

Annuities: the £30bn+ per annum investment challenge

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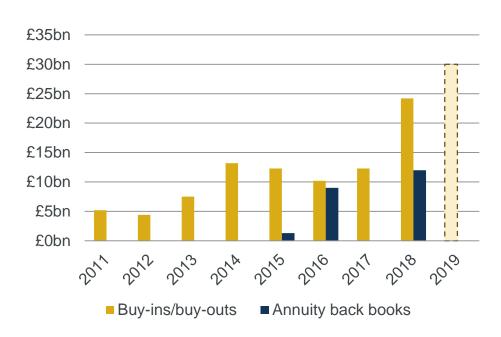


BPA market outlook

Magnitude of BPA transactions and high level asset allocation

Projected BPA pipeline

- 2018 record year
- Projected volumes stronger still
 - Up to £300bn predicted over next 10 years from FTSE100 companies
- Pensioners
 - Typically 10-15 year duration
- Whole schemes
 - Becoming more prevalent and longer duration



Source: LCP pensions de-risking report: Buy-ins, buy-outs and longevity swaps, March 2019 2019 estimate is between £25bn and £30bn



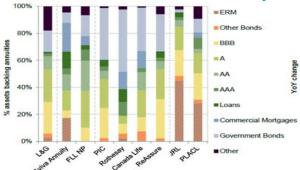
Impact on Asset Allocation

- £30bn p.a. required across gilts, credit and Direct Investments (private credit / real assets)
- Liquidity gilts, cash
- Credit GBP unlikely sufficient
 - USD/EUR corps with XCCY hedging
- Pricing typically 40-60% Direct Investments
 - Spread pick-up
 - Duration profile
 - Credit quality

Illustrative Asset Mix



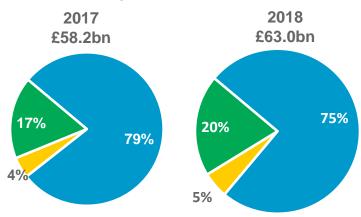
Asset Allocation Across Industry*





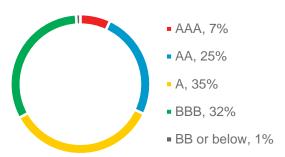
Example: L&G's Asset Portfolio

L&G Retirement Asset portfolio

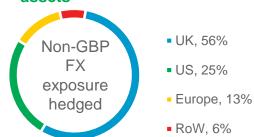


- Traded investments
- Lifetime mortgage
- Direct Investments (excl. lifetime mortgage)

Asset portfolio maintaining overall credit quality and high sectorial diversification*



Geographical diversification with bias to GBP assets*









Prudent Person Principle revisited

- Identify, measure, monitor, manage, control and report asset risks
- Ensure security, quality, liquidity and profitability of the portfolio as a whole
- Appropriate to the nature of liabilities
- In the best interest of all policyholders and beneficiaries

The PRA plans to consult on *expectations of firms' implementation of the Prudent Person Principle* in 2019*.



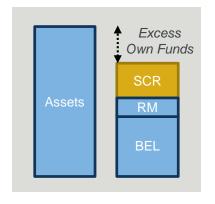


^{*} PRA Business Plan 2019/2020

Portfolio optimisation – more than just MA

- Going down the credit curve:
 - Increases MA and reduces BEL
 - Increases credit risk and SCR.
 - → Excess Own Funds net impact
- Annualise SCR charge to compare with MA
 - Incorporate model diversification and potentially LACDT offsetting*

Corp. credit rating	Annualised spread SCR**	MA 'hurdle' over AAA required to compensate for increased SCR
AAA	0.24%	
AA	0.32%	0.08%
Α	0.47%	0.24%
BBB	1.13%	0.89%



- * Loss Absorbing Capacity of Deferred Tax, which can reduce firms' SCRs.
- ** SCR charge for 10 year duration, post MA offsetting and diversification (but not LACDT).



Liquidity matters

CP 4/19 liquidity buffers

Category	Typical assets	Use (sale)	Use (collateral)	Haircuts
Primary liquidity	Cash, gilts	Immediate	Immediate	Limited
Secondary liquidity	Corporate bonds, listed equity	After 90 days	Immediate if permitted?	Yes
Other	Direct Investments	?	?	Yes; may be severe

- Derivatives: Rates and inflation, XCCY swaps
- Third party funding; committed and uncommitted
- Collateral upgrade transactions
- Beyond managing liquidity, how should insurers price it?



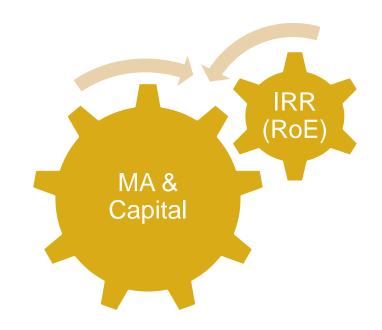
Panta Rhei*

- BPA deals are geared and long-dated
- IRR highly sensitive to MA / capital assumption changes
- Risk of changing PRA / ECAI views on investments, post-deal
- Gradual 'drift down' in credit quality as downgrades exceed upgrades
- BBB 'cliff risk'

RoE: Return on Equity

ECAI: External Credit Assessment Institutions

IRR: Internal Rate of Return





ESG and technology risks

- Long-term view vs short-term asset manager horizon for ESG?
- Environmental:
 - Transition effects (e.g. EPC standards E → C?, coal)
 - Physical effects (e.g. flood risk, subsidence)
- Social:
 - Expectations on investors (e.g. safety & wellbeing standards)
 - e.g. Doubling residential ground rents
- Technology:
 - e.g. Electric Vehicles (2040 target but price cross-over by 2025?)

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EPC: Environmental Performance Certificate

Specific requirements for DIs*

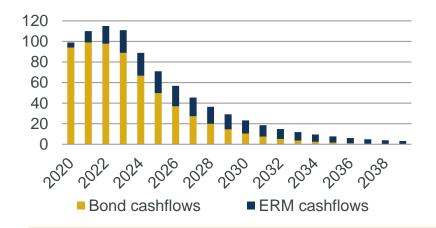
- Need for strategy and risk appetite
 - Risk appetite set by the board at 'suitable' granularity
 - Limits
- 2. Building the right capabilities
 - All three lines of defence
 - Underwriting, risk management and potentially workout
- Appropriate MI
- 4. Appropriate valuations, internal ratings, MA and SCR

*An annuity is a very serious business: Part Two, speech by David Rule, 10th April 2019

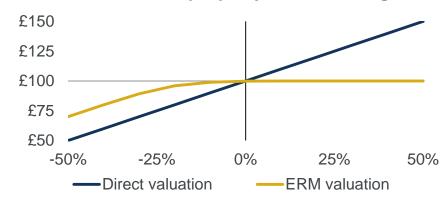


Concentration risks

- Too much illiquids in long end?
- PPP
- 'Going concern' assumption vs 'run off'



Asset value vs property market changes



- Property exposure:
 - Direct holdings
 - Equity release mortgages
 - Commercial Real Estate loans
- Non-linear and indirect
- Overall quantification







The UK Real Asset Picture

Long term capital

Current private sector DB pension fund assets

£1,602.9bn

Overall contributions to DB schemes (last 10 years)

c.£400bn



Estimated UK infrastructure funding requirement

Housing

£150bn

Regeneration

£100bn

Clean energy

£40bn

Transport

£90bn

SME finance

£125bn

Total

£505bn



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Reduced capacity

Banks

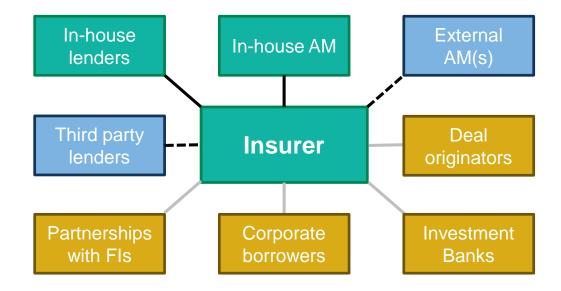
Governments

Strategy for Direct Investments

- Possible approaches:
 - Invest in outright MA-eligible assets as and when available
 - Develop businesses that can generate MA-eligible assets
- Precedent for development of new businesses:
 - Equity release
 - Commercial mortgages
- Passive participation → price-takers?
- Lending businesses may become valuable in their own right
- Regulatory / other constraints

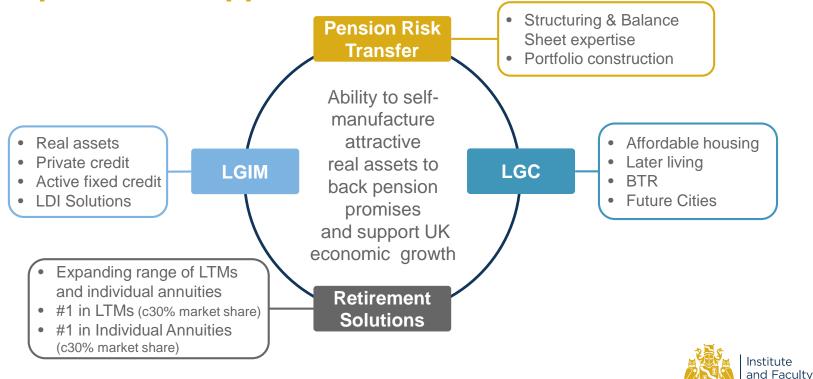


Routes to access Direct Investments





Example: L&G's approach



of Actuaries

Example: Selected L&G Direct Investments backing Annuities



Leeds

£600 million total investment including the redevelopment of Headingly stadium and L&G Homes' modular housing factory



Wales & Borders

£200 million financing of a new fleet of 60 Stadler trains to increase the rail service capacity in and around Cardiff



Cardiff

£400 million Cardiff Central Square regeneration. Expected to create 10,000 local jobs and a new £120 million HQ for BBC Wales.



Southampton

£93 million to fund a 1,104 unit student accommodation development in the city centre





Edinburgh

£200 million New Waverley development - moving 2,900 civil service jobs into the heart of the Old Town.



Newcastle

£350 million Newcastle Science Central development, a major UK hub for scientific research, and technology businesses



Walney & Hornsea Offshore Wind Farms

£580 million financing of two offshore wind farms powering >1,500,000 homes



Essex

£250 million invested in the London Gateway Port – UK's first new port for in over 2 decades



14 May 2019 Source: Legal & General 19





A complex undertaking

- Many loan and mortgage assets are not MA eligible
- Can internally restructure some assets to achieve MA compliance
 - Broadens investment universe
- Equity release 'poster child'
 - £6bn p.a. by 2020*
 - But NNEG and EVT headache
- Need to prioritise

Tated senior note(s)

Cash

Liquidity facility

NNEG: No Negative Equity Guarantee

EVT: Effective Value Test



Could other assets be securitised too?

- Some loans are 'nearly' MA eligible
- e.g. Dutch mortgages:
 - c. €40bn p.a. origination at 15Y+ fixed rates*
 - 'Make whole' prepayment penalties
 - No NNEG risk

ERC: Early Repayment Charge

 Overall economics would need to justify internal securitisation process

Loan feature	Equity release mortgages	Dutch residential mortgages	
Mortality and morbidity risk	Yes	Limited	
Prepayment risk	Yes but mitigated by ERCs	Mitigated by prepayment charges	
'House sale' risk	N/A	Yes, but high cost of sale and stable sales rates	
Property price risk	Yes – NNEG. Low initial LTVs but no borrower recourse	Yes, but mitigated by repayments and recourse	



* PwC estimate

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Summary



Key Take-aways

- Large BPA opportunity
- Strategic investment approach
- Multi-dimensional problem (MA, risks, liquidity, governance, ESG)
- People and experience
- Never lose sight of governance and MI
- DI key to success
- Internal securitisations can help, but not a panacea
- No one-size fits all approach



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Questions

Comments

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