

The background of the page is a close-up, slightly blurred image of a financial chart. The chart features a grid with a light blue background and a white grid. A prominent red line graph is visible, showing several peaks and troughs. The y-axis on the right side of the chart has numerical labels: 400, 420, 440, and 460. The overall image has a warm, yellowish tint.

**CLWYD PENSION FUND  
INVESTMENT STRATEGY AND  
MANAGER SUMMARY  
PERIOD ENDING 31 DECEMBER 2017**

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# 1 IMPACT ON CLWYD PENSION FUND INVESTMENT STRATEGY

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This report is produced by JLT Employee Benefits ("JLT") to assess the performance and risks of the investment managers of the Clwyd Pension Fund (the "Fund"), and of the Fund as a whole. The report does not comment on the Fund's Liability Driven Investment ("LDI") portfolio, as information in respect of this allocation is produced separately by Mercer.

## OVERALL

Over the 3 months to 31 December 2017, the Fund's total market value increased by £60.9m to £1,818,322,250.

Over the quarter, total Fund assets returned 3.9%, ahead of its target by 1.0%, attributable to strong stock selection. Total Fund (ex LDI) returned 3.3%, compared with its target of 2.1%.

Total Equities generated returns of 7.3%, followed by Best Ideas which gained 5.0%. In-House assets delivered 2.8%, whilst Managed Account Platform and Total Credit assets returned 2.2% and 0.3%, respectively.

In relative terms, total Fund assets exceeded their target, mainly due to the Best Ideas portfolio which outperformed its target by 3.5%. The portfolio made a contribution of 0.4% to total relative performance.

Equities returned 7.3% against a composite target of 6.1%, and contributed 0.2% to total relative performance.

Total Credit underperformed its target marginally, returning 0.3% against its target of 0.4%. The assets added 0.1% to relative performance, due to the underweight in the Private Credit portfolio which is not yet fully funded.

Managed Futures and Hedge Funds outperformed its target by 1.5% over the quarter, and added 0.1% to total relative performance.

In-House assets returned 2.8% over the quarter, ahead of its target by 1.1% and contributed 0.3% to total relative performance.

Insight's LDI portfolio rose by 6.0% over the quarter, due to a combination of the fall in yields and strong equity market performance. Overall, the overweight allocation to the LDI portfolio added 0.1% to relative performance.

## EQUITIES

Global equity markets ended the year on a high, as positive returns (in Sterling terms) were observed in all major regions over the quarter. Over 2017, all major regions posted double-digit performance figures.

Japanese equities led performance (in Sterling terms), largely driven by resilient economic data market. Additionally, stocks in the region rallied following the re-election of Shinzo Abe's government in the snap election held in October. US equities performed well, after Congress gathered enough votes to pass the tax reforms, boosting the country's financial stocks and tech giants with large overseas cash holdings. Within the UK, strong performance in December boosted returns and contributed to UK equities finishing the year at record levels. After strong performance in the first three quarters of the year, European equities lagged in the final quarter, as the region suffered from political uncertainty in Germany and Spain.

In Developed markets, Japan provided the strongest returns, increasing by 7.9%, followed by Asia Pacific (ex Japan) which returned 7.5%. The US and UK posted returns of 5.7% and 5.0%, respectively. In a reversal of last quarter's performance, Europe delivered the lowest return of the Developed markets, returning 0.5%.

Over the last 12 months, all developed regions posted positive returns, led by Asia Pacific (ex Japan) which posted gains of 23.4%. US equities generated the lowest return over the same period, but still increased by 11.5%.

Emerging Markets and Frontier Markets both rose by 6.6% and 4.8% respectively over the quarter, both markets also saw a strong annual return of 25.8% and 20.9%, respectively.

Total Equity assets returned 7.3%, ahead of the composite target by 1.2%. All funds in the strategy increased; Investec Global Strategic Equity returned 6.2% against its target of 6.7% whilst the Wellington Emerging Markets (Core) and Emerging Markets (Local) funds delivered returns of 6.4% and 8.7%. The Wellington Emerging Markets (Local) Fund was the only fund to outperform its 3 month target and is the only fund to have met its 3 year target.

Global equity exposures to Consumer Staples, Healthcare and IT sectors were the main contributors to returns, due to strong stock selection. Within Consumer Staples, Chinese spirits manufacturer Kweichow Moutai advanced, following continuing strong sales as well as the company's first price increase in five years. However, the holding in Unilever detracted as the market was disappointed by the level of sales volumes and growth.

In Emerging Markets, exposures to China and Taiwan contributed to the majority of gain due to positive stock selection, although this was offset to some extent by exposures to South Korea and India. Manager stock selection added the most within the Consumer Discretionary and Financials sectors, but this was partially offset by detractors within Telecommunications and Real Estate.

## CREDIT

Global credit markets advanced in the last quarter of 2017, driven by lower yields and tightening credit spreads on the back of strong global economic data, positive earnings trends and continued demands for yield-producing assets. The yield curve flattened across major government bond markets as participants began to readjust their expectations of inflation and future monetary policy.

The Bank of England's Monetary Policy Committee (MPC) voted to increase interest rates by 0.25% in November 2017 and the US Federal Reserve (Fed) also increased interest rates by the same amount in December, the third rate hike of the year. The Fed has indicated that three further hikes may take place in 2018.

Fixed interest and index-linked government bonds in the UK saw strong demand from investors over the quarter, as gilt issues by the Debt Management Office (DMO) were oversubscribed.

Over the quarter, Long Dated Fixed Interest Gilts, Long Dated Index-Linked Gilts and Long Dated UK Corporate Bonds produced returns of 3.6%, 3.9% and 2.9% respectively, as yields declined. Emerging Market Debt and Global High Yield posted returns of -1.5% and -0.1%, respectively. Global bonds were flat over the quarter.

Total Credit, which includes an allocation to Private Credit, returned 0.3% over the quarter, behind its target by 0.1%, and added 0.1% to total relative return.

Performance over the quarter was driven by asset allocation and stock selection. In addition, credit beta and duration also added to returns in the case of the Multi-Asset Credit Portfolio.

Within US High Yield, lower quality credits outperformed in December as investors added risk in anticipation of high demand and low supply in January. Meanwhile, European High Yield performance over the same period was flat, due to high interest rates and muted risk appetite amongst investors. Overall, Publishing and Printing, Utilities and Food & Drug Retailers were the best performing sectors. Within Emerging Market Debt, overweight exposure to Argentina, Iraq and the Gabonese Republic were the top contributors to performance. Oil producing countries such as Ecuador, Angola, and Nigeria also generated strong performance as oil prices rose.

## HEDGE FUNDS

Hedge Funds (in Sterling terms) returned 1.8% over the quarter. Emerging Markets was the key driver, returning 3.1% followed by Equity Hedge which posted gains of 2.6%. Global Macro (1.5%), Event Driven (1.2%) and Relative Value (0.4%) also generated positive returns.

Over the last 12 months, hedge fund performance in US dollar terms was 8.7%, driven by the acceleration of the US economy, performance of global equities and improvement of investor tolerance. However, the depreciation of the US dollar against Sterling over the same period led to a decline of -0.8% in Sterling terms.

ManFRM's Managed Futures & Hedge Funds strategy posted positive return of 2.4%, outperforming its target by 1.5% and contributing 0.1% to total relative performance.

ManFRM Hedge Funds (Legacy) portfolio which consists of Duet (S.A.R.E.), Liongate and Pioneer (until August 2016) assets generated a negative return of -0.3%.

## TACTICAL ALLOCATION PORTFOLIO

### *DIVERSIFIED GROWTH*

Total Diversified Growth assets returned 1.1% over the quarter, underperforming the target by 1.0%. Overall, this detracted -0.1% from total relative performance.

Pyrford returned 0.5% compared to a target of 2.2%. Performance was largely driven by equities, with currency also contributing positively, albeit to a lesser extent. UK and overseas equity stock selection benefited the strategy as stocks such as Vodafone, British American Tobacco and BP performed notably well. Overseas bond holdings were the major detractors of performance, as bond yields across the globe rose.

Investec generated a return of 1.6% compared to a target of 1.9%. Performance was primarily driven by 'Growth' strategies, due to a broad-based risk-on sentiment across global markets, as well as positive stock selection. 'Defensive' strategies were the primary detractor, as currency and Sterling currency hedging positions detracted. 'Uncorrelated' strategies added positively, as the infrastructure basket was backed by strong market performance.

### *BEST IDEAS PORTFOLIO*

The Best Ideas Portfolio returned 5.0%, above its target by 3.5%. Overall, this contributed 0.4% to the total Fund relative performance. Over the last 12 months, the Best Ideas Portfolio has delivered a return of 10.7% and outperformed its target of UK CPI +3.0% p.a. by 4.6%.

Over the quarter, positive returns were generated by all funds within the Best Ideas Portfolio. In particular, Investec Global Natural Resources returned 11.7%, as commodity prices, notably oil, rose strongly. Demand for most commodities was supported by increasing optimism about the global economy, and the modest weakness in the US Dollar also helped. On a relative basis, Investec's exposure to base metals and bulks was the main contributor.

F&C's UK Equity-Linked Gilt Fund (7.1%), BlackRock's Emerging Market Equities Fund (7.0%) and LGIM's North American Equities (Hedged) Fund (6.1%) all comfortably outperformed the CPI +3.0% target of 1.5% over the quarter.

Despite the positive returns generated by the BlackRock European Equities Fund (0.9%) and Investec Emerging Markets Debt Fund (0.2%), both funds underperformed their targets by -0.6% and -1.3%, respectively. However, both funds made neutral contributions to relative performance.

During the quarter, £7.0m was disinvested from the BlackRock Emerging Markets Equities with the proceeds being reinvested into the BlackRock European Equities (Hedged) Fund.

Additionally, the position in the Investec Global Natural Resources Fund was reduced by £5.0m, with the proceeds split equally and used to increase exposure to the LGIM Infrastructure Equities Fund and LGIM Global Real Estate Equities Fund.

## IN-HOUSE ASSETS

Total In-House assets returned 2.8%, ahead of its composite target by 1.1%. Overall this added 0.2% to total relative performance. The two sub-sections of the In-House assets; the Real Assets Portfolio and the Private Markets Portfolio returned 1.1% and 4.4% respectively.

Opportunistic assets were the strongest sector of the portfolio, returning 6.6% and outperforming its target by 5.3%.

Private Equity assets, which are overweight the strategic allocation, returned 4.1% and outperformed its target by 2.8%.

Infrastructure assets returned 3.1% and outperformed its target by 1.8%. This added 0.1% to relative performance.

Property assets, which are overweight the strategic allocation by 2.4%, gained 2.5% against its target of 3.4%.

Timber/Agriculture declined by -7.1% and underperformed its target by 8.4%. This detracted -0.2% from relative performance.

# 2 STRATEGIC ASSET ALLOCATION

## 31 DECEMBER 2017

### Allocation by underlying asset class

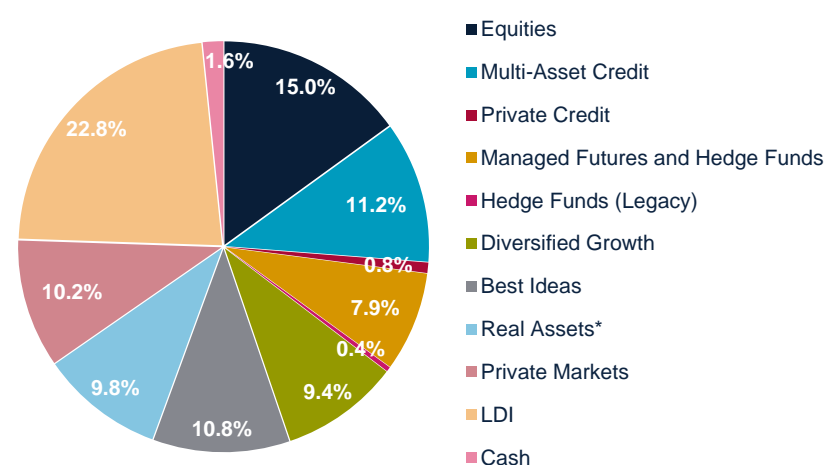
| Asset Class                           | Market Value<br>£    | Weight<br>%  | Strategic Allocation<br>% | Relative<br>% | Strategic Range<br>% |
|---------------------------------------|----------------------|--------------|---------------------------|---------------|----------------------|
| Global Equities                       | 148,838,852          | 8.2          | 8.0                       | +0.2          | 5.0 – 10.0           |
| Emerging Market Equities              | 124,198,139          | 6.8          | 6.0                       | +0.8          | 5.0 – 7.5            |
| Multi-Asset Credit                    | 203,874,549          | 11.2         | 12.0                      | -0.8          | 10.0 – 15.0          |
| Private Credit <sup>^</sup>           | 15,044,341           | 0.8          | 3.0                       | -2.2          | 2.0 – 5.0            |
| Managed Futures and Hedge Funds       | 144,288,857          | 7.9          | 9.0                       | -1.1          | 7.0 – 11.0           |
| Hedge Funds (Legacy)*                 | 6,644,847            | 0.4          | 0.0                       | +0.4          | –                    |
| Diversified Growth                    | 170,973,263          | 9.4          | 10.0                      | -0.6          | 8.0 – 12.0           |
| Best Ideas                            | 196,857,327          | 10.8         | 11.0                      | -0.2          | 9.0 – 13.0           |
| Property                              | 115,961,906          | 6.4          | 4.0                       | +2.4          | 2.0 – 6.0            |
| Infrastructure / Timber / Agriculture | 61,799,512           | 3.4          | 8.0                       | -4.6          | 5.0 – 10.0           |
| Private Equity / Opportunistic        | 184,861,140          | 10.2         | 10.0                      | +0.2          | 8.0 – 12.0           |
| LDI & Synthetic Equities              | 415,364,834          | 22.8         | 19.0                      | +3.8          | 10.0 – 30.0          |
| Cash                                  | 29,614,683           | 1.6          | 0.0                       | +1.6          | 0.0 – 5.0            |
| <b>TOTAL CLWYD PENSION FUND</b>       | <b>1,818,322,250</b> | <b>100.0</b> | <b>100.0</b>              | <b>0.0</b>    |                      |

Notes: \* Hedge Funds (Legacy) include the S.A.R.E (Duet) and Liongate portfolios. ^ The Private Credit allocation is not yet fully funded. Totals may not sum due to rounding.

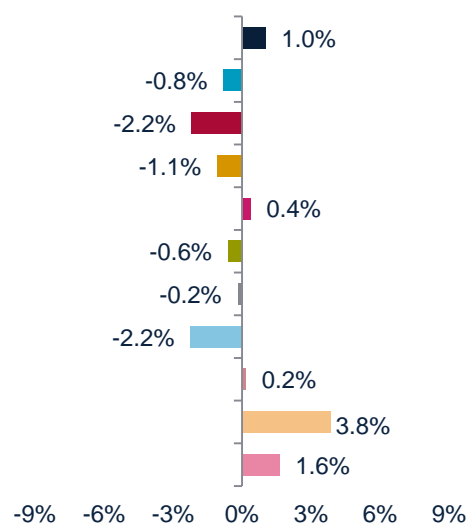
### Points to note

- Asset allocation reflects the strategy to be implemented as part of the 2016 Investment Strategy Review; as such a number of asset classes will be underweight for an interim period until the portfolio is fully constructed.
- Total allocation to LDI increased by 0.5% over the quarter and is 3.8% overweight relative to its strategic allocation.

### Strategic Asset Allocation as at 31 December 2017



### Deviation from Strategic Allocation



Note: Totals may not sum due to rounding.

\* In-House Property, Infrastructure and Timber/Agriculture portfolios.

# 3 VALUATION AND ASSET ALLOCATION AS AT 31 DECEMBER 2017

| Manager                              | Fund                                 | Market Value<br>£    | Weight<br>%  | Strategic<br>Allocation % | Strategic Range<br>%           |
|--------------------------------------|--------------------------------------|----------------------|--------------|---------------------------|--------------------------------|
| Investec                             | Global Strategic Equity              | 78,418,852           | 4.3          | 4.0                       | 5.0 – 10.0                     |
| BlackRock                            | World Multifactor Equity Tracker     | 70,420,000           | 3.9          | 4.0                       |                                |
| Wellington                           | Emerging Markets (Core)#             | 58,885,510           | 3.2          | 3.0                       | 5.0 – 7.5                      |
| Wellington                           | Emerging Markets (Local)#            | 65,312,628           | 3.6          | 3.0                       |                                |
| <b>Total Equity</b>                  |                                      | <b>273,036,991</b>   | <b>15.0</b>  | <b>14.0</b>               |                                |
| Stone Harbor                         | LIBOR Multi-Strategy                 | 131,816,226          | 7.2          | 12.0                      | 10.0 – 15.0                    |
| Stone Harbor                         | Multi-Asset Credit                   | 72,058,323           | 4.0          |                           |                                |
| <b>Multi-Asset Credit Portfolio</b>  |                                      | <b>203,874,549</b>   | <b>11.2</b>  | <b>12.0</b>               | <b>10.0 – 15.0</b>             |
| Permira                              | Credit Solutions III                 | 15,044,341           | 0.8          | 3.0                       | 2.0 – 5.0                      |
| <b>Private Credit Portfolio</b>      |                                      | <b>15,044,341</b>    | <b>0.8</b>   | <b>3.0</b>                | <b>2.0 – 5.0<sup>(1)</sup></b> |
| <b>Total Credit</b>                  |                                      | <b>218,918,890</b>   | <b>12.0</b>  | <b>15.0</b>               | <b>10.0 – 20.0</b>             |
| ManFRM                               | Managed Futures & Hedge Funds        | 144,288,857          | 7.9          | 9.0                       | 7.0 – 11.0                     |
| ManFRM                               | Hedge Funds (Legacy)*                | 6,644,847            | 0.4          | 0.0                       | –                              |
| <b>Managed Account Platform</b>      |                                      | <b>150,933,704</b>   | <b>8.3</b>   | <b>9.0</b>                | <b>7.0 – 11.0</b>              |
| Pyrford                              | Global Total Return                  | 82,417,145           | 4.5          | 5.0                       | 8.0 – 12.0                     |
| Investec                             | Diversified Growth                   | 88,556,119           | 4.9          | 5.0                       |                                |
| <b>Diversified Growth Portfolio</b>  |                                      | <b>170,973,263</b>   | <b>9.4</b>   | <b>10.0</b>               | <b>8.0 – 12.0</b>              |
| F&C                                  | UK Equity-Linked Gilts               | 11,414,809           | 0.6          | 11.0                      | 9.0 – 13.0                     |
| LGIM                                 | North American Equities (Hedged)     | 30,546,673           | 1.7          |                           |                                |
| BlackRock                            | US Opportunities                     | 18,609,440           | 1.0          |                           |                                |
| BlackRock                            | European Equities (Hedged)           | 20,245,558           | 1.1          |                           |                                |
| BlackRock                            | Emerging Markets Equities            | 47,495,844           | 2.6          |                           |                                |
| Investec                             | Global Natural Resources             | 20,520,830           | 1.1          |                           |                                |
| LGIM                                 | Infrastructure Equities MFG (Hedged) | 14,659,820           | 0.8          |                           |                                |
| LGIM                                 | Global Real Estate Equities          | 14,512,517           | 0.8          |                           |                                |
| Investec                             | Emerging Markets Local Debt          | 18,851,836           | 1.0          |                           |                                |
| <b>Best Ideas Portfolio</b>          |                                      | <b>196,857,327</b>   | <b>10.8</b>  |                           |                                |
| <b>Tactical Allocation Portfolio</b> |                                      | <b>367,830,590</b>   | <b>20.2</b>  | <b>21.0</b>               | <b>15.0 – 25.0</b>             |
| In-House                             | Property                             | 115,961,906          | 6.4          | 4.0                       | 2.0 – 6.0                      |
| In-House                             | Infrastructure                       | 36,769,637           | 2.0          | 8.0                       | 5.0 – 10.0                     |
| In-House                             | Timber / Agriculture                 | 25,029,875           | 1.4          |                           |                                |
| <b>Real Assets Portfolio</b>         |                                      | <b>177,761,418</b>   | <b>9.8</b>   | <b>12.0</b>               | <b>10.0 – 15.0</b>             |
| In-House                             | Private Equity                       | 158,127,299          | 8.7          | 10.0                      | 8.0 – 12.0                     |
| In-House                             | Opportunistic                        | 26,733,841           | 1.5          |                           |                                |
| <b>Private Markets Portfolio</b>     |                                      | <b>184,861,140</b>   | <b>10.2</b>  | <b>10.0</b>               | <b>8.0 – 12.0</b>              |
| <b>Total In-House Assets</b>         |                                      | <b>362,622,558</b>   | <b>19.9</b>  | <b>22.0</b>               |                                |
| Insight                              | LDI Portfolio                        | 415,364,834          | 22.8         | 19.0                      | 10.0 – 30.0                    |
| <b>Total Liability Hedging</b>       |                                      | <b>415,364,834</b>   | <b>22.8</b>  | <b>19.0</b>               | <b>10.0 – 30.0</b>             |
| Trustees                             | Cash                                 | 29,614,683           | 1.6          | -                         | 0.0 – 5.0                      |
| <b>TOTAL CLWYD PENSION FUND</b>      |                                      | <b>1,818,322,250</b> | <b>100.0</b> | <b>100.0</b>              |                                |

Notes: \* ManFRM Hedge Funds (Legacy) valuation includes S.A.R.E (Duet) and Liongate portfolio and is provided by ManFRM.

# Wellington Emerging Markets Core and Local valuations have been converted from US Dollar to Sterling using the WM/Reuters closing price exchange rates for the respective dates. <sup>1</sup>The Private Credit allocation is not yet fully funded.



# 4 PERFORMANCE SUMMARY

## PERIODS ENDING 31 DECEMBER 2017

| Manager                              | Fund                                  | 3 months %  |            | 12 months % |             | 3 years % p.a. |             | 3 Yr Performance vs Objective |
|--------------------------------------|---------------------------------------|-------------|------------|-------------|-------------|----------------|-------------|-------------------------------|
|                                      |                                       | Fund        | Target     | Fund        | Target      | Fund           | Target      |                               |
| ● Investec                           | Global Strategic Equity               | 6.2         | 6.7        | 18.6        | 16.5        | 15.7           | 17.6        | Target not met                |
| ● Wellington                         | Emerging Markets (Core) <sup>#</sup>  | 6.4         | 6.9        | 25.8        | 27.0        | 15.3           | 15.9        | Target not met                |
| ● Wellington                         | Emerging Markets (Local) <sup>#</sup> | 8.7         | 7.1        | 33.5        | 28.2        | 17.1           | 17.1        | Target met                    |
| <b>Total Equity</b>                  |                                       | <b>7.3</b>  | <b>6.1</b> | <b>23.6</b> | <b>21.1</b> | <b>15.6</b>    | <b>16.7</b> |                               |
| ● Stone Harbor                       | LIBOR Multi-Strategy                  | 0.4         | 0.3        | 3.4         | 1.3         | 2.4            | 1.4         | Target met                    |
| n/a Stone Harbor                     | Multi-Asset Credit                    | 0.4         | 0.3        | n/a         | n/a         | n/a            | n/a         | n/a                           |
| <b>Multi-Asset Credit Portfolio</b>  |                                       | <b>0.4</b>  | <b>0.3</b> | <b>3.9</b>  | <b>1.3</b>  | <b>2.7</b>     | <b>1.4</b>  |                               |
| n/a Permira                          | Credit Solutions III                  | -1.6        | 1.5        | n/a         | n/a         | n/a            | n/a         | n/a                           |
| <b>Private Credit Portfolio</b>      |                                       | <b>-1.6</b> | <b>1.5</b> | <b>n/a</b>  | <b>n/a</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| <b>Total Credit</b>                  |                                       | <b>0.3</b>  | <b>0.4</b> | <b>n/a</b>  | <b>n/a</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| n/a ManFRM                           | Managed Futures & Hedge Funds         | 2.4         | 0.9        | 4.5         | 3.8         | n/a            | n/a         | n/a                           |
| n/a ManFRM                           | Hedge Funds (Legacy) <sup>*</sup>     | -0.3        | 0.9        | -31.0       | 3.8         | -11.1          | 4.8         | n/a                           |
| <b>Managed Account Platform</b>      |                                       | <b>2.2</b>  | <b>0.9</b> | <b>2.1</b>  | <b>3.8</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| ● Pyrford                            | Global Total Return                   | 0.5         | 2.2        | 1.4         | 9.0         | 3.9            | 7.5         | Target not met                |
| n/a Investec                         | Diversified Growth                    | 1.6         | 1.9        | 9.2         | 7.9         | n/a            | n/a         | n/a                           |
| <b>Total Diversified Growth</b>      |                                       | <b>1.1</b>  | <b>2.1</b> | <b>5.3</b>  | <b>8.5</b>  | <b>3.9</b>     | <b>7.1</b>  |                               |
| <b>Best Ideas Portfolio</b>          |                                       | <b>5.0</b>  | <b>1.5</b> | <b>10.7</b> | <b>6.1</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| <b>Tactical Allocation Portfolio</b> |                                       | <b>3.2</b>  | <b>1.5</b> | <b>8.1</b>  | <b>6.2</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| ● In-House                           | Property                              | 2.5         | 3.4        | 6.7         | 11.2        | 8.7            | 9.1         | Target not met                |
| ● In-House                           | Infrastructure                        | 3.1         | 1.3        | 6.7         | 5.3         | 20.1           | 5.5         | Target met                    |
| ● In-House                           | Timber / Agriculture                  | -7.1        | 1.3        | -7.2        | 5.3         | 4.9            | 5.5         | Target not met                |
| <b>Real Assets</b>                   |                                       | <b>1.1</b>  | <b>2.0</b> | <b>4.4</b>  | <b>7.2</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| ● In-House                           | Private Equity                        | 4.1         | 1.3        | 11.6        | 5.3         | 14.0           | 5.5         | Target met                    |
| ● In-House                           | Opportunistic                         | 6.6         | 1.3        | 5.7         | 5.3         | -7.8           | 5.5         | Target not met                |
| <b>Private Markets Portfolio</b>     |                                       | <b>4.4</b>  | <b>1.3</b> | <b>10.9</b> | <b>5.3</b>  | <b>n/a</b>     | <b>n/a</b>  |                               |
| <b>Total In-House Assets</b>         |                                       | <b>2.8</b>  | <b>1.7</b> | <b>7.6</b>  | <b>6.4</b>  | <b>10.8</b>    | <b>6.4</b>  |                               |
| n/a Insight                          | LDI Portfolio                         | 6.0         | 6.0        | 11.5        | 11.5        | 17.9           | 17.9        | n/a                           |
| <b>Total (ex LDI)</b>                |                                       | <b>3.3</b>  | <b>2.1</b> | <b>9.4</b>  | <b>7.8</b>  | <b>7.5</b>     | <b>7.0</b>  |                               |
| <b>TOTAL CLWYD PENSION FUND</b>      |                                       | <b>3.9</b>  | <b>2.9</b> | <b>9.9</b>  | <b>8.4</b>  | <b>10.0</b>    | <b>8.9</b>  |                               |
| <b>Strategic Target (CPI +4.1%)</b>  |                                       | <b>1.6</b>  |            | <b>6.2</b>  |             | <b>6.2</b>     |             |                               |
| <b>Actuarial Target (CPI +2.0%)</b>  |                                       | <b>1.0</b>  |            | <b>4.1</b>  |             | <b>4.1</b>     |             |                               |

Notes: \* 'n/a' against the objective is for funds that have been in place for less than three years.

<sup>\*</sup> ManFRM Hedge Funds (Legacy) currently includes the Duet (S.A.R.E) and Liogate portfolios.

<sup>#</sup> Wellington Emerging Markets Core and Wellington Emerging Markets Local data has been converted from US Dollar to Sterling using the WM/Reuters closing price exchange rates for the respective dates.

Strategic and Actuarial targets derived from the latest JLT Market Forecast Group assumptions (Q4 2017 forecasts based on conditions at 30 September 2017). Current long term 10 year CPI assumption is 2.1% p.a.

● Fund has met or exceeded its performance target    ● Fund has underperformed its performance target

# 5 STRATEGIC ASSET CLASSES

## PERFORMANCE TO 31 DEC 2017

| Strategy                            | 3 months<br>% | 12 months<br>% | 3 years<br>% p.a. |
|-------------------------------------|---------------|----------------|-------------------|
| <b>Total Equities</b>               | <b>7.3</b>    | <b>23.6</b>    | <b>15.6</b>       |
| Composite Objective                 | 6.1           | 21.1           | 16.7              |
| Composite Benchmark                 | 5.7           | 18.7           | 14.4              |
| <b>Multi-Asset Credit Portfolio</b> | <b>0.4</b>    | <b>3.9</b>     | <b>2.7</b>        |
| Objective                           | 0.3           | 1.3            | 1.4               |
| Benchmark                           | 0.1           | 0.3            | 0.4               |
| <b>Managed Account Platform</b>     | <b>2.2</b>    | <b>2.1</b>     | <b>n/a</b>        |
| Objective                           | 0.9           | 3.8            | n/a               |
| Benchmark                           | 0.9           | 3.8            | n/a               |
| <b>Total Hedge Funds (Legacy)</b>   | <b>-0.3</b>   | <b>-31.0</b>   | <b>-11.1</b>      |
| Composite Objective                 | 0.9           | 3.8            | 4.8               |
| Composite Benchmark                 | 0.9           | 3.8            | 4.8               |
| <b>Total Diversified Growth</b>     | <b>1.1</b>    | <b>5.3</b>     | <b>3.9</b>        |
| Composite Objective                 | 2.1           | 8.5            | 7.1               |
| Composite Benchmark                 | 2.1           | 8.5            | 7.1               |
| <b>Best Ideas Portfolio</b>         | <b>5.0</b>    | <b>10.7</b>    | <b>n/a</b>        |
| Objective                           | 1.5           | 6.1            | n/a               |
| Benchmark                           | 1.5           | 6.1            | n/a               |
| <b>Total In-House Assets</b>        | <b>2.8</b>    | <b>7.6</b>     | <b>10.8</b>       |
| Composite Objective                 | 1.7           | 6.4            | 6.4               |
| Composite Benchmark                 | 1.7           | 6.4            | 6.4               |
| <b>Total LDI Portfolio</b>          | <b>6.0</b>    | <b>11.5</b>    | <b>17.9</b>       |
| Composite Objective                 | 6.0           | 11.5           | 17.9              |
| Composite Benchmark                 | 6.0           | 11.5           | 17.9              |
| <b>Total (ex LDI)</b>               | <b>3.3</b>    | <b>9.4</b>     | <b>7.5</b>        |
| <b>Composite Objective</b>          | <b>2.1</b>    | <b>7.7</b>     | <b>7.0</b>        |
| <b>Composite Benchmark</b>          | <b>2.0</b>    | <b>7.2</b>     | <b>6.4</b>        |
| <b>Total Clwyd Pension Fund</b>     | <b>3.9</b>    | <b>9.9</b>     | <b>10.0</b>       |
| <b>Composite Objective</b>          | <b>2.9</b>    | <b>8.4</b>     | <b>8.9</b>        |
| <b>Composite Benchmark</b>          | <b>2.8</b>    | <b>7.9</b>     | <b>8.4</b>        |

Source: Performance is calculated by JLT Employee Benefits based on data provided by the managers and is only shown for complete periods of investment.

Note: Objective performance includes the funds' outperformance targets above the relevant underlying benchmarks, as shown in the Appendix. Benchmark performance is based on the underlying benchmarks without the explicit outperformance targets for the relevant funds within the Equity and Multi-Asset Credit portfolios.

# 6 SUMMARY OF MANDATES

| Manager                              | Fund                             | Strategic Asset Class     | Performance Objective (Net of Fees)                 | Strategic Allocation       |
|--------------------------------------|----------------------------------|---------------------------|---|----------------------------|
| Investec                             | Global Strategic Equity          | Global Developed Equities | MSCI AC World NDR Index +2.5% p.a.                  | 4.0%                       |
| BlackRock                            | World Multifactor Equity Tracker | Global Developed Equities | MSCI World Index                                    | 4.0%                       |
| Wellington                           | Emerging Market (Core)           | Emerging Markets Equities | MSCI Emerging Markets Index +1.0% p.a.              | 3.0%                       |
| Wellington                           | Emerging Market (Local)          | Emerging Markets Equities | MSCI Emerging Markets Index +2.0% p.a.              | 3.0%                       |
| <b>Total Equity</b>                  |                                  |                           | <b>Composite Weighted Index</b>                     | <b>14.0%</b>               |
| Stone Harbor                         | LIBOR Multi-Strategy             | Multi-Asset Credit        | 1 Month LIBOR Index +1.0% p.a. <sup>(1)</sup>       | 12.0%                      |
| Stone Harbor                         | Multi-Asset Credit               | Multi-Asset Credit        | 1 Month LIBOR Index +1.0% p.a.                      |                            |
| Permira                              | Credit Solutions III             | Private Credit            | Absolute Return 6.0% p.a.                           | 3.0%                       |
| <b>Total Credit Portfolio</b>        |                                  |                           | <b>Composite Weighted Index</b>                     | <b>15.0%<sup>(4)</sup></b> |
| ManFRM                               | Managed Futures & Hedge Funds    | Managed Account Platform  | 3 Month LIBOR Index +3.5% p.a.                      | 9.0% <sup>(3)</sup>        |
| <b>Managed Account Platform</b>      |                                  |                           | <b>3 Month LIBOR Index +3.5% p.a.</b>               | <b>9.0%</b>                |
| Pyrford                              | Global Total Return              | Diversified Growth        | UK Retail Price Index +4.5% p.a. <sup>(2)</sup>     | 5.0%                       |
| Investec                             | Diversified Growth               | Diversified Growth        | UK Consumer Price Index +4.6% p.a.                  | 5.0%                       |
| Best Ideas                           | Best Ideas                       | Best Ideas Portfolio      | UK Consumer Price Index +3.0% p.a.                  | 11.0%                      |
| <b>Tactical Allocation Portfolio</b> |                                  |                           | <b>UK Consumer Price Index +3.0% p.a.</b>           | <b>21.0%</b>               |
| In-House                             | Private Equity                   | Private Markets           | 3 Month LIBOR Index +5.0% p.a.                      | 8.0%                       |
| In-House                             | Opportunistic                    | Private Markets           | 3 Month LIBOR Index +5.0% p.a.                      | 2.0%                       |
| In-House                             | Property                         | Property                  | IPD Balanced Funds Weighted Average                 | 4.0%                       |
| In-House                             | Infrastructure                   | Infrastructure            | 3 Month LIBOR Index +5.0% p.a.                      | 6.0%                       |
| In-House                             | Timber / Agriculture             | Infrastructure            | 3 Month LIBOR Index +5.0% p.a.                      | 2.0%                       |
| <b>Total In-House</b>                |                                  |                           | <b>Composite Weighted Index</b>                     | <b>22.0%</b>               |
| Insight                              | LDI Portfolio                    | LDI & Synthetic Equities  | Composite Liabilities & Synthetic Equity            | 19.0%                      |
| <b>Total Liability Hedging</b>       |                                  |                           | <b>Composite Liabilities &amp; Synthetic Equity</b> | <b>19.0%</b>               |

Notes: 1 FTSE A Gilts All Stocks Index until 31 March 2014. 2 UK Retail Price Index +4.4% p.a. until 31 March 2015. 3 Strategic Allocation represents the composite benchmark for the Managed Account Platform. 4 Committed but uninvested element of the Private Credit strategic allocation is represented by 1 Month LIBOR Index +1.0% p.a.

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