



London Borough of Hillingdon

Investment Risk & Analytical Services

September 30, 2020

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Portfolio Windows

Client Commentary

Quarter three recorded a number of headlines impacting global fixed income markets; In Europe the EU agreed a 750bn EUR stimulus package to help countries impacted by COVID, in the US there were suggestions by the Fed that rates would remain close to 0% until 2023 and in the UK, the ongoing talks of Brexit continued.

In the UK, negative growth figures, as measured by GDP for quarter two (-20%) suggest that the downturn from coronavirus has been less severe than initially expected, although the data still represents the biggest fall since records began in 1955. The OECD real GDP growth forecasts a double digit decline of -10.1% for 2020, an obvious trend seen across all G7 countries due to the impact of COVID. Over quarter three, the Bank of England continued to buy gilts under its quantitative easing programme; purchases over the last week in September alone were expected to total around £4.4bn.

Considering the resurgence of equity markets over Q2 and Q3 and the success of tech stocks, with lower corporate tax rates prevailing as they do currently, tech companies were trading at a price to earnings (P/E) ratio of 75 in August. At the time of the dotcom bubble at the end of the last century tech stocks were trading at a P/E ratio of 76. The S&P 500 average P/E ratio floats around 13-15. A good question might be “can growth stocks live up to these valuations?” The growth required to deliver the promise outstrips Wall Street analysts’ estimates considerably. Although Global equities finished up over Q3 they ended 5% below the 3 month peak based on increasing virus rates and slowing stimulus.

Apple’s revenues did not decline as predicted but instead increased by a new record of 11% at the start of the quarter following the release of a new iPhone. Apple is only marginally behind Saudi Aramco as the world’s most valuable public listed company. Facebook cashed in on advertising due to increased global screen time. Investment flows between China and the US fell to \$10.9bn in H1 2020, the lowest figure in a decade. Disney announced job cuts of 28k, one of the biggest layoffs of COVID-19. Looking at US sectors, as in Q1 and Q2, IT was strongest and Energy was weakest over 1 year. Consumer Discretionary was top again over the third quarter and Energy was the only negatively returning sector. The FTSE North America index returned 4.5% (GBP) over the third quarter and 10.5% (GBP) over the year (stable from Q2).

Political instability related to trade with China and the uncertainty around the upcoming US election have also contributed to the sell-off of the US dollar, at levels not seen for a decade. Whether this weakness is the beginning of a sharper decline or simply a short-term correction time will tell, however based on recent events the dollar continues to be the currency of choice during times of global financial stress and still represents more than 60% of official foreign exchange reserves.

Within this environment the London Borough of Hillingdon returned +0.67% which was behind the Total Plan benchmark of +1.52%. In monetary terms this is a gain in assets of £7.2 million and the value of the combined scheme now stands at £1,076 million as at 30th September 2020.

Client Commentary

AEW UK

The AEW UK Property Fund posted a total return of +2.19%, beating the the IPD UK PPFI AI Balanced Funds Index continuing the outperformance seen during the previous quarter. Rolling one year returns continue to see losses, with the mandate returning -14.00% versus -2.79% for the IPD Index. They continue to be behind over the three year period returning 0.35% against the benchmark of 2.66%. This translates as 2.30% relative underperformance. With positive absolute returns in all but two periods and four quarters in the red on a relative basis, growth is observed but behind benchmark over three years. Since the funds inception date of July 2014, the fund return is 6.24%, leading to an underperformance of approx 0.2% when compared to the IPD figure of 6.40%.

JP Morgan

In the latest quarter JP Morgan posted an increase in assets of +1.98% leading to an outperformance of +1.19% when compared to the 0.78% target for the 3 Month LIBOR + 3% p.a. Then with positive results in three of the last four quarters, the one year return of +2.53% is in positive territory although is behind the 3.82% target by over 1%. Then over three years they post returns behind the benchmark with figures of 2.88% vs 3.85%. Since the mandate funded their return of 3.80% is just ahead of the target return of 3.72% on an annualised basis.

Legal & General 1

There was a reorganisation of assets in both Legal & General 1 and 2 portfolios towards the end of 2018. Equity assets were moved to the No 1 account and fixed income to the No2 account. LGIM portfolio now represent almost 23% of the scheme as of 30th September 2020. Over the last three months the Legal & General No. 1 mandate post a return of +4.7% in line with the custom fixed weight blended benchmark. In the period since inception in October 2016, they return 6.9%, which is just below the benchmark return of 7.1%.

Legal & General 2

The No 2 Legal & General mandate returned -2.18% against -1.85% for the third quarter against the custom fixed weight blended benchmark consisting of FTSE Index Linked 15+ years, FTSE Index Linked and iBoxx UK Non-Gilts. In the period since inception, they remain broadly in line with the benchmark returning 6.5% against 6.8% for the benchmark.

Portfolio Windows(2)

Client Commentary

London CIV Ruffer

The absolute return strategies employed by London CIV Ruffer translated into a 108 basis point outperformance of the 3-mth Sterling LIBOR target. The investment is above the benchmark over all longer term periods. This is seen in a five year return of 4.54% versus 0.75%, then similarly for the since inception period (May 2010) figures of 5.16% versus 0.84% per annum, which translates as a relative return of over 4%.

M&G Investments

M&G posted further losses in Q3 by producing a return of -10.13% against the 3 Month LIBOR +4% p.a. target of 1.02%, demonstrating an underperformance of 11.04%. This is the third consecutive quarter of underperformance and the full year return remains behind the benchmark by 29.60%, coming from figures of -26.21% against 4.82%. Over the three and five year the account registers figures of -6.40% vs 4.85% and 0.98% vs 4.75% respectively; since inception (May 2010) returns improve to 3.46% pa whilst the benchmark is 4.73% pa. Although the since inception Internal Rate of Return moves further ahead of target with a figure of 7.63% opposed to the comparator of 4.60%.

Macquarie

Over the last three months, Macquarie produced losses of 0.23%, against the 0.78% for the 3 Month LIBOR +3% p.a. this translates as an underperformance of 1.01%. With xxx quarters of positive absolute returns and xxx positive relative returns, outperformance is seen in all longer periods. Over the rolling year a growth of 3.75% trails behind the target of 3.82% by 0.07%. By contrast the three year result of 11.22% versus 3.85% exhibits positive relative return over 7%. The annualised return over 5 years rises to 14.72%, and remains ahead of the 3.75% seen for the benchmark; then since inception (September 2010) the 6.45% is ahead of the target of 3.73%. Although the since inception Internal Rate of Return for this portfolio jumps to 12.20%, which is ahead of the benchmark figure of 3.70%.

UBS

During Q3 the UBS UK Equity investments was terminated and proceeds moved to the LGIM Future World Equity Fund

Client Commentary

Premira Credit

The Premira Credit Fund saw an increase of 1.93% over the third quarter of 2020, this was ahead of the 3 Month LIBOR +4% p.a. target of 1.02%. The fund has outperformed in three of the last four quarter's but are behind target, leading to an underperformance of 1.37%, created from figures of 3.45% against 4.82%. Then since the start of December 2014 when the fund incepted, the fund posts a return of 7.46% against the benchmark of 4.71%, leading to a relative position of over 2%.

UBS Property

The latest quarter for the UBS Property posted an underperformance of 0.30%, generated from a return of -0.10% against the IPD UK PPFI All Balanced Funds index of 0.20%. Over the one year the manager is behind the index, with a full year return of -4.11% vs -2.79%. The previous good run of results particularly during 2015 leads to high absolute returns staying just ahead of the IPD target over the ten year period with a return of 6.59% against 6.39%. Then since inception, in March 2006, the fund return falls to 3.37% per annum which is broadly in line with the benchmark.

Private Equity

The private equity assets saw a 9.15% rise in value for Adam Street. LGT also saw an increase of 2.89%. 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 9.58% and 15.40% for the three and five year periods respectively, while Adam Street posted 11.65% and 11.94% over the same periods. Adam St are behind the proxy benchmark of MSCI AC World +4% p.a. over the three and five year period (which show double digit gains of 13.03% and 18.50%). LGT are behind over the five year underperforming by over 300bps. Then since their respective inceptions in January 2005 and May 2004, Adam Street drops to 7.30% pa, while LGT sees a more modest dip to 10.68%.

Epoch

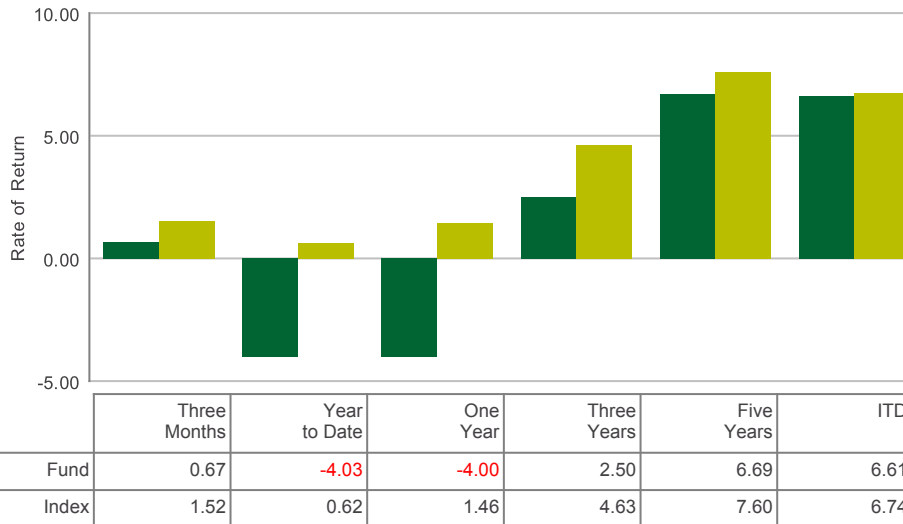
Over the third quarter the investment in Epoch's income equity fund generated a return of +0.77%. Since inception (November 2017) the fund has observed a modest rise in value 1.00% compared to the MSCI World figure of +7.56%, this leads to a relative return of over -6%.

LCIV Infrastructure Fund

The LCIV Infrastructure fund was launched in quarter two and the valuation at 30th September was £3.75m

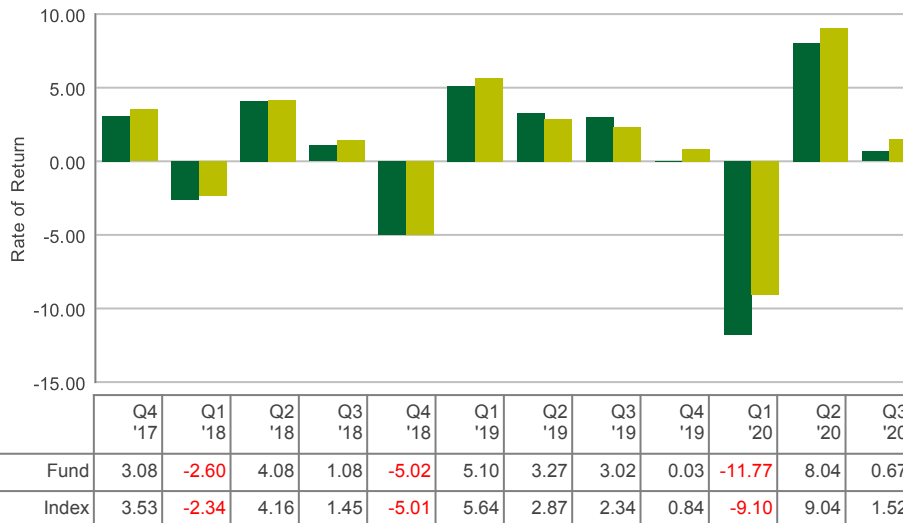
Executive Summary

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

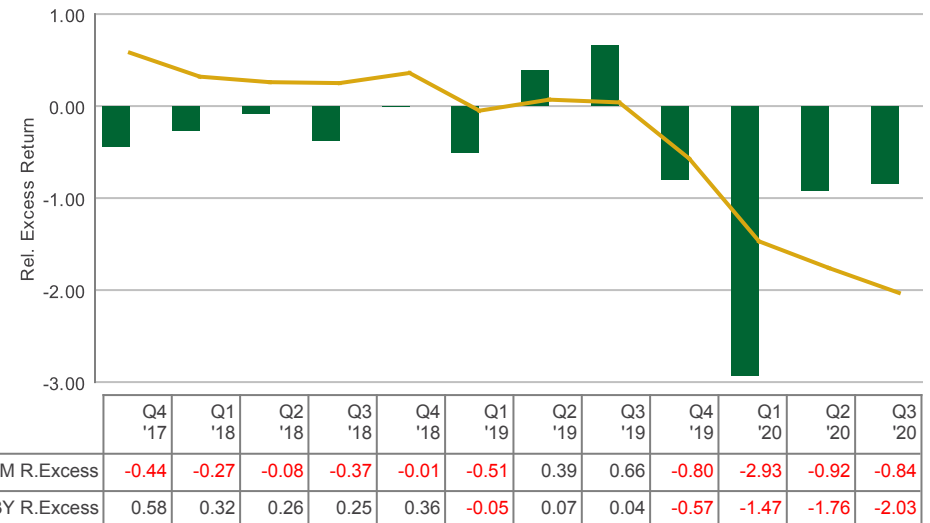
RISK STATISTICS

	3 Mos	1 Yr	3 Yrs	5 Yrs
Return	0.67	-4.00	2.50	6.69
Index Return	1.52	1.46	4.63	7.60
Excess Return	-0.85	-5.46	-2.13	-0.91
Standard Deviation	-	10.43	7.28	6.54
Index Standard Deviation	-	9.25	6.73	5.92
Tracking Error	-	1.65	1.45	1.44
Information Ratio	-	-3.32	-1.47	-0.63
Sharpe Ratio	-	-0.46	0.23	0.91
Index Sharpe Ratio	-	0.07	0.56	1.16
Jensen's Alpha	-	-5.39	-2.24	-1.35
Relative Volatility (Beta)	-	1.12	1.06	1.08
R Squared	-	0.99	0.96	0.96
Beginning MV (in 000s)	1,068,524	1,126,719	978,184	769,131
Net Contributions (in 000s)	-92	-6,094	19,547	11,372
Income (in 000s)	5,218	18,398	61,173	87,294
Appreciation (in 000s)	1,938	-63,435	16,684	207,791
Ending MV (in 000s)	1,075,588	1,075,588	1,075,588	1,075,588

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	Policy Weight	Three Months			Year to Date			One Year			Inception Date
				Port	Index	Relative Excess	Port	Index	Relative Excess	Port	Index	Relative Excess	
London Borough of Hillingdon	1,075,588,420	100.00	-	0.67	1.52	-0.84	-4.03	0.62	-4.63	-4.00	1.46	-5.38	30/09/1995
Total Plan Benchmark													
Adam Street	9,440,836	0.88	-	9.15	4.37	4.58	6.96	7.27	-0.29	-2.90	9.68	-11.46	31/01/2005
Adam Street PE Bmark													
AEW UK	52,165,265	4.85	-	2.19	0.20	1.99	-14.37	-3.08	-11.65	-14.00	-2.79	-11.53	30/06/2014
LBH22 AEW Benchmark													
Cash & Other Assets	0	0.00	-	-	-	-	-	-	-	-	-	-	31/10/2017
Cash & Other Assets	14,139,621	1.31	-	-0.88	-	-	-0.14	-	-	-0.17	-	-	30/09/2008
Epoch Investment P Income	145,795,552	13.55	-	0.77	3.15	-2.31	-8.47	4.22	-12.18	-9.30	5.24	-13.82	08/11/2017
LBH11001 MSCI World ND													
JP Morgan	96,848,986	9.00	-	1.98	0.78	1.19	1.88	2.84	-0.93	2.53	3.82	-1.24	08/11/2011
LBH15 JPM LIBOR +3%pa													
LCIV Infrastructure Fund	3,752,100	0.35	-	0.00	0.78	-0.77	0.00	2.84	-2.76	-	-	-	14/11/2019
LBH11004 3M Libor +3%													
Legal & General 1	243,404,069	22.63	-	4.71	4.84	-0.12	1.97	2.19	-0.22	6.28	6.55	-0.25	31/10/2016
LBH26 L&G Benchmark													
Legal & General 2	152,913,635	14.22	-	-2.18	-1.85	-0.34	9.92	9.63	0.27	1.54	1.62	-0.08	22/02/2017
LBH27 L&G Benchmark													
LGIM - Future World Equity IND	84,350,794	7.84	-	-	-	-	-	-	-	-	-	-	23/09/2020
LBH29 L&G Benchmark													
LGIM LPI Income Property	48,284,643	4.49	-	0.69	0.55	0.14	-	-	-	-	-	-	11/03/2020
LBH28 L&G RPI													
LGT	3,251,550	0.30	-	1.89	4.37	-2.38	1.42	7.27	-5.45	-1.43	9.68	-10.12	31/05/2004
LGT PE Bmark													
London CIV Ruffer	59,783,674	5.56	-	1.12	0.04	1.08	5.46	0.60	4.83	6.51	0.82	5.64	28/05/2010
LBH11003 Ruffer BM Libor													
M&G Investments	3,971,590	0.37	-	-10.13	1.02	-11.04	-28.25	3.58	-30.74	-26.21	4.82	-29.60	31/05/2010
LBH10 3 Month LIBOR +4%pa													
Macquarie	27,058,481	2.52	-	-0.23	0.78	-1.00	6.96	2.84	4.01	3.75	3.82	-0.06	30/09/2010
LBH14 Macquarie LIBOR +3%pa													

Account/Group -% Rate of Return	Ending Market Value GBP	Ending Weight	Policy Weight	Three Months			Year to Date			One Year			Inception Date
				Port	Index	Relative Excess	Port	Index	Relative Excess	Port	Index	Relative Excess	
Premira Credit LBH24 Premira LIBOR +4%pa	64,702,738	6.02	-	1.93	1.02	0.91	1.85	3.58	-1.68	3.45	4.82	-1.31	30/11/2014
UBS LBH04 UBS Benchmark	552,250	0.05	-	2.95	0.77	2.16	-27.19	-16.88	-12.40	-23.84	-13.42	-12.03	31/12/1988
UBS Property LBH06 UBS Property Benchmark	65,172,636	6.06	-	-0.10	0.20	-0.30	-3.74	-3.08	-0.68	-4.11	-2.79	-1.36	31/03/2006

Investment Hierarchy(2)

Account/Group -% Rate of Return	Ending Market Value GBP	Ending Weight	Policy Weight	Three Years			Five Years			Inception to Date			Inception Date
				Port	Index	Relative Excess	Port	Index	Relative Excess	Port	Index	Relative Excess	
London Borough of Hillingdon	1,075,588,420	100.00	-	2.50	4.63	-2.03	6.69	7.60	-0.85	6.61	6.74	-0.12	30/09/1995
Total Plan Benchmark													
Adam Street	9,440,836	0.88	-	11.65	13.03	-1.22	11.94	18.50	-5.54	7.30	-	-	31/01/2005
Adam Street PE Bmark													
AEW UK	52,165,265	4.85	-	0.35	2.66	-2.25	4.13	4.37	-0.23	6.24	6.40	-0.15	30/06/2014
LBH22 AEW Benchmark													
Cash & Other Assets	0	0.00	-	-	-	-	-	-	-	-	-	-	31/10/2017
Cash & Other Assets	14,139,621	1.31	-	1.42	-	-	3.00	-	-	-0.55	-	-	30/09/2008
Epoch Investment P Income	145,795,552	13.55	-	-	-	-	-	-	-	1.00	7.56	-6.10	08/11/2017
LBH11001 MSCI World ND													
JP Morgan	96,848,986	9.00	-	2.88	3.85	-0.93	4.47	3.75	0.69	3.80	3.72	0.08	08/11/2011
LBH15 JPM LIBOR +3%pa													
LCIV Infrastructure Fund	3,752,100	0.35	-	-	-	-	-	-	-	0.00	3.34	-3.23	14/11/2019
LBH11004 3M Libor +3%													
Legal & General 1	243,404,069	22.63	-	6.71	6.87	-0.15	-	-	-	6.98	7.11	-0.13	31/10/2016
LBH26 L&G Benchmark													
Legal & General 2	152,913,635	14.22	-	6.59	6.88	-0.28	-	-	-	6.51	6.84	-0.31	22/02/2017
LBH27 L&G Benchmark													
LGIM - Future World Equity IND	84,350,794	7.84	-	-	-	-	-	-	-	-5.15	-5.15	-0.00	23/09/2020
LBH29 L&G Benchmark													
LGIM LPI Income Property	48,284,643	4.49	-	-	-	-	-	-	-	-3.59	0.71	-4.27	11/03/2020
LBH28 L&G RPI													
LGT	3,251,550	0.30	-	9.58	13.03	-3.06	15.40	18.50	-2.62	10.68	-	-	31/05/2004
LGT PE Bmark													
London CIV Ruffer	59,783,674	5.56	-	3.48	0.85	2.61	4.54	0.75	3.76	5.16	0.84	4.28	28/05/2010
LBH11003 Ruffer BM Libor													
M&G Investments	3,971,590	0.37	-	-6.40	4.85	-10.73	0.98	4.75	-3.60	3.46	4.73	-1.22	31/05/2010
LBH10 3 Month LIBOR +4%pa													
Macquarie	27,058,481	2.52	-	11.22	3.85	7.10	14.72	3.75	10.57	6.45	3.73	2.63	30/09/2010
LBH14 Macquarie LIBOR +3%pa													

Account/Group -% Rate of Return	Ending Market Value GBP	Ending Weight	Policy Weight	Three Years			Five Years			Inception to Date			Inception Date
				Port	Index	Relative Excess	Port	Index	Relative Excess	Port	Index	Relative Excess	
Premira Credit LBH24 Premira LIBOR +4%pa	64,702,738	6.02	-	5.45	4.85	0.58	3.56	4.75	-1.14	7.46	4.71	2.62	30/11/2014
UBS LBH04 UBS Benchmark	552,250	0.05	-	-7.91	-2.00	-6.03	2.53	4.24	-1.64	8.45	7.83	0.58	31/12/1988
UBS Property LBH06 UBS Property Benchmark	65,172,636	6.06	-	1.97	2.66	-0.67	4.04	4.08	-0.04	3.37	3.46	-0.09	31/03/2006

Market Value Summary - Three Months

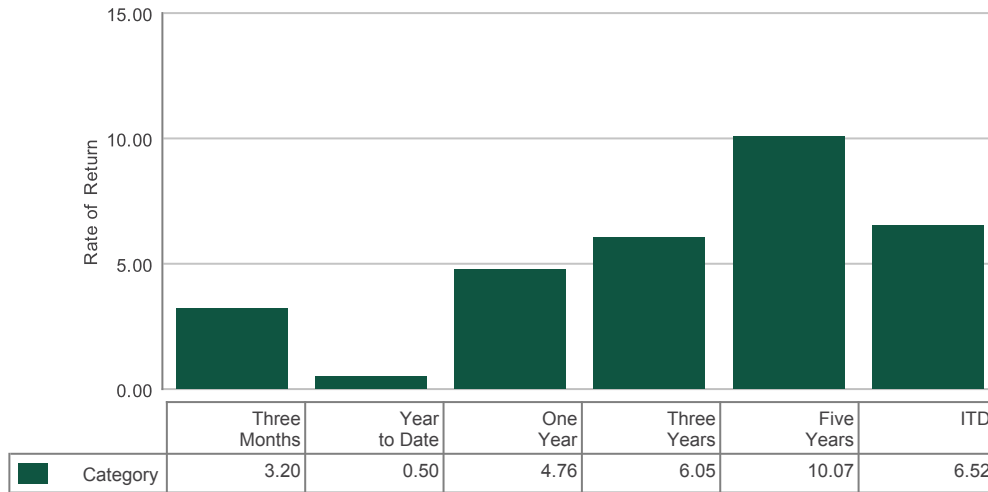
Account/Group	30/06/2020 Market Value	Net Contribution*	Income	Fees	Appreciation	30/09/2020 Market Value	30/09/2020 Weight	Change in Weight
London Borough of Hillingdon	1,068,523,947	-91,835	5,218,306	91,833	1,938,002	1,075,588,420	100.00	0.00
Adam Street	8,857,035	-210,121	0	0	793,923	9,440,836	0.88	0.05
AEW UK	51,046,931	0	473,577	0	644,757	52,165,265	4.85	0.07
Cash & Other Assets	12,847,162	1,407,397	1,308	0	-116,247	14,139,621	1.31	0.11
Cash & Other Assets	0	0	0	0	0	0	0.00	0.00
Epoch Investment P Income	144,687,852	0	1,375,006	0	-267,306	145,795,552	13.55	0.01
JP Morgan	94,970,904	0	0	0	1,878,081	96,848,986	9.00	0.12
LCIV Infrastructure Fund	3,752,100	0	0	0	0	3,752,100	0.35	-0.00
Legal & General 1	232,475,107	-12,213	0	12,213	10,941,175	243,404,069	22.63	0.87
Legal & General 2	156,330,300	-1,870	0	1,870	-3,414,795	152,913,635	14.22	-0.41
LGIM - Future World Equity IND	-	88,923,534	-11	77,885	-4,572,728	84,350,794	7.84	-
LGIM LPI Income Property	47,955,070	0	0	0	329,574	48,284,643	4.49	0.00
LGT	3,427,914	-230,593	-2	0	54,230	3,251,550	0.30	-0.02
London CIV Ruffer	59,121,573	0	301,529	0	360,572	59,783,674	5.56	0.03
M&G Investments	4,419,236	0	81	0	-447,727	3,971,590	0.37	-0.04
Macquarie	27,121,903	0	0	0	-63,421	27,058,481	2.52	-0.02
Premira Credit	63,474,761	0	1,962,926	0	-734,949	64,702,738	6.02	0.08
UBS	92,383,478	-89,555,869	583,615	0	-2,858,975	552,250	0.05	-8.59
UBS Property	65,652,620	-412,099	520,277	-135	-588,162	65,172,636	6.06	-0.08

Min 0.00  100.00 Max

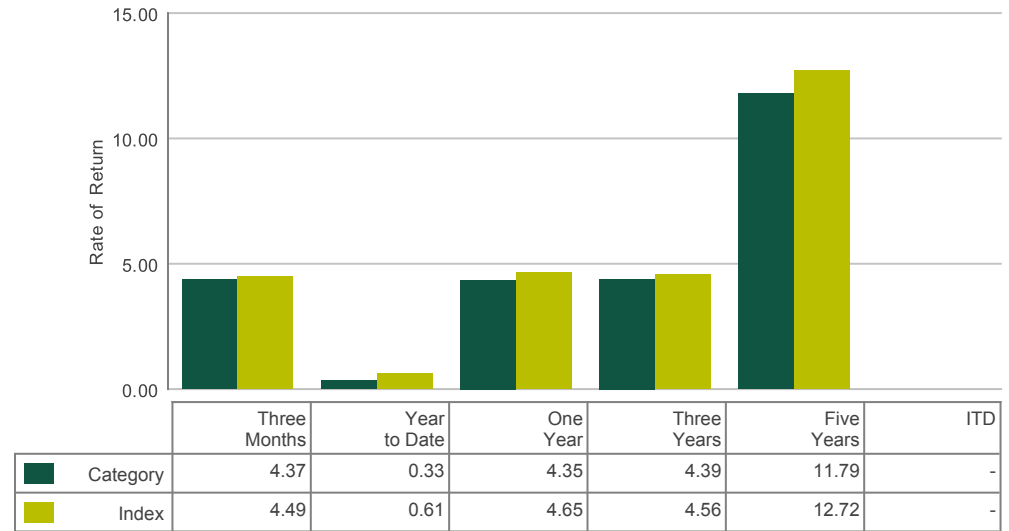
*Net Contributions include Cash Contributions/Distributions, Security Deliveries/Receipts, Fees/Fee Rebates, Inter Account transfers for Consolidations & Benefits Payments.
Copied History or Backloaded Data may not display the correct Contributions/Withdrawals creating misrepresentation.

Historical Performance

OVERSEAS EQUITIES

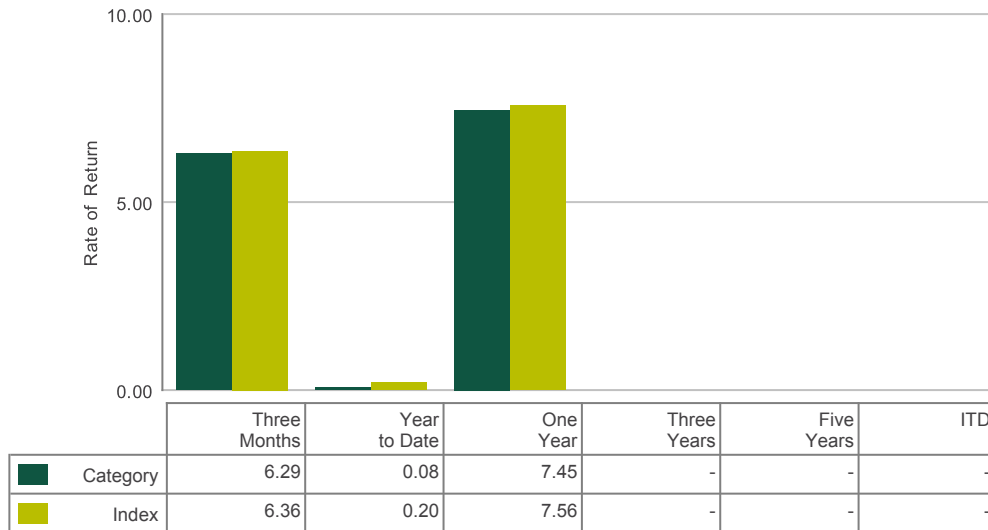


EMERGING MARKETS



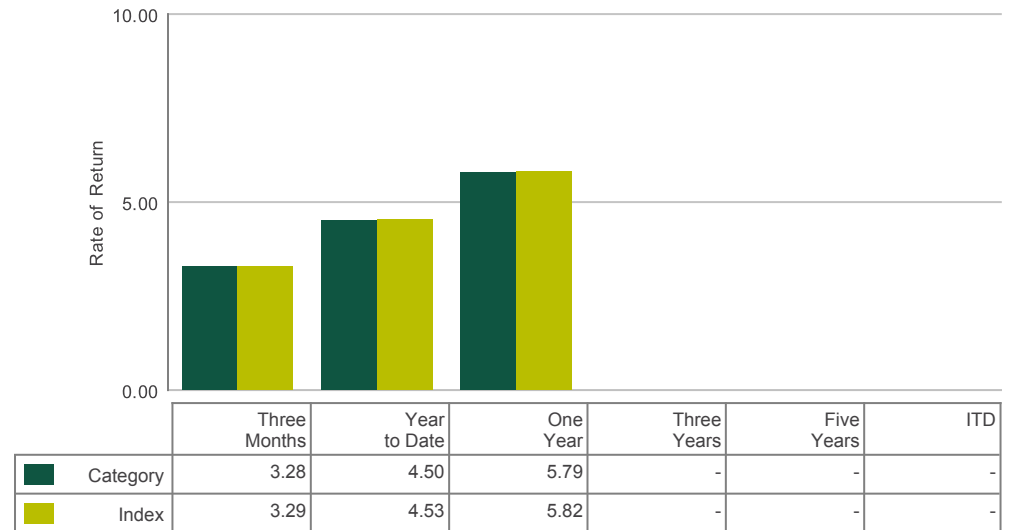
Index: LBH Emerging Markets

L&G GPCT WORLD DEV EQ IDX GBP HDG



Index: FTSE AW Developed HDG GBP

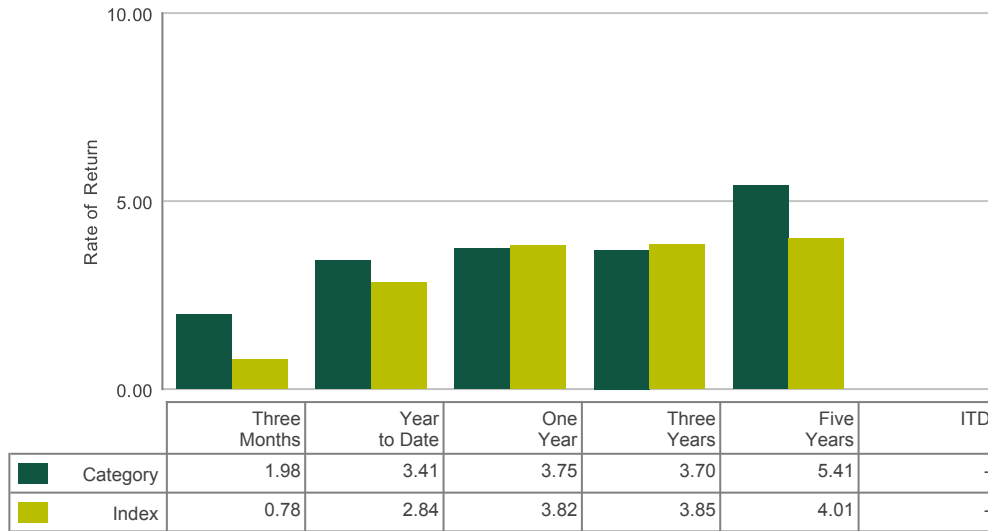
WORLD DEVELOPED EQUITY INDEX



Index: FTSE AW Developed

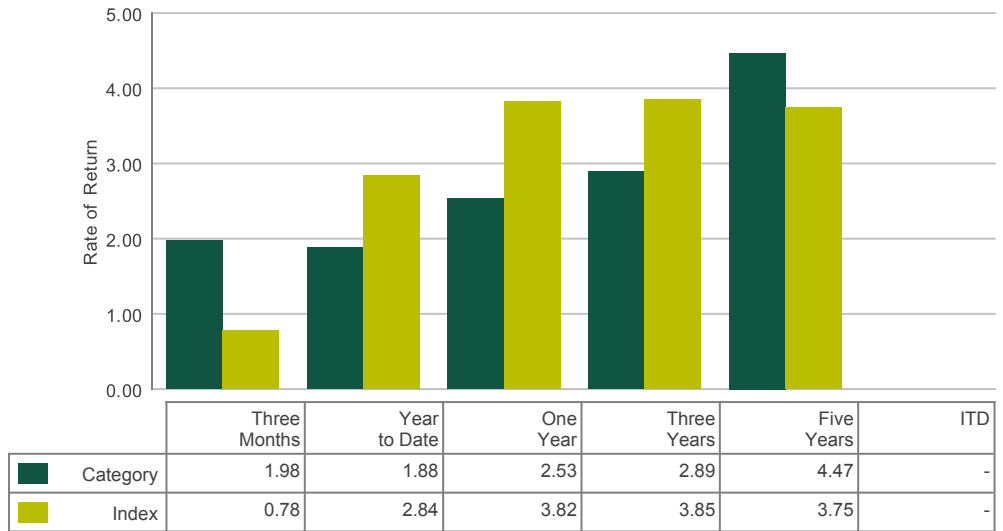
Historical Performance

FIXED INCOME



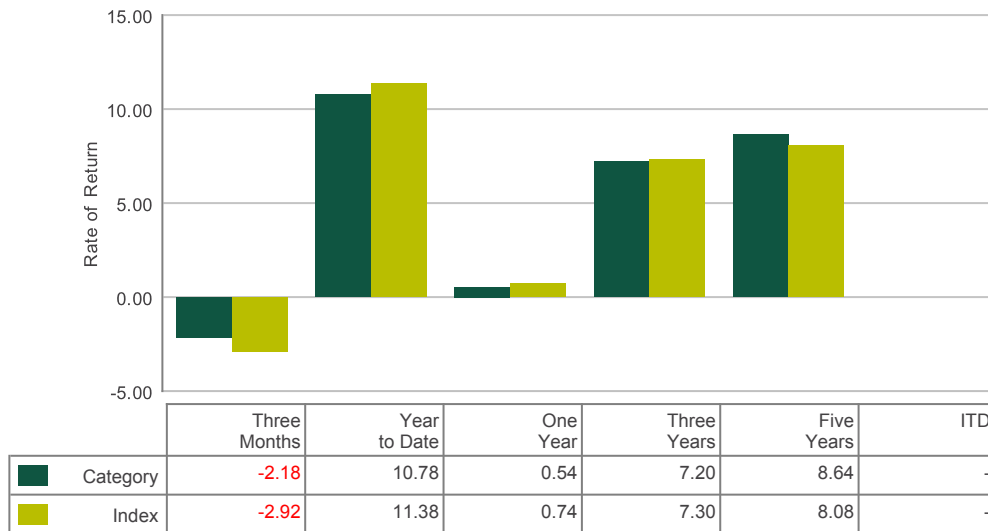
Index: LBH Fixed Income Benchmark

GLOBAL CORPORATE BONDS



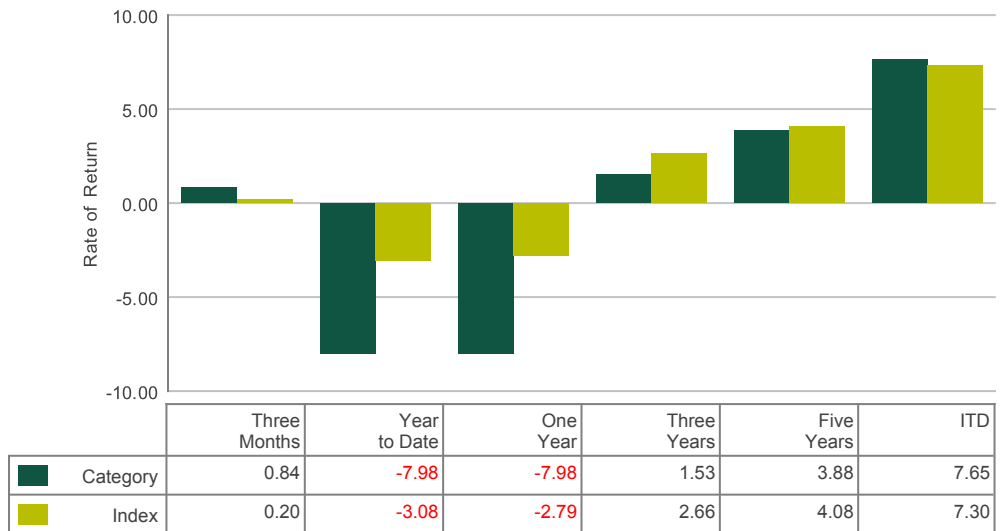
Index: LIBOR GBP 3 Month +3% pa

INDEX LINKED GILTS



Index: LBH Index Linked Benchmark

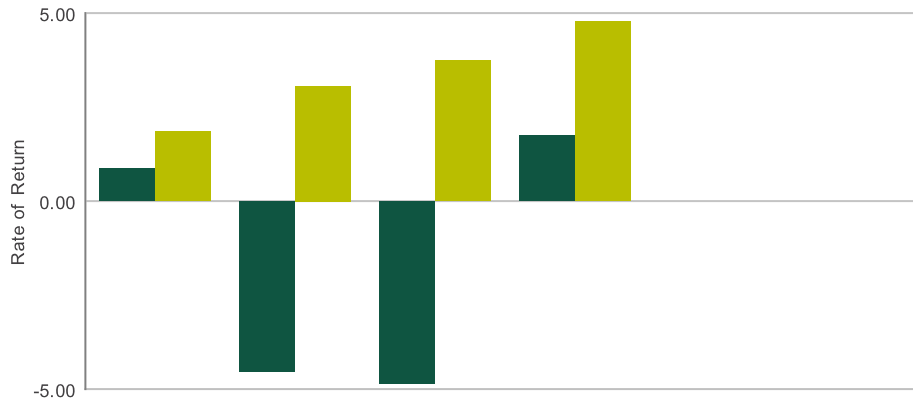
REAL ESTATES



Index: IPD UK PPF All Bal Funds Index

Historical Performance

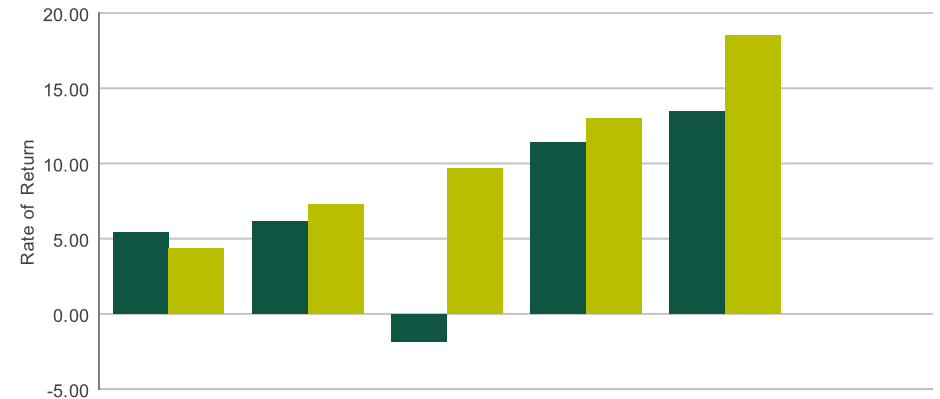
BALANCED FUNDS



	Three Months	Year to Date	One Year	Three Years	Five Years	ITD
Category	0.87	-4.54	-4.85	1.75	-	-
Index	1.85	3.06	3.75	4.77	-	-

Index: Balanced Fund Benchmark

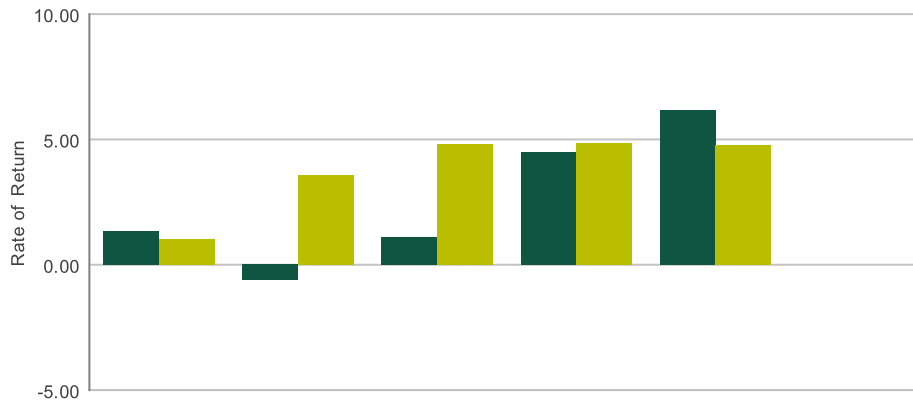
PRIVATE EQUITY



	Three Months	Year to Date	One Year	Three Years	Five Years	ITD
Category	5.43	6.18	-1.81	11.40	13.46	-
Index	4.37	7.27	9.68	13.03	18.50	-

Index: MSCI ACWI +4% pa

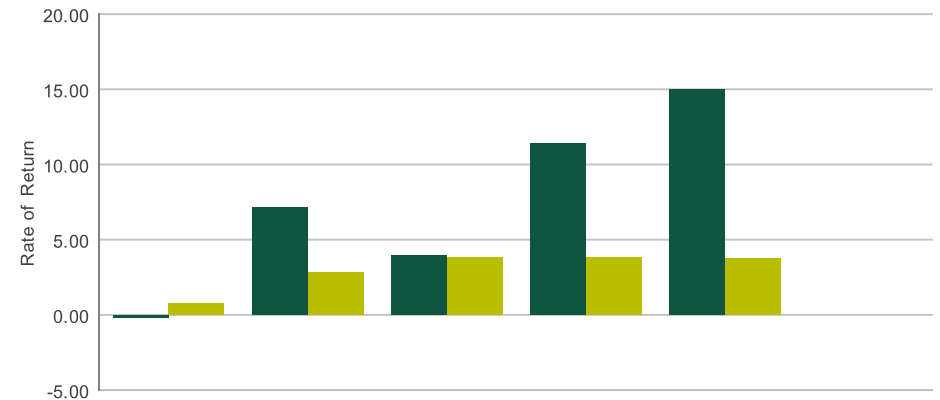
PRIVATE CREDIT



	Three Months	Year to Date	One Year	Three Years	Five Years	ITD
Category	1.35	-0.61	1.08	4.49	6.17	-
Index	1.02	3.58	4.82	4.85	4.75	-

Index: LIBOR GBP 3 Month +4% pa

INFRASTRUCTURE



	Three Months	Year to Date	One Year	Three Years	Five Years	ITD
Category	-0.16	7.18	3.98	11.43	15.00	-
Index	0.78	2.84	3.82	3.85	3.75	-

Index: LIBOR GBP 3 Month +3% pa

Overall Fund BenchMark		
Index	Manager	%
FTSE All Share	UBS LGIM	12.04
FTSE World Developed Equity Index Currency Hedged	LGIM	8.17
FTSE World Developed Equity Index unHedged	LGIM	8.03
FTSE Emerging Markets	LGIM	2.96
IPD UK PFI All Balanced Funds Index	UBS Property AEW	13.39
3 Month Libor +3%	JP Morgan Macquarie	10.53
MSCI World ND	Epoch/LCIV	13.47
3 Month Libor	Ruffer/LCIV	9.85
3 Month Libor +4%	M&G Permira	6.96
Markit iBoxx £ Non – Gilt	LGIM 2	3.11
FTSE A Govt Index – Linked (All Stocks)	LGIM 2	3.99
FTSE A Govt Index – Linked (Over 15 Year	LGIM 2	4.88
	Non Custody CashCash	0.81
MSCI All Countries World Index	Private Equity	1.79
		100.00

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