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# 1 IMPACT ON CLWYD PENSION FUND INVESTMENT STRATEGY

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 2018, the Fund's total market value decreased by £102.7m to £1,784,066,451.

Over the quarter, total Fund assets returned -5.1%, behind its target of -2.3%. Total Fund (ex LDI) returned -3.7%, compared with its target of -0.5%.

Total In-House Assets was the only section to post positive returns (+2.6%) and exceed its target over the period. Total Credit returned -2.1% and was the section that suffered the least severe negative impact over the quarter, this was followed by the Managed Account Platform (-6.0%) and the Tactical Allocation Portfolio (-6.4%), whilst Total Equity assets fell by 9.4% over the quarter.

In relative terms, total Fund assets were behind their target by 2.8%, mainly attributable to the Best Ideas assets which underperformed their target by 10.4%, detracting 1.2% from total relative performance.

In-House assets outperformed its target by 1.3%, as all sub-portfolios except Timber/Agriculture delivered a positive gain over the guarter. Overall this added 0.3% to total relative performance.

Total Credit underperformed its target by 2.6%, returning -2.1% against a target of 0.5%. The Private Credit subportfolio gained over the period, with a return of 1.7%. Overall this detracted 0.5% from total relative performance.

Managed Futures and Hedge Funds fell by 4.4% and underperformed its target by 5.4%. This detracted 0.5% from overall relative performance.

Total Equities underperformed its target by 1.2%, returning -9.4% against a target of -8.2%. Overall this detracted 0.2% from total relative performance.

Insight's LDI portfolio fell by 9.7% over the quarter, as negative performance from equity markets offset the impact of falling yields. Overall, the overweight allocation to the LDI portfolio detracted 0.4% from relative performance.

#### **EQUITIES**

Global equities tumbled over the quarter, with most developed markets posting double digit negative returns as fears of a slowdown in global growth, concerns regarding the pace of monetary tightening, increasing geopolitical tensions and trade uncertainty all dominated markets.

Japanese equities were the most affected as increased global growth risks impacted its export-dependent economy. In the US, indications of slowing revenue growth, immigration issues (which led to a partial shut down of the US government) and the US Federal Reserve's rate rise of 0.25%, all contributed to the market sell-off in December.

In Europe, negotiations between the European Union and the UK failed to reach a conclusion and rattled the markets as a result. Emerging Market Equities declined but outperformed developed markets; this was surprising given their tendency to lag the market during periods where there are concerns on excessive monetary tightening.

In Developed Markets, Japan (-12.4%) was the worst region over the quarter, followed by North America (-11.5%). Europe (ex UK), UK and Asia Pacific (ex Japan) returned -11.0%, -10.2% and -7.6%, respectively.

Over the last 12 months, with the exception of North America which gained by 0.8%, all Developed Equity markets declined. UK and Europe (ex UK) equities suffered the largest falls, returning -9.5% and -9.1% respectively.

Emerging and Frontier Markets delivered returns of -3.9% and -4.1%, respectively over the quarter. Whilst over the last 12 months, Emerging Markets returned -7.6% and Frontier Markets returned -15.3%.

Total Equity assets posted returns of -9.4% compared to a composite target of -8.2%. Whilst all funds declined, Wellington Emerging Market (Local) was the only fund to outperform its target over the quarter. Investec Global Strategic returned -14.1% against its target of -10.1%, BlackRock World Multifactor returned -12.7%, against its target of -11.2%. Wellington Emerging Markets (Core) and Wellington Emerging Market (Local) both declined, posting returns of -5.7% and -1.8%, compared to targets of -4.9% and -4.7% respectively.

None of the equity funds achieved their 3 year performance objectives.

Global equity exposure to the Consumer Discretionary and Communication Services sectors were a drag on performance due to poor stock selection. Information Technology and Health Care were the best performing sectors of the portfolio over the period, driven by strong stock selection.

Peru and Hungary contributed the majority of gains due to stock selection and allocation, respectively, whilst China and Mexico detracted the most. Industrials and Health Care were the leading sector driven by positive stock selection, however, this was partially offset by poor stock selection in the Energy sector.

#### CREDIT

In Global credit markets, US Treasuries came under pressure early in the quarter as economic data remained strong and markets priced in a faster pace of monetary policy normalisation. The yield on 10 year US Treasuries reached 3.2% in October, its highest level in 7 years. However, fears of a global slowdown grew and contributed to a decline in US yields. Concerns on Brexit and the weakening of European growth indicators contributed to a fall in UK and European sovereign gilt yields. Italian bonds rallied as its government reached a budget agreement with the European Commission, enabling Italy to avoid an EU process which could have led to financial sanctions.

The US Federal Reserve increased interest rates to 2.50% in December, the fourth rate hike in 2018, but indicated that the pace of tightening would slow. The European Central Bank (ECB) concluded its quantitative easing programme in December and announced that it would continue its reinvestment policy for an extended period of time. The ECB's first interest rate hike is expected later in 2019. In the UK, the Bank of England left rates unchanged.

Over the quarter, Long Dated Conventional Gilts, Index-Linked Gilts and UK Corporate Bonds increased by 2.6%, 2.0% and 1.4% respectively. Emerging Market Local Currency Debt and Emerging Market Hard Currency Debt returned 4.6% and 1.2%, respectively. Global High Yield declined by 1.5% over the period.

Total Credit returned -2.1% over the quarter, behind its target by 2.6%. Overall this detracted 0.5% from total relative performance, due to poor selection within the Multi-Asset Credit sub-portfolio. Being underweight to Private Credit (which is currently in its commitment phase) was detrimental to performance as the Private Credit sub-portfolio delivered gains of 1.7% over the quarter.

Additionally, an initial investment into the BlackRock Middle Market Senior Fund (North American mandate) was made in December, representing c.20% of the total commitment to this fund. Permira Credit Solutions III Fund (European mandate) was c.80% funded at the end of December 2018.

In Investment Grade Credit, Tobacco, Independent Energy and Oil Field services detracted the most from returns.

In US High Yield, all 36 industry sectors posted negative returns as the US High Yield market returned -4.7% (in US dollar terms), its worst quarterly return since Q2 2015. This negative performance was largely driven by declining oil prices, poor equity performance and signs of slowing global growth.

In Emerging Market Debt, Local Currency issues outperformed Hard Currency issues; this was mainly attributable to events in Turkey, Brazil and Indonesia. In Turkey, domestic debt and the Turkish Lira rallied as the country's central bank hiked policy rates.

#### **HEDGE FUNDS**

Hedge Funds endured a negative period, experiencing steep losses led by equity based strategies. Overall, Hedge Funds returned -5.8% in US dollar terms and -3.5% in Sterling terms, with weak performance across all strategies in US dollar terms. Equity Hedge were the worst strategies returning -8.3% (in US dollar) and -6.1% (in Sterling), Global Macro was the least negative, returning -1.9% in US dollars, but returned +0.5% in Sterling.

Over the last 12 months, performance from the various strategies was mixed, with Emerging Markets (-11.1%) and Equity Hedge (-6.2%) strategies falling significantly in US dollar terms. Relative Value strategies posted -0.2% in US dollar terms and +6.0% in Sterling.

ManFRM's Managed Futures & Hedge Funds strategy declined by 4.4%, behind its target of 1.1% and detracted 0.5% from total relative performance.

ManFRM Hedge Funds (Legacy) consists of Liongate and previously included Pioneer and Duet (S.A.R.E.) until August 2016 and November 2018, respectively. The assets generated a return of -71.6% over the quarter as the S.A.R.E. holding was marked down to nil at the end of November 2018. S.A.R.E. was placed into receivership in August and an initial write down of 46.6% was recommended by Man FRM's Independent Pricing Committee and applied to the valuation at the end of September.

#### TACTICAL ALLOCATION PORTFOLIO

#### **DIVERSIFIED GROWTH**

Total Diversified Growth assets fell by 2.9% over the quarter, behind its target of 1.6%. Overall, this detracted 0.5% from total relative performance.

Pyrford returned -2.0% and was behind its target by 3.6%. The fund's negative performance was primarily driven by its equity holdings. However, its bond holdings and cash & currency hedging positions marginally offset the negative performance. The main equity detractors were holdings in British American Tobacco, Reckitt Benckiser Group and Legal & General Group. Within the bond portfolio, positions in long duration bonds safeguarded capital and offset some losses seen over the quarter, as a 'flight to safety' in the final quarter saw high quality bond markets rally with longer duration bonds outperforming.

Investec generated a return of -3.7%, and underperformed its target by 5.3 %. The fund's negative performance was driven by its 'Growth Strategies' as almost all of the holdings in this strategy detracted from performance. Mining equities and a significant fall in oil prices hurt the fund's long position in US oil companies. However, partial hedging of the Japanese equity position and interest rate sensitivity helped. A long position in Japanese Yen contributed as the Yen appreciated meaningfully due to its safe haven status during the market sell off. Both Defensive and Uncorrelated strategies helped to mitigate losses experienced elsewhere in the portfolio.

#### BEST IDEAS PORTFOLIO

The Best Ideas Portfolio fell by 9.2%, behind its target by 10.4%, as volatility in markets rocked the performance of sub-funds due to the significant exposure to equities. Overall, this detracted 1.2% from total relative performance.

BlackRock US Opportunities, Investec Global Natural Resources and BlackRock Japanese Equities saw double digit declines of -14.1%, -13.7% and -12.2%, respectively. BlackRock Emerging Markets Equities, LGIM Global Real Estate and LGIM Infrastructure Equities also declined, posting returns of -4.1%, -3.3% and -1.3%.

All the sub-funds underperformed their targets.

In October, the holdings in LGIM North American Equities (Hedged) and BlackRock European Equities (Hedged) were transferred to the non-hedged version of the same funds. Following the switch, c.£14.8m was disinvested from BlackRock Emerging Markets Equities and the proceeds were allocated equally between LGIM North American Equities (Unhedged), BlackRock European Equities (Unhedged) and BlackRock Japanese Equities.

In November, £10m was disinvested from both LGIM North American Equities (Unhedged) and BlackRock US Opportunities. The proceeds were divided between the LGIM Infrastructure Equities (Hedged) and the LGIM Global Real Estate Equity Fund, with the former receiving £15m and the latter receiving £5m. Additionally, £7.5m and £2.5m were sold from the BlackRock Japanese Equities Fund and BlackRock European Equity Fund, respectively. The proceeds totalling £10m were divided equally between the BlackRock Emerging Markets Equities Fund and Investec Global Natural Resources Fund.

#### **IN-HOUSE ASSETS**

Total In-House assets returned 2.6%, ahead of its composite target by 1.3%. Overall this added 0.3% to total relative performance. The two sub-sections of the In-House assets; the Real Assets Portfolio and the Private Markets Portfolio returned 1.8% and 3.3%, respectively.

All assets within the In-House assets portfolio rose, with the expectation of Timber/Agriculture assets which declined by -1.3% over the quarter and underperformed their target by -2.7%.

Infrastructure assets led performance, returning 4.2% and outperforming its target by 2.8%. This added 0.1% to total relative performance.

Opportunistic and Private Equity assets both exceeded their target of 1.4%, returning 3.5% and 3.3%, respectively.

Property assets, which are overweight the strategic allocation and have exceeded the strategic range, returned 1.2% and were ahead of their target of 0.9%.

### 2 STRATEGIC ASSET ALLOCATION

### **31 DECEMBER 2018**

#### Allocation by underlying asset class

Asset Class	Market Value £	Weight %	Strategic Allocation %	Relative %	Strategic Range %
Global Equities	137,719,447	7.7	8.0	-0.3	5.0 – 10.0
Emerging Market Equities	109,132,355	6.1	6.0	+0.1	5.0 – 7.5
Multi-Asset Credit	196,686,265	11.0	12.0	-1.0	10.0 – 15.0
Private Credit^	29,183,814	1.6	3.0	-1.4	2.0 – 5.0
Managed Futures and Hedge Funds	136,814,821	7.7	9.0	-1.3	7.0 – 11.0
Hedge Funds (Legacy)*	982,440	0.1	0.0	+0.1	_
Diversified Growth	160,670,295	9.0	10.0	-1.0	8.0 – 12.0
Best Ideas	182,975,941	10.3	11.0	-0.7	9.0 – 13.0
Property	121,018,403	6.8	4.0	+2.8	2.0 – 6.0
Infrastructure / Timber / Agriculture	84,270,069	4.7	8.0	-3.3	5.0 – 10.0
Private Equity / Opportunistic	215,728,607	12.1	10.0	+2.1	8.0 – 12.0
LDI & Synthetic Equities	396,160,810	22.2	19.0	+3.2	10.0 – 30.0
Cash	12,723,185	0.7	0.0	+0.7	0.0 – 5.0
TOTAL CLWYD PENSION FUND	1,784,066,451	100.0	100.0	0.0	

Notes: \* Hedge Funds (Legacy) include the S.A.R.E (Duet) and Liongate portfolios. ^ The Private Credit allocations are not yet fully funded.

Totals may not sum due to rounding.

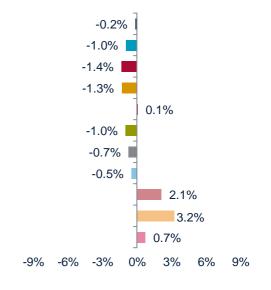
#### Points to note

- In December, an initial allocation to the BlackRock Private Credit mandate was funded which represents c.20% of the capital committed to this investment. Permira's allocation is now c. 80% funded.
- Total allocation to LDI has fallen by 1.6% over the quarter and remains 3.2% overweight relative to its strategic allocation. The LDI portfolio released £10,000,000 to top up the Fund's cash balance during December.

#### Strategic Asset Allocation as at 31 December 2018

#### ■ Equities ■ Multi-Asset Credit 13.8% ■ Private Credit ■ Managed Futures and Hedge Funds 11.0% ■ Hedge Funds (Legacy) ■ Diversified Growth 1.6% 12.1% ■ Best Ideas ■ Real Assets\* ■ Private Markets LDI 10.3% Cash

#### **Deviation from Strategic Allocation**



Note: Totals may not sum due to rounding.

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

# 3 VALUATION AND ASSET ALLOCATION AS AT 31 DECEMBER 2018

Manager	Fund	Market Value £	Weight %	Strategic Allocation %	Strategic Range %
Investec	Global Strategic Equity	71,989,447	4.0	4.0	5.0 – 10.0
BlackRock	ACS World Multifactor Equity	65,730,000	3.7	4.0	5.0 – 10.0
Wellington	Emerging Markets (Core)#	52,776,656	3.0	3.0	5.0 – 7.5
Wellington	Emerging Markets (Local)#	56,355,699	3.2	3.0	5.0 – 7.5
Total Equity		246,851,802	13.8	14.0	
Stone Harbor	LIBOR Multi-Strategy	128,045,810	7.2	12.0	10.0 – 15.0
Stone Harbor	Multi-Asset Credit	68,640,455	3.8	12.0	10.0 – 15.0
Multi-Asset Cro	edit Portfolio	196,686,265	11.0	12.0	10.0 – 15.0
Permira	Credit Solutions III	24,749,779	1.4	1.8	2.0 – 5.0
BlackRock	Middle Market Senior	4,434,035	0.2	1.2	2.0 – 5.0
Private Credit	Portfolio	29,183,814	1.6	3.0	2.0 - 5.0 <sup>(1)</sup>
<b>Total Credit</b>		225,870,078	12.7	15.0	10.0 – 20.0
ManFRM	Managed Futures & Hedge Funds	136,814,821	7.7	9.0	7.0 – 11.0
ManFRM	Hedge Funds (Legacy)*	982,440	0.1	0.0	_
Managed Acco	ount Platform	137,797,261	7.7	9.0	7.0 – 11.0
Pyrford	Global Total Return	81,324,587	4.6	5.0	0.0 10.0
Investec	Diversified Growth	79,345,708	4.4	5.0	8.0 – 12.0
Diversified Gro	owth Portfolio	160,670,295	9.0	10.0	8.0 – 12.0
BlackRock	US Opportunities	26,615,846	1.5		
BlackRock	Japanese Equities	21,703,273	1.2		9.0 – 13.0
BlackRock	Emerging Markets Equities	18,725,886	1.0		
Investec	Global Natural Resources	18,039,565	1.0		
LGIM	Infrastructure Equities MFG (Hedged)	28,975,156	1.6	11.0	
LGIM	Global Real Estate Equities	28,961,820	1.6		
LGIM	Sterling Liquidity	10,039	0.0		
LGIM	North American Equities (Unhedged)	19,488,376	1.1		
BlackRock	European Equities (Unhedged)	20,455,981	1.1		
Best Ideas Por	tfolio	182,975,941	10.3	11.0	9.0 – 13.0
Tactical Alloca	tion Portfolio	343,646,236	19.3	21.0	15.0 – 25.0
In-House	Property	121,018,403	6.8	4.0	2.0 - 6.0
In-House	Infrastructure	60,635,194	3.4	0.0	5.0 – 10.0
In-House	Timber / Agriculture	23,634,875	1.3	8.0	5.0 - 10.0
Real Assets Po	ortfolio	205,288,472	11.5	12.0	10.0 – 15.0
In-House	Private Equity	170,035,213	9.5	10.0	0.0 40.0
In-House	Opportunistic	45,693,394	2.6	10.0	8.0 – 12.0
Private Market	s Portfolio	215,728,607	12.1	10.0	8.0 – 12.0
Total In-House	Assets	421,017,079	23.6	22.0	
Insight	LDI Portfolio	396,160,810	22.2	19.0	10.0 – 30.0
Total Liability I	Hedging	396,160,810	22.2	19.0	10.0 – 30.0
Trustees	Cash	12,723,185	0.7	-	0.0 - 5.0
TOTAL CLWY	PENSION FUND	1,784,066,451	100.0	100.0	

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. 1 The Private Credit allocation is not yet fully funded.

### 4 PERFORMANCE SUMMARY

## PERIODS ENDING 31 DECEMBER 2018

Manager	Fund	3 mor	nths %	12 mo	nths %	3 years	s % p.a.	3 Yr Performance
		Fund	Target	Fund	Target	Fund	Target	vs Objective
Investec	Global Strategic Equity	-14.1	-10.1	-8.2	-1.4	15.6	18.3	Target not met
n/a BlackRock	ACS World Multifactor Equity	-12.7	-11.2	-6.6	-2.5	n/a	n/a	n/a
Wellington	Emerging Markets (Core)#	-5.7	-4.9	-10.3	-8.0	14.0	16.3	Target not met
Wellington	Emerging Markets (Local)#	-1.8	-4.7	-13.6	-7.1	12.8	17.4	Target not met
Total Equity		-9.4	-8.2	-9.5	-4.2	12.1	15.9	
Stone Harbo	r LIBOR Multi-Strategy	-2.4	0.4	-2.8	1.6	2.3	1.4	Target met
n/a Stone Harbo	r Multi-Asset Credit	-2.8	0.4	-4.7	1.6	n/a	n/a	n/a
Multi-Asset Cred	dit Portfolio	-2.6	0.4	-3.5	1.6	1.7	1.4	
n/a Permira	Credit Solutions III	1.8	1.5	9.6	6.0	n/a	n/a	n/a
Private Credit P	ortfolio	1.7	1.5	9.5	6.0	n/a	n/a	
Total Credit		-2.1	0.5	-2.4	1.9	2.0	1.6	
ManFRM	Managed Futures & Hedge Funds	-4.4	1.1	-6.3	4.1	-2.4	4.0	Target not met
n/a ManFRM	Hedge Funds (Legacy) <sup>*</sup>	-71.6	1.1	-72.7	4.1	-43.0	4.0	Target not met
Managed Accou	int Platform	-6.0	1.1	-8.7	4.1	-4.7	4.0	
Pyrford	Global Total Return	-2.0	1.6	-1.3	7.3	2.7	7.8	Target not met
Investec	Diversified Growth	-3.7	1.6	-10.3	6.8	0.3	7.0	Target not met
Total Diversified	d Growth	-2.9	1.6	-6.0	7.0	1.5	7.4	
Best Ideas P	ortfolio	-9.2	1.2	-7.0	5.1	5.6	5.3	Target met
Tactical Allocati	on Portfolio	-6.4	1.2	-6.5	5.1	3.6	5.4	
In-House	Property	1.2	0.9	7.6	6.5	7.2	6.7	Target met
In-House	Infrastructure	4.2	1.4	14.6	5.7	13.6	5.5	Target met
In-House	Timber / Agriculture	-1.3	1.4	7.2	5.6	7.0	5.5	Target met
Real Assets		1.8	1.3	9.4	5.9	8.5	4.9	
In-House	Private Equity	3.3	1.4	18.7	5.6	16.5	5.5	Target met
In-House	Opportunistic	3.5	1.4	21.1	5.7	6.7	5.5	Target met
Private Markets	Portfolio	3.3	1.4	19.1	5.6	15.1	5.5	
Total In-House	Assets	2.6	1.3	14.2	5.8	11.7	5.5	
n/a Insight	LDI Portfolio	-9.7	-9.7	-2.2	-2.2	18.6	18.6	n/a
Total (ex LDI)		-3.7	-0.5	-1.2	3.3	6.2	6.7	
TOTAL CLWYD	PENSION FUND	-5.1	-2.3	-1.4	2.2	8.8	8.6	
Strategic Target	(CPI +4.1%)	1.6		6.3		6.3		
Actuarial Target	(CPI +2.0%)	1.1		4.2		4.2		

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

ManFRM Hedge Funds (Legacy) currently includes the Duet (S.A.R.E) and Liongate 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 2018 forecasts based on conditions at 30 September 2018). Current long term 10 year CPI assumption is 2.2% p.a.

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

# 5 STRATEGIC ASSET CLASSES PERFORMANCE TO 31 DEC 2018

Strategy	3 months	12 months	3 years
	%	%	% p.a.
Total Equities	-9.4	-9.5	12.1
Composite Objective	-8.2	-4.2	15.9
Composite Benchmark	-8.5	-5.5	13.9
Multi-Asset Credit Portfolio	-2.6	-3.5	1.7
Objective	0.4	1.6	1.4
Benchmark	0.2	0.6	0.4
Managed Account Platform	-6.0	-8.7	-4.7
Objective	1.1	4.1	4.0
Benchmark	1.1	4.1	4.0
Total Hedge Funds (Legacy)	-71.6	-72.7	-43.0
Composite Objective	1.1	4.1	4.0
Composite Benchmark	1.1	4.1	4.0
Total Diversified Growth	-2.9	-6.0	1.5
Composite Objective	1.6	7.0	7.4
Composite Benchmark	1.6	7.0	7.4
Best Ideas Portfolio	-9.2	-7.0	5.6
Objective	1.2	5.1	5.3
Benchmark	1.2	5.1	5.3
Total In-House Assets	2.6	14.2	11.7
Composite Objective	1.3	5.8	5.5
Composite Benchmark	1.3	5.8	5.5
Total LDI Portfolio	-9.7	-2.2	18.6
Composite Objective	-9.7	-2.2	18.6
Composite Benchmark	-9.7	-2.2	18.6
Total (ex LDI)	-3.7	-1.2	6.2
Composite Objective	-0.5	3.3	6.7
Composite Benchmark	-0.6	2.9	6.2
Total Clwyd Pension Fund	-5.1	-1.4	8.9
Composite Objective	-2.3	2.2	8.6
Composite Benchmark	-2.4	1.9	8.1

**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%
Total Equity			Composite Weighted Index	14.0%
Stone Harbor	LIBOR Multi-Strategy	Multi-Asset Credit	1 Month LIBOR Index +1.0% p.a. (1)	12.0%
Stone Harbor	Multi-Asset Credit	Multi-Asset Credit	1 Month LIBOR Index +1.0% p.a.	12.0%
Permira	Credit Solutions III	Private Credit	Absolute Return 6.0% p.a.	1.8%
BlackRock	Middle Market Senior	Private Credit	Absolute Return 9.0% p.a.	1.2%
Total Credit Port	ifolio		Composite Weighted Index	<b>15.0%</b> <sup>(4)</sup>
ManFRM	Managed Futures & Hedge Funds	Managed Account Platform	3 Month LIBOR Index +3.5% p.a.	9.0% <sup>(3)</sup>
Managed Accou	nt Platform		3 Month LIBOR Index +3.5% p.a.	9.0%
Pyrford	Global Total Return	Diversified Growth	UK Retail Price Index +4.5% p.a. (2)	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%
Tactical Allocati	on Portfolio		UK Consumer Price Index +3.0% p.a.	21.0%
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 UK Monthly Property Index <sup>(5)</sup>	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%
Total In-House			Composite Weighted Index	22.0%
Insight	LDI Portfolio	LDI & Synthetic Equities	Composite Liabilities & Synthetic Equity	19.0%
Total Liability He	edging		Composite Liabilities & Synthetic Equity	19.0%

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. 5. IPD Quarterly Property Index sourced from Schroders has been used to calculate the performance between 31 December 2017 and 31 December 2018.

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#### CONTACT

KIERAN HARKIN
Director
+44 (0)161 957 8016
kieran\_harkin@jltgroup.com

NICK BUCKLAND Senior Consultant +44 (0)207 528 4188 nick\_buckland@jltgroup.com

ANTHONY WRAY
Consultant
+44 (0)161 253 1121
anthony\_wray@jltgroup.com

NATALIE ZANI Associate Consultant +44 (0)161 253 1124 natalie\_zani@jltgroup.com

ANDREW MUNRO
Associate Consultant
+44 (0)161 931 4497
andrew\_munro@jltgroup.com

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