A track record of proven delivery

Mark Zinkula
Chief Executive Officer
# Agenda

## 1. LGIM: An Investment Management business built for the future

- **A track record of proven delivery**
- **Market context**
- **LGIM today: Our competitive advantages**
- **Driving financial performance**
- **Clear plans for continued growth**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>A track record of proven delivery</td>
<td>Mark Zinkula – Chief Executive Officer</td>
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<tr>
<td>Market context</td>
<td></td>
</tr>
<tr>
<td>LGIM today: Our competitive advantages</td>
<td>Siobhan Boylan – Chief Financial Officer</td>
</tr>
<tr>
<td>Driving financial performance</td>
<td></td>
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<tr>
<td>Clear plans for continued growth</td>
<td>Mark Zinkula – Chief Executive Officer</td>
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</tbody>
</table>

## 2. Broadening our investment capabilities

- **Active strategies**
- **Real Assets**
- **Index**
- **Solutions (including LDI and Multi-Asset)**
- **ESG and Engagement**

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td>Active strategies</td>
<td>Anton Eser – Chief Investment Officer</td>
</tr>
<tr>
<td>Real Assets</td>
<td>Bill Hughes – Head of Real Assets</td>
</tr>
<tr>
<td>Index</td>
<td>Chad Rakvin – Global Head of Index Funds</td>
</tr>
<tr>
<td>Solutions (including LDI and Multi-Asset)</td>
<td>Anton Eser – Chief Investment Officer</td>
</tr>
<tr>
<td>ESG and Engagement</td>
<td>Meryam Omi – Head of Sustainability</td>
</tr>
</tbody>
</table>

## 3. Addressing the savings gap

- **Defined Contribution & Workplace**
- **Retail Intermediary**
- **Personal Investing**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>Defined Contribution &amp; Workplace</td>
<td>Emma Douglas – Head of UK Defined Contribution</td>
</tr>
<tr>
<td>Retail Intermediary</td>
<td>Honor Solomon – Head of EMEA Retail</td>
</tr>
<tr>
<td>Personal Investing</td>
<td>Helena Morrissey – Head of Personal Investing</td>
</tr>
</tbody>
</table>

## 4. Internationalising our core institutional strengths

- **UK Defined Benefit**
- **Europe/Gulf/Asia**
- **U.S.**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>UK Defined Benefit</td>
<td>Sarah Aitken – Head of Distribution</td>
</tr>
<tr>
<td>Europe/Gulf/Asia</td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>Aaron Meder – Chief Executive Officer (U.S.)</td>
</tr>
</tbody>
</table>

## 5. Closing remarks

- **Q&A**
- **Closing remarks**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>Closing remarks</td>
<td>Mark Zinkula – Chief Executive Officer</td>
</tr>
</tbody>
</table>
A strong and diversified business

2007 AUM include overlay assets of £24bn; Active Strategies include Active Fixed Income and Active Equities.
Consistent profit growth over the last 10 years

Operating Profit (£m)

Retail Investments admin profit included from 2012 and Workplace Savings from 2014
Consistently outperforming the market

**Revenue Trend**

<table>
<thead>
<tr>
<th>Year</th>
<th>LGIM</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>191</td>
</tr>
<tr>
<td>2013</td>
<td>133</td>
<td>217</td>
</tr>
<tr>
<td>2014</td>
<td>142</td>
<td>233</td>
</tr>
<tr>
<td>2015</td>
<td>137</td>
<td>279</td>
</tr>
<tr>
<td>2016</td>
<td>147</td>
<td>307</td>
</tr>
</tbody>
</table>

**AUM Trend**

<table>
<thead>
<tr>
<th>Year</th>
<th>LGIM</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>133</td>
</tr>
<tr>
<td>2013</td>
<td>105</td>
<td>142</td>
</tr>
<tr>
<td>2014</td>
<td>113</td>
<td>137</td>
</tr>
<tr>
<td>2015</td>
<td>108</td>
<td>147</td>
</tr>
<tr>
<td>2016</td>
<td>104</td>
<td></td>
</tr>
</tbody>
</table>

**Profit Trend**

<table>
<thead>
<tr>
<th>Year</th>
<th>LGIM</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>213</td>
</tr>
<tr>
<td>2013</td>
<td>113</td>
<td>224</td>
</tr>
<tr>
<td>2014</td>
<td>111</td>
<td>248</td>
</tr>
<tr>
<td>2015</td>
<td>108</td>
<td>256</td>
</tr>
<tr>
<td>2016</td>
<td>104</td>
<td>280</td>
</tr>
</tbody>
</table>

**Net Flows Trend**

<table>
<thead>
<tr>
<th>Year</th>
<th>LGIM</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>100</td>
<td>198</td>
</tr>
<tr>
<td>2013</td>
<td>105</td>
<td>215</td>
</tr>
<tr>
<td>2014</td>
<td>113</td>
<td>231</td>
</tr>
<tr>
<td>2015</td>
<td>119</td>
<td>243</td>
</tr>
<tr>
<td>2016</td>
<td>114</td>
<td>248</td>
</tr>
<tr>
<td>2017</td>
<td>112</td>
<td>268</td>
</tr>
</tbody>
</table>

Source: Boston Consulting Group; “Global Asset Management 2017: The Innovator’s Advantage”.
Note: Retail Investments admin included from 2012 and Workplace Savings from 2014. 2007 AUM include overlay assets of £24bn.
Successfully transforming our investment capabilities

Retail Investments admin business was transferred into LGIM in 2013. Revenue from continuing products in 2011 is £49m. Discontinued products revenue in 2011 is £40m and includes box profits, structured products and legacy products switched into different share classes following the Retail Distribution Review.
Successfully expanding into new regions and channels

Retail Investments admin business was transferred into LGIM in 2013. Comparable total retail revenue in 2011 from continuing products is £64m, of which £49m relates to admin fees from continuing products and £15m is asset management income included in Internal in the chart above. Discontinued products excluded from the calculation include box profits, structured products and legacy products switched into different share classes following the Retail Distribution Review; Internal includes Interest and Other.
Asset Management Challenges - Headwinds or Tailwinds?

The Retirement Savings Gap
Underfunding and risk transfer to individual

50%

$400tn

2050e decrease in workers-to-retiree ratio

2050e Global savings gap

Scale Matters
Increasing pressure on fees and costs

Bps cost per $ AUM (2017)

13%

20%

Digital Disruption
Customer and technology driving efficiency

CAGR in corporate spending on new technologies to 2020

Potential industry cost efficiencies through automation

#1 UK DB

#1 UK DC

Growing global pension client base

Industry leading Cost : Income ratio

Harnessing the benefits of scale

Increasingly digitally enabled customer businesses

Asset Management Challenges - Headwinds or Tailwinds?

Shift in Product Demand
For Solutions, Index, Real Assets

<table>
<thead>
<tr>
<th>Product Type</th>
<th>2016-2021e AUM CAGR</th>
<th>2016-2021e AUM CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Solutions</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Active Specialties</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Active Core</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Growing focus on ESG
Increasing focus on stewardship and responsible investing

- Likelyhood of millennials wanting to invest responsibly versus older generations: x2
- Institutional investors looking to apply ESG to smart beta in the next 18 months: 40%

Leading Solutions provider
Growing Real Assets business
Largest non-US Index manager

Active Ownership leadership
Thought leader and market innovator in ESG products

Source:
2. The Financial Times
3. 2016 Global Sustainable Investment Review
LGIM today: Our competitive advantages
What sets us apart from our peers?

1. Investment capabilities for the future

2. Culture and client-focused solutions resonating globally

3. Leading cost efficiency underpinned by investment in technology

4. Increasingly scaled customer facing Workplace, Retail and Direct businesses

5. Market leaders in Active Ownership and ESG

6. Unique benefits from being part of L&G Group
1. Investment capabilities for the future

Evolving market demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Alternatives</th>
<th>Active specialities</th>
<th>Solutions</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>9%</td>
<td>20%</td>
<td>57%</td>
<td>5%</td>
</tr>
<tr>
<td>2008</td>
<td>14%</td>
<td>19%</td>
<td>47%</td>
<td>35%</td>
</tr>
<tr>
<td>2016</td>
<td>15%</td>
<td>20%</td>
<td>18%</td>
<td>29%</td>
</tr>
<tr>
<td>2021 F</td>
<td>16%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Global AUM

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2008</th>
<th>2016</th>
<th>2021 F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>9%</td>
<td>14%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
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<td>19%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>2016</td>
<td>9%</td>
<td>11%</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>2021 F</td>
<td>57%</td>
<td>47%</td>
<td>35%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Structurally positioned to capture industry tailwinds

- **Significant Real Assets and Private Credit capability**
- **Leading Manager of Active Global Credit**
- **Largest UK LDI Solutions manager with growing US market leadership**
- **Growing Multi-Asset AUM across client channels**
- **5th largest Index manager globally, with growing FBI and ESG skillsets**

Source: Boston Consulting Group: "Global Asset Management 2017: The Innovator's Advantage"
2. Culture and client-focused solutions resonating globally

Culture and Client Service
- Collaborative and team-driven
- Consistently c.90% asset persistency rate
- 95% overall customer satisfaction
- 90% of new business comes from existing clients
- In U.S. Active Fixed Income/LDI, 64% of clients who have been with us for at least 1 year have added incremental assets

Solutions based approach
- #1 UK LDI manager: with over 40% market share
- Nearly 50% AUM invested in Solutions
- Growth in Multi-Asset, Active LDI, Pooled LDI, Fiduciary Management, FBI, ESG
- Market leader in US Corporate DB Solutions

2017 International Net Flows (£bn)

International AUM growth (£bn)

Source: KPMG LDI Survey 2017; Customer satisfaction: Core Client Survey, NMG 2017; International net flows comprises investments by client domicile; International AUM includes assets managed in the US on behalf of clients in other jurisdictions.
3. Leading cost efficiency underpinned by investment in technology

Market-leading Cost:Income ratio

<table>
<thead>
<tr>
<th>Global Average</th>
<th>LGIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>c.62%</td>
<td>c.50%</td>
</tr>
</tbody>
</table>

Optimisation, automation and simplification

1. Investment Process
   - NEXUS investment management platform
   - Digital analytics
   - International manufacturing and trading

2. Operating Model
   - ‘Digital first’ focus across Workplace and Retail administration
   - Robotic process and intelligent data automation

3. User Experience
   - Improved experience in Personal Investing
   - Client and customer journey enhancements in Workplace DC

Proprietary, in-house and agile

Source: Boston Consulting Group, “Global Asset Management 2017: The Innovator’s Advantage”
## 4. Increasingly scaled customer facing Workplace, Retail and Direct businesses

<table>
<thead>
<tr>
<th>LGIM UK DC</th>
<th>LGIM UK Retail</th>
<th>Personal Investing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DC AUM (£bn)</strong></td>
<td><strong>Number of customers (mn)</strong></td>
<td><strong>Flows (£bn)</strong></td>
</tr>
<tr>
<td>24</td>
<td>68</td>
<td>2011</td>
</tr>
<tr>
<td>0.3</td>
<td>2.7</td>
<td>0.3</td>
</tr>
<tr>
<td>2011</td>
<td>2017</td>
<td>2011</td>
</tr>
</tbody>
</table>

18.3% Market share\(^1\)  
Largest Mastertrust\(^1\)  
AUM CAGR 19%  

### LGIM UK Retail

**Top 3 by net sales\(^2\)**  
Accelerating channel growth via ETF’s  
AUM YoY increase 19%  

### Digital personal investing platform

Uniquely positioned with a trusted brand  
Innovative and fairly priced funds  

**Source:** 1. LGIM; Market Intelligence 2017 UK Defined Contribution And Retirement Income, Broadridge 2017; Hymans, April 2018, ‘Mastering Master Trusts’. LGIM, external AUM and sales data. 2. Pridham Report Press release Feb 2018
5. Market leaders in Active Ownership and ESG

**Governance**
We collaborate with regulators and investors to enhance the whole market returns

**Engagement**
We engage to create positive change at the companies in which we invest

**Voting**
We hold companies to account and use no abstentions

ESG integration into Investment Process
Performance and impact

Future World Funds
AUM ~ £5bn

Investing for a better tomorrow
6. Unique benefits from being part of L&G Group

- Partner to DB pensions across full de-risking journey
- £1.4bn out of £3.4bn LGRI annuities in 2017 from LGIM
- LGR’s US strategy is a natural extension of LGIM’s US LDI business
- End to end workplace retirement proposition
- Provider of direct investments for LGR
- Seed capital
- Investment Manager for £55bn

LGIM £983bn

Internal Assets £99bn

- Co-investment Opportunities
- Partner to address under investment in UK Infrastructure and Housing
- Manager/Originator for Urban Regeneration portfolio
- Sales pipeline for LGC originated assets
- Seed Capital
- Investment Manager for £6bn

Legal & General Retirement

Legal & General Capital

Driving group profitability through asset returns and credit

Internal AUM of £99bn include assets managed on behalf of LGR, LGC and Other L&G Group divisions
Driving Financial Performance

Siobhan Boylan
Chief Financial Officer
Driving Financial Performance

A global business delivering consistent operating profit growth, a market leading Cost : Income ratio while investing in the business and working in a changing regulatory environment.

Key Messages

Revenue growth through asset evolution

Investment in operational performance

Absorbing regulatory changes within Cost : Income ratio

Benefitting from being part of the L&G Group

£983bn
AUM

£805m
Revenue

50%
Cost : Income ratio

All financials as at 31 December 2017 unless otherwise stated
External net flows driving strong AUM growth

<table>
<thead>
<tr>
<th></th>
<th>2017 External Net Flows (£43.5bn)</th>
</tr>
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<tbody>
<tr>
<td>Asia Pacific</td>
<td>4.2</td>
</tr>
<tr>
<td>Gulf</td>
<td>3.6</td>
</tr>
<tr>
<td>Europe</td>
<td>12.6</td>
</tr>
<tr>
<td>US</td>
<td>12.6</td>
</tr>
<tr>
<td>Retail</td>
<td>3</td>
</tr>
<tr>
<td>UK DC</td>
<td>3</td>
</tr>
<tr>
<td>UK DB &amp; other</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Note: Annual persistency of AUM at ~ 90%
Revenue growth driven by evolving asset mix

Focus on higher revenue margin products

Source: Boston Consulting Group: "Global Asset Management 2017: The Innovator's Advantage"
Maintaining market-leading operational ratios while successfully transforming the business

Operating Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (£m)</th>
<th>Profit (£m)</th>
<th>C:I</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>594</td>
<td>304</td>
<td>49%</td>
</tr>
<tr>
<td>2014</td>
<td>645</td>
<td>321</td>
<td>48%</td>
</tr>
<tr>
<td>2015</td>
<td>694</td>
<td>355</td>
<td>48%</td>
</tr>
<tr>
<td>2016</td>
<td>730</td>
<td>366</td>
<td>49%</td>
</tr>
<tr>
<td>2017</td>
<td>805</td>
<td>400</td>
<td>50%</td>
</tr>
</tbody>
</table>

Workplace Savings Profit included from 2014; C:I ratio excludes Workplace Savings
Focused investment into growing the business

Channel
- DB, DC & Direct Propositions, platforms and digital

Capability
- Index, Multi-Asset, Real Assets
  Investing in people and technology

Product
- ICAV, SICAV, ETF
  Offerings for wider geographical sales

Market
- US, Europe & Asia
  Distribution & Manufacturing

Expenses - £m
- 2013: £256
  - Proposns, platforms and digital: £12
  - DB, DC: £22

- 2017: £405
  - Core: £316
    - Technology & Data: £41
    - International: £48

CAGR 9%

Automation and simplification
- Data Analytics
- Digital client portals
- Optimising our investment portfolio platforms
Well positioned to meet new and emerging industry regulations

<table>
<thead>
<tr>
<th>Events</th>
<th>Implications</th>
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</thead>
<tbody>
<tr>
<td>Increased reporting</td>
<td>Higher costs</td>
</tr>
<tr>
<td>MiFID II, EMIR</td>
<td></td>
</tr>
<tr>
<td>Increased transparency</td>
<td>Increased governance</td>
</tr>
<tr>
<td>Asset management study, PRIIPS</td>
<td></td>
</tr>
<tr>
<td>Greater regulatory scrutiny</td>
<td>Opportunities with the right product mix</td>
</tr>
<tr>
<td>SMCR, GDPR</td>
<td></td>
</tr>
<tr>
<td>Brexit</td>
<td></td>
</tr>
</tbody>
</table>

Taken positive actions early while maintaining industry-leading Cost : Income ratio
A workplace business administration platform breaks even

Different business operating model
Focus has been on growing to scale
Achieving unit cost reduction

Workplace business

ASSET MANAGEMENT ¹
DC AUM £68bn of which
WPS £28bn
DC revenue £59m
Cost income of LGIM of 50%

ADMINISTRATION ²
AUA £28bn
Revenue £54m
Cost income 100%

¹. Includes bundled and unbundled. ². Represents Workplace Savings admin only and excludes fund management profits.
Access to capital to build capabilities

Seed capital employed (£bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Seed Employment</th>
<th>Future World</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>0.7</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Note: Future World funds to be seeded in 2018

New funds launched since 2014 contributing 20% of total revenue
Commitment by Group being made for future business growth

Organic

Investment into our customer facing businesses – creation of new digital capability
Investing up to £60 million over 3 years
Digital development of operating platform and customer experience
Delivery of unit cost reductions in Workplace and increased funds in Personal investing

Inorganic

Acquisition of Canvas – development of new product and distribution capability
Complements our existing business, growth driver
Completed in March
Break even within 3 years
Driving Financial Performance Forward

A global business delivering consistent operating profit growth, a market-leading Cost : Income ratio while investing in the business and working in a changing regulatory environment.

**Key Messages**

- Cost : Income ratio slightly above 50% in short term
- Cost : Income ratio expected to be 50% in plan period
- Operating profit of 8%-10% per annum over medium term

**8-10%**
Per annum operating profit growth over medium term

**c.50%**
Cost : Income ratio
Clear plans for continued growth

Mark Zinkula
Chief Executive Officer
Three core strategic themes guide our expansion

1. Active Strategies: Expand Liability Aware whilst driving growth in High Yield and Emerging Market Debt
2. Real Assets: Expansion internationally whilst broadening our private credit franchise
3. Index: Innovating across Index e.g. Factor Based Investing and expanding ETF product range
4. Solutions: Enhancing our Multi-Asset and Fiduciary Management offerings
5. Active Ownership: Expand Future World range into Active and other areas
Three core strategic themes guide our expansion

1. Continuing to invest in member engagement and digital communications in Workplace DC
2. Becoming a leading provider for UK Retail investments
3. Launching our Personal Investing digital platform

Broadening our investment capabilities
Addressing the savings gap
Internationalising our core institutional strengths
Three core strategic themes guide our expansion

1. Maintaining momentum within our UK DB business by defending and growing revenue streams
2. Deploying our leading Solutions capabilities into the US and other target markets
3. Developing Multi-Asset and Real Asset capabilities in US to support distribution strategy and LGR's expansion
4. Expanding investment and distribution capabilities in Europe, including growth of our ETF platform
5. Growing client base and AUM in Asia
LGIM: An Investment Management business built for the future

1. Broadening our investment capabilities

- Chief Executive Officer
  - Mark Zinkula
- Chief Financial Officer
  - Siobhan Boylan
- Chief Investment Officer
  - Anton Eser
- Head of Real Assets
  - Bill Hughes
- Global Head of Index Funds
  - Chad Rakvin
- Head of Sustainability
  - Meryam Omi

2. Addressing the savings gap

- Head of UK DC
  - Emma Douglas
- Head of EMEA Retail
  - Honor Solomon
- Head of Personal Investing
  - Helena Morrissey DBE

3. Internationalising our core institutional strengths

- Head of Distribution
  - Sarah Aitken
- Chief Executive Officer (U.S.)
  - Aaron Meder

- Head of EMEA Retail
  - Honor Solomon
- Chief Executive Officer (U.S.)
  - Aaron Meder
LGIM Investments - Business Summary

Our Investments platform is the high performing growth driver of our firm. We are a client-driven investment manager and are incredibly proud of the breadth of capabilities and expertise we are able to offer our clients globally across asset classes and investment styles.

Active Strategies: £156bn
Real Assets: £24bn
Index: £341bn
Solutions: £463bn

Growth opportunity
Broadening our investment capabilities
Building long-term partnerships with our clients
Internationalising our capabilities

£983bn AUM
£805m Revenue
£43.5bn External Net Flows

All financials as at 31 December 2017 unless otherwise stated. 1. Actively Managed AUM: actively managed products measured against applicable benchmark or peer group performance. 2. Index Managed AUM: assets managed against benchmark within applicable tolerance. 3. Client solutions AUM: products managed against specific risk target or client outcome.
A philosophy aligned with our clients’ needs

Our philosophy

**Long-term Perspective**

We look beyond short-term distractions

We aim to protect and enhance our clients’ assets over the long term

**Client Driven Results**

The majority of our assets are managed against clients’ specific objectives

**Team-Based Approach**

We work together to make better decisions for our clients, breaking down the traditional silos

**Costs and Fees Matter**

We use our scale to reduce transaction costs and offer fair pricing
Active Strategies – Business Summary

Our active product offering has naturally evolved in line with our clients. There is a move away from traditional long-only benchmark funds, with investors seeking high conviction alternative credit strategies alongside low turnover liability aware credit, where LGIM is well placed to capture demand.

**Growth opportunity**

Leading active credit capability

Liability aware credit solutions well positioned to capture further assets in the UK and export capability globally

Gathering momentum in high margin alternative asset classes

Focused, high conviction active equity strategies complementing our index equity capabilities

Active strategies comprises active equities and active fixed income
A Global Fixed Income business built for the future

Global team
- LONDON
- CHICAGO
- HONG KONG

Investment professionals
- 80
- £149bn

Average experience
- 15yrs

A fixed income range built to suit the diverse needs of our clients

- Liability Aware Credit Solutions
  - £60bn
  - De-risking expertise
  - UK Pensions Annuity Solutions

- Benchmark Plus
  - £86bn
  - Market beta
  - Investment Grade Credit
    - Global High Yield
    - Emerging Market Debt

- Unconstrained
  - £3bn
  - Benchmark agnostic
  - Absolute Return Bond
    - Multi-Strategy Credit

40+ Buy ratings across consultants

Global Fixed Income Performance:
- One-year period: 92%
- Three-year period: 88%
- Five-year period: 85%

1. Investment performance across our AUM as at 31 December 2017, which has been calculated internally by LGIM to provide general guidance as to how our AUM is performing. The data is aggregated and is not intended for clients or potential clients investing in our products. 2. Actively Managed Fixed Income AUM: actively managed fixed income products measured against applicable benchmark or peer group performance. 3. Performance is measured on a gross-of-fee basis for institutional accounts and net-of-fee for retail funds, and is measured against benchmarks, peer group performance or risk-based metrics.
Long-term track record of delivering value

### US Credit performance

- **1 Year:** 6.3%
- **3 Year p.a.:** 3.6%
- **5 Year p.a.:** 3.2%
- **Since Inception p.a. (Jan-2007):** 6.4%

### Euro Credit performance

- **1 Year:** 2.7%
- **3 Year p.a.:** 2.7%
- **5 Year p.a.:** 3.3%
- **Since Inception p.a. (Aug-2007):** 4.5%

### UK Credit performance

- **1 Year:** 4.8%
- **3 Year p.a.:** 5.2%
- **5 Year p.a.:** 5.6%
- **Since Inception p.a. (Jan-2006):** 6.2%

### Number of issues

<table>
<thead>
<tr>
<th></th>
<th>USD Since 2007</th>
<th>EUR Since 2008</th>
<th>UK Since 2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Downgrades to High Yield</strong></td>
<td></td>
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</tr>
<tr>
<td>LGIM</td>
<td>5</td>
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<td>Benchmark</td>
<td>5</td>
<td>9</td>
<td>6</td>
<td>20</td>
</tr>
</tbody>
</table>
Evolving with our clients’ needs

Liability Aware Credit Solutions AUM (£bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Annuity Fund</th>
<th>UK Pensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>2012</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>2013</td>
<td>36</td>
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<td>32</td>
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<td>2015</td>
<td>48</td>
<td>33</td>
</tr>
<tr>
<td>2016</td>
<td>63</td>
<td>47</td>
</tr>
<tr>
<td>2017</td>
<td>67</td>
<td>50</td>
</tr>
</tbody>
</table>

15% CAGR

Liability Aware Credit Solutions - UK Pension AUM (£bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>UK Pensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>5</td>
</tr>
<tr>
<td>2013</td>
<td>5</td>
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<td>2014</td>
<td>7</td>
</tr>
<tr>
<td>2015</td>
<td>9</td>
</tr>
<tr>
<td>2016</td>
<td>17</td>
</tr>
<tr>
<td>2017</td>
<td>22</td>
</tr>
</tbody>
</table>

39% CAGR

Strong heritage

£45bn Annuity fund

£22bn AUM

42%

58%

Switches existing assets

Net new assets

70% of Liability Aware UK Pension clients also have LDI with LGIM

Annuity fund asset value of £45bn reflects assets managed as liability aware credit solutions only, excludes Real Assets

UK Pension AUM of £22bn includes £7bn Liability Aware Credit Solution capability reported as Solutions
Broadening our capabilities into alternative asset classes

A growing alternative credit market

Meeting the client demand

Total market size ($trn)
US High Yield and Emerging Market Debt $4.5trn

<table>
<thead>
<tr>
<th>Year</th>
<th>EM</th>
<th>US HY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>2013</td>
<td>2.1</td>
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<td>2014</td>
<td>2.4</td>
<td>1.3</td>
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<tr>
<td>2015</td>
<td>2.5</td>
<td>1.2</td>
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<td>2016</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>2017</td>
<td>3.1</td>
<td>1.3</td>
</tr>
<tr>
<td>2018</td>
<td>3.2</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Global High Yield

Team established
2012
+2.4%
Since current team p.a.
versus benchmark

Global High Yield (GBP hedged)

1 year 3 year p.a. 5 year p.a. Since current team p.a. (Jan 2012)

- 5.7% 2.6% 4.7% 4.8% 6.7%

Strategy Benchmark

Emerging Market Debt

Team established
2014
+2.2%
Since inception p.a.
versus benchmark

Emerging Markets Short Duration

1 Year 3 year p.a. Since Inception (Aug-14)

- 5.2% 3.3% 5.2% 4.0%

Strategy Benchmark

Performance is shown gross of fees. Global High Yield returns are in GBP hedged terms. Global High Yield benchmark: ICE BofAML Global High Yield BB-B Rated (excluding financials) 2% Constrained Index. EMD returns are in USD terms. EMD benchmark Blended 50/50 benchmark comprising the JPMorgan EMBI Global Diversified Index (sovereign) 3-5yr and the JPMorgan CEMBI Broad Diversified 3-5yr Index (corporate). Market sizing: BAML and J.P. Morgan research
Active Equities: Focused, high conviction and high active share

Delivering outcomes that are differentiated from passive solutions

£7bn
AUM

12
Investment professionals

17yrs
Average experience

Growth Focus

7 strategies

UK Growth Trust

14.0% 14.1%
13.1% 10.1%
12.4% 10.3%
15.3% 10.3%
10.1%
9.1%
87%
40
All growth focus funds

Income Focus

5 strategies

Real Income Builder

8.4% 10.3%
8.6% 5.0%
6.5% 5.0%
9.4% 5.5%
8.6% 5.0%
47
All income focus funds

Performance is measured on a gross-of-fee basis for institutional accounts and net-of-fee for retail funds, and is measured against benchmarks, peer group performance or risk based metrics.
LGIM Real Assets – Business Summary

Our Real Assets platform is a trusted long-term partner, creating assets that serve the needs of business and communities whilst delivering investment outcomes that serve the needs of our clients. Delivering growth to LGIM and the L&G Group.

Source: All financials as at 31 December 2017 unless otherwise stated
One of the largest managers of UK real assets

Delivering a spectrum of real assets to our clients

- **Real Estate Equity**
  - £16.6bn
  - Equity owner and active manager of UK real estate

- **Real Estate Debt**
  - £2.3bn
  - Asset-backed lending across major real estate sectors in the UK

- **Infrastructure Debt**
  - £3.0bn
  - Lending to core infrastructure projects

- **Private Corporate Debt**
  - £1.9bn
  - Lending to corporates on a private basis

- **Private Credit**
  - £10.3bn
  - LGC and LGR AUM

- **AUM**
  - £24bn
  - 76 investment professionals
  - 15 years average experience

- **ORIGINATION**
  - Sourcing direct investments

- **STRUCTURING**
  - Underwriting, protective covenants

- **DEVELOPMENT**
  - Creating assets, building and constructing

- **ASSET MANAGEMENT**
  - Enhancing, adapting, improving
Diverse and growing client base is a platform for strong growth

47% external client AUM

£324m net new inflow into retail fund in 2017 against peer group net outflow of -£1bn

House relative outperformance across 1, 3 and 5 years

£96m

£32m

2011

2017

20% CAGR

Source: Morningstar
Enduring international demand

UK
DB pension schemes continue to look for sources of secure income, diversification and yield as they de-risk

Europe
Strong track record with JV partners, e.g. PGGM
Recognised for best-in-class ESG credentials
European institutions continue to seek diversification and yield from alternative assets

North America
Potential for capital to be exported

Asia
UK attractive legal system, transparency and relative returns to domestic markets
Favourable currency movements have enhanced demand
Delivering and managing direct investment for LGR, LGC and LGIM

Leading major urban regeneration in Salford

2001: English Cities Fund established – a £200m joint venture between L&G, Muse and the Homes & Communities Agency

2014: Development of One New Bailey pre-let to Salford Council, a matching asset for LGR

2017: The Slate Yard launches as first Build to Rent scheme, investment by LGC, PGGM and LGIM Build to Rent pooled fund

2018: Development of 2nd New Bailey car park let on a 35 year lease to Salford Council, a matching asset for LGR
Delivering and managing direct investment for LGR and LGIM Clients

**Private Credit: Infrastructure Debt**

LGR investing alongside third party clients in UK infrastructure providing a source of renewable energy

**Walney Extension**

£300m Acquisition Finance

- LGIM led the structuring of long-term acquisition debt of a 50% share
- Will be the world's largest offshore wind farm providing power to over 500,000 homes in the UK
- Matching eligible investment for LGR, providing long-term secure income to external clients
Using our scale to create assets we would choose to own

1. LGIM
   Sourcing, underwriting, transacting and developing build to rent residential in the UK

2. LGC and PGGM
   Providing £300m capital to establish seed portfolio

3. LGIM Build to Rent Fund
   £1.1bn strategy*

Providing clients a diversified income stream with implicit inflation linkage, targeting 7-9% net total return over the long term

* Total capital commitments including debt
## Future growth plans

### Enhancing real estate offering
Expanding into emerging sectors, underpinned by long-term themes, including:

- Student accommodation
- Later living
- Healthcare

### Growing Private Credit
Expanding across additional geographies and capabilities. Launch product for third party clients supported by seed capital:

- Infrastructure debt
- Real estate debt
- Private corporate debt

### International markets
Building out our franchise into the USA, complementing LGIMA’s offering
Index – Business Summary

The 5th largest Global Index manager, we’ve been managing index assets for our clients for over 30 years.

Growth opportunity

Worldwide index AUM projected to more than double by 2025 to $36.6 trillion

Our core business is moving into LDI and Multi-Asset as we diversify into new markets

We are index solutions providers – FBI, ESG, Index Plus, Self-Indexation

We pride ourselves on being the Responsible Index Manager, seeking to add value, and engaging with companies on behalf of our clients

Full suite of Index capabilities

Index replication, multi-index solutions and benchmark customisation

Equities
- £214bn
  - Developed
  - Emerging
  - Small cap

Fixed Income
- £83bn
  - Gilts (for LDI)
  - Corporate bonds
  - EMD

New Strategies
- £44bn
  - Single and Multi-Factor
  - ESG (Future World)
  - Self-Indexation
  - Index Plus
  - Fallen Angels

AUM
- £341bn

Global team
- LONDON
- CHICAGO
- HONG KONG

Investment professionals
- 30
- 15 yrs

Average experience
- 15 yrs

Over 2,200 institutional index clients

5th Largest Global Index Manager

Largest UK Index Manager

Largest European Institutional Smart Beta Manager

We are the 5th largest index manager globally in a market dominated by the top three global providers. This gives us a tremendous opportunity as clients globally seek to diversify their index providers and search for added value.

Source: Pension & Investment “The largest Index Manager Survey 2018”, calculated as at 30 June 2017, converted from USD to GBP at 1.299. LGIM Index AUM shown as reported as at 30 June 2017.
What makes us different?

**The Responsible Index Manager**

### Unique business model
- Business model aligned with clients’ interests
- Minimise the impact of affiliated service providers
- Philosophy of generating value for clients, not just providing index returns

### Corporate Responsibility
- L&G believes in a greater social purpose
- Leading Corporate Governance team, recognized globally, with a reporting line directly to the CEO
- Passive investors, but active shareholders

### Proprietary technology platform
- We have built a customised multi-asset index management system in-house
- We can manage more index strategies for more client accounts and fund structures across our UK, US and Asia trading platforms, allowing us to expand internationally and into new strategies without significantly increasing costs
Largest UK provider of index assets

As our core index business of DB pension schemes de-risk into LDI and Multi-Asset, we have seen strong growth in new client channels across UK DC & Retail and International.

Source: Index AUM by channel is based on client domicile. Firm UK DB AUM includes overlay assets of £111bn in 2011.
Strong expansion internationally

Building on our UK business, we have focused on our Index Solutions offering, creating tailored index mandates and launching a range of pooled funds.

Europe and the Gulf

We have set up local fund management, trading, and sales in Chicago and Hong Kong to allow us to apply our market leading capabilities tailored to clients around the globe.

Asia and the US

Index International AUM (£bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Europe</th>
<th>Europe</th>
<th>Asia</th>
<th>Gulf</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<td>2012</td>
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<td>2013</td>
<td>30</td>
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<tr>
<td>2014</td>
<td>33</td>
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<td>2015</td>
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<tr>
<td>2016</td>
<td>61</td>
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<tr>
<td>2017</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Entry into the European ETF market with the acquisition of Canvas

The Canvas acquisition provides LGIM with ‘out of the box’ ETF capability, and an opportunity to bring the responsible indexer to a rapidly expanding channel.

By the end of FY18, we will have launched a Core range of LGIM ETFs to target a portion of the c.$800bn of ETF flows into Europe over the next five years, supplemented by new strategies in Factor Based Investing, Future World and Thematic funds.

Source: LGIM estimate, ETF Trends “Global ETF Assets to More Than Double in Five Years”. Canvas historical performance prior to acquisition by LGIM. Acquisition completion date was 16 March 2018.
## Growth opportunity for new higher margin index strategies

### Factor Based Investing (Smart Beta)

- **£26bn**
- Growing demand for factor based indexes
- LGIM are the largest provider of institutional factor based investing index strategies in Europe
- Higher fees associated with index selection, design, implementation and client service

### ESG (Future World)

- **£10bn**
- Investors are becoming more concerned with who they invest in and their ESG credentials
- LGIM designed strategies integrate intellectual property and expertise of corporate governance team
- Higher fees associated with index selection, design, implementation and client service

### Index Plus

- **£8bn**
- Index plus allows LGIM to target enhanced index replication with the aim of outperforming the index within a stated risk budget
- LGIM earns an asset management fee and a performance fee on any outperformance

### Self-Indexation

- **9 Strategies**
- LGIM has built self-indexation capabilities during 2018 with a number of funds launched or planned for 2018
- LGIM designed funds with integrated IP to deliver innovative products to the market
- Opens the door to collaborate with clients on new products
Solutions (including LDI and Multi-Asset)

Anton Eser
Chief Investment Officer
Solutions (including LDI and Multi-Asset) - Business Summary

Our global solutions platform across LDI and Multi-Asset is set to grow as clients increasingly seek outcome-oriented investments that are managed across multiple asset classes. The solutions approach commands a fee premium and tends to lead to a higher share of client assets (e.g. Fiduciary) and higher client retention rates.

Growth opportunity

Continue to lead LDI (No. 1 UK, established US)

Deliver Holistic Portfolio Solutions

Expand internationally

Continue to grow Multi-Asset

All financial data as at 31 December 2017 unless otherwise stated
Market-leading solutions provider

Combining our broader investment capabilities and strategic thinking to generate better client outcomes

Liability Driven Investment (LDI)
- Managing interest rate, inflation risk and derivative overlays
- Holistic portfolio solutions, Fiduciary Management and strategic client engagement

Multi-Asset
- Targeting diversified risk and return

UK LDI Manager
No.1

AUM
£463bn

Investment professionals
108

Average experience
12 yrs

Solutions AUM (£bn)

170
201
233
293
338
412
463

2011
2012
2013
2014
2015
2016
2017

18% CAGR

42% UK LDI market share

Solutions AUM include overlay assets of £111bn in 2011
Diversified UK LDI and derivative overlays business

<table>
<thead>
<tr>
<th></th>
<th>£310bn</th>
<th>£35bn</th>
<th>£50bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segregated LDI</td>
<td>No.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pooled LDI</td>
<td>No.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivative Overlays</td>
<td>80</td>
<td>38</td>
<td></td>
</tr>
</tbody>
</table>

- Currency overlay mandates: 80
- Equity derivative mandates: 38

- Assets: £908bn
- PPF liability: £908bn
- Buy-out: £908bn
- Liabilities hedged: £908bn

- 23% annual growth in liabilities hedged
- £908bn of liabilities hedged
- 1,808 pension schemes using LDI

Source: LDI market data from KPMG LDI Survey 2017, Purple Book 2017, LGIM estimates
Offering solutions at every stage of the DB pension lifecycle

Holistic Portfolio Solutions

- Delivering growth
- Managing risk
- Paying pensions

End Game

Client outcome

Funding level

Building blocks
- Real Assets
- Equities
- Credit
- Gilts

GROWTH

CASHFLOW

LIABILITY MATCHING

No.1
UK Index provider
Index switches to LDI

No.1
UK LDI Manager
LDI switches to holistic solutions

No.2
Risk-transfer provider
Self Sufficiency or Buy-out

Source: No. 2 risk transfer provider by buy-in and buy-out volumes 2017, LCP Pensions de-risking update – April 2018
Strong Multi-Asset growth across all client channels

Providing a range of multi-asset solutions across each of our client channels

- **Strategic**
  - £16bn
  - Efficient and simple equity-like returns with 2/3 of the volatility

- **Dynamic**
  - £22bn
  - Dynamic/tactical allocation, capital preservation, return enhancement

- **Low Equity Beta**
  - £0.3bn
  - Growth strategy explicitly targeting low equity beta

Multi-Asset Performance:
- One-year period: 83%
- Three-year period: 93%
- Five-year period: 70%

Source: Internal Multi Asset AUM include assets reported in the underlying building blocks. Investment performance. Investment performance across our AUM as at 31 December 2017. This has been calculated internally by LGIM to provide general guidance as to how our AUM is performing. The data is aggregated and is not intended for clients or potential clients investing in our products. Multi-Asset Performance measured against applicable benchmark or peer group performance. Performance is measured on a gross-of-fee basis for institutional accounts and net-of-fee for retail funds, and is measured against benchmarks, peer group performance or risk based metrics.
Three strategies from simple diversified market beta to target return

Strategic £16.1bn

Dynamic £22.4bn

Low Equity Beta £0.3bn

Multi Asset Fund (MAF) (%)

Dynamic Diversified Fund (DDF) (%)

Multi Asset Target Return (MATR) (%)

Market beta

Increasing dynamism and use of derivatives

Target return

Source: LGIM, Lipper for Investment Management and Bloomberg. All funds and peer group medians shown net of fees. Performance comparators (cash+) shown gross of fees. Performance numbers for Multi-Asset Fund (MAF) and Dynamic Diversified Fund (DDF) shown to 31/12/17, Multi-Asset Target Return Fund (MATR) shown to 31/03/18. For MAF L&G (PMC) Multi-Asset SH G17-Pen is used. For DDF performance is shown net of a 50bps fee. MATR L share class is shown with performance adjusted based on LGIM’s understanding of the management fee of the peers. Peer group median for MAF is ABI Mixed Investment 40-85% Shares Sector. Criteria used for selecting peers for DDF and MATR available on request. MATR inception 20 March 2018.
Significant growth opportunities, particularly in UK DC and Retail

Projected growth of UK DC AUM (£bn)

- £13bn
- LGIM DC Multi-Asset AUM 2017
- 10% CAGR
- 2016: 338
- 2026: 871
- Projected growth

Projected growth of UK Retail AUM (£bn)

- £5bn
- LGIM UK Retail Multi-Asset AUM 2017
- 9% CAGR
- 2016: 799
- 2026: 1893
- Projected growth

Active ownership means using our scale and influence to bring about real, positive change to create sustainable investor value. Our clients trust us to manage, safeguard and help grow the value of their assets; effective corporate governance is integral to achieving this.

**Key Messages**

- Bringing ESG into the mainstream
- Building on established expertise and experience and our long-term perspective
- Giving a voice to individual investors
- Engaging with impact and consequences
- Investing for the future
ESG and Engagement

Meryam Omi
Head of Sustainability
Being responsible is good for business

Experience in Governance
20+ yrs

Average team experience
12 yrs

LGIM AUM
£983bn

We have a responsibility; to our clients and society at large

I want my money to increase in value
ESG to enhance financial outcome

I want my companies better managed
Engage to promote better management

I want my rights exercised
Vote and speak up

Best Index Manager for ESG (1)
No.1

Best in Investor Engagement (2)
No.1

Climate risk management (3)
No.2

Companies voted at
c.8,500

Not all managers are made equal

Shareholder resolution supporting climate disclosure

<table>
<thead>
<tr>
<th>Manager</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager 1</td>
<td>2%</td>
</tr>
<tr>
<td>Manager 2</td>
<td>2%</td>
</tr>
<tr>
<td>Manager 3</td>
<td>2%</td>
</tr>
<tr>
<td>Manager 4</td>
<td>21%</td>
</tr>
<tr>
<td>Manager 5</td>
<td>37%</td>
</tr>
<tr>
<td>Manager 6</td>
<td>11%</td>
</tr>
<tr>
<td>Manager 7</td>
<td>17%</td>
</tr>
<tr>
<td>Manager 8</td>
<td>49%</td>
</tr>
<tr>
<td>Manager 9</td>
<td>10%</td>
</tr>
<tr>
<td>Manager 10</td>
<td>16%</td>
</tr>
<tr>
<td>LGIM</td>
<td>95%</td>
</tr>
</tbody>
</table>

21%

Average support of 2017 US climate resolutions from the world’s 10 largest asset managers

LGIM supported 95% of climate change shareholder resolutions in 2017

Source: Ceres/FundVotes survey of US asset manager votes. LGIM were not included in the original survey. LGIM voting record was compared to the Ceres resolutions database.

Note: Top 10 fund managers by AUM displayed in no particular order.
Engagement leading to real action

- Climate change
- Board accountability
- Short termism
- Diversity
- Transparency
- Cyber security
- Executive remuneration

**Climate Impact Pledge**

**Industries**
- Energy, Transport, Finance and Agricultural

**Assessment criteria**
- Policy on climate
- Governance and Transparency
- Strategy of resilience and innovation
- Reputation/Public policy

**Direct engagement with companies**

**Improvements made “name and fame”**

**Vote against & divest holding from within future world funds**
Accelerating global demand

ESG/SRI investment expressed in different ways

Exclusionary Screening
Environmental, Social and Governance (ESG) Data Integration
Factor based Screening
Corporate Engagement
Thematic/Sustainable Investing
Impact Investing

Minimize Negative Impact

Target Impact

SRI assets by region ($bn)

<table>
<thead>
<tr>
<th>Region</th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>10,775</td>
<td>12,040</td>
</tr>
<tr>
<td>US</td>
<td>6,572</td>
<td>8,723</td>
</tr>
<tr>
<td>Canada</td>
<td>729</td>
<td>1,086</td>
</tr>
<tr>
<td>Australia/NZ</td>
<td>148</td>
<td>516</td>
</tr>
<tr>
<td>Asia excl. Japan</td>
<td>45</td>
<td>53</td>
</tr>
<tr>
<td>Japan</td>
<td>7</td>
<td>474</td>
</tr>
</tbody>
</table>

CAGR over 2014-2016

SRI AUM Growth by strategy ($bn)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>2014</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Investing</td>
<td>101</td>
<td>349</td>
</tr>
<tr>
<td>Sustainable Investing</td>
<td>137</td>
<td>331</td>
</tr>
<tr>
<td>Best-in-class Screening</td>
<td>889</td>
<td>1,930</td>
</tr>
<tr>
<td>Norms-based Screening</td>
<td>4,385</td>
<td>6,210</td>
</tr>
<tr>
<td>Corporate Engagement</td>
<td>5,919</td>
<td>7,527</td>
</tr>
<tr>
<td>ESG Integration</td>
<td>10,969</td>
<td>13,946</td>
</tr>
<tr>
<td>Exclusionary Screening</td>
<td>12%</td>
<td>15023</td>
</tr>
</tbody>
</table>

Source: Global Sustainable Investment Review 2016. Japan CAGR 724%
## Bringing ESG product into the mainstream

### Future World

<table>
<thead>
<tr>
<th>Index</th>
<th>Multi-asset</th>
<th>Real assets</th>
<th>Active equity</th>
<th>Global fixed income</th>
<th>Active opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Future World Equity Factor Fund</td>
<td>£4.9bn</td>
<td>4 consultant ratings in 12 months</td>
<td>Included seed investment from L&amp;G and external clients</td>
<td>12 Platforms</td>
</tr>
</tbody>
</table>

### The blueprint for future success

LGIM’s ambition is to create an ESG product range built for the future spanning:

- Asset classes
- Investor channels
- Regions globally
We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don’t let yourself be lulled into inaction.

Bill Gates
Addressing the savings gap
Defined Contribution and Workplace

Emma Douglas
Head of UK Defined Contribution
UK Defined Contribution & Workplace Savings - Business Summary

Our UK DC business provides DC investors with a choice of pension funds through a platform offering Investment Only, unbundled or bundled (including administration) investment propositions.

- Largest (#1) manager of UK DC assets with ~ 18.3% market share
- ~14,000 schemes and ~2.7m customers
- Largest (#1) and fastest growing Mastertrust in the UK by assets
- Well placed to take advantage of market trends
- Investing in technology

All financials as at 31 December 2017 unless otherwise stated. Refer to appendix for further AUM detail. Revenue of £113m includes bundled administration revenue. Source: LGIM; Market Intelligence 2017 UK Defined Contribution And Retirement Income, Broadridge 2017; Hymans, April 2018, ‘Mastering Master Trusts’.
DC operating model

DC investors access the same range of funds regardless of product

Unbundled Clients
£40.5bn

Bundled Clients - £27.7bn
- Contract-Based £19.3bn
- Trust-Based £3.7bn
- Master Trust £4.7bn

Administration Platform

DC Investment Platform
Investment Platform acts as funds engine: consistent funds and functionality regardless of point of access
Trends in the UK DC Market

DC Asset Growth – 2016-2026

Sources of DC asset growth and decline (£bn, 2016-2026)

- By 2026 total DC assets of £338bn will grow to £871bn
- Ongoing contributions are the biggest source of growth
- 97% retention rate for bundled schemes
- AE contribution increases
- 17% Share in Smart Pension

Source: Market Intelligence 2017 UK Defined Contribution And Retirement Income, Broadridge 2017
Trends in the UK DC Market

Master trust expected to experience fast growth by 2026

Growth in assets by market segment (£bn, 2016-2026)

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>2016</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust based</td>
<td>164</td>
<td>199</td>
</tr>
<tr>
<td>Contract based</td>
<td>162</td>
<td>366</td>
</tr>
<tr>
<td>Master trust (unbundled)</td>
<td>12</td>
<td>306</td>
</tr>
<tr>
<td>Trust based (unbundled)</td>
<td>135</td>
<td>167</td>
</tr>
</tbody>
</table>

Source: Market Intelligence 2017 UK Defined Contribution And Retirement Income, Broadridge 2017
How are our UK DC assets split?

Bundled business CAGR of 36%

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall</th>
<th>Bundled Mastertrust</th>
<th>Bundled / WPS</th>
<th>3rd Party Platform</th>
<th>IOP</th>
<th>Unbundled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>40.0</td>
<td>1.3</td>
<td>9.7</td>
<td>11.0</td>
<td>18.0</td>
<td>(12%)</td>
</tr>
<tr>
<td>2015</td>
<td>46.3</td>
<td>1.6</td>
<td>13.1</td>
<td>13.0</td>
<td>14.6</td>
<td>(12%)</td>
</tr>
<tr>
<td>2016</td>
<td>57.2</td>
<td>3.2</td>
<td>17.6</td>
<td>17.0</td>
<td>14.2</td>
<td>(12%)</td>
</tr>
<tr>
<td>2017</td>
<td>68.2</td>
<td>4.7</td>
<td>23.0</td>
<td>17.9</td>
<td>12.3</td>
<td>(12%)</td>
</tr>
</tbody>
</table>

CAGR

Overall 19%
Bundled Mastertrust 53%
Bundled / WPS 33%
3rd Party Platform 18%
IOP 60%
Unbundled (12%)

IOP CAGR is based on growth from 2015
Continued Growth of DC Business

Increasing cashflows from existing clients

- Strong growth in year-on-year assets under administration
- Steadily increasing cashflows from existing clients

Decreasing costs of administration

- Increased investment into DC business has led to decreasing year-on-year administrative costs per member

Bundled business: Increasing cashflows, decreasing administrative costs
Continued Growth of DC Revenue

Enhancing our DC revenues through vertical integration

Vertical integration allows LGIM the benefit of generating investment management revenues from our bundled business.
Trends in the UK DC Market

Product/asset allocation in the DC space is evolving

- The largest asset allocation is to passive equities and fixed income as well as multi-asset funds
- Target date funds (TDFs) attracting more attention
- Consultants and millennials placing emphasis on ESG

LGIM is well placed to capture opportunities based on each of the DC trends described

Note: the data above on TDFs refers to closed architecture target date funds, rather than open-architecture strategies.

Source: Market Intelligence 2017 UK Defined Contribution And Retirement Income, Broadridge 2017
Offering DC Solutions for Client Needs: L&G Pathway Funds

A diversified DC solution focused on customer experience

Key investment stages*

- The concept is easy to message
- To-and-through retirement – ready for the new world of investment in retirement
- Investment strategy can be changed quickly and efficiently
- 5-year buckets are more suitable for flexible retirement patterns

Chart shows illustrative asset allocation for L&G Pathway 2055-60
Investment in Technology

User Experience (UX)
- Client
- End Customer

Technology
- Driving Operational Efficiency

Operating Model
- Digital First

Personalised messaging
How much do I have?
How much will I get?
New communication methods bring pensions to life
Working with the wider business - What’s next for DC?

For our customers

**Advice Solutions**
Working with Personal Investing

**Digital First**
Working with wider Group

**Post-retirement solution**
Working with LGRR

For our business

**Rapidly growing, regular cashflows**

**Scale and technology** leading to profitable admin platform and further reduction in cost per member

**Robotics / Lean Processes**
Learning from wider Group

**Consolidation of #1 position** in the UK DC market

---

**Allocating your pension pot**
We’ve split your pot into four to reflect your needs over time but you have the option to change this.

**Suggested split for your pension pot**
£200,000

- **Active years income** £100,000
- **Rainy day fund** £25,000
- **Later years income** £50,000
- **Kids inheritance** £25,000

Based on the above allocation of your pension, your income at 65 will be:
£18,400

(Drag the slider below to see how this will change)

- **Is this enough**
- **Add additional income**
- **Consolidate other pension pots**

---

Apply pension pot split
Retail Intermediary

Honor Solomon
Head of EMEA Retail
Retail Intermediary - Business Summary

Our Retail Intermediary business distributes our products to intermediaries buying funds on behalf of end customers. A growth story in the UK, we are now translating that success into Europe and beyond.

Advisory: IFAs, banks, building societies, ratings agencies and insurance companies
Wealth: Private banks and stockbrokers

UNIT TRUST ETF ICAV SICAV

Key Messages
Delivered strong growth in recent years, establishing a market leading position in the UK with continued upside

Product range, pricing and service model matched to customer demands

Addition of ETFs is a key growth accelerant

Growth plan focused on exploiting opportunities in new geographies

£30bn AUM
£116m Revenue
£3bn External Net Flows

All financials as at 31 December 2017 unless otherwise stated and are inclusive of personal investing.
From outside top 20 to top 3 ranking within 5 years

Consistent growth in gross and net sales since 2013 (£bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Inflows</th>
<th>Net Flows</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2012</td>
<td>2.2</td>
<td>-0.7</td>
</tr>
<tr>
<td>2013</td>
<td>3.7</td>
<td>0.4</td>
</tr>
<tr>
<td>2014</td>
<td>5.3</td>
<td>0.8</td>
</tr>
<tr>
<td>2015</td>
<td>5.8</td>
<td>1.1</td>
</tr>
<tr>
<td>2016</td>
<td>6.7</td>
<td>1.4</td>
</tr>
<tr>
<td>2017</td>
<td>8.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Firmly established as a diversified, growth business in the UK

- Ranked 3rd for gross and net sales in 2017
- Strong AUM growth and asset class diversification despite challenging market conditions
- Broadened product range
- Improved customer service proposition

Retail AUM ($bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Retail inc. PI</th>
<th>Retail Intermediary</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Retail AUM by Product (2017)

- Index: 61%
- Active: 17%
- Multi Asset: 9%
- Real Assets: 13%

Source: Pridham report press release February 2018. Pridham report figures are based on IA classification of Retail UK domiciled funds.

Retail Snapshot

- **TOP 10 GROSS RETAIL SALES 2017 (£m)**
  - BlackRock: £16,390
  - Fidelity: £9,703
  - Legal & General IM: £8,404
  - Invesco Perpetual: £8,332
  - Old Mutual Glob. Inv.: £8,139
  - Schroders: £7,946
  - Stand Life Inv.: £6,707
  - JP Morgan: £6,471
  - Jupiter: £6,386
  - M&G: £6,260

- **TOP 10 NET RETAIL SALES 2017 (£m)**
  - Old Mutual Glob. Inv.: £3,436
  - BlackRock: £3,358
  - Legal & General IM: £2,895
  - Fundsmith: £2,189
  - Ballie Gifford: £1,926
  - Schroders: £1,366
  - Jupiter: £1,061
  - Hargreaves Lansdown: £957
  - Royal London AM: £924
  - BMO: £924
Strong backdrop to Pan-European Growth

Focusing on scale markets with strong growth and existing relationships

Combined assets per country (€ billions)

Source: Broadridge, as of April 2018. Funds of Funds, Money Market funds, SIF and ETFs excluded throughout. Cross-border: offshore funds, representing the portion attributed to foreign funds that are distributed across multiple markets. Round trip: funds that are marketed primarily for a single market but which are not domiciled in that home country, e.g., Luxembourg domiciled fund primarily for distribution in Italy.

Building Out Our European Franchise:

- Increasing sales presence
- Clients across 14 jurisdictions
- Targeting Germany, Italy, Ireland and Switzerland
Investment solutions tailored to our clients’ requirements

<table>
<thead>
<tr>
<th>Product requirements</th>
<th>Advisory</th>
<th>Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost effective multi-asset On-going suitability</td>
<td>Full range of index funds</td>
<td>Active building blocks Unique thematic exposures</td>
</tr>
<tr>
<td>Multi-Asset</td>
<td>Real Assets</td>
<td>Index</td>
</tr>
<tr>
<td>Unit trust</td>
<td>ETF</td>
<td>ICAV</td>
</tr>
</tbody>
</table>

Leveraging LGIM’s market leading capabilities to offer a broad range of solutions

ESG: Future World Range

Investment vehicles
Multi-Index Funds

Risk targeted solutions for every stage of the investment journey

<table>
<thead>
<tr>
<th>Growth</th>
<th>Multi-Index Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Index 3</td>
<td>Multi-Index 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>Multi-Index Income Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Index Income 4</td>
<td>Multi-Index Income 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Euro</th>
<th>Multi-Index Euro Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Index EUR III</td>
<td>Multi-Index EUR IV</td>
</tr>
</tbody>
</table>

Multi-Index AUM Growth (£bn)

- L&G MI EUR
- L&G MI
LGIM ETF platform: Growth and product range

European ETP market AUM ($bn)

- Since acquisition, LGIM ETF AUM has grown to over £2.7bn AUM
- ROBO is nearing the milestone of £1bn AUM
- We expect to see continued positive net flow and revenue growth from existing products while building our product range and distribution capability.

Existing product range

- Thematic
  - Commodities
  - Fundamental fixed income

Expanding the product range

- Core
- FBI
- Future World
- Thematic

Source: ETF Market AUM Source: ETFGI
LGIM Retail Intermediary

Cumulative Net Sales in the UK (£bn)

2017 metrics

£30bn
AUM

£116m
Revenue

£3bn
Net sales

LGIM Retail Intermediary:

- Delivered strong growth in recent years, establishing a market leading position in the UK with continued upside
- Product range, pricing and service model matched to customer demands
- Addition of ETFs is a key growth accelerant
- Growth plan focused on exploiting opportunities in new geographies
Personal Investing

Helena Morrissey
Head of Personal Investing
Personal investing is a recent, strategically important focus for LGIM, as financial responsibility shifts from institution to individual and trends indicate customers prefer going direct.

**Key Messages**

Fast growing market

We have or are creating all components of success

Our DC, DB and Retail Intermediary credentials provide a strong foundation

All financials as at December 2017 unless otherwise stated
Size of the UK’s ‘direct to customer’ market is rapidly growing

Our Goal
To be the number 1 asset manager in Personal Investing in the UK

Drivers for change creating opportunity

Institutional to individual
Pension freedoms
Tax allowances
Advice gap
Digital innovation
DB transfers
Low interest rates

D2C Assets (£bn)

Source 1: Platforum September 2017
Source 2: Platforum, (May 2017 data). D2C AUM 2018-2022 is an LGIM forecast
## Opportunity for LGIM in a fragmented UK market

### AUM by Market Segment (£bn) \(^1\)

<table>
<thead>
<tr>
<th>Segment</th>
<th>AUM</th>
<th>Market Share</th>
<th>Y-O-Y Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct with pension / insurance providers</td>
<td>253</td>
<td>45%</td>
<td>17%</td>
</tr>
<tr>
<td>Direct platforms</td>
<td>205</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>Execution-only with wealth managers</td>
<td>63</td>
<td>11%</td>
<td>22%</td>
</tr>
<tr>
<td>Direct with asset managers</td>
<td>30</td>
<td>5%</td>
<td>27%</td>
</tr>
<tr>
<td>Direct with retail banks</td>
<td>8</td>
<td>1%</td>
<td>11%</td>
</tr>
</tbody>
</table>

### Market Share Y-O-Y Change

- Direct with pension / insurance providers: 17%
- Direct platforms: 21%
- Execution-only with wealth managers: 22%
- Direct with asset managers: 27%
- Direct with retail banks: 11%

### Top 3 factors selected by customers \(^5\)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A competitive price</td>
<td>58%</td>
</tr>
<tr>
<td>A well-known and trustworthy company name</td>
<td>51%</td>
</tr>
<tr>
<td>Access to a wide range of investments</td>
<td>48%</td>
</tr>
<tr>
<td>A website that is easy to use</td>
<td>42%</td>
</tr>
<tr>
<td>A service that helps me choose and manage my investments</td>
<td>40%</td>
</tr>
<tr>
<td>Good customer service</td>
<td>36%</td>
</tr>
</tbody>
</table>

---

Source 1: Platforum (September 2017)  
Source 2: Building Society Association March 2018  
Source 3: Boring Money  
Source 4: HMRC ISA Statistics, April 2018  
Source 5: Platforum Consumer Insights, January 2018

- UK household aggregate cash £1.5trn \(^2\)
- 9% of women in their 40s and 50s have a stocks and shares ISA \(^3\)
- 70% of Junior ISAs are invested in cash \(^4\)
LGIM’s distinct approach

Our Vision

To democratise and popularise investment in the UK

STRATEGY

By being bold
By connecting emotionally
By focusing on what matters to people
By serving them well

Why?

Brand and scale
Product breadth and innovation
Pricing
Digital operating model

What?

How?
LGIM has breadth and relevance in investment services

First time investor

- Multi-Index
  - Preferred choice for customers
  - Diversified funds serve as one-stop-shop
  - Tactical asset allocation

Regular investor

- Future World
  - Focus on what customers care about
  - Authenticity important to customers

Sophisticated investor

- Index Funds
  - A leading provider across the market
  - Low cost option

- Absolute Return
  - Designed as an all weather strategy
  - Good performance
  - Priced competitively against market

Core investment options below which can be supplemented with a wide range of actively managed funds, including property.
Why? Fund innovation to focus on what actually interests customers

Future World

Different Interests A high percentage of millennials and women say they are interested in ESG investing. Financial advisors? Not so much.

<table>
<thead>
<tr>
<th>Interest (%)</th>
<th>Investors</th>
<th>Advisors</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>80</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>60</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>40</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

Sources: Morgan Stanley Institute for Sustainable Investing, Cerulli Associates.

GIRL Fund
Personal investors value the Legal & General brand

Source: *Typologies based on Brandz™ data – study established in 1998 tracking consumer perceptions across 414 categories and 51 markets for over 120K brands. Interviews to date – 3.1m. Scores are taken from Crufts dip study
Engaging the nation – the campaign

OWN YOUR WORLD
Changing the narrative: active investing
Changing the narrative: active investing
Changing the narrative: active investing
Changing the narrative: active investing
A long-term strategy to leverage household name

<table>
<thead>
<tr>
<th>LONG-TERM RETURNS</th>
</tr>
</thead>
</table>

### PRICING
- Price reductions continue to reflect operating efficiencies

### ACCESSIBILITY
- Minimums reducing to £100 for lump sum and £20 for regulars

### TRACK RECORD
- Customers benefit from established fund range

### SCALE
- Managing c£1trn for clients globally already

---

**Inclusivity, Fund Range, Service Proposition**

- Lower cost no frills
- Value for money
  - Wide-ranging service
  - Future World range
  - Pension wrapper under development
  - ETFs with thematic investing to be added
- Full service open architecture
- New entrant ‘robo’ start-ups

---

**Price reductions continue to reflect operating efficiencies**

**Minimums reducing to £100 for lump sum and £20 for regulars**

**Customers benefit from established fund range**

**Managing c£1trn for clients globally already**

---

**Legal & General**
Growth ambitions based on targeted approach

<table>
<thead>
<tr>
<th>Build</th>
<th>Acquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>High current value</td>
<td>High potential value</td>
</tr>
<tr>
<td>18m potential customers</td>
<td>12m potential customers</td>
</tr>
<tr>
<td>£720bn potential assets</td>
<td>£42bn potential assets</td>
</tr>
</tbody>
</table>

1. Financially sophisticated: 50 years old, £86K
2. Secure professionals: 51 years old, £59K
3. Retired investors: 73 years old, £51K
4. Contently retired: 76 years old, £28K
5. Financially starting out: 22 years old, £48K
6. Younger financially rising: 30 years old, £59K
7. Older high spending families: 47 years old, £51K

Source: Interview output combined with CACI’s 50m UK consumer database to show dimensions for each segment e.g. new tech adoption, ethical consciousness, advice seeking, financial confidence and engagement
Distribution strategy

1. Build on strong foundations

2. Expand customer base by harnessing internal partners & developing partnerships
An iterative staged innovation process
Enables rapid and robust improvements in our customer experience
e.g. improved ISA apply journey

An integrated tech stack
With reusable services and interfaces allows rapid orchestration of
new / legacy services and rich customer insights

Robotic and AI driven process automation
Will drive operating efficiencies which will be passed to our
customers through lower charges

Digital operating model build out

- Mobile first approach
  With robo style investment advice and monthly app style fee

- CUSTOMER SERVICE

- INTEGRATED TECH STACK

- AUTOMATED BACK OFFICE

- LEGACY SYSTEMS
Our ambition is to deliver a winning, mass market personal investing business

- **Scale and price**: Value for money enabled by established scale
- **Digital**: Providing a frictionless customer experience
- **Investments**: Breadth and relevance of investment services
- **Engage the nation**: Focus on why customers should be invested leveraging brand

...that amplifies the Legal & General brand
Internationalising our core institutional strengths
UK DB – the bedrock of our business

Sarah Aitken
Head of Distribution
Our UK DB business is our heritage and core strength. We deliver comprehensive client solutions utilising our class-leading capabilities.

Key Messages

- Market-leading business
- Experts in Institutional client management
- Well positioned in growth segments of the market
- Able to capture the full value chain as part of L&G Group

Source: All financials as at 31 December 2017 unless otherwise stated
UK DB remains the bedrock of our business

LGIM Revenue by Channel (£m / %)

- International: £103m (13%)
- Retail: £116m (14%)
- UK DC: £59m (7%)
- Internal: £170m (21%)
- DB Expansion: £417m (44%)

LGIM UK DB at a glance

- #1: UK DB Market Leader
- #1: LDI Manager
- 2.2k: UK DB Clients
- 13: Average client tenure in years
- £357m: 2017 UK DB Revenue
- #1: Manager of LGPS Assets

DB Core includes Index and Sterling Investment Grade Fixed Income products; DB Expansion includes Solutions, Real Assets and Active Strategies (ex Sterling Investment Grade Fixed Income).
UK DB market: still growing, yet consolidating

Historical UK DB market AUM (£bn)

- **£908bn** Liabilities hedged in LDI mandates
- **£30bn** Annual company contributions
- **10-15 years** Average deficit contribution plan
- **71%** UK market invested with the top 3 managers

Consultant ratings are crucial

- **#1** Index / FBI
- **#2** LDI
- **#3** GFI
- **#4**
- **#5**
- **#6**

Source: PPF, LGiM internal data, Spence Johnson, FT (DB concentration - 2015). Table data reflects ratings from top 6 consultants in the UK. Ratings conventions are not identical across consultants, and so this table is designed for illustrative purposes only.
Case Study: long-term strategic partnerships with our clients

DB Pension Scheme milestones

- **Funding level**
  - £100m AUM
    - 20% hedged
    - 2007
  - £5bn physical equities into synthetic
    - 2008
  - £2bn AFI mandate
    - 2009
  - Collateral manager for externals
    - 2012
  - Swaptions
    - 2013
  - Transition £7bn of equities
    - 2013
  - Establishing cash waterfall
    - 2014
  - DB to DC Transfers
    - 2018
  - £20bn AUM
    - >100% hedged
    - 2018

- **Managing risk**
  - CSD-based de-risking strategy
    - 2007
  - £5bn physical equities into synthetic
    - 2008
  - £2bn AFI mandate
    - 2009
  - Collateral manager for externals
    - 2012
  - Swaptions
    - 2013
  - Cleared swaps & counterparty risk
    - 2014
  - Establishing cash waterfall
    - 2018
  - £20bn AUM
    - >100% hedged
    - 2018

- **Liquidity**
  - Collateral manager for externals
    - 2012
  - Swaptions
    - 2013
  - Cleared swaps & counterparty risk
    - 2014
  - Establishing cash waterfall
    - 2018
  - DB to DC Transfers
    - 2018

DC Pension Scheme milestones

- **Unbundled**
  - £1m AUM
    - (investment only via ext platform)
    - 2007
  - Appointed for all index assets
    - 2014
  - Appointed bundled provider
    - 2016
  - Appointed post-retirement Master Trust
    - 2016
  - Asset / Member Transition
    - 2017
  - Income drawdown default
    - 2017
  - Communication & engagement review
    - 2017/8
  - Illiquid DGF
    - 2018
  - £1.1bn AUM
    - (bundled)
    - 2018

- **Bundled**
  - £1m AUM
    - (investment only via ext platform)
    - 2007
  - Appointed for all index assets
    - 2014
  - Appointed bundled provider
    - 2016
  - Appointed post-retirement Master Trust
    - 2016
  - Asset / Member Transition
    - 2017
  - Income drawdown default
    - 2017
  - Communication & engagement review
    - 2017/8
  - Illiquid DGF
    - 2018
  - £1.1bn AUM
    - (bundled)
    - 2018
LGIM is well-positioned to continue winning in a changing market

UK plans’ broad asset allocation changes

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Bonds</td>
<td>43%</td>
<td>42%</td>
<td>47%</td>
<td>47%</td>
<td>48%</td>
<td>48%</td>
<td>49%</td>
</tr>
<tr>
<td>Equities</td>
<td>47%</td>
<td>43%</td>
<td>39%</td>
<td>37%</td>
<td>33%</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>15%</td>
<td>14%</td>
<td>16%</td>
<td>19%</td>
<td>21%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Source: Mercer. Other includes property, alternatives, other matching assets

“LDI 2.0”: Cashflow management and matching

- Higher revenue solutions
- Fixed income and secure income

Fiduciary Management & small scheme consolidation

- Higher revenue solutions
- Multi-asset solutions
Capturing the full value chain for L&G Group

Projected sources of private DB market growth and decline

- Total UK DB Assets 2016: £1,341bn
- Investment Return: £545bn
- Normal Contributions: £132bn
- DRCs: £155bn
- Other Income: £29bn
- Pensions Paid: -£402bn
- DB to DC transfers: -£209bn
- Buy-outs: -£94bn
- Schemes winding up: -£53bn
- Schemes entering PPF: -£15bn
- Total costs (inc. PPF levy): -£78bn
- Total UK DB Assets 2026: £1,351bn

Where L&G owns the value chain

1. Leading manager of UK DB assets
2. Market leader in UK DC
3. Post-retirement solutions, L&G Annuity products
4. L&G Pension Risk Transfer and innovative solutions – LGIM clients did ~£1.4bn in PRT in 2017
5. Manage assets for PPF

Source: Spence Johnson
Global Distribution

Sarah Aitken
Head of Distribution
Global distribution built around a core institutional franchise

LGIM's Global Distribution Footprint

- Chicago
- Dublin
- Benelux
- Frankfurt
- Tokyo
- Hong Kong

142
Global Sales FTEs*

29
Countries where we have clients

7
Local Sales Offices

Source: All financials as at 31 December 2017 unless otherwise stated
*Includes Salespeople, CRMs, CREs. Excludes client reporting and servicing and marketing
Europe ex-UK, The Gulf and Asia
Europe ex-UK, The Gulf and Asia - Business Summary

**External Net Flows**
- **Europe ex-UK**: £12.6bn
- **Gulf**: £3.6bn
- **Asia**: £4.2bn

**AUM**
- **Europe ex-UK**: £44bn
- **Gulf**: £36bn
- **Asia**: £8bn

**Key Messages**
- Building on UK Institutional heritage
- Accessing growing markets
- Playing to LGIM’s investment strengths

*Source: All financials as at 31 December 2017 unless otherwise stated*
Europe ex-UK: where we are today

LGIM has delivered strong growth in Europe

LGIM Europe ex-UK AUM growth (£bn)

2011

£9.7bn

2017

£44.2bn

+29% CAGR

General Account Insurance Investments by country (€bn)

France

€2,040bn

Germany

€1,800bn

UK

€980bn

Italy

€680bn

Switzerland

€520bn

Denmark

€280bn

Netherlands

€270bn

Spain

€250bn

Belgium

€250bn

Sweden

€170bn

Norway

€130bn

Austria

€110bn

Ireland

€80bn

Source: Spence Johnson, European Insurance Asset Management 2017
Trends supporting LGIM’s growth in Europe

1. Growing appetite for ESG strategies
   - 2013-17 19% CAGR in European ESG

2. Search for yield supports growth in higher-margin mandates
   - Fixed income now constitutes 24% of total European ETF market, up from 16% in 2011

3. Passive megatrend in its early stages
   - Expanded pooled fund range and ETFs position LGIM well

Source: Cerulli Associates – The Cerulli Edge, Morningstar February 2017
The Gulf: Sovereign Wealth Fund-dominated, long-term relationships key

LGIM Gulf AUM growth (£bn)

- 6.1 (2011)
- 10.3 (2012)
- 16.8 (2013)
- 18.7 (2014)
- 19.9 (2015)
- 27.3 (2016)
- 36.3 (2017)

+32% CAGR

LGIM’s competitive advantages

1. Natural diversifying option
2. Opportunities in new pension segment
3. Growing interest in ESG

Growth rate has been restated to report on a constant currency basis
Asia: where we are today

LGIM has seen strong AUM growth among a range of clients across the region.

LGIM Asia AUM growth (£bn)

Growth rates of total market assets (%CAGR, 2012-16)

- **Japan**: 3.1% (Pensions), 6.9% (Insurance)
- **Hong Kong**: 8.5% (Insurance), 9.1% (Pensions)
- **Taiwan**: 12.0% (SWF), 11.7% (Insurance)
- **South Korea**: 18.9% (Insurance), 18.3% (SWF), 9.1% (Pensions)
- **China**: 16.8% (Insurance), 9.5% (Pensions), 10.9% (SWF)

Source: Spence Johnson, Deeper Perspectives 2017
A large opportunity in a fast-growing set of markets

Market trends

1. Fast-growing “Mature Asia” segment with significant AUM
   - Sizeable addressable universe

2. Wide range of institutional capital pools for LGIM to target
   - Global consultant ratings are a tailwind for targeting large institutions

3. Unique opportunity in China
   - Market predicted to grow by 17% CAGR from 2016-2021

How we will capture the opportunity

Growing local presence and attractive product set

Heritage that resonates in Asia

ESG as an important differentiator

Source: McKinsey “Perspectives on Asia”
U.S. Significant growth opportunity ahead

Aaron Meder
Chief Executive Officer (U.S.)
U.S. - Business Summary

Our US business is rapidly growing and becoming a larger component of global revenue and profits. A market leader in U.S. Corporate DB, we are now focused on further expanding our presence in Public DB and DC.

Solutions Strategy Team: focusing on DB De-risking, Retirement Income and ESG

Key Messages

Business differentiated by a client centric culture, investment excellence and a true solutions orientation
Well positioned to expand into the U.S. Public DB and DC channels
Market leader in Corporate DB derisking solutions
Emerging force in Index/FBI

Source: All financials as at 31 December 2017 unless otherwise stated. AUM includes all mandates managed by LGIM America, including US domestic, UK and International (ex US) clients as well as L&G Group. External net flows relate to US domestic clients only.
U.S. history - A decade of strong growth

£140bn

U.S DOMESTIC £72bn | INTERNAL £12bn | INT'L £56bn

Source: Internal comprises assets managed on behalf of other Legal and General Group companies. International comprises assets managed on behalf of clients in other jurisdictions including the UK.
An established solutions provider

LGIMA has grown to become a market leader in Corporate DB de-risking solutions and an emerging force in Index

AFI / LDI AUM (£bn)

4 7 12 21 26 47 61

Index / FBI AUM (£bn)

2014 2015 2016 2017
38 42 59 67

Source: Figures exclude internal assets
Our competitive advantages

In AFI/LDI, 64% of clients who have been with us for at least 1 year have added incremental assets.

Source: eVestment peer group. Total individual clients at YE17 were 247. This equated to 349 client investment.
What we want to achieve

Corporate DB
Solidify market leading position across full spectrum of AFI/LDI solutions

DC
Be the market leader across full spectrum of “income-aware” solutions

Public DB
Be the market leader in AFI, ESG and factor-based solutions

International
Deliver client-led product strategy across all regions
U.S. Institutional Retirement Market

• De-risking is still a high-growth market
• The majority of return-seeking assets (approximately $1.7T) will need to move into AFI/LDI solutions over the next 10-20 years

Source: ICI, Towers Watson, Cerulli, U.S. Census
Corporate DB - Solidify our market leading position

Increasingly customized strategies

- Long duration benchmarks
  - Extend duration using market-based benchmarks
- Custom blend of market benchmarks
  - Custom blend of market-based benchmarks
- Liability benchmarking
  - Convert plan liabilities into a liability benchmark
- Derivative overlays
  - Derivatives to shape outcomes or replicate exposures
- End-game solutions
  - Use custom portfolios to meet end-game objectives, private credit capabilities will be a differentiator
- Self-Sufficiency

Being able to offer complete end-to-end suite of capabilities is a key differentiator
**DC - Be market Leader across full spectrum of income-aware solutions**

Leveraging our expertise in Liability Driven Investment and Customized Solutions

<table>
<thead>
<tr>
<th>Solutions Type</th>
<th>LGIM Capability</th>
<th>Our Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Retirement Innovator</td>
<td>Multi-Asset Solutions / LDI</td>
<td>Solutions focused on delivering income in retirement via investment only and guaranteed income solutions</td>
</tr>
<tr>
<td>Component Provider</td>
<td>AFI / Index / FBI / ESG</td>
<td>Deliver component solutions to DC plans on a stand-alone basis or as part of a target date fund</td>
</tr>
<tr>
<td>Redefining the Objective of TDFs</td>
<td>Multi-Asset Solutions / LDI</td>
<td>Refocusing the TDF design to align to an income-aware objective</td>
</tr>
</tbody>
</table>
### Public DB - Be market leader in custom AFI, ESG and factor-based solutions

<table>
<thead>
<tr>
<th>Plan challenges</th>
<th>LGIM Proposition</th>
<th>Why LGIM?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing their funding gap</td>
<td>Redefine the role of Fixed Income</td>
<td>• Innovative liability aware approach incorporating IG credit, LIBOR+ and HY to increase return and better match liabilities</td>
</tr>
<tr>
<td>Balancing their impact on society with financial objectives</td>
<td>Custom ESG Solutions</td>
<td>• Leading global corporate governance and stewardship team</td>
</tr>
<tr>
<td>Customization based on plan objectives while reducing costs and volatility</td>
<td>Multi-Asset Solutions and Factor Based Investing</td>
<td>• Ability to design a solution based on the custom objectives of a plan</td>
</tr>
<tr>
<td>without sacrificing investment return</td>
<td></td>
<td>• Transparent index proposition</td>
</tr>
</tbody>
</table>
Continuing Success

34%
AUM CAGR
2011-17

The first decade for our US business has been a great success

$16.7trn
Market Opportunity

Focused on broadening our competitive advantages so we can solve client problems in Corporate DB, DC and Public DB

Significant 5-year planned investment

To deliver this we are investing in our Investment Capabilities, Distribution and Operating Model

Source: ICI, AUM CAGR restated to report on a constant currency basis and excludes the impact of transferring index assets from the UK in 2014
Closing Remarks and Summary
LGIM: An Investment Management business built for the future

Clients first and foremost

Diverse set of expansion strategies

Investing for the future

Operating profit growth of 8-10% per annum over the medium term
Appendix – Financial Disclosures

Investment capabilities

<table>
<thead>
<tr>
<th>2017</th>
<th>Revenue £m</th>
<th>AUM £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>259</td>
<td>341</td>
</tr>
<tr>
<td>Active</td>
<td>226</td>
<td>156</td>
</tr>
<tr>
<td>Solutions</td>
<td>210</td>
<td>463</td>
</tr>
<tr>
<td>Real Assets</td>
<td>96</td>
<td>24</td>
</tr>
<tr>
<td>Interest &amp; Other</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Total LGIM Asset management</td>
<td>805</td>
<td>983</td>
</tr>
</tbody>
</table>

Regions and Channels

<table>
<thead>
<tr>
<th>2017</th>
<th>Client Revenue £m</th>
<th>Client AUM £bn</th>
<th>Reporting adjustments</th>
<th>Reported AUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>170</td>
<td>99</td>
<td></td>
<td>99</td>
</tr>
<tr>
<td>Active</td>
<td>357</td>
<td>634</td>
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<tr>
<td>Solutions</td>
<td>103</td>
<td>160</td>
<td>68 1</td>
<td>228</td>
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<tr>
<td>Real Assets</td>
<td>59</td>
<td>60</td>
<td>8 2</td>
<td>68</td>
</tr>
<tr>
<td>Interest &amp; Other</td>
<td>116</td>
<td>30</td>
<td></td>
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<td>805</td>
<td>983</td>
<td></td>
<td>983</td>
</tr>
</tbody>
</table>

Revenue by ‘Regions and Channels’ is shown on the basis of client domicile. The equivalent ‘Client AUM’ is shown in the table above.

Two adjustments are made for reporting purposes to reflect the overall scale of AUM managed by business areas:

1. International AUM adjustment of £68bn includes assets managed in the US on behalf of UK clients.
2. DC AUM adjustment of £8bn includes workplace savings assets invested in ‘Internal’ Linked Pension funds alongside mature savings products.