



DB endgame

Keith McInally, Senior Solutions Director - Pensions

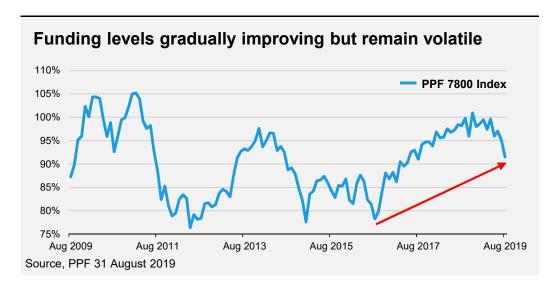
Timea Varga, Senior Solutions Specialist - Pensions

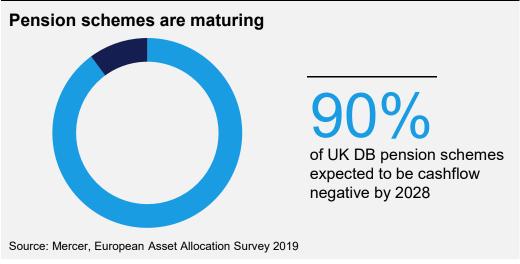


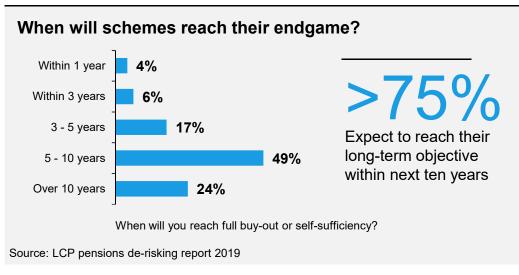
Market background and DB endgame options

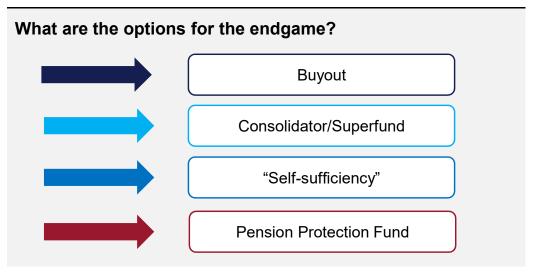
The UK DB pension scheme landscape

A sharper focus on the endgame











Investing for the endgame

A changing focus as schemes move along their de-risking journey



PROTECTION

Growth:

• Typically a requirement for growth to close funding deficit

ACCUMULATION

Preservation:

Increasing hedging level to reduce interest rate and inflation risks

Income:

Matching cashflows not a significant focus

Growth:

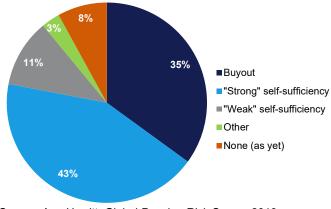
 Lower growth requirements as funding level improves

Preservation:

Hedging precision has increased with a high level of interest rate and inflation protection

Income:

Higher focus on "sequencing risk" and cashflow matching (e.g. pensioners)



Source: Aon Hewitt, Global Pension Risk Survey 2019 For illustrative purposes only.



Investing for the endgame

Changing cashflow requirements

- Scheme starts to turn cashflow negative as the funding level improves and the scheme matures
- · Scheme has significant cashflow requirements

Liabilities

Assets

- Typically cashflow positive sponsor contributions sufficient to meet cashflow requirements
- Some potentially significant cashflow requirements from transfers out

- Sponsor contributions reduce and are no longer sufficient to meet ongoing cashflow requirements
- Increased proportion of members are current pensioners receiving benefits
- Larger proportion of membership is current pensioners
- Little or no further sponsor contributions to offset cashflow requirements

What are the different approaches?

Regular disinvestments

Cashflow needs are met by regular redemptions of units in the strategy

Risk of being a forced seller in down markets and crystallising losses

Investing in income generating asset classes

Cashflow needs are met by taking distributions from assets that generate income

Income can be generated from a wide range of assets including growth assets such as equities and property

Cashflow matching

Assets are managed such that coupon and redemption payments are structured to meet required cashflows

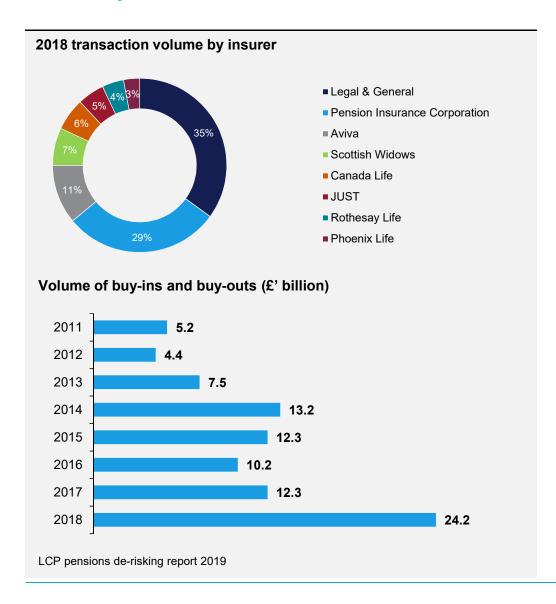
Typically managed on a buy and maintain basis

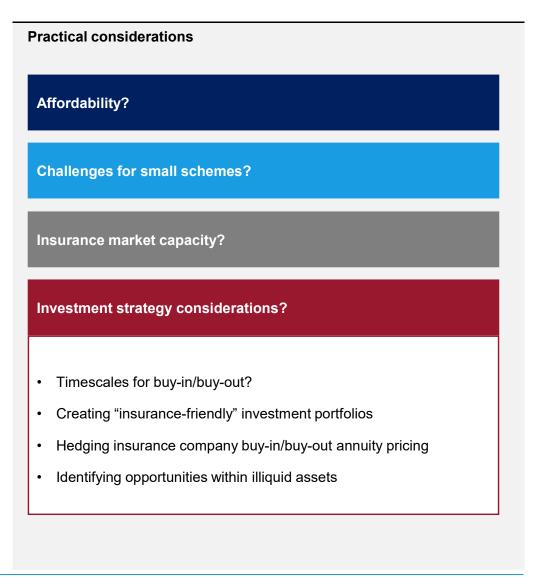
For illustrative purposes only.



Insurance company buy-in and buy-out activity

Record year for insurance transactions... but when will demand outstrip supply?







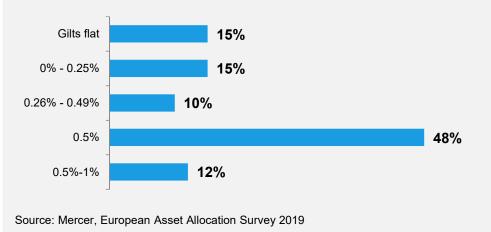
"Self-sufficiency" or "low reliance" approach

Keep on running...

"Under a self-sufficiency approach, the ongoing reliance on the sponsoring employer is kept at a minimal level. This requires a low-risk investment strategy to minimise the chances of the employer having to make good any investment losses. Typically, the investment approach may be similar to that of an insurance company under the buy-out approach, but without the solvency requirements of an insurance company and the need to make a profit for shareholders."

The Pensions Regulator, "Understanding → DB pension scheme funding", April 2018

Self-sufficiency basis (assumed margin over gilts)



Practical considerations

Continued reliance on employer covenant

Running costs?

Longevity and other risks

Investment strategy considerations?

- Creating a "low reliance" investment strategy
- Exploiting the illiquidity premium
- Utilising flexibility pension schemes have over insurers
- Important to take a holistic view of investment risks



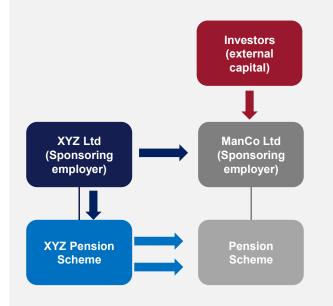
Alternative endgame options emerging...

The rise of superfunds?

What are the main characteristics of a "superfund"?

- Occupational pension scheme set up to effect consolidation
- Link to ceding employer is broken on transfer to a superfund
- New "covenant" is a capital buffer provided by external investors
- Mechanism for returns to be payable to external investors

DWP – consolidation of DB pension schemes consultation



Different providers emerging:

Clara Pensions

· "Bridge to buyout"

Pension SuperFund

Long term run-off

Practical considerations

Awaiting formal regulations (post DWP consultation)

Different models and approaches being proposed

Consideration of covenant being "given up"

Is it suitable for your scheme? (Proposed "Gateway")

- Exclude schemes that have ability to buyout at the point of transfer
- Exclude schemes assessed able to afford buyout in the 'foreseeable future' (defined as next five years); and
- A move to a superfund would need to be based on evidence it enhances the likelihood of members receiving full benefits.





Investing for the endgame

Navigating to your endgame

Different skillset is required when investing for the endgame



ACCUMULATION



Investment growth, and removing "unrewarded risks"

Full breadth of return generating assets, plus LDI focused on removing funding deficit

Minimising risk, and increasing certainty of outcome

Predominantly low risk, income yielding, assets focused on your ultimate endgame objectives





Partnering with an "expert in these waters"

Source: Aberdeen Standard Investments. 30 June 2019



Navigating to your endgame

Different skillset is required when investing for the endgame



Buy & Maintain Credit with a strong track record of avoiding downgrades and defaults



Alternative sources of contractual income to access illiquidity premia and diversify risk exposures



ESG* Embedded across investment capabilities to generate the best long-term outcomes



LDI and derivatives expertise for hedging residual risks including interest rates, inflation and currency risks



Insurance heritage and a track record of delivering holistic pensions solutions through connected teams



Genuine partnership working with a manager who helps you understand your options and who will implement the optimal solution for you

Source: Aberdeen Standard Investments, 30 June 2019. *Environmental, Social and Governance



Significant allocation to public Fixed Income assets

Crucial to select a manager with a robust Buy & Maintain credit process

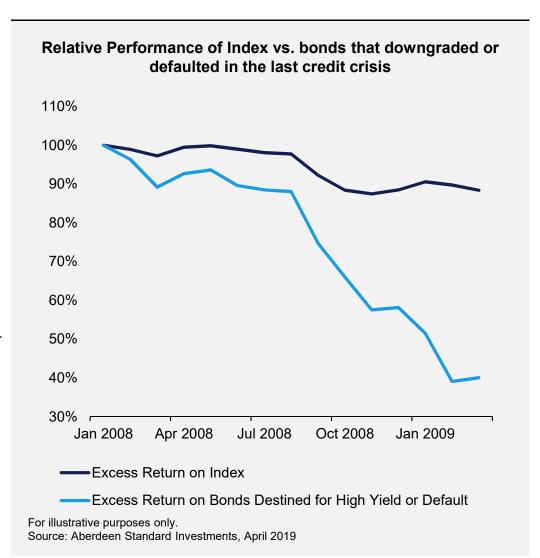
Cornerstone of any CDI investment portfolio is a significant allocation to public and private debt

- Crucial to understand and manage risks
- Essential to have a fixed income manager with a robust credit research/fund management process

Interaction between CDI and LDI

- CDI manager needs well established systems, processes and delivery mechanisms to provide data and work with LDI manager
- Potential benefits in managing LDI and CDI holistically however it is much more important to first select the best CDI manager

Primary focus should be on finding a manager with a robust Buy & Maintain credit process and a strong track record of avoiding downgrades and defaults





The benefits of a holistic approach across Public & Private Credit

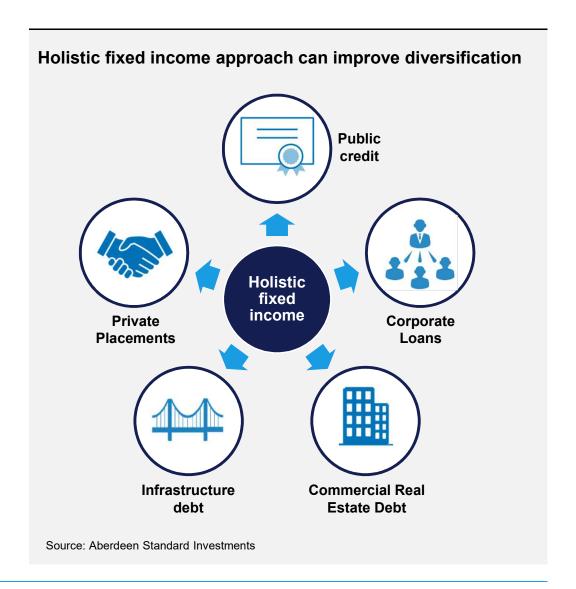
Optimising your Fixed Income allocation

Benefits of a holistic approach to investing in private credit

- Flexibly allocate across sectors with most attractive characteristics at time of investment
- Reduce resourcing and governance required to manage fund investments

Benefits of a holistic approach across public and private credit

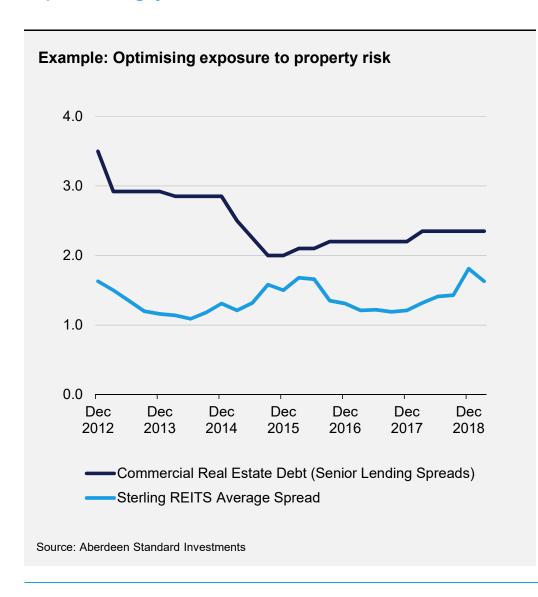
- Ability to optimise exposure to sectors and risk factors: flexibility to ensure that you maximise the return you receive for taking exposure to a specific sector or risk factor
- Efficient implementation: ability to optimise exposure to an individual credit name or minimise yield drag whilst building up private debt allocations





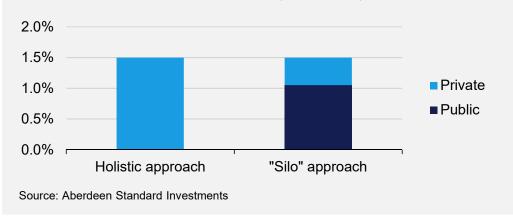
The benefits of a holistic approach across Public & Private Credit

Optimising your Fixed Income allocation



Example: Optimising Exposure to an Individual Company

- Individual company issues both public and private debt there is a
 positive credit view on both the public and private issues
- Suppose from a holistic perspective the optimal allocation for this issuer is to allocate to the private debt
- Portfolio restrictions max allocation to individual name of 1.5%
- Holistic approach to fixed income
 - 1.5% allocation to private debt
- "Silo" approach (with say 70% public and 30% private allocation)
 - 1.05% allocation to public debt (70% x 1.5%)
 - 0.45% allocation to private debt (30% x 1.5%)



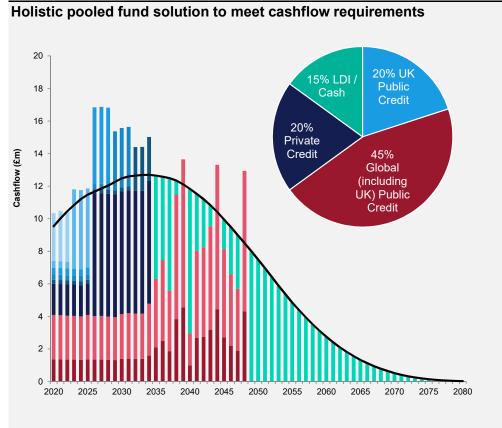




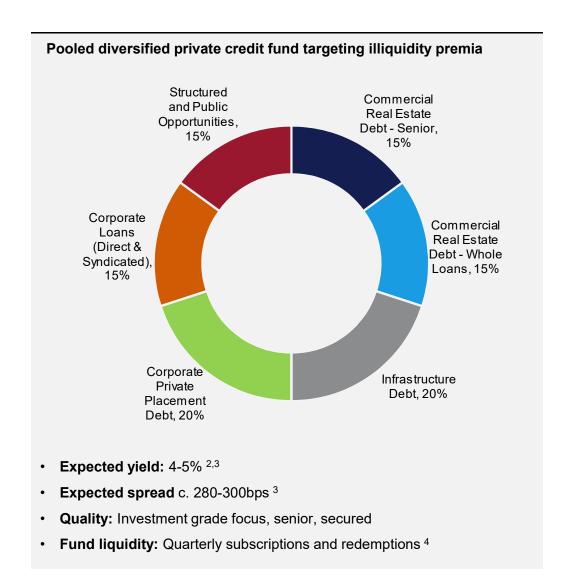
Investing for the endgame (considerations for smaller schemes)

Navigating to your endgame

Pooled investment solutions for smaller schemes



- · Pooled buy & maintain funds with focus on contractual income
- LDI funds to hedge residual risks
- · Well diversified global credit exposure
- · Ensure sufficient liquidity to meet unexpected cashflows

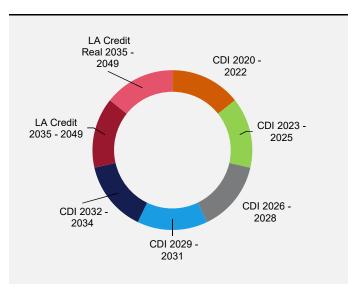


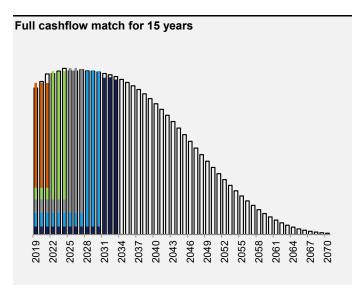
Investments

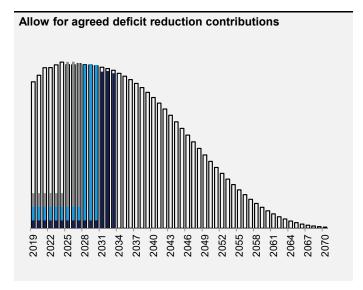
Source: Aberdeen Standard Investments, 30 June 2019. Past performance is no guide to future results. ¹ Characteristics are indicative, and subject to change. ² For the GBP share class. ³ Based on current and anticipated market conditions. Yield and spread level that is expected once the portfolio is fully invested, which could take 9-12 months following launch. Gross of fees and expenses. ⁵ Subject to there being offsetting subscriptions in the first 5 years, and subject to a fund-level gate thereafter.

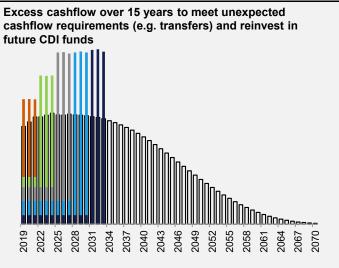
A range of options to meet cashflow requirements

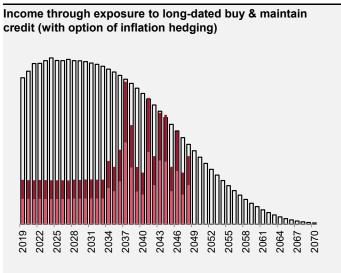
Scheme specific income solutions

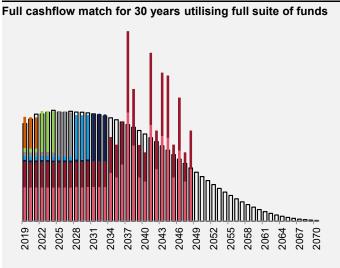














Case Study

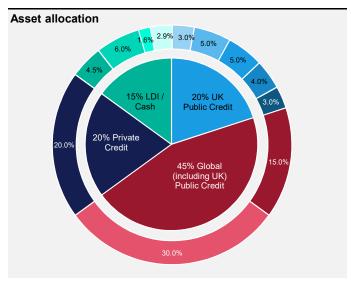
Endgame solution

Scheme overview

- Scheme is closed to new entrants and accrual
- Total assets: £300m
- Fully funded on a gilts + 0.5% basis
- · Scheme duration: 17 years
- Inflation proportion: 60%
- The pension scheme is well funded and maturing over time. The trustees wish to adopt an "endgame" investment strategy to provide a high level of certainty of being able to meet all future benefits while minimising downside risk / reliance on the sponsor

Investment strategy consideration / objectives

- Focus on contractual income assets to meet future liability cashflows with limited reinvestment risk – reducing sequencing risk (including a prudent allowance for defaults)
- No exposure to traditional growth assets (e.g. equities) to reduce reliance on the sponsor
- Use LDI to hedge residual interest rate and inflation risk low tracking error of hedge vs liabilities
- Well diversified global credit exposure (investment grade) including private credit allocation to exploit illiquidity premium
- Ensure sufficient liquidity to meet unexpected liability cashflows
 e.g. transfer values and potential LDI recapitalisation events
- Clear journey plan to naturally de-risk over time to reduce credit exposure and potentially buyout the scheme in the future



Legend

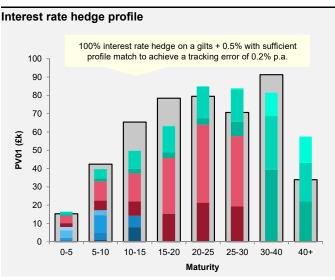
LA CDI 2020 - 2022 Fund

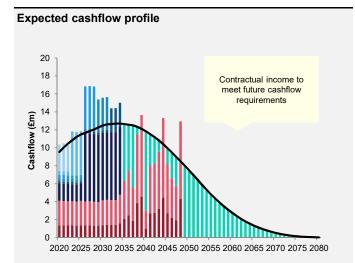
■ LA CDI 2029 - 2031 Fund

LA Long Nominal Profile

Cash / Gilts

LA Credit Real 2035 - 2049 Fund





LA CDI 2026 - 2028 Fund

■ LA Nominal Profile

LA Long Real Profile

■LA Credit Nominal 2035 - 2049 Fund

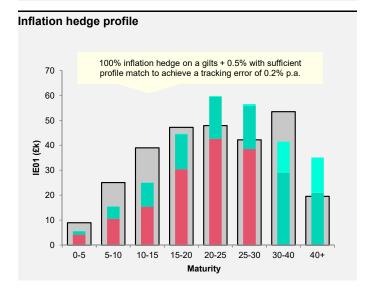
Note: Credit cahflow projection allows for defaults

LA CDI 2023 - 2025 Fund

■ LA CDI 2032 - 2034 Fund

■ Multi-Sector Private Credit

LA Real Profile



Source: Aberdeen Standard Investments, 30 September 2019 For illustrative purposes only.

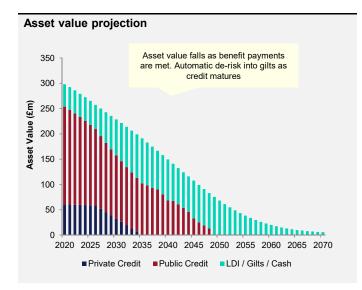


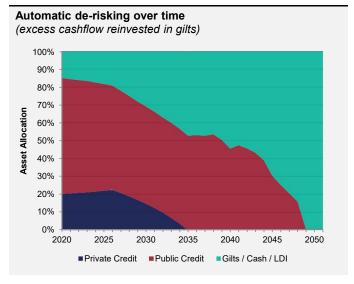
Case Study (cont.)

Endgame solution

Evolution of the strategy over time

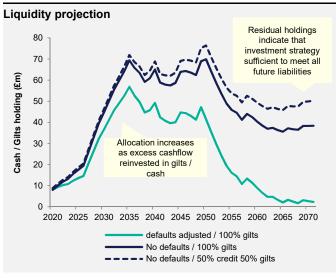
- Income and maturity payments from credit assets are used to meet liability payments over time. Any excess income is invested in cash and gilts, to be drawn down as required to meet future cashflow requirements
- By not investing excess cashflow in credit, the strategy naturally de-risks towards a 100% allocation to gilts and cash
- Analysis suggests that no future investment in credit is required this should be monitored over time. If, for example, the expected liability cashflows increase due to an increase in longevity, an allocation could be made to corporate bonds in the future to provide additional yield / income vs gilts / cash. This is illustrated in the liquidity projection

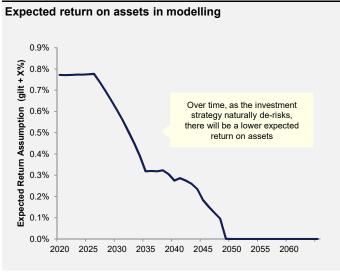




Summary

- ✓ Tailored endgame investment solution low cost and low governance solution
- ✓ Well diversified global credit portfolio tailored to the scheme's future cashflow requirements
- Exposure to multi-sector private credit to exploit illiquidity premium and provide additional diversification
- ✓ Sufficient income and liquidity to meet expected liability cashflows and cash buffer to meet unexpected cashflow requirements e.g. transfer values / recapitalisation on LDI funds
- ✓ Full interest rates and inflation hedge to match scheme's risk profile
- ✓ Clear and transparent journey plan towards full gilt-based strategy
- ✓ Modelling implies no requirement for future credit investment





Source: Aberdeen Standard Investments. 30 September 2019 For illustrative purposes only.



Navigating to your endgame

Summary

Increased focus on the endgame

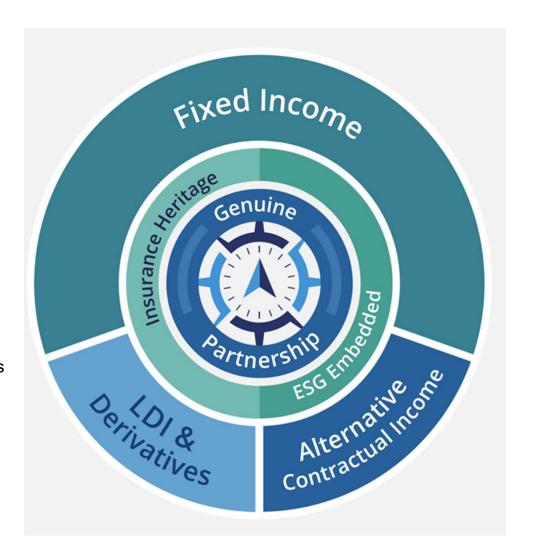
- · A different investment approach and skillset is required
- Innovation of pooled fund solutions for smaller schemes

Demand for buyouts expected to continue to increase

- Capacity considerations?
- What practical steps can you take to prepare for a buyout?

Consolidation expected to be a feature of the future landscape

- A range of innovative options will emerge
- Crucial that these meet the genuine needs of pension schemes







Responsible Investment & Environmental Social Governance (ESG)

Bill Hartnett, Investment Director, ESG

Agenda

This session will cover the below topics:

- 1. What is Responsible Investing?
- 2. ASI's Approach



Responsible Investing

Why it is so topical....

Our primary goal is to generate the best long-term outcomes for our clients & fulfil our fiduciary responsibilities

Financial Regulation e.g. Pensions SIP and the UK Stewardship Code 2019

Cross-industry regulation that affects the companies we invest e.g. Global insurance regulation

Market forces do not always produce sustainable outcomes e.g. climate change, inequality, resource consumption

Recognition of external costs, e.g., carbon causing economic and political turmoil

As well as micro risks ...shown by corporate collapses resulting from poor oversight of ESG issues

Why this plays to ASI's strengths

Active stewardship and ownership helping agitate change beneficial to companies and their investors

ESG investment heritage since 1992

One of the largest ESG investment teams globally, with an innovative hub and spoke operating model

ESG considerations in all our investment decisions; ASI use financially material ESG investment information to improve risk/return profile

Bespoke, thematic and sector-level ESG investment research

Sophisticated product design tailored to client needs (ethical & faith-based, SRI, climate & impact solutions)



Impact on Risk-adjusted Returns

Leading academic & industry thought on the relationship between responsible investing and performance

"the orientation toward long-term responsible investing should be important for all kinds of rational investors in order to fulfil their fiduciary duties¹"

Morgan Stanley Institute for Sustainable Investing

"Research conducted on the performance of nearly 11,000 mutual funds from 2004 to 2018 shows no financial trade-off in returns of sustainable funds compared to traditional funds, and they demonstrate lower downside risk²"

Friede, Busch & Bassen

"it is possible to employ systematic strategies that both improve ESG ratings and outperform a global benchmark³"

MSCI

Exhibit 1: ESG Tilt and Momentum Strategy Active Performance vs. MSCI World Index





¹ Friede, Busch & Bassen, "ESG and financial performance: aggregated evidence from more than 2000 empirical studies"

² Morgan Stanley Institute for Sustainable Investing, "Sustainable Reality"

³ https://www.msci.com/www/research-paper/research-insight-can-esg-add/0182813629 For illustrative purposes only.

Navigating the Terminology

Being able to differentiate between these commonly used terms is key



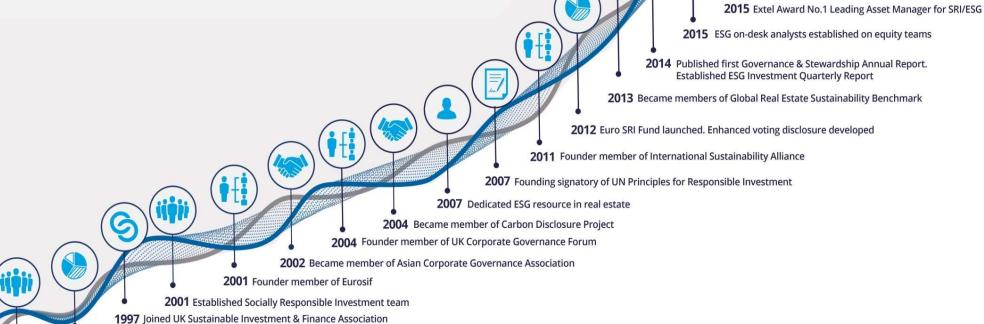
http://gsiareview2012.gsi-alliance.org/#/8/



Responsible Investing

"By making ESG central to our investment capabilities, we look to deliver robust financial outcomes for our clients – as well as actively contributing to a fairer, more sustainable world."

Euan Stirling, Global Head of Stewardship and ESG Investment



1992 Corporate Governance team established

Source: Aberdeen Standard Investments, September 2019

1994 First ethical fund launched



2019

2018 Establishment of cross-asset class ESG Investment Forum

2017 Dedicated ESG resource fixed income

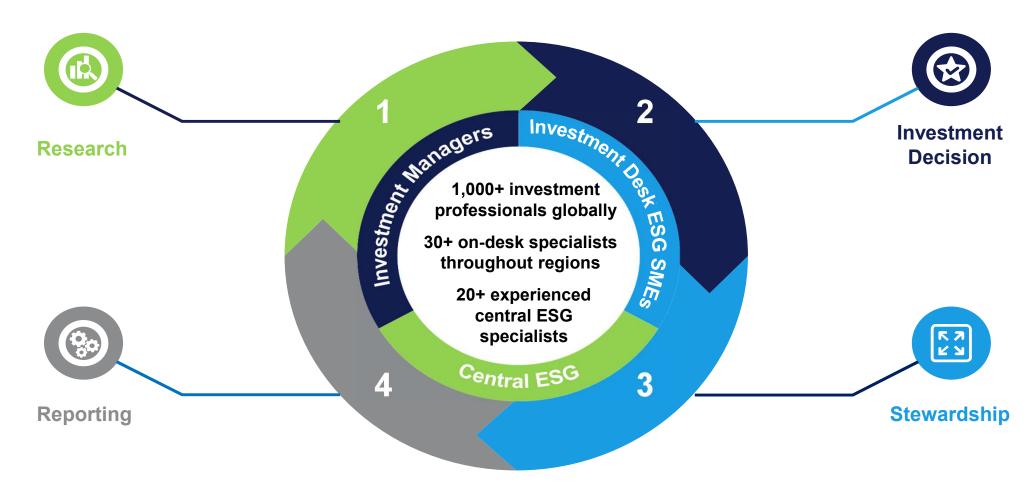
2017 First impact fund launched
 2016 Became founder member of Investment Advisory Group of Sustainability Accounting Standards Board

Awarded First General

Research Ethics Board 5-star rating

Investment Process

Continuous assessment of Responsible Investing opportunities and risks across all asset classes



Source: Aberdeen Standard Investments, September 2019



Investment Capabilities

ASI has a long standing heritage when it comes to ESG Investment analysis, that is spread across all investment teams with the central ESG Investment team coordinating efforts, driving the agenda and consulting where necessary

20+

Central ESG
Stewardship Team
Members

The team is responsible for coordinating integration across the investment cycle and is **one of the largest ESG teams globally**:

- Bespoke, thematic and sectorlevel ESG research
- Coordinating integration strategy •
- Engaging with **policy-makers** around the globe
- Input on **product** design
- Vote on all active and passive strategies
- Engage with companies to improve their practices
- Support client queries and meetings

30+

Investment Team ESG Specialists

Each asset class has individuals within their team who have supporting integration as part of their role, which can include:

- Providing guidance on micro ESG issues and themes
- Focus on a specific region to help fund managers to understand ESG risks impacting their portfolios
- Coordinating activity across investment teams, and facilitating communication between the desk and central ESG team

1,000+

ESG-trained Investment Professionals

ASI provides **tools and training** to all investment teams to allow them to make the most informed investment decisions possible. Individual teams also have specific responsibilities which support the integration process:

- Research Institute provide information on ESG topics
- Client Solutions work with clients to provide holistic ESG portfolios
- Investment Governance ensure all asset classes are adhering to an appropriate investment strategy and risks are monitored effectively

Source: Aberdeen Standard Investments. September 2019



Responsible Investment Principles

We generate returns for clients led by our four Stewardship & ESG Investment Principles

We will put stewardship and ESG considerations at the heart of:

Our investment process

Integrate and appraise environmental, social and governance factors in our investment process to generate the best long-term outcomes for our clients

Our investment activity

Actively take steps as stewards and owners to protect and enhance the value of our clients' assets

Our client journey

Clearly define how we act in our clients' interests in delivering our stewardship and ESG principles and transparently report on our actions to meet those interests

Our corporate influence

Actively advance policy, regulation and industry standards to deliver a better future for our clients, the environment and wider societal stakeholders

Agreed by the ESG Investment Forum & incorporated into each strategy



Global ESG Investment Research





Source: Aberdeen Standard Investments



Active stewardship and ownership following ESG philosophy

ESG Investment at the heart of research

Clear ESG philosophy

Active use of ownership rights

Escalation - 6,000+ votes against management

Improved outcomes for clients

Active stewardship and ownership

On-going research

- · Business or asset performance
- Financial analysis
- · Analyse risks and opportunities
- · Insight through engagement
- · Thematic, industry, company



Frequent dialogue

- · Board members
- Senior executives
- · Asset-specific initiatives
- · Site risks
- · Influence for positive outcomes

Ownership rights

- Influence for positive outcomes
- Buy, sell, manage
- Vote at and attend general meetings
- · Asset inspection and appraisal
- Refinancing options
- Transparent reporting

Source: Aberdeen Standard Investments

ESG assessment and engagement enhances returns



Engagement

Portfolio Managers & the central team meet with company leadership to encourage sustainable

practices



Recovering from climate catastrophe

At their AGM on 21 May 2019, BP were asked to set targets around the carbon emissions related to its products (Scope 3 emissions). Their response was that it could not be held responsible for Scope 3 emissions. In our view, this is something that is possible and will be necessary to limit global warming to well below 2°C. We voted against this resolution in order to give BP the opportunity to define meaningful targets. We expect more transparency from BP on this going forward.



Getting a full picture of the supply chain

Adidas relies on leather and other raw materials within its products, so we analysed their supply chain to determine any environmental risks. As a result we suggested firmer auditing of suppliers and a review of certain policies. Adidas's public reporting has improved and they continue to improve risk management.



Before the fall

We voted against the company's remuneration plans through 2016 and 2017 as they sought to introduce additional elements to the CEO at a time when the financial and share price performance was particularly weak. This proved to be a classic warning sign for the troubles that escalated into the cause of the company's collapse which resulted in the largest peacetime repatriation of UK citizens.



Mitigating child labour risks

We were concerned about Microsoft's supply chain and its partnership with an organisation that had ties to child labour issues in the Congo. After speaking to the company we learned that the partnership has helped to determine the root causes of child labour in mining and addressed the problem at its source.



Damn Tragedy

ASI is undertaking ongoing engagement to improve governance and safety standards following two catastrophic dam collapses in Brazil that have left 100s dead, communities devastated, the company paying huge fines and huge loss of reputation.

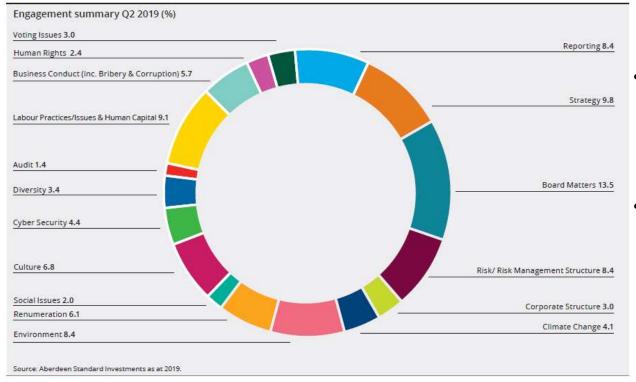


Stewardship

Voting responsibly is a core activity of the ESG Investment & Stewardship team

Voting summary Q2 2019

	Total
Shareholder meetings at which our clients' shares were voted	3,072
Percentage of meetings with at least one vote against or abstention	58.9%
Number of resolutions voted	38,113
Percentage of resolutions voted with management recommendations	85.6%
Percentage of resolutions voted against management recommendations	11.7%
Percentage of abstentions	2.6%



- During Q2 2019, Aberdeen Standard Investments met with and discussed ESG issues with over 100 companies. The chart and table opposite offer examples of companies that we engaged with and the specific ESG topics discussed
- Engagement and voting are key ingredients of our approach to strong stewardship and we report both of these elements on a quarterly basis
- Engagement allows ASI to gain better insights on ESG matters and to drive positive change from the investments we are making, through encouraging strong governance and risk management assessments



Policy Work: Affiliations & Memberships

The below shows some of ASI's affiliations and the initiatives ASI are signed up to

















































Responsible Investment Approaches

ASI has a number of solutions aligned to different investor preferences

Values Investor

For clients with particular ethical or religious views who do not wish to invest in certain types of companies.

Sustainable Investor

For clients who want to reduce exposure to the long term risks associated with ESG factors and companies which fail to meet recognised sustainability standards while seeking improvement in business practices / approach through targeted engagement.

Thematic Investor

For clients seeking to benefit from exposure to a specific ESG theme in their portfolios.

Impactful Investor

For clients seeking to make a positive difference and a return through exposure to companies that intentionally deliver products or solutions that have a measurable beneficial social or environmental impact or have a material alignment to one or more of the UN's SDGs.



Ethical Fund Range Enhanced Index Range



Sustainable & Responsible (SRI) Fund Range



Carbon Mitigation Strategy



Sustainable Development Funds Impact fund range



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