  | 0.6  | -0.5 | -0.7 | -0.1 | 1.0  |      |      |
| [11] Student Rental Growth               | -0.2 | -0.3 | -0.4 | -0.2 | 0.3  | 0.6  | 0.0  | -0.4 | -0.5 | 0.1  | 1.0  |      |
| [12] GDP Growth                          | 0.5  | 0.6  | 0.5  | 0.3  | -0.8 | -0.6 | -0.5 | 0.6  | -0.2 | -0.6 | -0.2 | 1.0  |

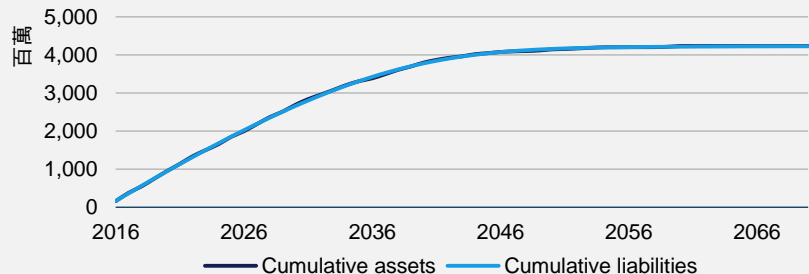
<sup>1</sup> Based on yearly data for the period 2004-2014, with the exception of Broad Infrastructure Defaults (2004-2011), Social housing void losses (2008-2014) and UK electricity prices (2004-2013). Absolute values of correlations are shown. Source: Standard Life Investments, June 2017

# Digital Here and Now: Cash Flow Matching

## Annual cashflows



## Cumulative cashflows



### Liabilities

- Typical liability cashflow profile
- Either annuity cashflows or fixed /stable component of participating business

### Asset allocation

- Portfolio composition (public/private/oseas) determined by strategic asset allocation
- Either client view or in consultation with SLI

### Stock selection

- Investible universe of favoured credit determined by credit portfolio manager

### Portfolio construction

- Use proprietary optimisation techniques to construct optimal portfolio subject to relevant constraints
- Able to construct optimal portfolio on a range of metrics: net spread, SCR, cashflow match

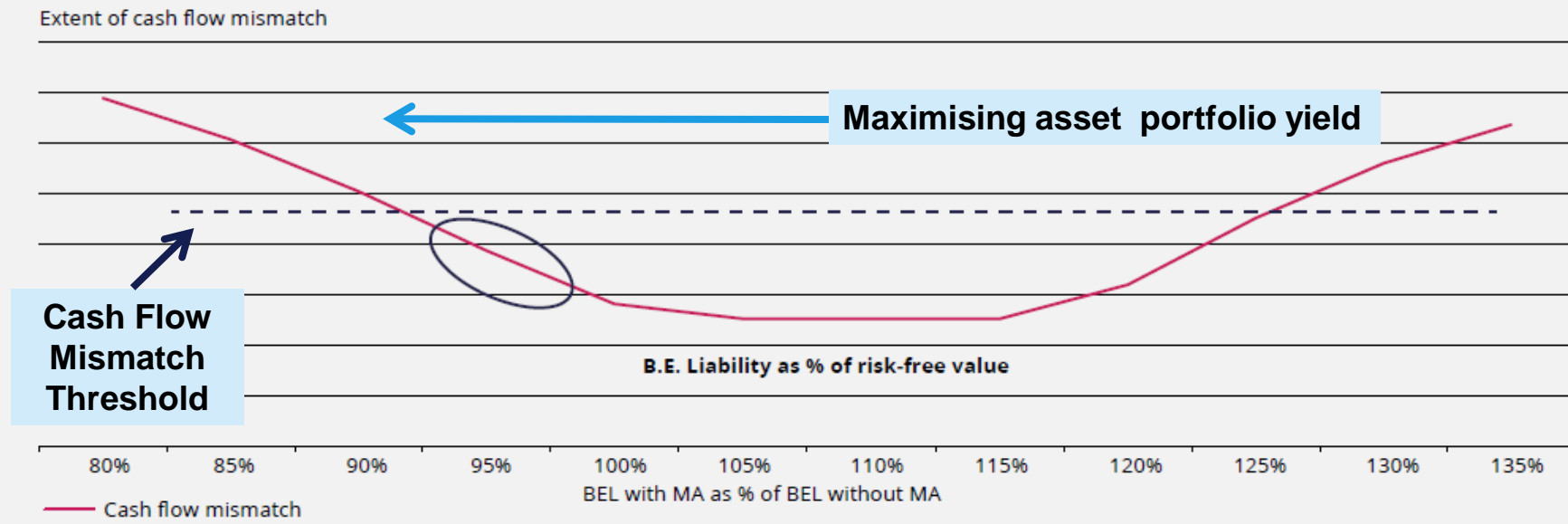
### Portfolio management

- Ongoing management by credit PM
- Combining PM expertise and judgment with relevant quantitative insurance focussed metrics
- e.g. hurdle rates, SCR based risk/return metric, cashflow match

This slide is for illustrative purposes only and shows a sample cash flow matched portfolio. Source: Aberdeen Standard Investments

# Digital Here and Now: Optimal Cash Flow Matching

Figure 3: Asset allocation optimisation - the efficient frontier



Source: Aberdeen Standard Investments, February 2015

# 04

## Conclusions

# Conclusions

- Global insurance challenges are leading to:
  - New business models, asset classes and solutions focus
- Regulatory modernisation => value increasingly created by:
  - Risk and capital management
  - Solutions-based investment approaches
- To provide risk-managed solutions for new customers
- To provide risk-efficient asset allocation solutions for in-force balance sheets

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