



# London Borough of Hillingdon

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## Investment Risk & Analytical Services

March 31, 2018

# Table of Contents

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|   |    |
|---|----|
| <b>Section 1. London Borough of Hillingdon</b>  | 3  |
| 1.1. <u>Client Commentary</u>                   | 3  |
| 1.2. <u>Client Commentary (cntd)</u>            | 4  |
| 1.3. <u>Executive Summary</u>                   | 5  |
| 1.4. <u>Investment Hierarchy</u>                | 6  |
| 1.5. <u>Investment Hierarchy(2)</u>             | 7  |
| 1.6. <u>Market Value Summary - Three Months</u> | 8  |
| 1.7. <u>Historical Performance</u>              | 9  |
| 1.8. <u>Benchmark Composition</u>               | 13 |
| <b>Section 2. Appendix</b>                      | 14 |
| 2.1. <u>Disclaimer(s)</u>                       | 14 |

## Client Commentary

### Total Scheme Commentary

Volatility returned to equity markets in quarter 1. Global equities rode a virtual see-saw. Tech stocks took a bit of a battering in February following allegations of the misappropriate use of Facebook data and other leaks even prior to the fallout from the looming tariff war. Apple's iPhone X sales were down resulting in a production cut but the world's biggest company still reported a record Q4 profit of \$20.1bn. Globally, Technology had the strongest quarter and year. Telecoms was the lowest performing sector over both periods. Oil ended March at \$69 per barrel, marginally up from the end of 2017. The FTSE World was down by -4.3% (GBP) over quarter one 2018 and returned 2.6% (GBP) over the year.

One year on from the triggering of Article 50, UK sentiment readings continue to surprise investors and forecasters by pointing to an economy resilient amidst ongoing Brexit uncertainty. The squeeze on households' spending power showed signs of easing as UK wages rose at the fastest pace in nearly two and a half years and the unemployment rate edged lower. The closely-watched IHS Markit / CIPS UK Services PMI disappointed however, recording a reading of 51.7 in March, down from 54.5 in February. The barometer slipped to its lowest level since July 2016 as inclement weather disrupted business operations and subdued consumer spending. Sterling remained buoyed as Britain and the European Union agreed to a 21-month Brexit transition period and a potential solution to a hard border in Northern Ireland. Following the announcement, 2-year and 10-year gilt yields also rose, hitting highs of 0.92% and 1.65% respectively before falling back to 0.82% and 1.35% at period end. The FTSE All-Stock index delivered a total return of 0.26% in Sterling terms over the quarter whilst the ML Sterling Non-Gilts index returned -1.15% for the same period. In the UK, Q1 2018 saw Sterling strengthen against the Dollar and Euro. The consumer price index including owner occupiers' housing costs rose by 2.5% in the year to February 2018, down from 2.7% in January 2018. The main downward contributors were food and transport. These were partially offset by the rising prices of footwear. The Nationwide House Price Index showed the annual rate of house price growth in February at 2.2%, markedly down from the January figure of 3.2%.

Within this environment the London Borough of Hillingdon returned -2.60% which was below the Total Plan benchmark of -2.34%. In monetary terms this is a loss in assets of £26.3 million and the value of the combined scheme now stands at £1,013 million as at 31<sup>st</sup> March 2018. Looking further into the analysis the results seen were caused by some underperformance particularly with London CIV Ruffer and the newer Epoch investment. While allocation effects overall were positive, the most notable impacts were the positive effects of LGT and Epoch which were partially reversed by the negative impacts in UBS and M&G

The Scheme's one year return of 2.96% is 0.73% behind the benchmark of 3.71% following four consecutive quarters of underperformance. While over the longer periods, with nine positive quarters over the last 3 years, the Scheme has outperformed, producing a return of 7.42% over three year versus 7.08%. Then the excess marginally increases to 0.33% for the 5 year period where we see figures of 7.92% versus 7.56% per annum. Then since inception in September 1995, the Fund remains ahead of target by 11 basis points with an annualised return of 7.03% against a target of 6.92%.

### Manager Commentary

#### AEW UK

Over the first quarter AEW UK Property produced a growth of 2.43%, which was 0.52% above the IPD UK PFI All Balanced Funds index figure of 1.90%. They remain ahead of target over the year, and continue to be ahead over the three year period returning 10.85% against the benchmark of 8.57%. This translates as a +2.10% relative return. However, with positive absolute returns in all but one period and only five quarters in the red on a relative basis, growth ahead of benchmark is seen since the fund inception. Since the funds inception date of July 2014, the fund return is 11.84%, leading to an outperformance of 1.64% when compared to the IPD figure of 10.03%.

#### JP Morgan

In the latest quarter JP Morgan produces a reduction in assets of -0.38% leading to an underperformance of 1.24% when compared to the 0.87% target for the 3 Month LIBOR + 3% p.a. Then with positive results in the three of the last four quarters, the one year return of 3.09% is in positive territory but is behind the 3.41% target by 0.31%. Then over three and five years they post returns closer to the benchmark with figures of 4.06% vs 3.60% and 3.47% vs 3.58% respectively. Since the mandate funded their return of 3.99% is +34 basis points above the target return of 3.63% on an annualised basis.

#### Legal & General 1

Over the last three months the Legal & General No. 1 mandate post a return of -4.03% against -4.05% for the custom fixed weight blended benchmark, a slight outperformance of +2 basis points. In the short period since inception in October 2016, they return 5.26%, which is in line with the benchmark return. Further analysis demonstrates the passive strategy with all funds neutral when compared to the benchmark weights and in line with their respective benchmark returns.

#### Legal & General 2

During February 2017 the new Legal & General mandate was funded, now in its first full year of investment they post a return of -1.29% against -1.25% for the first quarter against the custom fixed weight blended benchmark consisting of FTSE Global Equity Hedged and Emerging Markets, FTSE Index Linked 15+ years and iBoxx UK Non-Gilts. In the short period since inception, they return 6.35% against 6.66% for the benchmark.

## Client Commentary (cntd)

### Manager Commentary

#### London CIV Ruffer

This quarter assets within the London CIV Ruffer portfolio saw a negative return at -2.55% when compared to the LIBOR 3 Month GBP figure of 0.12%, this leads to a relative return of -2.67%. This has dampened the results from 2017 and the one year period now shows a negative return of -1.12% against the target of 0.41%. Outperformance remains in the longer periods. This is seen in a three year return of 2.87% versus 0.59%, then similarly for the five years with figures of 4.23% against 0.59%, culminating in since inception (May 2010) figures of 5.48% versus 0.81% per annum, which translates as a relative return of 4.63%. This manager shows the largest outperformance of all the schemes managers over the since inception period.

#### M&G Investments

For the fourth consecutive period M&G posted gains in Q1 by producing a return of 1.71% against the 3 Month LIBOR +4% p.a. target of 1.11%, demonstrating an outperformance of 0.59%. Coupled with the previous good results, the full year return leads the benchmark by 5.58%, coming from figures of 10.23% against 4.41%. Over the three and five year the account registers figures of 10.61% vs 4.59% and 9.14% vs 4.58% respectively; since inception (May 2010) return falls slightly to 7.58% pa whilst the benchmark is 4.67% pa. Although the since inception Internal Rate of Return moves further ahead of target with a figure of 8.71% opposed to the comparator of 4.40%.

#### Macquarie

Over the last three months, Macquarie produced a growth of 1.29%, against the 0.87% for the 3 Month LIBOR +3% p.a. this translates as an outperformance of 0.42%. With fifteen consecutive quarters of positive absolute and relative returns, outperformance is seen in all longer periods. Over the rolling year a growth of 9.33% beats the target of 3.41% by 5.72%, similarly the three year result of 17.74% versus 3.59% exhibits the best relative return at 13.66%. The annualised return over 5 years falls to 12.37%, but still ahead of the 3.58% seen for the benchmark; then since inception (September 2010) the 4.66% is ahead of the target of 3.66%. Although the since inception Internal Rate of Return for this portfolio jumps to 12.01%, which is ahead of the benchmark figure of 3.59%.

#### UBS

During Q1 the UBS UK Equity investments returned -4.68%, ahead of the -6.87% for the FTSE All Share. Looking into the attribution analysis this outperformance was a combined result of good selection effects and allocation effects. The most significant being the allocation decisions in underweighting Consumer Goods (+69bps) and underweighting Technology (+25 bps), while the largest negative impact comes from underweighting Healthcare (-9 bps). Selection effects were also notable and made a positive impact with the most significant being in Consumer Goods (+46 bps) as well as in Basic Materials (+38bps). The manager is now ahead over the one year, figures of 4.31 vs 1.25% translates as a relative return of +3.02%. This is largely attributable to allocation effects, the biggest impacts come from both underweighting Consumer Goods (+121bps) and overweighting basic Materials (+58 bps). The longer time periods show a positive picture, with three and five years ahead of the index, culminating in a since inception (January 1989) return of 10.10% versus 8.66% on an annualised basis.

### Manager Commentary

#### Premira Credit

The Premira Credit Fund saw a growth of 2.13% over the first quarter of 2018, this compares favourably with the 3 Month LIBOR +4% p.a. target of 1.11%. All four quarters over the last year are still ahead of target, leading to an outperformance of 3.27%, created from figures of 7.83% against 4.41%. Then since the start of December 2014 when the fund inceptioned, the fund posts a return of 9.36% against the benchmark of 4.55%, leading to a relative position of 4.60%. This manager shows one of the largest outperformance of all the schemes managers over the since inception period.

#### UBS Property

In contrast from the previous period, the latest quarter for the UBS Property posted an underperformance with -0.23%, generated from a return of 1.67% against the IPD UK PPF All Balanced Funds index of 1.90%. Over the one year a deficit is recorded, with a full year return of 8.31% falling -1.58% behind the IPD target of 10.05%. However, the previous good run of results particularly during 2015 leads to high absolute returns staying ahead of the IPD target over the longer periods, peaking over the five year with a return of 11.31% against 10.49%. Then since inception, in March 2006, the fund return falls to 3.99% per annum which manages to stay just ahead of the benchmark figure of 3.94%.

#### Private Equity

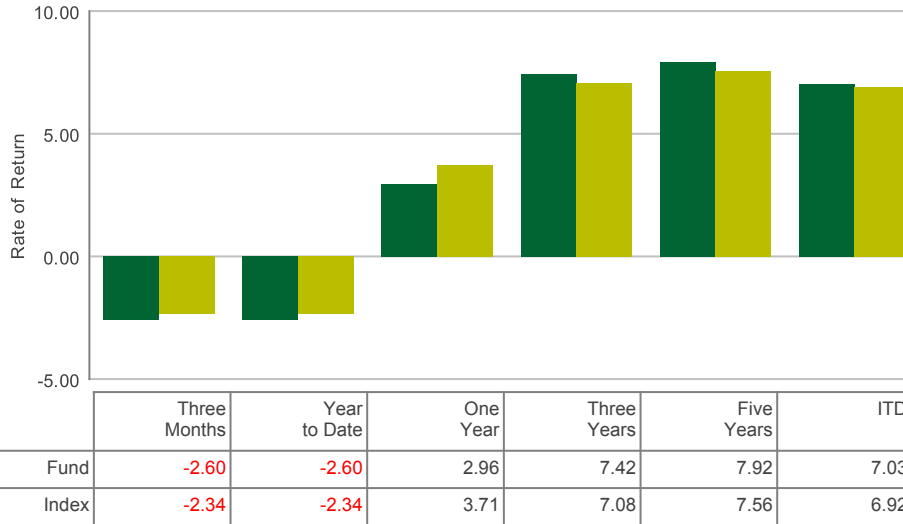
The private equity assets saw a 1.14% rise in value for LGT. Adam Street saw an increase of 0.70%. Over the longer periods, the outlook over which private equity investments should be measured, returns remain positive. LGT maintain a run of over 3 years of growth with figures of 15.21%, 21.14% and 14.89% for the one, three and five year periods respectively, while Adam Street posted 3.37%, 11.54% and 14.05% over the same periods. Although Adam St falls short of the proxy benchmark of MSCI AC World +4% p.a. which shows 6.62%, 14.68% and 14.98%. LGT by contrast are ahead over the one and three year periods (outperforming by +8.05% and +5.63% respectively) but fall somewhat short over the five year underperforming by 8bps. Then since their respective inceptions in January 2005 and May 2004, Adam Street drops to 6.34% pa, while LGT sees a more modest dip to 10.85%.

#### Epoch

This quarter saw a full 3 month performance for the relatively new investment in Epoch's income equity fund of -7.57%. Since inception (November 2017) the fund has observed a fall in value -8.41% compared to the MSCI World figure of -5.20%, this leads to a relative return of -3.38%.

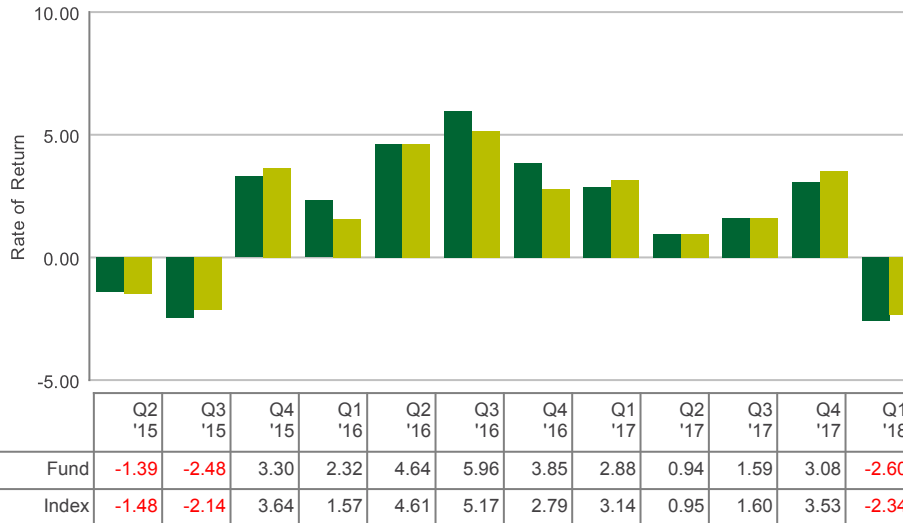
# Executive Summary

## LONDON BOROUGH OF HILLINGDON TOTAL FUND GROSS OF FEES



Index: Total Plan Benchmark

## LONDON BOROUGH OF HILLINGDON ROLLING QUARTERS TOTAL FUND GROSS OF FEES



Index: Total Plan Benchmark

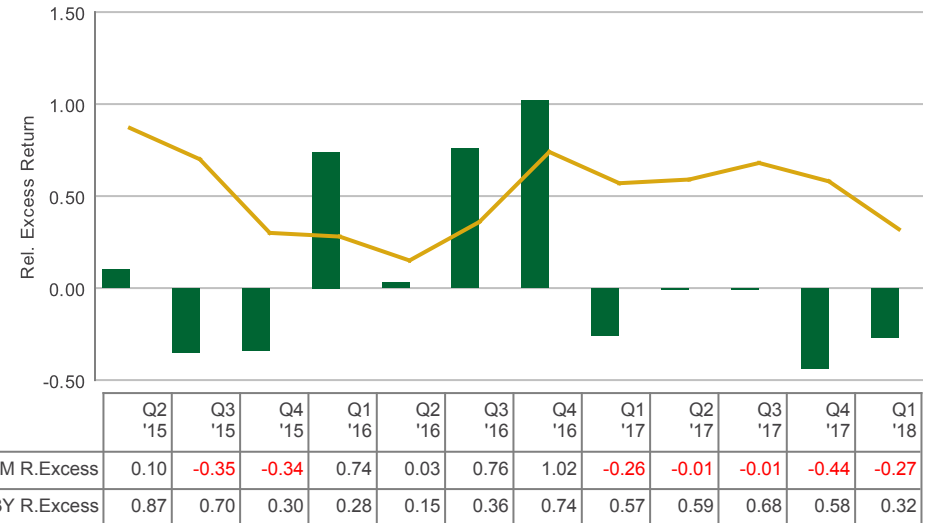
## RISK STATISTICS

|                            | 1 Yr  | 3 Yrs | 5 Yrs |
|----------------------------|-------|-------|-------|
| Return                     | 2.96  | 7.42  | 7.92  |
| Index Return               | 3.71  | 7.08  | 7.56  |
| Relative Excess Return     | -0.73 | 0.32  | 0.33  |
| Standard Deviation         | 4.12  | 5.23  | 5.03  |
| Index Standard Deviation   | 3.91  | 4.90  | 4.77  |
| Tracking Error             | 0.99  | 1.22  | 1.07  |
| Information Ratio          | -0.76 | 0.28  | 0.33  |
| Sharpe Ratio               | 0.62  | 1.31  | 1.46  |
| Index Sharpe Ratio         | 0.85  | 1.33  | 1.46  |
| Sortino Ratio              | -     | 2.85  | 2.96  |
| Treynor Ratio              | 2.50  | 6.58  | 7.11  |
| Jensen's Alpha             | -0.79 | 0.08  | 0.14  |
| Relative Volatility (Beta) | 1.02  | 1.04  | 1.03  |
| R Squared                  | 0.94  | 0.95  | 0.96  |

Index: Total Plan Benchmark. Risk Free Index: JP Morgan 3 month Cash (GBP)

Category: Total Fund Gross of Fees. Calculation Frequency: Monthly

## LONDON BOROUGH OF HILLINGDON ROLLING QUARTERS TOTAL FUND GROSS OF FEES



Index: Total Plan Benchmark

## Investment Hierarchy

| Account/Group -% Rate of Return     | Ending Market Value GBP | Ending Weight | Three Months |              |                 | Year to Date |              |                 | One Year     |              |                 |
|-------------------------------------|-------------------------|---------------|--------------|--------------|-----------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
|                                     |                         |               | Port         | Index        | Relative Excess | Port         | Index        | Relative Excess | Port         | Index        | Relative Excess |
| <b>London Borough of Hillingdon</b> | <b>1,013,570,103</b>    | <b>100.00</b> | <b>-2.60</b> | <b>-2.34</b> | <b>-0.27</b>    | <b>-2.60</b> | <b>-2.34</b> | <b>-0.27</b>    | <b>2.96</b>  | <b>3.71</b>  | <b>-0.73</b>    |
| Total Plan Benchmark                |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>AEW UK</b>                       | <b>54,360,982</b>       | <b>5.36</b>   | <b>2.43</b>  | <b>1.90</b>  | <b>0.52</b>     | <b>2.43</b>  | <b>1.90</b>  | <b>0.52</b>     | <b>14.29</b> | <b>10.05</b> | <b>3.85</b>     |
| LBH22 AEW Benchmark                 |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>JP Morgan</b>                    | <b>56,311,723</b>       | <b>5.56</b>   | <b>-0.38</b> | <b>0.87</b>  | <b>-1.24</b>    | <b>-0.38</b> | <b>0.87</b>  | <b>-1.24</b>    | <b>3.09</b>  | <b>3.41</b>  | <b>-0.31</b>    |
| LBH15 JPM LIBOR +3%pa               |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Legal &amp; General 1</b>        | <b>229,282,791</b>      | <b>22.62</b>  | <b>-4.03</b> | <b>-4.05</b> | <b>0.02</b>     | <b>-4.03</b> | <b>-4.05</b> | <b>0.02</b>     | <b>2.11</b>  | <b>2.24</b>  | <b>-0.13</b>    |
| LBH26 L&G Benchmark                 |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Legal &amp; General 2</b>        | <b>66,556,081</b>       | <b>6.57</b>   | <b>-1.29</b> | <b>-1.25</b> | <b>-0.04</b>    | <b>-1.29</b> | <b>-1.25</b> | <b>-0.04</b>    | <b>5.04</b>  | <b>5.38</b>  | <b>-0.32</b>    |
| LBH27 L&G Benchmark                 |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>M&amp;G Investments</b>          | <b>15,363,766</b>       | <b>1.52</b>   | <b>1.71</b>  | <b>1.11</b>  | <b>0.59</b>     | <b>1.71</b>  | <b>1.11</b>  | <b>0.59</b>     | <b>10.23</b> | <b>4.41</b>  | <b>5.58</b>     |
| LBH10 3 Month LIBOR +4%pa           |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Macquarie</b>                    | <b>27,421,776</b>       | <b>2.71</b>   | <b>1.29</b>  | <b>0.87</b>  | <b>0.42</b>     | <b>1.29</b>  | <b>0.87</b>  | <b>0.42</b>     | <b>9.33</b>  | <b>3.41</b>  | <b>5.72</b>     |
| LBH14 Macquarie LIBOR +3%pa         |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Newton</b>                       | <b>0</b>                | <b>0.00</b>   | <b>-</b>     | <b>-</b>     | <b>-</b>        | <b>-</b>     | <b>-</b>     | <b>-</b>        | <b>-</b>     | <b>-</b>     | <b>-</b>        |
| LBH19 FTSE World Index +2%          |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Premira Credit</b>               | <b>58,117,260</b>       | <b>5.73</b>   | <b>2.13</b>  | <b>1.11</b>  | <b>1.01</b>     | <b>2.13</b>  | <b>1.11</b>  | <b>1.01</b>     | <b>7.83</b>  | <b>4.41</b>  | <b>3.27</b>     |
| LBH24 Premira LIBOR +4%pa           |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>UBS</b>                          | <b>133,132,863</b>      | <b>13.14</b>  | <b>-4.68</b> | <b>-6.87</b> | <b>2.36</b>     | <b>-4.68</b> | <b>-6.87</b> | <b>2.36</b>     | <b>4.31</b>  | <b>1.25</b>  | <b>3.02</b>     |
| LBH04 UBS Benchmark                 |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>UBS Property</b>                 | <b>75,192,170</b>       | <b>7.42</b>   | <b>1.67</b>  | <b>1.90</b>  | <b>-0.23</b>    | <b>1.67</b>  | <b>1.90</b>  | <b>-0.23</b>    | <b>8.31</b>  | <b>10.05</b> | <b>-1.58</b>    |
| LBH06 UBS Property Benchmark        |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Adam Street</b>                  | <b>13,206,247</b>       | <b>1.30</b>   | <b>0.70</b>  | <b>-3.39</b> | <b>4.23</b>     | <b>0.70</b>  | <b>-3.39</b> | <b>4.23</b>     | <b>3.37</b>  | <b>6.62</b>  | <b>-3.05</b>    |
| Adam Street PE Bmark                |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>LGT</b>                          | <b>6,340,061</b>        | <b>0.63</b>   | <b>1.14</b>  | <b>-3.39</b> | <b>4.69</b>     | <b>1.14</b>  | <b>-3.39</b> | <b>4.69</b>     | <b>15.21</b> | <b>6.62</b>  | <b>8.05</b>     |
| LGT PE Bmark                        |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>Epoch Investment P Income</b>    | <b>129,750,098</b>      | <b>12.80</b>  | <b>-7.57</b> | <b>-4.80</b> | <b>-2.91</b>    | <b>-7.57</b> | <b>-4.80</b> | <b>-2.91</b>    | <b>-</b>     | <b>-</b>     | <b>-</b>        |
| LBH11001 MSCI World ND              |                         |               |              |              |                 |              |              |                 |              |              |                 |
| <b>London CIV Ruffer</b>            | <b>103,276,776</b>      | <b>10.19</b>  | <b>-2.55</b> | <b>0.12</b>  | <b>-2.67</b>    | <b>-2.55</b> | <b>0.12</b>  | <b>-2.67</b>    | <b>-1.12</b> | <b>0.41</b>  | <b>-1.52</b>    |
| LBH11003 Ruffer BM Libor            |                         |               |              |              |                 |              |              |                 |              |              |                 |

## Investment Hierarchy(2)

| Account/Group -% Rate of Return                             | Three Years |       |                 | Five Years |       |                 | Inception to Date |       |                 | Inception Date |
|---|-------------|-------|-----------------|------------|-------|-----------------|-------------------|-------|-----------------|----------------|
|   | Port        | Index | Relative Excess | Port       | Index | Relative Excess | Port              | Index | Relative Excess |                |
| <b>London Borough of Hillingdon</b><br>Total Plan Benchmark | 7.42        | 7.08  | 0.32            | 7.92       | 7.56  | 0.33            | 7.03              | 6.92  | 0.11            | 30/09/1995     |
| <b>AEW UK</b><br>LBH22 AEW Benchmark                        | 10.85       | 8.57  | 2.10            | -          | -     | -               | 11.84             | 10.03 | 1.64            | 30/06/2014     |
| <b>JP Morgan</b><br>LBH15 JPM LIBOR +3%pa                   | 4.06        | 3.60  | 0.44            | 3.47       | 3.58  | -0.11           | 3.99              | 3.63  | 0.34            | 08/11/2011     |
| <b>Legal &amp; General 1</b><br>LBH26 L&G Benchmark         | -           | -     | -               | -          | -     | -               | 5.26              | 5.26  | 0.00            | 31/10/2016     |
| <b>Legal &amp; General 2</b><br>LBH27 L&G Benchmark         | -           | -     | -               | -          | -     | -               | 6.35              | 6.66  | -0.29           | 22/02/2017     |
| <b>M&amp;G Investments</b><br>LBH10 3 Month LIBOR +4%pa     | 10.61       | 4.59  | 5.76            | 9.14       | 4.58  | 4.36            | 7.58              | 4.67  | 2.79            | 31/05/2010     |
| <b>Macquarie</b><br>LBH14 Macquarie LIBOR +3%pa             | 17.74       | 3.59  | 13.66           | 12.37      | 3.58  | 8.49            | 4.66              | 3.66  | 0.97            | 30/09/2010     |
| <b>Newton</b><br>LBH19 FTSE World Index +2%                 | -           | -     | -               | -          | -     | -               | -                 | -     | -               | 24/01/2013     |
| <b>Premira Credit</b><br>LBH24 Premira LIBOR +4%pa          | 9.92        | 4.59  | 5.10            | -          | -     | -               | 9.36              | 4.55  | 4.60            | 30/11/2014     |
| <b>UBS</b><br>LBH04 UBS Benchmark                           | 8.99        | 5.86  | 2.95            | 9.83       | 6.59  | 3.05            | 10.10             | 8.66  | 1.32            | 31/12/1988     |
| <b>UBS Property</b><br>LBH06 UBS Property Benchmark         | 8.83        | 8.06  | 0.71            | 11.31      | 10.49 | 0.74            | 3.99              | 3.94  | 0.05            | 31/03/2006     |
| <b>Adam Street</b><br>Adam Street PE Bmark                  | 11.54       | 14.68 | -2.74           | 14.05      | 14.98 | -0.81           | 6.34              | -     | -               | 31/01/2005     |
| <b>LGT</b><br>LGT PE Bmark                                  | 21.14       | 14.68 | 5.63            | 14.89      | 14.98 | -0.08           | 10.85             | -     | -               | 31/05/2004     |
| <b>Epoch Investment P Income</b><br>LBH11001 MSCI World ND  | -           | -     | -               | -          | -     | -               | -8.41             | -5.20 | -3.38           | 08/11/2017     |
| <b>London CIV Ruffer</b><br>LBH11003 Ruffer BM Libor        | 2.87        | 0.59  | 2.27            | 4.23       | 0.59  | 3.62            | 5.48              | 0.81  | 4.63            | 28/05/2010     |

## Market Value Summary - Three Months

| Account/Group                       | 31/12/2017<br>Market Value | 31/12/2017<br>Weight | Net Contribution* | Income           | Fees         | Appreciation       | 31/03/2018<br>Market Value | 31/03/2018<br>Weight | Change in Weight |
|-------------------------------------|----------------------------|----------------------|-------------------|------------------|--------------|--------------------|----------------------------|----------------------|------------------|
| <b>London Borough of Hillingdon</b> | <b>1,008,836,599</b>       | <b>100.00</b>        | <b>31,042,738</b> | <b>4,834,001</b> | <b>8,373</b> | <b>-31,143,235</b> | <b>1,013,570,103</b>       | <b>100.00</b>        | <b>0.00</b>      |
| AEW UK                              | 53,072,998                 | 5.26                 | 0                 | 716,927          | 0            | 571,056            | 54,360,982                 | 5.36                 | 0.10             |
| JP Morgan                           | 56,529,035                 | 5.60                 | 0                 | 0                | 0            | -217,312           | 56,311,723                 | 5.56                 | -0.05            |
| Legal & General 1                   | 238,916,988                | 23.68                | -4,440            | 0                | 4,440        | -9,629,756         | 229,282,791                | 22.62                | -1.06            |
| Legal & General 2                   | 67,428,860                 | 6.68                 | -3,933            | 0                | 3,933        | -868,846           | 66,556,081                 | 6.57                 | -0.12            |
| M&G Investments                     | 15,103,419                 | 1.50                 | 2,319             | 3,219            | 0            | 254,809            | 15,363,766                 | 1.52                 | 0.02             |
| Macquarie                           | 27,071,739                 | 2.68                 | 0                 | 12               | 0            | 350,026            | 27,421,776                 | 2.71                 | 0.02             |
| Newton                              | 0                          | 0.00                 | 0                 | 0                | 0            | 0                  | 0                          | 0.00                 | 0.00             |
| Premira Credit                      | 55,632,218                 | 5.51                 | 1,300,000         | 983,645          | 0            | 201,397            | 58,117,260                 | 5.73                 | 0.22             |
| UBS                                 | 139,662,286                | 13.84                | 0                 | 1,089,631        | 0            | -7,619,054         | 133,132,863                | 13.14                | -0.71            |
| UBS Property                        | 73,960,152                 | 7.33                 | 0                 | 623,084          | 0            | 608,935            | 75,192,170                 | 7.42                 | 0.09             |
| Adam Street                         | 14,382,397                 | 1.43                 | -1,222,046        | 4,018            | 0            | 41,878             | 13,206,247                 | 1.30                 | -0.12            |
| LGT                                 | 7,594,764                  | 0.75                 | -1,317,900        | -18              | 0            | 63,215             | 6,340,061                  | 0.63                 | -0.13            |
| Cash & Other Assets                 | 13,120,894                 | 1.30                 | 32,288,738        | 28,495           | 0            | -180,621           | 45,257,507                 | 4.47                 | 3.16             |
| Epoch Investment P Income           | 140,383,728                | 13.92                | 0                 | 686,478          | 0            | -11,320,108        | 129,750,098                | 12.80                | -1.11            |
| London CIV Ruffer                   | 105,977,118                | 10.50                | 0                 | 698,473          | 0            | -3,398,816         | 103,276,776                | 10.19                | -0.32            |
| Cash & Other Assets                 | 0                          | 0.00                 | 0                 | 0                | 0            | 0                  | 0                          | 0.00                 | -0.00            |
| Transition                          | 4                          | 0.00                 | 0                 | 36               | 0            | -36                | 4                          | 0.00                 | -0.00            |

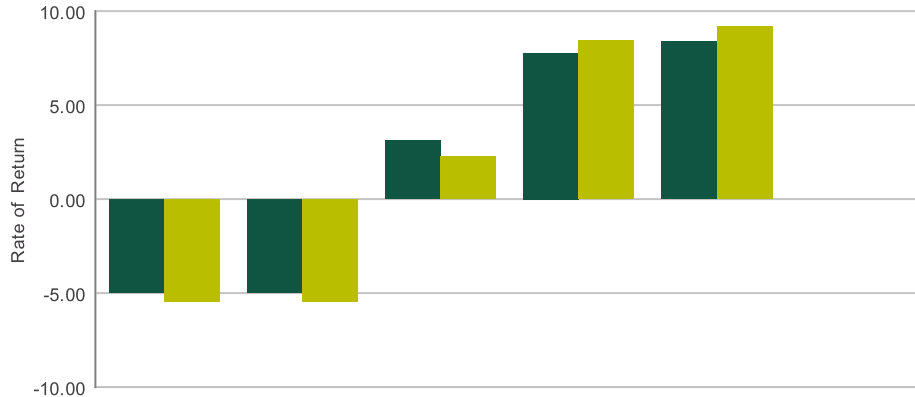
Min -1.11  3.16 Max

\*Net Contributions include Cash Contributions/Distributions, Security Deliveries/Receipts, Fees/Fee Rebates, Inter Account transfers for Consolidations & Benefits Payments.  
Copied History or Backloaded Data may not display the correct Contributions/Withdrawals creating misrepresentation.



# Historical Performance

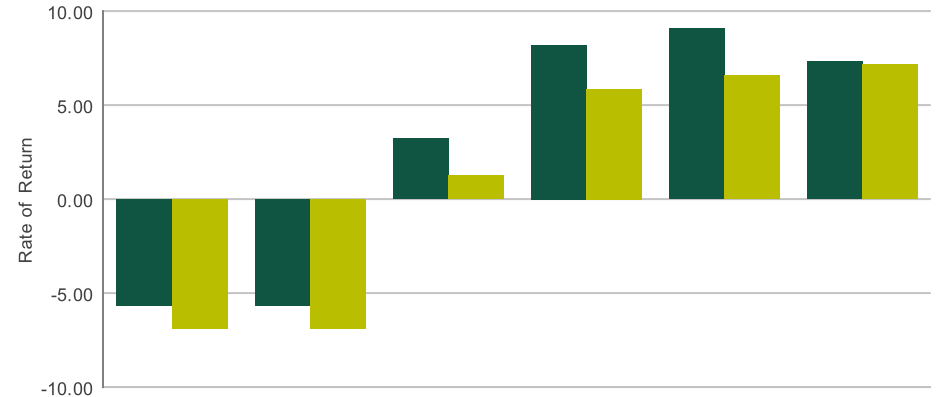
## EQUITY



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -4.95        | -4.95        | 3.11     | 7.77        | 8.38       | -   |
| Index    | -5.46        | -5.46        | 2.27     | 8.45        | 9.19       | -   |

Index: Total Equity Benchmark

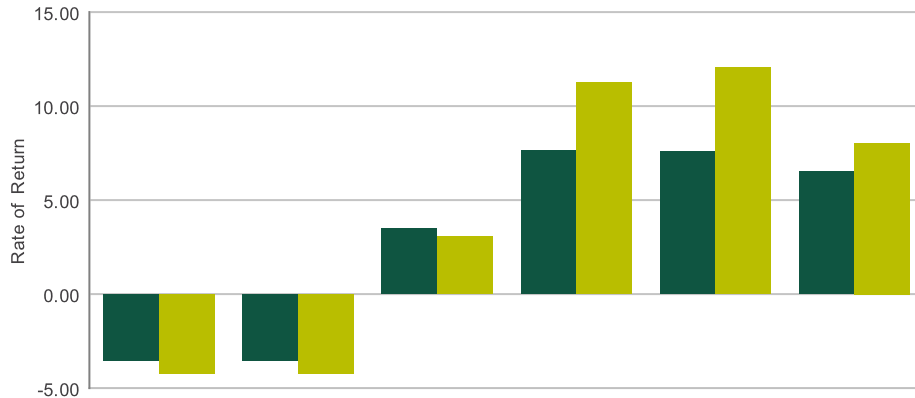
## UNITED KINGDOM



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD  |
|----------|--------------|--------------|----------|-------------|------------|------|
| Category | -5.67        | -5.67        | 3.24     | 8.20        | 9.08       | 7.32 |
| Index    | -6.87        | -6.87        | 1.25     | 5.86        | 6.59       | 7.17 |

Index: FTSE All Share UK Equity

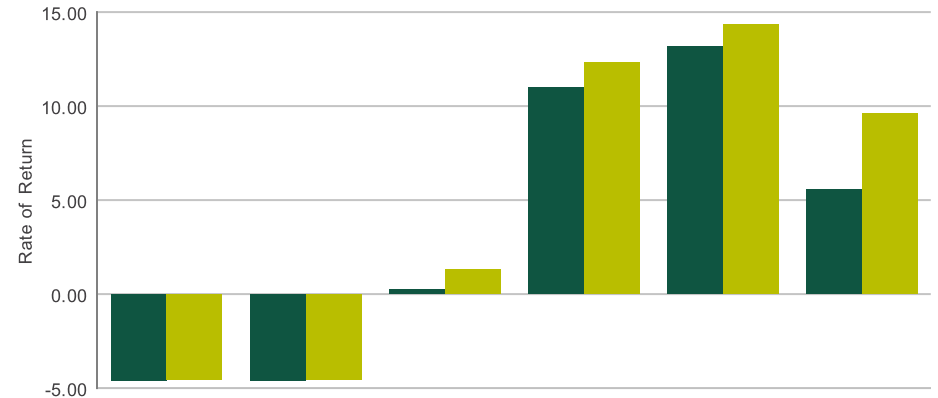
## OVERSEAS EQUITIES



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD  |
|----------|--------------|--------------|----------|-------------|------------|------|
| Category | -3.56        | -3.56        | 3.50     | 7.62        | 7.60       | 6.51 |
| Index    | -4.22        | -4.22        | 3.06     | 11.25       | 12.07      | 8.04 |

Index: Total Overseas Equity Benchmark

## NORTH AMERICA

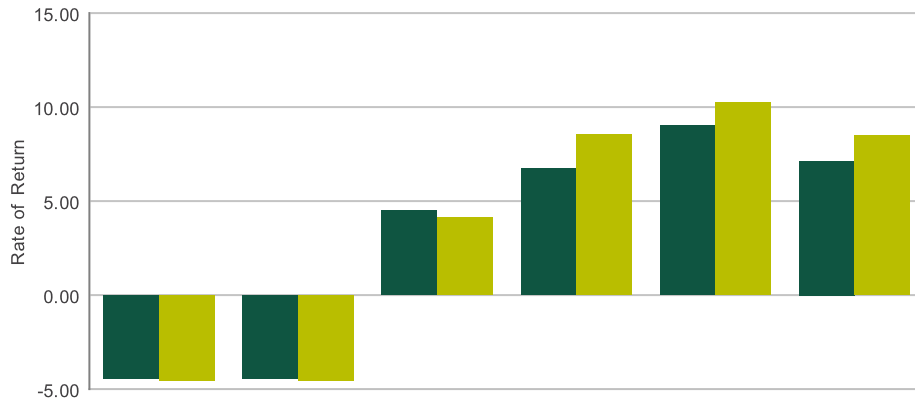


|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD  |
|----------|--------------|--------------|----------|-------------|------------|------|
| Category | -4.59        | -4.59        | 0.25     | 10.99       | 13.17      | 5.58 |
| Index    | -4.54        | -4.54        | 1.33     | 12.33       | 14.36      | 9.62 |

Index: FTSE North America

# Historical Performance

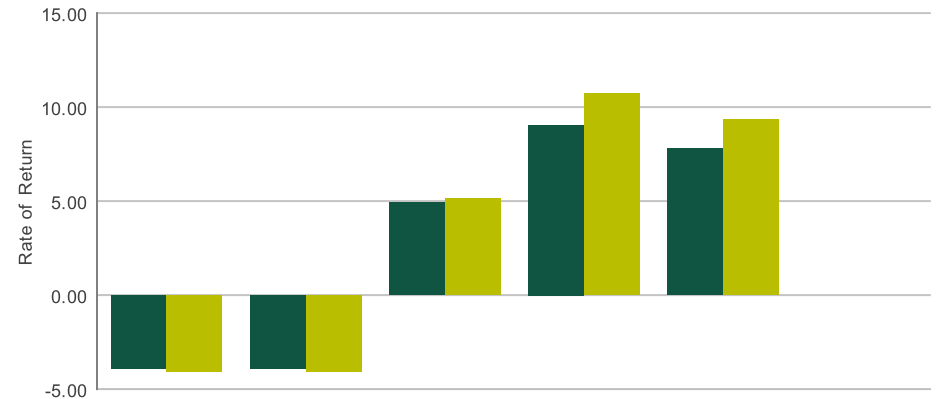
## EUROPE EX UK



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD  |
|----------|--------------|--------------|----------|-------------|------------|------|
| Category | -4.44        | -4.44        | 4.50     | 6.72        | 9.04       | 7.13 |
| Index    | -4.57        | -4.57        | 4.13     | 8.56        | 10.26      | 8.48 |

Index: FTSE AW Dev Europe ex UK

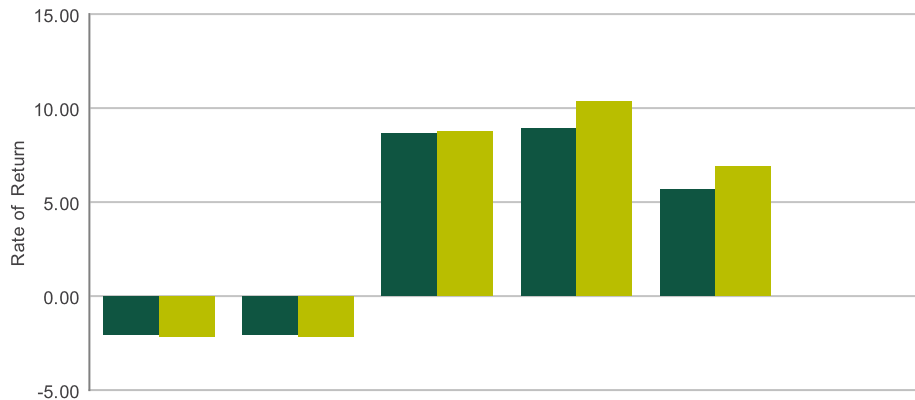
## ASIA PACIFIC INC JAPAN



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -3.93        | -3.93        | 4.93     | 9.05        | 7.79       | -   |
| Index    | -4.07        | -4.07        | 5.16     | 10.73       | 9.32       | -   |

Index: FTSE AW Dev Asia Pacific

## EMERGING MARKETS

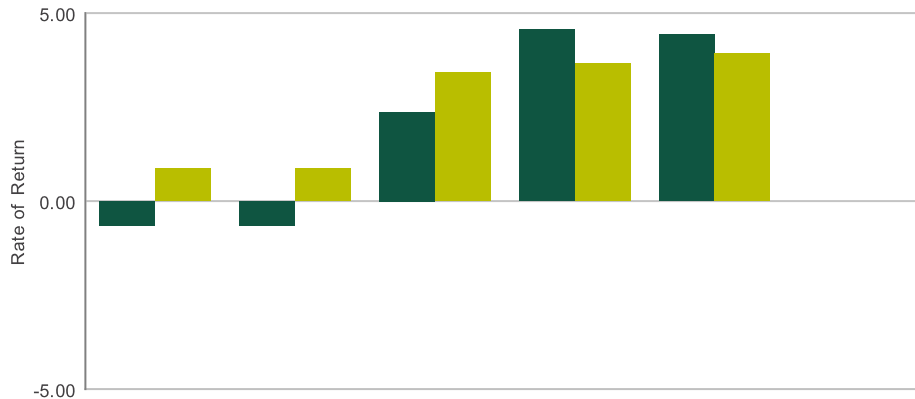


|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -2.06        | -2.06        | 8.63     | 8.93        | 5.68       | -   |
| Index    | -2.15        | -2.15        | 8.75     | 10.36       | 6.88       | -   |

Index: LBH Emerging Markets

# Historical Performance

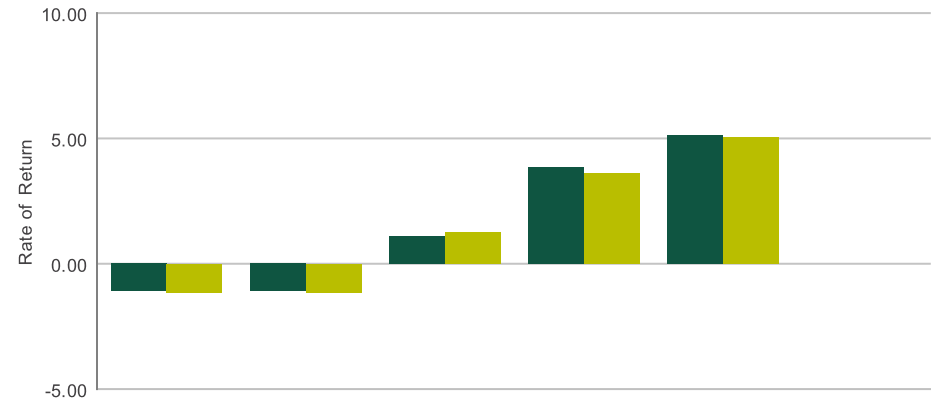
## FIXED INCOME



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -0.64        | -0.64        | 2.37     | 4.57        | 4.42       | -   |
| Index    | 0.87         | 0.87         | 3.41     | 3.65        | 3.93       | -   |

Index: LBH Fixed Income Benchmark

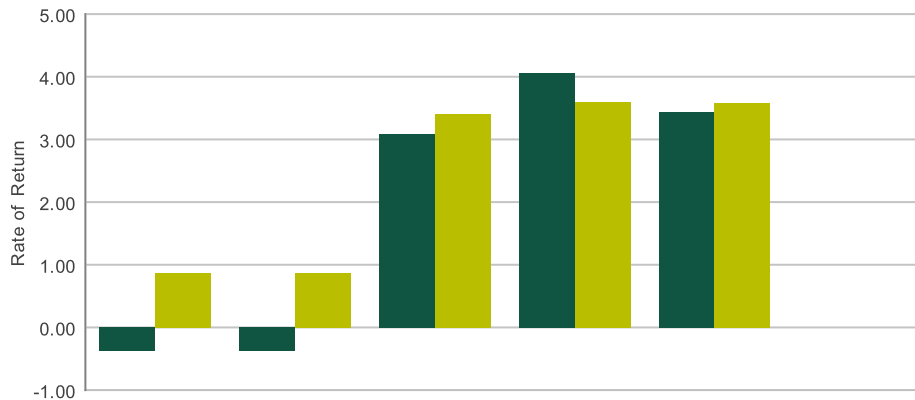
## UK CORPORATE BONDS



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -1.09        | -1.09        | 1.10     | 3.87        | 5.14       | -   |
| Index    | -1.15        | -1.15        | 1.24     | 3.63        | 5.03       | -   |

Index: LBH Non-Gilts Benchmark

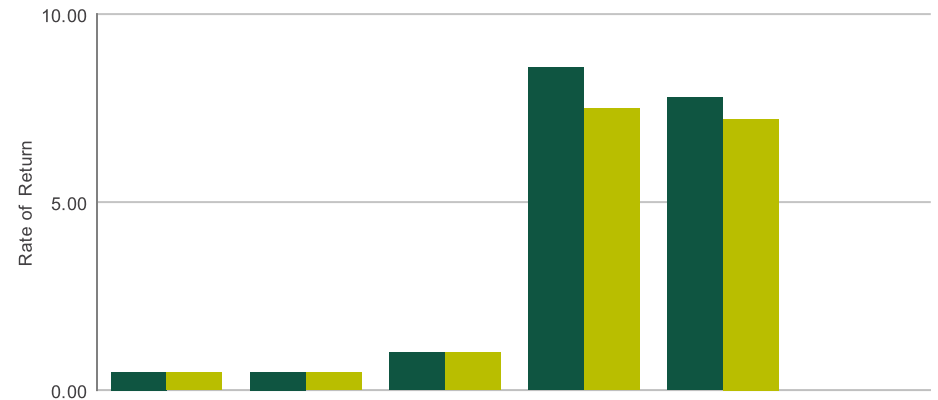
## GLOBAL CORPORATE BONDS



|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | -0.38        | -0.38        | 3.09     | 4.06        | 3.44       | -   |
| Index    | 0.87         | 0.87         | 3.41     | 3.60        | 3.58       | -   |

Index: LIBOR GBP 3 Month +3% pa

## INDEX LINKED GILTS

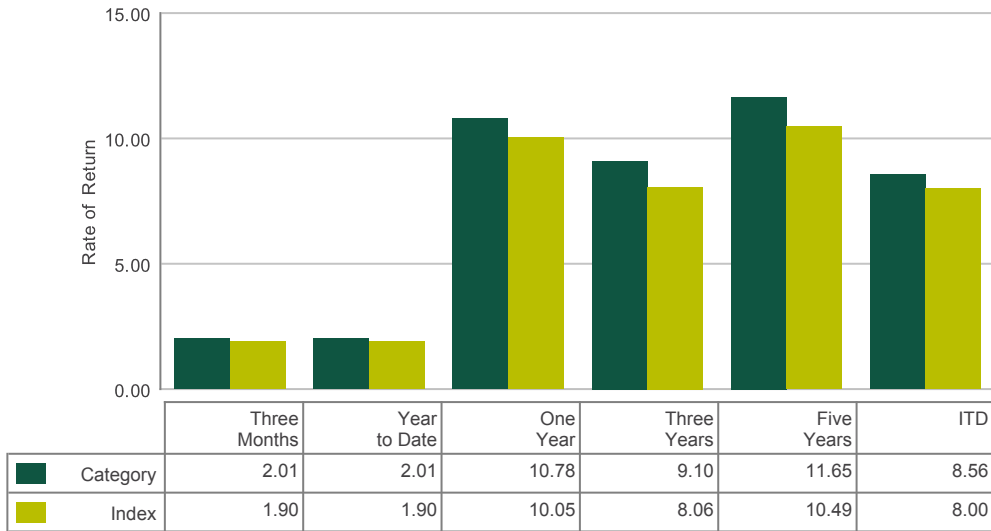


|          | Three Months | Year to Date | One Year | Three Years | Five Years | ITD |
|----------|--------------|--------------|----------|-------------|------------|-----|
| Category | 0.48         | 0.48         | 0.99     | 8.57        | 7.79       | -   |
| Index    | 0.47         | 0.47         | 0.99     | 7.48        | 7.21       | -   |

Index: LBH Index Linked Benchmark

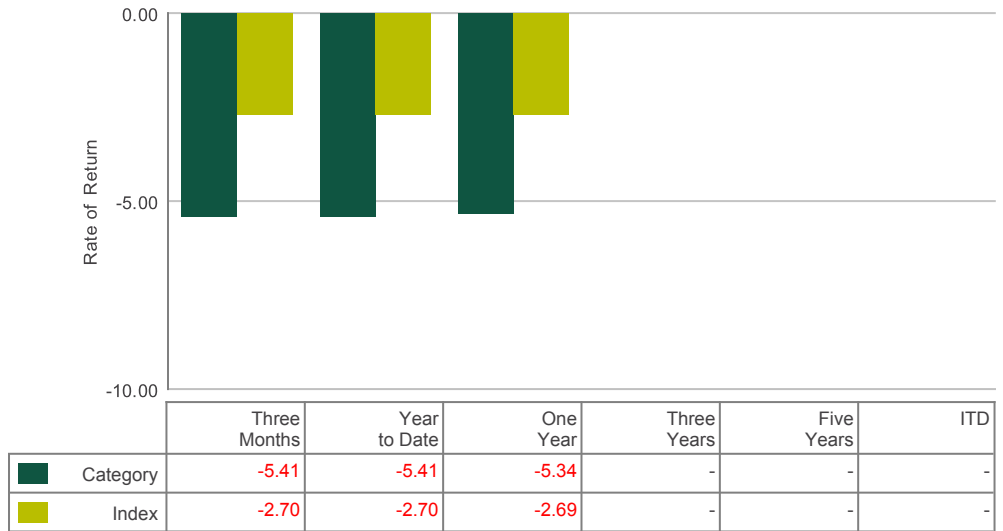
# Historical Performance

## REAL ESTATES



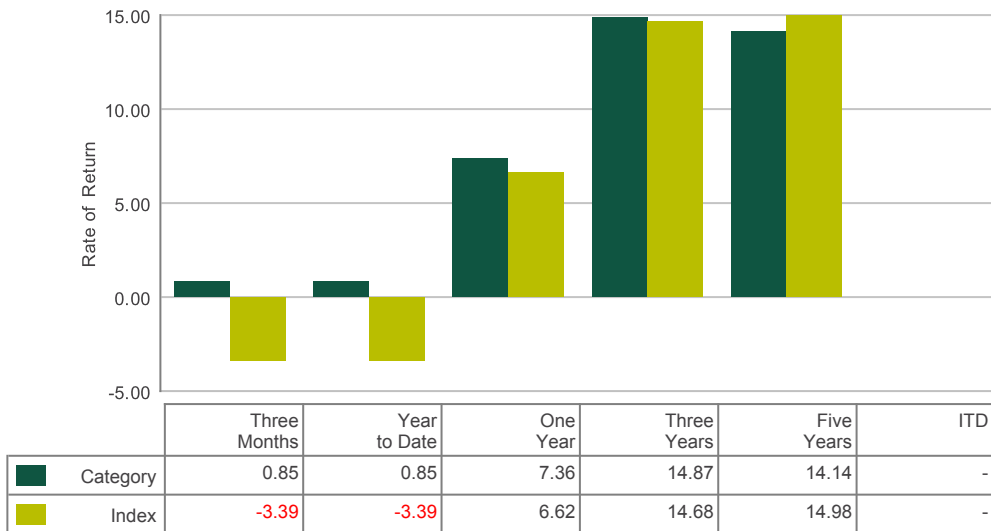
Index: IPD UK PPFI All Bal Funds Index

## BALANCED FUNDS



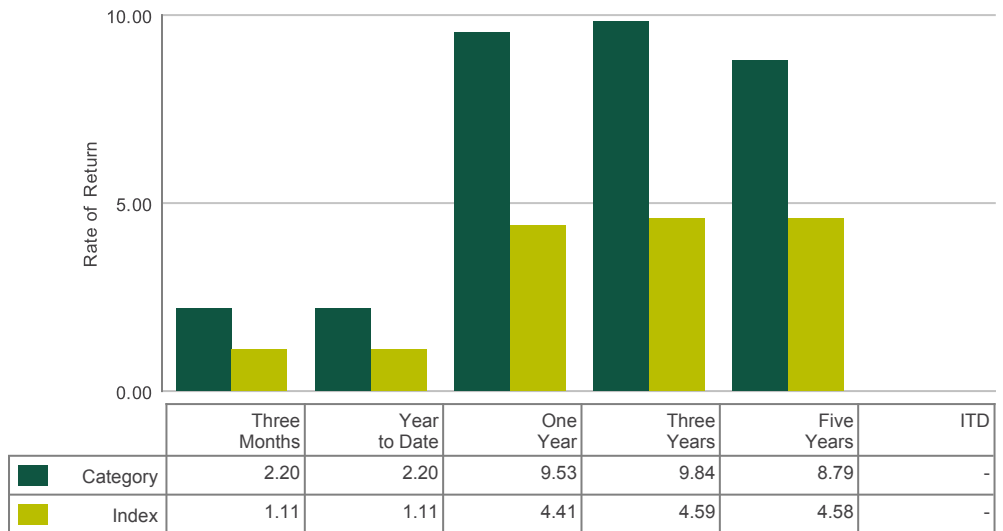
Index: Balanced Fund Benchmark

## PRIVATE EQUITY



Index: MSCI ACWI +4% pa

## PRIVATE CREDIT



Index: LIBOR GBP 3 Month +4% pa

## Benchmark Composition

...

### Total Plan Benchmark

|       |                                      |
|-------|--------------------------------------|
| 2.21  | MSCI All Countries World Index + 4%  |
| 1.42  | FT Japan                             |
| 2.45  | FT North America                     |
| 1.00  | FTSE Developed Asia Pacific ex Japan |
| 2.46  | FTSE Developed Europe ex UK          |
| 1.74  | FTSE Developed GBP Hedged            |
| 22.57 | FTSE All Share                       |
| 1.71  | FTSE Index Linked Gilts              |
| 4.81  | FTSE Index Linked Gilts 15+ Years    |
| 2.44  | FTSE Emerging Markets                |
| 12.62 | IPD UK PFI All Balanced Funds Index  |
| 7.21  | 3 Month LIBOR +4%pa                  |
| 10.67 | 3 Month LIBOR                        |
| 8.44  | 3 Month LIBOR +3%pa                  |
| 14.22 | MSCI World                           |
| 0.86  | LIBID 7 Day                          |
| 3.17  | iBoxx Sterling Non-Gilts             |

## Portfolio Benchmarks

### AEW UK

100.00 IPD UK PFI All Balanced Funds Index

### JP Morgan

7.55 3 Month LIBOR +3%pa

### Legal & General

6.00 FT Japan

10.35 FT North America

4.22 FTSE Developed Asia Pacific ex Japan

10.41 FTSE Developed Europe ex UK

38.58 FTSE All Share

20.8 FTSE Index Linked Gilts 15+ Years

3.07 FTSE Emerging Markets

6.57 iBoxx Sterling Non-Gilts

### Adam St

100.00 MSCI All Countries World Index + 4%

### LGT

100.00 MSCI All Countries World Index + 4%

### Legal & General

23.97 FTSE Index Linked Gilts 15+ Years

25.69 FTSE Emerging Markets

24.24 iBoxx Sterling Non-Gilts

26.10 FTSE Developed GBP Hedged

### London CIV Ruffer

100.00 3 Month LIBOR

### Epoch Ruffer

100.00 MSCI World Index (Net)

### M&G Investments

100.00 3 Month LIBOR +4%pa

### Macquarie

100.00 3 Month LIBOR +3%pa

### Premira Credit

100.00 3 Month LIBOR +4%pa

### UBS

100.00 FTSE All Share

### UBS Property

100.00 IPD UK PFI All Balanced Funds Index

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