#### Agenda Item No. 4 (a)

#### DERBYSHIRE COUNTY COUNCIL

#### PENSIONS AND INVESTMENTS COMMITTEE

#### 10 June 2020

#### **Report of the Director of Finance & ICT**

#### **INVESTMENT REPORT**

#### 1 Purpose of the Report

To review the Fund's asset allocation, investment activity since the last meeting, long term performance analysis and to seek approval for the investment strategy in the light of recommendations from the Director of Finance & ICT and the Fund's independent adviser.

#### 2 Information and Analysis

#### (i) Report of the External Adviser

A copy of Mr Fletcher's report, incorporating his view on the global economic position, factual information for global market returns, the performance of the Fund and his recommendations on investment strategy and asset allocation, is attached as Appendix 1.

#### (ii) Asset Allocation and Recommendations Table

The Fund's latest asset allocation as at 30 April 2020 and the recommendations of the Director of Finance & ICT and Mr Fletcher, in relation to the Fund's strategic asset allocation benchmark, is set out overleaf.

The table also shows the recommendations of the Director of Finance & ICT, adjusted to reflect the impact of future investment commitments. These commitments (existing plus any new commitments recommended in this report) relate to Private Equity, Multi-Asset Credit, Property and Infrastructure and total around £320m (£310m at 31 January 2020). Whilst the timing of drawdowns will be lumpy and difficult to predict, the In-house Investment Management Team (IIMT) believes that these are likely to occur over the next 18 to 36 months.

Asset Category	Benchmark	Fund Allocation	Fund Allocation	Permitted Range	Rel	hmark ative nendation		endation	Adjusted for Commitments (1)	Benchmark Sterling Return	Benchmark Sterling Return
		31/01/20	30/04/20		AF 10/06/20	DPF 10/06/20	AF 10/06/20	DPF 10/06/20	DPF 10/06/20	3 Months to 31/3/20	3 Months to 30/4/20
Growth Assets	57.0%	55.9%	53.2%	+/- 8%	-	(1.0%)	57.0%	56.0%	58.1%	n/a	n/a
UK Equities	16.0%	17.4%	15.8%	+/- 4%	-	+0.5%	16.0%	16.5%	16.5%	(25.1%)	(18.8%)
Overseas Equities:	37.0%	35.3%	34.2%	+/- 6%	-	(0.7%)	37.0%	36.3%	36.3%	n/a	n/a
North America	12.0%	10.9%	10.6%	+/- 4%	-	(1.5%)	12.0%	10.5%	10.5%	(14.5)%	(5.6%)
Europe	8.0%	8.4%	7.8%	+/- 3%	-	(0.2%)	8.0%	7.8%	7.8%	(17.3%)	(12.1%)
Japan	5.0%	6.4%	6.3%	+/- 2%	-	+1.0%	5.0%	6.0%	6.0%	(11.0%)	(6.5%)
Pacific ex-Japan	4.0%	4.7%	4.6%	+/- 2%	-	-	4.0%	4.0%	4.0%	(15.8%)	(5.9%)
Emerging Markets	5.0%	4.9%	4.3%	+/- 2%	-	-	5.0%	5.0%	5.0%	(19.0%)	(9.3%)
Global Sustainable	3.0%	-	0.6%	+/- 2%	-	-	3.0%	3.0%	3.0%	(15.9%)	(8.0%)
Private Equity	4.0%	3.2%	3.2%	+/- 2%	-	(0.8%)	4.0%	3.2%	5.3%	(24.7%)	(17.8%)
Income Assets	23.0%	20.4%	21.3%	+/- 6%	+2.0%	(1.3%)	25.0%	21.7%	25.6%	n/a	n/a
Multi-Asset Credit	6.0%	6.3%	6.1%	+/- 2%	+2.0%	0.3%	8.0%	6.3%	7.9%	(8.1%)	(-10.5%)
Infrastructure	8.0%	6.2%	6.9%	+/- 3%	-	(0.9%)	8.0%	7.1%	9.2%	0.7%	0.7%
Direct Property (3)	5.0%	4.6%	4.9%	+/- 2%	+1.0%	(0.1%)	5.0%	4.9%	4.9%	(1.3%)	(1.3%) (2)
Indirect Property (3)	4.0%	3.3%	3.4%	+/- 2%	(1.0%)	(0.6%)	4.0%	3.4%	3.6%	(1.4%)	(1.4%) (2)
Protection Assets	18.0%	17.3%	18.3%	+/- 5%	(2.0%)	(0.7%)	16.0%	17.3%	17.3%	n/a	n/a
Conventional Bonds	6.0%	5.4%	5.8%	+/- 2%	(3.0%)	(0.5%)	3.0%	5.5%	5.5%	6.3%	5.8%
Index-Linked Bonds	6.0%	5.7%	6.2%	+/- 2%	-	(0.5%)	6.0%	5.5%	5.5%	1.6%	2.4%
Corporate Bonds	6.0%	6.2%	6.3%	+/- 2%	+1.0%	+0.3%	7.0%	6.3%	6.3%	(6.0%)	(2.0%)
Cash	2.0%	6.4%	7.2%	0 – 8%	-	+3.0%	2.0%	5.0%	(1.0%)	0.1%	0.1%

Total Investment Assets totaled £4,923.3m at 30 April 2020.

(1) Recommendations adjusted for investment commitments at 30 April 2020 and presumes all commitments are funded from cash.

(2) Benchmark Return for the three months to 31 March 2020.

(3) The maximum permitted range in respect of Property is +/- 3%.

The table above reflects the following three categorisations:

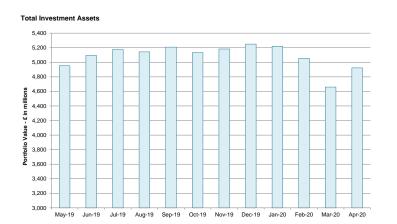
- **Growth Assets**: largely equities plus other volatile higher return assets such as private equity;
- **Income Assets**: assets which are designed to deliver an excess return, but with more stable return patterns than Growth Assets because income represents a large proportion of the total return of these assets; and
- Protection Assets: lower risk government or investment grade bonds.

Relative to the benchmark, the Fund as at 30 April 2020, was overweight in Protection Assets and Cash, and underweight in Growth Assets and Income Assets.

If all of the Fund's commitments (existing plus any new commitments recommended in this report) were drawn-down, the cash balance would reduce by 6.0% to -1.0%. However, in practice as these commitments are drawn-down, they will be partly offset by new net cash inflows from investment income, distributions from existing investments and changes in the wider asset allocation.

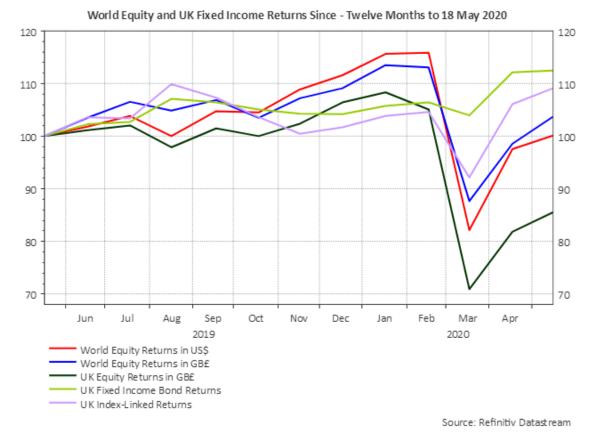
#### (iii) Total Investment Assets

The value of the Fund's investment assets fell by £296.2m (-5.7%) between 31 January 2020 and 30 April 2020 to just over £4.9bn, comprising a noncash market loss of around £375m, partly offset by an advance contribution of £58m from Derbyshire County Council and cash inflows from dealing with members & investment income of around £20m. Over the twelve months to 30 April 2020, the value of the Fund's investment assets has fallen by £81.1m (1.6%), comprising a non-cash market loss of around £240m, partly offset by an advance contribution of £58m and cash inflows from dealing with members & investment income of £58m and cash inflows from dealing with members and advance contribution of £58m and cash inflows from dealing with members & investment income of around £100m. A copy of the Fund's valuation is attached at Appendix 2.



The Fund's valuation can fluctuate significantly in the short term, reflecting market conditions, and supports the Fund's strategy of focusing on the long term.

#### (iv) Market returns over the last 12 months



The chart above shows market returns for Global Equities in Sterling and the US dollar, UK Equities, UK Fixed Income and UK Index Linked bonds for the twelve months to 18 May 2020.

After several years of positive returns, and ever higher equity markets, stock markets were adversely impacted by a sharp sell-off in February and early March 2020 in response to the Covid-19 pandemic. The FTSE All World in US dollars fell by 33.6% between 19 February and 23 March 2020. The economic impact of the containment measures imposed across the globe was unprecedented, as was the resultant policy response from central banks and from national governments. In the UK, for example, the extraordinary level of public sector borrowing in April, which totalled £62.1bn, the highest April figure since records began in 1993, and almost six times borrowings in April 2019, reflected a precipitous fall in tax receipts and an enormous increase in public expenditure to support the government's response to the crisis. It is highly likely that significant additional fiscal stimulus will be required from national governments going forward, supported by accommodative central banks.

Preliminary data for Q1 2020, indicates that the disruption caused by the coronavirus outbreak is set to cause the steepest fall in global GDP since the Second World War, and significantly greater than that experienced during the

2008-2009 Global Financial Crisis. UK GDP fell by 2.0% in Q1 2020, with a 5.8% month-on-month decline in March 2020 as the containment measures came into effect towards the month-end. This was matched by similar Q1 2020 GDP falls across other major developed markets: US -4.8%; Eurozone - 3.8%; and Japan -3.4%. In April 2020, the International Monetary Fund (IMF) projected that the global economy would contract by -3% in 2020, with a decline of -6.1% across developed economies. The IMF's baseline projection assumes that the Covid-19 pandemic fades in the second half of 2020 with containment efforts gradually being unwound.

Capital Economics forecasts a 51/2% contraction in global GDP in 2020 but believes that once the virus is under control, output should rebound quickly. However, the economic research firm believes that it could take a few years to return to its pre-crisis path - "if indeed, it ever does'. Capital Economics has pencilled in falls in real GDP in the second quarter of 2020 of as much as 20% in some advanced economies, with a rebound in China only partly offsetting falls elsewhere. Unlike in previous downturns, services are forecast to suffer more than industry, with containment measures having a disproportionate effect on consumer-facing sectors. The wage subsidy schemes deployed by many countries to encourage firms to retain workers will prevent unemployment from rising as much as it would otherwise have done but the jobless numbers are still forecast to rise sharply. However, fiscal and monetary action is expected to prevent the fall in economic activity leading to a prolonged slump in global output. Capital Economics believes that once the 'shutdowns' are eased, the global economy's capacity to produce goods and services should rebound strongly.

Markets have recovered most of the sell-off from mid-March 2020, supported by significant central bank financial stimulus, and more recently by reductions in the number of new coronavirus cases and the commencement of lockdown easing. Over the twelve months to 18 May 2020, the FTSE All World returned -0.7% in local currency, with the US market being the strongest performer with a return of 5.0% over the period. The UK market was the worst performer with a return of -14.5%, principally reflecting the composition of the UK index which has a high concentration of energy and commodity stocks (i.e. some of the sectors most affected by the pandemic), and renewed Brexit uncertainty as negotiations between the UK and European Union appeared to make little progress.

Sterling investors also benefited from a weaker pound relative to most other developed market currencies. The pound weakened from £1:\$1.311 on 9 March 2020 to a low of £1:\$1.149 on 23 March 2020, as the \$ was supported by safe-haven demand. Whilst the pound has slightly strengthened since that

date to £1:\$1.219 on 18 May 2020, renewed Brexit uncertainty of late has also weighed on the value of Sterling. The impact of the weaker pound increased the FTSE All World returns from -0.7% in local currency to +3.7% in Sterling terms.

Demand for sovereign bonds increased significantly as a result of the Covid-19 pandemic, with US Treasuries reporting the strongest return followed by UK Gilts. Longer dated bonds outperformed shorter dated maturities, and current yields are at, or around, historic lows. UK gilts have returned 12.5% since the start of the year. Index-Linked bonds initially fell on the back of deflationary concerns, the on-going RPI versus CPI consultation, and the fact that Index-Linked bonds are not part of the Bank of England quantitative easing programme. Index-Linked bonds have since rallied and stabilised, returning 9.5% since the start of the year.

The monetary policy response to the Covid-19 pandemic has been unprecedented, with central banks reducing interest rates, and either introducing (Australia and Canada) or recommencing (US, UK and Eurozone) significant levels of quantitative easing, including buying sovereign bonds, and for the first time the US Federal Reserve (US Fed) is purchasing investment grade bonds and 'fallen angels' (i.e. investment grade bonds downgraded to high yield status) to support credit markets. Some investors have even questioned whether the US Fed would consider buying equities going forward to support equity markets.

The yield on 10 year UK gilts reached a 20 year low of 16 basis points on 9 March 2020 (down from 82.5 basis points at 31 December 2019). The comparable yield on a 10 year treasury bond also fell to a 20 year low of 49.8 basis points on 9 March 2020 (down from 191 basis points on December 2019).

The IIMT notes that despite the significant bounce in equity markets since mid-March 2020, and the expectation of significant bond issuance going forward, both the UK and US 10 year bond yields have not increased significantly from mid-March, indicating that the bond market may not be as optimistic about the shape of the economic recovery as the equity market.

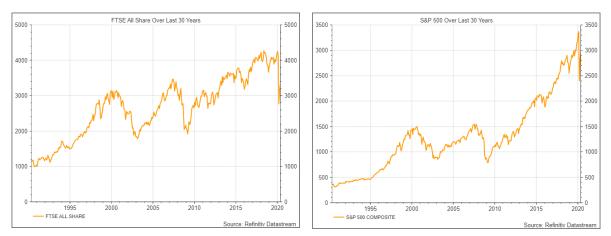
The BoE reduced the Bank Rate by 65 basis points to 10 basis points, with a 50 basis points reduction on 11 March 2020, followed by a further 15 basis points reduction on 19 March 2020. This was matched by the US Fed, which reduced the federal funds rate by 150 basis points to 0 to 25 basis points. Both the European Central Bank (ECB) and Bank of Japan (BoJ) already had zero or negative interest rates, so had little room to reduce rates further, albeit

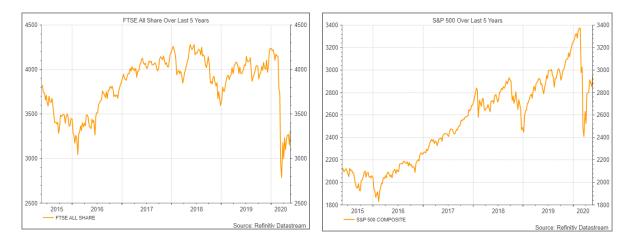
both the ECB and BoJ have announced significant quantitative easing programmes.

Corporate and High Yield bonds fell sharply in Q1 2020, as investors switched into 'risk-off' assets (e.g. cash and sovereign bonds). Spreads over sovereign bonds widened significantly reflecting concerns about the effect of the lockdowns on corporate profits. For example, the average yield spread on a 7–10 year US investment grade bond increased from around 75 basis points prior to the coronavirus outbreak to around 250 basis points by mid-March, whereas the average spread on a 7–10 year US high yield bond increased from around 450 basis to around 1,200 basis points over the comparable period.

UK investment grade bonds returned -4.7% in Q1 2020, whereas Sterling hedged global high-yield bonds returned -14.2%. Spreads have subsequently narrowed, after central banks, in particular the US Fed, increased the scope of quantitative easing to include investment grade and some high yield bonds. Since 1 April 2020, UK investment grade bonds have returned 4.5% and Sterling hedged global high-yield bonds have returned 6.7%.

Asset class weightings and recommendations are based on values at the end of April 2020. Equity markets fell sharply in February and early March 2020 but have recovered strongly since then, albeit at different rates. For example, the recovery in the UK equity market has been more muted than in the US. The UK equity market is now generally lower than at any other time in the last five years, whereas the US equity market has substantially recovered and is generally higher than at any time in the last five years.





#### (v) Longer Term Performance

Figures provided by Portfolio Evaluation Limited show the Fund's performance over 1, 3, 5 and 10 years to 30 April 2020.

Per annum	DPF	Benchmark Index
1 year	(4.7%)	(5.4%)
3 year	1.5%	1.0%
5 year	4.8%	4.3%
10 year	6.7%	6.4%

The Fund out-performed the benchmark in all time periods.

Over the last five years Committee has approved several changes to the Strategic Asset Allocation Benchmark (SAAB) which have resulted in a rebalancing of the Fund's assets from Growth Assets to Income Assets.

The table below shows the impact on the Fund's annualised and cumulative returns over the last five years to 31 March 2020 of the changes to the SAAB, together with the impact of the relative out-performance achieved by the Fund over that period.

£ in Million	1 Year	3 Years	5 Years
Annualised Impact of Benchmark Changes	+61	+33	+24
Annualised Impact of Relative Performance	+33	+23	+22
Total Annualised Impact	+94	+56	+46
Cumulative Impact of Benchmark Changes	+61	+98	+120
Cumulative Impact of Relative Performance	+33	+70	+108
Total Cumulative Impact	+94	+168	+229

Source: IIMT Analysis

The analysis prepared by the IIMT indicates that the SAAB changes and relative out-performance have cumulatively increased the Fund's investment assets by £229m at 31 March 2020 (equivalent to 4.9% of total investment assets at that date), with both levers contributing to the positive outcome.

The IIMT are working with Portfolio Evaluation Limited to separately show the performance attributable to products and services provided by LGPS Central Limited, and those resulting from the Fund's non-pooled assets.

#### (vi) Category Recommendations

	Benchmark	Fund Allocation	Permitted Range	Recommendation		Benchmark Relative Recommendation	
		30 Apr-20		AF	DPF	AF	DPF
Growth Assets	57.0%	53.2%	± 8%	57.0%	56.0%	-	(1.0%)
Income Assets	23.0%	21.3%	± 6%	25.0%	21.7%	+2.0%	(1.3%)
Protection Assets	18.0%	18.3%	± 5%	16.0%	17.3%	(2.0%)	(0.7%)
Cash	2.0%	7.2%	0 – 8%	2.0%	5.0%	-	+3.0%

At an overall level, the Fund was overweight Protection Assets and Cash at 30 April 2020, and underweight Growth Assets and Income Assets, although if commitments waiting to be drawn down were taken into account, the Fund would move to an overweight position in Growth and Income Assets. The table on page 2 assumes that all new commitments will be funded out of the current cash weighting; in practice as private market commitments are drawn down they are likely to be funded partially out of cash and partially by distributions (income and capital) from existing investments and sales of public market assets. The Fund has progressively reduced its exposure to Growth Assets over the last two years, as equity valuations have become increasingly stretched, and increased the allocation to Income Assets and Protection Assets.

The IIMT recommendations reflected in this report: increase Growth Assets by 2.8% to 56.0% (1.0% underweight), with a change in the regional composition to reflect the implementation of the allocation to sustainable equities: United Kingdom Equities +0.7%; North American Equities -0.1%; Japanese Equities -0.3%; Asia-Pacific Ex-Japan -0.6%; Emerging Markets +0.7%; and Global Sustainable Equities +2.4%); increase Income Assets by 0.4% (Infrastructure +0.2% and Multi-Asset Credit +0.2%); reduce Protection Assets by 1.0% (Conventional Bonds - 0.3%; and Index-Linked Bonds -0.7%); and reduce Cash by -2.2%. The IIMT notes that the recommendations are subject to market conditions, which are highly volatile at the moment.

The IIMT continues to recommend a defensive cash allocation. Whilst global equity markets have stabilised following a significant sell off in February and early March 2020, this has been heavily dependent on substantial and unprecedented central bank monetary support. The recovery, particularly in respect of the US market, appears to be ignoring significant headwinds including

considerable uncertainty about the shape of the economic recovery (i.e. V-shaped, W-shaped, U-shaped, L-shaped, etc.); whether economic activity can return to pre-outbreak levels; the risk of a second wave of infections; no guarantee that a vaccine will be developed; slowing economic growth going into the pandemic; a re-escalation of US-China tensions over political and global economic dominance; weaker business and consumer confidence (e.g. caused by general uncertainty and rising unemployment); and an upcoming US Presidential Election. Furthermore, as noted above, the cash weighting will be reduced as the Fund's current commitments are drawn down.

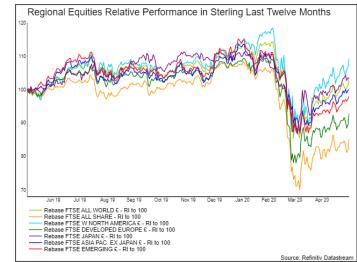
#### (vii) Growth Assets

At 30 April 2020, the overall Growth Asset weighting was 53.2%, down from 55.9% at 31 January 2020, reflecting relative market weakness.

Just under 1% was added to equities in mid-March as markets had fallen sharply. The IIMT recommendations below increase the overall Growth Asset weighting to 56.0%, 1.0% underweight relative to the benchmark. Whilst equity valuations have fallen as a result of the Covid-19 pandemic, so have company prospects and earnings forecasts. The shape of the economic recovery is unclear, and many of the issues weighing on investors prior to the outbreak remain, including slowing economic growth, US-China trade relations, geopolitical uncertainty and Brexit.

The risk of investor confidence being eroded should there be a second wave of infections and/or the economic recovery is more protracted than expected, together with the strong recovery in equity markets in April and May, justify a cautious approach to rebuilding the weighting in growth assets. A small underweight position in growth assets is, therefore, recommended.

The Chart opposite shows the relative regional equity returns in Sterling terms over the last twelve months, and the charts overleaf show the returns since the last Investment Report was presented to Committee and in Q1 2020. Equity markets



Benchmark Return	Q2 2020 (*)	Q1 2020	1 Year	3 Year	5 Year
FTSE All World	13.3%	(15.9%)	(6.2%)	2.2%	7.2%
FTSE UK	7.0%	(25.1%)	(18.5%)	(4.2%)	0.6%
FTSE North America	16.9%	(14.5%)	(2.8%)	5.0%	10.1%
FTSE Europe	8.4%	(17.3%)	(8.0%)	(0.6%)	3.7%
FTSE Japan	6.4%	(11.0%)	(2.1%)	1.4%	6.0%
FTSE Asia Pacific Ex-Japan	10.1%	(15.8%)	(11.2%)	(0.7%)	4.2%
FTSE Emerging Markets	10.0%	(19.0%)	(13.0%)	(1.2%)	3.6%
Source: Performance Evoluction Lim	ited				

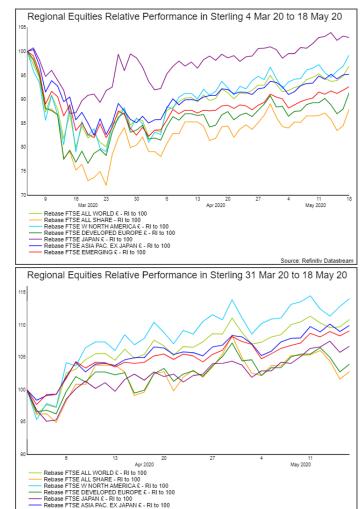
Source: Performance Evaluation Limited (\*) 1 April 2020 to 18 May 2020 trended upwards throughout 2019 but fell sharply in February and early March 2020 as the coronavirus outbreak escalated and lockdown measures were introduced across the globe. Markets have recovered strongly in April and May 2020, particularly in the US, driven by unprecedented levels of fiscal stimulus and a gradual easing of lockdown restrictions as the number of new cases has fallen in developed markets. The fiscal and monetary response from governments and central banks is boosting investor sentiment at present, and offsetting declining economic data and corporate profitability expectations.

Over the course of the year to 18 May 2020, the US market provided the strongest returns (+5.0%) in local currency terms, followed by the Japanese market (-3.4%). The UK market produced the lowest return (-14.5%).

Sterling investors benefited from a weaker pound over the period, which pushed up regional equity returns. The US dollar strengthened to its strongest levels since the 1980's on the back of safe-haven demand and Brexit uncertainty. This increased the US return from +5.0% in local currency to +9.6% in Sterling terms.

Globally, growth stocks (companies with future growth and capital appreciation potential) have significantly out-performed value stocks (stocks which trade at a lower price relative to their fundamentals, including dividends, earnings, and sales).

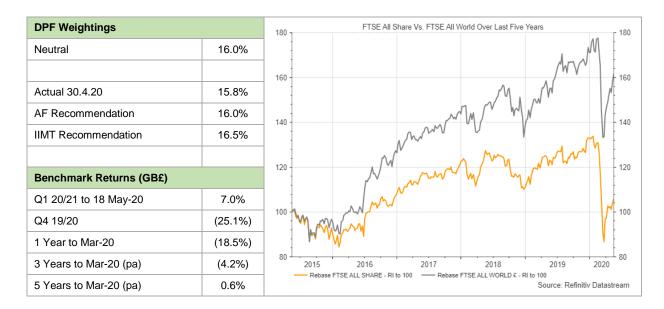
UK Equities lagging all other regional markets in the year to 18 May 20, reflecting the impact of Brexit uncertainty, and the fact that the UK index has a high concentration of energy and commodity stocks (i.e. some of the sectors most affected by the pandemic), and a low concentration of technology stocks (e.g. some of the companies best positioned to benefit from the Covid-19 pandemic).



Source: Refinitiv Datastrear

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#### **United Kingdom Equities**

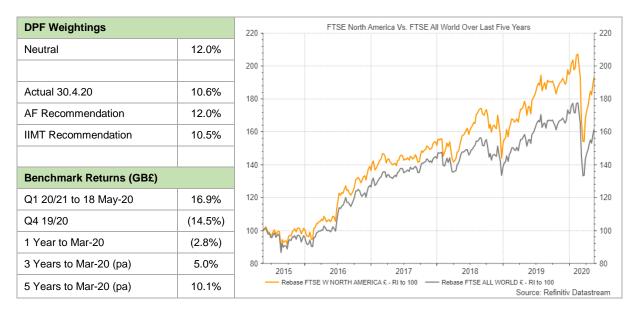


Whilst net investment totalled £40m in the period, relative market weakness reduced the UK Equities from 17.4% at 31 January 2020 to 15.8% at 30 April 2020; 0.2% underweight overweight relative to the benchmark. Although the market has bounced by 22% since the low point in mid-March.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations. Mr Fletcher believes that the rebound in equity market since mid-March 2020 and the difference in the performance of certain sectors and indices has reduced the attractiveness of equities. There is increased macro-uncertainty and the chance that markets may witness another round of weakness as the recovery from lockdown proceeds.

The IIMT believes that whilst UK Equity returns are likely to be volatile in the short-term as the uncertainty caused by the Covid-19 pandemic and on-going Brexit negotiations weigh on investor confidence, UK equity valuations are attractive on a relative basis. The IIMT notes that UK Equities also pay a higher dividend than most other regional equity markets (albeit these are likely to be lower in the short to medium terms as companies preserve cash), and around 70% of the earnings of the UK market are generated overseas increasing diversification. As a result, the IIMT recommends a modest overweight allocation of 16.5% to UK allocations; 0.5% overweight.

#### North American Equities



Divestment of £30m in the period (recycled into Global Sustainable Equities) reduced the Fund's North American Equity weighting from 10.9% at 31 January 2020 to 10.6% at 30 April 2020, 1.4% underweight.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations (see earlier). This increases Mr Fletcher recommendation to US Equities from 11% in March 2020 to 12%.

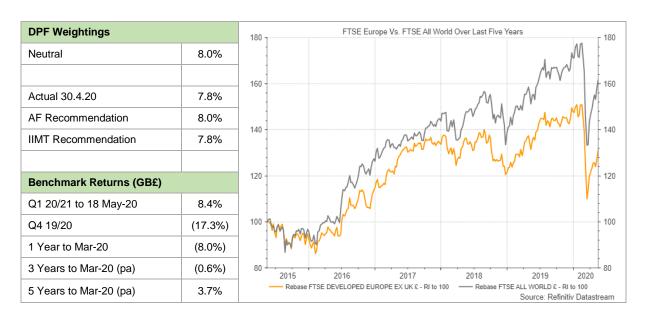
The IIMT notes that following a sharp sell-off in February and early March 2020 (US equities fell by -34.4% between 19 February and 23 March 2020), they have rebounded strongly since then (+33.1% to 18 May 2020 – equating to a net recovery of around 65%), out-performing all other regional equity markets. The US market is close to an all-time high. This recovery has largely been concentrated in a limited number of technology and online retail stocks (Facebook, Apple, Amazon, Netflix, Alphabet ('Google') and Microsoft). These businesses have models which have been well suited to the coronavirus outbreak, and there is significant performance dispersion versus the rest of the US market.

The IIMT believes that the shape of the economic recovery from the Covid-19 pandemic is uncertain, including the risk of a second wave of infections, which could have a significant impact on investor confidence. Furthermore, there appears to be renewed tensions between the US and China, with President Trump publically blaming China for the pandemic and criticising China's containment measures. The level of political uncertainty is also likely to increase in the run-up to the US Presidential Election in November 2020,

with some of the policies of the potential democratic candidates likely to cause concern on Wall Street.

Given the strong relative performance of the US Equity market over the last twelve months, the IIMT continues to believe that an underweight position remains justified, and recommend a 1.5% underweight allocation of 10.5%.

#### **European Equities**



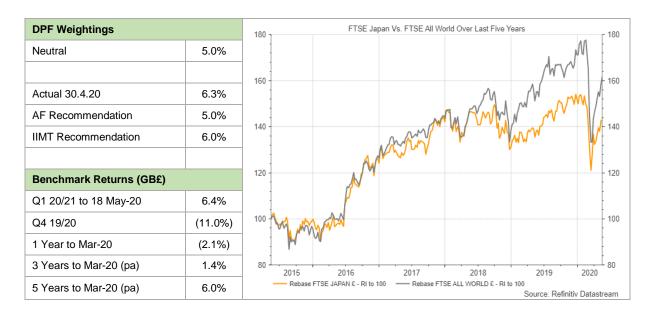
Whilst there were no transactions in the period, relative market weakness reduced the Fund's allocation to European Equities to 7.8% at 30 April 2020; 0.2% underweight.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations; 8% in respect of European Equities.

Even before the Covid-19 pandemic, growth in the Eurozone remained weak despite continued monetary support. Several Eurozone countries have been badly affected by the Covid-19 pandemic and the shape of the economic recovery across Europe is unclear.

The IIMT believes that the economic outlook for the Eurozone is likely to remain challenging, with the potential for heightened political uncertainty around the financial support offered for those countries most affected by the Covid-19 pandemic (albeit a proposed €750bn recovery fund is currently being discussed by the EU), and the potential impact of a recent German court ruling that the ECB's bond-buying programme to stabilise the Eurozone partly violates the German constitution. Furthermore, there is also limited scope for the ECB to reduce interest rates because these are already at -50

basis point, although the ECB has initiated a further €750bn bond buying exercise (Pandemic Emergency Purchase Programme). As a result, the IIMT recommends that the slightly underweight allocation of 7.8% at 30 April 2020 (0.2% underweight) is maintained.



#### Japanese Equities

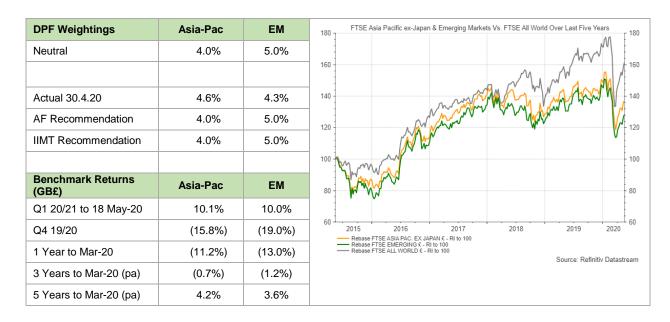
Whilst there were no transactions in the three months to January 2020, relative market weakness reduced the weighting slightly by 0.1% to 6.3% at 30 April 2020; 1.3% overweight against the benchmark.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations; 6% in the case of Japanese Equities.

Similar to the Eurozone, the Japanese economy was suffering from weakness prior to the coronavirus outbreak, with a -1.4% fall in GDP in Q4 2019. The Japanese economy slipped into recession in Q1 2020 with a -3.4% contraction, with the economy hit by both the adverse impact of the Covid-19 pandemic and a sales tax increase in October 2019. The Japanese government announced a record \$1 trillion stimulus package in response to the pandemic, and the BoJ expanded its stimulus measures.

Whilst Japanese Equities returned -3.4% in YTD20, the defensive qualities of the Japanese ¥ have protected Sterling investors, with a Sterling return of +3.3% over the period. Notwithstanding the 2019-20 economic slowdown, the IIMT believes that the long term story in Japan remains intact supported by attractive relative valuations, improving corporate governance, and the diversifying and defensive qualities of the Japanese market (e.g. the safe-haven status of the ¥). The IIMT believes that an overweight position remains

appropriate but recommend that the allocation is reduced by 0.3% to 6.0%; 1.0% overweight to 'lock-in' some of the YTD20 relative performance. Asia Pacific Ex-Japan and Emerging Market Equities



Relative market weakness reduced the Asia Pacific Ex-Japan weighting from 4.7% at 31 January 2020 to 4.6% at 30 April 2020; divestment of £10m and relative market weakness reduced the Emerging Market Equity weighing by 0.6% to 4.3% over the comparable period.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations; 4% in the case of Asia Pacific Ex-Japan Equities and 5% in Emerging Market Equities (down from a 1% overweight allocation in the previous quarter).

The IIMT continues to believe in the long-term growth potential of these regions, noting that these regions have accounted for well over half of global growth over the last ten years, and as shown below, Asia Pacific is forecast to grow at a faster rate than developed markets in 2020 and 2021; growth forecasts remains positive in 2020 despite the Covid-19 pandemic.

Region	Real GDP 2019 (A)	Real GDP 2020 (F)	Real GDP 2021 (F)
Asia Ex-Japan	5.0%	0.4%	7.0%
Latin America	0.6%	(4.0%)	3.0%
Eastern Europe	2.4%	(3.4%)	3.9%
North America	2.2%	(5.5%)	4.3%
Japan	0.7%	(5.5%)	2.4%
Eurozone	1.4%	(7.2%)	5.6%
United Kingdom	1.4%	(7.9%)	6.1%

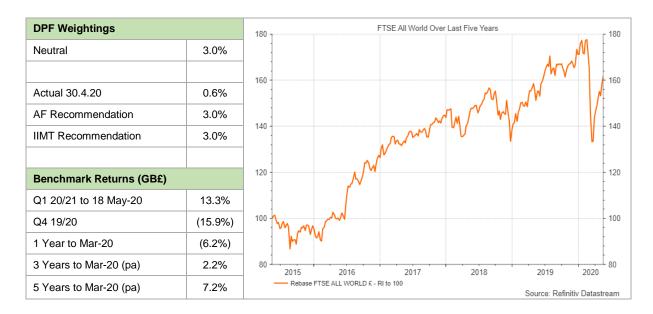
Notwithstanding the strong growth dynamics, particularly in respect of Emerging Asia, this has failed to convert into strong relative returns for emerging market investors. Over the last five years, Asia Pacific and Emerging Market equity returns have been relatively weak - cumulative total dollar returns from US equities over the last five years totalled 50.4%, compared to 6.3% from Asia Pacific equities and -0.3% from emerging market equities. The return from emerging markets has also varied significantly by region with Emerging Asia returning +10.2%; Emerging Europe returning +5.0%; and Emerging Latin America returning -30.9%.

The poor relative performance of Asia Pacific Ex-Japan and Emerging Market Equities has been attributed to three key drivers: a stronger dollar acting as a headwind for further migration of western savings pools towards these regions; tepid global growth, including an on-going slowdown in China; and the increase in more domestically focused political agendas (e.g. at the expense of further globalization).

The economic impact of the Covid-19 pandemic remains unclear, albeit the consensus forecasts for the Asia Pacific region appear positive and the response from most of the countries in the region to the coronavirus outbreak was seen as timely and decisive, and the lockdown measures introduced are now being relaxed. Whilst the situation appears to be improving, the Chinese economy was already slowing going into the Covid-19 pandemic, and the risk of a second wave of infections remains. There are growing signs that the tensions between the US and China are escalating again, and there is a risk that following the pandemic, political agendas and supply chains will become much more domestically focused (e.g. at the expense of further globalisation).

The IIMT recommends that the Fund reduces the Asia Pacific Ex-Japan Equity weighting by 0.6% to take it to a neutral position of 4%, whilst adding 0.7% to Emerging Market's to also bring it into line with a neutral weighting of 5%, with a tilt towards Emerging Asia.

#### **Global Sustainable Equities**



The Fund made its first allocation to the Global Sustainable Equities asset class in April 2020, with a £30m investment into a positive change fund. The fund aims to deliver attractive long-term returns and to deliver positive change by contributing toward a more sustainable and inclusive world.

Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations; 3% in the case of Global Sustainable Equities.

As noted above, the Fund made its first investment into the asset class in April 2020, and has now successfully completed due diligence on two investment managers; the IIMT expects to allocate further capital to the asset class over the upcoming quarter subject to market conditions.

The IIMT recommends a neutral opening allocation of 3%.

# Private Equity

DPF Weighting								
Netural		Actual 30.4.20	Committed 30.4.20	AF Recommendation	IIMT Recommendation			
4.0%		3.2%	5.3%	4.0%	3.2%			
	Benchmark Returns (GB£)							
Q1 20/21 to 18 May-20	Q4 19/20	1 Year to Mar-20	3 Years to Mar-20 (pa)	5 Years to Mar-20 (pa)				
7.0%	(24.7%)	(17.5%)	(3.2%)	1.5%				

The Private Equity allocation remained flat between 31 January 2020 and 30 April 2020; 5.3% on a committed basis.

Mr Fletcher recommends a neutral weighting of 4% in Private Equity.

Prior to the Covid-19 pandemic, the IIMT were concerned about private equity earnings multiples which were nearing all-time highs, particularly in respect of large and mega cap deals. The IIMT believes that the coronavirus outbreak is likely to lead to a period of lower private equity multiples, particularly in respect of small and mid-cap deals, creating an opportunity to deploy additional capital. As a result, the Fund made a £25m commitment to a small and mid-cap focused private equity fund in April 2020, increasing the committed weight in the asset class to 5.3%.

#### (viii) Income Assets

At 30 April 2020, the overall weighting in Income Assets was 21.3%, up from 20.4% at 31 January 2020, principally reflecting relative market strength compared to growth assets. The IIMT recommendations below would take the overall Income Asset weighting to 21.7%, and the committed weighting to 25.6%.

DPF Weighting								
Neutral		Actual 30.4.20	AF Recommendation	IIMT Recommendation				
6.0%		6.1%	8.0%	6.3%				
		Benchmark Returns (G	BB£)					
Q1 20/21 to 18 May-20	Q4 19/20	1 Year to Mar-20	3 Years to Mar-20 (pa)	5 Years to Mar-20 (pa)				
2.9%	(8.1%)	(5.5%)	0.5%	n/a				

#### Multi Asset Credit

There were minimal net transactions in the three months to 30 April 2020, with commitment drawdowns being matched by distributions. Relative market weakness driven by a significant widening in credit spreads reduced the asset class allocation from 6.3% at 31 January 2020 to 6.1% at 30 April 2020. Adjusting for commitments, the weighting increases to 7.9%. Whilst this implies the pension fund will be 1.9% overweight should all the commitments be drawn-down, in practice it is unlikely that the commitments will be fully drawn, and some of the existing closed-ended investments have now entered their distribution phase (i.e. returning cash to investors).

Mr Fletcher has increased his recommended allocation to Multi-Asset Credit from 6% to 8% (2% overweight), noting that the recent move in government bond yields has caused spreads to widen dramatically. Central banks have generally announced that they plan to buy corporate bonds and in the case of the US Fed, this will also include sub-investment grade debt. Mr Fletcher notes that spreads have now stabilised, and in the past the current level of spread has been more than sufficient to compensate for the increased default risk.

Whilst the IIMT continues to be positive about the long-term attractions of the asset class, with a strong bias towards defensive forms of credit, it is noted that spreads have narrowed significantly since mid-March 2020 (e.g. US 7-10 year high yield bond spreads initially increased from around 450 basis points prior to the outbreak to around 1,200 basis points by mid-March but have subsequently fallen to around 750 basis points). The IIMT believes that it is unclear whether the current level of spread is sufficient to compensate for the increased risk of default, particularly when the shape of the recovery is unknown, and the recovery cannot easily be benchmarked to previous trends. It is also likely to differ significantly by country and sector.

The IIMT recommends increasing the invested weighting by 0.2% to 6.3% in the upcoming quarter (0.3% overweight) to cover anticipated commitment drawdowns.

DPF Weighting							
Neutral		Actual 30.4.20	AF Recommendation	IIMT Recommendation			
9.0%	9.0%		9.0%	8.3%			
		Benchmark Return	s (GB£)				
Q1 20/21 to 18 May-20	Q4 19/20	1 Year to Mar-20	3 Years to Mar-20 (pa)	5 Years to Mar-20 (pa)			
Not Available	(1.3%)	0.5%	4.8%	5.9%			

#### Property

The Fund's allocation to Property increased by 0.4% to 8.3% at 30 April 2020. Direct Property accounted for 4.9% (0.1% underweight) and Indirect Property accounted for 3.4% (0.6% underweight). The committed weight was 8.5% at 30 April 2020.

Mr Fletcher recommends that the property allocation should remain at neutral with a preference for Direct Property over Indirect Property. Over the next couple of years, Mr Fletcher believes that the income from property may be lower due to the impact of postponed and potentially cancelled rent payments but that this should only prove temporary. As a long-term investor, the Fund should 'look-through' the temporary impact of lower rental income impacting total asset class returns.

Colliers Capital, the Fund's Property Manager, notes that since February 2020, the UK commercial property market has encountered unprecedented and exceptionally challenging conditions in the face of the Covid-19 pandemic. Colliers anticipates that this will adversely and significantly impact on property market valuations (this has yet to come through in the market), void rates and the ability of tenants to pay rent as many businesses have closed due to the lockdown. The manager is actively working with tenants to agree rent deferrals where appropriate.

Whilst the short to medium term outlook is unclear, the manager believes that the Fund's direct property portfolio is relatively well placed to meet the challenging conditions, with good quality properties in strong locations, a void rate below market averages, a robust income stream from on the whole tenants with good covenant strength and a relatively low exposure to the retail sector. The manager further notes that good opportunities to make further investments in the asset class are likely to arise when the effects of the current pandemic are reflected in market valuations.

The IIMT recommends that in the short term the Fund's current allocation to Direct Property (4.9%; 0.1% underweight) and Indirect Property (3.4%; 0.6% underweight) are maintained but liquidity of up to £50m is made available to the Direct Property manager to make further investments at the right time should they identify suitable investment opportunities.

	DPF Weighting								
Neutral		Actual 30.4.20	tual 30.4.20 Committed 30.4.20 AF Recommendation		IIMT Recommendation				
8.0%	6.9% 9.2%		8.0%	7.1%					
	Benchmark Returns (GB£)								
Q1 20/21 to 18 May-20	Q4 19/20	1 Year to Mar-20	3 Years to Mar-20 (pa)	5 Years to Mar-20 (pa)					
0.5%	0.7%	2.8%	2.7%	2.4%					

#### Infrastructure

Net investment of £3.0m, together with relative market strength, increased the Fund's allocation to Infrastructure from 6.2% at 31 January 2020 to 6.9% at 30 April 2020; 9.2% on a committed basis.

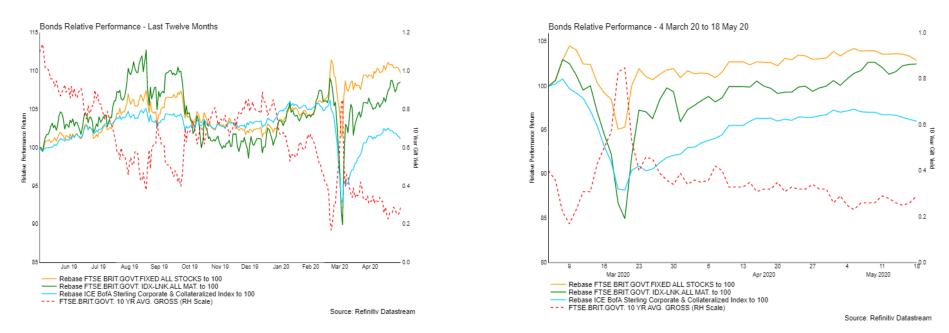
Mr Fletcher recommends a neutral weighting of 8% allocation.

The IIMT continues to view Infrastructure as an attractive asset class, and favour a bias towards core infrastructure assets. Core infrastructure assets can offer low volatility; low correlation to equity and fixed income; and reliable long-term cash flows. This was evidenced in Q1 2020, when the Fund's infrastructure portfolio returned +3.9% versus an equity return of -19.2%, albeit there is a risk that the valuation impact of the coronavirus outbreak has yet to flow through infrastructure valuations (i.e. creating a valuation timing lag).

Notwithstanding the noted favourable characteristics of the asset class, the IIMT continues to believe that infrastructure assets are exposed to increased political and regulatory risk, and this risk is managed through asset type and geographical diversification. Further investment opportunities which are in line with these objectives, continue to be assessed, including a focus on additional renewable energy commitments.

The IIMT recommends that the Infrastructure weighting is increased by 0.2% to 7.1% (0.9% underweight) in the upcoming quarter, in anticipation of existing commitment draw-downs.

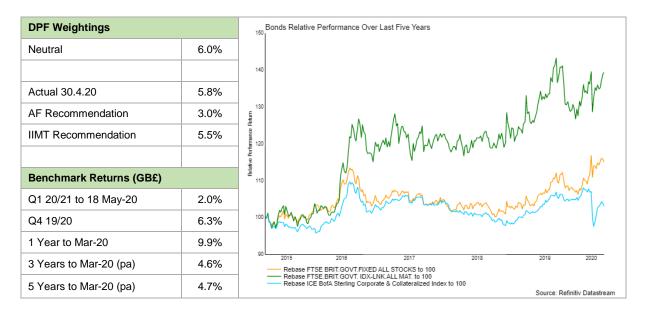
#### (ix) Protection Assets



The weighting in Protection Assets at 30 April 2020 was 18.3%, up from 17.3% at 31 January 2020, reflecting relative market strength. The IIMT recommendations below reduce the weighting to 17.3%.

Government bond yields fell (i.e. prices rose) in Q1 2020 as demand for safe-haven assets increased. The 'spike' in the 10 year gilt yield between 9 March and 18 March reflected an increase in sales by investors to generate liquidity which fell away as liquidity improved following central bank support. Bond yields have not risen despite the equity market rally since mid-March 2020, and the expectations of significant bond issuance going forward, which indicates that the bond market may not be as optimistic about the shape of the economic recover as the equity market. The IIMT also notes that the UK government issued £3.75bn of gilts on 20 May 2020 with a maturity in July 2023, at a negative yield. This sees the UK joining Japan, Germany and some other European countries in selling debt yielding less than 0%.

#### **Conventional Bonds**



Despite divestment of £10m in the period (driven by a fixed term maturity), relative market strength increased the Fund's allocation to Conventional Bonds by 0.4% to 5.8% at 30 April 2020; 0.2% underweight.

Mr Fletcher has reduced his recommended allocation to Conventional Bonds to 3% underweight (down from 6% in March 2020). Mr Fletcher believes that following interest rate cuts by both the BoE and US Fed, and their stated desire not to introduce negative interest rates because of the technical difficulties it produces for the money markets and banking system, government bond yields are close to their lower boundary, and the long-term direction is for yields to trend higher once the recovery is underway.

The IIMT continues to believe that whilst conventional sovereign bonds do not appear to offer good value at current levels with yields around historic lows, they are diversifying assets and continue to afford greater protection than other asset classes in periods of market uncertainty as evidenced during the Covid-19 pandemic (up 8.4% YTD20). The IIMT believes that it is too early to call the bottom of the coronavirus outbreak, and the shape of the economic recovery, including whether economic activity will return to pre-outbreak levels. Whilst the IIMT recommends an underweight allocation to 'lock-in' some of the YTD20 gain, the underweight recommendation is relatively modest at 0.5% because of the concerns noted above.

## Index-Linked Bonds



Relative market strength increased the Index-Linked Bonds weighting from 5.7% at 31 January 2020 to 6.2% at 30 April 2020; 0.2% overweight.

Mr Fletcher recommends a neutral 6% allocation to Index-Linked Bonds, up from a 2% underweight recommendation of 4% in March 2020. Mr Fletcher notes that over the last quarter much of the overvaluation in Index-Linked Bonds has been removed by the bigger price change in Conventional Bonds, although they remain expensive relative to US Treasuries and Treasury Inflation Protected (TIPS) Bonds. Covid-19 has caused the consultation period on RPI reform to be extended, as investors continue to lobby the government for no change or the payment of compensation should it proceed with the proposal.

In line with the IIMT's recommendation in respect of Conventional Bonds, the IIMT notes that whilst Index-Linked Bonds appear expensive at current levels, it is too early to call the bottom of the Covid-19 pandemic. The IIMT believes that inflation expectations in the short-term are muted reflecting the deflationary effects of weaker demand and lower oil prices but in the medium term inflation will pick-up driven by the enormous policy stimulus (both fiscal and monetary).

The IIMT recommends a modest 0.5% underweight allocation to Index-Linked Bonds to 'lock-in' some of the YTD20 gain (up 8.7% YTD20). It is also recommends that the current exposure to US TIPS (around 20% of the Index-Linked portfolio) is maintained.

## **Corporate Bonds**



The Fund completed the transition of the legacy UK bond portfolio into a global investment grade credit fund developed by LGPS Central Limited in the period. Relative market strength increased the Fund's allocation to the asset class from 6.2% at 31 January 2020 to 6.3% at 30 April 2020; 0.3% overweight.

Mr Fletcher has increased his Corporate Bonds recommendation from neutral to 1% overweight noting that the recent rise in credit spreads is more than sufficient to compensate for the additional default risk.

The IIMT notes that credit spreads have narrowed significantly since mid-March 2020 (e.g. US 7-10 year investment grade bond spreads initially increased from around 75 basis points prior to the outbreak to around 250 basis points by mid-March but have subsequently fallen to around 200 basis points), and it is unclear whether the current level of spread is sufficient to compensate for the increased default, particularly when the shape of the recovery is unknown, and the recovery cannot easily be benchmarked to previous trends. It is also likely to differ significantly by country and sector. Whilst the impact of the current situation on corporate profitability, balance sheets and cash flows remains unclear, the IIMT believes that the more modest overweight allocation of 6.3% is warranted.

# (x) Cash

The Cash weighting at 30 April 2020 was 7.2% (5.2% overweight relative to the benchmark), and included a £58m advance payment contribution by Derbyshire County Council on 30 April 2020 (increasing the cash weighting by 1.2%).

Mr Fletcher has reduced his recommended allocation to Cash from 4% to a neutral 2%. Mr Fletcher believes that any excess cash after due consideration of any allocations that have been committed, or need to be held as a buffer in anticipation of a shortfall in expected positive cash flow, should now be invested to top up underweight growth asset allocations to neutral (together with the monies raised from reducing the overweight regional allocations to neutral). , after reducing the allocations which are above neutral.

Whilst global markets have stabilised following the sharp sell-off in Q1 2020, this has been heavily dependent on substantial and unprecedented central bank monetary support. The rebound in equity markets, particularly in the US, appears to be ignoring significant headwinds including the shape of the economic recovery; whether economic activity can return to pre-outbreak levels; the risk of a second wave of infections; no guarantee that a vaccine will be developed; slowing economic growth going into the pandemic; a re-escalation of US-China tensions over political and global economic dominance; weaker business and consumer confidence (e.g. caused by general uncertainty and rising unemployment); and an upcoming US Presidential Election.

The IIMT recommends a defensive cash allocation of 5% due to the highly uncertain economic outlook This will also ensure that the Fund has sufficient operational headroom after adjusting for term-loan maturities (i.e. short-term loans provided by the Fund to other public sector bodies) to cover upcoming investment commitment drawdowns (expected to be in excess of £120m over the course of 2020-21), and to cover the likelihood that cash inflows into the Fund, particularly, from investment income, reduce as a result of the Covid-19 pandemic.

#### 3 Other Considerations

In preparing this report the relevance of the following factors has been considered: financial, legal and human rights, human resources, equality and

diversity, health, environmental, transport, property and prevention of crime and disorder.

#### 4 Background Papers

Files held by the Investment Section.

#### 5 Officer's Recommendations

- 5.1 That the report of the external adviser, Mr Fletcher, be noted.
- 5.2 That the asset allocations, total assets and long term performance analysis in this report be noted.
- 5.3 That the strategy outlined in the report be approved.

#### PETER HANDFORD

Director of Finance & ICT



# First Quarter 2020 Investment Report

#### **PREPARED FOR:**

Derbyshire County Council Pension Fund: Pensions and Investment Committee Meeting

**JUNE 2020** 

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# Investment Report for Derbyshire County Council Pension Fund

This report has been prepared by Anthony Fletcher "External Investment Advisor" of Derbyshire County Council Pension Fund (the Fund). At the request of the Pension and Investment Committee the purpose of the report is to fulfil the following aims: -

- Provide an overview of market returns by asset class over the last quarter and 12 months.
- An analysis of the Fund's performance by asset class versus the Fund specific benchmark for the last quarter and the last 12 months.
- An overview of the economic and market outlook by major region, including consideration of the potential impact on the Fund's asset classes
- An overview of the outlook for each of the Funds asset classes for the next two years; and recommend asset class weightings for the next quarter together with supporting rationale.

The report is expected to lead to discussions with the in-house team on findings and recommendations as required. The advisor is expected to attend quarterly meetings of the Pensions and Investment Committee to present his views and actively advise committee members.

Meeting date 10<sup>th</sup> June 2020 Date of paper 18<sup>th</sup> May 2020



# 1. Market Background (First quarter 2020)

At the time of writing my last report in early February, the US equity markets, were on their way to making new all-time highs, which the S&P 500 achieved on the 19<sup>th</sup> February with a high close of 3,386, it closed on the 23<sup>rd</sup> of March at 2,237. The index had fallen by 1/3 in only 20 or so trading sessions. The S&P 500 managed to recover to close the quarter 16% higher at 2,585. Representing a total return for the quarter in US dollar terms of -21%, all the main stock markets produced similar local currency returns with the FTSE All share down 25%. However, because of the weakness of Sterling, overseas equity market performance was much better, in Table 1 below I have set out the returns for major markets for a Sterling based investor.

Against this backdrop government bonds produced positive returns performing the function of partially protecting the Fund against equity market volatility. But with yields already so low this protection was more muted than it would have been in the past.

The cause of the rapid sell off was the emergence of news on just how bad the Covid 19 epidemic was in Wuhan, China and its rapid transmission around the world with hotspots of infection not just confined to the region but showing up in Europe and the USA. By 11<sup>th</sup> March, when the WHO finally declared Covid 19 a Pandemic, asset prices were in melt down as equity and credit markets were hit by waves of panic selling from leveraged and short-term investors. The sudden need for US dollar cash by banks for liquidity and investors to settle positions, as well as its safe haven status caused the US dollar to strengthen significantly.

Central Banks were quick to respond easing Monetary Policy by cutting rates, introducing new bond buying programmes and providing liquidity to the markets. But the market dislocation and "dash for cash" was so extreme that it was not until the week beginning 23<sup>rd</sup> March, following the announcement of huge Fiscal packages to support the economy in the UK and the US and Europe that markets began to stabilise and recover into quarter end.

Needless to say, the markets and the global economy are in a different place now, we can expect to see a recession in the developed economies, possibly even a global growth recession because of the abrupt "turning off" of economic activity caused by the lockdown measures adopted in March by most countries.

The depth and length of recession is highly uncertain, due to the progression of the virus, the time taken to come out of lockdown and because of the potential for people, companies and governments to change their behaviour. However, once the trough of the recession is known economies will be at the start of a new expansion and this is usually marked by periods of stronger than normal credit and equity market returns.

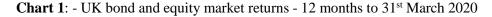
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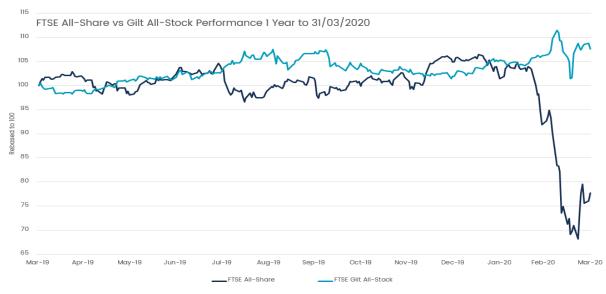
> Table 1, below shows the total investment return in pound Sterling for the major asset classes, using FTSE indices except where noted; for the month of April 2020 and the 3 and 12 months to the end of March 2020.

#### % TOTAL RETURN DIVIDENDS REINVESTED

	MARKET RETURNS					
		Period end 31 <sup>st</sup> March 2020				
	April 2020	3 months	12 months			
Global equity ACWI^	9.1	-15.5	-5.3			
Regional indices						
UK All Share	4.9	-25.1	-18.5			
North America	11.2	-14.1	-2.3			
Europe ex UK	4.7	-18.0	-8.0			
Japan	3.8	-11.0	-2.2			
Pacific Basin	9.1	-20.0	-14.1			
Emerging Equity Markets	7.4	-19.0	-13.0			
UK Gilts - Conventional All Stocks	3.0	6.3	9.9			
UK Gilts - Index Linked All Stocks	4.9	1.6	2.2			
UK Corporate bonds*	6.3	-5.6	-0.1			
Overseas Bonds**	0.7	3.6	7.2			
UK Property quarterly^	-	-1.3	0.9			
Sterling 7 day LIBOR	0.01	0.14	0.7			

^ MSCI indices \* iBoxx £ Corporate Bond; \*\*Citigroup WGBI ex UK hedged





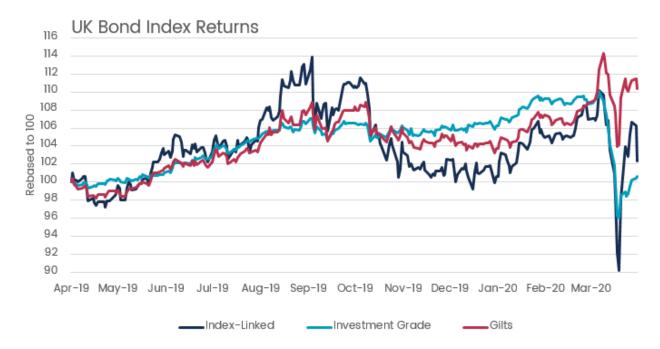
Source: - Bloomberg



 Table 2: - Change in Bond Market yields over the quarter and 12 months.

BOND MARKET % YIELD TO MATURITY	31 <sup>st</sup> December 2019	31 <sup>st</sup> March 2020	Quarterly Change	31 <sup>st</sup> March 2019	Current 8 <sup>th</sup> May 2020				
UK GOVERNMENT BONDS (GILTS)									
10 year	0.82	0.35	-0.47	1.00	0.23				
30 year	1.33	0.82	-0.51	1.55	0.55				
Over 15y Index linked	-1.84	-1.91	-0.07	-1.85	-2.22				
OVERSEAS 10 YEA	R GOVERN	MENT BOND	S						
US Treasury	1.92	0.67	-1.25	2.49	0.68				
Germany	-0.19	-0.46	-0.27	-0.07	-0.52				
Japan	-0.01	-0.01	0.00	-0.09	0.00				
NON-GOVERNMENT BOND INDICES									
UK corporates	2.16	2.96	+0.80	2.58	2.33				
Global High yield	5.10	9.39	+4.29	6.04	7.96				
Emerging markets	4.39	6.16	+1.77	4.79	5.32				

Source: - Bloomberg, G8LI, UC00, HW00, EMGB, ICE indices 8th May 2020.



#### Chart 2: - UK Bond index returns, 12 months to 31<sup>st</sup> March 2020.

Source: - Bloomberg

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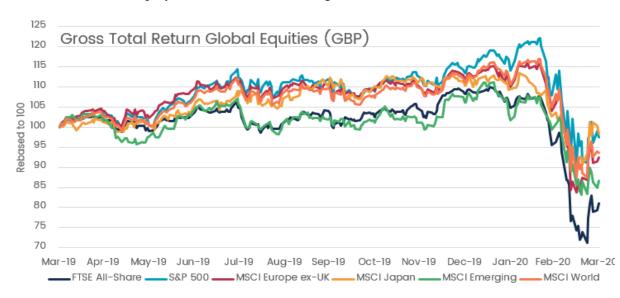


Chart 3: - Overseas equity markets returns in Sterling terms, 12 months to 31<sup>st</sup> March 2020.

Source: - Bloomberg

#### Recent developments (April and May 2020)

Since the beginning of the 2<sup>nd</sup> quarter, global equity and credit markets have continued to perform well. In general equity markets have recovered about 50% to 60% of their losses from the highs in February. However, there has been a marked difference in performance between regions and sectors. The US indices have delivered the strongest returns and the UK indices the worst. The main driver of the disparity in performance is the sector variation in the index construction. The US indices have a significantly higher weight to Technology stocks and the UK indices have higher weight to large global; Energy, Commodity and Financial companies, 3 of the sectors that have been hardest hit by the fall in oil prices, the potential global economic recession and the increased risk of default.

The main driver of the recovery in prices has been the unprecedented level of monetary and fiscal interventions put in place to soften the economic impact of the lockdown. While it is true that these measures will reduce the impact it seems to me that the equity markets have become somewhat detached from reality and this may go some way to explaining why they have stalled at their current levels, it also suggests that they may be vulnerable to another sell off as the real extent of the economic impact comes to light in the data. Equally the uncertainty around the pace of the recovery from lockdown and the unknown magnitude of a second wave of infections could dent the markets optimistic view that equity earnings and company profits will go "back to normal" in 2021.

In terms of the macro-economic data Chinese and South-East Asian activity is recovering quickly as countries come out of lockdown. Europe, the UK and USA are still at the beginning of coming out of lockdown, the reported data is truly dire and at levels much worse than in the GFC and in some cases only comparable to the Depression of the 1930's. Here are just a few of the myriad of eyewatering numbers; close to 40 million people are unemployed in the US, the UK government borrowed more in April 2020 than it did in the whole of 2019. Activity in the Leisure and Airline sectors is down by over 90%. Despite the bad news it is important to remember that as a long term investor the Fund is well placed to ride out such short term volatility.



# 2. Investment Performance

Table 3 shows the performance of the Derbyshire Pension Fund versus the fund specific benchmark for the 3 months and year to the end of March 2020. While the total Fund performance was negative, the Fund outperformed the benchmark over 3 and 12 months. Measured against longer time horizons, more appropriate for Pension Fund performance, the Fund continues to deliver positive returns and has outperformed the strategic benchmark on rolling 3,5,10 years and since inception on a net of fees basis. Over 10 years the Fund has achieved a total return of 6.7% per annum.

% TOTAL RETURN (NET)				
31 <sup>st</sup> MARCH 2020	3 MONTHS		12 MONTHS	
	Derbyshire Pension Fund	Benchmark	Derbyshire Pension Fund	Benchmark
<b>Total Growth Assets</b>	-19.2	-18.9	-11.1	-10.7
UK Equity Total Overseas Equity North America Europe Japan Pacific Basin Emerging markets Global Sustainable Equity Global Private Equity Total Protection Assets	-25.4 -16.8 -14.7 -17.3 -15.5 -16.7 -22.6 0.0 -10.0 <b>0.1</b>	-25.1 -15.5 -14.5 -17.3 -11.0 -15.8 19.0 -15.9 -24.7 0.3	-18.6 -8.5 -3.9 -7.9 -6.9 -13.8 -16.4 0.0 1.5 3.9	-18.5 -6.4 -2.8 -8.0 -2.1 -11.2 -13.0 -6.2 -17.5 <b>3.7</b>
UK Gilts UK & Overseas Inflation Linked UK Corporate bonds	4.9 2.9 3.4	6.3 1.6 2.9	8.0 5.4 9.4	9.9 2.2 9.2
<b>Total Income Assets</b>	-1.4	0.0	2.6	0.5
Multi-asset Credit Infrastructure Property (all sectors) Internal Cash	-8.8 3.9 0.2 0.1	0.9 0.7 -1.3 0.1	-5.5 10.9 2.9 0.1	3.6 2.8 0.5 0.5
Total Fund	-11.1	-11.5	-4.7	-5.4

Table 3: - Derbyshire Pension Fund and Benchmark returns

#### Total fund value at 31st March 2020 £4,665 million

The first quarter of 2020 saw a huge swing in equity market sentiment, related to the Covid 19 pandemic, global equities peaked with a new high in mid-February, but were roughly 30% lower by mid-March, since then markets have recovered somewhat in local currency terms, however when



currency is taken into consideration all overseas equity market returns were better than those from the UK. The UK equity market was hit by the triple impact of falling global economic demand, falling oil and commodity prices and a weaker currency.

Over both 3 and 12 months, Growth asset performance overwhelmed the positive contributions of other asset classes. The Fund did however experience a less negative return than equity and a less negative performance relative to the strategic benchmark.

#### Growth assets - Equity performance

Over the year growth assets delivered a worse performance than the benchmark mainly due to the poor performance of the LGPS Central UK active equity portfolio. Overseas equity performance was also negative relative to the benchmark due to a zero allocation to Global sustainable equity.

The first of these issues have been addressed by the replacement of LGPS Central's active UK portfolio by LGIM's passive UK equity fund in the fourth quarter of 2019 and the second partially resolved by an initial investment in Global sustainable equities in April 2020.

Over the quarter the 2 main drivers of UK performance were Sterling which was weak against nearly all other currencies and the high concentration of energy and commodity, and the low concentration of technology, stocks in the UK equity market indices.

North American equity actively managed in a segregated portfolio (by Wellington), performance was broadly in line with the benchmark over the quarter, but over 12 months they were 1.1% below benchmark. The poor relative performance of Wellington has extended out to the rolling 5 year returns, while some of this can be explained by the underweight allocation, the PEL analysis suggests stock selection has also played its part, over 10 years Wellington have delivered the strongest equity market returns at 13.3% p.a. and remains 1.2% ahead of benchmark.

The continental European equity portfolio is passively managed by UBS. The 3 and 12 month returns are in line with the benchmark.

The other equity assets are invested in Japan, the Pacific Basin and Emerging Markets equities, via pooled funds selected by the in-house team, there were no significant changes in allocation. All 3 regional portfolios have had a difficult quarter and 12 months with returns in aggregate behind benchmark. 3 and 5 year returns remain mixed relative to the benchmark but over 10 years Japan and Asia-Pacific have delivered strong returns and outperformed the benchmark.

Private equity continues to deliver strong positive absolute and relative returns that are significantly ahead of the benchmark over the more meaningful 3, 5 and 10 year periods, after US equity this is the second strongest performing equity allocation.

At the end of the quarter no allocation had been made to Sustainable Global Equity, which has caused a drag on overall growth asset performance. In April this has started to be addressed with an initial allocation of 0.6% to the Baillie Gifford Positive Change Fund.



#### Protection assets - Fixed Income Performance

Over the quarter the bond portfolio experienced a small positive absolute return, but because the Fund is slightly underweight relative to the strategic allocation and the Fund's assets have lower aggregate duration (interest rate sensitivity) than the benchmark, performance was slightly worse than the benchmark and only just ahead over 12 months. Over the quarter the UK corporate bond allocation was successfully transitioned to LGPS Central's new externally managed Global corporate bond fund.

#### Income assets – Property, Infrastructure and MAC

Over the year, the combined portfolio of income assets has outperformed, the benchmark. Infrastructure and total property delivered another positive and above benchmark return, MAC experienced a sharply negative quarter and year but over 3 years returns are positive.

The total allocation to all property produced positive returns that were ahead of the benchmark over 3 months and well ahead of benchmark over 12 months. Over the longer-term direct property investments have helped the allocation outperform the benchmark whereas indirect property returns have been more mixed.

Infrastructure allocations continue to produce positive absolute returns well ahead of the benchmark, over 10 years returns have been the highest in the Fund at 14.1% p.a. This will not always be the case but it does demonstrate the value of diversification.

The Multi-Asset Credit (MAC) allocation a combination of private debt, high yield and emerging market debt had a very poor quarter declining almost 9% with all sectors delivering negative returns. The 3y returns are as a result much lower at 1.1% p.a. compared to 3.6% for the LIBOR based benchmark.

# 3. Economic and Market outlook

## Economic outlook

The immediate outlook is for a Recession in the developed economies and potentially the global economy. I have no greater insights into how the economy and securities markets will recover, than the alphabet soup of scenarios for the shape of the economic recovery V, U, W and worryingly L, shaped; set out by commentators. It is the path of progress of the virus, the rate of recovery in the actual data and how the stimulatory measures are removed, that will drive the securities markets over the coming months. The longer the restrictions on activity remain in place the worse the outcome. Hence the shapes of the potential outcomes mapped seem reasonable.

If I allow myself to be optimistic, I believe that based on the pace of recovery seen in those countries like China that have been through the primary wave impact of the Pandemic and the lack of a meaningful second wave, something close to an ice hockey stick "V" shaped recovery could be seen, not least because people will want to get back to work, school, social activity and holidays. Having said that, the gradient of the road of recovery is dependent on the amount of activity and income or rent that has been cancelled rather than postponed; the degree of economic scarring and the reaction function (willingness to take risk) of Society, Government and Companies. I believe, therefore that it could be a couple of years before the aggregate level of economic activity gets back to where we were before the Pandemic and some sectors could be permanently damaged.

I believe that many of the themes that have been playing out in markets over the last few years could be accelerated by Covid 19. China has for some years been re-engineering it's economy away from low value to higher value manufacturing, at the same time it is creating, for now, the largest consumer market on the planet. As a result, the growth of the influence of China is likely to continue spread out across the region, further raising tensions with the USA. I believe the aggregate demographics still favour emerging markets and expect the "fulcrum" of global economic power will continue to shift East.

The very high levels of developed market Sovereign debt will be part of the new reality financed by lower for longer (lower forever?) central bank rates and QE policies. Although I may be wrong, I do not expect negative interest rates will be adopted as tool by the US Fed or the Bank of England.

It would also seem reasonable to me that in the short to medium term at least, that savings rates will increase as households judge that they need to be more resilient. Regulators and governments may also expect non-financial corporates, just as they did the financial sector after the GFC, to become more resilient. This potentially means lower dividends, more "cash" on balance sheets and thereby lower returns on capital.

The Developed world will increasingly be weighed down by debt and demographics, with lower aggregate levels of return. In general, Emerging markets should do better because of the development of their own domestic markets, creating consumption for themselves rather than for the developed countries, as a result trade in goods could become more regional. The trend away from traditional retail to increased ecommerce will continue.

Excess returns on equity and credit will become more dominated by stock selection and fund manager skill, favouring active management and possibly private markets over passive management and listed market investments.

I have left out my usual chart of past quarterly economic growth as it provided no information at the moment, below in Table 4 are the consensus forecasts for growth in 2020 and 2021, for what they are worth. In Chart 4 below I have shown growth as forecast by JP Morgan to give an idea of the path and magnitude of the possible outcome for GDP and Earnings, this year and next.

Chart 4: - Global growth – Real	GDP forecasts and	earnings implications

thange quarter on quarter, seasonany aujusted annuansed rate								
	Q1 '20	Q2 '20	Q3 '20	Q4 '20	2020*	2021*		
us	-10.0	-25.0	11.0	7.0	-5.3	45		
Eurozone	-15.0	-22.0	45.0	3.5	-3.4	4.7		
China	-40.8	57.4	23.9	5.5	1.1	9.8		
ик	-10.0	-30.0	50.0	2.5	-3.7	4.1		





Source: - JP Morgan Investment Bank and Asset Management

As can be seen in chart 5 below, inflation was already tending down and broadly lower than the respective central bank's target rate. The sharp fall in economic activity and the fall of the oil price has already pushed reported inflation lower. I expect it to remain low for a very long time.

Chart 5: - Inflation – Annual rate versus Central Bank Target



Source: - Bloomberg



#### Central Banks

Central banks have announced unprecedented levels of support for markets including rate cuts, further bond buying, QE and support for the money markets and banks. All in an effort to encourage banks and other lenders not to withdraw credit from businesses and individuals. Most importantly they have said they will do whatever it takes to support and stabilise their respective economies. And equally important governments have moved hand in glove to announce huge measures in support of the private sector in terms of loans and paying the wages of Furloughed workers in the UK and Europe and by increasing unemployment benefits in the US.

A new period of "lower for longer" central bank rates has started. Central banks are also likely to be the main buyer of the new government debt issued to finance the economic support measures. The next action I expect will be measures to manipulate the shape of the yield curve, but I do not expect the US or the UK to introduce negative interest rates, because of the distortion this causes in the banking system, unlike in Europe and Japan the US and UK banks are in much better shape in terms of capital and quality of their loan books and they remain a reasonably effective channel for the implementation of monetary policy.

The only fly in the ointment is the judgement by the German Constitutional Court on 5<sup>th</sup> May declaring that both the Court of Justice of the EU (ECJ) and the European Central Bank (ECB) acted outside the scope of their powers in relation to the Public Sector Purchase Programme (PSPP) launched by the ECB in 2015!

This has more implications for politics in the Eurozone because it has raised doubts about which court in Europe reigns supreme, the ECJ or the member state's judiciary. For the ECB it makes their job potentially more difficult just when it needs to be unconditionally supportive of the Eurozone monetary system and raises issues about the cohesiveness of central bank policy. While it is unlikely, this decision could prevent the Bundesbank from taking part in future QE and could make them sell some of the non-German stock of assets bought under past QE programmes.

#### Politics

Politics has not gone away; it has just been clouded in a miasma of a mainstream media distracted by the Covid 19 pandemic searching for the next scoop on what failed and when and who's fault was it. In the meantime, Mr Trump is still fighting his re-election campaign and blaming everyone else for the impact of the Pandemic, when he isn't giving out really useful medical advice. China has instituted a new national security law that overrides the Hong Kong constitution. The UK still plans to complete the new UK, European trade deal by the end of the year.

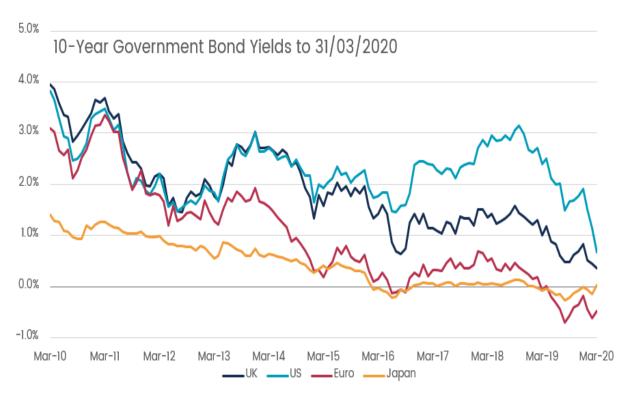
The Pandemic has shown up how fragile institutions have become in the last few years. While it is impressive how quickly individual countries responded to the economic risks, it is remarkable how little global policy co-ordination there has been on most other fronts and how quickly, even within Europe individual countries adopted a "my people first" approach, closing borders and sequestering exports of certain products. It has also flagged up the limitations of relying on a fully functional "just in time" global supply chain at all times. In the post Covid 19 world, domestic resilience, planning and co-ordination is likely to be higher on the respective government's "to do list" than it has been in the past.



## Government bonds

As can be seen in table 2 above and chart 6 below, Government bond yields fell sharply in response to the Pandemic. As a result, government bond yields have made new "all-time lows". Unless the UK and US adopt a negative interest rate policy, I believe that government bond yields have reached the lower boundary and cannot fall much further on a sustainable basis. As mentioned above I do expect the central banks to become the main buyer of newly issued government bond yields as temporary and expect yields to rise in the medium term.

Chart 6: - Government bond yields, last 10 years.

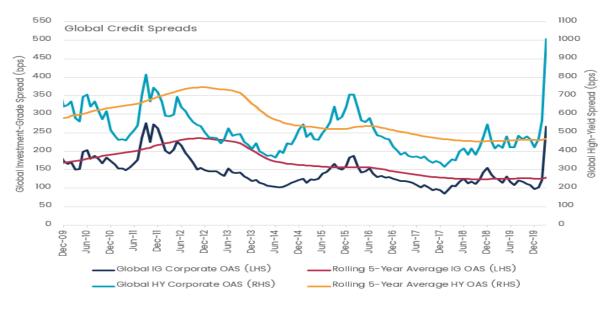


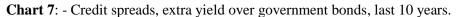
Source: - Bloomberg

#### Non-government bonds

As can be seen in Chart 7 below, the excess yield spread for both investment grade non-government and high yield bonds exploded in the first quarter. However, as a result of the policy measures put in place by central banks, including offering to buy unlimited amounts of mostly investment grade corporate debt, investment grade credit spreads have narrowed significantly.

I still believe there is an opportunity to be exploited in sub-investment grade debt that can probably best be delivered by a Multi-Asset Credit manager. If we are in a lower for longer interest rate environment, both investment grade and sub-investment grade bonds will deliver better returns than government bonds provided they have a lower default experience. See chart 8 below, which shows the outcome for various assets classes during and after a period of spread widening.

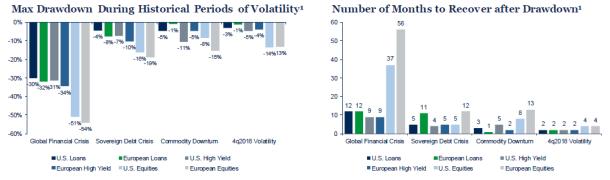


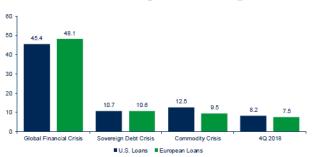


Source: - Bloomberg

In the past when the aggregate spread of sub-investment grade debt is above 600bps high yield bond markets recover faster than equity markets and they achieve higher total returns.

Chart 8: - Speed of Recovery from periods of negative return for high credit spreads markets.





#### 12-month Return After Spread Widening Event (%)<sup>1</sup>

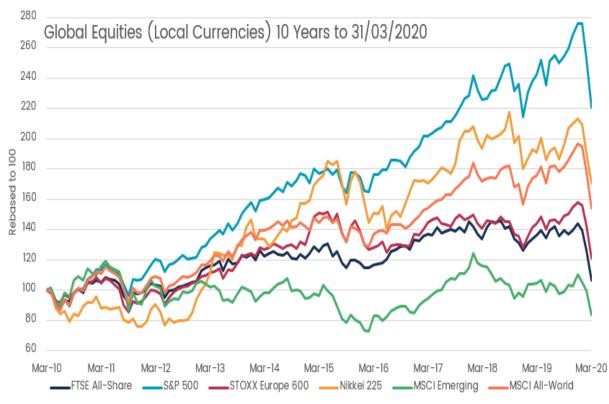
Source: - Barings

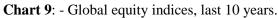
Even if government bond yields rise, I haven't changed my mind about holding sub-investment grade bonds and loans, because of their higher yield and lower duration they may still be able to outperform. See Table 7 below for an estimate of the impact of rising bond yields on UK Government and nongovernment bond markets.



## Equities

As can be seen in Chart 9 below and as discussed above local currency equity market returns have been sharply negative since the 19<sup>th</sup> February. At the end of the quarter all market returns were negative over 3 and 12 months, however since the end of the quarter all markets have rebounded from their lows and as can be seen in table 1, April's returns were positive.





The markets fall to the end of March, has been so great that all the gains earned over the last 3 years have been wiped out! The medium term picture is slightly better at the end of April with overseas equity beginning to show positive returns over 3 years but the UK remains in negative territory. Over 5 years the Fund's return from its diversified allocation to UK and Overseas equity at the end of March is 4.1% p.a. making up the majority of the Funds overall total return of 4.8% p.a. Despite the short term volatility investing in equity for the long term it provides an important source of returns for the Fund.

The sell-off and recovery in markets was quite differentiated by sector as can be seen in chart 10 below. As result equity indices with a higher sector weight to Technology, Online services, Healthcare and Consumer non-discretionary, like the US indices and the Nasdaq in particular have bounced back more strongly. Those with high weights to Energy, Commodities and resources and the Financial sector, like the FTSE UK indices have experienced bigger falls and smaller recoveries. This relative performance could turn out to be temporary as the short-term outlook remains dominated by the progression of the Pandemic Over the medium term as activity begins to return to normal as demonstrated by China and other countries in the region, demand for energy, and commodities will

Source: - Bloomberg

increase and those equity market sectors and indices hardest hit should start to see improved performance.

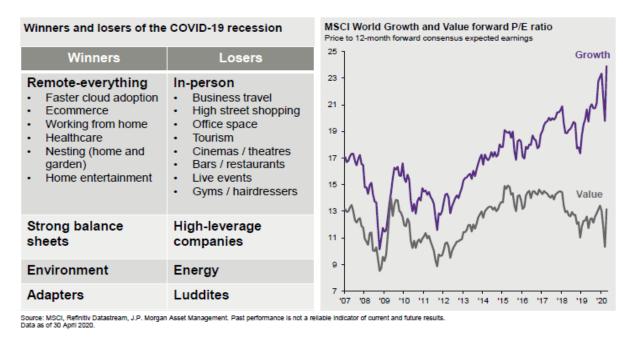


Chart 10: - Thrivers, survivors and failures, thus far during the Pandemic.

At the time of writing the recovery in equity markets has slowed but the willingness of the authorities to provide support has calmed the markets, see chart 11 below. The technical position for short term and leveraged investors has also improved, they are now more neutral and carrying more cash. At the moment there is almost universal acceptance that the economy and earnings will be in recession in 2020, but that both will rebound strongly in 2021.

**Chart 11:** - Left Hand Chart; MSCI ACWI Index Fund; Right Hand Chart; FTSE 100 index. 2020 year to date 18<sup>th</sup> May 2020.



Source: Trading Economics

While growth and earnings forecasts are probably still too optimistic at the moment I agree with the direction. However, I am concerned that the market is vulnerable to worse than expected data, a second wave of infections as countries come out of lockdown and potential bad news on the development and efficacy of a Vaccine.

For these reasons I would not recommend being overweight any part of the equity market, but I would advocate moving as close to neutral as possible, top slicing those regions that are overweight and increasing those positions that are underweight first of all and then topping up from cash.

The clearest area that needs attention here is the underweight allocation to Global Sustainable Equity. I believe that the themes and trends that were in place prior to the outbreak of the pandemic are likely to be accelerated by it in the future, hence the importance of increasing the Fund's exposure to neutral.

Table 4 shows the consensus forecasts for GDP growth in calendar 2020 and 2021 and my expectations in January and May 2020.

% CHANGE YOY								
2020 2021								
	JANUARY MAY		JANUARY		MAY			
	Consensus	AF	Consensus	AF	Consensus	AF	Consensus	AF
US	1.9	2.0	-5.4	-6.0	1.9	2.0	4.3	5.0
UK	1.0	1.0	-7.9	-9.0	1.1	1.4	6.1	6.5
Japan	0.2	0.2	-5.5	-6.0	0.8	0.8	2.4	3.0
EU 28	1.2	1.2	-7.2	-8.0	1.2	1.4	5.6	6.0

Table 4: - GDP forecasts - Consensus versus Advisor expectations.

Source: - Consensus Economics May 2020

2020 started with a more optimistic tone, growth was looking stronger as a result of the US Fed easing monetary policy twelve months ago, uncertainty over the US China trade negotiations had dissipated with the Phase one, Trade Deal, global manufacturing was coming out of recession and the UK finally completed the EU withdrawal agreement and started the transition away from the European Union. Fairly quickly this better mood was turned darker by the emerging Pandemic of Covid 19 in China and the "lockdown" of Wuhan province immediately after the Lunar New Year, at the end of January. Little did we know then that the whole world would have the same treatment visited upon it in the coming months.

At the time of writing my last report it looked as though the economic and health impact would be temporary and confined to China and it's immediate hinterland. The consensus was for developed market economic growth in 2020 and 2021 to be slightly better than in 2019, as can be seen the January data in the table above. At the time of the last PFC, things were slightly less optimistic with the developing situation in Italy and by the end of March most national economies were in some form of "lockdown" with all but essential economic activity turned off!



As a result, it goes without saying that the global economy will, in 2020, see the recession that has long been forecast and the longest expansion of economic activity in modern times has come to an end. The only thing that can be said for the consensus data shown in the table above published in May is that it is likely to be wrong. Equally I have no better insight than the consensus on the quantum of growth, other than to say I expect the outcome to be worse for 2020 and as a consequence I expect the rebound in 2021 to be stronger. If only because activity will have recovered somewhat and the bad quarterly data prints will have dropped out of the year over year data.

In terms of actual data, first quarter GDP in China was -9.8% quarter on quarter making the annual rate -6.8%. At the time of writing the rate of activity in the Chinese economy has recovered to levels that are similar to those prior to its lockdown and it is in the process of back filling the "postponed" economic activity. We will have to wait until 16<sup>th</sup> July, to see if the rebound is sufficient for the economy to avoid its first modern era recession.

The apparent rapid recovery in China after lockdown is due largely to the centrally controlled, command nature of the economy and its position in global manufacturing. This is unlikely to be repeated in the more de-centralised, market driven developed economies, where consumption and services are the main drivers of growth.

In the US, fourth quarter 2019 growth was confirmed at 2.1% annualised. The estimate of first quarter growth was reported at -4.8%, the worst outcome since the GFC in 4Q2008, making the annual growth rate +0.3%.

In the UK, the quarterly growth rate for the fourth quarter of 2019 was revised down from +0.5% to zero reflecting the weakness caused by Brexit and the general election. The advance estimate of first quarter 2020 growth, which only includes about 10 days of the UK's lockdown is -2%, this means the economy shrank by 1.6% over the year to 31<sup>st</sup> March 2020.

The Japanese economy shrank by 1.8% in the first quarter of 2020, meaning that the annual growth rate was only +0.7%.

Not surprisingly with the impact of Covid 19 on the economies of Italy and Spain, Euro Area GDP fell 3.8% in the first quarter, this brings the annual growth rate down to -3.2%. Because of revised negative growth rates in the fourth quarter, both Germany and France are already in recession.

At the time of writing the US states and major developed economies are still either in lockdown or starting the process of coming out of lockdown, hence growth will also be negative in the second quarter. The rate of growth for the rest of the year is highly uncertain, dependent on the infection rate of the virus, the strength of the measures taken to mitigate its spread and the pace of the removal of lockdown.

## **Consumer Price Inflation**

Table 5 shows the consensus forecasts for Consumer Price Inflation in calendar 2020 and 2021 and my expectations in January and May 2020.

% CHANGE YOY								
2020 2021								
	JANUARY MAY		JANUARY		MAY			
	Consensus	AF	Consensus	AF	Consensus	AF	Consensus	AF
US	2.1	2.0	0.7	0.7	2.1	2.0	1.8	1.6
UK	2.1	2.0	1.0	1.0	1.9	1.8	1.4	1.2
Japan	0.6	0.6	-0.4	-0.4	0.6	0.5	0.1	0.0
EU 28	1.6	1.5	0.5	0.5	1.5	1.4	1.2	1.0

Table 5: - Consumer Price Inflation forecasts - Consensus versus Advisor expectations

Source: - Consensus Economics May 2020

The consensus forecasts for inflation in calendar 2020 and 2021 have been marked significantly lower. Inflationary expectations had already been revised down in the fourth quarter of 2019 and they were marked even lower in the last few months. The impact of Covid19 on activity is only a recent contributor to the story. Central Banks were already struggling to stimulate inflation through easy monetary policy and the secular trends of a high debt burden and an ageing population were not helping.

In the first quarter the oil producing nations decided to increase rather than decrease production in the face of falling demand, thereby further driving down the oil price. Even before the impact of the lockdowns were felt the oversupply of oil, required a significant cut in production if the price was to stabilise. By the time a cut had been agreed the impact of the lockdowns meant excess supply was more than 10 million barrels a day and most storage facilities were full.

The collapse in economic activity and the fall in the oil price is going to substantially reduce the aggregate level of inflation this year and next even if food prices continue to rise. Some commentators point to the impact of the policy measures put in place to tackle the Pandemic by governments and central banks and the possibility of "de-globalisation" as sowing the seeds for future inflation. At the moment I doubt this, because the actions taken are to offset the potential for an even sharper downturn in activity and are not being taken in an environment of excess demand. I also expect the savings rate to increase as households repair their balance sheets and seek to build greater resilience into their finances. I therefore expect inflation to be lower than the consensus forecasts for some time to come.

The annual rate of US headline inflation peaked at 2.5% in February, as of April it now stands at 0.3%, while food prices were 3.5% higher all other component were down with fuel prices as much as 20% lower. Ex food and energy, core inflation has fallen from 2.3% to 1.4%.



In March the UK headline inflation rate (CPI) was 1.5%, core inflation which excludes food, energy, alcohol and tobacco in the UK, was also lower at 1.6% p.a.

The April "flash" report of inflation in the Euro Area has fallen to 0.4% p.a. but the core rate continues to steadily pick up and now stands at 0.9%.

The Japanese inflation rate was only 0.4% p.a. in March and the core rate that excludes fresh food was 0.6% p.a.



## 4. The outlook for the securities markets

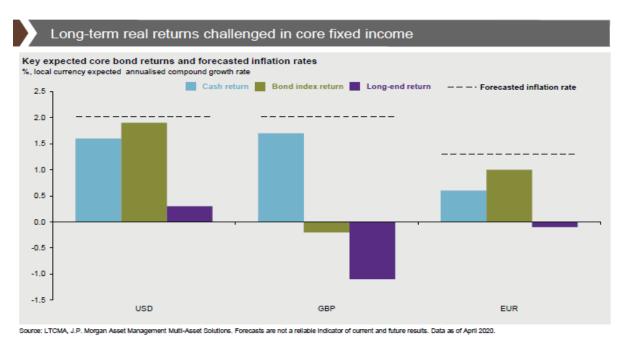
In my last report I suggested the impact of Coronavirus, now called Covid 19 would be fairly short lived and potentially limited to China and South-East Asia. I did flag up that I expected the impact on global growth would be higher than SARS, because of the increased importance of Chinese manufacturing production and commodity demand, but I did not expect the virus itself to wreak the havoc it has on the global economy. Needless to say, the outlook for the securities markets is now dominated by the respective national government response to the virus.

Central banks were quick to respond to the pandemic by cutting interest rates, offering to buy both government and non-government bonds; and by making statements to the effect that they will do "whatever it takes" to support and stabilise the money and credit markets. So far this has been successful in restoring a degree of composure to the febrile equity and bond markets. Governments have also stepped in to underwrite wages and to provide support to businesses. But the underlying fragility of many employment and business models suggests that if we do not go back to something that closely resembles life before Covid 19, the implications could be serious and long term for certain sectors of the economy.

It appears clear to me that both the monetary and fiscal authorities will provide support to their respective economies as they navigate a potentially bumpy path out of lockdown. I also believe that where they can people will want to get back to some semblance of normality. But until there is either a vaccine or a reliable system of "test, track and trace" or the acceptance by the population that Covid 19 is a risk we will have to live with, just as we did infectious and deadly deceases in the past, the short term outlook remains very uncertain and the level of economic activity is likely to be lower.

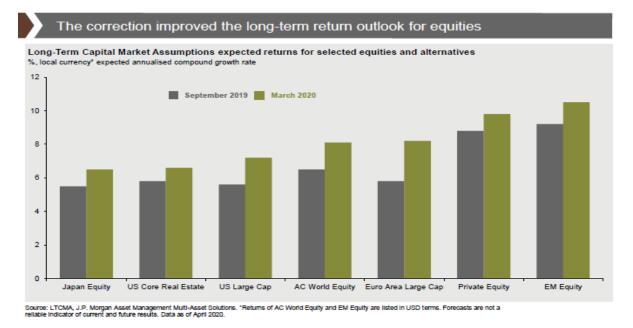
The challenge for a Pension Fund is too look through the short term and focus on the medium to long term. The history of past crises is that the securities markets recover and after a sharp sell-off markets experience a period of above average returns. I do not believe that this time will be any different and that many of the themes that have been acting on markets will continue and potentially accelerate going forward. I also believe that once the economy is well on the way to recovery, the authorities will expect non-financial companies, just as they did the financial sector after the GFC, to become more resilient. This could mean that the overall return on equity may be lower and practices like distributing high dividends, using debt to retire shareholder capital and taking on higher levels of leverage; could attract a higher degree of regulatory scrutiny.

In response to the recent unprecedented market moves, JP Morgan Asset Management have decided to re-work their Long Term Capital Market Assumptions, using the 31<sup>st</sup> March 2020 as a starting point and comparing this to where the markets were when they last reported in September 2019. Charts 12 and 13 below show the annual returns they now forecast for government bonds and the main equity markets over the next 15 years. The main result of their analysis is they now expect stronger positive annualised returns from Equity and non-government bond markets, but very low nominal and negative real returns from long dated government bond markets in particular.



**Chart 12:** - Expected Government bond, long term returns annualised, 31<sup>st</sup> March 2020.

Chart 13: - Expected Equity market, long term returns annualised, March 2020 vs September 2019



In recent quarters I have been cautious on equity markets due to their extremely high valuations and while the likely fall in earnings over 2020 may not have improved the valuations, it does offer a lower entry level for equity prices. The same is true for non-government bond markets where spreads have been close to historic lows. The widening of spreads especially in the sub investment grade bond and loan markets now makes these assets extremely attractive. Equally the fall government bond yields has had made them even less attractive. I believe that government bond yields in the developed



markets have reached their lower boundary, by that I mean that I do not expect them to go materially lower from where they are today, unless negative interest rates are introduced in the USA and UK.

Despite my renewed optimism for the future long term returns of growth assets like equity, I believe the equity markets could experience another fall in prices before the recovery is confirmed. Hence my suggested allocation to Growth assets remains at neutral. I have removed my bias for emerging over the USA and believe that all overweight and underweight positions should be rebalanced to neutral relative to the strategic benchmark. After due consideration for the worst case potential need for cash, including the possibility that contributions may not be received from some employers. I believe this rebalancing should be funded from the cash balance in the Fund, where it cannot be achieved from the regional equity allocations.

As I believe UK government bond yields are close to their lowest possible levels, in light of the increased fiscal spending and budget deficit; the unlikely ability of government to reduce deficits by either a new round of austerity or increased taxes. I believe the Fund should be 2% underweight protection assets and 2% overweight Income Assets, because the cash can be deployed quickly and efficiently this overweight should be deployed to Multi-Asset Credit.

#### Bond Markets

In table 6, below I have set out my expectations for 3 month LIBOR interest rates and benchmark 10 year government bond yields, over the next 3 and 12 months. They are not meant to be accurate point forecasts, more an indication of the possible direction of yields from May 2020.

%	CURRENT	DECEMBER 2020	JUNE 2021
UNITED STATES			
3month LIBOR 10 year bond yield	0.43 0.68	0.75 1.00	0.75 1.25
UNITED KINGDOM			
3month LIBOR 10 year bond yield	0.37 0.23	0.50 0.75	0.50 1.0
JAPAN			
3month LIBOR 10 year bond yield	-0.03 0.00	-0.10 0.10	-0.10 0.10
GERMANY			
3month EURIBOR 10 year bond yield	-0.24 -0.52	-0.25 0.0	-0.25 0.0

Source: - Bloomberg, Trading Economics; 8th May 2020

As can be seen in table 2 above government bond yields fell significantly in the first quarter of 2020, making new "All Time Lows" as markets have responded to the Covid 19 pandemic. I know I have said this before but with the cuts in rates from the Fed and the Bank of England and their stated desire not to introduce negative rates because of the technical difficulties it produces for the money markets and the banking system. I really do believe the current level of government yields is close to the lower boundary, this does not mean they can't stay at the current levels for some time but given the increased commitments pledged by the UK and US governments to support their economies, the long term direction is for yields to trend higher once the recovery is underway.

With most of the global economy already in recession it is highly likely that the level of defaults in credit markets will increase, however the level of spread widening we have seen is more than sufficient to compensate for the increased default risk.

## Bond Market (Protection Assets) Recommendations

The total allocation to Protection assets in the strategic benchmark is 18%, my suggestion is that this is reduced to 16% and this 2% given to the MAC allocation in the Income asset portion of the Fund. I would take this 2% from conventional gilts and within the allocation to Protection assets I would take



a further 1% from conventional gilts and allocate this money to Global corporate bonds, increasing this allocation to 1% overweight.

The recent move in government yields and the impending economic recession has caused nongovernment bonds yield spreads to widen dramatically. However, following the announcement from the central banks that they plan to buy corporate bonds and in the case of the US Fed even some bonds that had been downgraded to sub-investment grade (Fallen Angels); the market has now stabilised at wider spreads. In the past this level of spreads has more than compensated for the increased level of defaults that occur in a recession and led to excess returns as spreads narrow in the economic recovery.

As usual in table 7 below I have updated the data and recalculated my estimates of the total return impact of rising yields for government and non-government bond indices based on their yield and interest rate sensitivity (Duration) over 3 and 12 months. The estimates do not take into consideration any narrowing or widening of spread over the holding period but does indicate the level of losses that can be experienced in long duration assets for only a small change in yield.

INDEX	YIELD TO MATURITY %	DURATION	YIELD INCREASE %	% TOTAL RETURN, HOLDING PERIOD	
				3 MONTH	12 MONTHS
All Stock Gilts	0.32	13.9	0.5	-6.8	-6.6
All Stock Linkers	-2.33	19.5	0.5	-9.7	-9.5
Global IG Corporate	2.40	7.0	0.5	-2.9	-1.1
Global High Yield	7.96	4.0	0.5	0.0	+5.9

Table 7: - Total returns from representative bond indices

Source: - ICE Indices 8th May 2020

In terms of the allocation to index linked gilts I would prefer to remain 2% underweight UK linkers with a 2% allocation to US TIPS. Over the quarter much of the overvaluation of Index Linked gilts has been removed by the bigger price change in conventional gilts. However, while UK Linkers are now less overvalued relative to UK gilts and UK inflationary expectations, they remain expensive relative to US TIPS and US inflation expectations.

Covid 19 has caused the consultation period on RPI reform to be extended, LGIM and Insight Investment, two of the largest investors in this market continue to lobby the government for no change or if it proceeds that investors in the asset class are compensated for the lost inflation protection, I still believe the outcome of this reform will need to be decided in the courts.

## Equity Markets

Table 8 below, shows the dividend yield for 2020 and the earnings growth and price / earnings ratio estimates, for 2020 and 2021 provided by Citi Research.

COUNTRY	DIVIDEND YIELD %	EARNINGS GROWTH				IINGS RATIO
FORECAST PERIOD	2020	2020	2021	2020	2021	
United Kingdom	5.4	-23.3	22.1	14.4	11.8	
United States	2.1	-11.5	20.8	20.8	17.3	
Europe ex UK	3.5	-16.6	23.0	16.4	13.4	
Japan	2.8	2.1	13.2	14.0	12.3	

Table 8: - Dividend yield	Earnings gro	wth and Price/Earnin	ngs Ratios
	, Dumings gro	will and I mov Dam	igo manos

Source: - Citi Research, Global Equity Strategist, April 2020

Sadly, the table of earnings growth, P/E ratios and dividends above is very much out of date and in my opinion too optimistic an outlook for earnings growth in 2020 and equally too optimistic expectation for recovery in 2021. To be fair to Citi research this is probably due to the lag between data collection, publication and the speed of developments in economies. As with the GDP and inflation data consensus forecasts noted in tables 4 & 5 above, the only information in the data is the likely direction. I believe the average earnings fall in the developed economies in 2020 is likely to be larger and the recovery in 2021 smaller.

Ironically with the average market price lower than the expected fall in earnings the P/E ratios may be giving a slightly more accurate prediction of the future as they have gone up suggesting the markets are more expensive on a forward looking basis. Another reason to doubt the usefulness of this data is the dividend yield. In the short term dividends are being passed or cut, to enable companies to better weather the loss of earnings during the lockdown. In the medium to long term I believe one of the changes we will see in markets is lower distributions to shareholders via the dividend and higher "cash" on company balance sheets. At the end of the day governments cannot be expected to rush to the rescue of companies that have failed to reserve against bad times during the good times. Having said that dividends on equity, while not guaranteed like coupons on bonds, are likely to remain higher.

## Equity Market (Growth Assets), Recommendations

For some time now the inhouse team and I have been in agreement about the scarcity of compelling opportunities in the relatively expensive and in some cases overvalued equity markets. The recent unprecedented sell off has opened up the opportunity to reconsider the attractiveness of Growth assets relative to the rest of the Fund and decide whether from a medium term perspective the Fund should

overweight Growth assets. On reflection I believe the re-bound in equity markets since the 23<sup>rd</sup> of March and the difference in the performance of certain sectors and indices has reduced the attractiveness given the increased macroeconomic uncertainty and the chance that markets may see another round of weakness as the recovery from lockdown proceeds.

In light of the recent movements I do not believe the time is right to go overweight equity, but the relative performance of growth assets in the Fund means that the Fund is now underweight relative to the strategic benchmark. Therefore, I believe the allocation should be increased to neutral from excess cash and that the individual regional allocations should also be brought back to neutral. In order to execute this rebalancing quickly the initial transactions should be focussed on listed equity markets.

If this rebalancing to the strategic benchmark cannot be achieved because the cash is not available then at least the most overweight and underweight positioning within growth assets should be considered. The most underweight allocation (using end of April data) is Global sustainable equity (-2.4%); and the most overweight are Japan (+1.3%) and Asia ex-Japan (+0.6%). I believe this should be addressed because the Fund has been underweight for the last 18 months and the themes that merited consideration of this allocation are only going to be stronger in a post Covid 19 world.

I believe that over the next 12 to 18 months the Fund will be presented with the opportunity to adjust the regional allocations and maybe even go overweight Growth assets. But at the moment with the level of uncertainty rebalancing to neutral relative to the strategic benchmark is I believe the most prudent action for the medium term.

#### Income Assets

I believe the allocation to income assets should be increased from 23% to 25%. I suggest keeping Infrastructure at neutral because the Fund is still underweight and building to a neutral allocation. I believe Property should remain neutral overall, but I continue to express my preference for Direct Property over Funds. Over the next couple of years, I believe the income from property may be lower due to the impact of postponed and potentially cancelled rent payments but this should only prove to be temporary drag on the performance of the asset class. As a long term investor the Fund can afford to "look through" the temporary impact of a lower rental income impacting the total return from the asset class.

I suggest that the extra money be allocated to Multi Asset Credit (MAC), furthermore I believe that this extra allocation should be given to CQS. My reason for this is the main opportunity in MAC comes from global high yield bonds and loans. As can be seen in table 2 above spreads have increased by more than 2% for high yield bonds and the same is true for loans. In the past the current level of sub-investment grade spreads (over 600 bps) has led to high levels of total return in subsequent years. Increasing this allocation at this time is a quick and efficient way to capture the opportunity.

Through the last year the Fund has been overweight cash, this has been highly beneficial, but now is the time to draw down the cash balance. Any excess cash, after due consideration of any allocations that have been committed or need to be held as a buffer in anticipation of a shortfall in expected



positive cashflow, should now be put to work to top up underweight growth asset allocations to neutral, after reducing the regional allocations which are above neutral.

The asset allocation set out in table 9 below, shows the new Strategic benchmark allocations for the Derbyshire Pension Fund and my suggested relative weights as of 31<sup>st</sup> January 2020 and 18<sup>th</sup> May 2020. My suggested asset allocation weights are relative to the classification of assets and strategic benchmark ranges. These allocations represent an ideal objective for the Fund based on my expectations for economic growth and market performance, but they do not take into consideration the difficulty in reallocating between asset classes and the time needed by the In-house Team and their investment managers to find correctly priced assets for inclusion in the Fund.

**Table 9**: - Recommended asset allocation against the new Strategic Benchmark that came into effect on the 1<sup>st</sup> January 2019.

% ASSET CATEGORY	DERBYSHIRE STRATEGIC WEIGHT 1 <sup>ST</sup> JANUARY 2019	ANTHONY FLETCHER 31 <sup>st</sup> JANUARY 2020	DERBYSHIRE STRATEGIC WEIGHT 1 <sup>st</sup> JANUARY 2019	ANTHONY FLETCHER 18 <sup>th</sup> MAY 2020
Growth Assets	57	0	57	0
UK Equity	16	0	16	0
<b>Overseas Equity</b>	41	0	41	0
North America Europe ex UK Japan Pacific ex Japan Emerging markets Global Sustainable Private Equity	12 8 5 4 5 3 4	-1 0 0 +1 0 0	12 8 5 4 5 3 4	0 0 0 0 0 0 0
Income Assets Property Infrastructure Multi-asset Credit	<b>23</b> 9 8 6	0 0 0 0	<b>23</b> 9 8 6	+2 0 0 +2
Protection Assets Conventional Gilts UK index Linked US TIPS UK corporate bond	18 6 6 0 6	-2 -1 -2 +1 0	18 6 6 0 6	-2 -3 -2 +2 +1
Cash	2	+2	2	0



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# Appendix

#### References

Source material was provided by, including but not limited to, the following suppliers: -

- Derbyshire Pension Fund, PEL performance services
- Citi Research,
- FTSE, Citigroup, IPD, Barclay's Global and ICE Indices
- Kames, Blackrock, M&G and JP Morgan, Asset Management
- Bank of England, UK Debt Management Office, UK OBR, UK Treasury, ONS
- US Bureau of Labour Statistics, US Commerce Dept. Executive office of the President of the United States.
- Bank of Japan, Japan MITI
- ECB, Eurostat
- Bloomberg, Markit, Trading Economics, DataStream and S&P
- Financial Times, Daily Telegraph, Wall Street Journal, New York Times, Washington Post



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# Appendix 2 Investment Portfolio Valuation April 2020

County Hall, Matlock, Derbyshire, DE4 3AH Administered by Derbyshire County Council

## DERBYSHIRE PENSION FUND

	DCC 30/04/2020 £m	DCC 30/04/2020 %
Growth Assets	2622.7	53.3%
UK	780.2	15.8%
US .	519.6	10.6%
Europe	385.2	7.8%
Japan	311.7	6.3%
Pacific (ex Japan)	224.9	4.6%
Emerging Markets	213.6	4.3%
Global Sustainable	30.9	0.6%
Private Equity	156.5	3.2%
Income Assets	1046.2	21.3%
Infrastructure	340.4	6.9%
Property	407.9	8.3%
Direct	239.7	4.9%
Indirect	168.2	3.4%
Multi-Asset Credit	298.0	6.1%
Protection Assets	897.9	18.2%
Government	283.5	5.8%
UK	234.9	
Overseas	48.6	
Index Linked	305.1	<b>6.2</b> %
UK		
Overseas		0.00/
Non Government	309.4	<b>6.3</b> %
Cash	353.8	7.2%
LGPSC Regulatory Capital	2.0	0.0%
Total	4922.7	100.0%

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#### DERBYSHIRE PENSION FUND APRIL 2020 PORTFOLIO VALUATION - BID

UK EQUITIES Company name	Number held	Mkt price in local currency	Mkt Price GBP	Value in Sterling £
<b>uk equities fund</b> <b>Lgim uk equity index fund</b> Uk equitie: Lgim uk equity index fund	64,187,672.92	11.32	11.32	726,347,707
				726 347 707

**UK EQUITIES TOTAL** 

726,347,707

#### DERBYSHIRE PENSION FUND APRIL 2020 PORTFOLIO VALUATION - BID NEW SECTORS UK EQUITIES

Sector	Company Name	Number held	Mkt Price Pence	Total £
	STMENT COMPANIES t Co': ABERFORTH SML 1P	939,000	897.00	8,422,830
UK Investmen	t Co': BLACKROCK SMALLER COMPANIE	830,000 3,868,000	1310.00	10,873,000
UK Investmen	t Co' LOW CARBON ACCELERATOR LTI t Co' MONTANARO UK SMALLER CO'S 1	11,996,285	111.00	13,315,876
UK Investmen	t Co': RIVER & MERCANTILE UK MICRO t Co': STRATHDON INVESTMENTS PLC	2,902,170 20	119.00 1000.00	3,453,582 20,000
UK Equity Inv	vestment Companies Total		•	36,085,289
UNIT TRUST	S & OEICs			
UK Unit Trusts UK Unit Trus	S LIÓNTRUST UK SMALLER COMPAI Is & OEICs Total	1,201,544.47	1479.42	17,775,889 <b>17,775,889</b>
INVESTMENT	ENTITIES			

**UK Investment Entities Total** 

		,			
· · ·	1.0 1.0000.0000000.0000000000				
DERBYSHIRE PENS		'			
APRIL 2020 PORTEG	OLIO VALUATION - BID				
US EQUITIES	• •				
Sector	Company Name	Number	Mkt price	Mkt Price	Value in Sterlin
		held	USD/	GBP	£
• •			CAN\$		
OIL & GAS PRODUC	ERS				
US Oil & Gas	BP PLC-SPONS ADR	47689	23.80	18.90	
US Oil & Gas	CHEVRON CORP	42130	91.82	72.91	
US Oil & Gas	CONCHO RESOURCES INC	14114	56.63	44.96	
US Oil & Gas	DIAMONDBACK ENERGY INC	16685	43.45	34.50	
US Oil & Gas	EXXON MOBILE CORP	145950	46.31	36.77	5,366,602
US Oil & Gas		59498	31.99	25.40	
US Oil & Gas	NOBLE ENERGY INC	73061	9.80	7.78	
US Oil & Gas	PIONEER NATURAL RESOURCES CO	8691	89.18	70.81	
US Oil & Gas	TC ENERGY CORP	36183	46.39	<u>36.8</u> 3	1,332,752
US Oil & Gas Produ	cers Total	····			14,577,435
OIL & GAS SERVICE					
		72724	40.04	40.05	070 657
US Forestry & Papel			16.81	13.35	970,657 970,657
CHEMICALS					
US Chemicals	CABOT CORP	52645	33.88	26.90	1,416,188
US Chemicals	CELANESE CORP	23009	82.97	65.88	1,515,791
US Chemicals	FMC CORP	29242	91.87	72.94	2,133,051
US Chemicals	INGEVITY CORP	22124	51.72	41.07	908,537
US Chemicals	LINDE PLC	19285	183.98	146.08	2,817,155
US Chemicals US Chemicals Total	PPG INDUSTRIES INC	26720	90.73	72.04	1,924,899 10,715,622
	· ·				
FORESTRY & PAPE					
US Industrial Metals	INTERNATIONAL PAPER CO	28145	34.24	27.19	765,166
US Forestry & Pape	r I otal	***-***	*****		765,166
INDUSTRIAL METAL					
US Industrial Metals	LIVENT CORP	42162	6.19	4.91	207,220
US Industrial Metals					207,220
45000105					
	POENIC COTHE	44 100	440.00	444.00	4 075 000
US Aero defence	BOEING CO/THE	11400	140.86	111.84	1,275,008
US Aero defence		18162	388.93	308.81	5,608,615
US Aero defence US Aero defence		16072	330.29	262.25	4,214,886 5,853,323
US Aerospace Total	RAYTHEON TECHNOLOGIES CORP	112920	04.09	51.36	16,951,832
US Aerospace Total					16,951,032
GENERAL INDUSTR					
US Div Ind	BALL CORP	46902	65.62	52.10	2,443,701
US Div Ind	DANAHER CORP	30986	163.35	129.70	4,018,881
US Div Ind	DYCOM INDUSTRIES INC	30200	32.56	25.85	780,750
US Div Ind	INGERSOLL-RAND PLC	168434	29.05	23.07	3,885,048
US Div Ind	ILLINOIS TOOL WORKS INC	1538	162.49	129.02	198,428
US Div Ind		40628	25.60	20.33	825,821
JS Div Ind	INGERSOLL-RAND PLC	168434	29.05	23.07	3,885,048
US Div Ind	REXNORD CORP	44890	27.31	21.68	973,401
US Div Ind	STANLEY BLACK & DECKER INC	7467	110.07	87.40	652,583
US Div Ind	TRANE TECHNOLOGIES PLC	30672	87.42	69.41	2,128,989
US Div Ind US General Industria	TRITON INTERNATIONAL LTD/BER	28181	30.97	24.59	692,976 <b>20,485,626</b>
		- 1 · · · · · · · · · · · · · · · · · ·			: ZU.485.626

ELECTRONIC EQUIP	PMENT			·	
US Electricity	3M CO	2974	151.86	120.58	358,596
US Electricity	FORTIVE CORP	59234	63.69	50.57	2,995,455
US Electricity US Electricity	GENERAL ELECTRIC CO NVENT ELECTRIC PLC	5759 79210	6.81 18.60	5.41 14.77	31,140
US Electronic Equip		79210	10.00	14.77	4,554,995
INDUSTRIAL ENGINE			,		
			*	,	
INDUSTRIAL TRANS	FEDEX CORP	44524	100 74	100.62	1 460 570
US Transportation	HUNT (JB) TRANSPORT SERVICES	14534 26925	<u>    126.74</u> 101.09	100.63 80.27	1,462,579 2,161,148
US Transportation	KNIGHT-SWIFT TRANSPORTATION	33820	37.14	29.49	997,323
US Transportation	SCHNEIDER NATIONAL INC-CL B	8653	21.86	17.36	150,189
US Transportation	UBER TECHNOLOGIES INC	150479	30.27	24.03	3,616,669
US Industrial Transp	ort Total				8,387,908
SUPPORT SERVICES		<u> </u>			
US Support Services		63158	34.43	27.34	1,726,577
US Support Services US Support Services	TRANSUNION TRINET GROUP INC	5159 38219	78.65	62,45	322,170 1,487,859
US Support Services US Support Services		36219	49.03	38.93	1,487,859 3,536,605
BEVERAGES					
US Beverages	COCA-COLA CO/THE	246117	45.85	36.40	8,959,865
US Beverages Total		240117	-0.00		8,959,865
FOOD PRODUCTION	/PROCESS				
	MONDELEZ INTERNATIONAL INC-A	160287	51.44	40.84	6,546,660
US Food Production					6,546,660
HOUSEHOLD GOOD	S				
	UNDER ARMOUR INC-CLASS A	142969	10.39	8.25	1,179,446
US Hous Gds Txtiles	UNDER ARMOUR INC-CLASS C	194764	9.27	7.36	1,433,537
US Hous Gds Txtiles		93150	58.04	46.08	4,292,702
US Household Good	s Total				6,905,685
PERSONAL GOODS				· · ·	
11177A/MIN//ALAA/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	PROCTOR & GAMBLE CO/THE	123146	117.70	93.45	11,508,462
US Personal Goods <sup>-</sup>		· ·	-	1x A	11,508,462
HEALTHCARE EQUI	<b>NY MINI TANÀNA MANDRA MANDRA DAMIN'NA DAMIN'N</b>			**************************************	1
US Healthcare Equipm		18068	280.67	222.85	4,026,490
US Healthcare Equipr	EDWARDS LIFESCIENCES CORP	36192 12713	66.52 217.50	52.82 172.70	1,911,549 2,195,472
	ENVISTA HOLDINGS CORP	65181	19.47	172.70	1,007,645
	HCA HOLDINGS INC	21566	109.79	87.17	1,879,979
US Healthcare Equipn	IDEXX LABORATORIES INC	7683	277.17	220.07	1,690,821
	INTUITIVE SURGICAL INC	2020	510.35	405.22	818,540
US Healthcare Equipm		12780	141.14	112.07	1,432,193
	SHOCKWAVE MEDICAL INC	30632	40.12	31.86 265.50	975,791 4,952,063
	ment & ServicesTotal			200.00	20,890,541
PHARMACEUTICAL,	BIOTECH				
US Pharm, Biotech	89BIO INC	14400	23.51	18.67	268,804
US Healthcare	ABBOTT LABORATORIES	83461	91.96	73.02	6,094,008
US Healthcare	AERIE PHARMACEUTICALS INC	11723	15.24	12.10	141,855
US Healthcare	ALNYLAM PHARMACEUTICALS INC	2766	131.63	104.51	289,086
US Healthcare	APELLIS PHARMACEUTICALS INC	11236	34.27	27.21	305,736
US Pharm, Biotech US Pharm, Biotech	ASSEMBLY BIOSCIENCES INC	7199 9538	17.50 15.28	13.90 12.13	100,030 115,718
US Pharm, Biotech	ASTRAZENECA PLC-SPONS ADR	150923	52,24	41.48	6,260,069
			~ <u>~</u> , <u>~</u>		

US Healthcare	BAXTER INTERNATIONAL INC	44429	88.64	70.38	3,126,920
US Healthcare	BLACK DIAMOND THERAPEUTICS I	19600	37.04	29.41	576,431
US Healthcare	CONSTELLATION PHARMACEUTICAL	8700	35.93	28.53	248,197
US Pharm, Biotech	ELI LILLY & CO	63231	154.54	122.70	7,758,745
US Pharm, Biotech	GLOBAL BLOOD THERAPEUTICS IN	7301	76.57	60.80	443,876
US Pharm, Biotech		27466	2.79	2.22	60,844
US Pharm, Biotech US Pharm, Biotech	G1 THERAPEUTICS INC	16294 2367	13.13 319.05	10.43 253.33	169,869 599,622
US Pharm, Biotech		56400	4.07	3.23	182,261
US Pharm, Biotech	INCYTE CORP	5144	97.57	77.47	398,509
US Pharm, Biotech	KODIAK SCIENCES INC	5300	54.55	43.31	229,557
US Healthcare	MADRIGAL PHARMACEUTICALS INC	3519	83.68	66.44	233,809
US Healthcare	MIRATI THERAPEUTICS INC	3263	85.04	67.52	220,324
US Healthcare	MYOKARDIA INC	11431	62.81	49.87	570,077
US Healthcare	NOVARTIS AG-SPONSORED ADR	51671	84.73	67.28	3,476,199
US Healthcare	ODONATE THERAPEUTICS INC	12709	28.14	22.34	283,959
US Pharm, Biotech	PFIZER INC	373111	38.31	30.42	11,349,343
US Pharm, Biotech		78207	23.89	18.97	1,483,482
US Pharm, Biotech US Pharm, Biotech	REATA PHARMACEUTICALS INC-A REGENERON PHARMACEUTICALS	1782	158.27 524.09	125.67 416.13	223,937 836,416
US Pharm, Biotech	REVOLUTION MEDICINES INC	10100	31.27	24.83	250,767
US Pharm, Biotech	RIGEL PHARMACEUTICALS INC	37337	1.77	1.41	52,473
US Pharm, Biotech	SATSUMA PHARMACEUTICALS INC	5500	19.01	15.09	83,017
US Pharm, Biotech	SEATTLE GENETICS INC	6331	137.28	109.00	690,081
US Pharm, Biotech	SYNDAX PHARMACEUTICALS	28529	18.00	14.29	407,736
US Pharm, Biotech	TRICIDA INC	15035	30.25	24.02	361,118
US Pharm, Biotech	TURNING POINT THERAPEUTICS I	7371	51.43	40.84	300,998
US Pharm, Biotech US Healthcare		8300	22.21	17.63	146,368
US Healthcare	VERTEX PHARMACEUTICALS INC WAVE LIFE SCIENCES LTD	5738 11951	251.10 8.68	<u>199.37</u> 6.89	1,144,005 82,365
US Healthcare	UNITEDHEALTH GROUP INC	24805	292.07	231.90	5,752,368
US Pharmaceutical, I	Biotech Total				55,318,979
FOOD RETAIL					
	HOUGHTON MIFFLIN HARCOURT CO	102894	1.60	1.27	130,717
	HYATT HOTELS CORP-CL A MCDONALD'S CORP	27568 97902	56.27 187.30	44.68 148.72	1,231,694 14,559,613
	PERFORMANCE FOOD GROUP CORP	68588	29.38	23.33	1,600,002
US Food Retail Total					17,522,025
			-		
RETAILERS - GENER		·			A
US Retailers Gen	AMAZON.COM INC	13483	2,466.92	1,958.73	26,409,617
US Retailers Gen US Retailers Gen	BOOKING HOLDINGS INC	1221 72086	1,480.57 64.87	<u>1,175.57</u> 51.51	1,435,374 3,712,918
US Retailers Gen	TJX COMPANIES INC	182660	49.00	38.91	7,106,570
US Retailers - Genera					38,664,479
				**************************************	
MEDIA					
US Media & Photo	CHARTER COMMUNICATIONS INC-A	26255	494.28	392.46	10,303,993
US Media & Photo	ELECTRONIC ARTS INC	26026	114.26	90.72	2,361,142
US Media & Photo US Media & Photo	FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C	85738	204.71	162.54 25.57	13,935,832 1,052,912
US Media & Photo	MATCH GROUP INC	41108	77.00	61.14	2,513,261
US Media & Photo	NETFLIX INC	23377	419.83	333.35	7,792,607
US Media & Photo	NEW YORK TIMES CO-A	16037	32.52	25.82	414,089
US Media & Photo	OMNICOM GROUP	48302	57.08	45.32	2,189,120
US Media & Photo	WALT DISNEY COMPANY	59373	108.01	85.76	5,091,825
US Media Total				-	45,654,782
TRAVEL & LEISURE	· · ·				
US Hotels Leisure	JETBLUE AIRWAYS CORP	55467	9.73	7.73	428,517
US Hotels Leisure	SPIRIT AIRLINES INC	· 0	15.01	11.92	-
US Hotels Leisure	SOUTHWEST AIRLINES CO	7433	31.24	24.80	184,372

ELECTRICITY					•
US Electricity		28591	72.75	57.76	1,651,516
US Electricity US Electricity	AVANGRID INC DUKE ENERGY CORP	41984	42.94 84.60	34.09 67.17	1,431,418 2,828,092
US Electricity	EDISON INTERNATIONAL	33193	58.57	46.50	1,543,627
US Electricity	EXELON CORP	171656	37.04	29.41	5,048,362
US Electricity	NATIONAL GRID PLC-SP ADR	31230	58.54	46.48	1,451,594
US Electricity	NRG ENERGY INC	99760	33.50	26.60	2,653,516
US Electricity Total		·	· · ·		16,608,125
GAS & WATER	· · · · · · · · · · · · · · · · · · ·		· ·		
Gas	SEMPRA ENERGY	33556	123.80	98.30	3,298,461
Gas US Gas & Water Tota	UGI CORP	15881	30.15	23.94	380,177
US Gas & water rota				****	3,678,638
BANKS, RETAIL				(0.00	
US Banks Retail US Banks Retail	BANK OF AMERICA CORP	427807	24.04	19.09	8,165,877
	JPMORGAN CHASE & CO	29801	95.69	75.98	2,264,216
US Banks - Retail To	tal				10,430,094
NON-LIFE INSURANC		1			
US Insurance	AMERICAN INTERNATIONAL GROUP	80607	25.39	20.16	1,625,010
US Insurance	ASSURANT INC	27531	106.23	84.35	2,322,147
US Insurance	ASSURED GUARANTY LTD	80700	29.73	23.61	1,904,974
US Insurance	ATHENE HOLDING LTD-CLASS A	63511	27.01	21.45	1,362,053
US Insurance	HARTFORD FINANCIAL SVCS GRP	77491	37.98	30.16	2,336,828
US Insurance US Insurance	MARSH & MCLENNAN COS INC COM PROGRESSIVE CORP	36681 44859	97.23 77.30	77.20 61.38	2,831,796
US Insurance	TRUPANION INC	44009	29.90	23.74	980,368
US Non-Life Insurance				~~···	16,116,450
REAL ESTATE					********
US Real Estate	AMERICAN TOWER CORP	33996	237.47	188.55	6,409,986
US Real Estate	ALEXANDRIA REAL ESTATE EQUIT	26330	156.82	124.52	3,278,482
US Real Estate	DOUGLAS EMMETT INC	59165	30.40	24.14	1,428,101
US Real Estate		11063	674.33	535.42	5,923,330
US Real Estate	STORE CAPITAL CORP	60790	20.05	15.92	967,759
US Real Estate US Real Estate Total	VORNADO REALTY TRUST	25730	43.82	34.79	895,226 18,902,883
******					,
GENERAL FINANCIA					
US Special Finance	AMERICAN EXPRESS CO	22392	91.24	72.44	1,622,179
US Special Finance US Special Finance	ARES MANAGEMENT CORP - A CHARLES SCHWAB CORP	75568 59871	33.55 37.72	26.64 29.95	2,013,033 1,793,117
US Special Finance	CME GROUP INC	42874	177.93	141.28	6,057,085
US Special Finance	EQUITABLE HOLDINGS INC	170061	18.32	141.20	2,473,721
US Special Finance	THE BLACKSTONE GROUP INC-A	65944	52.24	41.48	2,735,262
US Special Finance	EQUIFAX INC	5828	138.90	110.29	642,750
JS Special Finance	FLEETCOR TECHNOLOGIES INC	15663	241.25	191.55	3,000,287
JS Special Finance		52544	166.02	131.82	6,926,344
JS Special Finance	GOLDMAN SACHS GROUP INC HAMILTON LANE INC-CLASS A	4206 34073	<u>183.50</u> 64.61	145.70 51.30	612,810 1,747,956
JS Special Finance	IHS MARKIT LTD	6963	67.25	53.40	371,800
JS Special Finance	ONEMAIN HOLDINGS INC	49153	24.20	19.21	944,465
JS Special Finance	PAYPAL HOLDINGS INC	34813	122.97	97.64	3,399,078
JS Special Finance	S&P GLOBAL INC	11918	292.44	232.20	2,767,328
JS Special Finance	TD AMERITRADE HOLDING CORP	47474	39.22	31.14	1,478,373
JS Special Finance	VISA INC CL A SHS	45167	178.34	141.60	6,395,736
JS Special Finance	VOYA FINANCIAL INC	39509	45.19	35.88	1,417,617
JS Special Finance		10373	131.61	104.50	1,083,961

US General Financia	I Total		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		47,482,902
SOFTWARE	· · ·				
	ADOBE SYSTEMS INC	5709	353.34	280.55	1,601,671
	ALPHABET INC - CL A SHARES	16310	1,346.70	1,069.28	17,439,954
US Software & Comp		79943	14.07	11.17	893,090
		12436	91.01	72.26	898,649
US Software & Comp		199452	179.19	142.28	28,377,404
	SALESFORCE.COM INC	34511	161.76	128.44	4,432,504
	SCIENCE APPLICATIONS INTERNATIONA	16797	81.64	64.82	1,088,818
US Software & Comp		6041	352.27	279.70	1,689,682
K	SLACK TECHNOLOGIES INC-CL A	16451	26.66	21.17	348,235
US Software & Comp		7199	140.36	111.45	802,299
	SPOTIFY TECHNOLOGY SA	5205	151.56	120.34	626,363
	SS&C TECHNOLOGIES HOLDINGS	41355	55.24	43.86	1,813,853
US Software & Comp		142270	15.70	12.47	1,773,509
US Software & Comp		3214	209.49	166.34	534,601
	WORKDAY INC-CLASS A	13963	153.85	122.16	1,705,677
US Software Total	WORRDAT INC-CLASS A	10900	155.65	122.10	64,026,310
05 Software Total					04,020,010
TECHNOLOGY HARE					
US IT Hardware	ADVANCED MICRO DEVICES	93743	52.37	41.58	3,898,001
US IT Hardware	APPLE INC	99580	293.83	233.30	23,232,116
US IT Hardware	FIRST SOLAR INC	19419	43.96	34.90	677,805
US IT Hardware	INTEL CORP	22078	59.95	47.60	1,050,919
US IT Hardware	KLA-TENCOR CORP	19153	163.99	130.21	2,493,875
US IT Hardware	LATTICE SEMICONDUCTOR CORP	125127	22.51	17.87	2,236,387
US IT Hardware	LUMENTUM HOLDINGS INC	39584	80.90	64.23	2,542,662
US IT Hardware	MARVELL TECHNOLOGY GROUP LTD	135867	26.73	21.22	2,883,590
US IT Hardware	MICRON TECHNOLOGY INC	69469	47.89	38.02	2,641,535
US IT Hardware	TAIWAN SEMICONDUCTOR-SP ADR	44023	53.13	42.19	1,857,120
US IT Hardware	TERADYNE INC	32189	62.54	49.66	1,598,401
US IT Hardware	TEXAS INSTRUMENTS INC	37765	116.02	92.12	3,478,907
US Technology Hard					48,591,319
TOTAL UNITED STAT	res				519,574,154
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EUROPEAN EQUITIES Company name	Number held	Mkt price in local currency	Mkt Price GBP	Value in Sterling £
EUROPEAN PASSIVE TRACKER FUND EUROPEAN UBS LIFE EUROPE EX-UK EQUITY	T 127,335,613	302.52	3.03	385,215,696
EUROPEAN EQUITIES TOTAL				385,215,696

OTHER EQUITIES Company name JAPAN	Number held	Mkt price in local currency	Mkt Price GBP	Value in Sterling £
Investment Companies Japan CC Japan Income & Growth Trust Japan JPMorgan JAP IT 25P Japan JPMF japs smoc Japan Schroder Japan Growth Fund 10p ords J Investment Companies Total	5,000,000 7,730,000 2,250,000 11,300,000	122.00 455.00 390.00 163.00	122.00 455.00 390.00 163.00	6,100,000 35,171,500 8,775,000 18,419,000 68,465,500
· · · · ·				
Unit Trusts & OEICs Japan Baillie Gifford OGF - Japanese B Acc Shares Japan Barings Jap Growth Trst-IGBA Japan Invesco Japan FD-UKNTACC Japan JPMorgan Jap Fd A Acc Japan Schroder UT Tokyo Ac J Unit Trusts Total	4,523,678.49 5,282,832.62 4,573,118.88 3,000,000.00 11,000,000.00	1,608.00 228.90 166.90 516.90 328.10	1,608.00 228.90 166.90 516.90 328.10	72,740,750 12,092,404 7,632,535 15,507,000 36,091,000 144,063,689
Life Policies Internatio: LGIM Japan Equity Index Fund International Life Policies	26,141,158.640	1.89	1.89	49,421,429 49,421,429
Investment Entities Japan Aberdeen Global - JAP Smaller Cos Fund D£ Japan JO Hambro - Japan Fd GBP-A J Investment Entities Total	1,662,639,78 15,000,000.00	11.02 2.10	11.02 2.10	18,325,283 31,470,000 <b>49,795,283</b>
JAPAN TOTAL				311,745,901
OTHER ASIA Investment Companies			/=	
Asian ABERDEEN ASIAN INCOME FUND ORDS Asian ABERDEEN NDIT 25P Asian ASIA DRAGON TRUST 20P Asian INVESCO ASIA TRUST 10P OA Investment Companies Total	3,000,000 7,780,000 8,610,000 6,358,000	170.50 224.00 368.00 250.00	170.50 224.00 368.00 250.00	5,115,000 17,427,200 31,684,800 15,895,000 <b>70,122,000</b>
Unit Trusts & OEICs         Asian       Stewart Investors Asia Pacific Fund (First State Asian         Asian       JPMorgan Asia Fund A Ac         Asian       Schroder Inst! PAC Fd Ac         OA Unit Trusts Total	5,250,000 20,000,000 2,000,000	1,332.70 229.80 1,453.00	1,332.70 229.80 1,453.00	69,966,750 45,960,000 29,060,000 144,986,750
Investment Entities Asian Barings Australia Fund-IUSDA \$ OA Investment Entities Total	109,543.282	113.01	89.73	9,829,312 9,829,312
OTHER ASIA TOTAL				224,938,062
EMERGING MARKETS Investment Companies			·	
Internatio ABERDEEN EMERGING MARKETS Internatio BLACKROCK FRONTIERS INV TRUST Internatio: JP Morgan EMER IT25P Int'l Investment Companies Total	2,788,425 2,950,000 2,388,000	490.00 88.20 885.00	490.00 88.20 885.00	13,663,283 2,601,900 21,133,800 37,398,983
Unit Trusts & OEICs Internatio: Stewart Investors Global Emerging Markets Funf Latin Amt Thd ndle Lnamer Gwth Int'l Unit Trusts Total	3,000,000 3,500,000	711.33 199.94	711.33 199.94	21,339,900 6,997,900 <b>28,337,800</b>
Life Policies Internatio LGIM World Emerging Markets Index Fund International Life Policies	35,134,030.420	3.19	3.1 <del>9</del>	111,999,559 111,999,559
Investment Entities Latin Amt JPMorgan LNAMER A U\$ Internatic POLUNIN FUNDS DEVEL CNTY-B LatAm Investment Entities Total	86,085.904 47,502.659	30.67 895.18	24.35 710.77	2,096,362 33,763,604 35,859,966

EMERGING MARKETS TOTAL

213,596,308

OTHER EQUITIES TOTAL

750,280,272

GLOBAL SUSTAINABLE FUNDS Company name	Number held	Mkt price in local currency	Mkt Price GBP	Value in Sterling £
GLOBAL SUSTAINABLE FUNDS GLOBAL SU: Baillie Gifford positive Change Fund B .	14,157,621.52	218.00	2.18	30,863,615
UK EQUITIES TOTAL				30,863,615

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OTHER EQUITIES Company name PRIVATE EQUITY	Number held	Mkt price in local currency	Value in Sterling £
Quoted Private Equity			
UK Invest APAX GLOBAL ALPHA LTD	3,000,000	125.00	3,750,000
UK Invest HARBOURVEST GLOBAL PRIVATE	925,000	1438.00	13,301,500
UK Invest HGCAPITAL TRUST PLC	7,053,150	224.00	15,799,056
UK InvestICG ENTERPRISE TRUST PLC	181,795	736.00	1,338,011
UK Invest NB PRIVATE EQUITY PARTNERS Ltd (A)	1,500,000	10.10	12,029,100
UK Invest PANTHEON INTERNATIONAL PLC	345,000	1990.00	6,865,500
UK Invest PRINCESS PRIVATE EQUITY HOLDING LTD	500,000	9.20	4,001,264
UK Invest STANDARD LIFE PRIVATE EQUUITY	900,000	286.00	2,574,000
UK Invest SCHRODER UK PUBLIC PRIVATE	5,000,000	22.50	1,125,000
UK Quoted Private Equity Total			60,783,431
Henry ford Debrafe, English			
	00 000 000	0.00	44,000,004
UK Uncla ADAM STREET PARTNERS (FEEDER) 2017 FU	30,000,000	0.59	14,029,031
UK Uncla BAIRD CAPITAL PARTNERS EUROPE FUND L	4,300,000	0.03	126,042
UK Uncla CAPITAL DYNAMICS GLOBAL SECONDARIES	20,000,000	0.75	11,889,995
UK Uncla CAPITAL DYNAMICS MID-MARKET DIRECT FI	25,000,000	0.97	21,046,477
UK Uncla CAPITAL DYNAMICS LGPS COLLECTIVE PE \	20,000,000	0.46	9,194,781
UK Uncla CATAPULT GROWTH FUND UNITS	3,000,000	0.09	281,369
UK Uncla EAST MIDLANDS VENTURE	3,000,000	0.07	212,913
UK Uncla EPIRIS FUND II	25,000,000	0.39	9,653,294
UK Uncla GRAPHITE CAPITAL PARTNERS FUND 1X A	11,250,000	0.08	930,177
UK Uncla GRAPHITE CAPITAL PARTNERS FUND 1X C	11,250,000	80.0	930,183
UK Uncla MOBEUS EQUITY PARTNERS IV LP	10,000,000	0.60	6,038,575
UK Invest PANORAMIC ENTERPRISE CAPITAL UNITS	1,428,486	1.17	1,673,516
UK Invest PANORAMIC GROWTH FUND 2 LP	10,000,000	0.34	3,431,922
UK Invest PARTNERS GROUP GLOBAL VALUE 2008	7,500,000	0.43	2,777,077
UK Invest STAR CAPITAL STRATEGIC ASSETS III LP	12,500,000	0.48	5,183,681
UK Uncla VESPA CAPITAL II LLP	10,000,000	0.83	8,348,405
UK Unquoted Private Equity Total			95,747,438
PRIVATE EQUITY TOTAL			156,530,869
INFRASTRUCTURE			
UK Infrastructure Quoted			
Closed-er FORESIGHT SOLAR FUND LTD	4,000,000	110.00	4,400,000
Closed-er GREENCOAT UK WIND PLC	11,875,000	135.20	16,055,000
Closed-er HICL INFRASTRUCUTRE CO LTD	6,060,872	164.80	9,988,317
Closed-e INTERNATIONAL PUBLIC PARTNERSHIP LTD	20,462,823.00	155.80	31,881,078.23
Closed-e 3I INFRASTRUCTURE PLC	2,249,999.00	259.00	5,827,497.41
Closed-e RENEWABLES INFRASTRUCTURE GR	8,111,111.00	123.20	9,992,888.75
UK Infrastructure Quoted Total			78,144,781
UK Infrastructure Unquoted	05 000 000	4.04	05 004 000
UK Uncla DALMORE CAPITAL 3 LP	25,000,000	1.01	25,294,082
UK Uncla EQUITIX FUND 1 LTD P'SHIP	7,500,000	1.71	12,859,549
UK Uncla Equitix Fund IV Ltd P'ship	25,000,000	1.29	32,325,635
UK Uncla FIRST STATE EDIF II	20,000,000	0.95	16,502,898
UK Uncla IMPAX NEW ENERGY INVESTORS II UNITS	10,000,000	0.02	131,555
UK Uncla JP Morgan Infrastructure Investment Fund UK L	110,000,000	0.94	82,350,420
UK Uncla MEIF 5 Co-Invest LP	12,600,000	0.60	6,615,290
UK Uncla MEIF 6 Co-Invest LP	28,000,000	0.00	10 040 040
UK Uncla Macquarie European Infrastructure Fund 5 LP	14,400,000	1.04	13,016,948
UK Uncla Macquarie European Infrastructure Fund 6 SCS	56,000,000	0.32	15,548,373
UK Uncla Macquarie Green Infrastructure Fund (Euro)	59,000,000	0.05	2,566,028
UK Uncla PIP Multi Strategy Infrastructure LP	25,000,000	0.84	21,041,599
UK Uncla SL CAPITAL INFRASTRUCTURE 1LP	15,000,000	1.14	17,107,660
UK Uncla SL Capital Infratructure II SCSP	25,000,000	0.78	16,862,957
UK Infrastructure Total			262,222,995

#### INFRASTRUCTURE TOTAL

ALTERNATIVES TOTAL

496,898,645

340,367,776

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APRIL 2020 PORTFOLIO VALUAT					Total
		Mkt Price in	Mkt Price		£
		local currency	pence		GBP
	(Clean) use	(Dirty)	GBP		001
	Calc & IL	use for Non			
UK GILTS	Valuation	IL Valuation			10 510 707
TSY 3.75% 7/9/2020	101.30	101.86	101.86		10,513,727
TSY 1.75% 7/9/2022	104.04	104.30	104.30		14,069,874
TSY 4% 7/3/2022	107.36	107.96	107.96		11,870,183
TSY 2.25% 7/9/2023	107.38	107.72	107.72		16,588,615 6,846,141
TSY 5% 7/3/2025	123.73	124.48	124.48		7,759,564
TSY 2% 7/9/2025	110.55	110.85	110.85		6,177,263
TSY 1.5% 7/22/2026	108.92	109.33	109.33 132.78		23,900,464
TSY 4.25% 7/12/2027	131.09	132.78	149.20		19,637,284
TSY 4.75% 7/12/2030	147.30 146.07	. 149.20 147.77	147.77		18,278,574
TSY 4.25% 7/6/2032 TSY 4.5% 7/9/2034	146.07	157.43	157.43		25,775,286
TSY 4.25% 7/3/2034	150.75	158.39	158.39		18,056,140
	120.40	120.66	120.66		14,237,709
TSY 1.75% 7/9/2037 TSY 4.75% 7/12/2038	175.31	177.21	177.21		14,059,509
TSY 4.25% 7/9/2039	168.21		168.85		6,838,352
TSY 3.25% 1/22/2044	158.74	159.63	159.63		12,770,309
TSY 4.25% 7/12/2046	190.35	192.05	192.05		7,489,925
001 UKGB Total	100.00				234,868,917
· · · · · · · · · · · · · · · · · · ·					
US GOVERNMENT BONDS					
T 2,75% 31/8/2023	108.16	108.62	86.24		22,588,149
T 2.25% 15/11/2024	108.48	100.02	86.96		18,261,838
T 2.75% 15/11/2042	129.64	130.91	103.94		7,795,682
004 USGB Total	120101	100.01	100101		48,645,669
004 0005 1014					
NON GOVERNMENT BONDS					
LGPS Central Global Active Corp B	95.98	95.98	95.98		309,352,379
Non Govt Bonds Total					309,352,379
Holl Gove Bolida Fotal	1. A.				
MULTI ASSET CREDIT					
AMP Capital Infrastructure Debt Fu	0.86	0.86	0.86	• · · · · ·	12,715,078
Barings Global Private Loan Fund	0.51	0.51	0.51		20,442,173
Barings Global Private Loan Fund 2		0.89	0.89		35,404,569
Barings Global Private Loan Fund 3		0.33	0.33		16,372,791
CQS Credit Multi Asset Fund Class		931,93	931.93		98,308,757
CVC Credit PARTNERS European	0.22	0.22	0.22	·	14,250,311
Janus Henderson Multi Asset Credi	1.02	1.02	1.02		100,511,674
Multi Asset Credit Total					298,005,353
UK INDEX LINKED					
					04 047 707
TREAS 4.125% IL STK 22/7/2030	380.32				24,917,737
TREAS 2% IL STK 26/1/2035	295:54	296.42	296.42		23,713,775
002 UKGIL Total					48,631,512
INDEX LINKED (3 monthers)					Tatal
	Clean Price	Index Ratio	Gross	Accrued Interest	Total
UK INDEX LINKED (3monthers)				(	10 000 500
TREAS 0.125% IL STK 22/3/2024	110.0790		12,238,274.56		12,239,529
TREAS 1.25% IL STK 22/11/2027	132.4460			40,913.46	14,787,896
TREAS 0.125% IL STK 22/3/2029	127.4080				8,344,883 5 867 028
TREAS 1.25% IL STK 22/11/2032	156.7160		· · · · · · · · · · · · · · · · · · ·		5,867,928 22 110 448
TREAS 0.75% IL STK 22/3/2034	153.3110				22,110,448 14,277,468
TREAS 1.125% IL STK 22/11/2037					13,053,462
TREAS 0.625% IL STK 22/3/2040	172.7950			3,804.35	15,064,795
TREAS 0.625% IL STK 22/11/2042					23,805,784
TREAS 0.125% IL STK 22/3/2044	172.2980			•	17,630,649
TREAS 0.125% IL STK 22/3/2046	178.2830				19,061,209
TREAS 0.75% IL STK 22/11/2047	208.4200				10,511,024
TREAS 0.125% IL STK 10/08/2048					14,189,596
TREAS 0.5% IL STK 22/3/2050	207.3620	1.368320	14,100,070.08	2,111.00	1-1,100,000

		Mkt Price in local currency	Mkt Price pence		·	Total £
	(Clean) use	(Dirty)	GBP			GBP
UK INDEX LINKED (3monthers)	TOTAL					190,944,671
US INDEX LINKED	Clean Price	Index Ratio	Gross \$	Accrued Interest \$	Total \$	Total £
TII0.125% 15/7/2022	99.828125	1.048160	0.00	0.00	. 0	-
TII0.125% 15/1/2023	99.859375	1.120680	7,833,728.31	2,572,12	7,836,300	6,222,022.53
TII3.625% 15/4/2028	131.179688	1.599340	8,486,447,27	6,410,11	, ,	6,743,328,76
TII1.750% 15/1/2028	116.171875	1.234760	7,961,163,33	,	-1	6,343,832,77
TII2.5% 15/1/2029	125.085938	1.204840	10,549,597,87	51,442,31	10.601.040	8,417,225.90
TII2.125% 15/2/2040	144.789063	1.196810	7,096,020.66	,	, .,	5,648,666.39
TII0.75% 15/2/2042	117.851563	1.144790	27,387,803.92	,	.,	21,771,156.35
Til0.625% 15/2/2043 0045 USGB IL Total	115.757813	1.125120	13,024,143.00			10,351,530.81 <b>65,497,764</b>

#### TOTAL BONDS

Index linked-total Conventional-total Non gov-total

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1,195,946,264

305,073,946 283,514,586 607,357,732

DERBYSHIRE PEN		31.3.20 Valuation		
Real Property				£
Property	Southampton Property			7,150,000
Property	Retail Unit Tamworth			8,450,000
Property	15-17 Jockeys Field London			11,700,000
Property	D'Arblay House, London			16,300,000
Property	Bristol Odeon Development			5,050,000
Property	Quintins Centre, Hailsham			6,300,000
Property	Caledonia House, London			24,400,000
Property	Chelsea Fields Ind Est, London			13,900,000
Property	Planet Centre, Feltham			14,200,000
Property	Hill St, Mayfair			15,900,000
Property	Birmingham - Travelodge develop	om't		16,800,000
Property	Saxmundham, Tesco developm't			9,700,000
Property	Roundhay Road, Leeds			6,600,000
Property	Premier Inn, Rubery, Birmingham	ł.		6,050,000
Property	South Normanton Warehouse, Al	freton		15,800,000
Property	Loddon Centre, Basingstoke			13,900,000
Property	Parkway, Bury St Edmunds			10,350,000
Property	Waitrose, York			13,550,000
Property	Link 95, Haywood Manchester			10,650,000
Property	Car Park, Welford Rd Leicester			12,900,000
Total Real Property	,			239,650,000
Property Managed	Funds	Number held	Mkt price	
Property Pence	Assura PLC	6,000,000	76.3000	4,578,000
Property GBP	Aviva Pooled Property Fund - cla	615,727	16.0217	9,864,990
Property GBP	Aviva Pooled Property Fund - cla	523,250	16.1426	8,446,604
Property GBP	Bridges Property Alternatives Fu	10,000,000	0.7213	7,212,662
Property GBP	Bridges Property Alternatives Fu	10,000,000	0.1411	1,410,701
Property EUR	Fidelity Eurozone Select Real Es	4,486	5956.7563	23,245,375
Property GBP	Hearthstone Residential Fund 1	25,000,000	0.7507	18,767,771
Desmartin ODD	Julas Desensation Dishin Dropp	4 6 4 4 4 0 9	0.0226	156 100

		perty Fund	Is		110000	168,215,019
-	Regulato	ry Capital	LGPS Central	0.00		2,000,000
	Cash	Updated	to 30 April 2020	Mellon USD	Exch rate	
	Cash Cash Cash		Northern Trust	UK Euro Wellington		12,999,625 0 5,756,517
			Northern Trust	LGPS Cent-C	apital & Income	0
	Cash	· .	Cash - Lloyds bank Superfund	20553355	5	8,083,000
	Cash		Cash Townson I com	200 600 00	0	

Igloo Regeneration P'ship Prope

Invesco Real Estate-European F

M&G PP UK Property Fund (Inc)

M&G European Property Fund S

Threadneedle Pensions Property

Tritax Big Box Indirect Pooled Ft

Unite UK Student Accommodatic

Target Healthcare REIT Ltd

	Heasing Dins	<u></u>	027,000,000
	Treasury Bills	0	327,000,000
	Certs of Deposit	0	
	Deutsche Global MMF	30,000,000	
	Federated Prime Rate	27,500,000	
	Aberdeen Standard Life	30,000,000	
	Thurrock Council 2 D/N	20,000,000	
	Santander 180 Day Notice	10,000,000	· · ·
Cash	Cash Temporary Loans	209,500,000	

Property

Property

Property

Property

Property

Property

Property

Property

GBP

EUR

GBP

EUR

GBP

GBP

Pence

Pence

0.0336

116.6090

108.0000

732,3400

120.6000

1.0349

5.9790

1.3680

4,644,493

4,085,000

25,000,000

15,584,567

1,647,730 10,000,000

44,569

27,124

156,199

4,520,670

4,411,800

19,863,990

22,504,791

9,851,780

12,060,000

21,319,688

31/05/2020