Public Document Pack



Simon Hobbs

Director of Legal and Democratic Services County Hall Matlock Derbyshire DE4 3AG

Extension 38357 Direct Dial 01629 538357 Ask for Danny Sunderland

PUBLIC

To: Members of Pensions and Investments Committee

Tuesday, 2 June 2020

Dear Councillor,

Please attend a meeting of the **Pensions and Investments Committee** to be held at <u>10.30 am</u> on <u>Wednesday, 10 June 2020</u>. This meeting will be held virtually. As a member of the public you can view the virtual meeting via the County Council's website. The website will provide details of how to access the meeting, the agenda for which is set out below.

Yours faithfully,

Simon Hobbs

Director of Legal and Democratic Services

AGENDA

PART I - NON-EXEMPT ITEMS

- 1. To receive apologies for absence (if any)
- 2. To receive declarations of interest (if any)
- 3. To confirm the non-exempt Minutes of the meeting held on 4 March 2020 (Pages 1 10)
- 4 (a) Investment Report (Pages 11 94)

- 4 (b) Stewardship Report (Pages 95 128)
- 4 (c) Derbyshire Pension Fund Service Plan (Pages 129 142)
- 4 (d) Derbyshire Pension Fund 2019 Actuarial Valuation (Pages 143 186)
- 5. Exclusion of the Public

To move "That under Regulation 21 (1)(b) of the Local Authorities (Executive Arrangements) (Access to Information) (England) Regulations 2000, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Paragraph(s)... of Part 1 of Schedule 12A to the Local Government Act 1972"

PART II - EXEMPT ITEMS

- 6. To receive declarations of interest (if any)
- 7. To confirm the exempt Minutes of the meeting held on 4 March 2020 (Pages 187 192)
- 8 (a) Stage 2 Appeal under the LGPS Application for Adjudication Disagreement Procedure LG (Pages 193 220)
- 8 (b) Stage 2 Appeal under the LGPS Application for Adjudication Disagreement Procedure DD (Pages 221 348)
- 8 (c) Summary of Appeals and Ombudsman Escalations during 2019-20 (Pages 349 360)

PUBLIC

MINUTES of a meeting of the **PENSIONS AND INVESTMENT COMMITTEE** held at County Hall, Matlock on 4 March 2020

PRESENT

Councillor J Perkins (in the Chair)

Derbyshire County Council

Councillors R Ashton, N Atkin, J Boult, P Makin, S Marshall-Clarke, B Ridgway and M Wall (substitute Member)

Derby City Council

Councillors M Carr and L Eldret

Derbyshire County Unison

Mr M Wilson

Also in attendance – N Dowey, D Kinley, P Peat and K Riley

N Calvert (Pension Board member)

Apologies for absence were received on behalf of Councillor R Mihaly

- 11/20 <u>VARIATION IN ORDER OF BUSINESS</u> The Chairman informed the Committee that Michael Marshall, the Director of Responsible Investment and Engagement from LGPS Central Ltd would be providing presentations on the climate-related reports. To enable Members to consider the Climate Risk Report, it had been agreed that the confidential section of the meeting would be brought forward. The public could then benefit from the presentation on the Climate-Related Disclosures report.
- **12/20 EXCLUSION OF THE PUBLIC RESOLVED** that the public be excluded from the meeting during the Committee's consideration of the remaining items on the agenda to avoid the disclosure of the kind of information detailed in the following summary of proceedings:-

SUMMARY OF PROCEEDINGS CONDUCTED AFTER THE PUBLIC HAD BEEN EXCLUDED FROM THE MEETING

1. To receive declarations of interest (if any)

- 2. To confirm the exempt minutes of the meeting held on 22 January 2020 (contains exempt information)
- 3. To consider the exempt reports of the Director of Finance and ICT on:-
 - (a) Climate Risk Report (contains information relating to the financial or business affairs of any particular person (including the Authority holding that information))
 - (b) Stage 2 Appeal under the LGPS Application for Adjudication Disagreement Procedure (contains information relating to any individual)

(Following consideration of the exempt items on the agenda, the Committee returned to the public section of the meeting)

MINUTES RESOLVED that the non-exempt minutes of the 16/20 meeting held on 22 January 2020 be confirmed as a correct record and signed by the Chairman.

CLIMATE-RELATED DISCLOSURES The Derbyshire Pension 17/20 Fund's Climate-Related Disclosures report, which had been prepared in collaboration with LGPS Central was received by the Committee. Michael Marshall, from LGPS Central Ltd attended the meeting to provide Members with a presentation.

A report outlining the Fund's approach to incorporating the implications of climate change into its investment processes was considered by the Committee in August 2017. Since the report was considered by Committee. climate change had continued to move up the political and financial agenda. The urgency of addressing the issue of climate change had increased as the world has experienced a number of extreme weather events and as five of the warmest years on record have been recorded since 2010.

The overall risk for the Fund was that its assets would be insufficient to meet its liabilities. Underlying the overall risk, the Fund was exposed to demographic risks, regulatory risks, governance risks, administration risks and financial risks including investment risk.

Climate change risk was not currently separated out from the other investment risks on the Fund's Risk Register or included as a potential risk to the liabilities of the Fund. However, the Fund's approach to managing the risks associated with climate change, via the incorporation of Environmental, Social and Governance (ESG) factors into the investment process and Fund stewardship activities, was included in the Investment Strategy Statement approved by Committee in October 2018. It was increasingly best practice for pension funds to develop stand-alone climate strategies given the magnitude of the potential climate-related risks and opportunities.

The Bank of England (the BOE), having established that the financial risks from climate change were significant and would manifest through transition risks and physical risks, expected the organisations that it supervised to develop an enhanced approach to managing the financial risks of climate change covering governance, risk management, scenario analysis and disclosure.

The Taskforce on Climate-related Financial Disclosures (The Task Force/TCFD) was commissioned in 2015 by Mark Carney in his remit as Chair of the Financial Stability Board, in recognition of the risks caused by greenhouse gas emissions to the global economy and the impacts that were likely to be experienced across many economic sectors. The Task Force was asked to develop voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders and insurance underwriters in understanding material climate-related risks. In 2017, the TCFD released its recommendations for improved transparency by companies, asset managers, asset owners, banks, and insurance companies with respect to how climate-related risks and opportunities were being managed. Guidance was also released to support all organisations in developing disclosures consistent with the recommendations, with supplemental guidance released for specific sectors and industries, including asset owners.

The Task Force structured its recommendations around four thematic areas that represented core elements of how organisations operated: governance; strategy; risk management; and metrics and targets. The four overarching recommendations were supported by recommended disclosures that build out the framework with information that would help investors/stakeholders understand how reporting organisations assessed climate related risks and opportunities.

In collaboration with LGPSC, the Fund had developed a Climate-Related Disclosures report (the Disclosures report was attached as Appendix 1 to the report) which was aligned with the recommendations of the TCFD. It described the way in which climate-related risks were currently managed by the Fund and included the results of recent climate scenario analysis and carbon risk metrics analysis undertaken on the Fund's assets as part of LGPSC's preparation of a Climate Risk Report for the Pension Fund. The Disclosures report also included information on the Fund's governance of climate risk and on the Fund's climate-related stewardship activities.

The challenges of measuring the potential impact of climate change on investment portfolios were well recognised. The Fund believed that a suite of carbon risk metrics and climate scenario analysis currently provided the most appropriate method of analysing climate risk to provide an evidence base which

would support the development of a detailed strategy for integrating climate risk into investment decisions. Climate scenario analysis carried out at the asset class level estimated the effects of different climate scenarios on key financial parameters (e.g. risk and return) over a selection of time periods. The climate scenario analysis had been carried out on the Fund's current asset allocation and on the asset allocation set out in the Fund's Strategic Asset Allocation Benchmark.

Key findings of the climate scenario analysis were:

- A 2°C scenario would have a positive impact on the Fund's returns considering both a timeline to 2030 and to 2050. This positive impact is boosted under the Strategic Asset Allocation reflecting the 3% allocation to Global Sustainable Equities.
- A 3°C scenario (which is in line with the current greenhouse gas trajectory) has a relatively muted impact on the Fund's annual returns.
- A 4°C scenario would reduce the Fund's annual returns, with most asset classes expected to experience negative returns.

Climate stress testing analysis suggested that should a 2°C scenario suddenly be priced in by the market, the Fund could benefit in terms of financial returns, whereas the opposite was true should a 4°C scenario be priced in by the market.

Carbon risk metrics analysis on the Fund's listed equities portfolios considered: portfolio carbon footprint (weighted average); fossil fuel exposure; carbon risk management; and clean technology (portfolio weight in companies whose products and services include clean technology). The measure for clean technology exposure should be treated with some caution as there appeared to be a moderate positive correlation in the dataset between sectors that had a high carbon intensity and those that had a higher weight in clean technology.

Officers were currently digesting the Fund's Climate Risk Report (CRR) which would be utilised to support the development of a Climate Strategy and a Climate Stewardship Plan for the Pension Fund. In addition, high level climate change risk analysis from the Fund's actuary, Hymans Robertson LLP, which considered the potential effect of climate change on the Fund's liabilities as well as on the assets of the Pension Fund, would support the development of the Climate Strategy. Guidance on implementing the TCFD recommendations for asset owners from the TCFD and the Principles for Responsible Investment would also be utilised.

Climate change risk would be added as a separate risk to the Fund's Risk Register. The Fund's climate-related disclosures would develop over time and would be updated after a Climate Strategy and a Climate Stewardship Plan had been developed for the Fund. It was anticipated that climate-related disclosures would be included in the Pension Fund's Annual Report.

Members welcomed this report as a good starting point with a lot of positives and looked forward to the document being developed over the coming months.

RESOLVED that the Committee notes the Climate-Related Disclosures report attached as Appendix 1 to the report.

18/20 **INVESTMENT REPORT** Mr Anthony Fletcher, the external adviser from MJHudson Allenbridge Investment Advisers Limited, attended the meeting and presented his report to the Committee. The report incorporated Mr Fletcher's view on the global economic position, factual information on global market returns, the performance of the Derbyshire Pension Fund, and his latest recommendations on investment strategy and asset allocation. Mr Fletcher also provided details on the potential impact the coronavirus outbreak could have on the markets.

Details were provided of Mr Fletcher's investment recommendations in UK Equities, North American Equities, European Equities, Japan, Asia/Pacific, Infrastructure, Private Equity and Cash, along with those of the Derbyshire Pension Fund In-House Fund Management Team.

The Fund's latest asset allocation, as at 31 January 2020 and the recommendations of the Director of Finance and ICT and the Fund's Independent Adviser in relation to the Pension Fund's new strategic asset allocation benchmark were reported. Relative to the new benchmark, the Fund as at 31 January 2020, was overweight in cash, and underweight in growth assets, income assets and protection assets. Details were also provided of the recommendations of the Director of Finance and ICT, which had been adjusted to reflect the impact of future investment commitments. These commitments largely related to private equity, multi-asset credit, property and infrastructure and totalled around £310m. Whilst the timing of drawdowns would be difficult to predict, the In-house Investment Management Team (IIMT) believed that these were likely to occur over the next 18 to 36 months.

The value of the Fund's investment assets had risen by £86.6m between 31 October 2019 and 31 January 2020 to just over £5.2bn, comprising a noncash market gain of around £65m and cash inflows from dealing with members and investment income of around £20m. Over the twelve months to 31 January 2020, the value of the Fund's investment assets had risen by £468.6m, comprising a non-cash market gain of around £370m and cash inflows from dealing with members and investment income of around £100m. A copy of the latest portfolio was presented at Appendix 2 to the report.

The new strategic asset allocation benchmark included a 3% allocation to Global Sustainable Equities. The Committee had previously approved the use a non-DCC framework to appoint two or three investment managers to manage the planned allocation on a discretionary basis. The non-DCC framework had now been finalised and the IIMT was currently in the process of selecting the managers to be appointed. The IIMT expected this to be completed by mid-March, with cash deployment as soon as possible thereafter, an update would be provided at the meeting in June 2020. The IIMT had recommended a neutral opening allocation of 3.0%.

Investment in Infrastructure in the three months to January 2020 totalled £2m. The invested weighting fell by 0.2% to 6.2% over the period, resulting from an adverse currency movement. The committed weighting increased to 9.0% at 31 January 2020 reflecting a £50m commitment to a globally diversified renewable energy fund. The IIMT continued to view Infrastructure as an attractive asset class, and favoured a bias towards core infrastructure assets given the market was now increasingly late cycle.

Asset class weightings and recommendations were based on values at the end of January 2020, and were relative to the new strategic asset benchmark which became effective on 1 January 2019. Many global stock markets were still trading close to all-time highs. Details were given on the Fund's performances over 1, 3, 5 and 10 years to 31 December 2019. The Fund had out-performed the benchmark over all time periods.

RESOLVED that (1) the report of the external adviser, Mr Fletcher, be noted;

- (2) the asset allocations, total assets and long term performance analysis in the report of the Director of Finance and ICT be noted; and
- (3) the strategy outlined in the report of the Director of Finance and ICT be approved.
- **19/20 STEWARDSHIP REPORT** Members were provided with an overview of the stewardship activity carried out by Derbyshire Pension Fund's external investment managers in the quarter ended 31 December 2019.

The Fund's directly held UK Equities were transitioned into a Legal and General Investment Management (LGIM) passive pooled product in November 2019. LGIM exercised the voting rights in respect of the equities held within its UK Equity Index Fund. In order to ensure that Members were aware of the engagement activity being carried out by LGIM and by LGPS Central Limited, copies of the following two reports were presented:

- Q4 2019 Legal & General Investment Management (LGIM) ESG Impact Report (Appendix 1 to the report)
- Q3 2019-20 LGPS Central Limited Quarterly Stewardship Report (Appendix 2 to the report)

LGIM currently managed around £1bn of assets on behalf of the Fund through passive products covering: UK Equities; Japanese Equities; and Emerging Market Equities. It was expected that LGPS Central Limited would manage a growing proportion of the Fund's assets going forward as part of the LGPS pooling project.

These two reports provided an overview of the investment managers' current key stewardship themes and voting engagement activity over the last quarter. It was anticipated that stewardship reports from both managers would be presented to the Committee on a quarterly basis. It was agreed that the Stewardship Manager from LGPS Central Limited would be invited to a future meeting of Committee to present one of the quarterly Stewardship Reports.

RESOLVED to note the stewardship activity of LGIM and LGPS Central Limited.

20/20 FUNDING STRATEGY STATEMENT CONSULTATION As part of the valuation process, the Fund reviewed the funding strategy to ensure that an appropriate contribution plan and investment strategy was in place. The funding strategy was set out in the Funding Strategy Statement (FSS) which was the Fund's key governance document in relation to the actuarial valuation.

The FSS set out the funding policies adopted, the actuarial assumptions used and the time horizons considered for each category of employer. The draft Funding Strategy Statement was presented to the Committee in December 2019, when it was noted that the Fund intended to consult with the Fund's stakeholders on the FSS. The main changes to the FSS since the previous valuation were:

- Increased likelihoods of reaching the funding target for all employers to allow for the potential impact of the McCloud judgement (court ruling that transitional protections awarded to some members of public service pension scheme when the schemes were reformed were unlawful on the grounds of discrimination)
- A larger increase in the likelihood of reaching the funding target, and a reduction in the assessment of the employer covenant for the sector
- Increased clarity on risk sharing options
- The proposed treatment of exit credits
- Increased clarity on pooling arrangements

The consultation on the FSS had commenced on 6 January 2020 and closed on 2 February 2020. Hymans Robertson LLP, the Fund's actuary had explained the main changes in the FSS to the attendees, representing 70 scheme employers, who had attended the Fund's Employer Valuation Seminar on 13 January 2020. Respondents to the consultation could submit comments either by email or by post. The Fund had received one response to the consultation from the University of Derby and details of these comments were provided.

Members welcomed this informative report. The response to the consultation was considered and the members endorsed the actions of the officers.

RESOLVED that having considered the report to the consultation, the Committee confirms that no changes to the proposed Funding Strategy Statement are required approve the Funding Strategy Statement attached at Appendix 1 to the report.

TREASURY MANAGEMENT STRATEGY Derbyshire Pension Fund traditionally adopted the same Treasury Management Strategy as the County Council. The Treasury Management Strategy, attached at Appendix 1 to the report, had been approved at Full Council on 5 February 2020. In future, an individual Strategy for the Pension Fund would come straight to this Committee for approval, and not Full Council. The Strategy covered both the County Council and the Pension Fund, and references to the County Council also applied to the Pension Fund unless separately identified.

The Fund's current benchmark allocation to cash was 2% (about £100m at current asset values). The Fund generally needed to retain a higher level of instant access funds than the County Council. A major buying opportunity in the market could require immediate access to significant sums of cash for investment. The Fund's actual cash allocation at 31 January 2020 was 6.4%, equating to £334m. Future commitments at 31 January 2020 totalled around £310m.

The recommended Strategy for 2020-21 included the following requirements and comments:

- The Council's objective when investing money was to strike a balance between risk and return, minimising the risk of incurring losses from defaults and the risk of receiving unsuitably low investment income;
- The Pension Fund used cash for liquidity rather than investment return;
- The maximum amount and duration by counterparty should be as per Table 2b on page 4 of the Strategy. This also noted that the Pension Fund may receive employer contributions in advance, and this could substantially increase the cash balances of the Pension Fund, pending a

suitable investment opportunity. It was, therefore, requested that the limits on Banks were increased from £10m to £30m and on Local Authorities were increased from £20m to £30m with effect from 1 April 2020; and

 Investments should be limited by type in accordance with Table 3b on page 8 of the Strategy.

Borrowings were permitted only in exceptional circumstances and in accordance with the LGPS (Management and Investment of Funds) Regulations 2016. Borrowings were limited to the maximum amount required to meet the Fund's obligations, and should not exceed 90 days in duration.

RESOLVED that the Treasury Management Strategy attached at Appendix 1 to the report, be approved.



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.

| | | | 31/01/20 | 30/04/20 | | AF 10/06/20 | DPF 10/06/20 | AF 10/06/20 | DPF 10/06/20 |
|------|-----------------------|-------|----------|----------|--------|----------------|-----------------|----------------|-----------------|
| | Growth Assets | 57.0% | 55.9% | 53.2% | +/- 8% | - | (1.0%) | 57.0% | 56.0% |
| | UK Equities | 16.0% | 17.4% | 15.8% | +/- 4% | - | +0.5% | 16.0% | 16.5% |
| | Overseas Equities: | 37.0% | 35.3% | 34.2% | +/- 6% | - | (0.7%) | 37.0% | 36.3% |
| | North America | 12.0% | 10.9% | 10.6% | +/- 4% | - | (1.5%) | 12.0% | 10.5% |
| | Europe | 8.0% | 8.4% | 7.8% | +/- 3% | - | (0.2%) | 8.0% | 7.8% |
| | Japan | 5.0% | 6.4% | 6.3% | +/- 2% | - | +1.0% | 5.0% | 6.0% |
| | Pacific ex-Japan | 4.0% | 4.7% | 4.6% | +/- 2% | - | - | 4.0% | 4.0% |
| | Emerging Markets | 5.0% | 4.9% | 4.3% | +/- 2% | - | - | 5.0% | 5.0% |
| | Global Sustainable | 3.0% | - | 0.6% | +/- 2% | - | - | 3.0% | 3.0% |
| Page | Private Equity | 4.0% | 3.2% | 3.2% | +/- 2% | - | (0.8%) | 4.0% | 3.2% |
| ge | Income Assets | 23.0% | 20.4% | 21.3% | +/- 6% | +2.0% | (1.3%) | 25.0% | 21.7% |
| 12 | Multi-Asset Credit | 6.0% | 6.3% | 6.1% | +/- 2% | +2.0% | 0.3% | 8.0% | 6.3% |
| | Infrastructure | 8.0% | 6.2% | 6.9% | +/- 3% | - | (0.9%) | 8.0% | 7.1% |
| | Direct Property (3) | 5.0% | 4.6% | 4.9% | +/- 2% | +1.0% | (0.1%) | 5.0% | 4.9% |
| | Indirect Property (3) | 4.0% | 3.3% | 3.4% | +/- 2% | (1.0%) | (0.6%) | 4.0% | 3.4% |
| | Protection Assets | 18.0% | 17.3% | 18.3% | +/- 5% | (2.0%) | (0.7%) | 16.0% | 17.3% |

5.8%

6.2%

6.3%

7.2%

Fund

Allocation

5.4%

5.7%

6.2%

6.4%

Benchmark

Asset Category

Conventional Bonds

Index-Linked Bonds

Corporate Bonds

Cash

Fund

Allocation

Permitted

Range

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

6.0%

6.0%

6.0%

2.0%

+/- 2%

+/- 2%

+/- 2%

0 - 8%

(3.0%)

+1.0%

(0.5%)

(0.5%)

+0.3%

+3.0%

Benchmark

Relative

Recommendation

Adjusted for

Commitments

(1)

DPF

10/06/20

58.1%

16.5%

36.3%

10.5%

7.8%

6.0%

4.0%

5.0%

3.0%

5.3%

25.6%

7.9%

9.2%

4.9%

3.6%

17.3%

5.5%

5.5%

6.3%

(1.0%)

Recommendation

DPF

5.5%

5.5%

6.3%

5.0%

3.0%

6.0%

7.0%

2.0%

Benchmark

Sterling

Return

3 Months to

31/3/20

n/a

(25.1%)

n/a

(14.5)%

(17.3%)

(11.0%)

(15.8%)

(19.0%)

(15.9%)

(24.7%)

n/a

(8.1%)

0.7%

(1.3%)

(1.4%)

n/a

6.3%

1.6%

(6.0%)

0.1%

Benchmark

Sterling

Return

3 Months to

30/4/20

n/a

(18.8%)

n/a

(5.6%)

(12.1%)

(6.5%)

(5.9%)

(9.3%)

(8.0%)

(17.8%)

n/a

(-10.5%)

0.7%

(1.3%)(2)

(1.4%)(2)

n/a

5.8%

2.4%

(2.0%)

0.1%

⁽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.

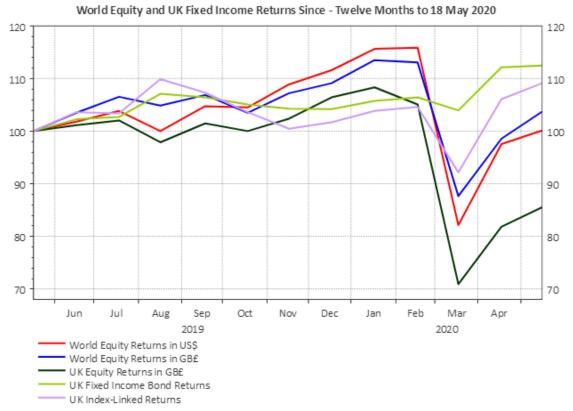
(iii) Total Investment Assets

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 non-cash 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 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



Source: Refinitiv Datastream

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 5½% 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.

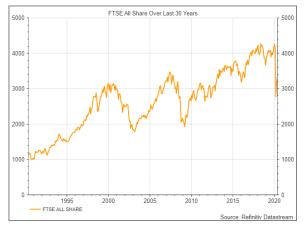
The BoE reduced the Bank Rate by 65 basis points to 10 basis points, with a 50 basis points reduction on 11 March 2020, followed by a further 15 basis points reduction on 19 March 2020. This was matched by the US Fed, which reduced the federal funds rate by 150 basis points to 0 to 25 basis points. Both 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 wash 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.

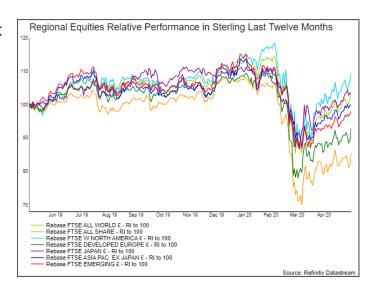
(vii) Growth Assets

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 £6.0%, 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 Evaluation Lim | ited | | | | |

(*) 1 April 2020 to 18 May 2020

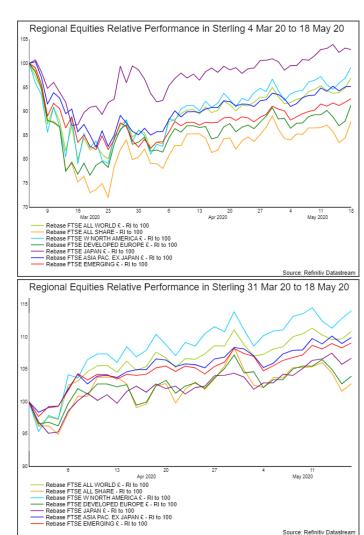
trended upwards throughout 2019 but fell sharply in February and early March 2020 as the coronavirus outbreak escalated and lockdown measures were introduced across the globe. Markets have recovered strongly in April and May 2020, particularly in the US, driven by unprecedented levels of fiscal stimulus 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 80'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).



United Kingdom Equities

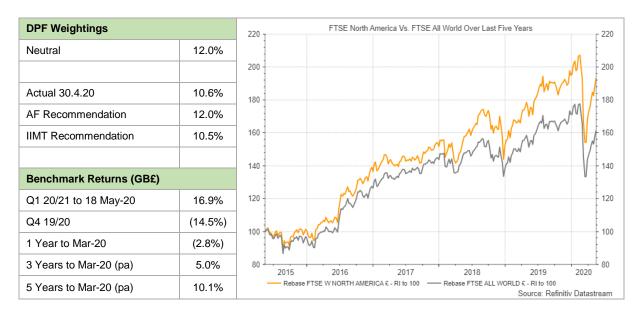
| DPF Weightings | |
|-------------------------|---------|
| Neutral | 16.0% |
| Actual 30.4.20 | 15.8% |
| F Recommendation | 16.0% |
| IIMT Recommendation | 16.5% |
| Bonchmoul Beturns (CBC) | |
| Benchmark Returns (GB£) | |
| Q1 20/21 to 18 May-20 | 7.0% |
| Q4 19/20 | (25.1%) |
| 1 Year to Mar-20 | (18.5%) |
| 3 Years to Mar-20 (pa) | (4.2%) |
| 5 Years to Mar-20 (pa) | 0.6% |

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%.

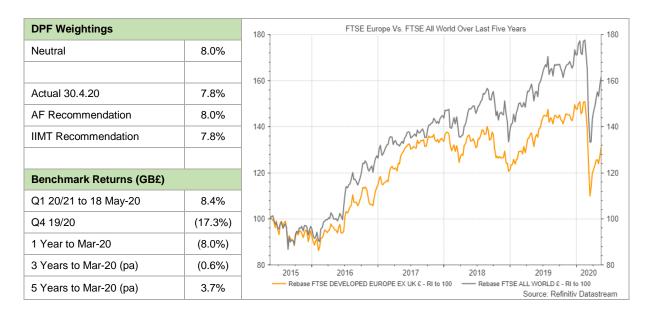
The IIMT notes that following a sharp sell-off in February and early March 2020 (US equities fell by -34.4% between 19 February and 23 March 2020), they have rebounded strongly since then (+33.1% to 18 May 2020 – equating to a net recovery of around 65%), out-performing all other regional equity markets. 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.

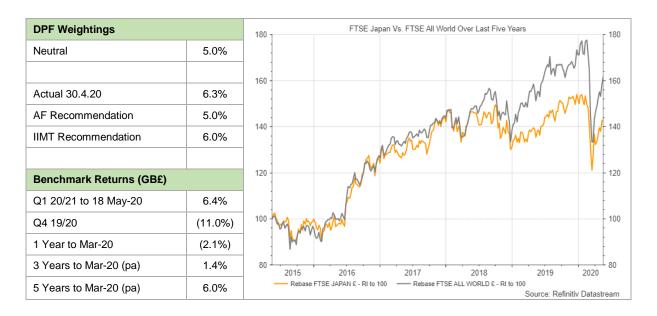
Mr Fletcher recommends a neutral weighting across all of the Fund's regional equity allocations; 8% in respect of European Equities.

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 safehaven 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

| DPF Weightings | Asia-Pac | EM |
|----------------------------|----------|---------|
| Neutral | 4.0% | 5.0% |
| | | |
| Actual 30.4.20 | 4.6% | 4.3% |
| AF Recommendation | 4.0% | 5.0% |
| IIMT Recommendation | 4.0% | 5.0% |
| | | |
| Benchmark Returns (GB£) | Asia-Pac | EM |
| Q1 20/21 to 18 May-20 | 10.1% | 10.0% |
| Q4 19/20 | (15.8%) | (19.0%) |
| 1 Year to Mar-20 | (11.2%) | (13.0%) |
| 3 Years to Mar-20 (pa) | (0.7%) | (1.2%) |
| 5 Years to Mar-20 (pa) | 4.2% | 3.6% |

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% |

Source: May 2020 Consensus Forecasts

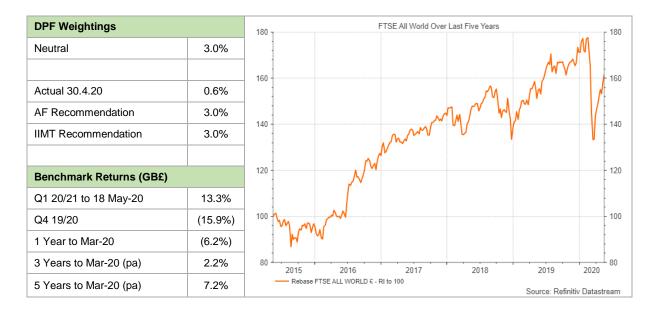
Notwithstanding the strong growth dynamics, particularly in respect of Emerging Asia, this has failed to convert into strong relative returns for emerging market investors. Over the last five years, Asia Pacific and Emerging Market equity returns have been relatively weak - cumulative total dollar returns 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%.

Multi Asset Credit

| | DPF Weighting | | | | | | | |
|--------------------------|---------------|----------------------|---------------------------|---------------------------|--|--|--|--|
| Neutral | | Actual 30.4.20 | AF Recommendation | IIMT Recommendation | | | | |
| 6.0% | | 6.1% 8.0% | | 6.3% | | | | |
| | | | | | | | | |
| | | Benchmark Returns (C | 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 | | | | |

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.

Property

| | DPF Weighting | | | | | | |
|--------------------------|---------------|---------------------|---------------------------|---------------------------|--|--|--|
| Neutral | | Actual 30.4.20 | AF Recommendation | IIMT Recommendation | | | |
| 9.0% | | 8.3% | 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% | | | |

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.

Infrastructure

| | DPF Weighting | | | | | | | |
|--------------------------|---------------|---------------------|---------------------------|---------------------------|---------------------|--|--|--|
| Neutral | | Actual 30.4.20 | Committed 30.4.20 | AF Recommendation | IIMT Recommendation | | | |
| 8.0% | | 6.9% | 9.2% | 8.0% | 7.1% | | | |
| | | | | | | | | |
| | | Bencl | nmark 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% | | | | |

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.

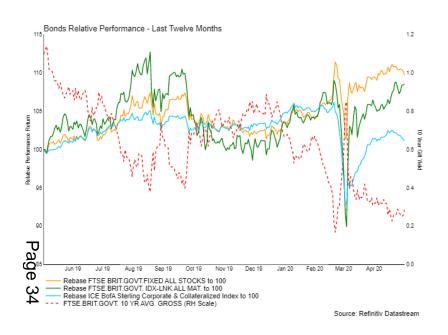
Mr Fletcher recommends a neutral weighting of 8% allocation.

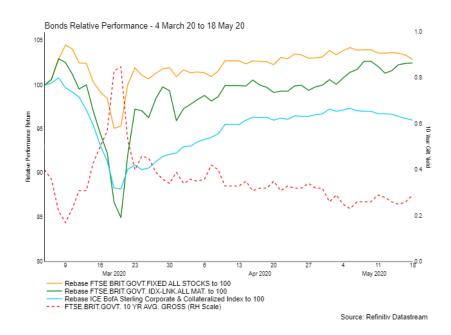
The IIMT continues to view Infrastructure as an attractive asset class, and favour a bias towards core infrastructure assets. Core infrastructure assets can offer low volatility; low correlation to equity and fixed income; and reliable long-term cash flows. This was evidenced in Q1 2020, when the Fund's 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

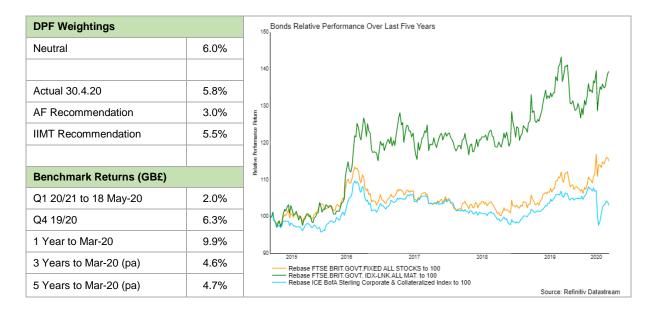




The weighting in Protection Assets at 30 April 2020 was 18.3%, up from 17.3% at 31 January 2020, reflecting relative market strength. The IIMT recommendations below reduce the weighting to 17.3%.

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

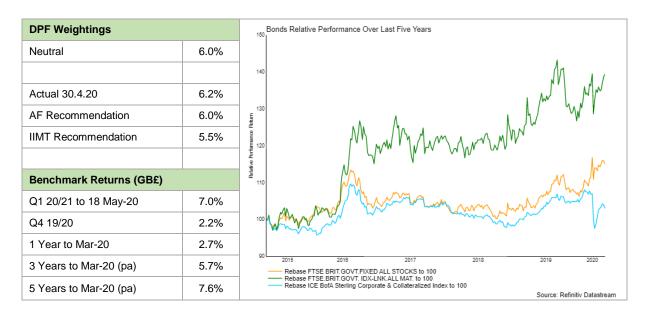


Despite divestment of £10m in the period (driven by a fixed term maturity), relative market strength increased the Fund's allocation to Conventional Bonds by 0.4% to 5.8% at 30 April 2020; 0.2% underweight.

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



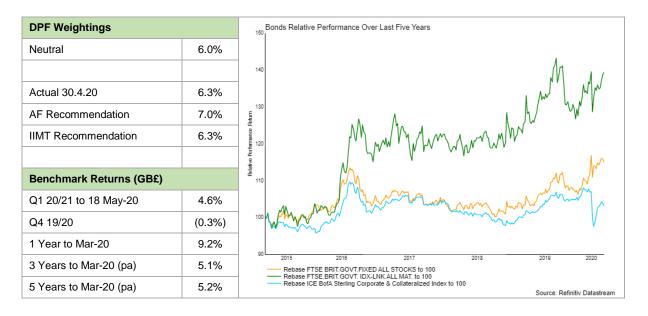
Relative market strength increased the Index-Linked Bonds weighting from 5.7% at 31 January 2020 to 6.2% at 30 April 2020; 0.2% overweight.

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 reescalation 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

This document is directed only at the person(s) identified on the front cover of this document and is governed by the associated agreements we have with that person. No liability is admitted to any other user of this report and if you are not the named recipient you should not seek to rely upon it.

This document is issued by MJ Hudson Allenbridge a trading name MJ Hudson Investment Advisers Limited, an appointed representative of MJ Hudson Advisers Limited which is Authorised and Regulated by the Financial Conduct Authority. The Registered Office of MJ Hudson Advisers Limited is 1 Frederick's Place, London, United Kingdom, EC2R 8AE.



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 10th June 2020 Date of paper 18th 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 19th February with a high close of 3,386, it closed on the 23rd 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 11th 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 23rd 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.



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 31st 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

Chart 1: - UK bond and equity market returns - 12 months to 31st March 2020



Source: - Bloomberg

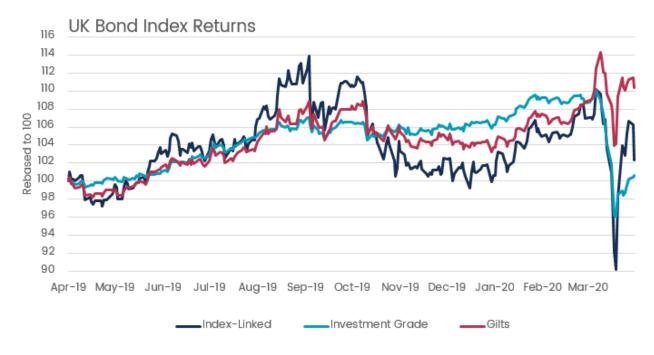


Table 2: - Change in Bond Market yields over the quarter and 12 months.

| BOND MARKET % YIELD TO MATURITY | 31st December 2019 | 31 st March 2020 | Quarterly Change | 31 st March 2019 | Current 8 th 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 | AR GOVERNA | 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 31st March 2020.



Source: - Bloomberg



125 Gross Total Return Global Equities (GBP) 120 115 110 105 Rebased to 100 100 95 90 85 80 75 70 Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 S&P 500 -MSCI Europe ex-UK — MSCI Japan — MSCI Emerging — MSCI World

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

Source: - Bloomberg

Recent developments (April and May 2020)

Since the beginning of the 2nd 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.

Table 3: - Derbyshire Pension Fund and Benchmark returns

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

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

% change quarter on quarter, seasonally adjusted annualised rate

| | Q1 '20 | Q2 '20 | Q3 '20 | Q4 '20 | 2020* | 2021* |
|----------|--------|--------|--------|--------|-------|-------|
| us | -10.0 | -25.0 | 11.0 | 7.0 | -5.3 | 4.5 |
| 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 |
| uĸ | -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 5th 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.

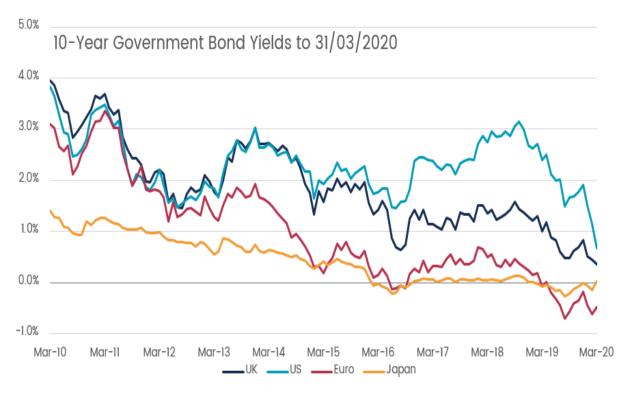
The Pandemic has shown up how fragile institutions have become in the last few years. While it is impressive how quickly individual countries responded to the economic risks, it is remarkable how little global policy co-ordination there has been on most other fronts and how quickly, even within Europe 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 bonds however unless the recovery is "L" shaped, on balance I view the current level of government bond yields as temporary and expect yields to rise in the medium term.

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



Source: - Bloomberg

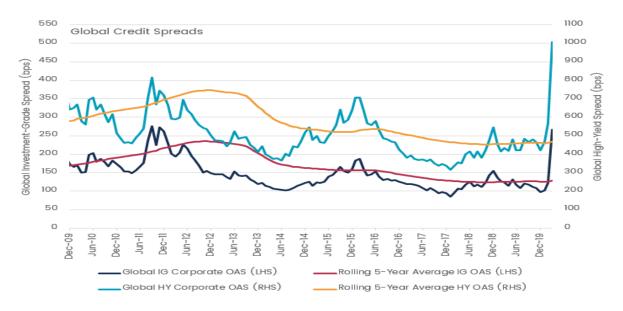
Non-government bonds

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.



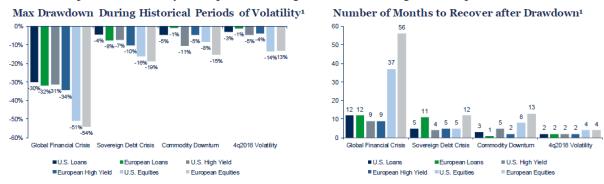
Chart 7: - Credit spreads, extra yield over government bonds, last 10 years.



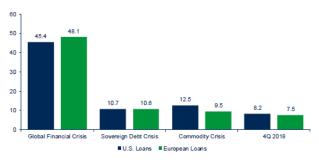
Source: - Bloomberg

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 (%)1



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 non-government 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 19th 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.

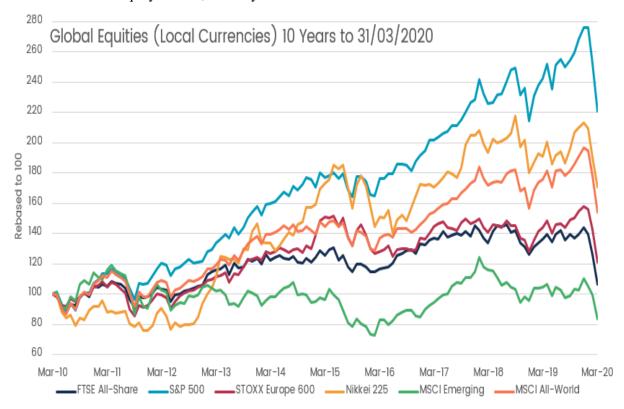


Chart 9: - Global equity indices, last 10 years.

Source: - Bloomberg

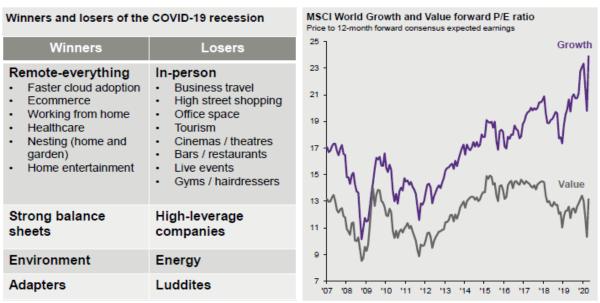
The markets fall to the end of March, has been so great that all the gains earned over the last 3 years have been wiped out! The medium term picture is slightly better at the end of April with overseas equity beginning to show positive returns over 3 years but the UK remains in negative territory. Over 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



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.



Source: MSCI, Refinitiv Datastream, J.P. Morgan Asset Management. Past performance is not a reliable indicator of current and future results
Data as of 30 April 2020

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 18th 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.

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

| % CHANGE YOY | | | | | | | | |
|--------------|-------------|-----|-----------|---------|-----------|-----|-----------|-----|
| 2020 | | | | | | 20 | 21 | |
| | 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 |

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 16th 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 31st 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.

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

| % CHANGE YOY | | | | | | | | |
|--------------|-------------|-----|-----------|---------|-----------|-----|-----------|-----|
| 2020 | | | | | 2021 | | | |
| | JANUARY MAY | | | JANUARY | | MA | 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 |

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.

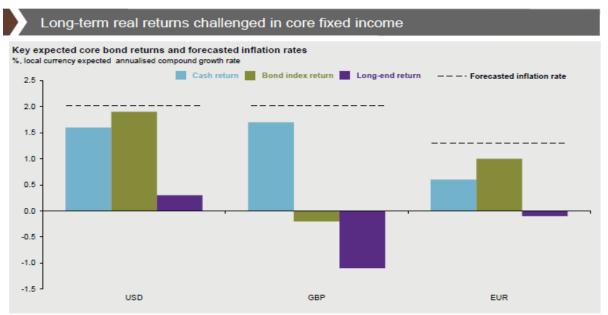
It appears clear to me that both the monetary and fiscal authorities will provide support to their respective economies as they navigate a potentially bumpy path out of lockdown. I also believe that where they can people will want to get back to some semblance of normality. But until there is either 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 31st 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.

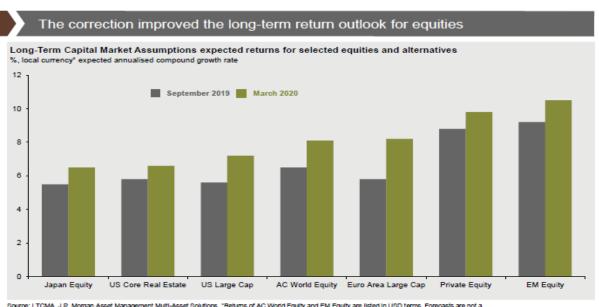


Chart 12: - Expected Government bond, long term returns annualised, 31st March 2020.



Source: LTCMA, J.P. Morgan Asset Management Multi-Asset Solutions. Forecasts are not a reliable indicator of current and future results. Data as of April 2020

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



Source: LTCMA, J.P. Morgan Asset Management Multi-Asset Solutions. "Returns of AC World Equity and EM Equity are listed in USD terms. Forecasts are not a reliable indicator of current and future results. Data as of April 2020.

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.

Table 6: - Interest rate and Bond yield forecasts

| % | 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 non-government 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.

Table 7: - Total returns from representative bond indices

| 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 |

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.

Table 8: - Dividend yield, Earnings growth and Price/Earnings Ratios

| COUNTRY | DIVIDEND YIELD % | EARNING | S GROWTH | PRICE/EARN | 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 |

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 23rd 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 31st January 2020 and 18th 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 1st January 2019.

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



Anthony Fletcher

Senior Adviser

DD: +44 20 7079 1000

anthony.fletcher@mjhudson.com

Appendix

References

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

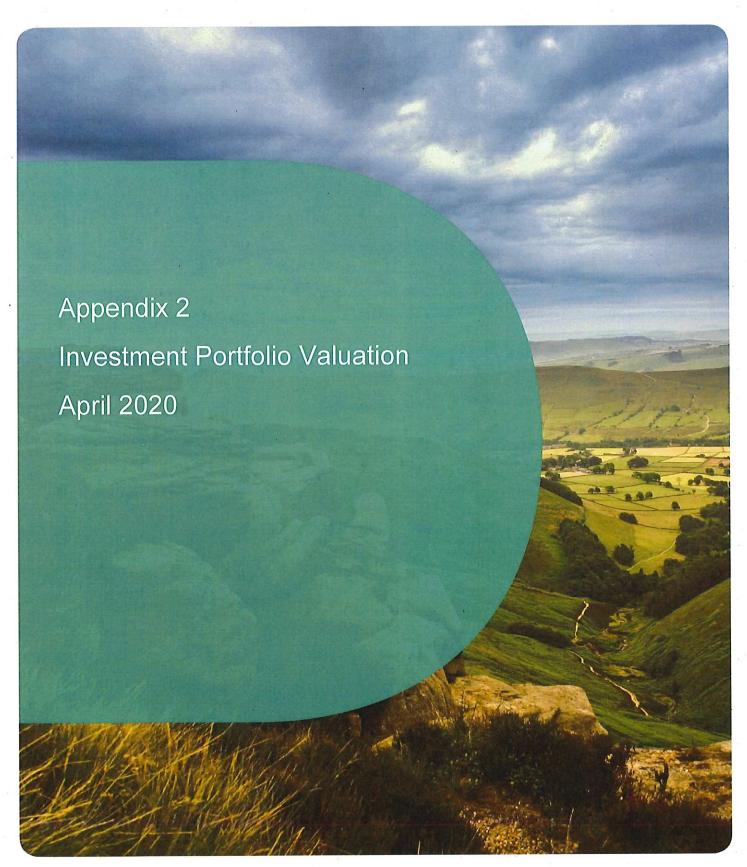
- Derbyshire Pension Fund, PEL performance services
- Citi Research,
- FTSE, Citigroup, IPD, Barclay's Global and ICE Indices
- Kames, Blackrock, M&G and JP Morgan, Asset Management
- Bank of England, UK Debt Management Office, UK OBR, UK Treasury, ONS
- US Bureau of Labour Statistics, US Commerce Dept. 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





T: 01629 538 900

E: pensions@derbyshire.gov.uk derbyshire.gov.uk/pensions





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 บห | 305.1 | 6.2% |
| Overseas | | |
| Non Government | 309.4 | 6.3% |
| Cash | 353.8 | 7.2% |
| LGPSC Regulatory Capital | 2.0 | 0.0% |
| Total | 4922.7 | 100.0% |

| UK EQUITIES Company name | Number held | Mkt price in local currency | Mkt Price GBP | Value in Sterling £ |
|--|----------------|-----------------------------------|------------------|------------------------|
| UK EQUITIES FUND LGIM UK EQUITY INDEX FUND UK EQUITIE: LGIM UK EQUITY INDEX FUND | 64,187,672.92 | 11.32 | 11.32 | 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 £ |
|--|--|--|--|--|
| UK Investment Co UK Investment Co UK Investment Co UK Investment Co UK Investment Co UK Investment Co | MENT COMPANIES D': ABERFORTH SML 1P D': BLACKROCK SMALLER COMPANIE D': LOW CARBON ACCELERATOR LTI D': MONTANARO UK SMALLER CO'S 1 D': RIVER & MERCANTILE UK MICRO D': STRATHDON INVESTMENTS PLC Ment Companies Total | 939,000 830,000 3,868,000 11,996,285 2,902,170 20 | 897.00 1310.00 0.00 111.00 119.00 1000.00 | 8,422,830 10,873,000 - 13,315,876 3,453,582 20,000 36,085,289 |
| UNIT TRUSTS & UK Unit Trusts UK Unit Trusts & INVESTMENT EN UK Investment E | LIONTRUST UK SMALLER COMPAI OEICs Total | 1,201,544.47 | 1479.42 | 17,775,889 17,775,889 - |

| APRIL 2020 PORTFO | LIO VALUATION - BID | | | | |
|---|------------------------------|--|--|-----------|---------------------------|
| US EQUITIES | | | | | |
| OO EQUITIES | | | | | |
| Sector | Company Name | Number | Mkt price | Mkt Price | Value in Sterling |
| | | held | USD/ | GBP | £ |
| : | | | CAN\$ | | |
| OIL & GAS PRODUC | | | | | |
| US Oil & Gas | BP PLC-SPONS ADR | 47689 | 23.80 | 18.90 | |
| US Oil & Gas | CHEVRON CORP | 42130 | 91.82 | 72.91 | 3,071,491 |
| US Oil & Gas | CONCHO RESOURCES INC | 14114 | 56.63 | 44.96 | |
| US Oil & Gas | DIAMONDBACK ENERGY INC | 16685 | 43.45 | 34.50 | 575,621 |
| US Oil & Gas | EXXON MOBILE CORP | 145950 | 46.31 | 36.77 | 5,366,602 |
| US Oil & Gas | MARATHON PETROLEUM CORP | 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 | 36.83 | 1,332,752 |
| US Oil & Gas Produc | ers Total | | | | 14,577,435 |
| OIL & GAS SEDVICE | | | | | |
| OIL & GAS SERVICE | | | | | |
| US Oil & Gas Services US Forestry & Paper | SCHLUMBERGER LTD Total | 72724 | 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 | |
| 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 | PPG INDUSTRIES INC | 26720 | 90.73 | 72.04 | 1,924,899 |
| US Chemicals Total | 1 1 O REDOTALEO INO | 20720 | 30.73 | 12.04 | 10,715,622 |
| FORESTRY & PAPER | | | | | |
| | INTERNATIONAL PAPER CO | 28145 | 34.24 | 27.19 | 765,166 |
| US Forestry & Paper | + | 20170 | | | 765,166 |
| | | | and a substitute to the substitute of the substi | | |
| INDUSTRIAL METALS | | | | | |
| | LIVENT CORP | 42162 | 6.19 | 4.91 | 207,220 |
| US Industrial Metals | Total | The state of the s | | | 207,220 |
| AEDOCDACE | | | | | |
| AEROSPACE | BOEING CO/THE | 11400 | 140.86 | 111.84 | 4 275 000 |
| US Aero defence US Aero defence | LOCKHEED MARTIN CORP COM | 18162 | 388.93 | 308.81 | 1,275,008 |
| US Aero defence | NORTHROP GRUMMAN CORP | 16072 | 330.29 | 262.25 | 5,608,615 4,214,886 |
| US Aero defence | RAYTHEON TECHNOLOGIES CORP | 113958 | 64.69 | 51.36 | 5,853,323 |
| US Aerospace Total | RATTHEON TECHNOLOGIES CORP | 113930 | 04.09 | 31,30 | 16,951,832 |
| GENERAL INDUSTRI | AL · | | | | |
| 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 | KENNAMETAL INC | 40628 | 25.60 | 20.33 | 825,821 |
| US 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 | |
| US Div Ind | TRANE TECHNOLOGIES PLC | 30672 | 87.42 | 69.41 | 2,128,989 |
| US Div Ind | TRITON INTERNATIONAL LTD/BER | 28181 | 30.97 | 24.59 | |
| US General Industria | | | | | 20,485,626 |
| | | | | · | |
| | | | | | |

| ELECTRONIC EQUIP | MENT | | | | |
|---|--|----------------|--|-----------------|----------------------|
| US Electricity | 3M CO | 2974 | 151.86 | 120.58 | 250 506 |
| US Electricity | FORTIVE CORP | 59234 | 63.69 | 50.57 | 358,596 2,995,455 |
| US Electricity | GENERAL ELECTRIC CO | 5759 | 6.81 | 5.41 | 31,140 |
| US Electricity | NVENT ELECTRIC PLC | 79210 | 18.60 | 14.77 | 1,169,805 |
| US Electronic Equipr | | 7 32 10 | 10.00 | 14.77 | 4,554,995 |
| | AVA-01-2-01-2-01-2-01-2-01-2-01-2-01-2-01- | | | · · · | 1,001,000 |
| INDUSTRIAL ENGINE | ERING | | and the second s | ,,.,,,,,, | |
| US Industrial Engine | ering Total | | | | - |
| | | | · | | ···· |
| INDUSTRIAL TRANSI | PORT | | | | |
| US Transportation | FEDEX CORP | 14534 | 126.74 | 100.63 | 1,462,579 |
| US Transportation | HUNT (JB) TRANSPORT SERVICES | 26925 | 101.09 | 80.27 | 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 |
| OURDORT OFFICE | | | | | <u>.</u> |
| SUPPORT SERVICES | | | | 07.01 | 4 700 577 |
| US Support Services | GENPACT LTD TRANSUNION | 63158 | 34.43 | 27.34 | 1,726,577 |
| US Support Services US Support Services | TRINET GROUP INC | 5159 38219 | 78.65 49.03 | 62.45 38.93 | 322,170 1,487,859 |
| US Support Services | | 38219 | 49,03 | <u> </u> | 3,536,605 |
| OS Support Services | | | | | 3,030,000 |
| BEVERAGES | | | 300 | | |
| US Beverages | COCA-COLA CO/THE | 246117 | 45.85 | 36.40 | 8,959,865 |
| US Beverages Total | GOOA-COLA GO) THE | 240117 | 45.65 | | 8,959,865 |
| OO Deverages rotal | | | | | |
| FOOD PRODUCTION | //PROCESS | | | | |
| | MONDELEZ INTERNATIONAL INC-A | 160287 | 51,44 | 40.84 | 6,546,660 |
| US Food Production | | 100201 | | 70.01 | 6,546,660 |
| | | | | | |
| HOUSEHOLD GOOD | \$ | | | | |
| US Hous Gds Txtiles | 740-00-00-00-00-00-00-00-00-00-00-00-00-0 | 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 | VF CORP | 93150 | 58.04 | 46.08 | 4,292,702 |
| US Household Goods | s Total | | | | 6,905,685 |
| | | | | | |
| PERSONAL GOODS | | | | | |
| | PROCTOR & GAMBLE CO/THE | 123146 | 117.70 | 93.45 | 11,508,462 |
| US Personal Goods 1 | Fotal . | | | | 11,508,462 |
| | | | | | w |
| HEALTHCARE EQUIP | | | × . | | |
| US Healthcare Equipm | | 18068 | 280.67 | 222.85 | 4,026,490 |
| US Healthcare Equipm | | 36192 | 66.52 | 52.82 | 1,911,549 |
| | EDWARDS LIFESCIENCES CORP | 12713 | 217.50 | 172.70 | 2,195,472 |
| | ENVISTA HOLDINGS CORP | 65181 | 19.47 | 15.46 | 1,007,645 |
| | HCA HOLDINGS INC | 21566 | 109.79 | 87.17 | 1,879,979 |
| | IDEXX LABORATORIES INC | 7683 | 277.17 | 220.07 | 1,690,821 |
| | INTUITIVE SURGICAL INC | 2020 | 510.35 | 405.22 | 818,540 |
| US Healthcare Equipm | SHOCKWAVE MEDICAL INC | 12780 30632 | 141.14 40.12 | 112.07 31.86 | 1,432,193 975,791 |
| | THERMO FISHER SCIENTIFIC | 18652 | 334.38 | 265.50 | 4,952,063 |
| | ment & ServicesTotal | 10002 | 557.56 | 200.00 | 20,890,541 |
| Houselouro Equip | | | | - | 20,000,0-71 |
| 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 | ASSEMBLY BIOSCIENCES INC | 7199 | 17.50 | 13.90 | 100,030 |
| US Pharm, Biotech | ATRECA INC-A | 9538 | 15.28 | 12.13 | 115,718 |
| US Pharm, Biotech | ASTRAZENECA PLC-SPONS ADR | 150923 | 52.24 | 41.48 | 6,260,069 |

| | | | | 1 | |
|---|--|--|--|---|---|
| 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 | GLYCOMIMETICS INC | 27466 | 2.79 | 2.22 | 60,844 |
| US Pharm, Biotech | G1 THERAPEUTICS INC | 16294 | 13.13 | 10.43 | 169,869 |
| US Pharm, Biotech | ILLUMINA INC | 2367 | 319.05 | 253.33 | 599,622 |
| US Pharm, Biotech | IMMUNOGEN INC | 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 | PPD INC | 78207 | 23.89 | 18.97 | 1,483,482 |
| US Pharm, Biotech | REATA PHARMACEUTICALS INC-A | 1782 | 158.27 | 125.67 | 223,937 |
| US Pharm, Biotech | REGENERON PHARMACEUTICALS | 2010 | 524.09 | 416.13 | 836,416 |
| US Pharm, Biotech | <u> </u> | | | | |
| | 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 | UROGEN PHARMA LTD | 8300 | 22.21 | 17.63 | 146,368 |
| US Healthcare | VERTEX PHARMACEUTICALS INC | 5738 | 251.10 | 199.37 | 1,144,005 |
| US Healthcare | WAVE LIFE SCIENCES LTD | 11951 | 8.68 | 6.89 | 82,365 |
| US Healthcare | UNITEDHEALTH GROUP INC | 24805 | 292.07 | 231.90 | 5,752,368 |
| | IONITEDITEATTI GROOT INC | 240001 | 202.01 | 201.003 | 0.702.000 |
| l- | | 24003 | 292.01 | 231.80 | |
| US Pharmaceutical, E | | 24000 | 292.01 | 231.80 | 55,318,979 |
| US Pharmaceutical, E | | 24000 | 292.01 | 231.30 | |
| US Pharmaceutical, E | Biotech Total | | | | 55,318,979 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug | Biotech Total HOUGHTON MIFFLIN HARCOURT CO | 102894 | 1.60 | 1.27 | 55,318,979 130,717 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Retail Food & Drug | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A | 102894 27568 | 1.60 56.27 | 1.27 44.68 | 55,318,979 130,717 1,231,694 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP | 102894 27568 97902 | 1.60 56.27 187.30 | 1.27 44.68 148.72 | 130,717 1,231,694 14,559,613 |
| FOOD RETAIL US Retail Food & Drug | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A | 102894 27568 | 1.60 56.27 | 1.27 44.68 | 130,717 1,231,694 14,559,613 1,600,002 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP | 102894 27568 97902 | 1.60 56.27 187.30 | 1.27 44.68 148.72 | 130,717 1,231,694 14,559,613 |
| FOOD RETAIL US Retail Food & Drug US Food Retail Total | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP | 102894 27568 97902 | 1.60 56.27 187.30 | 1.27 44.68 148.72 | 130,717 1,231,694 14,559,613 1,600,002 |
| FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP | 102894 27568 97902 68588 | 1.60 56.27 187.30 29.38 | 1.27 44.68 148.72 23.33 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC | 102894 27568 97902 68588 | 1.60 56.27 187.30 29.38 | 1.27 44.68 148.72 23.33 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC | 102894 27568 97902 68588 13483 1221 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 |
| FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC | 102894 27568 97902 68588 13483 1221 72086 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 | 1.27 44.68 148.72 23.33 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC | 102894 27568 97902 68588 13483 1221 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 |
| FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC | 102894 27568 97902 68588 13483 1221 72086 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC | 102894 27568 97902 68588 13483 1221 72086 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC | 102894 27568 97902 68588 13483 1221 72086 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers - Genera | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC | 102894 27568 97902 68588 13483 1221 72086 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen US Retailers Gen US Retailers - Genera MEDIA US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A | 102894 27568 97902 68588 13483 1221 72086 182660 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers - Genera MEDIA US Media & Photo US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC | 102894 27568 97902 68588 13483 1221 72086 182660 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen US Retailers Gen US Retailers - Genera MEDIA US Media & Photo US Media & Photo US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen US Retailers Gen US Retailers - Genera MEDIA US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers Gen US Retailers Gen US Retailers Gen US Retailers - Genera MEDIA US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 | 1.27 44.68 148.72 23.33 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo US Media & Photo US Media & Photo US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Retailers - Genera MEDIA US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 5,091,825 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo US Media Total | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 5,091,825 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo US Media Total | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP WALT DISNEY COMPANY | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 59373 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 108.01 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 85.76 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 5,091,825 45,654,782 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo US Media Total | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP WALT DISNEY COMPANY | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 59373 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 108.01 | 1.27 44.68 148.72 23.33 1,1958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 85.76 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 5,091,825 |
| US Pharmaceutical, E FOOD RETAIL US Retail Food & Drug US Food Retail Total RETAILERS - GENER US Retailers Gen US Media & Photo US Media Total | HOUGHTON MIFFLIN HARCOURT CO HYATT HOTELS CORP-CL A MCDONALD'S CORP PERFORMANCE FOOD GROUP CORP AL AMAZON.COM INC BOOKING HOLDINGS INC ETSY INC TJX COMPANIES INC I Total CHARTER COMMUNICATIONS INC-A ELECTRONIC ARTS INC FACEBOOK INC LIBERTY MEDIA CORP-MEDIA C MATCH GROUP INC NETFLIX INC NEW YORK TIMES CO-A OMNICOM GROUP WALT DISNEY COMPANY | 102894 27568 97902 68588 13483 1221 72086 182660 26255 26026 85738 41170 41108 23377 16037 48302 59373 | 1.60 56.27 187.30 29.38 2,466.92 1,480.57 64.87 49.00 494.28 114.26 204.71 32.21 77.00 419.83 32.52 57.08 108.01 | 1.27 44.68 148.72 23.33 1,958.73 1,175.57 51.51 38.91 392.46 90.72 162.54 25.57 61.14 333.35 25.82 45.32 85.76 | 130,717 1,231,694 14,559,613 1,600,002 17,522,025 26,409,617 1,435,374 3,712,918 7,106,570 38,664,479 10,303,993 2,361,142 13,935,832 1,052,912 2,513,261 7,792,607 414,089 2,189,120 5,091,825 45,654,782 |

| US Travel & Leisure | Total | | IP STEVEN I AND PORTUGATION | · | 612,889 |
|----------------------|---|--|-----------------------------|--------|--|
| | | | | -//A/A | |
| ELECTRICITY | | | | ·^ | 4 |
| US Electricity | AMEREN CORPORATION | 28591 | 72.75 | 57.76 | 1,651,516 |
| US Electricity | AVANGRID INC | 41984 | 42.94 | 34.09 | 1,431,418 |
| US Electricity | DUKE ENERGY CORP | 42102 | 84.60 | 67,17 | 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 | UGI CORP | 15881 | 30.15 | 23.94 | 380,177 |
| US Gas & Water Tota | | | | | 3,678,638 |
| BANKS, RETAIL | | | | | |
| US Banks Retail | BANK OF AMERICA CORP | 427807 | 24.04 | 19.09 | 8,165,877 |
| US Banks Retail | JPMORGAN CHASE & CO | 29801 | 95.69 | 75.98 | 2,264,216 |
| | | 2,5001 | 30.08 | 10.30 | 2,204,210 |
| US Banks - Retail To | tal | | | | 10,430,094 |
| NON-LIFE INSURANCE | <u>J </u> | | | | • |
| 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 | MARSH & MCLENNAN COS INC COM | 36681 | 97.23 | 77.20 | 2,831,796 |
| US Insurance | PROGRESSIVE CORP | 44859 | 77.30 | 61,38 | 2,753,275 |
| US Insurance | TRUPANION INC | 41295 | 29.90 | 23.74 | 980,368 |
| US Non-Life Insuran | ce Total | | | | 16,116,450 |
| REAL ESTATE | | | | | PP-PP-70-7017000000000000000000000000000 |
| 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 | EQUINIX INC | 11063 | 674.33 | 535.42 | 5,923,330 |
| US Real Estate | STORE CAPITAL CORP | 60790 | 20.05 | 15.92 | 967,759 |
| US Real Estate | VORNADO REALTY TRUST | 25730 | 43.82 | 34.79 | 895,226 |
| US Real Estate Total | 1 A A A A A A A A A A A A A A A A A A A | | | | 18,902,883 |
| GENERAL FINANCIA | L · | | | | |
| US Special Finance | AMERICAN EXPRESS CO | 22392 | 91.24 | 72.44 | 1,622,179 |
| US Special Finance | ARES MANAGEMENT CORP - A | 75568 | 33.55 | 26.64 | 2,013,033 |
| US Special Finance | CHARLES SCHWAB CORP | 59871 | 37.72 | 29.95 | 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 | 14.55 | 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 |
| US Special Finance | FLEETCOR TECHNOLOGIES INC | 15663 | 241.25 | 191.55 | 3,000,287 |
| US Special Finance | GLOBAL PAYMENTS INC | 52544 | 166.02 | 131.82 | 6,926,344 |
| US Special Finance | GOLDMAN SACHS GROUP INC | 4206 | 183.50 | 145.70 | 612,810 |
| US Special Finance | HAMILTON LANE INC-CLASS A | 34073 | 64.61 | 51.30 | 1,747,956 |
| US Special Finance | IHS MARKIT LTD | 6963 | 67.25 | 53.40 | 371,800 |
| US Special Finance | ONEMAIN HOLDINGS INC | 49153 | 24.20 | 19.21 | 944,465 |
| US Special Finance | PAYPAL HOLDINGS INC | 34813 | 122.97 | 97.64 | 3,399,078 |
| US Special Finance | S&P GLOBAL INC | 11918 | 292.44 | 232.20 | 2,767,328 |
| US Special Finance | TD AMERITRADE HOLDING CORP | 47474 | 39.22 | 31.14 | 1,478,373 |
| US Special Finance | VISA INC CL A SHS | 45167 | 178.34 | 141.60 | 6,395,736 |
| US Special Finance | VOYA FINANCIAL INC | 39509 | 45.19 | 35.88 | 1,417,617 |
| US Special Finance | WEX INC | 10373 | 131.61 | 104.50 | 1,083,961 |

| US General Financial Total | | | | 47,482,902 |
|---|--------|---|----------|-------------|
| SOFTWARE | | | | • |
| US Software & Comp SADOBE SYSTEMS INC | 5709 | 353.34 | 280.55 | 1,601,671 |
| US Software & Comp (ALPHABET INC - CL A SHARES | 16310 | 1,346.70 | 1,069.28 | 17,439,954 |
| US Software & Comp (BLUCORA INC | 79943 | 14.07 | 11.17 | 893,090 |
| US Software & Comp (GUIDEWIRE SOFTWARE INC | 12436 | 91.01 | 72.26 | 898,649 |
| US Software & Comp MICROSOFT CORP | 199452 | 179.19 | 142.28 | 28,377,404 |
| US Software & Comp (SALESFORCE.COM INC. | 34511 | 161.76 | 128.44 | 4,432,504 |
| US Software & Comp SCIENCE APPLICATIONS INTERNATI | | 81.64 | 64.82 | 1,088,818 |
| US Software & Comp SERVICENOW INC | 6041 | 352.27 | 279.70 | 1,689,682 |
| US Software & Comp SLACK TECHNOLOGIES INC-CL A | 16451 | 26.66 | 21.17 | 348,235 |
| US Software & Comp SPLUNK INC | 7199 | 140.36 | 111.45 | 802,299 |
| US Software & Comp SPOTIFY TECHNOLOGY SA | 5205 | 151.56 | 120.34 | 626,363 |
| US Software & Comp SS&C TECHNOLOGIES HOLDINGS | 41355 | 55.24 | 43.86 | 1,813,853 |
| US Software & Comp SVMK INC | 142270 | 15.70 | 12.47 | 1,773,509 |
| US Software & Comp (VERISIGN INC | 3214 | 209.49 | 166.34 | 534,601 |
| US Software & Comp (WORKDAY INC-CLASS A | 13963 | 153.85 | 122.16 | 1,705,677 |
| US Software Total | | 100.00 | 122, 10 | 64,026,310 |
| - Continuity Total | | | | |
| TECHNOLOGY HARDWARE | | | | - |
| 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 LTI | | 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 Hardware Total | | | | 48,591,319 |
| | | · · · · · · · · · · · · · · · · · · · | | |
| TOTAL UNITED STATES | | .,,,,,, | | 519,574,154 |
| | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | |
| | | | · | |
| | | | | , |
| | | *************************************** | | |

| 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 | Mkt Price GBP | Value in Sterling £ |
|--|------------------------------|-----------------------|--------------------|---------------------------|
| Investment Companies | | currency | | |
| Japan CC Japan Income & Growth Trust Japan JPMorgan JAP IT 25P | 5,000,000 7,730,000 | 122.00 455.00 | 122.00 455,00 | 6,100,000 35,171,500 |
| Japan JPMF japs smoc | 2,250,000 | 390.00 | 390.00 | 8,775,000 |
| Japan Schroder Japan Growth Fund 10p ords | 11,300,000 | 163.00 | 163.00 | 18,419,000 |
| J Investment Companies Total | | | | 68,465,500 |
| Unit Trusts & OEICs Japan Baillie Gifford OGF - Japanese B Acc Shares | | 1,608.00 | 4 000 00 | 70.740.750 |
| Japan Baillie Gifford OGF - Japanese B Acc Shares Japan Barings Jap Growth Trst-IGBA | 4,523,678,49 5,282,832.62 | 228.90 | 1,608.00 228.90 | 72,740,750 12,092,404 |
| Japan Invesco Japan FD-UKNTACC | 4,573,118.88 | 166,90 | 166.90 | 7,632,535 |
| Japan JPMorgan Jap Fd A Acc | 3,000,000.00 | 516.90 | 516.90 | 15,507,000 |
| Japan Schroder UT Tokyo Ac J Unit Trusts Total | 11,000,000.00 | 328.10 | 328.10 | 36,091,000 144,063,689 |
| Life Policies | | | | |
| Internatio: LGIM Japan Equity Index Fund | 26,141,158.640 | 1.89 | 1.89 | 49,421,429 |
| International Life Policies | | | | 49,421,429 |
| Investment Entities | | | | |
| Japan Aberdeen Global - JAP Smaller Cos Fund D£ | 1,662,639.78 | 11.02 | 11.02 | 18,325,283 |
| Japan JO Hambro - Japan Fd GBP-A J Investment Entitles Total | 15,000,000.00 | 2.10 | 2.10 | 31,470,000 49,795,283 |
| JAPAN TOTAL | | | | 311,745,901 |
| OTUER ASIA | | | | |
| OTHER ASIA Investment Companies | | | | |
| Asian ABERDEEN ASIAN INCOME FUND ORDS | 3,000,000 | 170.50 | 170.50 | 5,115,000 |
| Asian ABERDEEN NDIT 25P | 7,780,000 | 224.00 | 224.00 | 17,427,200 |
| Asian ASIA DRAGON TRUST 20P | 8,610,000 | 368.00 | 368.00 | 31,684,800 |
| Asian INVESCO ASIA TRUST 10P OA Investment Companies Total | 6,358,000 | 250.00 | 250.00 | 15,895,000 70,122,000 |
| ************************************** | | | | 70,144,000 |
| Unit Trusts & OEICs | | | | |
| Asian Stewart Investors Asia Pacific Fund (First State As Asian JPMorgan Asia Fund A Ac | 5,250,000 20,000,000 | 1,332.70 229.80 | 1,332.70 229.80 | 69,966,750 45,960,000 |
| Asian Schroder Insti PAC Fd Ac | 2,000,000 | 1,453.00 | 1,453.00 | 29,060,000 |
| OA Unit Trusts Total | _,,,,,,,, | ., | | 144,986,750 |
| Investment Entities | | | | |
| Asian Barings Australia Fund-IUSDA \$ | 109,543.282 | 113.01 | 89.73 | 9,829,312 |
| OA Investment Entitles Total | | | | 9,829,312 |
| OTHER ASIA TOTAL | | | | 224,938,062 |
| • | | | | |
| EMERGING MARKETS | | | | · |
| Investment Companies Internatio: ABERDEEN EMERGING MARKETS | 2,788,425 | 490.00 | 490.00 | 13.663,283 |
| Internation BLACKROCK FRONTIERS INV TRUST | 2,950,000 | 88.20 | 88.20 | 2,601,900 |
| Internatio: JP Morgan EMER IT25P | 2,388,000 | 885.00 | 885.00 | 21,133,800 |
| Int'i Investment Companies Total | • | | | 37,398,983 |
| Unit Trusts & OEICs | | | • | |
| Internatio Stewart Investors Global Emerging Markets Funf | 3,000,000 | 711.33 | 711.33 | 21,339,900 |
| Latin Ame Thd ndle Lnamer Gwth | 3,500,000 | 199.94 | 199.94 | 6,997,900 |
| Int'l Unit Trusts Total | | | | 28,337,800 |
| Life Policies | * | | | |
| Internation LGIM World Emerging Markets Index Fund | 35,134,030.420 | 3.19 | 3.19 | 111,999,559 |
| International Life Policies | * | | | 111,999,559 |
| Investment Entities | | | | |
| Latin Ame JPMorgan LNAMER A U\$ | 86,085.904 | 30.67 | 24.35 | 2,096,362 |
| Internatio: POLUNIN FUNDS-DEVEL CNTY-B LatAm Investment Entities Total | 47,502.659 | 895.18 | 710.77 | 33,763,604 35,859,966 |
| The state of the s | | | | 30,000,000 |
| EMERGING MARKETS TOTAL | | | | 213,596,308 |
| | | | | 2,0,000,000 |
| | • | | | |
| 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 E | 3 , 14,157,621.52 | 218.00 | 2.18 | 30,863,615 |
| UK EQUITIES TOTAL | | | | 30,863,615 |

| 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 Invest ICG 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 |
| Unquoted Private Equity | | | |
| ·UK Uncla ADAM STREET PARTNERS (FEEDER) 2017 FU | . 20.000.000 | 0.59 | 44 000 004 |
| UK Unda BAIRD CAPITAL PARTNERS EUROPE FUND L | 30,000,000 4,300,000 | | 14,029,031 126,042 |
| UK Uncla CAPITAL DYNAMICS GLOBAL SECONDARIES | 20,000,000 | 0.03 0.75 | 11,889,995 |
| UK Uncla CAPITAL DYNAMICS GLOBAL SECONDARIES UK Uncla CAPITAL DYNAMICS MID-MARKET DIRECT FI | 25,000,000 | 0.73 | 21,046,477 |
| UK Uncla CAPITAL DYNAMICS MID-MARKET DIRECT PE | • • | 0.46 | |
| UK Uncla CATAPULT GROWTH FUND UNITS | 20,000,000 3,000,000 | 0.46 | 9,194,781 281,369 |
| UK Uncla EAST MIDLANDS VENTURE | 3,000,000 | 0.09 | |
| | , , | | 212,913 |
| UK Uncla EPIRIS FUND II UK Uncla GRAPHITE CAPITAL PARTNERS FUND 1X A | 25,000,000 | 0.39 | 9,653,294 |
| UK Uncla GRAPHITE CAPITAL PARTNERS FUND 1X C | 11,250,000 | 80.0 | 930,177 |
| UK Uncla MOBEUS EQUITY PARTNERS IV LP | 11,250,000 | 0.08 | 930,183 |
| UK Invest PANORAMIC ENTERPRISE CAPITAL UNITS | 10,000,000 1,428,486 | 0.60 1.17 | 6,038,575 |
| UK Invest PANORAMIC ENTERPRISE CAPITAL UNITS | 10,000,000 | 0.34 | 1,673,516 3,431,922 |
| UK Invest PARTNERS GROUP GLOBAL VALUE 2008 | | 0.34 | |
| UK Invest STAR CAPITAL STRATEGIC ASSETS III LP | 7,500,000 12,500,000 | 0.48 | 2,777,077 |
| UK Uncla VESPA CAPITAL II LLP | 10,000,000 | 0.83 | 5,183,681 8,348,405 |
| UK Unquoted Private Equity Total | 10,000,000 | 0.00 | 95,747,438 |
| ON Onducted I fivate Eduity Total | | | 30,141,400 |
| PRIVATE EQUITY TOTAL | | | 156,530,869 |
| | | • | |
| INED A OFFICIOR | | | |
| 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 |
| III/ Infrantrustura Unaviotad | • | | |
| UK Infrastructure Unquoted | 25 020 002 | 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 | 40.046.040 |
| UK Uncla Macquarie European Infrastructure Fund 5 LP | 14,400,000 | 1.04 | 13,016,948 |
| UK Uncla Macquarie European Infrastructure Fund 6 SCS UK Uncla Macquarie Green Infrastructure Fund (Euro) | 56,000,000 | 0.32 | 15,548,373 |
| UK Uncla PIP Multi Strategy Infrastructure LP | 59,000,000 | 0.05 | 2,566,028 |
| UK Uncla SL CAPITAL INFRASTRUCTURE 1LP | 25,000,000 | 0.84 1.14 | 21,041,599 17,107,660 |
| UK Uncla SL Capital Infrastructure II SCSP | 15,000,000 25,000,000 | 0.78 | 16,862,957 |
| UK Infrastructure Total | 20,000,000 | 0.76 | 262,222,995 |
| and the second comment of the second comment of the second comment of the second comment of the second comment | | | |
| INFRASTRUCTURE TOTAL | | | 340,367,776 |
| | | | • • |

ALTERNATIVES TOTAL

496,898,645

| | | | | | • |
|--|---|--|------------------|------------------|-------------------------|
| | | | | , | |
| | | | | • | |
| DERBYSHIRE PENSION FUND APRIL 2020 PORTFOLIO VALUATI | ION - BID | | | | , |
| APRIL 2020 PORTFOLIO VALGATI | | Mkt Price in | Mkt Price | | Total |
| | | local currency | pence | | £ |
| | (Clean) use | (Dirty) | GBP | | GBP |
| · | Calc & IL | use for Non | | | |
| UK GILTS | Valuation | IL Valuation | | | |
| 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 |
| TSY 5% 7/3/2025 | 123.73 | | 124.48 | | 6,846,141 |
| TSY 2% 7/9/2025 | 110.55 | | 110.85 | | 7,759,564 |
| TSY 1.5% 7/22/2026 | 108.92 | The second secon | 109.33 | | 6,177,263 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 | | 149.20 | | 18,278,574 |
| TSY 4.25% 7/6/2032 | 146.07 156.75 | 147.77 157.43 | 157.43 | | 25,775,286 |
| TSY 4.5% 7/9/2034 TSY 4.25% 7/3/2036 | 150.75 | | 158.39 | | 18,056,140 |
| TSY 4.25% 7/3/2036 TSY 1.75% 7/9/2037 | 120.40 | | 120.66 | | 14,237,709 |
| TSY 4.75% 7/12/2038 | 175.31 | | 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 | • | 12,770,309 |
| TSY 4.25% 7/12/2046 | 190.35 | | 192.05 | | 7,489,925 |
| 001 UKGB Total | | | | | 234,868,917 |
| | | | | | |
| HE COVERNMENT PONDS | | | | | |
| 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 | | 86.96 | | 18,261,838 |
| T 2.75% 15/11/2042 | 129.64 | | 103.94 | - | 7,795,682 |
| 004 USGB Total | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | 48,645,669 |
| ••• | | | | • | • |
| 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 |
| | | | | | |
| MULTI ASSET CREDIT | • | | | • | |
| AMP Capital Infrastructure Debt Ful | 0.86 | 0.86 | 0.86 | • | 12,715,078 |
| Barings Global Private Loan Fund | 0.51 | | 0.51 | • | 20,442,173 |
| Barings Global Private Loan Fund 2 | | | 0.89 | | 35,404,569 16,372,79 |
| Barings Global Private Loan Fund 3 | | | 0.33 | | 98,308,75 |
| CQS Credit Multi Asset Fund Class | | | | | 14,250,31 |
| CVC Credit PARTNERS European | 0.22 | | | | 100,511,674 |
| Janus Henderson Multi Asset Credi | 1.02 | 1.02 | 1.02 | | 298,005,353 |
| Multi Asset Credit Total | | | | | |
| | | | | | |
| UK INDEX LINKED | | | | | |
| TDEAC 4 40EW II OTV 00/7/0000 | 380.32 | 382.76 | 382.76 | | 24,917,73 |
| TREAS 4.125% IL STK 22/7/2030 TREAS 2% IL STK 26/1/2035 | 295:54 | | | | 23,713,775 |
| 002 UKGIL Total | 200.0 | 200.72 | 2002 | | 48,631,512 |
| INDEX LINKED (3 monthers) | | | | • | |
| • | Clean Price | Index Ratio | Gross | Accrued Interest | Total |
| UK INDEX LINKED (3monthers) | | | | | |
| TREAS 0.125% IL STK 22/3/2024 | 110.0790 | | | | 12,239,529 |
| TREAS 1.25% IL STK 22/11/2027 | 132.4460 | | | | 14,787,896 8,344,883 |
| TREAS 0.125% IL STK 22/3/2029 | 127.4080 | 1.229890 | 8,344,159.19 | 123.51 | 0,044,000 |

| our ditail Total | | | | | |
|--------------------------------|-------------|-------------|---------------|------------------|---|
| INDEX LINKED (3 monthers) | Clean Price | Index Ratio | Gross | Accrued Interest | Total |
| UK INDEX LINKED (3monthers) | | | | | , |
| TREAS 0.125% IL STK 22/3/2024 | 110.0790 | 1.204520 | 12,238,274.56 | | 12,239,529 |
| TREAS 1.25% IL STK 22/11/2027 | 132.4460 | 1.504640 | 14,746,982.66 | 40,913.46 | 14,787,896 |
| TREAS 0.125% IL STK 22/3/2029 | 127.4080 | 1.229890 | 8,344,159.19 | 723.51 | 8,344,883 |
| TREAS 1.25% IL STK 22/11/2032 | 156.7160 | 1.344800 | 5,852,574.06 | 15,353.61 | 5,867,928 |
| TREAS 0.75% IL STK 22/3/2034 | 153.3110 | 1.257380 | 22,101,101.73 | 9,346.47 | 22,110,448 |
| TREAS 1.125% IL STK 22/11/2037 | 176.8730 | 1.443810 | 14,249,702.14 | 27,765.87 | 14,277,468 |
| TREAS 0.625% IL STK 22/3/2040 | 172.7950 | 1.348590 | 13,049,658.11 | 3,804.35 | 13,053,462 |
| TREAS 0.625% IL STK 22/11/2042 | 184.0240 | 1.374350 | 15,048,346.37 | 16,448.32 | 15,064,795 |
| TREAS 0.125% IL STK 22/3/2044 | 172,2980 | 1.204510 | 23,804,225.96 | 1,558.42 | 23,805,784 |
| TREAS 0.125% IL STK 22/3/2046 | 178,2830 | 1.132700 | 17,629,462.75 | 1,186.14 | 17,630,649 |
| TREAS 0.75% IL STK 22/11/2047 | 208,4200 | 1,405420 | 19,039,646.37 | 21,562.50 | 19,061,209 |
| TREAS 0.125% IL STK 10/08/2048 | 186,6080 | 1.062620 | 10,509,549.83 | 1,474.24 | 10,511,024 |
| TREAS 0.5% IL STK 22/3/2050 | 207.3620 | | 14,186,878.59 | 2,717.39 | 14,189,596 |
| | | | | | |

| Mkt Price in Mkt Price in | Mkt Price | Total |
|---|-----------|--------------------|
| local currenc local currenc | pence | £ |
| (Clean) use (Dirty) UK INDEX LINKED (3monthers) TOTAL | GBP | GBP 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 | 8,492,857 | 6,743,328.76 |
| TII1.750% 15/1/2028 | 116.171875 | 1.234760 | 7,961,163.33 | 28,550.48 | 7,989,714 | 6,343,832.77 |
| Tll2.5% 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 | 18,168.75 | 7,114,189 | 5,648,666.39 |
| TII0.75% 15/2/2042 | 117.851563 | 1.144790 | 27,387,803.92 | 31,788.46 | 27,419,592 | 21,771,156.35 |
| TII0.625% 15/2/2043 | 115.757813 | 1.125120 | 13,024,143.00 | 13,049.45 | 13,037,192 | 10,351,530.81 |
| 0045 USGB IL Total | | | | | | 65,497,764 |

| TOTAL BONDS | | 1,195,946,264 |
|--------------------|---|---------------|
| Index linked-total | | 305,073,946 |
| Conventional-total | • | 283,514,586 |
| Non gov-total | | CO7 957 709 |

| DERBYSH | | | • | • | |
|----------------------|--------------------|--|--------------------------|----------------------|--------------------------|
| | | OLIO VALUATION - BID | | | 31.3.20 Valuation £ |
| Real Property | erty | 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 Chelsea Fields Ind Est, London | | | 24,400,000 13,900,000 |
| Property Property | | Planet Centre, Feltham | | | 14,200,000 |
| Property | | Hill St, Mayfair | | | 15,900,000 |
| Property | | Birmingham - Travelodge develo | pm't | | 16,800,000 |
| Property | | Saxmundham, Tesco developm'i | t | | 9,700,000 |
| Property | | Roundhay Road, Leeds | | | 6,600,000 |
| Property | | Premier Inn, Rubery, Birminghan | | | 6,050,000 |
| Property Property | | South Normanton Warehouse, A Loddon Centre, Basingstoke | mem | | 15,800,000 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 |
| D | | | Atsombon bold | BELLA mula a | |
| Property N | nanageα F Pence | Assura PLC | Number held 6,000,000 | Mkt price 76.3000 | 4,578,000 |
| Property Property | GBP | Aviva Pooled Property Fund - cla | | 16.0217 | |
| Property | GBP | Aviva Pooled Property Fund - cla | | 16.1426 | |
| , , | GBP | Bridges Property Alternatives Fu | | 0.7213 | |
| Property | GBP | Bridges Property Alternatives Fu | | 0.1411 | 1,410,701 |
| Property | EUR | Fidelity Eurozone Select Real Es | 4,486 | 5956.7563 | |
| Property | GBP | Hearthstone Residential Fund 1 | 25,000,000 | 0.7507 | |
| Property | GBP | Igloo Regeneration P'ship Prope | | 0.0336 | |
| Property | EUR | Invesco Real Estate-European F | | 116.6090 | |
| Property | Pence | Target Healthcare REIT Ltd M&G PP UK Property Fund (Inc) | 4,085,000 27,124 | 108.0000 732,3400 | |
| Property Property | GBP EUR | M&G European Property Fund (Inc) | | 1.0349 | |
| Property | GBP | Threadneedle Pensions Property | | 5,9790 | |
| Property | Pence | Tritax Big Box Indirect Pooled Fu | | 120,6000 | |
| Property | GBP | Unite UK Student Accommodation | | 1.3680 | 21,319,688 |
| Total Prop | erty Fund | s | • | | 168,215,019 |
| | | | | | |
| Regulator | y Capitai | LGPS Central | 0.00 | | 2,000,000 |
| | | | Mellon | | |
| Cash | Updated t | to 30 April 2020 | USD | Exch rate | |
| Cash | | Northern Trust | UK | | 12,999,625 |
| Cash | | Notaletti itust | Euro | | 0 |
| Cash | | | Wellington | | 5,756,517 |
| | | | | | |
| | | Northern Trust | LGPS Cent-Ca | pital & Income | 0 |
| | | | | . • | |
| Cash | | Cash - Lloyds bank Superfund | 20553355 | | 8,083,000 |
| | | | • | | |
| | | | 000 500 000 | | |
| Cash | | Cash Temporary Loans | 209,500,000 | | |
| | | Santander 180 Day Notice | 10,000,000 | | |
| | | Thurrock Council 2 D/N | 20,000,000 | | |
| | | Aberdeen Standard Life Federated Prime Rate | 30,000,000 27,500,000 | | |
| | | Deutsche Global MMF | 30,000,000 | | |
| | | Certs of Deposit | 00,000,000 | | |
| | | Treasury Bills | 0 | | 327,000,000 |
| Total Casi | n | | | Total Cash | 353,839,141 |
| | | | | | |

Agenda Item No. 4 (b)

DERBYSHIRE COUNTY COUNCIL PENSIONS AND INVESTMENTS COMMITTEE

10 June 2020

Report of the Director of Finance & ICT

STEWARDSHIP REPORT

1 Purpose of the Report

To provide the Pensions & Investments Committee with an overview of the stewardship activity carried out by Derbyshire Pension Fund's (the Fund) external investment managers in the quarter ended 31 March 2020.

2 Information and Analysis

This report attaches the following two reports to ensure that the Pensions & Investments Committee is aware of the engagement activity being carried out by LGIM and by LGPS Central Limited (the Fund's pooling company):

- Q1 2020 Legal & General Investment Management (LGIM) ESG Impact Report (Appendix 1)
- Q4 2019/20 LGPS Central Limited Quarterly Stewardship Report (Appendix 2).

LGIM manages around £1bn of assets on behalf of the Fund through passive products covering: UK Equities; Japanese Equities; and Emerging Market Equities. It is expected that LGPS Central Limited will manage a growing proportion of the Fund's assets going forward as part of the LGPS pooling project.

These two reports provide an overview of the investment managers' current key stewardship themes and voting and engagement activity over the last quarter.

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 considerations.

4 Officer's Recommendation

That Committee notes the stewardship activity of LGIM & LGPS Central Limited.

PETER HANDFORD

Director of Finance & ICT





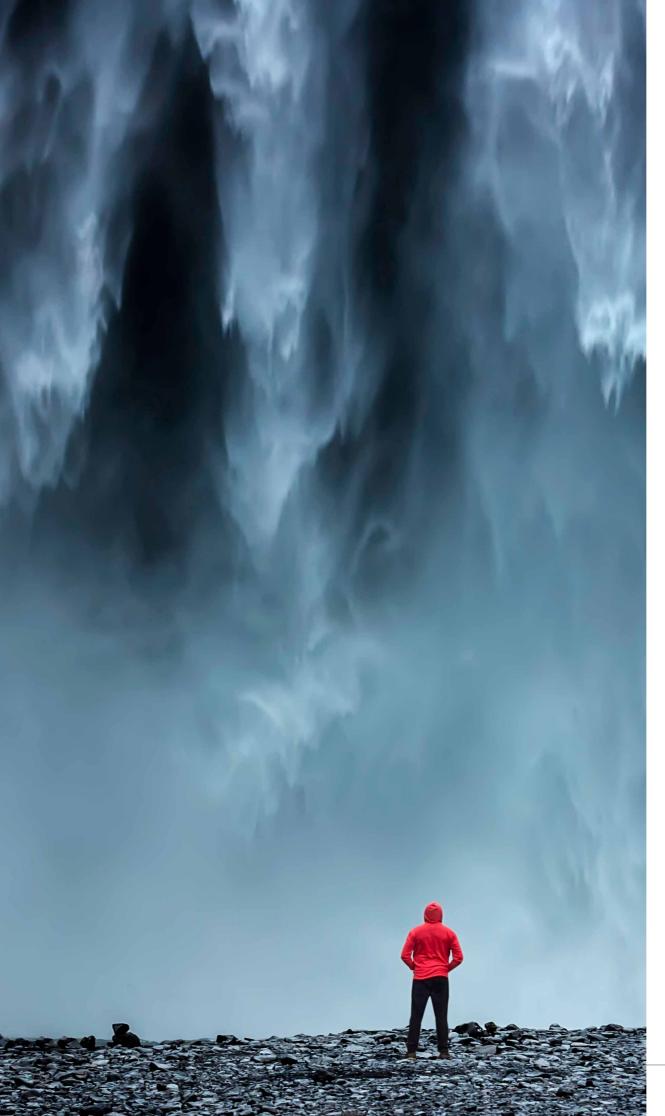
To use our influence to ensure that:

1

Companies integrate environmental, social and governance (ESG) factors into their culture and everyday thinking.

2

Markets and regulators create an environment in which good management of ESG factors is valued and supported.



Our focus

To use our influence to ensure that:

Holding boards to account

To be successful, companies need to have people at the helm who are well equipped to create resilient long-term growth. By voting and engaging directly with companies, we encourage management to control risks and benefit from emerging opportunities.

We seek to protect and enhance our clients' assets by engaging with companies and holding management to account for their decisions. Voting is an important tool in this process, and one which we use extensively.

Creating sustainable value

We believe it is in the interest of all stakeholders for companies to build sustainable business models that are also beneficial to society. We work to prevent market behaviour that destroys long-term value creation.

LGIM wants to safeguard and grow our clients' assets by ensuring that companies are well positioned for sustainable growth. Our investment process includes an assessment of how well companies incorporate relevant ESG factors into their everyday thinking.

We engage directly and collaboratively with companies to highlight key challenges and opportunities, and to support strategies that can deliver long-term success.

Promoting market resilience

As a long-term investor for our clients, it is essential that markets are able to generate sustainable value. In doing so, companies should become more resilient to change and therefore benefit the whole market.

We use our scale and influence to ensure that issues impacting the value of our clients' investments are recognised and appropriately managed. This includes working with key decision-makers such as governments and regulators, and collaborating with asset owners to bring about positive change.

Action and impact

LGIM's statement to investee companies

Legal & General Investment Management's (LGIM) Investment Stewardship team expressed, in a private letter, our support to all the companies we are a long-term investor in.

The COVID-19 (coronavirus) has strained our social and financial systems, and we encouraged companies to focus on shareholders and in addition their wider stakeholders, especially their employees, supply-chain relationships, the environment and the communities in which they operate.

We also indicated we would stand behind those companies that may be asked to temporarily refocus their efforts to support government responses and manufacture new products, even if this means no financial gain for the individual company.

On capital allocation matters, we expect boards to proceed in a manner that will ensure confidence, the long-term sustainability of the company and to support its stakeholders.

In relation to executive remuneration, we encourage boards to demonstrate restraint and discretion.

Lastly, as companies globally are meant to hold their annual shareholder meetings at this time of year, we expressed our trust in boards to make the appropriate judgements and demonstrate a willingness to ensure all shareholders, including retail shareholders, have the ability to be heard by the board, as they would do under normal circumstances. We also indicated our exceptional support for holding virtual shareholder meetings to limit disruption.

LGIM rated as a leader in responsible investment

An independent report¹ released this quarter ranked LGIM third out of the world's 75 largest asset managers for our approach to responsible investment. One of only five worldwide to receive an A rating, LGIM was the highest rated among UK, index and the 15 largest global asset managers.

1. https://shareaction.org/research-resources/point-of-no-returns/

Top-rated global asset managers for responsible investment

| Fund | Strategy | Rank | Rating |
|--|----------|------|--------|
| Robeco | Active | 1 | А |
| BNP Paribas Asset Managment | Active | 2 | А |
| Legal & General Investment Management | Passive | 3 | А |
| APG Asset Management | Active | 4 | А |
| Aviva Investors | Active | 5 | А |

Source: Shareaction, 2020

Pensions and investment watchdog ShareAction ranked LGIM's firm-wide capabilities, from our own governance and investment offering, to our engagement and voting record on environmental and social issues (climate change, biodiversity, human rights).

Their review concluded that: "Legal & General Investment Management (LGIM), a predominantly passive investor, shows leading performance (ranked in the A category). This demonstrates that passive investors can have a leading approach to responsible investment." (ShareAction)

Advocating for diversity through collaboration

We continue to work with other global investors to push for better representation and transparency on diversity policies in the US. During the quarter, our coalition of investors sent letters to 18 US companies with less than 20% women on the board, and where board tenure for some non-executive directors is above average. Our requests remain consistent. They are:

- to disclose skill sets in the proxy statement;
- to affirm commitment to diversity in governance policies;
- to incorporate procedures by which diverse candidates are identified;

 and to attest that director searches will consider suitable candidates beyond the executive suite.

As we receive responses, we shall engage further with these companies.

In the UK, the collaborative 30% Club UK Investor Group, which Clare Payn, Senior ESG & Diversity Manager chairs, sent out letters to over 120 companies that have either: only one woman on the board for two years; less than 30% women on the board; or an all-male executive committee. The purpose of the letter is to remind the companies that we are looking to see a minimum of 30% women on the board, and that we also expect 30% representation on executive committees, by the end of 2020.

Podcasts

We are committed to helping our clients understand more about ESG considerations for their portfolios. Our Investment Stewardship team produced two podcasts this quarter.

In the podcast 'Is the new Stewardship Code 2020 the greenwashing cure we've all been waiting for?'², Jeannette Andrews, Senior Global Investment Stewardship Manager explains how the ambitious update to the UK Stewardship Code goes a long way to putting an end to greenwashing, and how it will become a lot more meaningful for an asset manager to be a signatory of the new code.

In the podcast 'Why corporate culture matters', Clare Payn, Senior Global ESG & Diversity Manager, explains why measuring a company's culture is so important for investors.

LGIM ESG Score guide

A comprehensive guide to LGIM's proprietary ESG scores is now available on our website³. This guide sets out the methodology behind our scoring system, and includes the reasons why LGIM selected the 28 indicators which compose these scores. This level of transparency is aimed at helping our investee companies and all other interested stakeholders understand what the minimum standards in ESG are globally and how they can improve over time.





^{2.} https://www.lgim.com/uk/en/insights/podcast/

^{3.} https://www.lgim.com/uk/en/capabilities/corporate-governance/assessing-companies-esg/

2020 AGM season – LGIM's strengthened policies

This quarter, LGIM's Investment Stewardship team reviewed our *global and regional policies*⁴ to ensure they remain aligned with the various evolving regulations, best practice and client feedback. We incorporated many of the suggestions from our Stakeholder Event held in November 2019, such as escalating voting sanctions against compensation committee chairs in the North American market, and also expecting more clarity from companies around audit quality and oversight of culture. We highlight below the main changes made to our policies for 2020:

Escalating our position on combined chair and CEO roles

As we strengthened our voting policies, we decided to systematically escalate our position on combined board chair and CEO functions⁵. We announced our decision to vote against all companies where the board chair also serves as CEO from 2020 (excluding Japan, due to the unique features of this particular market).

We believe that there is inherently a conflict when a single individual is tasked with exercising management duties and challenging management simultaneously. The separation of board chair and CEO roles provides a better balance of authority and responsibility, and aligns with the long-term interests of companies and investors, and ultimately also our clients.

LGIM has been engaging on this topic for many years in markets which allow a combination of the two functions. In 2018, we led an engagement campaign on the topic with 14 CAC 40 (French) companies and three IBEX 35 (Spanish) companies. In the North American market, we first escalated our position by putting in place a policy to systematically vote in favour of shareholder resolutions calling for an independent board chair, and have been voting against the chair of the nomination committee when roles have been recombined without prior shareholder approval.

We believe this new voting policy will have particular impact in the United States, France and Spain where combined roles are still common. Despite positive momentum in the United States, 47% of S&P 500 boards still have combined board chair and CEO roles⁶. In Spain 20% of IBEX 35 companies⁷ and in France 53% of CAC 40 companies have combined roles.

Case study

Company name: DTE Energy*

Sector: Utilities

Market cap: USD 19.15bn

Country: United States

ESG score: 39 (-)**

What did LGIM do?

We have had regular engagement calls with the company over the last three years, and have encouraged the company to put a lead independent director in place, as well as to separate the role of CEO and board chair in order to increase the independence and risk oversight at board level. During our most recent call with the company we learnt that they appointed a lead independent director in 2018 and had separated their CEO and board chair role in 2019. As our new voting policy comes into place this year, where we shall be voting against all combined CEO and board chairs in the US, this is a timely and positive change

*For illustrative purposes only. ** LGIM's ESG scores capture minimum standards on environmental, social and governance metrics – as well as companies' overall levels of transparency. Scores shown as at end of Q3 2019 (compared to end of Q3 2018). LGIM's scores for over 2000 listed companies, as well as a quide to our methodology can be found at: https://www.lgim.com/uk/en/capabilities/corporategovernance/assessing-companies-esg/

- 4. https://documentlibrary.lgim.com/documentlibrary/library_55458.html
- 5. https://www.lgim.com/uk/en/capabilities/corporate-governance/influencing-the-debate/
- 6. Spencer Stuart Board Index 2019 United States
- 7. www.spencerstuart.com/research-and-insight/spain-board-index
- 8. www.spencerstuart.com/research-and-insight/france-board-index

Escalation of our position on the issue of female representation on Japanese boards

Following a campaign on gender diversity in Japan (2019) we decided to escalate our voting policy. We are now voting against all companies in the large-cap TOPIX 100 index that do not have at least one woman on their board 10. Given the importance of diversity as a strategic business issue, we intend to expand the scope of our policy to a greater number of Japanese companies over time, as we note that there are 164 all-male boards in the TOPIX 500.

In a recent blog 'Japan can't be an island on board diversity' 11,

Aina Fukuda, Japan ESG
Manager, and Clare Payn, Senior
Global ESG & Diversity Manager,
explain how we are pushing
companies in all regions to make
progress on diversity while

highlighting the situation and developments in Japan.

While we will continue to engage with companies to ensure top management recognise diversity as a strategic business issue, we expect companies to set aspirational targets and promote diversity at the hiring stage as well as across each level of the workforce. For Japan in particular, we have long argued the importance for companies to promote diversity at the senior management ('bucho' or division heads) level. We believe this is needed to build a diversified talent pool that would enable companies to find qualified women to serve at the highest level of the company in the future.

We have seen some Japanese companies take positive steps since this announcement. This includes **Recruit Holdings** who informed us that they have moved to select a female candidate to serve on the board; a decision they said took into account the voice of their shareholders¹². With examples like this we are pleased that our voting policy strictures will need to be applied to fewer than the 22 companies originally anticipated.

Additional main changes made to our global and regional policies

Global Principles

- We have expanded our discussion on employee representation and culture; asking companies to disclose how culture is measured and how it relates to business strategy
- As board effectiveness
 reviews are increasingly
 recognised as good practice
 among boards and investors
 globally, we have added more detail on our
 expectations on the topic
- Regarding the audit committee, we would also like to see all audit committee chairs globally have a financial background
- In relation to remuneration we encourage companies to set post-exit shareholding requirements which equal a significant portion of their shareholding guideline requirement

UK policy

- In our UK policy we expanded our expectations on employee engagement. We do not apply any voting sanctions on this topic, but use this discussion as a point of engagement
- In relation to audit, we expanded our policy and will now require that the audit chair specifically has financial expertise. We will vote against the chair's



- 10. This only includes board of directors, not kansayaku (or statutory auditors)
- $11.\ https://www.lgimblog.com/categories/esg-and-long-term-themes/japan-cannot-be-an-island-on-board-diversity/linear-cannot-be-an-island-on-board-diversity/l$
- 12. The appointment will be subject to approval in the shareholders meeting in June

 $_{6}$

appointment if this is not the case. We have strengthened our requests for additional disclosure surrounding the audit itself to evidence audit quality

On board independence, we have reiterated in this year's principles that we will commence voting against any chair of the board who has been a member of board for more than nine years from 2021

North America policy

• LGIM increased its expectations on gender diversity on the board by a vote¹³ against the largest 100 companies in the S&P500 and the S&P/TSX where there is less than 25% women on the board. We already announced we would strengthen this policy from 2021 to include all companies in the S&P 500 and the S&P/TSX. Our expectation is for all companies in this market to reach a minimum of 30% women on the board and at senior management level by 2023

• In relation to remuneration, we will expect North American companies to increase the level of performance-based long-term incentive pay over time from 50% as it is now to at least 65% by 2022

Japan policy

 On independence, we call for boards to be comprised of a minimum of one-third of independent directors and request that companies outline the steps they are taking to increase independence. Further, while director re-election in Japan generally takes place every two years we encourage annual re-elections

When it comes to audit tenure, where shareholders have the opportunity to vote on the re-election of the audit firm, LGIM has lowered its threshold and we will vote against the appointment of any audit firm with a tenure of 30 years or more

13. Vote happening now – largest 100 S&P/TSX companies who have less than 25% women on board are being sanctioned



Sustainability engagements

Preventing stranded assets

Having long since been the most polluting fossil fuel, coal is now also the most expensive⁹. With over half of existing coal plants being more costly to run than to create new renewable sources of energy¹⁰, we are taking a stance against the construction of new coal plants which risk becoming unprofitable, 'stranded' assets:

- In Poland, we contributed to the successful efforts of environmental law firm ClientEarth in halting the construction of a major new coal plant¹¹ at Ostrołeka C; with our approach covered in local media¹²
- Alongside other major investors, we have written publicly to major energy companies Fortum¹³ and KEPCO¹⁴, raising our concerns with proposed new plants in Germany and Indonesia, respectively

Driving the debate

There is clear momentum for more ambitious climate action. Following in the footsteps of the UK, the EU now aims to reach net zero greenhouse gas emissions (GHG) by 2050. As proof that our policy engagement is being taken into account by senior policymakers, the European Commission president spoke publicly about a letter co-signed by LGIM in support of this goal.

We have similarly collaborated with other investors to encourage the Japanese government to strengthen its climate targets.¹⁶



To drive forward the climate debate, it is our ambition to focus on sectors and themes which might receive comparatively less attention. The carbon contribution of the energy sector is much discussed; agriculture, forestry and land less so. We regularly engage with food companies on their deforestation and agricultural practices, and have recently published a *blog*¹⁷ explaining why investors and policy-makers cannot afford to ignore the role of land use in successful decarbonisation.

Even in the oil and gas sector, we are often asked if we are encouraging investee companies to increase their investment in renewable energy. In a new *blog*¹⁷, we explained why we believe the sector should focus on shrinking production in line with international climate targets, and return growing amounts of capital to their investors. In our view, diversifying into cleantech is a risky strategy, and should be restricted to those areas where the industry's skills can add value (e.g. biofuels).

Zeroing in on 'net zero'

A notable development comes from oil major BP. Last year, LGIM co-filed its first shareholder resolution at the company, calling for more details on its climate strategy. Following our successful resolution, BP recently announced¹⁸ that it will become a 'net zero' company by 2050, planning to:

- have net zero emissions across operations;
- 'reduce and neutralise the carbon in the oil and gas we dig out of the ground'; and
- halve the emissions intensity of all sold energy (not all of which comes from BP's own production).

To meet these goals, BP has suggested that it will gradually reduce its oil and gas extraction, return some of the cash from existing projects back to investors, and gradually ramp up investment in low-carbon ventures. As the company notes, if every oil and gas company adopted a similar strategy, it would solve the emissions problem for the sector.

As discussed in a separate *blog*¹⁹, we are encouraged by a growing number of high-carbon companies setting net zero targets, and we believe the products of the oil and gas industry can still play a role to play for decades amid the energy transition. However, for this to be true, the sector must urgently bring down all of its GHG, including methane – a GHG that

is far more potent than carbon dioxide over the short term. We

A \$1.4 Trillion Asset Manager Is Zeroing In on Methane Leaks

have collaborated with leading NGO Environmental Defense Fund on a guide presenting innovative ways to measure and report methane data²⁰. We expect investee companies to swiftly implement its recommendations²¹.

Finance for the future

Financial institutions, too, must step up on climate change. For the past two years, we have assisted our parent company – Legal & General – in better understanding and managing the climate risks in the assets on their balance sheet. L&G's second report in line with the best practice recommendations of the Task Force on Climate-related Financial Disclosures was published in early March²². It will be followed by a

separate report from LGIM in the second half of the year. Going one step further, in January we formally joined the One Planet Asset Manager Initiative. Convened by the French President Emmanuel Macron, the initiative will support some of the largest sovereign wealth funds in the world in stepping up their approach to climate change and investing in the lowemissions economy²³.



- $9.\ https://oilprice.com/Latest-Energy-News/World-News/Oil-Crash-Makes-Coal-The-Worlds-Most-Expensive-Fossil-Fuel.html$
- 10. https://carbontracker.org/reports/how-to-waste-over-half-a-trillion-dollars/
- 11. https://www.clientearth.org/press/climate-victory-companies-put-polands-last-new-coal-plant-on-ice/
- 12. http://300gospodarka.pl/news/2020/02/21/enea-i-energa-nie-odrobily-zadania-domowego-sama-zmiana-ostroleki-na-gaz-nie-wystarczy-mowigigant-inwestycyjny-z-londynu/
- $13.\ https://reclaimfinance.org/site/wp-content/uploads/2020/03/JointInvestorLetter_Fortum 2020.pdf$
- 14. https://www.aigcc.net/international-investors-kepco-should-reconsider-supporting-new-overseas-coal-power-plants/
- 15. https://twitter.com/IIGCCnews/status/1220000101936123904?s=20
- $16. \ https://www.aigcc.net/investors-encourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-with-revised-paris-pledge/discourage-japanese-government-to-lift-climate-ambition-government-to-lift-climate-ambition-government-to-lift-climate-ambition-government-gov$
- 17. https://www.lgimblog.com/categories/esg-and-long-term-themes/land-use-the-other-piece-of-the-decarbonisation-puzzle/

- $17. \ https://www.lgimblog.com/categories/markets-and-economics/commodities/why-the-oil-sector-shouldn-t-reinvent-itself-through-renewables/properties and the sector-shouldn-t-reinvent-itself-through-renewables/properties and the sector-shouldn-t-reinvent-itself-through-renewables/properti$
- $18. \ https://www.bp.com/en/global/corporate/news-and-insights/speeches/reimagining-energy-reinventing-bp.html$
- 19. https://www.lgimblog.com/categories/esg-and-long-term-themes/when-red-herrings-turn-green/
- 20. https://business.edf.org/insights/hitting-the-mark-improving-the-credibility-of-industry-methane-data/
- 21. https://www.bloomberg.com/news/articles/2020-02-06/a-1-4-trillion-asset-manager-is-zeroing-in-on-methane-leaks
- $22.\ https://www.legalandgeneralgroup.com/media/17720/lg_tcfd_100320-finalpdf-with-link-2-pdf-with-link.pdf$
- 23. https://oneplanetswfs.org/

Public policy update

Over the past quarter LGIM has been actively engaged, and closely following, a wide variety of policy and regulatory developments around the world.



Page

United Kingdom

In July 2019 the UK Government's Green Finance Strategy (GFS) set an expectation that all large asset owners would be disclosing in line with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) by 2022. Since then, LGIM has been part of an industry led group (the 'Pensions Climate Risk Industry Group') that has been working on producing guidance for Pension Trustees on managing and reporting climate related risks in line with TCFD. At the recent PLSA conference in Edinburgh the Department for Work and Pensions (DWP) launched the public consultation²⁴ on the guidance document, 'Aligning your pension scheme with the TCFD recommendations', and would encourage your input.

In line with the Government's GFS DWP has also proposed climate change-related amendments to the *Pension Scheme Bill*²⁵. The amendments will require schemes to report on their climate change strategies as well as how their investment support wider climate goals. LGIM will continue to monitor the Bill as it progresses through the legislative system.

Building on the above and in line with the GFS, in early March the Financial Conduct Authority (FCA) published a consultation paper²⁶ that outlines new climate-related disclosure requirements for premium listed firms. The new rule will require firms report in line with the TCFD or explain why not. LGIM will continue to engage with the FCA and will submit a response to this in due course. The FCA is also currently considering how best to enhance climate-related disclosures by regulated firms, including asset managers and life insurers, to ensure a coordinated approach.

LGIM has of course been engaging with government, regulators, indexes and industry associations on various ESG topics. A few examples include continuing to push for equal weighted voting rights (i.e. 'one-share-one-vote' principle); the development of useable responsible and sustainable investment frameworks (i.e. the Investment Associations Responsible Investment Framework); and pushing for consistent, comparable and material ESG disclosures by issuers, asset owners, and asset managers.



European Union

At a European Union level, we have continued to closely follow the important and in-depth technical work outlined in the Commission's action plan on sustainable finance. Specific areas of interest for us over the past few months have been

- the finalisation of the EU Taxonomy²⁷ a clear and detailed EU classification system for sustainable activities. It creates a common language for all actors in the financial system and aims to stop 'greenwashing';
- the publication of the *regulation*²⁸ on Climate Change Benchmarks;
- the publication of the *regulation*²⁹ on sustainablerelated disclosures in the financial sector;
- the proposal on the European Climate Law30; and
- the Usability guide for the EU green bond standard31.

At the end of 2019 the *European Green Deal*³² was launched – an ambitious strategy that aims to transform the EU into a net-zero emissions economy by 2050, where economic growth is decoupled from resource use - an initiative we will continue to engage on. We will also be focusing on the EC's review of the *Non-Financial Reporting Directive*³³, open for consultation until June 2020



United States

In the United States we have been working together with Legal & General Investment Management America (LGIMA) to engage with the Securities Exchange Commission (SEC) on several important points. Over the past months LGIM has been working with LGIMA as well as The Council of Institutional Investors34 (CII) and the UN PRI³⁵ to voice concerns on two proposals on proxy voting advice. The SEC's proposed rules on shareholder proposals and proxy advisers would introduce a major impediment to ESG integration, which has traditionally depended on dedicated investors engaging with management and access to unbiased and efficient proxy voting advice. If adopted, these would be the most significant changes to the voting rights of shareholders in decades and in our view would severely jeopardise the interests of individual and institutional investors.



Japa

While we have been particularly proactive in the development of the UK 2020 *Stewardship Code*³⁵, we have also consistently shared our views on the Japan Stewardship Code with the Japan Financial Services Agency (FSA). We very much welcome the FSA

incorporating many of our recommendations. We continue to hold concerns with regards to the treatment of proxy advisors but greatly hope that the revised Code will encourage better stewardship activities and transparency across all market participants.

We have closely followed the Amendment to the Foreign Exchange and Foreign Trade Act³⁶. The amendment requires foreign investors to file a 'pre-acquisition notification' to the government if they intend to acquire 1% or more of a listed company in a restricted sector. We have been supportive of the efforts of the Asian Corporate Governance Association (ACGA) and the International Corporate Governance Network (ICGN) to seek clarification from the Japanese government on whether this applies to asset managers and have also met with the Japanese Ministry of Finance in this regard. Following a consultation, the final rules and regulations of the Act will be released in due course.



Hong Kone

In Hong Kong the LGIM team engaged with the Hang Seng Index regarding the eligibility of Weight Voting Right Companies. We continued to push for the 'One Share -One Vote' Principle.

- 24. https://www.gov.uk/government/consultations/aligning-your-pension-scheme-with-the-tcfd-recommendations
- 25. https://services.parliament.uk/bills/2019-21/pensionschemes.html
- 26. https://www.fca.org.uk/publications/consultation-papers/cp20-3-proposals-enhance-climate-related-disclosures-listed-issuers-and-clarification-existing
- $27. \ https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy_en$
- 28. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2089
- 29. https://eur-lex.europa.eu/eli/reg/2019/2088/oj
- $30. \ https://ec.europa.eu/info/sites/info/files/commission-proposal-regulation-european-climate-law-march-2020_en.pdf$
- $31. \ https://ec.europa.eu/info/files/200309-sustainable-finance-teg-green-bond-standard-usability-guide_en$
- $32.\ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en$

- 33. https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive/public-consultation
- 34. https://www.cii.org/correspondence
- 35. https://www.unpri.org/sustainable-markets/briefings-and-consultations
- 36. https://www.fsa.go.jp/en/refer/councils/stewardship/20200324.html
- 37. https://www.mof.go.jp/english/international_policy/fdi/20191021.html

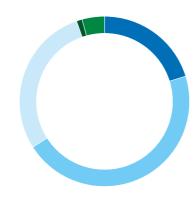
Regional updates

UK - Q1 2020 voting summary

| Proposal category | For | Against | Abstain |
|--|------|---------|---------|
| Antitakeover Related | 58 | 0 | 0 |
| Capitalisation | 292 | 19 | 0 |
| Directors Related | 510 | 43 | 0 |
| Non-Salary Compensation | 120 | 27 | 0 |
| Reorganisation and Mergers | 17 | 1 | 0 |
| Routine/Business | 356 | 4 | 0 |
| Shareholder Proposal - Compensation | 0 | 0 | 0 |
| Shareholder Proposal - Corporate Governance | 0 | 0 | 0 |
| Shareholder Proposal - Directors Related | 0 | 0 | 0 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 0 | 0 | 0 |
| Shareholder Proposal - Other/Miscellaneous | 0 | 0 | 0 |
| Shareholder Proposal - Routine/Business | 1 | 0 | 0 |
| Shareholder Proposal - Social/Human Rights | 0 | 0 | 0 |
| Shareholder Proposal - Social | 0 | 0 | 0 |
| Total | 1354 | 94 | 0 |
| Total resolutions | | 1448 | |
| No. AGMs | | 84 | |
| No. EGMs | 28 | | |
| No. of companies voted on | 105 | | |
| No. of companies where voted against management on at least one resolution | 48 | | |
| % of companies with at least one vote against | | 46% | |

Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds

Votes against management



- Antitakeover Related 0
- Capitalisation 19
- Directors Related 43
- Non-Salary Compensation 27
- Reorganisation and Mergers 1
- Routine/Business 4
- Shareholder Proposal Compensation 0
- Shareholder Proposal Corporate Governance 0
- Shareholder Proposal Directors Related 0
- Shareholder Proposal General Economic Issues 0
- Shareholder Proposal Health/Environment 0Shareholder Proposal Other/Miscellaneous 0
- Shareholder Proposal Routine/Business 0
- Shareholder Proposal Rodalite/ Business 0

 Shareholder Proposal Social/Human Rights 0
- Shareholder Proposal Social 0

Number of companies voted for/against abstentions



48

- No. of companies where supported management
- No. of companies where voted against management (including abstentions)

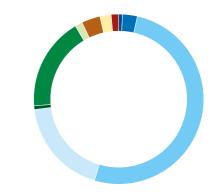
LGIM voted against at least one resolution at 46% of UK companies over the quarter

Europe - Q1 2020 voting summary

| Proposal category | For | Against | Abstain |
|--|-----|---------|---------|
| Antitakeover Related | 0 | 1 | 0 |
| Capitalisation | 60 | 4 | 0 |
| Directors Related | 388 | 50 | 22 |
| Non-Salary Compensation | 57 | 26 | 0 |
| Reorganisation and Mergers | 7 | 1 | 0 |
| Routine/Business | 284 | 20 | 5 |
| Shareholder Proposal - Compensation | 1 | 0 | 0 |
| Shareholder Proposal - Corporate Governance | 5 | 2 | 0 |
| Shareholder Proposal - Directors Related | 4 | 4 | 1 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 2 | 0 | 0 |
| Shareholder Proposal - Other/Miscellaneous | 1 | 3 | 0 |
| Shareholder Proposal - Routine/Business | 11 | 2 | 0 |
| Shareholder Proposal - Social/Human Rights | 0 | 0 | 0 |
| Shareholder Proposal - Social | 0 | 0 | 0 |
| Total | 820 | 113 | 28 |
| Total resolutions | | 961 | |
| No. AGMs | | 47 | |
| No. EGMs | 8 | | |
| No. of companies voted on | 53 | | |
| No. of companies where voted against management on at least one resolution | | 38 | |
| % of companies with at least one vote against | | 72% | |

Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds $\,$

Votes against management



- Antitakeover Related 1
- Capitalisation 4
- Directors Related 72
- Non-Salary Compensation 26
- Reorganisation and Mergers 1
- Routine/Business 25
- Shareholder Proposal Compensation 0
- Shareholder Proposal Corporate Governance 2
- Shareholder Proposal Directors Related 5
- Shareholder Proposal General Economic Issues 0Shareholder Proposal Health/Environment 0
- Shareholder Proposal Other/Miscellaneous 3
- Shareholder Proposal Routine/Business 2
- Shareholder Proposal Rodulley Business 2

 Shareholder Proposal Social/Human Rights 0
- Shareholder Proposal Social 0

Number of companies voted for/against abstentions

15

38

- No. of companies where supported management
- No. of companies where voted against management (including abstentions)

LGIM voted against at least one resolution at 72% of European companies over the quarter

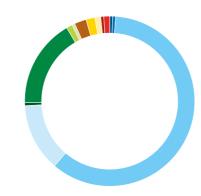
Q1 2020 ESG Impact Report Q1 2020 ESG Impact Report

North America - Q1 2020 voting summary

| Proposal category | For | Against | Abstain |
|--|-----|---------|---------|
| Antitakeover Related | 6 | 1 | 0 |
| Capitalisation | 10 | 1 | 0 |
| Directors Related | 405 | 107 | 0 |
| Non-Salary Compensation | 49 | 23 | 0 |
| Reorganisation and Mergers | 6 | 1 | 0 |
| Routine/Business | 53 | 30 | 0 |
| Shareholder Proposal - Compensation | 1 | 2 | 0 |
| Shareholder Proposal - Corporate Governance | 1 | 1 | 0 |
| Shareholder Proposal - Directors Related | 2 | 4 | 0 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 0 | 3 | 0 |
| Shareholder Proposal - Other/Miscellaneous | 0 | 2 | 0 |
| Shareholder Proposal - Routine/Business | 0 | 1 | 0 |
| Shareholder Proposal - Social/Human Rights | 1 | 2 | 0 |
| Shareholder Proposal - Social | 2 | 0 | 0 |
| Total | 536 | 178 | 0 |
| Total resolutions | | 714 | |
| No. AGMs | | 51 | |
| No. EGMs | 10 | | |
| No. of companies voted on | 60 | | |
| No. of companies where voted against management on at least one resolution | | 51 | |
| % of companies with at least one vote against | | 85% | |

Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds

Votes against management



Antitakeover Related - 1

Capitalisation - 1

Directors Related - 107

Non-Salary Compensation - 23

■ Reorganisation and Mergers - 1

Routine/Business - 30

■ Shareholder Proposal - Compensation - 2

Shareholder Proposal - Corporate Governance - 1

■ Shareholder Proposal - Directors Related - 4

Shareholder Proposal - General Economic Issues - 0

Shareholder Proposal - Health/Environment - 3

Shareholder Proposal - Other/Miscellaneous - 2 ■ Shareholder Proposal - Routine/Business - 1

■ Shareholder Proposal - Social/Human Rights - 2

Shareholder Proposal - Social - 0

Number of companies voted for/against abstentions



No. of companies where supported management

No. of companies where voted against management (including abstentions)

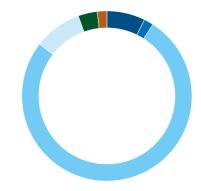
LGIM voted against at least one resolution at 85% of North American companies over the quarter

Japan - Q1 2020 voting summary

| Proposal category | For | Against | Abstain | |
|--|-----|---------|---------|--|
| Antitakeover Related | 0 | 4 | 0 | |
| Capitalisation | 0 | 1 | 0 | |
| Directors Related | 610 | 42 | 0 | |
| Non-Salary Compensation | 32 | 5 | 0 | |
| Reorganisation and Mergers | 23 | 2 | 0 | |
| Routine/Business | 48 | 0 | 0 | |
| Shareholder Proposal - Compensation | 2 | 0 | 0 | |
| Shareholder Proposal - Corporate Governance | 1 | 0 | 0 | |
| Shareholder Proposal - Directors Related | 1 | 1 | 0 | |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 | |
| Shareholder Proposal - Health/Environment | 0 | 0 | 0 | |
| Shareholder Proposal - Other/Miscellaneous | 0 | 0 | 0 | |
| Shareholder Proposal - Routine/Business | 0 | 0 | 0 | |
| Shareholder Proposal - Social/Human Rights | 0 | 0 | 0 | |
| Shareholder Proposal - Social | 0 | 0 | 0 | |
| Total | 717 | 55 | 0 | |
| Total resolutions | | 772 | ı | |
| No. AGMs | 67 | | | |
| No. EGMs | | 6 | | |
| No. of companies voted on | 72 | | | |
| No. of companies where voted against management on at least one resolution | | 37 | | |
| % of companies with at least one vote against | | 51% | | |
| | | | | |

Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds

Votes against management



Antitakeover Related - 4

Capitalisation - 1

Directors Related - 42

Non-Salary Compensation - 5

■ Reorganisation and Mergers - 2

Routine/Business - 0

Shareholder Proposal - Compensation - 0

Shareholder Proposal - Corporate Governance - 0

■ Shareholder Proposal - Directors Related - 1

Shareholder Proposal - General Economic Issues - 0

Shareholder Proposal - Health/Environment - 0 Shareholder Proposal - Other/Miscellaneous - 0

■ Shareholder Proposal - Routine/Business - 0

■ Shareholder Proposal - Social/Human Rights - 0

Shareholder Proposal - Social - 0

Number of companies voted for/against abstentions



No. of companies where supported management

No. of companies where voted against management (including abstentions)

LGIM voted against at least one resolution at 51% of Japanese companies over the quarter

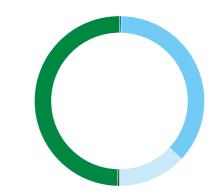
Q1 2020 ESG Impact Report Q1 2020 ESG Impact Report

Asia Pacific - Q1 2020 voting summary

| | | - | |
|--|-----|---------|---------|
| Proposal category | For | Against | Abstain |
| Antitakeover Related | 1 | 0 | 0 |
| Capitalisation | 5 | 1 | 0 |
| Directors Related | 324 | 93 | 0 |
| Non-Salary Compensation | 135 | 33 | 0 |
| Reorganisation and Mergers | 18 | 1 | 0 |
| Routine/Business | 222 | 126 | 0 |
| Shareholder Proposal - Compensation | 0 | 0 | 0 |
| Shareholder Proposal - Corporate Governance | 0 | 0 | 0 |
| Shareholder Proposal - Directors Related | 1 | 0 | 0 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 0 | 0 | 0 |
| Shareholder Proposal - Other/Miscellaneous | 0 | 0 | 0 |
| Shareholder Proposal - Routine/Business | 1 | 0 | 0 |
| Shareholder Proposal - Social/Human Rights | 0 | 0 | 0 |
| Shareholder Proposal - Social | 0 | 0 | 0 |
| Total | 707 | 254 | 0 |
| Total resolutions | | 961 | |
| No. AGMs | | 129 | |
| No. EGMs | | 13 | |
| No. of companies voted on | | 139 | |
| No. of companies where voted against management on at least one resolution | | 127 | |
| % of companies with at least one vote against | | 91% | |

Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds

Votes against management



- Antitakeover Related 0
- Capitalisation 1
- Directors Related 93
- Non-Salary Compensation 33
- Reorganisation and Mergers 1
- Routine/Business 126
- Shareholder Proposal Compensation 0
- Shareholder Proposal Corporate Governance 0
- Shareholder Proposal Directors Related 0
- Shareholder Proposal General Economic Issues 0
- Shareholder Proposal Health/Environment 0 Shareholder Proposal - Other/Miscellaneous - 0
- Shareholder Proposal Routine/Business 0
- Shareholder Proposal Social/Human Rights 0
- Shareholder Proposal Social 0

Number of companies voted for/against abstentions



127

- No. of companies where supported management
- No. of companies where voted against management (including abstentions)

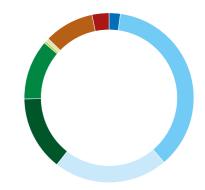
LGIM voted against at least one resolution at **91%** of Asia Pacific companies over the quarter

Emerging markets - Q1 2020 voting summary

| Proposal category | For | Against | Abstain |
|---|------|---------|---------|
| Antitakeover Related | 2 | 0 | 0 |
| Capitalisation | 420 | 10 | 0 |
| Directors Related | 599 | 84 | 86 |
| Non-Salary Compensation | 45 | 101 | 0 |
| Reorganisation and Mergers | 266 | 66 | 0 |
| Routine/Business | 605 | 53 | 0 |
| Shareholder Proposal - Compensation | 0 | 2 | 0 |
| Shareholder Proposal - Corporate Governance | 0 | 3 | 0 |
| Shareholder Proposal - Directors Related | 6 | 44 | 0 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 0 | 0 | 0 |
| Shareholder Proposal - Other/Miscellaneous | 0 | 0 | 0 |
| Shareholder Proposal - Routine/Business | 2 | 15 | 0 |
| Shareholder Proposal - Social/Human Rights | 0 | 0 | 0 |
| Shareholder Proposal - Social | 1 | 0 | 0 |
| Total | 1946 | 378 | 86 |
| Total resolutions | 2410 | | |
| No. AGMs | 87 | | |
| No. EGMs | 201 | | |
| No. of companies voted on | 278 | | |
| No. of companies where voted against management on at least one resolution | 127 | | |
| % of companies with at least one vote against | 46% | | |
| Source for all data LGIM. The votes above represent voting instructions for our main FTSE | | | |

pooled index funds. The abstentions were due to technical reasons which prevented us from voting. Where we have the option to vote, it is our policy to not abstain.

Votes against management



- Antitakeover Related 0
- Capitalisation 10
- Directors Related 170
- Non-Salary Compensation 101
- Reorganisation and Mergers 66
- Routine/Business 53
- Shareholder Proposal Compensation 2
- Shareholder Proposal Corporate Governance 3
- Shareholder Proposal Directors Related 44
- Shareholder Proposal General Economic Issues 0
- Shareholder Proposal Health/Environment 0 Shareholder Proposal - Other/Miscellaneous - 0
- Shareholder Proposal Routine/Business 15
- Shareholder Proposal Social/Human Rights 0
- Shareholder Proposal Social 0

Number of companies voted for/against abstentions

151

127

- No. of companies where supported management
- No. of companies where voted against management (including abstentions)

LGIM voted against at least one resolution at 46% of emerging markets companies over the quarter

Global voting summary

Voting totals

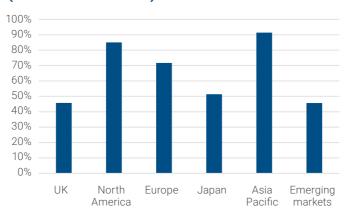
| Proposal category | For | Against | Abstain | Total |
|--|------|---------|---------|-------|
| Antitakeover Related | 67 | 6 | 0 | 73 |
| Capitalisation | 787 | 36 | 0 | 823 |
| Directors Related | 2836 | 419 | 108 | 3363 |
| Non-Salary Compensation | 438 | 215 | 0 | 653 |
| Reorganisation and Mergers | 337 | 72 | 0 | 409 |
| Routine/Business | 1568 | 233 | 5 | 1806 |
| Shareholder Proposal - Compensation | 4 | 4 | 0 | 8 |
| Shareholder Proposal - Corporate Governance | 7 | 6 | 0 | 13 |
| Shareholder Proposal - Directors Related | 14 | 53 | 1 | 68 |
| Shareholder Proposal - General Economic Issues | 0 | 0 | 0 | 0 |
| Shareholder Proposal - Health/Environment | 2 | 3 | 0 | 5 |
| Shareholder Proposal - Other/Miscellaneous | 1 | 5 | 0 | 6 |
| Shareholder Proposal - Routine/Business | 15 | 18 | 0 | 33 |
| Shareholder Proposal - Social/Human Rights | 1 | 2 | 0 | 3 |
| Shareholder Proposal - Social | 3 | 0 | 0 | 3 |
| Total | 6080 | 1072 | 114 | 7266 |
| No. AGMs | 465 | | | |
| No. EGMs | 266 | | | |
| No. of companies voted on | 707 | | | |
| No. of companies where voted against management on at least one resolution | 428 | | | |
| % of companies with at least one vote against | 61% | | | |

Number of companies voted for/against abstentions



- No. of companies where supported management
- No. of companies where voted against management (including abstentions)

% of companies with at least one vote against (includes abstentions)



Source for all data LGIM. The votes above represent voting instructions for our main FTSE pooled index funds



Page 107

Q1 2020 ESG Impact Report

Global engagement summary

Engagement stats



151

Total number of engagements during the quarter



Number of companies engaged

Engagement type



21

Face to face



46

Conference call



45

Email



39

Letter

Number of engagements on



31

Page 108

Environmental topics



31

Other topics (e.g. financial and strategy



124

Governance topics



43

Social topics

Top five engagement topics





Remuneration





Board composition





Diversity





LGIM ESG score





Climate change

Breakdown of our engagements by market





Contact us

For further information about LGIM, please visit lgim.com or contact your usual LGIM representative







Important information

Past performance is not a guide to future performance. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

Views expressed are of Legal & General Investment Management Limited as at 11 May 2020.

This document is designed for the use of professional investors and their advisers. No responsibility can be accepted by Legal & General Investment Management Limited or contributors as a result of information contained in this publication. The information contained in this brochure is not intended to be, nor should be construed as investment advice nor deemed suitable to meet the needs of the investor. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be solely relied on in making an investment or other decision. The views expressed here are not necessarily those of Legal & General Investment Management Limited and Legal & General Investment Management Limited may or may not have acted upon them. This document may not be used for the purposes of an offer or solicitation to anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such offer or solicitation. No party shall have any right of action against Legal & General in relation to the accuracy or completeness of the Information, or any other written or oral information made available in connection with this publication.

As required under applicable laws Legal & General will record all telephone and electronic communications and conversations with you that result or may result in the undertaking of transactions in financial instruments on your behalf. Such records will be kept for a period of five years (or up to seven years upon request from the Financial Conduct Authority (or such successor from time to time) and will be provided to you upon request.

© 2020 Legal & General Investment Management Limited. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, without the written permission of the publishers. Legal & General Investment Management Limited. Registered in England and Wales No. 02091894. Registered Office: One Coleman Street, London, EC2R 5AA. Authorised and regulated by the Financial Conduct Authority, No. 119272.

Legal & General
INVESTMENT MANAGEMENT

CC2334_2020 Page 109



Quarterly Stewardship Report

FOURTH QUARTER, 2019-20 (JANUARY-MARCH 2020)





















Responsible Investment & Engagement

LGPS Central's approach



LGPS Central's approach to Responsible Investment & Engagement carries two objectives:

OBJECTIVE #1

Support investment objectives

OBJECTIVE #2

Be an exemplar for RI within the financial services industry, promote collaboration, and raise standards across the marketplace

These objectives are met through three pillars:



This report covers Central's stewardship activity. Our stewardship efforts are supplemented by global engagement and voting services provided by EOS at Federated Hermes (EOS). For more information please refer to Central's Responsible Investment & Engagement Framework and UK Stewardship Code Compliance Statement.

ADDITIONAL DISCLOSURES



Stewardship Code



Voting Principles



Voting Disclosure









01 Introduction and Market Overview

The first cases of coronavirus disease (COVID-19) emerged in Wuhan province, China, in December 2019. By late January 2020 the virus had spread to the UK. Lockdown measures in most major economies have created economic and financial uncertainty, and there have also been knock on effects for environmental, social and corporate governance issues.





Media reports suggest the lockdowns have improved air quality, reduced GHG emissions, and even cleaned up Venice's canal water. In order to avoid climate catastrophe, we need global GHG emissions to peak

by around 2020 and reach net zero by around 2050. Given recent experiences, must attainment of the Paris Agreement come at the cost of jobs and economic prosperity? We believe that suggestions of mutual exclusivity between economic growth or green issues is a false dichotomy. You can have both, if we have the right policy measures plus strategic corporate planning. Of greater importance than the short-term reduction in GHG emissions is the

policy agenda after the pandemic subsides. We think the IIGCC's recent statement urging governments to prioritise human relief, job creation and the Paris Agreement, strikes the right tone. COP26 in Glasgow – along with planned pre-conference policy announcements – has been postponed from December 2020 to an unknown¹ 2021 date. Meanwhile, there have been calls for central bank asset purchases to be dependent on climate-related factors, and for government bailouts to weigh climate issues when providing financial assistance to carbon intensive industries, such

 $^{\rm 1}$ At the time of writing, May 2020





as airlines. Following coordinated investor engagement, we have seen net zero commitments from Barclays, BP, Rio Tinto, and Royal Dutch Shell. In our view Coronavirus will not destabilise the climate agenda, and climate-related risks remain a major uncertainty for long-term investors.

From a corporate governance perspective, the main pandemicrelated issues are capital raising, distributions, remuneration, and shareholder voting. Shareholders have historically been unreceptive to virtual-only AGMs, but leeway might be afforded as a one-off in 2020, or for 'hybrid' (in-person and virtual) AGMs. Due procedure requires company articles to be amended to permit AGM format changes and LGPS Central along with its stewardship provider will be keeping a close eye on companies to ensure shareholder rights are not permanently affected. The pandemic will be a good test for the design of remuneration policies, and whether Remuneration Committees are able to exercise discretion to defer executive pay awards until the virus passes. It will also be a test for corporates' recent embrace of 'stakeholder capitalism' (for example the Business Roundtable or the Davos Manifesto). Will the costs of the crisis, and any post-crisis gains be public or private? Possibly in response to the 2019 experience (during which at least 62 FTSE

All Share companies had over 20% voting opposition to pay-related resolutions), and in some cases as a result of regulatory pressure, there has been a trickle of company announcements relating to cuts or deferrals in executive pay awards. As ever, remuneration will be a key area of focus for LGPS Central in the 2020 proxy season.

Climate change aside, the global pandemic could divert attention from important ESG issues, including the control of inappropriate content by the mega-cap technology companies. It has been over a year since the deadly Christchurch attacks and we, along with a coalition of investors, think social media companies have failed to properly respond (the Christchurch attacks were, tragically, livestreamed on social media temporarily). Subsequent atrocities in Germany and Thailand have since been livestreamed across various social-media platforms. On the anniversary of the attacks, LGPS Central co-signed an investor letter asking Facebook, Twitter, and Alphabet to do more to protect the public from similar events in the future (see further detail under Section 3 below). Despite attention being diverted as a result of the pandemic, LGPS Central continues to press companies on material issues on behalf of our partner funds.



Engagement

This quarter our engagement set² comprised 1045 companies with 1351 engagement issues³. There was engagement activity on 631 engagement issues and achievement of some or all engagement objectives on 428 occasions. Most engagements were conducted through letter issuance or company meetings, and we or our partners in a majority of cases met or wrote to the Chair or a member of senior management.





In order to use our resources efficiently, our engagement work focusses mainly on key stewardship themes that have been identified in collaboration with our partner funds. These themes are touched on in more detail under Section 3 below. We continue, however, to employ a broad stewardship programme - beyond just our targeted themes - covering issues like fair remuneration, board composition, diversity, and human rights, to name but a few. We also employ a diverse range of engagement tools including filing of shareholder resolutions when this ties in with our overall engagement effort.

² This includes engagements undertaken directly, in collaboration, and via our contracted Stewardship Provider. This guarter's total includes 726 companies written to as part of the International Mining

³ There can be more than one engagement issue per company, for example board diversity and climate change.





REMUNERATION AND FAIR PENSION ARRANGEMENTS

Remuneration has long been a key area of corporate governance for LGPS Central and is probably the dominant theme in our Voting Principles. We expect the 2020 voting season to be even busier than usual when it comes to executive pay. Ideally our vote – whether For or Against – will be the result of engagement and will not come as a surprise to the Board. A good example of this has been a recent engagement with a UK-listed Bank, whose remuneration policy we opposed at the 2019 AGM. Following our oppose vote, we wrote to the company and scheduled calls to explain our key concerns with the policy, which related primarily to the difference in pension arrangements for the CEO compared to the wider workforce. As a result of engagement, the pension arrangement for the executives have been reduced from 20% to 10% of salary. In addition, the CEO will forgo his cash bonus in light of the Coronavirus. We were able to vote for the remuneration-related resolutions at the bank's 2020 AGM – a sign of progress.

MODERN SLAVERY

It is a blight on our society that slavery exists in modern form. Modern slavery is an illicit trade worth an estimated US\$150 billion, involving approximately 40 million people in sectors ranging from food retail to hotel chains. The introduction in 2015 of the UK Modern Slavery Act was supposed to herald a sea change in the disclosure and management of modern slavery in corporate supply chains, but the Business and Human Rights Resource Centre's (BHRRC) annual reviews show underwhelming performance by large UK-listed companies, and a corporate preference for disclosure and aspiration, rather than action.

Rathbones Brothers Plc convened an investor group, which LGPS Central has joined, to press 23 laggard companies that had failed to meet the reporting requirements of Section 54 of the Modern Slavery Act 2015. Though each investor's voting decisions remain at the investor's discretion, some participating investors used their shareholder rights as leverage in the engagement, promising to vote against the Annual Report & Accounts should compliance not be achieved. It is pleasing that since the engagement began, 16 out of the 23 companies on the target list are now compliant and there are ongoing constructive talks with the remaining companies, working to target completion date of October 2020. Though Coronavirus has had a particularly acute impact on companies whose supply chains are prone to modern slavery risk, and this has delayed progress somewhat, we are pleased at the rate of improvement in this continuing engagement.



03 Stewardship Themes

In order to be efficient and targeted in our engagement, we prioritise specific Stewardship Themes





In collaboration with our Partner Funds, we identified four themes at the start of the current financial year which are given particular attention in our ongoing stewardship efforts.

These are:

- Climate change
- Single-use plastics,
- Fair tax payment and tax transparency
- Technology and disruptive industries

Identifying core themes that are material to our investment horizon helps direct engagement and it also sends a signal to companies of the areas we are likely to be concerned with when we meet them. Given that engagement requires perseverance and patience, we expect to pursue the same themes over a one to three-year horizon, and in some cases — like with climate change — a longer time period. In our Annual Stewardship Plan (ASP) we have adopted a strategy of seeking to combine collaborative engagement alongside direct engagement with companies. We also aim to encourage the establishment and promotion of best practice standards through industry standard setting or regulation.



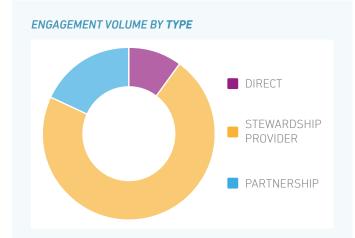
CLIMATE CHANGE

This quarter our climate change engagement set comprised 175 companies with 210 engagements issues⁴. There was engagement activity on 195 engagement issues and achievement of some or all engagement objectives on 64 occasions.

Since inception, LGPS Central has been an active member of the Climate Action 100+ initiative (CA100+), alongside the Transition Pathway Initiative (TPI) and the Institutional Investor Group on Climate Change (IIGCC). We are currently co-leading or in the focus group of ongoing engagements with eight companies that are part of the CA100+ initiative. These engagements are with oil and gas and mining companies, as well as one industrial technology company and one integrated energy company. We held meetings, in some cases multiple meetings, with five of these companies during the quarter at Chair or CEO levels. Scope 3 emissions, emissions that occur downstream of a company's business activities, i.e. as part of the activities of the company's customers, remain a particular challenge both in terms of measuring and of ensuring corporate accountability. Scope 3 emissions are often the largest category of emissions from a company and it is therefore critical to bring Scope 3 emissions into the scope of companies' climate targets, alongside direct emissions. Over the last quarter, TPI and their team at the London School of Economics has initiated consultations on a methodology for assessment of carbon performance (progress on transition to a low-carbon economy that aligns with the Paris Agreement on climate change) for diversified mining companies and European oil and gas companies. The availability of a credible and objective standard that shows whether or not a company's trajectory aligns with the Paris Agreement is a critically useful tool in company engagement.

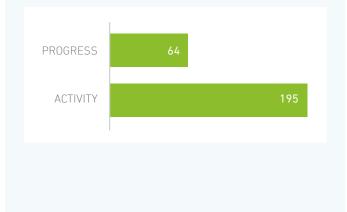
Together with 10 other investors, LGPS Central co-filed a shareholder resolution at Barclays Plc asking the company to disclose targets to phase out the provision of finance to companies, starting with those in the energy and utility sectors, that are not aligned with the Paris climate change goals. The resolution aligns with LGPS Central's responsible investment beliefs on climate change as a materially financial risk. During the last quarter we continued engagement with Barclays. Following multiple meetings with investors, Barclays recently announced an ambition to become a "net-zero bank" covering emissions across Barclays' own operations and those of its clients. We view this as a reflection of positive engagement pressure, and the bank's willingness to listen. As was the case with BP Plc in 2019, Barclays' board sponsored a resolution to its AGM that captured this commitment. Barclays has invited investor scrutiny and dialogue as they work to establish metrics and nearer-term targets that correspond meaningfully to the long-term net-zero ambition. We are keen to see evidence that all of Barclays' lending activities, including those that bear the most climate risk, will be addressed with Paris agreement urgency.

During the last quarter and going into the next, we have engaged two US companies following our co-filing of shareholder resolutions asking for enhanced transparency in corporate lobbying. We are generally concerned that companies across sectors and markets do not always disclose their lobbying activities. In many instances industry associations that a company is a member of advocate in a manner which is not aligned with the Paris Accord on climate change, or with other stated corporate ambitions. Without necessary disclosures – provided in an easily accessible manner – we are not able to assess risks and/or benefits associated with a company's participation in the public policy process. LGPS Central continues to view "negative" climate lobbying as one of the most corrosive blocks to achieving the goals of the Paris Climate Agreement in that it hinders the development of necessary regulation to support the transition to a low-carbon economy.



- 210 engagements in progress
- · Majority of engagements undertaken via CA100+
- Shareholder-resolutions to escalate engagement with several companies

ENGAGEMENT VOLUME BY OUTCOME



⁴ There can be more than one climate-related engagement issue per company.



SINGLE-USE PLASTICS

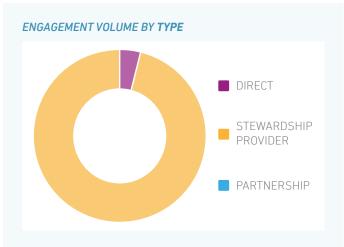
This quarter our single-use plastics engagement set comprised 22 companies with 26 engagements issues. There was engagement activity on 26 engagements and achievement of some or all engagement objectives on 6 occasions.

Alongside five other investors, we engaged a multinational food manufacturing company headquartered in the US to discuss their packaging strategy and how they are managing risks stemming from plastic pollution across their product development, operations and value chain. In 2019 the company reported plastic packaging data for the first time to the Ellen MacArthur Foundation (EMF)⁵ and is reporting to have already achieved 32% recyclability for plastic packaging. We were encouraged to hear that the company is working towards a goal of 100% reusable, recyclable or compostable packaging by the end of 2025. The company acknowledges the challenge in that plastics currently used, such as multilayer laminate films, are not in compliance with the EMF definition for recyclability. The company emphasised the importance of establishing partnerships along their value chain, including with retailers, fossil fuel industry, waste management and public sector, in order to achieve their 2025 ambition. We were informed that there is board oversight on these risks and on the sustainable packing ambitions through a board sub-committee on public policy and sustainability. We expect the company to publish new packaging data in the next guarter and will seek further engagement following that. We would also like to discuss with the company whether the COVID pandemic may set plastic reduction targets back as a result of potential pressure to shift back to more single-use plastic items.

We are pleased to announce that we have joined the PRI's Plastics Working Group. This collaboration will primarily aim to define good practice and to build performance and assessment tools and engagement guides across key sectors (chemicals, retailers, plastic packaging, waste management) in collaboration with relevant experts including the EMF. The working group will maintain a focus on plastics but also consider the circular economy concept (eliminating waste and the continual use of resources). While the PRI does not currently coordinate specific engagements for the

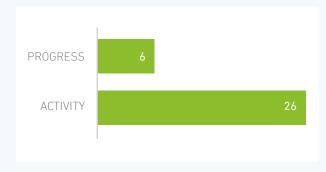
working group members, we will seek engagement collaboration with peer investors, leveraging the best practice standards that are being defined for particular sectors.

During the last quarter our stewardship provider, EOS at Federated Hermes (EOS), has on our behalf engaged with a European beverages company on sustainability goals including packaging. The company provided an in-depth update on the 2025 sustainability goals it launched in 2018, focused on smart agriculture, water stewardship, circular packaging and climate action. EOS commended the company for focusing on issues material to its operations and for taking an impact-oriented approach. The company is working on impact metrics to track performance over time, something EOS has encouraged.



- 26 engagements during the quarter
- Collaborative engagement initiated with US food manufacturer
- PRI Plastics Working Group aiming to define good practice across key sectors

ENGAGEMENT VOLUME BY **OUTCOME**



⁵ https://www.ellenmacarthurfoundation.org/ The Ellen MacArthur Foundation works with business, government and academia to build a framework for an economy that is restorative and regenerative by design.



FAIR TAX PAYMENT AND TAX TRANSPARENCY

This quarter our tax transparency engagement set comprised 12 companies with 12 engagements issues. There was engagement activity on 12 engagements and achievement of some or all engagement objectives on one occasion.

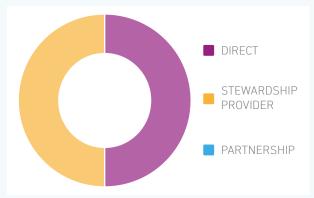
We actively seek collaboration with like-minded investors and have during the last guarter continued collaboration with five fellow European investors to engage a selection of companies across technology, telecommunication, finance and mining sectors. We have sent letters to five companies to assess and discuss some key tax-related elements including:

- board oversight of tax policy and risk assessment;
- · disclosure of tax strategy and policy;
- · link between company's purpose, sustainability goals and tax strategy;
- engagement with tax policy makers and other stakeholders.

During the last quarter, the investor group held a meeting with a multinational telecommunications company that welcomed engagement on tax transparency. The company has developed and strengthened its tax policy and strategy over the course of the last 10 years following previous controversies and increasing stakeholder interest. This has resulted in increased capacity across tax teams (across markets), more engagement at board level on the tax strategy, as well as formal reporting to the Audit and Risk Committee twice a year. The company takes a forward view of tax risk management and assesses it through the lens of broader sustainable development. Last year the company published countryby-country tax reporting, which it views as unproblematic from a competitive perspective and as useful not least in communication with various stakeholders. The company engages tax authorities both directly and through industry groups, on issues such as country-by-country reporting and the expansion of digital services. From the investor group perspective, this engagement, which the company is open to continue, helps increase our own learning and better capture best practices in responsible tax behaviour as they evolve.

On our behalf, EOS has continued engagement with a multinational bank setting out requests for improvements on its tax policy transparency, both on conduct in client services and its own tax obligations, and for its annual tax reporting. This follows on from EOS' engagement with a number of banks on the issue allowing for comparison of practices across the sector. EOS has asked the bank in question to go beyond standard policy and financial reporting to articulate the company's responsible approach to tax practices, in particular with regard to the products and services provided by the bank including subsidiaries. This would also ensure alignment with its commitment to be a responsible bank. Further to this, the bank should clearly show how it is confident that it has the right culture to avoid any controversy in future.





- 12 engagements during the quarter
- Collaboration with peer European investors to engage a selection of companies across vulnerable sectors
- We expect clear articulation of companies' responsible approach to tax

ENGAGEMENT VOLUME BY OUTCOME







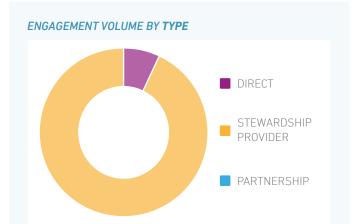


TECHNOLOGY AND DISRUPTIVE INDUSTRIES

This quarter our technology and disruptive industries engagement set comprised 29 companies with 46 engagements issues. There was engagement activity on 46 engagement issues and achievement of some or all engagement objectives on nine occasions.

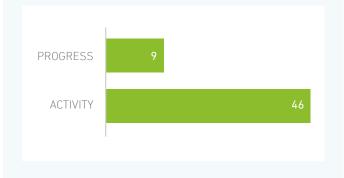
We have this guarter continued our collaborative engagement, led by the New Zealand Crown-owned investors, aiming for social media companies to strengthen controls around the live streaming and distribution of objectionable content. The engagement is targeting Alphabet, Facebook and Twitter. This guarter saw the anniversary of the Christchurch terror attacks in March 2019, which were tragically streamed live on Facebook. Through an open letter we communicated to the social media companies a need for better oversight and more action to align with their shareholders on serious social harm and business risks. While progress has been made, especially on the technology side, we are concerned that it is not sufficient to prevent livestreaming and/or dissemination of content should another attack occur. We are of the view that stronger governance and accountability at executive and board level are needed alongside greater openness and engagement with investors in order to properly manage inherent risks. While we advocate for a stronger response from companies, we also encourage modernised regulation that keeps up with the changing environment.

On our behalf, EOS engages technology companies on a broad spectrum of vulnerabilities via its Social and Strategy, Risk and Communication themes. As an example, EOS engaged Ping An Insurance Group Co of China during the last quarter on the need for responsible AI (Artificial Intelligence) practices. Last year, Ping An became one of the first major financial institutions globally to publish a set of AI ethical principles, which explains key ethical issues of AI specific to the company's businesses, and key principles that guide AI applications. EOS provided detailed feedback to these principles. Although an AI governance framework is in place with the sponsorship of the co-CEO, plus members of the management committee and research committee, EOS has recommended that the company considers appropriate board level oversight.



- 46 engagements in progress
- Collaborative engagement with social media companies (Alphabet, Facebook and Twitter) on content control
- Emerging practice of Artificial Intelligence ethical principles







04 Voting

POLICY

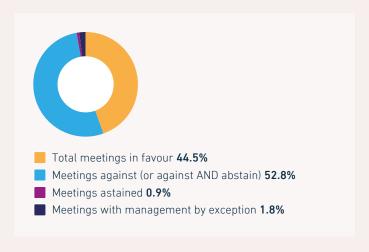
For UK listed companies, we vote our shares in accordance with a set of bespoke UK Voting Principles. For other markets, we consider the recommendations and advice of our third-party proxy advisor.

COMMENTARY

On behalf of our clients, we continued to vote shares at company meetings between January and March 2020⁶.

⁶ The data presented here relate to voting decisions for securities held in portfolios held within the company's Authorised Contractual Scheme (ACS)

GLOBAL



Over the last quarter we voted at 436 meetings (4,680 resolutions). At 230 meetings we opposed one or more resolutions. We voted with management by exception at eight meetings and abstaining at four meetings. We supported management on all resolutions at the remaining 194 meetings.

GLOBAL VOTES AGAINST AND ABSTENTIONS BY CATEGORY

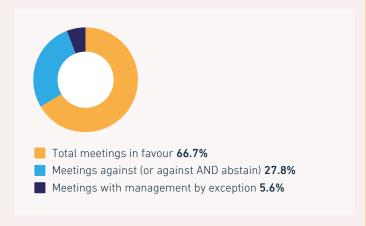


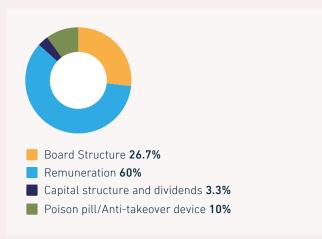
- Board Structure 50.6%
- Remuneration 24.5%
- Shareholder resolution 5.3%
- Capital structure and dividends 3.1%
- Amend articles 3.3%
- Audit and accounts 8.0%
- Poison pill/Anti-takeover device 1.4%
- Other **3.9%**



UK

We voted at 54 meetings (733 resolutions) over the last quarter. We voted against or abstained on 30 resolutions out of the total resolutions voted.





At TUI AG's AGM (an Anglo-German multinational travel and tourism company) we voted against the election of Vladimir Lukin to the Supervisory Board because of the failure to establish a sufficiently independent board. As stated in the LGPS Central Voting Principles we expect the majority of board members to be independent. At TUI AG, the board is only 30% independent. We also voted against TUI's Remuneration Policy over a combination of concerns, including our view that there should be more detailed disclosure on the annual bonus targets. In line with best practice, targets for both financial and non-financial aspects should be disclosed in detail, which is not the case for TUI. Further to this, the Remuneration Committee of the Supervisory Board is majority non-independent, which is contrary to best practice.

EUROPE EX-UK

We voted at 68 meetings (1,137 resolutions) over the last quarter. We voted against or abstained on 107 resolutions out of the total resolutions voted.





At the AGM of Novartis AG, we voted against the re-election of PwC as external auditor of the company. PwC has been in place as Novartis' external auditor since 1940. We consider this excessive tenure. According to LGPS Central's Voting Principles we expect companies to regularly tender and rotate the external auditor, tendering at least every 10 years. We also voted against the re-election of the current audit and compliance committee chair, Elizabeth Doherty to emphasise the fact that we view the issue of auditor independence is fundamental. A rotation will provide the opportunity for Novartis to be examined with a fresh pair of eyes. It should be noted that Switzerland does not intend to adopt the EU Audit Reform regulations or to change the existing legal

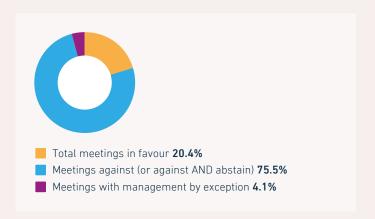


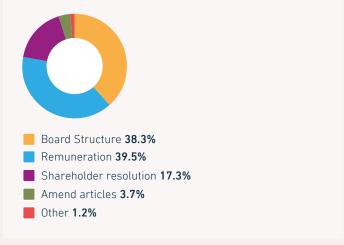
requirements related to auditor independence. Lacking regulatory pressure that would align with our Voting Principles, it is all the more important that we express our expectations through voting.

LGPS Central provided a Power of Attorney to our stewardship provider so that they could attend Novartis' AGM to express this view on our behalf.

NORTH AMERICA

We voted at 49 meetings (562 resolutions) over the last quarter. We voted against or abstained on 81 resolutions out of the total resolutions voted.





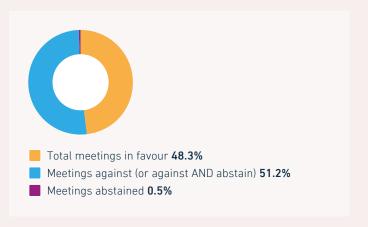
At Apple's AGM we voted in favour of all agenda items, though this included three instances in which we voted contrary to the company's recommendation to oppose shareholder resolutions. We voted for Apple's executive compensation and the chair of the compensation committee. Despite being the largest company in the world, executive compensation is modest by comparison to its US peers and shows exemplary performance compared to the US technology sector. Apple's compensation is largely aligned with LGPS Central's expectations on fair remuneration, including a

higher base salary (i.e. lower variable pay), high share ownership and strong alignment with long-term performance. A favourable vote on executive remuneration also creates a point of leverage for engagement on two shareholder proposals related to increased disclosure on freedom of expression, and production of a board report considering potential use of ESG metrics in executive compensation decisions. Against the board's recommendation, we voted for these two resolutions, alongside a shareholder proposal asking for improved proxy access.

DEVELOPED ASIA

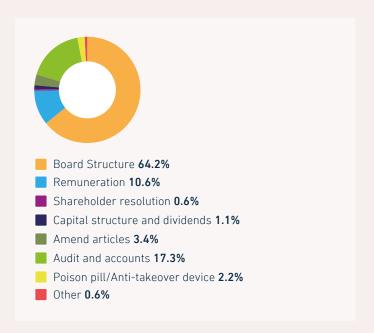
We voted at 205 meetings (1,688 resolutions) over the last quarter. We voted against or abstained on 107 resolutions over the same quarter.

At Samsung Electronics we voted for all resolutions but are continuing to push for improvements via engagement. We approved the company's financial statements and view the proposed dividend as acceptable in light of Samsung's positive developments in capital efficiency. We also voted for the election of two Inside Directors, while encouraging the company to consider increasing diversity of background, expertise and gender on the board. Samsung stated its aim to appoint at least one international board member during



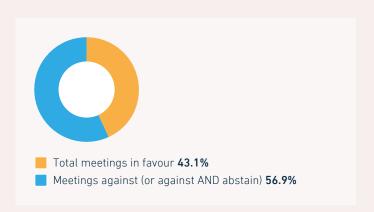


next year's AGM. It would in our view be counterproductive to vote against these Directors' appointments as their expertise is likely to strengthen the board's expertise (including in visual display development, IoT (Internet of things), capital management, and management of ESG issues). Lastly, we voted for Total Director Remuneration (a lump-sum cap on total remuneration payable to all directors) which is on par with Samsung's US peers and justified considering the company's financial position and its size relative to peers. We encouraged Samsung to adopt a remuneration scheme with longer duration and a lower proportion paid out in the first year and a reduction of the performance-based component as a proportion of total compensation.



EMERGING AND FRONTIER MARKETS

We voted at 58 meetings (547 resolutions) over the last quarter. We voted against or abstained on 112 resolutions over the same quarter.



At the AGM of EDP Energias do Brasil SA, one of the largest electric utility companies in Brazil, we voted against the election of the board due to a lack of independence. The Brazilian Corporate Governance Code, introduced in 2016, recommends that at least 1/3 of the board be independent in order to protect the interests of all shareholders including minority shareholders, whereas EDP Energias' board is 12% independent. While the company meets the minimum independence requirement of the Novo Mercado listing segment of the Sao Paulo Stock Exchange (B3), we expect Brazilian companies to aspire to the local Corporate Governance



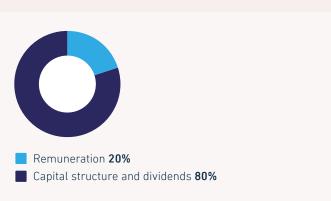
Code. This would also be more in line with the expectation of international institutional shareholders. Looking across companies in the Emerging and Frontier Markets segment, the theme of board structure was the cause for concern in over half of all resolutions where we voted against management or abstained.



AUSTRALIA & NEW ZEALAND

We voted at two meetings (13 resolutions) over the last quarter. We voted against or abstained on five resolutions over the same quarter.





At the AGM of consumer services company Aristocrat Leisure, we cast our vote against the grant of performance share rights to the CEO, Trevor Croker. As expressed in our Voting Principles, we are generally concerned when executive remuneration fails to align with long-term success and with the interests of long-term shareholders. We uphold similar expectations for alignment across markets, including the Australian market. 40% of the LTI (Long-Term Incentive) award for Aristocrat's CEO is subject to "objectivebalanced scorecard KPOs" which according to the company are aligned with supporting longer-term strategy and sustainable growth. What is lacking, however, is a clear disclosure of what the KPOs are and how they align with improved shareholder results. It is equally unclear whether this significant portion of the LTI award is something other than a bonus for the CEO's day job that would objectively warrant additional remuneration. For large ASX-listed entities in the Australian market, LTI awards are expected to be subject to rigorous performance conditions which are appropriately disclosed allowing shareholders the opportunity to assess whether there is objective alignment with the interest of shareholders.



05

Industry Participation

LGPS Central is an active participant in the debate on good corporate and investor practice. We value collaboration with peer investors and with industry initiatives, which gives a stronger voice and more leverage in engagement.

The TPI (Transition Pathway Initiative) Annual State of Transition Summit this year was held as a webinar due to the COVID 19 pandemic, allowing more people to join online. TPI was established in 2017 with the aim of defining what the transition to a low-carbon economy looks like for companies in high-impact sectors such as oil and gas, mining, and electricity. It continues to be a highly useful and robust tool which helps inform investors' investment decision making and engagement. Taking a forward view, TPI assesses companies' management quality - how they manage greenhouse gas emissions and the risks/opportunities from that transition to a low-carbon economy - as well as companies' carbon performance - how companies are positioned to reach the Paris goals. According to the Intergovernmental Panel on Climate Change, the global community has now entered the final decade in which to take action to avoid catastrophic climate change. It is therefore worrying that while some progress is being made, the TPI State of Transition report 2020 concludes that on management quality nearly 40 per cent of companies (out of a total 332) are demonstrably unprepared for the transition. On carbon performance, more than 80 per cent of companies (out of a total 238) remain off track for a 2-degree world. More companies are coming out with ambitions to be net zero by 2050, which is encouraging, however these ambitions often imply the use of offsetting, which presents risks. Furthermore, the scope of emissions covered by net-zero ambitions vary and are usually much less than 100% of lifecycle emissions (Scopes 1 to 3). The report encourages investors to engage companies to take a more strategic approach to climate change. As a TPI Steering Committee member, LGPS Central views the role of TPI as critical going forward in spurring robust, well-informed and outcome-oriented engagement across sectors on climate change.

Last quarter saw the launch of a new tax standard by the Global Reporting Initiative (GRI). This is the first global standard to guide corporations on responsible tax behaviour and tax transparency. Whereas the existing OECD Base Erosion and Profit Shifting (BEPS) project asks companies to report to tax authorities, the new GRI standard asks companies to report on their tax behaviour to stakeholders including investors. The standard is voluntary and asks companies to disclose their approach to tax (including tax havens), their tax governance, control and risk management, their stakeholder engagement, and to provide a country-by-country

reporting. The latter will shed light on whether profits are reported where economic activity takes place. This level of reporting will allow investors the ability to appraise a company's tax strategy and how that ties in with the overall business strategy and planning. While many countries are providing various forms of tax relief to businesses during the COVID pandemic, it seems reasonable for investors to expect companies to pay their fair share of tax. As a global society we are badly able to handle any crisis, including the current health pandemic and the ongoing climate crisis, without funding through tax.

We regularly contribute to RI-related advisory committees and make select speaking appearances at investment conferences. During the last quarter we spoke at the following events (see table below).

| CONFERENCE/ EVENT | ТОРІС |
|--|------------------------------------|
| Responsible Investment podcast hosted by Man Group | UK Stewardship Code |
| LGC Investment Conference | Climate Change |
| ClearPathAnalysis ESG Conference | Differences between ESG and ethics |

LGPS Central currently contributes to the following investor groups:

- Cross-Pool Responsible Investment Group
- UK Pension Fund Roundtable
- BVCA Responsible Investment Advisory Group
- PRI Listed Equity Integration Advisory Sub-Committee
- TPI Steering Committee & Technical Advisory Group
- Roundtable on Mining (Investor Mining and Tailings Safety Initiative)
- GFI Working Group on Data, Disclosure & Risk
- FRC Investor Advisory Group
- LAPF SIF Advisory Board
- IIGCC Shareholder Resolutions Sub-group
- IIGCC Paris Aligned Investment Steering Group



LGPS CENTRAL LIMITED'S

Partner Organisations





























This document has been produced by LGPS Central Limited and is intended solely for information purposes. Any opinions, forecasts or estimates herein constitute a judgement, as at the date of this report, that is subject to change without notice. It does not constitute an offer or an invitation by or on behalf of LGPS Central Limited to any person to buy or sell any security. Any reference to past performance is not a guide to the future. The information and analysis contained in this publication have been compiled or arrived at from sources believed to be reliable, but LGPS Central Limited does not make any representation as to their accuracy or completeness and does not accept any liability from loss arising from the use thereof. The opinions and conclusions expressed in this document are solely those of the author. This document may not be produced, either in whole or part, without the written permission of LGPS Central Limited.

All information is prepared as of **15.05.2020**.

This document is intended for **PROFESSIONAL CLIENTS** only.

 ${\sf LGPS}\ {\sf Central}\ {\sf Limited}\ {\sf is}\ {\sf authorised}\ {\sf and}\ {\sf regulated}\ {\sf by}\ {\sf the}\ {\sf Financial}\ {\sf Conduct}\ {\sf Authority}.$

Registered in England. Registered No: 10425159.

Registered Office: Mander House, Mander Centre, Wolverhampton, WV1 3NB

Agenda Item No. 4 (c)

DERBYSHIRE COUNTY COUNCIL

PENSIONS AND INVESTMENTS COMMITTEE

10 June 2020

Report of the Director of Finance & ICT

DERBYSHIRE PENSION FUND SERVICE PLAN

1. Purpose of the Report

To seek approval for Derbyshire Pension Fund's Service Plan for 2020-21, including the annual budget for the year.

2. Information and Analysis

The Service Plan, attached as Appendix 1 sets out:

- The objectives of Derbyshire Pension Fund (the Fund)
- Details of the Pension Fund Team
- Key services of the Fund
- Key achievements in 2019-20
- Review of 2019-20 performance indicators
- Forward plan of Pension Fund procurements to 31 March 2022
- The Fund's medium term priorities
- The 2020-21 budget required to deliver the Fund's services
- 2020-21 key performance indicators

In line with best practice, the Fund is seeking approval from Committee for its annual budget in order to improve transparency and to provide assurance regarding the business planning process and the use of the Fund's resources. As this is the first year that Committee's approval has been sought for the Fund's budget, the forecast budget is compared in the Service Plan to actual Fund spend in 2019-20.

A budget of £32.9m is sought to deliver the services of the Pension Fund; this represents an increase of 5.5% over the previous year. It should be noted, that around 85% of the Fund's costs relate to external investment management fees which are impacted by changes in the Fund's asset allocation mix, as well as changes in the value of assets under management.

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. Officer's Recommendation

That the Committee approves the 2020-21 Service Plan, including the annual budget of £32.9m.

PETER HANDFORD Director of Finance & ICT

PHR - 1083 Page 130

Derbyshire Pension Fund – Service Plan 2020-21

Appendix 1 Dawn Kinley – Head of Pension Fund

INTRODUCTION

Derbyshire County Council is the administering authority for the Derbyshire Pension Fund (the Fund); one of 89 regional Local Government Pension Scheme (LGPS) administering authorities in England and Wales. There are over 300 employers in the Fund, including Derbyshire County Council, Derby City Council, all the district and borough councils in Derbyshire, Peak District National Park Authority, Derbyshire Police Authority, Derbyshire Fire Authority, Derby College, Chesterfield College, University of Derby, a host of town and parish councils and a large group of smaller employers via admission agreements. There are currently around 105,000 members of Derbyshire Pension Fund; around 40,000 active contributing members who are currently employed by one of the Fund's employers, 33,000 deferred members who worked for a scheme employer in the past and are entitled to receive a pension from the Fund in the future and 32,000 members in receipt of pension. Key stakeholders of the Fund include: pension fund members; employers and local tax payers.

Pension Fund Objectives

- to ensure sound governance arrangements for the Fund
- to ensure that sufficient assets are available to meet benefit payments
- to deliver a high quality service to scheme members and employers
- to enable employer contribution rates to be kept as constant as possible and at reasonable cost to the taxpayer
- to deliver clear, timely and relevant communications to all stakeholders

Pension Fund Team

The Pension Fund Team, headed by Dawn Kinley, is part of the Finance & ICT Division of Derbyshire County Council's Commissioning, Communities and Policy Department, and is comprised of an Investment Team and a Pension Administration Team. Both teams contribute to the governance of the Pension Fund.

The Investment Team actively manages a proportion of the Fund's investments assets in house, and oversees the external management of the remaining assets. The investment assets are currently valued at £4.9bn (30 April 2020). Following the recruitment of an Assistant Fund Manager and an additional Business Services Officer, the Investment Team is now comprised of an Investment Manager, an Assistant Fund Manager, a Pension Fund Accountant and 3 Business Services Officers.

The Pension Administration Team manages the day to day activities associated with members of the Fund and their employers and is comprised of a Pensions Administration Manager, 4 Team Leaders, 1 Project Lead, 45 Pensions Officers across three levels and 1 Business Services Assistant. Pension Fund full-time equivalent posts: 54.

Key services include:

- Managing and monitoring the Fund's governance obligations, including supporting the Local Pension Board, formulating and reviewing the Fund's statements, strategies and policies and preparing the Fund's Annual Report.
- Reporting to and providing support to the Pensions and Investments Committee.
- Managing the employer admissions and cessations process.
- Maintaining records for around 105,000 members.
- Communicating with members and employers (e.g. supporting employing authorities with their responsibilities under LGPS regulations).
- Calculating and arranging payment of pension benefits.
- Managing the Fund's investment assets.
- Managing the transition of investment assets into investment vehicles offered by LGPS Central Ltd.
- Selecting, managing and monitoring the performance of the Fund's other external investment managers.
- Managing the stewardship of the Fund's assets in conjunction with the external custodian.
- Managing and monitoring costs; seeking value for money and seeking to reduce average costs per member.
- Monitoring and managing the Fund's cash flows.
- Maintaining the Fund's accounting records, including monthly valuations and preparation of supporting control
 accounts and reconciliations; reconciling and accounting for employee and employer contributions received, and
 benefits paid out.
- Providing investment settlement services (i.e. processing cash payments and receipts) in respect of the Fund's investment portfolio.

KEY ACHIEVEMENTS IN 2019-20

Key achievements over the last 12 months include:

Governance:

- Development and implementation of an Employer Risk Management Framework to identify, manage and monitor the
 risks associated with employers; including assessments of the covenant strength of employers not benefiting from
 local or national tax payer backing.
- Sound management of the triennial actuarial valuation process in conjunction with the Fund's actuary Hymans Roberston, including agreement of employer contribution rates from 1 April 2020 to 31 March 2023.
- Review and update of the Funding Strategy Statement, including revised employer risk categorisations to reflect the assessments of employer covenants.
- Development and implementation of a detailed Covid-19 Business Continuity Plan, ensuring that the critical activities
 of the Pension Fund could be continued remotely.
- Procurement of a Climate Risk Report and subsequent development of Pension Fund Climate-Related Disclosures.
- Development of a Data Management Group to review progress against the Fund's Data Improvement Plan and ensure continued compliance with GDPR and data security requirements.
- Development and implementation of a Complaints Policy & Procedure to provide assurance to members of the Pension Fund that all complaints will be considered properly and dealt with in a consistent manner.
- Establishment of a project board to oversee the implementation of the i-Connect system which will enable employers to automate the submission of their data.
- Successful transition to a new custodian for the custody of investment assets.
- Development of an Admission, Cessation & Bulk Transfer Policy setting out the Fund's approach to the risks involved in the admission of new employers to the Pension Fund and how it deals with possible bulk transfers and employers ceasing their participating in the Fund.
- Review and update of the Fund's Pension Administration Strategy, Communications Policy Statement and Governance Policy and Compliance Statement.
- Successful LGPS Employer Discretions communications strategy resulting in 98% of the Fund's employers having published their discretion policy by the financial year end.

- Continued development of the Fund's bespoke website, including the introduction of online enquiry forms and the launch of an improved version of the online pension calculator.
- Procurement of online training tools to assist with the training and development of new and existing team members
- Continuation of significant contribution to the LGPS Central Pool's governance arrangements including leading the Pool's Finance Working Group, and developing a new Cost Savings Model in collaboration with LGPSC.

Investments:

- Outperformance against the fund specific benchmark over 1, 3, 5 and 10 years.
- Provision of asset allocation advice and support to the Director of Finance & ICT and the Pensions & Investments Committee.
- Active participation in the development of the LGPS Central offer.
- Continued implementation of the new Strategic Asset Allocation Benchmark (SAAB).
- Continued build of significant commitments to Infrastructure, Private Equity and Multi-Asset Credit.
- Successful sourcing and completion of due diligence on a £50m renewable energy infrastructure fund.
- Completion of due diligence on the options for the new allocation to Global Sustainable Equities.
- Successful transition of the Fund's corporate bond investments to the LGPS Central Ltd Global Corporate Bonds Fund.
- Continued internal management of a substantial proportion of the Fund's investments.

Pension Administration:

- Successful team adaptation to Altair, the new pension administration system, with efficiency gains starting to flow through into an improved service to members and to a reduction in backlogs.
- Continued significant data cleansing exercise and re-evaluation of processes and procedures associated with the implementation of Altair.
- Continued improvement in the Fund's common and conditional data scores which are reported to the Pensions Regulator.
- Timely provision of good quality data to the Fund's actuary to support the triennial valuation.
- Successful on boarding of around 45 new employers (mostly academies).
- Continued improvement in relationships with, and information flow from, some of the larger employing authorities.
- Increased support to all employing authorities with their LGPS responsibilities via regular newsletters and very well received training events.

- Provision of well attended LGPS information sessions for Fund members at various sites around the County.
- Continued development of the performance management regime and quarterly performance report to the Pensions and Investments Committee and to the Pension Board.
- Increased collaboration with other LGPS funds including membership of the LGPS Central Administration Group and an LGA Communications Group in addition to membership of the East Midlands Pension Officers Group.
- Successful onboarding of an initial seven employers to the i-Connect system.
- Efficient transition to remote working; the commitment and flexibility of the team enabled queries to the telephone Pension Helpline and to the online Pension Inbox to be answered throughout the 'Stay At Home' period of the Covid-19 pandemic.

REVIEW OF 2019-2020 PERFORMANCE INDICATORS

| Indicator | Definition and Success Measure | Owner | 2019-20 Performance |
|--|--|-----------|---|
| Investment Performance | Target outperformance against the Fund's Strategic Asset Allocation Benchmark (SAAB) over the long term – performance is measured externally on a quarterly basis and reported to the Pensions and Investments Committee on a quarterly basis. | DKK / NAS | The Fund outperformed its (SAAB) over 1, 3, 5 and 10 years to 31 March 2020. |
| Actuarial Valuation and Funding Strategy Statement | Manage the actuarial valuation process and seek agreement from employers for the Funding Strategy Statement including employer contribution rates from April 2020 – to be reported to the Pensions and Investments Committee. | DKK /ND | The actuarial valuation process was successfully managed in conjunction with the Fund's actuary. An updated Funding Strategy Statement has been approved by Committee following a consultation exercise and contribution rates from April 2020 to March 2023 have been agreed. The Actuarial Valuation is due to be received by Committee in June 20. |
| Strategic Asset Allocation Benchmark | Implement the new Strategic Asset Allocation Benchmark on a committed basis – asset allocation is reported to the Pensions and Investments Committee. | DKK /NAS | The Fund's committed asset allocation is in line with the SAAB with the exception of the 3% allocation to Global Sustainable Equities. The IIMT expect this allocation to be in-line by Q3 2020 subject to market conditions. |
| TPR Code of Practice 14 | Ensure full compliance with the Pension Regulator's (TPR) Code of Practice No. 14 – with confirmation to be sought from the Pension Board. | DKK/ND | During the year, TPR announced its intention to review its codes of practice and combine the content of the 15 current codes of practice to form a single, shorter code. It is intended to make the codes quicker to find, use and update so that trustees and managers of all types of schemes can be |

| | more responsive to changes in regulations. |
|--|--|
| | The new code is currently awaited. |

FORWARD PLAN OF PENSION FUND PROCUREMENTS TO 31 MARCH 2022

| External Investment Advisor | Apr 21 |
|---|---------|
| Fixed Income Research | Sept 20 |
| Investment Performance & Cost Monitoring/Benchmarking & Reporting | Apr 21 |
| Investment Property Performance Measurement | May 21 |
| Macro-Economic Research | Apr 21 |
| Portfolio Performance Measurement | Jun 20 |
| Property Valuation | Dec 20 |
| Stock Market Data Provider 1 | June 21 |
| Stock Market Data Provider 2 | June 21 |
| Sustainable Global Equities Portfolio Managers | Jun 20 |
| Tax Advisory Service | Sept 20 |
| US Equity Discretionary Portfolio Manager | May 21 |
| Voting Service | Mrch 21 |
| Stock market Index Data Provider | Jan 21 |

MEDIUM TERM PRIORITIES

| Priority | Timeline | Owner |
|--|--|--------|
| Ensure sound governance arrangements for the Fund. | | |
| Continue to review the Fund's governance arrangements, including the Fund's statements, strategies and policies, taking into consideration the emerging expectations from The Pensions Regulator & the Scheme Advisory Board. | Ongoing | DKK |
| Continue to identify the training requirements of members of the Committee, members of the Pension Board and members of staff and update training plans accordingly. | Ongoing | DKK |
| Review the structure of the Pension Fund Team to enable it to support an agile, customer focussed operating model and to provide development opportunities which will build the skills and resilience required for the future. | 2020/21 | DKK |
| Ensure that sufficient assets are available to meet benefit | | |
| payments & Enable employer contribution rates to be kept as | | |
| constant as possible and at a reasonable cost to the taxpayer. | | |
| Continue to develop and implement employer covenant analysis. | 2020/21 | DKK/SW |
| Review the Fund's Investment Strategy Statement, including the Strategic Asset Allocation Benchmark. | By Sept 2020. | NS |
| Develop a Responsible Investment Strategy and a Climate Strategy. | By Sept 2020. | DKK/NS |
| Manage the Fund's investments with the aim of outperforming the Fund specific benchmark over the longer term. | Measured and reported on a quarterly basis – to be assessed annually | DKK/NS |
| Continue to deliver the Fund's new allocation to Global Sustainable Equities. | By Sept 20 | NS |
| Progress due diligence on a pipeline of additional renewable energy investments. | 2020/21 | NS |
| Continue to develop a sustainable working relationship with LGPS Central Ltd and the Partner Funds within the Central Pool and ensure, | Ongoing | DKK/NS |

| where possible, that the Pool develops products to deliver the Fund's investment strategy. | | |
|--|---------|-----------------------------------|
| Continue to improve the efficiency of the pension administration service with the support of the new system and develop administration performance targets in line with best practice. | 2020/21 | DKK/Pension Admin Team Leaders |
| Deliver a high quality service to scheme members and employers & Deliver clear, timely and relevant communications to all stakeholders. | | |
| Implement and roll out an employer automated data submission and validation service to employing authorities. | 2020/21 | DKK/EW/SW |
| Enable digital interaction and communication with members with the development of a member self-service system. | 2020/21 | DKK/EW/SW |
| Seek feedback on the delivery of the Fund's services to improve the customer experience, utilising the Fund's website and via the formation of a Member Forum. | 2020/21 | DKK/SW |

RESOURCES

2020-21 Budget

In order to deliver the services of the Pension Fund, the forecast budget requirement for 2020-21 is £32,917,891, up from actual spend of £31,207,308 in 2019-20, an increase of 5.5%.

This is the first year that the Pension Fund has sought Committee approval for its budget. Comparison to last year's actual spend rather than last year's budget provides an appropriate baseline for considering the proposed budget.

| | Actual 2019-20 | Budget 2020-21 | Change | Change |
|------------------------------------|----------------|-------------------|-----------|--------|
| | £ | £ | £ | % |
| Oversight & Governance | 1,275,726 | 1,547,500 | 271,774 | 21.3 |
| Employee Costs | 1,805,925 | 2,162,811 | 356,886 | 19.8 |
| Systems | 552,450 | 537,734 | (14,715) | (2.7) |
| Other Non-IME | 932,130 | 1,021,046 | 88,916 | 9.5 |
| Non-Investment Management Expenses | 4,566,231 | 5,269,091 | 702,860 | 15.4 |
| Investment Management Expenses | 26,641,077 | 27,648,800 | 1,007,723 | 3.8 |
| Total | 31,207,308 | 32,917,891 | 1,710,583 | 5.5 |

Oversight & Governance costs: include LGPS Central Ltd Governance, Operator & Product Development recharges, which accounted for £907,158 in 2019-20 and are forecast to account for £1,033,000 in 2020-21. A provision of £100,000 for possible Covid-19 related expenditure has been included in the budget for 2020-21.

Employee Costs: relate to the employee costs of both the Pension Administration Team and the Investment Team. The forecast increase in the budget against last year's actual spend reflects: the expected local authority pay increase for 2020-21; the impact of increments; the full year impact of staff recruited part way through the previous year; and a provision for the additional staffing resource that is likely to be required to implement the remedy for the McCloud case and to implement the member self-service system.

Systems: the reduction in forecast expenditure reflects certain one-off upfront costs for the new pension administration systems being charged in 2019-20. New costs related to the implementation of i-Connect and the member self-service system partially offset the reduction.

Other Non-IME costs: include: actuarial fees; custody fees; subscriptions; DCC exchequer & treasury management recharges; together with other miscellaneous expenses. The forecast increase in the budget against last year's actual spend reflects the cost of the one-off fiche digitisation project, offset by lower actuarial fees following completion of the triennial valuation.

Investment Management Expenses (IMEs): external investment manager costs incurred in the management of the Fund's assets. IMEs account for the bulk of the Fund's costs, representing around 85% of total costs in 2019-20. These costs are largely ad-valorem in nature (i.e. they relate to the value of the asset under management) and are impacted by changes in the asset allocation mix of the Fund as well as the value of assets under management.

2020-21 KEY PERFORMANCE INDICATORS

| Indicators | Definition and Success Measure | Timeline | Owner |
|--|---|----------|-----------|
| Investment Performance | Target outperformance against the Fund's Strategic Asset Allocation Benchmark over the long term – performance is measured externally on a quarterly basis and reported to the Pensions and Investments Committee on a quarterly basis. | Ongoing | DKK/NS |
| i-Connect | Achieve onboarding of employers representing 70% of the membership by 31 March 2021. | Mrch 21 | DKK/EW/SW |
| Member Self Service | Achieve registration of 15% of active members by 31 March 2021. | Mrch 21 | DKK/EW/SW |
| Review SAAB & ISS | Review and obtain Committee approval for updated SAAB & ISS. | Dec 20 | NS |
| Responsible Investment Strategy & Climate Strategy | Develop and obtain Committee approval for a Responsible Investment Strategy & a Climate Strategy. | Dec 20 | DKK/NS |

This page is intentionally left blank

Agenda Item No. 4. (d)

DERBYSHIRE COUNTY COUNCIL PENSIONS AND INVESTMENTS COMMITTEE

10 June 2020

Report of the Director of Finance & ICT

DERBYSHIRE PENSION FUND 2019 ACTUARIAL VALUATION

1. Purpose of the Report

To receive Derbyshire Pension Fund's 2019 Actuarial Valuation Report (the Valuation Report) attached as Appendix 1.

2. Information and Analysis

At its meeting in December 2019, the Committee considered a report on the initial whole fund results of the actuarial valuation of the assets and liabilities of the Pension Fund as at 31st March 2019. Since that date, the method of setting contribution rates for different categories of employers has been agreed and confirmed following a consultation exercise on the Pension Fund's Funding Strategy Statement.

The whole fund results, which provide a high-level snapshot of the funding position at 31 March 2019, reported an improvement in the funding level of the Pension Fund from 87% in March 2016 to 97% at March 2019, with a reduction in the deficit from £564m to £163m. For the purposes of reporting a funding level, an investment return of 3.6% p.a was assumed.

The Valuation Report includes the Rates and Adjustments Certificate which sets out the minimum contribution rates payable by the Fund's employers from 1st April 2020 to 31st March 2023. The rates of three of the Fund's employers were revised after the Valuation Report had been issued following consideration of further information. An updated Rates and Adjustments Certificate is attached as Appendix 2.

The Valuation Report together with the updated Rates and Adjustments Certificate will be published on the Fund's website once they have been received by Committee.

Hymans Robertson notes the significant volatility experienced in the financial markets as a result of the coronavirus pandemic. This volatility

PHR - 1084 Page 143

may impact funding balance sheets for those employers planning to exit the Fund during the period covered by the Rates and Adjustments Certificate. In order to effectively manage employer exits from the Pension Fund, the Fund retains the right to revisit the contribution rate for employers that are expected to cease participation in the Fund before 31 March 2023.

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. Officer's Recommendation

That the Committee receives the Fund's 2019 Actuarial Valuation Report and the updated Rates and Adjustment Certificate.

PETER HANDFORD
Director of Finance & ICT



Contents

| aluation report | Page |
|---|------|
| Introduction | 1 |
| Valuation approach | 3 |
| Valuation results | 5 |
| Sensitivity analysis | 10 |
| Final comments | 13 |
| ppendices | |
| ppendix 1 – Data | 14 |
| ppendix 2 – Assumptions | 15 |
| ppendix 3 – Rates and Adjustments certificate | 19 |
| ppendix 4 – Section 13 dashboard | 28 |

1 Introduction

Background to the actuarial valuation

We have been commissioned by Derbyshire County Council ("the Administering Authority") to carry out an actuarial valuation of the Derbyshire Pension Fund ("the Fund") as at 31 March 2019 as required under Regulation 62 of the Local Government Pension Scheme Regulations 2013 ("the Regulations").

The actuarial valuation is a risk management exercise with the purpose of reviewing the current funding plans and setting contribution rates for the Fund's participating employers for the period from 1 April 2020 to 31 March 2023. This report summarises the outcomes of the valuation and the underlying advice provided to the Administering Authority throughout the valuation process.

This summary report is the culmination of other communications in relation to the valuation, in particular:

- Our <u>2019 valuation toolkit</u> which sets out the methodology used when reviewing funding plans:
- Our papers dated March 2019 and August 2019 which discuss the valuation assumptions;
- Our Initial Results Report dated November 2019 which outlines the whole fund results and inter-valuation experience;
- The Funding Strategy Statement which details the approach taken to adequately fund the current and future benefits due to members.

Reliances and Limitations

This report has been prepared for the sole use of Derbyshire County Council in its role as Administering Authority of the Fund to provide an actuarial valuation of the Fund as required under the Regulations. It has not been prepared for any other third party or for any other purpose. We make no representation or warranties to any third party as to the accuracy or completeness of this report, no reliance should be placed on this report by any third party and we accept no responsibility or liability to any third party in respect of it.

Hymans Robertson LLP is the owner of all intellectual property rights in this report. All such rights are reserved.

The totality of our advice complies with the Regulations as they relate to actuarial valuations.

The following Technical Actuarial Standards¹ are applicable in relation to this report and have been complied with where material:

- TAS 100 Principles for technical actuarial work;
- TAS 300 Pensions.

¹ Technical Actuarial Standards (TASs) are issued by the Financial Reporting Council (FRC) and set standards for certain items of actuarial work.

Use of this report by other parties

This report is addressed to the Administering Authority of the Fund only. We appreciate that other parties may also seek information about the 2019 valuation process and methodology. We would encourage such parties to refer to the following publicly available documents for further information:

- The Fund's Funding Strategy Statement;
- The Fund's Investment Strategy Statement;
- Published meeting papers and minutes for the quarterly meetings of the Fund's Pensions Committee.

Considering these papers alongside this valuation report will provide a more complete view of the Fund's funding strategy and decision-making process surrounding this. These documents are available on the Fund's website or on request.

2 Valuation approach

Employer contribution rates

The purpose of the valuation is to review the current funding strategy and ensure the Fund has a contribution plan and investment strategy in place that will enable it to pay members' benefits as they fall due.

Valuations for open defined benefit multi-employer pension funds such as the Derbyshire Pension Fund are complex. Firstly, the time horizons are very long; benefits earned in the LGPS today will be paid out over a period of the next 80 years or more, and new members will continue to join in the future. Secondly, as they depend on unknowns such as future inflation and life expectancy, the actual value of future benefit payments is uncertain. Finally, to keep contributions affordable, the Fund invests in return seeking assets which have higher levels of future volatility.

Given the above and that the future cannot be predicted with certainty, employer contribution rates can only ever be an estimate. However, the valuation approach adopted uses an understanding of the Fund, and the uncertainties and risks discussed above, to quantify the likelihood of the contribution plan and investment strategy for each employer being sufficient to fund future benefits.

This is achieved in practice by following the process outlined below.

Step 1: The Fund sets a funding target (or funding basis) for each employer which defines the estimated amount of assets to be held to meet the future benefit payments.

- Step 2: The Fund sets the funding time horizon over which the funding target is to be achieved.
- Step 3: The Fund sets contributions that give a sufficiently high likelihood of meeting the funding target over the set time horizon.

These three steps are central to the "risk-based" approach to funding which is described in Guide 5 of our 2019 valuation toolkit².

The risk-based approach uses an Asset Liability Model (described in Guide 6) of the 2019 valuation toolkit) to project each employer's future benefit payments, contributions and investment returns into the future under 5,000 possible economic scenarios. Future inflation (and therefore benefit payments) and investment returns for each asset class (and therefore asset values) are variables in the projections. Further details of these variables are provided in Appendix 2. The investment strategy underlying the projection of employer asset values is provided in Appendix 1.

By projecting the evolution of an employer's assets and benefit payments 5,000 times, a contribution rate can be set that results in a sufficient number of the future projections being successful i.e. meeting the funding target by the funding time horizon.

The risk-based approach to setting employer contributions allows the Fund and its employers to understand and quantify the level of risk inherent in funding plans, something that is not possible using a single set of assumptions alone.

Further detail on the approach to calculating contributions for individual employers, including the parameters used in the three steps for each type of employer, is set out in the Funding Strategy Statement dated March 2020.

 $^{^{\}mathbf{2}} \ \text{https://www.hymans.co.uk/media/uploads/LGPS}_2019_Valuation_Toolkit_Guides.pdf$

Funding position as at 31 March 2019

The valuation also offers an opportunity to measure the Fund's funding position as at 31 March 2019. Whilst this measurement has limited insight into understanding the long term ability to be able to pay members' benefits, it is a useful summary statistic.

For the purposes of this valuation we have adopted a "mark to market" approach, for measuring the funding position, meaning that the Fund's assets have been taken into account at their market value and the liabilities have been valued by reference to a single set of assumptions based on market indicators at the valuation date. These assumptions are detailed in Appendix 2. As we have taken a market-related approach to the valuation of both the assets and the liabilities, we believe that they have been valued on a consistent basis.

Significant events

The figures in this report are based on our understanding of the benefit structure of the LGPS in England and Wales as at 31 March 2019. Details can be found at http://www.lgpsregs.org/.

McCloud ruling

The LGPS benefit structure is currently under review following the Government's loss of the right to appeal the McCloud and other similar court cases. At the time of writing, the format and scope of any benefit changes in light of the McCloud ruling is still unknown. In line with the advice issued by the Scheme Advisory Board in May 2019, the following allowance has been made at the valuation for the McCloud ruling:

- Employer contribution rates: additional prudence in funding plans via an increase in the likelihood of success (step 3) when setting contribution rates;
- Measurement of funding position at 31 March 2019: no allowance.

Further details of the approach taken are set out in Section 2.7 of the Funding Strategy Statement.

Indexation and equalisation of Guaranteed Minimum Pensions (GMP)

As a result of the Government's introduction of a single-tier state pension (STP) there is currently uncertainty around who funds certain elements of increases on GMPs for members reaching State Pension Age after 6 April 2016.

As part of the introduction of STP, the Government confirmed that public service pension schemes, including the LGPS, will be responsible for funding all increases on GMP as an 'interim solution'. In their <u>January 2018</u> <u>consultation response</u>, HM Treasury confirmed that the 'interim solution' will continue to remain in place up to 5 April 2021. Thereafter the Government's preferred approach is to convert GMP to scheme pension.

For the 2019 valuation, given the Government's preference for conversion to scheme benefits, we have assumed that all increases on GMPs for members reaching State Pension Age after 6 April 2016 will be paid for by LGPS employers. This has served to increase the value placed on the liabilities.

The Government have also stated that their preferred long term indexation solution of converting GMP to scheme pension will also meet the requirements of equalisation.

3 Valuation results

Employer contribution rates

The key objective of the Fund is to set employer contributions that are likely to be sufficient to meet both the cost of new benefits accruing and to address any funding surplus or deficit relative to the funding target over the agreed time horizon. A secondary objective is to maintain relatively stable employer contribution rates.

In order to meet the above objectives, the methodology set out in Section 2 has been used to set employer contributions from 1 April 2020.

Employer contributions are made up of two elements:

- a) the estimated cost of future benefits being built up each year, after deducting members' own contributions and including an allowance for the Fund's administration expenses. This is referred to as the "Primary rate", and is expressed as a percentage of members' pensionable pay; plus
- an adjustment for the difference between the Primary rate above, and the total contribution the employer needs to pay, referred to as the "Secondary rate". In broad terms, the Secondary rate is in respect of benefits already accrued at the valuation date. The Secondary rate may be expressed as a percentage of pay and/or a monetary amount in each year.

The Primary rate and Secondary rate for every contributing employer in the Fund is set out in the Rates and Adjustments Certificate in Appendix 3.

Each employer has been certified primary and secondary contributions that are appropriate for that employer's circumstances and which reflects that employer's experience. However, broadly speaking:

- Primary contribution rates have been subject to some upwards pressure as a result of a weaker outlook for future investment returns and the additional prudence built into funding plans to allow for the McCloud ruling;
- Secondary contributions have decreased as employer assets have increased since 31 March 2016, reducing any extra contributions required in respect of benefits accrued to the valuation date. The impact of this on secondary contributions has been partially offset by the additional prudence built into funding plans to allow for the McCloud ruling.

The table below summarises the whole fund Primary and Secondary Contribution rates at this valuation. The Primary rate is the payroll weighted average of the underlying individual employer primary rates and the Secondary rate is the total of the underlying individual employer secondary rates, calculated in accordance with the Regulations and CIPFA guidance. The whole fund Primary and Secondary contributions calculated at the 2016 valuation of the Fund are shown for comparison.

| | | aluation ch 2016 | | aluation ch 2019 |
|-------------------------|---------|---------------------|---------|---------------------|
| Primary Rate (% of pay) | 17 | .1% | 18. | .5% |
| Secondary Rate (£) | 2017/18 | 19,396,000 | 2020/21 | 17,432,000 |
| | 2018/19 | 19,316,000 | 2021/22 | 17,752,000 |
| | 2019/20 | 19,224,000 | 2022/23 | 18,079,000 |

The Primary rate includes an allowance of 0.4% of pensionable pay for the Fund's expenses (0.3% at the 2016 valuation).

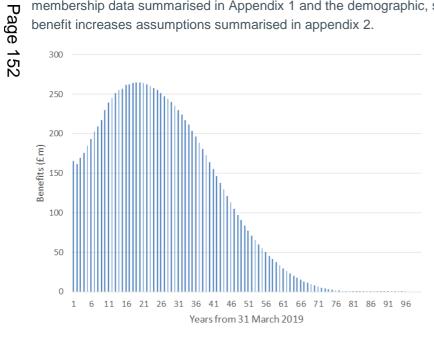
The total expected contributions to be received by the Fund over the period 1 April 2020 to 31 March 2023 is higher overall in monetary terms than the expected contributions over the period 1 April 2017 to 31 March 2020.

The average employee contribution rate is 6.3% of pensionable pay (6.1% at the 2016 valuation).

Funding position as at 31 March 2019

The funding position is a summary statistic often quoted to give an indication of the health of the fund. It is limited as it provides only a snapshot in time and is based on a single set of assumptions about the future. To measure the funding position at 31 March 2019, we compare the value of the Fund's assets on that date against the expected cost (including an allowance for future investment returns) of all the future benefit payments accrued up to the valuation date (the liabilities).

The chart below details the projected future benefit payments based on the membership data summarised in Appendix 1 and the demographic, salary and benefit increases assumptions summarised in appendix 2.

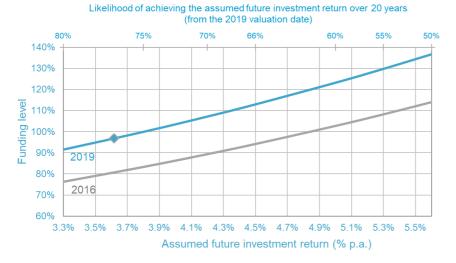


Using an assumption about the future investment return generated from the Fund's assets then allows a value to be placed on these payments in today's money; the liabilities. The higher the assumed investment return, the lower the liability value and therefore the higher the funding level.

The value placed on the liabilities is extremely sensitive to the investment return assumption. Based on the Fund's current investment strategy (detailed in Appendix 1) and the same model used in the contribution rate calculations, it is estimated that:

- There is a 50% likelihood of the Fund's investments achieving at least an annual return of 5.6% p.a. over the next 20 years;
- There is a 75% likelihood of the Fund's investments achieving at least an annual return of 3.8% p.a. over the next 20 years; and
- There is an 80% likelihood of the Fund's investments achieving at least an annual return of 3.3% p.a. over the next 20 years.

The following chart shows how the funding level varies with the future investment return assumption (blue line). For comparison, the funding level associated with the same choice of investment return assumption at the 2016 valuation is also shown (grey line).



From this chart, we can see that:

- Regardless of the investment return assumption used, there has been a
 genuine improvement in the funding position at 31 March 2019 compared
 to the last valuation, reflecting an increase in the assets held today per
 pound of benefit to be paid out in future;
- The funding position would be 100% if future investment returns were around 3.8% p.a. (at 2016, the investment return would have needed to be 4.9% p.a.). The likelihood of the Fund's assets yielding at least this return is around 75%.
- If future investment returns were 5.6% p.a. then the Fund currently holds sufficient assets to meet 135% of the accrued liabilities. The likelihood of the Fund's assets yielding at least this return is 50%. 135% can therefore be considered the "best estimate" funding position.

Reported funding position

The valuation outputs are more meaningful when stakeholders can understand the likelihood, and hence the level of prudence, attached to them. The above chart does this for the measurement of the funding position.

However, there is still a requirement to report a single funding position at 31 March 2019. This reported position must include a margin of prudence.

For the purpose of reporting a funding level and an associated funding surplus/deficit for the 2019 valuation, an investment return of 3.6% p.a. has been used. It is estimated that the Fund's assets have a 77% likelihood of achieving this return.

The resulting funding position is as follows:

| Valuation Date | 31 March 2016 | 31 March 2019 |
|--------------------------|---------------|---------------|
| Past Service Liabilities | (£m) | (£m) |
| Employees | 1,703 | 2,019 |
| Deferred Pensioners | 758 | 923 |
| Pensioners | 1,776 | 2,150 |
| Total Liabilities | 4,236 | 5,092 |
| Assets | 3,672 | 4,929 |
| Surplus / (Deficit) | (564) | (163) |
| Funding Level | 87% | 97% |

There has been an improvement in the reported funding level since 31 March 2016 from 87% to 97% and a reduction in the funding deficit from £564m to £163m.

A breakdown of the key factors that have influenced the reported funding position from 31 March 2016 to 31 March 2019 are detailed overleaf.

| Change in the surplus/deficit position | Assets (£m) | Liabilities (£m) | Surplus / (Deficit) (£m) |
|---|-------------|------------------|--------------------------|
| Last valuation at 31 March 2016 | 3,672 | 4,236 | (564) |
| Cashflows | | | |
| Employer contributions paid in | 393 | | 393 |
| Employee contributions paid in | 116 | | 116 |
| Benefits paid out | (464) | (464) | 0 |
| Net transfers into / out of the Fund* | (5) | | (5) |
| Other cashflows (e.g. Fund expenses) | (8) | | (8) |
| Expected changes in membership | | | |
| Interest on benefits already accrued | | 536 | (536) |
| Accrual of new benefits | | 530 | (530) |
| Membership experience vs expectations | | | |
| Salary increases less than expected | | (6) | 6 |
| Benefit increases less than expected | | (1) | 1 |
| Early retirement strain (and contributions) | 6 | 5 | 1 |
| Ill health retirement gain | | (24) | 24 |
| Early leavers greater than expected | | (4) | 4 |
| Pensions ceasing greater than expected | | (13) | 13 |
| Commutation greater than expected | | (5) | 5 |
| Other membership experience | | (20) | 19 |
| Changes in market conditions | | | |
| Investment returns on the Fund's assets | 1,219 | | 1,219 |
| Changes in future inflation expectations | | 132 | (132) |
| Changes in actuarial assumptions | | | |
| Change in demographic assumptions (excl. longevity) | | (17) | 17 |
| Change in longevity assumptions | | (164) | 164 |
| Change in salary increase assumption | | 14 | (14) |
| Change in discount rate | | 356 | (356) |
| This valuation at 31 March 2019 | 4,929 | 5,092 | (163) |

^{*}We have insufficient data to value the impact on the liabilities as a result of all transfers in / out.

Note that figures may not sum due to rounding

Since the previous valuation, various events have taken place which affect the value placed on the liabilities, including:

- There is an interest cost of £536m. This is broadly three years of compound interest (or expected investment returns) at 4.0% p.a. applied to the previous valuation liability value of £4,236m. The benefits that have been accrued to the valuation date are three years closer to payment at 31 March 2019 than they were at 31 March 2016, meaning there is a shorter period for future investment returns to help meet this cost. This serves to increase the value placed on the liabilities;
- The areas of membership experience that have had the greatest impact on the surplus/deficit position of the Fund are set out below, together with their impact on the liabilities:

| | Expected | Actual | Difference | Impact on Liabilities |
|--------------------------------------|----------|--------|------------|--------------------------|
| Pre-retirement experience | | | | |
| Early leavers (no of lives) | 9,512 | 11,327 | 1,815 | Positive |
| Ill health retirements (no of lives) | 321 | 135 | (186) | Positive |
| Salary increases (p.a.) | 3.3% | 3.1% | (0.2%) | Positive |
| Post-retirement experience | | | | |
| Benefit increases (p.a.) | 2.1% | 2.1% | (0.0%) | Broadly neutral |
| Pensions ceasing (£m) | 8,593 | 9,394 | 801 | Positive |

- The changes to the longevity assumptions used for the valuation have resulted in a modest reduction in life expectancies. This has served to reduce the liabilities by £164m;
- The assumed rate of future CPI inflation has increased from 2.1% p.a. at 31 March 2016 to 2.3% p.a. at 31 March 2019. This has increased the value of the liabilities by £132m;
- The assumed rate of future investment returns has decreased from 4.0%
 p.a. to 3.6% p.a.. This has increased the value of the liabilities by £356m.

There has been a large increase in the value of the Fund's assets since the previous valuation because:

• The investment return on the Fund's assets for the period 31 March 2016 to 31 March 2019 was 33.3%. This has increased the value of the assets by £1,219m.

Projection of the funding position

The progression of the funding position will depend on various factors including future asset performance, economic conditions and membership movements. If the financial and demographic assumptions made at this valuation are borne out in practice, and there are no changes to the valuation assumptions, we project that the funding level at the 2022 valuation date will be approximately the same as at 31 March 2019. This allows for contributions to be paid as described in Appendix 3.

Sensitivity analysis

The results set out in this report are based on assumptions about the future. The actual cost of providing the benefits will depend on the actual experience of the Fund, which could be significantly better or worse than assumed. This section discusses the sensitivity of the results to some of the key assumptions.

Sensitivity of contribution rates to changes in assumptions

The approach to setting employer contribution rates mitigates the limitation of relying on one particular set of assumptions about the future by recognising the uncertainty around future investment returns and inflation. Therefore, there is no need to carry out additional analysis of the sensitivity of contribution rates to changes in financial assumptions.

The contribution rates are sensitive to changes in demographic assumptions. The results in this section in relation to the funding position can be broadly applied to the contribution rates.

Sensitivity of the funding position to changes in assumptions

The reported valuation funding position is based on one set of actuarial assumptions about the future of the Fund. If all of the assumptions made were exactly borne out in practice then the liability value presented in this report would represent the actual cost of providing accrued benefits from the Fund as it stands at 31 March 2019.

Sensitivity of the funding position to future investment returns

The chart in Section 3 details how the funding position varies with the future assumed investment return.

Sensitivity of the funding position to future inflation

Pensions (both in payment and in deferment) in the LGPS increase annually in line with CPI. Furthermore, benefits accrued in the CARE scheme are revalued annually in line with CPI. If future CPI inflation is higher than the assumed rate of 2.3% p.a. then the cost of the benefits will be higher than we have set out in Section 3.

The table quantifies the impact on the funding position of varying the benefit increases and CARE revaluation (CPI) assumption below.

| CPI Assumption | Surplus/(Deficit) | Funding Level |
|----------------|-------------------|---------------|
| % pa | (£m) | % |
| 2.1% | (31) | 99% |
| 2.3% | (163) | 97% |
| 2.5% | (295) | 94% |

Sensitivity of the funding position to life expectancy

The main area of demographic risk is people living longer than expected. If long term mortality rates fall at a rate of 1.5% p.a. (compared to the assumed 1.25% p.a.) then members will live slightly longer than we have assumed in this valuation. The impact on the funding position is detailed below.

| Long term rate of improvement | Surplus/(Deficit) | Funding Level |
|-------------------------------|-------------------|---------------|
| % pa | (£m) | % |
| 1.25% | (163) | 97% |
| 1.50% | (205) | 96% |

Other demographic risks to consider

There are other risk factors which would have an impact on the funding position. Examples of these include the level of ill health retirements, withdrawals from the scheme and take up of the 50:50 option. These are probably unlikely to change in such a way that would rank them as amongst the highest risks facing the Fund and therefore there has been no further quantification of their risk.

Comment on sensitivity analysis

Note that the tables above show the effect of changes to each assumption in isolation. In reality, it is perfectly possible for the experience of the Fund to deviate from more than one of the assumptions simultaneously and so the precise effect on the funding position is therefore more complex. Furthermore, the range of assumptions shown here is by no means exhaustive and should not be considered as the limits of how extreme experience could actually be.

Other risks to consider

Regulatory, Administration and Governance risks

As well as financial and demographic risks, the Fund also faces:

- Regulatory risks central government legislation could significantly change the cost of the scheme in the future; and
- Administration and governance risk failures in administration processes could lead to incorrect data and inaccuracies in the actuarial calculations.

These risks are considered and monitored by the Fund as part of its ongoing risk management framework.

Resource and environment risks

The Fund is exposed to risks relating to future resource constraints and environmental changes. These risks may prove to be material.

Climate change is a complex issue for the Fund. Adverse future climate change outcomes will have an impact on future longevity, inflation, government and corporate bond yields and equity returns.

Whilst there has been no explicit increase in certified employer contribution related to climate change, these risks have been considered by the Administering Authority when assessing the output from contribution rate ('comPASS') modelling. These risks were explored further as part of the stabilisation modelling commissioned by the Awarding Authority.

Risk management

Employers participating in the Fund are exposed to a number of risks. These include, but are not limited to:

- Investment risk;
- Market risks;
- Demographic risks;
- Regulatory risks;
- Administration and Governance risks;
- Resource and Environmental risks.

The Funding Strategy Statement has further details about these risks and what actions the Fund takes to monitor, mitigate and manage each one.

Post calculation events

There has recently been significant volatility in the financial markets as a result of the economic uncertainty associated with the COVID-19 pandemic. At 29 March 2020, we estimate that the whole fund investment return since 31 March 2019 would be in the region of -5% to -10%.

As an open scheme, with a strong covenant, the LGPS as a whole is able to take a long term outlook when considering the general funding implications of such external events. For employers who have a very short time horizon, recent market falls may be more immediately impactful and the administering authority may take steps to engage individually with these employers about the deteriorated funding position.

At the time of writing, it is very uncertain how this will affect the long term economy and investment returns. Therefore no allowance has been made for this ongoing volatility in the 2019 valuation results or contribution rates detailed in the Rates & Adjustments Certificate. This situation will be monitored closely to understand what impact it may have on the Fund and participating employers.

5 Final comments

The Fund's valuation operates within a broader framework, and this document should therefore be considered alongside the following:

- the Funding Strategy Statement, which in particular highlights how different types of employer in different circumstances have their contributions calculated:
- the Investment Strategy Statement, which sets out the investment strategy for the Fund;
- the general governance of the Fund, such as meetings of the Pensions Committee and Local Pension Board, decisions delegated to officers, the Fund's business plan, etc;
- the Fund's risk register; and
- the information the Fund holds about the participating employers.

Intervaluation employer events

New employers joining the Fund

Any new employers or admission bodies joining the Fund should be referred to the Fund Actuary to assess the required level of contribution. Depending on the number of transferring members the ceding employer's rate may also need to be reviewed.

Cessations and bulk transfers

Any employer who ceases to participate in the Fund should be referred to us in accordance with Regulation 64 of the Regulations.

Any bulk movement of scheme members:

- involving 10 or more scheme members being transferred from or to another LGPS fund: or
- involving 2 or more scheme members being transferred from or to a non-LGPS pension arrangement;

should be referred to us to consider the impact on the Fund.

Valuation frequency

Under the provisions of the LGPS regulations, the next formal valuation of the Fund is due to be carried out as at 31 March 2022 where contribution rates payable from 1 April 2023 will be set.

Barry Dodds

Richard Warden

Fellows of the Institute and Faculty of Actuaries

For and on behalf of Hymans Robertson LLP

31 March 2020



Appendices

Appendix 1 – Data

Membership data as at 31 March 2019

A summary of the membership data provided by the Administering Authority for the purposes of the valuation at 31 March 2019 is shown below. The corresponding membership data from the previous valuation is also shown for reference.

| Whole Fund Membership Data | Last Valuation 31 March 2016 | This Valuation 31 March 2019 |
|--------------------------------------|---------------------------------|---------------------------------|
| Employee members | | |
| Number | 34,762 | 37,033 |
| Total Actual Pay (£000) | 574,275 | 626,894 |
| Total Accrued Pension (£000) (80ths) | - | 33,246 |
| Total Accrued Pension (£000) (60ths) | - | 31,786 |
| Total Accrued Pension (£000) (CARE) | 20,328 | 49,826 |
| Average Age (liability weighted) | 51.4 | 51.7 |
| Future Working Lifetime (years) | 9.2 | 8.2 |
| Deferred pensioners | | |
| Number | 33,131 | 36,160 |
| Total Accrued Pension (£000) | 43,586 | 50,035 |
| Average Age (liability weighted) | 50.7 | 50.9 |
| Pensioners | | |
| Number | 26,513 | 29,860 |
| Total pensions in payment (£000) | 110,609 | 131,207 |
| Average Age (liability weighted) | 68.0 | 68.3 |
| Average duration of liabilities | 16.7 | 18.2 |

Benchmark investment strategy

The following investment strategy, extracted from the Fund's Investment Strategy Statement, has been used to assess employer contribution rates and to set the future investment return assumption as at 31 March 2019:

| | Current |
|--------------------------------|----------|
| % allocation | strategy |
| UK equities | 16% |
| Overseas equities | 37% |
| Infrastructure | 8% |
| Private equity | 4% |
| Total growth assets | 65% |
| Cash | 2% |
| Index-linked gilts | 6% |
| Fixed interest gilts | 6% |
| UK Corporate Bonds | 6% |
| Total protection assets | 20% |
| Multi asset credit | 6% |
| Property | 9% |
| Total income generating assets | 15% |
| Grand total | 100% |

Other data used in this valuation

We have also relied upon asset and accounting data from the Fund's published 2016/17, 2017/18 and 2018/19 Annual Report and Accounts. Employer level cashflow data was provided by the Administering Authority and reconciled against the information shown in these documents.

Comment on data quality

The results of the valuation are dependent on the quality of the data provided to us by the Administering Authority for the specific purpose of this valuation. We have carried out validations on the membership data provided to ensure it is fit for the purpose of the valuation. Further details can be found in our report issued to the Administering Authority entitled "Data report for 2019 valuation", dated March 2020. We believe the membership data is fit for the purposes of this valuation.

Appendix 2 – Assumptions

Financial assumptions used to set employer contribution rates

Projection of assets and benefit payments

The approach to setting employer contribution rates does not rely on a single set of assumptions but involves the projection of an employer's future benefit payments, contributions and investment returns under 5,000 future economic scenarios. In this modelling, inflation (and therefore benefit payments) and investment returns for each asset class (and employer asset values) are variables and take different values in each projection.

The model underlying these projections is Hymans Robertson's proprietary economic model, the Economic Scenario Service (ESS). The ESS is a complex model to reflect the interactions and correlations between different asset classes and wider economic variables. The table below shows the calibration of the model as at 31 March 2019. All returns are shown net of fees and are the annualised total returns over 5, 10 and 20 years, except for the yields which refer to simulated yields at that time horizon.

| | | Annualised total returns | | | | | | | | | |
|-------------|-----------------------------|--------------------------|--------------------------------------|--|-----------|--------------------|----------|---------------------|-----------|-----------------------|------------------|
| | | Cash | Index Linked Gilts (medium) | Fixed Interest Gilts (medium) | UK Equity | Overseas Equity | Property | Corp Medium A | Inflation | 17 year real yield | 17 year yield |
| | 16th %'ile | -0.4% | -2.3% | -2.9% | -4.1% | -4.1% | -3.5% | -2.7% | 1.9% | -2.5% | 0.8% |
| 5 years | 50th %'ile | 0.7% | 0.5% | 0.3% | 4.0% | 4.1% | 2.4% | 0.8% | 3.3% | -1.7% | 2.1% |
| > | 84th %'ile | 2.0% | 3.3% | 3.4% | 12.7% | 12.5% | 8.8% | 4.0% | 4.9% | -0.8% | 3.6% |
| 1755 | 16th %'ile | -0.2% | -1.8% | -1.3% | -1.5% | -1.4% | -1.5% | -0.9% | 1.9% | -2.0% | 1.2% |
| 10 years | 50th %'ile | 1.3% | 0.0% | 0.2% | 4.6% | 4.7% | 3.1% | 0.8% | 3.3% | -0.8% | 2.8% |
| × | 84th %'ile | 2.9% | 1.9% | 1.7% | 10.9% | 10.8% | 7.8% | 2.5% | 4.9% | 0.4% | 4.8% |
| 983 | 16th %'ile | 0.7% | -1.1% | 0.1% | 1.2% | 1.3% | 0.6% | 0.7% | 2.0% | -0.7% | 2.2% |
| 20 years | 50th %'ile | 2.4% | 0.3% | 1.0% | 5.7% | 5.8% | 4.3% | 1.9% | 3.2% | 0.8% | 4.0% |
| * | 84th %'ile | 4.5% | 2.0% | 2.0% | 10.3% | 10.4% | 8.1% | 3.0% | 4.7% | 2.2% | 6.3% |
| | Volatility (Disp) (1 yr) | 1% | 7% | 10% | 17% | 17% | 14% | 11% | 1% | | |

Funding target

At the end of an employer's funding time horizon, an assessment is made – for each of the 5,000 projections – of how the assets held compare to the value of assets required to meet the future benefit payments (the funding target). To value the cost of future benefits, assumptions are made about the following financial factors:

- Benefit increases and CARE revaluation:
- Salary growth;
- Investment returns (the "discount rate").

Each of the 5,000 projections represents a different prevailing economic environment at the end of the funding time horizon and so a single, fixed value for each assumption is not appropriate for every projection. Therefore, instead of using a fixed value, each assumption is set with reference to an economic indicator. The economic indicators used are:

| Assumption | Economic Indicator |
|---------------------------|---|
| Benefit increases | Future CPI inflation expectations |
| CARE revaluation | Future CPI inflation expectations |
| Salary increases | As above plus 0.7% p.a. |
| Future investment returns | Prevailing risk free rate of return plus margin |

The Fund has two funding bases which will apply to different employers depending on their type. Each funding basis uses a different margin in the future investment return assumption.

| Funding Basis | Margin above risk-free rate |
|-----------------------|-----------------------------|
| Ongoing participation | 1.8% |
| Gilts exit | 0% |

Financial assumptions used to assess the funding position Salary and Benefit Increases

| Financial Assumptions (p.a.) | 31 March 2016 | 31 March 2019 |
|--|---------------|---------------|
| Benefit increases and CARE revaluation (CPI) | 2.1% | 2.3% |
| Salary increases | 2.7%* | 3.0%** |

^{*}CPI plus 0.6%

Investment Return

The reported funding position is based on an assumed future investment return of 3.6% p.a.. The derivation of this assumption is set out in Section 3. The equivalent assumption at the 2016 valuation was 4.0% p.a.. This was derived in a different way, please see the 2016 valuation report for further details.

Demographic assumptions

The same demographic assumptions are used in setting contribution rates and assessing the current funding position.

Longevity

As the fund is a member of Club Vita, the baseline longevity assumptions are a bespoke set of Vita Curves that are tailored to fit the membership profile of the Fund. These curves are based on the data the Fund has provided us with for the purposes of this valuation.

We have also allowed for future improvements in mortality based on the CMI 2018 model with an allowance for smoothing of recent mortality experience and a long term rate of improvement of 1.25% p.a. for both women and men.

| Longevity Assumptions | 31 March 2016 | 31 March 2019 |
|-----------------------|----------------------|----------------------|
| Baseline Longevity | Club Vita | Club Vita |
| Future Improvements | CMI2013, Peaked, | CMI2018, Smoothed, |
| | 1.25% p.a. long term | 1.25% p.a. long term |

Full details are available on request.

The longevity assumptions result in the following typical future life expectancies from age 65 (figures for 2016 shown for comparison):

| Assumed Life Expectancy | 31 March 2016 | 31 March 2019 | | |
|-------------------------|---------------|---------------|--|--|
| Male | | | | |
| Pensioners | 21.9 years | 21.6 years | | |
| Non-pensioners | 23.9 years | 22.6 years | | |
| Female | | | | |
| Pensioners | 24.4 years | 23.7 years | | |
| Non-pensioners | 26.5 years | 25.1 years | | |

Non-pensioners are assumed to be aged 45 at the valuation date

Other demographic assumptions

We are in the unique position of having a very large local authority data set from which to derive our other demographic assumptions. We have analysed the trends and patterns that are present in the membership of local authority funds and tailored our demographic assumptions to reflect LGPS experience. The resulting demographic assumptions are as follows:

^{**}CPI plus 0.7%

| Demographic Assumptions | |
|------------------------------|---|
| Retirements in normal health | We have adopted the retirement age pattern assumption as used for the purpose of the 2016 LGPS cost cap valuation. Further details are available on request. |
| Death in Service | See sample rates below |
| Retirements in ill health | See sample rates below |
| Withdrawals | See sample rates below |
| Promotional salary increases | See sample increases below |
| Family details | A varying proportion of members are assumed to have a dependant at retirement or on earlier death. For example, at age 60 this is assumed to be 90% for males and 85% for females. The dependant of a male member is assumed to be 3 years younger than him and the dependant of a female member is assumed to be 3 years older than her. |
| Commutation | 50% of future retirements elect to exchange pension for additional tax free cash up to HMRC limits for service to 1 April 2008 (equivalent 75% for service from 1 April 2008). |
| 50:50 option | 0.5% of members (uniformly distributed across the age, service and salary range) will choose the 50:50 option. |

Sample rates for demographic assumptions

Males

| | | | Incidence | per 1000 a | ctive memb | oers per a | nnum | | |
|-----|-----------------|-------------------------|-----------|------------|------------|------------|------------------|------|--|
| Age | Salary Scale | Death Before Retirement | Withd | rawals | III Healt | h Tier 1 | Γier 1 III Healt | | |
| | | FT & PT | FT PT | | FT | FT PT | | PT | |
| 20 | 105 | 0.21 | 252.69 | 527.36 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 25 | 117 | 0.21 | 166.91 | 348.34 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 30 | 131 | 0.26 | 118.43 | 247.12 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 35 | 144 | 0.30 | 92.53 | 193.05 | 0.10 | 0.07 | 0.02 | 0.01 | |
| 40 | 150 | 0.51 | 74.50 | 155.38 | 0.16 | 0.12 | 0.03 | 0.02 | |
| 45 | 157 | 0.85 | 69.98 | 145.92 | 0.35 | 0.27 | 0.07 | 0.05 | |
| 50 | 162 | 1.36 | 57.68 | 120.15 | 0.90 | 0.68 | 0.23 | 0.17 | |
| 55 | 162 | 2.13 | 45.42 | 94.66 | 3.54 | 2.65 | 0.51 | 0.38 | |
| 60 | 162 | 3.83 | 40.49 | 84.34 | 6.23 | 4.67 | 0.44 | 0.33 | |
| 65 | 162 | 6.38 | 0.00 | 0.00 | 11.83 | 8.87 | 0.00 | 0.00 | |

Females

| | | | Incidence | per 1000 a | ctive memb | oers per ai | nnum | |
|-----|-----------------|----------------------------|-----------|------------|------------|-------------|-----------|----------|
| Age | Salary Scale | Death Before Retirement | Withd | rawals | III Healt | h Tier 1 | III Healt | h Tier 2 |
| | | FT & PT | FT | PT | FT | PT | FT | PT |
| 20 | 105 | 0.12 | 204.63 | 290.53 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 117 | 0.12 | 137.69 | 195.46 | 0.07 | 0.07 | 0.02 | 0.01 |
| 30 | 131 | 0.18 | 115.42 | 163.82 | 0.09 | 0.10 | 0.03 | 0.02 |
| 35 | 144 | 0.30 | 99.62 | 141.34 | 0.18 | 0.19 | 0.05 | 0.04 |
| 40 | 150 | 0.48 | 82.91 | 117.60 | 0.27 | 0.29 | 0.08 | 0.06 |
| 45 | 157 | 0.77 | 77.37 | 109.72 | 0.36 | 0.39 | 0.10 | 0.08 |
| 50 | 162 | 1.13 | 65.23 | 92.41 | 0.68 | 0.73 | 0.24 | 0.18 |
| 55 | 162 | 1.49 | 48.67 | 69.02 | 2.51 | 2.69 | 0.52 | 0.39 |
| 60 | 162 | 1.90 | 39.23 | 55.55 | 4.00 | 4.28 | 0.54 | 0.40 |
| 65 | 162 | 2.44 | 0.00 | 0.00 | 7.18 | 7.69 | 0.00 | 0.00 |

Prudence in assumptions

We are required to include a degree of prudence within the valuation. This has been achieved in both the setting of contributions and assessment of funding position.

Contribution rates

 Employer funding plans have been set such that the likelihood the employer's funding target is met by the end of the funding time horizon is more than 50%. The actual likelihood varies by employer. Further detail in is the Funding Strategy Statement.

Funding position

The Fund's investments have a 77% likelihood of returning at least the assumed return.

All other assumptions represent our "best estimate" of future experience.

The assumptions used in this valuation have been agreed with the Administering Authority and are set out in the Fund's Funding Strategy Statement dated 08 January 2020.

Appendix 3 – Rates and Adjustments certificate

In accordance with regulation 62(4) of the Regulations we have made an assessment of the contributions that should be paid into the Fund by participating employers for the period 1 April 2020 to 31 March 2023 in order to maintain the solvency of the Fund.

The method and assumptions used to calculate the contributions set out in the Rates and Adjustments certificate are detailed in the Funding Strategy Statement dated 08 January 2020 and in Appendix 2 of our report on the actuarial valuation dated 31 March 2020. These assumptions underpin our estimate of the number of members who will become entitled to a payment of pensions under the provisions of the LGPS and the amount of liabilities arising in respect of such members.

The table below summarises the whole fund Primary and Secondary Contribution rates for the period 1 April 2020 to 31 March 2023. The Primary rate is the payroll weighted average of the underlying individual employer primary rates and the Secondary rate is the total of the underlying individual employer secondary rates, calculated in accordance with the Regulations and CIPFA guidance.

| Whole Fund Contribution Rate | | |
|------------------------------|---------|------------|
| Primary Rate (% of pay) | 18. | 5% |
| Secondary Rate (£) | 2020/21 | 17,432,000 |
| | 2021/22 | 17,752,000 |
| | 2022/23 | 18,079,000 |

The required minimum contribution rates for each employer in the Fund are set out below.

| T |
|---------|
| aŭ |
| Ó |
| Ф |
| _ |
| <u></u> |

| | | | | | | Secon | dary Rate | | | | Total Contribution Rate | Rate |
|--------------|---|--|---|----------------|------------------------|----------------|--------------------------|----------------|------------------------|--|--|--|
| Employer | | Contributions currently | Primary Rate % 1 April 2020 - 31 March 2023 | 202 | 0/2021 | 202 | 21/2022 | 202 | 2/2023 | | | |
| code | Employer/Pool name | in payment 2019/2020 | | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| Councils | | | | | | | | 1 | | | | |
| | Derbyshire County Council ⁽¹⁾ | 14.5% plus £15,536,000 | 18.2% | -2.7% | £15,536,000 | -2.7% | £15,536,000 | -2.7% | £15,536,000 | 15.5% plus £15,536,000 | 15.5% plus £15,536,000 | 15.5% plus £15,536,000 |
| | | | | | | | | | | | | |
| | Derby City Council | 13.5% plus £6,981,000 | 17.6% | -3.1% | £6,981,000 | -3.1% | £6,981,000 | -3.1% | £6,981,000 | 14.5% plus £6,981,000 | 14.5% plus £6,981,000 | 14.5% plus £6,981,000 |
| 460 | ENGIE Services Ltd ⁽²⁾ | 20.6% | 28.0% | -3.0% | £0 | -3.0% | £0 | -3.0% | £0 | 25.1% | 25.1% | 25.1% |
| 479 | Action For Children ⁽²⁾ | 28.1% | 28.6% | -12.1% | £0 | -12.1% | £0 | -12.1% | £0 | 16.5% | 16.5% | 16.5% |
| | | | | | | | | | | | | |
| | High Peak Borough Council | 12.4% plus £1,833,000 | 18.3% | -4.9% | £1,833,000 | -4.9% | £1,833,000 | -4.9% | £1,833,000 | 13.4% plus £1,833,000 | 13.4% plus £1,833,000 | 13.4% plus £1,833,000 |
| 485 | Alliance Environmental Services | 16.9% | 18.3% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 18.3% | 18.3% | 18.3% |
| | | | | | | | | | | | | |
| | Erewash Borough Council | 13.1% plus £1,125,000 | 17.8% | -3.7% | £999,000 | -3.7% | £999,000 | -3.7% | £999,000 | 14.1% plus £999,000 | 14.1% plus £999,000 | 14.1% plus £999,000 |
| 499 | Parkwood Leisure (Erewash) ⁽²⁾ | 27.2% | 28.1% | -1.3% | £0 | -1.3% | £0 | -1.3% | £0 | 26.8% | 26.8% | 26.8% |
| | | 10.00/ 1.00/ | 47.00/ | 0.00/ | 0=01.005 | 0.007 | 0001.000 | | 0001.005 | 44.00/ 1 0004.555 | 1100/ 1 0001 | 44.00/ 1 0004.555 |
| | Derbyshire Dales District Council | 13.6% plus £645,000 | 17.6% | -3.0% | £561,000 | -3.0% | £561,000 | -3.0% | £561,000 | 14.6% plus £561,000 | 14.6% plus £561,000 | 14.6% plus £561,000 |
| 493 | Wealden Leisure Ltd (Freedom Leisure) (2) | 24.5% | 26.9% | -1.2% | 03 | -1.2% | £0 | -1.2% | £0 | 25.8% | 25.8% | 25.8% |
| 131 | Bolsover District Council | 13.9% plus £962.000 | 18.1% | -3.2% | £962,000 | -3.2% | £962.000 | -3.2% | £962.000 | 14.9% plus £962.000 | 14.9% plus £962.000 | 14.9% plus £962.000 |
| 131 | Chesterfield Borough Council | 13.9% plus £962,000 14.2% plus £1,991,000 | 18.1% | -3.2% | £962,000 £1,991,000 | -3.2% | £962,000 £1.991.000 | -3.2% | £962,000 £1,991,000 | 14.9% plus £962,000 15.2% plus £1,991,000 | 14.9% plus £962,000 15.2% plus £1,991,000 | 14.9% plus £962,000 15.2% plus £1,991,000 |
| 136 | North East Derbyshire District Council | 13.7% plus £1,591,000 | 18.0% | -2.5% | £1,527,000 | -2.5% | £1,991,000 £1,527,000 | -2.5% | £1,527,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 |
| 136 | South Derbyshire District Council | 13.7% plus £1,527,000 13.8% plus £678,000 | 17.6% | -3.3% | £1,527,000 £678,000 | -3.3% | £1,527,000 £678,000 | -3.3% | £1,527,000 £678,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 |
| 130 | Amber Valley Borough Council | 14.0% plus £1,057,000 | 18.3% | -3.3% | £1.057.000 | -3.3% | £1.057.000 | -3.3% | £1,057,000 | 15.0% plus £1,057,000 | 15.0% plus £1,057,000 | 15.0% plus £1,057,000 |
| 130 | Amber valley borough council | 14.078 plus £1,007,000 | 10.576 | -3.376 | 21,007,000 | -3.376 | 21,037,000 | -3.376 | 21,007,000 | 13.076 pius £1,037,000 | 13.076 plus £1,037,000 | 13.0 % pius £1,037,000 |
| | Town and Parish Councils (Pre 2001) | 23.8% | 18.4% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.2% | 18.2% | 18.2% |
| | Town and Parish Councils (Post 2001) | 17.2% | 19.1% | -0.3% | £0 | -0.3% | £0 | -0.3% | £0 | 18.8% | 18.8% | 18.8% |
| | Town and Farisin Godinois (Fost 2001) | 17.270 | 10.170 | 0.070 | 20 | 0.070 | 2.0 | 0.070 | 20 | 10.070 | 10.070 | 10.070 |
| Other Sched | uled Bodies | | | | | | | | | | | |
| 40 | Peak District National Park Authority | 14.0% plus £224,000 | 18.0% | -3.0% | £224.000 | -3.0% | £224,000 | -3.0% | £224,000 | 15.0% plus £224,000 | 15.0% plus £224,000 | 15.0% plus £224,000 |
| 123 | Derby Homes Ltd | 13.4% plus £290,000 | 17.5% | -3.1% | £290,000 | -3.1% | £290,000 | -3.1% | £290,000 | 14.4% plus £290,000 | 14.4% plus £290,000 | 14.4% plus £290,000 |
| | Rykneld Homes | 16.4% | 17.6% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 17.4% | 17.4% | 17.4% |
| 139 | Chesterfield Crematorium | 17.8% plus £29,000 | 18.0% | 0.8% | £29,000 | 0.8% | £29,000 | 0.8% | £29,000 | 18.8% plus £29,000 | 18.8% plus £29,000 | 18.8% plus £29,000 |
| | Police and Crime Commissioner for Derbyshire | 12.9% plus £1,465,000 | 17.3% | -3.4% | £1,465,000 | -3.4% | £1,465,000 | -3.4% | £1,465,000 | 13.9% plus £1,465,000 | 13.9% plus £1,465,000 | 13.9% plus £1,465,000 |
| 403 | Derbyshire Fire & Rescue | 13.2% plus £170,000 | 17.5% | -3.3% | £170,000 | -3.3% | £170,000 | -3.3% | £170,000 | 14.2% plus £170,000 | 14.2% plus £170,000 | 14.2% plus £170,000 |
| | C = 4.10.1 | | | | | | | | | | | |
| Further Educ | cation Establishments | 40 70/ -1 0745 000 | 04.00/ | 4.70/ | 00 | 0.00/ | 00 | 0.00/ | 00 | 40.00/ | 47.40/ | 40.40/ |
| | University of Derby Derby College | 12.7% plus £745,000 13.7% plus £441,000 | 21.0% 21.6% | -4.7% -5.1% | £0 £350,000 | -3.6% -4.1% | £0 £360,000 | -2.6% -3.1% | £0 £371,000 | 16.3% 16.5% plus £350,000 | 17.4% 17.5% plus £360,000 | 18.4% 18.5% plus £371,000 |
| | Chesterfield College | 13.7% plus £441,000 12.9% plus £158,000 | 21.5% | -5.1% | £350,000 £166,000 | -4.1% -5.2% | £360,000 £171.000 | -3.1% | £371,000 £176.000 | 15.0% plus £350,000 15.0% plus £166,000 | 17.5% plus £360,000 16.3% plus £171,000 | 17.6% plus £176,000 |
| | Chesterneld College | 12.9% plus £130,000 | 21.570 | -0.576 | 2100,000 | -3.276 | 2171,000 | -3.976 | 2170,000 | 13.0 % plus £100,000 | 10.376 plus £171,000 | 17.0% plus £170,000 |
| Community | Admission Bodies | | | | | | | | | | | |
| 120 | Futures Housing (Amber Valley Housing) | 23.9% plus £103.000 | 33,4% | 0.0% | £95,000 | 0.0% | £95,000 | 0.0% | £95.000 | 33,4% plus £95,000 | 33.4% plus £95.000 | 33.4% plus £95.000 |
| 185 | Belper Leisure Centre Ltd | 31.4% | 33.3% | 0.0% | £1,000 | 0.0% | £1,000 | 0.0% | £1,000 | 33.3% plus £1,000 | 33.3% plus £1,000 | 33.3% plus £1,000 |
| 404 | Derbyshire Student Residences Ltd | 25.8% | 27.7% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 27.7% | 27.7% | 27.7% |
| 457 | Derby Museums & Art Trust | 19.2% | 28.0% | -5.9% | £0 | -5.9% | £0 | -5.9% | £0 | 22.1% | 22.1% | 22.1% |
| 467 | Derby County Community Trust | 23.1% | 35.5% | 0.0% | £8,000 | 0.0% | £8,000 | 0.0% | £8,000 | 35.5% plus £8,000 | 35.5% plus £8,000 | 35.5% plus £8,000 |
| | 1 | | | | | | | | | | | |
| Transferee A | Admission Bodies | 10.00 | 00.007 | 40 =01 | 60 | 40 =01 | | 40 =01 | | 40.007 | 40.007 | 40.007 |
| 104 | Leisure Amber Valley | 13.8% | 30.2% | -16.5% | 03 | -16.5% | £0 | -16.5% | £0 | 13.8% | 13.8% | 13.8% |
| 124 | East Midlands Homes (Three Valleys Housing Ltd) | 22.3% plus £161,000 | 28.4% | -7.3% | 03 | -7.3% | £0 | -7.3% | £0 | 21.1% | 21.1% | 21.1% |
| 128 170 | Waterloo Housing Group Crich Tramway Museum | 28.1% plus £18,000 24.0% plus £15,000 | 30.2% 30.8% | -18.8% 0.0% | 03 03 | -18.8% 0.0% | £0 £0 | -18.8% 0.0% | £0 | 11.4% 30.8% | 11.4% 30.8% | 11.4% 30.8% |
| 170 | Crich Tramway Museum Chesterfield Care Group | 24.0% plus £15,000 25.2% | 28.8% | -25.5% | £0 | -25.5% | £0 | -25.5% | £0 | 30.8% | 30.8% | 30.8% |
| 414 | Veolia (Chesterfield Refuse) | 17.5% | 31.2% | -23.5% | £0 | -25.5% | £0 | -25.5% | £0 | 8.3% | 8.3% | 8.3% |
| 414 | V CORA (Oriosidificia Netase) | 17.570 | J1.2/0 | -22.070 | 2.0 | -22.070 | LU | -22.370 | 1.0 | 0.070 | 0.576 | 0.076 |

| | Employer/Pool name | | Primary Rate % 1 April 2020 - 31 March 2023 | | | Second | ary Rate | Total Contribution Rate | | | | |
|-------------|--|-------------------------|---|----------------|----------|----------------|----------|-------------------------|----------|----------------|----------------|----------------|
| Employer | | Contributions currently | | 2020/2021 | | 2021/2022 | | 2022 | /2023 | | | |
| code | | in payment 2019/2020 | | % of pay | | % of pay | | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| ansferee Ar | dmission Bodies continued | | | | | | | | | | | |
| 416 | VINCI (ex Norwest Holst) | 33.0% | 33.8% | -24.2% | £0 | -24.2% | £0 | -24.2% | £0 | 9.5% | 9.5% | 9.5% |
| 417 | Veolia (Amber Valley Refuse) | 6.1% | 31.9% | -31.9% | £0 | -31.9% | £0 | -31.9% | £0 | 0.0% | 0.0% | 0.0% |
| 418 | Interserve Integrated Services | 7.1% | 33.2% | -12.4% | £0 | -12.4% | £0 | -12.4% | £0 | 20.8% | 20.8% | 20.8% |
| 419 | Interserve Catering Services | 20.2% | 32.8% | -8.5% | £0 | -8.5% | £0 | -8.5% | £0 | 24.4% | 24.4% | 24.4% |
| 424 | Balfour Beatty Living Places(Balfour Beatty PLC) | 16.5% | 32.2% | -14.8% | £0 | -14.8% | £0 | -14.8% | £0 | 17.3% | 17.3% | 17.3% |
| 425 | MacIntyre Care | 2.0% | 30.1% | -30.1% | £0 | -30.1% | £0 | -30.1% | £0 | 0.0% | 0.0% | 0.0% |
| 443 | Mitie Facilities Services Ltd | 37.7% | 32.5% | -2.3% | £0 | -2.3% | £0 | -2.3% | £0 | 30.2% | 30.2% | 30.2% |
| 444 | Compass Services (DCC) | 16.5% | 31.7% | -13.2% | £0 | -13.2% | £0 | -13.2% | £0 | 18.5% | 18.5% | 18.5% |
| 446 | Active Nation | 28.2% plus £2,000 | 31.8% | -12.0% | £0 | -12.0% | £0 | -12.0% | £0 | 19.8% | 19.8% | 19.8% |
| 451 | Compass Services (City) | 10.3% | 31.6% | -14.7% | £0 | -14.7% | £0 | -14.7% | £0 | 17.0% | 17.0% | 17.0% |
| 453 | Clean Slate (Pottery) | 30.4% plus £600 | 32.7% | -16.3% | £0 | -16.3% | £0 | -16.3% | £0 | 16.4% | 16.4% | 16.4% |
| 466 | Arvato Public Services Ltd (Derbyshire Dales) | 13.8% | 29.6% | -29.6% | £0 | -29.6% | £0 | -29.6% | £0 | 0.0% | 0.0% | 0.0% |
| 468 | Aspens Services Ltd | 28.2% plus £1,000 | 30.4% | -1.9% | £0 | -1.9% | £0 | -1.9% | £0 | 28.5% | 28.5% | 28.5% |
| 470 | VINCI Contruction UK LTD (Ashcroft & Portway) | 31.7% | 33.4% | -2.6% | £0 | -2.6% | £0 | -2.6% | £0 | 30.8% | 30.8% | 30.8% |
| 471 | NSL Limited | 22.3% | 30.1% | -9.9% | £0 | -9.9% | £0 | -9.9% | £0 | 20.3% | 20.3% | 20.3% |
| 472 | Mellors Catering Services Ltd | 25.7% | 32.3% | -32.3% | £0 | -32.3% | £0 | -32.3% | £0 | 0.0% | 0.0% | 0.0% |
| 475 | Connex Community Support | 13.3% | 34.4% | -13.4% | £0 | -34.4% | £0 | -34.4% | £0 | 21.0% | 0.0% | 0.0% |
| 478 | Taylor Shaw Ltd (Edwards and Blake, Elior) | 34.7% | 31.9% | -7.5% | £0 | -7.5% | £0 | -7.5% | £0 | 24.4% | 24.4% | 24.4% |
| 480 | CSE Educational Systems | 29.0% | 32.4% | -6.1% | £0 | -6.1% | £0 | -6.1% | £0 | 26.3% | 26.3% | 26.3% |
| 481 | Mellors (Murray Park) | 31.7% | 34.0% | -3.9% | £0 | -3.9% | £0 | -3.9% | £0 | 30.0% | 30.0% | 30.0% |
| 482 | Derbyshire Building Control Partnership Limited | 23.2% | 28.2% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 27.8% | 27.8% | 27.8% |
| 483 | Amber Valley School Sports Partnership | 21.0% | 24.1% | -1.1% | £0 | -1.1% | £0 | -1.1% | £0 | 23.0% | 23.0% | 23.0% |
| 484 | Caterlink Ltd (Lea Primary) | 30.2% | 27.6% | -14.8% | £0 | -14.8% | £0 | -14.8% | £0 | 12.9% | 12.9% | 12.9% |
| 486 | Insight Services Ltd- Tibshelf Infant School - (KCLS Ltd) | 34.4% | 34.1% | -27.2% | £0 | -27.2% | £0 | -27.2% | £0 | 6.9% | 6.9% | 6.9% |
| 488 | Caterlink (Shirebrook Stubbin Wood) | 30.8% | 31.4% | -15.4% | £0 | -15.4% | £0 | -15.4% | £0 | 16.0% | 16.0% | 16.0% |
| 490 | Caterlink (Swanwick Hall) | 29.8% | 31.7% | 25.7% | £0 | 25.7% | £0 | 25.7% | £0 | 57.4% | 57.4% | 57.4% |
| 491 | Caterlink (St Mary's Chesterfield) | 29.1% | 31.8% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 33.4% | 33.4% | 33.4% |
| 492 | Caterlink (Reigate Primary) | 27.9% | 27.0% | 31.9% | £0 | 31.9% | £0 | 31.9% | £0 | 58.9% | 58.9% | 58.9% |
| 494 | Caterlink (Abercrombie) | 27.8% | 31.0% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 28.8% | 28.8% | 28.8% |
| 495 | Caterlink Ltd (St Mary's High School) | 31.8% | 30.6% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 31.2% | 31.2% | 31.2% |
| 497 | Churchill Contract Services Ltd (St Mary's Chesterfield) | 32.0% | 31.8% | 8.2% | £0 | 8.2% | £0 | 8.2% | £0 | 40.0% | 40.0% | 40.0% |
| 500 | Caterlink Ltd (De Ferrers Trust) | 30.2% | 30.5% | 1.3% | £0 | 1.3% | £0 | 1.3% | £0 | 31.7% | 31.7% | 31.7% |
| 502 | Caterlink Ltd (Cavendish Learning Trust) | 28.3% | 30.5% | -0.8% | £0 | -0.8% | £0 | -0.8% | £0 | 29.6% | 29.6% | 29.6% |
| 503 | Parkwood Leisure (HPBC - Buxton Pavillion) | 24.3% | 24.0% | 0.3% | £0 | 0.3% | £0 | 0.3% | £0 | 24.3% | 24.3% | 24.3% |
| 505 | Accuro FM Ltd | 32.4% | 28.9% | 3.5% | £0 | 3.5% | £0 | 3.5% | £0 | 32.4% | 32.4% | 32.4% |
| | | | | | | | | | | | | |
| cademies | Occupation Total | 10.00/ | 40.50/ | 0.50/ | 00 | 0.50/ | 00 | 0.50/ | 00 | 04.40/ | 04.40/ | 04.40/ |
| | Cavendish Learning Trust | 19.3% | 18.5% | 2.5% | £0 | 2.5% | £0 | 2.5% | 03 | 21.1% | 21.1% | 21.1% |
| | Djanogly Learning Trust | 21.0% | 19.3% 18.1% | -1.4% -1.5% | £0 £0 | -1.4% -1.5% | £0 £0 | -1.4% -1.5% | £0 | 17.9% 16.6% | 17.9% 16.6% | 17.9% 16.6% |
| | Esteem Multi-Academy Trust | 21.0% | 18.1% 17.8% | -1.5% 1.9% | £0 £0 | -1.5% 1.9% | £0 | -1.5% 1.9% | £0 | 16.6% 19.7% | 16.6% | 16.6% 19.7% |
| | Odyssey Collaborative Trust | | | | | | | | | | | |
| | Ormiston Ilkeston Enterprise Authority Peak Multi-Academy Trust | 23.7% | 19.2% 18.8% | 5.5% 1.6% | £0 £0 | 6.5% 1.6% | £0 | 7.5% 1.6% | £0 £0 | 24.7% 20.3% | 25.7% 20.3% | 26.7% 20.3% |
| | Queen Elizabeth Grammar School Multi-Academy Trust | 21.6% | 18.1% | 4.5% | £0 | 5.5% | £0 | 6.5% | £0 | 20.3% | 20.5% | 20.3% |
| | Queen Elizabeth Granifiai School Multi-Academy Hust | 21.076 | 10.176 | 4.576 | LU | 3.376 | 20 | 0.576 | 20 | 22.076 | 23.076 | 24.076 |
| | Frederick Gent School | 21.0% | 18.5% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.3% | 18.3% | 18.3% |
| 487 | RM Education Ltd ⁽²⁾ | 28.8% | 30.3% | 3.3% | £0 | 3.3% | £0 | 3.3% | £0 | 33.7% | 33.7% | 33.7% |
| 199 | Derby Manufacturing University Technical College | 21.1% | 17.9% | 2.2% | £0 | 1.2% | £0 | 0.2% | £0 | 20.1% | 19.1% | 18.1% |
| 336 | The Ecclesbourne School | 22.6% | 18.5% | 5.1% | £0 | 6.1% | £0 | 7.1% | £0 | 23.6% | 24.6% | 25.6% |
| 337 | Kirk Hallam Community Academy | 18.4% | 18.0% | 1.4% | £0 | 2.4% | £0 | 3.4% | £0 | 19.4% | 20.4% | 21.4% |
| 338 | John Port Spencer Academy | 20.4% | 18.2% | 3.2% | £0 | 4.2% | £0 | 5.2% | £0 | 21.4% | 22.4% | 23.4% |
| 340 | Brookfield Academy | 20.0% | 18.4% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.0% | 22.0% | 23.0% |
| 341 | The Long Eaton School | 19.9% | 17.8% | 3.1% | £0 | 4.1% | £0 | 5.1% | £0 | 20.9% | 21.9% | 22.9% |
| 342 | West Park School | 21.2% | 18.5% | 3.7% | £0 | 4.7% | £0 | 5.7% | £0 | 22.2% | 23.2% | 24.2% |
| | TTT COLT OF COLLOW | Z1.Z70 | 10.070 | J. 1 70 | LU | 7.3% | £0 | 8.3% | LU | ZZ.Z70 | ZJ.Z70 | 24.270 |

| | | | Primary Rate % 1 April 2020 - 31 March 2023 | | | Secon | dary Rate | Total Contribution Rate | | | | |
|---------------|--|--|---|--------------|---------|--------------|-----------|-------------------------|----------|----------------|----------------|-----------|
| Employer code | Employer/Pool name | Contributions currently in payment 2019/2020 | | 202 | 0/2021 | 202 | 21/2022 | 2022 | 2/2023 | | | |
| code | | in payment 2019/2020 | | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| Academies c | ontinued | | | | | | | | | | | |
| 347 | Pennine Way Junior Academy | 19.7% | 18.7% | 2.0% | £0 | 3.0% | £0 | 4.0% | £0 | 20.7% | 21.7% | 22.7% |
| 348 | Heanor Gate Science College | 20.5% | 19.0% | 2.5% | £0 | 3.5% | £0 | 4.5% | £0 | 21.5% | 22.5% | 23.5% |
| 349 | Lees Brook Community School | 19.7% | 17.8% | 2.9% | £0 | 3.9% | £0 | 4.9% | £0 | 20.7% | 21.7% | 22.7% |
| 351 | Redhill Academy | 20.7% | 19.2% | 2.5% | £0 | 3.5% | £0 | 4.5% | £0 | 21.7% | 22.7% | 23.7% |
| 352 | St John Houghton Catholic Voluntary Academy | 20.6% | 16.6% | 5.0% | £0 | 6.0% | £0 | 7.0% | £0 | 21.6% | 22.6% | 23.6% |
| 353 | Allestree Woodlands School | 19.9% | 17.8% | 3.1% | £0 | 4.1% | £0 | 5.1% | £0 | 20.9% | 21.9% | 22.9% |
| 354 | Grampian Primary Academy | 19.2% | 16.6% | 3.6% | £0 | 4.6% | £0 | 5.6% | £0 | 20.2% | 21.2% | 22.2% |
| 360 | Saint Benedict Voluntary Catholic Academy | 22.0% | 19.0% | 4.0% | £0 | 5.0% | £0 | 6.0% | £0 | 23.0% | 24.0% | 25.0% |
| 361 | St Mary's Catholic High School, a Catholic Voluntary Academy | 21.4% | 18.7% | 3.7% | £0 | 4.7% | £0 | 5.7% | £0 | 22.4% | 23.4% | 24.4% |
| 362 | St John fisher Catholic Voluntary Academy | 21.7% | 19.4% | 3.3% | £0 | 4.3% | £0 | 5.3% | £0 | 22.7% | 23.7% | 24.7% |
| 363 | St Georges Voluntary Catholic Academy | 20.1% | 17.9% | 3.2% | £0 | 4.2% | £0 | 5.2% | £0 | 21.1% | 22.1% | 23.1% |
| 364 | Wyndham Primary Academy | 16.7% | 17.7% | 0.0% | £0 | 1.0% | £0 | 2.0% | £0 | 17.7% | 18.7% | 19.7% |
| 365 | The Bolsover School | 20.9% | 19.1% | 2.8% | £0 | 3.8% | £0 | 4.8% | £0 | 21.9% | 22.9% | 23.9% |
| 366 | Landau Forte Academy Moorhead (Landau Forte Charitable Trust) | 19.6% | 18.5% | 2.1% | £0 | 3.1% | £0 | 4.1% | 03 | 20.6% | 21.6% | 22.6% |
| 367 | Derby Pride Academy | 15.5% | 15.8% | 0.7% | 03 | 1.7% | 03 | 2.7% | 03 | 16.5% | 17.5% | 18.5% |
| 368 | Merrill Academy | 22.5% | 18.1% | 5.4% | £0 | 6.4% | £0 | 7.4% | £0 | 23.5% | 24.5% | 25.5% |
| 371 | English Martyrs Catholic Voluntary Academy | 18.5% | 18.8% | 0.7% | £0 | 1.7% | 03 | 2.7% | 03 | 19.5% | 20.5% | 21.5% |
| 372 373 | Newbold Church of England Primary School | 17.3% 25.8% | 17.7% 19.3% | 0.6% 5.5% | 0£ 0 | 1.6% 4.5% | £0 | 2.6% | 0£0 | 18.3% 24.8% | 19.3% 23.8% | 20.3% |
| 373 | Bishop Lonsdale Church of England Primary School & Nursery | | | 2.4% | £0 | 2.4% | £0 £0 | 2.4% | | | | |
| 374 | Zaytouna Primary School | 20.0% 25.0% | 17.6% 19.0% | 7.0% | £0 | 8.0% | £0 | 9.0% | £0 £0 | 20.0% 26.0% | 20.0% | 20.0% |
| | The Ripley Academy | 17.6% | | 0.5% | | 1.5% | | 2.5% | | 18.6% | 19.6% | |
| 376 | St Joseph's Catholic Primary School A Voluntary Academy(Mansfield) | | 18.1% 17.8% | | 03 | | 03 | | 03 | | | 20.6% |
| 377 378 | Dovedale Primary School Sawley Infant and Nursery School | 20.9% | 17.8% | 3.1% 1.8% | 0£ 0 | 3.1% 2.8% | £0 | 3.1% | £0 £0 | 20.9% | 20.9% | 20.9% |
| 379 | Sawley Junior School | 20.0% | 19.2% | 2.7% | £0 | 2.7% | £0 | 2.7% | £0 | 21.0% | 21.2% | 23.0% |
| 380 | Shardlow Primary School | 23.3% | 19.7% | 2.6% | £0 | 1.6% | £0 | 0.6% | £0 | 21.2% | 21.2% | 20.3% |
| 381 | Immaculate Conception Catholic Primary | 20.7% | 17.7% | 2.0% | £0 | 1.0% | £0 | 0.0% | £0 | 19.7% | 18.7% | 17.7% |
| 382 | Allenton Primary School | 27.9% | 17.7% | 9.1% | £0 | 8.1% | £0 | 7.1% | £0 | 26.9% | 25.9% | 24.9% |
| 383 | Outwood Academy Newbold | 20.2% | 18.4% | 2.8% | £0 | 3.8% | £0 | 4.8% | £0 | 21.2% | 22.2% | 23.2% |
| 384 | Turnditch Church of England Primary School | 20.2% | 18.0% | 3.2% | £0 | 4.2% | £0 | 5.2% | £0 | 21.2% | 22.2% | 23.2% |
| 385 | William Gilbert Endowed (C of E) Primary School | 21.2% | 20.1% | 2.1% | £0 | 3.1% | £0 | 4.1% | £0 | 22.2% | 23.2% | 24.2% |
| 386 | St Laurence CofE VA Primary School | 21.2% | 18.4% | 2.8% | £0 | 2.8% | £0 | 2.8% | £0 | 21.2% | 21.2% | 21.2% |
| 387 | Akaal Primary School | 19.5% | 17.5% | 1.0% | £0 | 0.0% | £0 | -1.0% | £0 | 18.5% | 17.5% | 16.5% |
| 388 | Inkersall Primary School | 20.2% | 18.1% | 3.1% | £0 | 4.1% | £0 | 5.1% | £0 | 21.2% | 22.2% | 23.2% |
| 389 | St Philip Howard Catholic Voluntary Academy | 20.2% | 17.4% | 2.8% | £0 | 2.8% | £0 | 2.8% | £0 | 20.2% | 20.2% | 20.2% |
| 390 | St Giles CofE Aided Primary School (Matlock) | 20.3% | 17.6% | 3.7% | 03 | 4.7% | £0 | 5.7% | 03 | 21.3% | 22.3% | 23.3% |
| 391 | Walter Evans CofE Primary & Nursery School | 21.0% | 18.3% | 2.9% | £0 | 2.9% | £0 | 2.9% | £0 | 21.1% | 21.1% | 21.1% |
| 392 | Swanwick Hall School | 20.2% | 18.6% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.2% | 22.2% | 23.2% |
| 393 | John Flamsteed Community School | 20.2% | 18.6% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.2% | 22.2% | 23.2% |
| 395 | David Nieper Academy | 17.8% | 18.2% | 0.6% | £0 | 1.6% | £0 | 2.6% | £0 | 18.8% | 19.8% | 20.8% |
| 396 | Christ Church Primary School | 21.5% | 19.0% | 2.5% | £0 | 2.5% | £0 | 2.5% | £0 | 21.5% | 21.5% | 21.5% |
| 422 | Landau Forte College Derby (Landau Forte Charitable Trust) | 12.3% plus £3,000 | 16.6% | -3.1% | £0 | -2.1% | £0 | -1.1% | £0 | 13.5% | 14.5% | 15.5% |
| 439 | Shirebrook Academy | 20.4% | 18.0% | 3.4% | £0 | 4.4% | £0 | 5.4% | £0 | 21.4% | 22.4% | 23.4% |
| 601 | Holbrook CE Primary School | 22.4% | 18.6% | 3.8% | £0 | 3.8% | £0 | 3.8% | £0 | 22.4% | 22.4% | 22.4% |
| 602 | St Edwards Catholic Academy | 20.0% | 18.7% | 1.3% | £0 | 1.3% | £0 | 1.3% | £0 | 20.0% | 20.0% | 20.0% |
| 603 | St Joseph's Catholic Primary School (Matlock) | 20.0% | 19.5% | 1.5% | £0 | 2.5% | £0 | 3.5% | £0 | 21.0% | 22.0% | 23.0% |
| 604 | Mary Swanwick Primary School | 21.0% | 19.0% | 1.2% | £0 | 1.2% | £0 | 1.2% | £0 | 20.2% | 20.2% | 20.2% |
| 605 | Brimington Manor Infant School | 18.9% | 19.6% | 0.3% | £0 | 1.3% | £0 | 2.3% | £0 | 19.9% | 20.9% | 21.9% |
| 606 | Brimington Junior School | 18.3% | 19.2% | 0.1% | £0 | 1.1% | £0 | 2.1% | £0 | 19.3% | 20.3% | 21.3% |
| 607 | Noel-Baker Academy | 21.0% | 18.7% | 4.8% | £0 | 4.8% | £0 | 4.8% | £0 | 23.5% | 23.5% | 23.5% |
| 608 | All Saints CofE Infant School (Matlock) | 21.0% | 18.1% | -0.3% | £0 | -0.3% | £0 | -0.3% | £0 | 17.8% | 17.8% | 17.8% |
| 609 | St Giles CE Primary School (Killamarsh) | 21.0% | 17.7% | -0.8% | 03 | -0.8% | 03 | -0.8% | 03 | 16.9% | 16.9% | 16.9% |
| 612 | All Saints Junior School (Matlock) | 21.0% | 19.1% | 0.0% | 03 | 0.0% | 03 | 0.0% | 03 | 19.1% | 19.1% | 19.1% |
| 613 | Heritage High | 21.0% | 18.6% | -0.6% | 03 | -0.6% | 03 | -0.6% | 03 | 18.0% | 18.0% | 18.0% |
| 614 | New Whittington Primary | 21.0% | 18.4% | -2.2% | £0 | -2.2% | 03 | -2.2% | £0 | 16.2% | 16.2% | 16.2% |
| 615 | Eckington Juniors | 19.4% | 19.1% | 0.3% | £0 | 0.3% | £0 | 0.3% | £0 | 19.4% | 19.4% | 19.4% |

| | Employer/Pool name | | Primary Rate % 1 April 2020 - 31 March 2023 | | | Second | dary Rate | Total Contribution Rate | | | | |
|-------------|--|-------------------------|---|----------------|----------|----------------|-----------|-------------------------|----------|----------------|----------------|----------------|
| Employer | | Contributions currently | | 2020/2021 | | | 1/2022 | 2022 | /2023 | | | |
| code | | in payment 2019/2020 | | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| Academies o | continued | | | | | | | | | | | |
| 616 | Darley Churchtown Primary School | 21.0% | 18.1% | -0.6% | £0 | -0.6% | £0 | -0.6% | £0 | 17.5% | 17.5% | 17.5% |
| 617 | Temple Normanton Junior Academy | 21.0% | 20.2% | 4.6% | £0 | 4.6% | £0 | 4.6% | £0 | 24.8% | 24.8% | 24.8% |
| 618 | Da Vinci Academy | 21.0% | 18.1% | 6.0% | £0 | 6.0% | £0 | 6.0% | £0 | 24.1% | 24.1% | 24.1% |
| 619 | The Pingle Academy | 21.0% | 19.0% | -0.1% | £0 | -0.1% | £0 | -0.1% | £0 | 18.9% | 18.9% | 18.9% |
| 621 | Derwent Community Primary School | 21.0% | 17.9% | 2.9% | £0 | 2.9% | £0 | 2.9% | £0 | 20.8% | 20.8% | 20.8% |
| 622 | Breadsall Hill Top Primary | 21.0% | 18.6% | 1.8% | £0 | 1.8% | £0 | 1.8% | £0 | 20.4% | 20.4% | 20.4% |
| 623 | Pear Tree Junior School | 21.0% | 19.1% | 2.5% | £0 | 2.5% | £0 | 2.5% | £0 | 21.6% | 21.6% | 21.6% |
| 624 | Granville Academy | 21.0% | 17.2% | -1.7% | £0 | -1.7% | £0 | -1.7% | £0 | 15.5% | 15.5% | 15.5% |
| 625 | St Georges CofE Primary (New Mills) | 21.0% | 18.9% | 0.3% | £0 | 0.3% | £0 | 0.3% | 03 | 19.2% | 19.2% | 19.2% |
| 626 | Scargill CofE Primary | 21.0% | 19.5% 18.2% | 0.4% 1.3% | £0 £0 | 0.4% | 03 03 | 0.4% | 03 03 | 19.9% | 19.9% 19.5% | 19.9% 19.5% |
| 627 628 | Cavendish Close Junior Academy Cloudside Academy | 21.0% | 18.2% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 19.5% 17.4% | 19.5% | 19.5% |
| 629 | Somercotes Infants | 21.0% | 18.4% | -2.3% | £0 | -2.3% | £0 | -2.3% | £0 | 16.1% | 16.1% | 16.1% |
| 630 | Somerlea Park Junior | 21.0% | 19.3% | 0.7% | £0 | 0.7% | £0 | 0.7% | £0 | 20.0% | 20.0% | 20.0% |
| 631 | Bolsover CofE Junior School | 21.0% | 18.3% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 17.9% | 17.9% | 17.9% |
| 633 | Firs Primary School | 21.0% | 18.6% | -0.1% | £0 | -0.1% | £0 | -0.1% | £0 | 18.5% | 18.5% | 18.5% |
| 634 | Hardwick Primary School | 21.0% | 17.6% | 1.8% | £0 | 1.8% | £0 | 1.8% | £0 | 19.4% | 19.4% | 19.4% |
| 635 | Derby Moor Academy | 21.0% | 16.9% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 17.4% | 17.4% | 17.4% |
| 636 | John King Infant Academy | 21.0% | 18.0% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 17.3% | 17.3% | 17.3% |
| 637 | Longwood Infant Academy | 21.0% | 18.4% | -2.1% | £0 | -2.1% | £0 | -2.1% | £0 | 16.3% | 16.3% | 16.3% |
| 639 | Kirkstead Junior Academy | 21.0% | 18.4% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 18.0% | 18.0% | 18.0% |
| 641 | Ironville and Codnor Park Primary School | 21.0% | 17.9% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 17.0% | 17.0% | 17.0% |
| 644 | Chaddesden Park Primary School | 21.0% | 18.6% | 4.7% | £0 | 4.7% | £0 | 4.7% | £0 | 23.3% | 23.3% | 23.3% |
| 645 | Eckington School | 21.0% | 19.0% | 0.2% | £0 | 0.2% | £0 | 0.2% | £0 | 19.2% | 19.2% | 19.2% |
| 646 | Village Primary Academy | 21.0% | 18.0% | 2.1% | £0 | 2.1% | £0 | 2.1% | £0 | 20.1% | 20.1% | 20.1% |
| 647 | Street Lane Primary School | 21.0% | 19.7% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 19.0% | 19.0% | 19.0% |
| 648 | Ash Croft Primary Academy | 21.0% | 18.9% | 1.5% | £0 | 1.5% | £0 | 1.5% | £0 | 20.4% | 20.4% | 20.4% |
| 649 | Langwith Bassett Junior Academy | 21.0% | 18.2% | -2.1% | £0 | -2.1% | £0 | -2.1% | £0 | 16.1% | 16.1% | 16.1% |
| 650 | Friesland School | 21.0% | 18.7% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 16.5% | 16.5% | 16.5% |
| 657 | All Saints Catholic Voluntary Academy (Glossop) | 21.0% | 17.2% | -1.2% | £0 | -1.2% | £0 | -1.2% | £0 | 16.0% | 16.0% | 16.0% |
| 658 | Christ the King Catholic Voluntary Academy | 21.0% | 18.8% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 17.4% | 17.4% | 17.4% |
| 659 | St Alban's Catholic Voluntary Academy (Derby) | 21.0% | 18.7% | 1.6% | £0 | 1.6% | £0 | 1.6% | 03 | 20.3% | 20.3% | 20.3% |
| 660 | St Anne's Catholic Voluntary Academy (Buxton) | 21.0% | 19.9% | -0.7% | £0 | -0.7% | £0 | -0.7% | 03 | 19.2% | 19.2% | 19.2% |
| 661 | St Charles Catholic Primary Voluntary Academy (Hadfield) | 21.0% | 18.6% 19.1% | -1.1% -1.8% | £0 | -1.1% -1.8% | £0 £0 | -1.1% -1.8% | 03 03 | 17.5% 17.3% | 17.5% 17.3% | 17.5% 17.3% |
| 662 663 | St Elizabeth's Catholic Voluntary Academy (Belper) St Joseph's Catholic Voluntary Academy (Derby) | 21.0% | 19.0% | 1.1% | £0 | 1.1% | £0 | 1.1% | £0 | 20.1% | 20.1% | 20.1% |
| 664 | St. Margaret's Catholic Voluntary Academy (Glossop) | 21.0% | 18.7% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 16.5% | 16.5% | 16.5% |
| 665 | St. Mary's Catholic Voluntary Academy (Glossop) St Mary's Catholic Voluntary Academy (Derby) | 21.0% | 18.2% | 2.1% | £0 | 2.1% | £0 | 2.1% | £0 | 20.3% | 20.3% | 20.3% |
| 667 | St Mary's Catholic Voluntary Academy (New Mills) | 21.0% | 18.3% | -2.8% | £0 | -2.8% | £0 | -2.8% | £0 | 15.5% | 15.5% | 15.5% |
| 668 | St Thomas Catholic Voluntary Academy (New Willis) | 21.0% | 18.7% | -1.2% | £0 | -1.2% | £0 | -1.2% | £0 | 17.5% | 17.5% | 17.5% |
| 669 | St Thomas More Voluntary Academy (Buxton) | 21.0% | 19.1% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 18.2% | 18.2% | 18.2% |
| 670 | Derby Cathedral School | 21.0% | 19.7% | -0.4% | £0 | -0.4% | £0 | -0.4% | 03 | 19.3% | 19.3% | 19.3% |
| 671 | St Mary's Catholic Voluntary Academy (Glossop) | 21.0% | 19.5% | -0.5% | £0 | -0.5% | £0 | -0.5% | 03 | 19.0% | 19.0% | 19.0% |
| 672 | Alvaston Junior Academy | 21.0% | 19.4% | 3.3% | £0 | 3.3% | £0 | 3.3% | £0 | 22.7% | 22.7% | 22.7% |
| 673 | Reigate Park Primary Academy | 21.0% | 18.2% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 18.7% | 18.7% | 18.7% |
| 674 | Cottons Farm Primary Academy | 21.0% | 19.4% | 2.1% | £0 | 2.1% | £0 | 2.1% | £0 | 21.5% | 21.5% | 21.5% |
| 675 | Hilton Primary School | 21.0% | 18.4% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 17.0% | 17.0% | 17.0% |
| 676 | Loscoe CofE Primary School and Nursery | 21.0% | 18.2% | -1.5% | £0 | -1.5% | £0 | -1.5% | £0 | 16.7% | 16.7% | 16.7% |
| 677 | Ashwood Spencer Academy | 21.0% | 18.7% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 20.3% | 20.3% | 20.3% |
| 678 | Wilsthorpe School | 21.0% | 18.5% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 19.0% | 19.0% | 19.0% |
| 679 | Gamesley Primary Academy | 21.0% | 18.0% | -0.1% | £0 | -0.1% | £0 | -0.1% | £0 | 17.9% | 17.9% | 17.9% |
| 682 | Lakeside Primary Academy | 21.0% | 17.3% | 1.8% | £0 | 1.8% | £0 | 1.8% | £0 | 19.1% | 19.1% | 19.1% |
| 684 | Walton on Trent CofE Primary & Nursery School | 21.0% | 18.9% | 0.1% | £0 | 0.1% | £0 | 0.1% | £0 | 19.0% | 19.0% | 19.0% |
| 685 | Griffe Field Primary School | 21.0% | 19.2% | 3.2% | £0 | 3.2% | £0 | 3.2% | 03 | 22.4% | 22.4% | 22.4% |
| 686 | Horsley Woodhouse Primary School | 21.0% | 18.5% | 0.2% | £0 | 0.2% | £0 | 0.2% | £0 | 18.8% | 18.8% | 18.8% |
| 687 | Kilburn Junior School | 21.0% | 17.7% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 16.8% | 16.8% | 16.8% |

| Employer code | Employer/Pool name | | Primary Rate % | | | Secon | dary Rate | | | | Total Contribution Rate | |
|------------------|--|-------------------------|----------------|----------|------|----------|-----------|----------|------|-------------|-------------------------|-----------|
| | | Contributions currently | 1 April 2020 - | 2020 | 2021 | 202 | 1/2022 | 2022/2 | 2023 | | | |
| | | in payment 2019/2020 | 31 March 2023 | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 2 | 2021/2022 | 2022/2023 |
| Academies of | ontinued | | | | | | | | | | | |
| 688 | Aldercar Infant School | 21.0% | 18.5% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.3% | 18.3% | 18.3% |
| 689 | Heath Primary School | 21.0% | 17.3% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 16.4% | 16.4% | 16.4% |
| 690 | Howitt Primary Community School | 21.0% | 18.9% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 18.2% | 18.2% | 18.2% |
| 691 | Derby St Chad's CofE (VC) Nursery and Infant School | 21.0% | 18.2% | 1.1% | £0 | 1.1% | £0 | 1.1% | £0 | 19.3% | 19.3% | 19.3% |
| 693 | Arboretum Primary School | 21.0% | 17.4% | 1.2% | £0 | 1.2% | £0 | 1.2% | £0 | 18.6% | 18.6% | 18.6% |
| Post 2019 va | luation employers | | | | | | | | | | | |
| 701 | Portway Junior School (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| 702 | Cherry Tree Hill Primary (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| 703 | Beaufort Primary School (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| 704 | Holme Hall Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 705 | Brookfield Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 706 | Richardson Endowed Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 707 | Woodthorpe CofE Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 708 | Ashgate Croft Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 709 | Old Hall Junior School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 710 | Walton Holymoorside Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 711 | Westfield Infants | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 713 | Brooklands Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 714 | Tupton Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 716 | Carlyle Infant & Nursery School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 717 | Hodthorpe Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 718 | Kensington Junior School (Djanogly Learning Trust) | 21.0% | 19.3% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 17.9% | 17.9% | 17.9% |
| 719 | Longford CofE Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 720 | NE Derbyshire Support Centre (Esteem Trust) | 21.0% | 18.1% | -1.5% | £0 | -1.5% | £0 | -1.5% | £0 | 16.6% | 16.6% | 16.6% |
| 721 | St Clares Special School (Esteem Trust) | 21.0% | 18.1% | -1.5% | £0 | -1.5% | £0 | -1.5% | £0 | 16.6% | 16.6% | 16.6% |
| 722 | St Andrews Special School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 723 | Church Gresley Infant and Nursery School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 724 | Ravensdale Junior School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 725 | Chellaston Fields Academy | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 726 | The Mease at Hilton | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 727 | Hackwood Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 728 | Ivy House School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 729 | Tupton Hall School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 730 | St Werburgh Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 731 | St Giles Primary Chaddesden | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 732 | The Green Infant School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 733 | Lawn Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 734 | St Peter's CE Aided Junior | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 735 | Springwell Community College | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| 736 | North Wingfield Primary & Nursery Academy | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |

Notes

- (1) The contributions due for 1 April 2020 to 31 March 2023 are shown in the table. With the agreement of the Administering Authority, this employer has agreed to make a cash payment of £56,379,340 in April 2020 in respect of contributions due for the year to 31 March 2021. The cash amount payable for the year to 31 March 2021 will be reduced in return for this early payment by 1.75% for the period 1 April 2020 to 31 March 2021 (i.e. the above amounts will be multiplied by 0.9825). With the agreement of the Administering Authority, the employer may also make a cash payment in April 2021 in respect of contributions due in the year to 31 March 2022 and/or April 2022 in respect of contributions due in the year to 31 March 2023. The reduction in the amount payable will be calculated by the Fund actuary at that time based on updated payroll estimates. As the employer has estimated, in advance, the pensionable pay for 2020/21 (and will estimate for 2021/22 and/or 2022/23 if prepaying those contributions), a balancing adjustment to reflect the actual pensionable pay over the year would be made at the end of each year (no later than 30th April following the year-end).
- (2) These are pass through employers for which we have calculated a stand-alone rate. However, they are pooled with their respective Awarding Authority for all funding risks. For the employer RM Education Ltd (487), this is Frederick Gent School.
- (3) Contributions expressed as a percentage of payroll should be paid into Derbyshire Pension Fund ("the Fund") at a frequency in accordance with the requirements of the Regulations;
- (4) Further sums should be paid to the Fund to meet the costs of any early retirements and/or augmentations using methods and factors issued by us from time to time or as otherwise agreed.
- (5) Payments may be required to be made to the Fund by employers to meet the capital costs of any ill-health retirements that exceed those allowed for within our assumptions. If an employer has ill health liability insurance in place with a suitable insurer and provides satisfactory evidence to the Administering Authority, then their certified contribution rate may be reduced by the value of their insurance premium, for the period the insurance is in place.
- (6) The certified contribution rates represent the **minimum** level of contributions to be paid. Employing authorities may pay further amounts at any time and future periodic contributions may be adjusted on a basis approved by the Fund Actuary.

- (7) There has been significant volatility in the financial markets during February and March 2020 as a result of the COVID-19 pandemic. This volatility may impact funding balance sheets for those employers planning to exit the Fund during the period covered by this Rates and Adjustments Certificate. In order to effectively manage employer exits from the Fund, the Administering Authority reserves the right to revisit the contribution rates for employers that are expected to cease participation in the Fund before 31 March 2023. An employer will be contacted by the Administering Authority in this instance.
- (8) The Town and Parish Councils are split as per the following table:

| Tow | n and Parish Councils (Pre 2001) | Town and Parish Councils (Post 2001) | | | | | |
|-----|----------------------------------|--------------------------------------|---------------------------------------|--|--|--|--|
| 144 | Shirebrook Town Council | 142 | Morton Parish Council | | | | |
| 145 | New Mills Town Council | 155 | Glapwell Parish Council | | | | |
| 147 | Clay Cross Parish Council | 161 | Burnaston Parish Council | | | | |
| 148 | Eckington Parish Council | 165 | North Wingfield Parish Council | | | | |
| 149 | Smalley Parish Council | 174 | Tupton Parish Council | | | | |
| 150 | Pinxton Parish Council | 186 | Alfreton Town Council | | | | |
| 151 | Wirksworth Town Council | 187 | Wingerworth Parish Council | | | | |
| 152 | Old Bolsover Town Council | 188 | Heanor & Loscoe Town Council | | | | |
| 153 | Bakewell Town Council | 189 | Darley Dale Town Council | | | | |
| 157 | Belper Town Council | 234 | Tibshelf Parish Council | | | | |
| 159 | Elmton Parish Council | 235 | Kilburn Parish Council | | | | |
| 160 | Killamarsh Parish Council | 236 | Codnor Parish Council | | | | |
| 162 | Dronfield & District Jnt Burial | 237 | Shardlow & Great Wilne Parish Council | | | | |
| 171 | Ashbourne Town Council | 238 | Ticknall Parish Council | | | | |
| 172 | Dronfield Town Council | 239 | Stenson Fields Parish Council | | | | |
| 173 | Whitwell Parish Council | 240 | Heath & Holmewood Parish Council | | | | |
| 175 | Staveley Town Council | 241 | Bretby Parish Council | | | | |
| 178 | Matlock Town Council | 242 | Breaston Parish Council | | | | |
| 179 | Whaley Bridge Town Council | 243 | Woodville Parish Council | | | | |
| 181 | Willington Parish Council | 244 | Elvaston Parish Council | | | | |
| 182 | Holymoorside Parish Council | 245 | Hatton Parish Council | | | | |
| | | 248 | Clowne Parish Council | | | | |
| | | 250 | Draycott Parish Council | | | | |
| | | 251 | Blackwell Parish Council | | | | |



Rill W.

Signature:

Name: Barry Dodds

Richard Warden

Qualification: Fellows of the Institute and Faculty of Actuaries

Firm: Hymans Robertson LLP

20 Waterloo Street

Glasgow G2 6DB

Date: 31 March 2020

Appendix 4 – Section 13 dashboard

The following information has been provided to assist the Government Actuary's Department in complying with Section 13 of the Public Service Pensions Act.

| Item | |
|---|---|
| Past service funding position - local funding basis | |
| Funding level (assets/liabilities) | 97% |
| Funding level (change since last valuation) | 10% increase |
| Asset value used at the valuation | £4,928,587,000 |
| Value of liabilities | £5,091,629,000 |
| Surplus (deficit) | £163,042,000 |
| Discount rate(s) | 3.6% p.a. |
| Assumed pension increases (CPI) | 2.3% p.a. |
| Method of derivation of discount rate, plus any changes since previous valuation | There is a 77% likelihood that the Fund's investments will return at least 3.6% |
| interior of derivation of discount rate, plus any changes since previous valuation | over the next 20 years based on a stochastic asset projection. |
| | The assumption at the 2016 valuation was 1.8% above the yield available on |
| | long-dated fixed interest gilts. |
| Assumed life expectancies at age 65: | a grant at the grant |
| Average life expectancy for current pensioners - men currently age 65 | 21.6 years |
| Average life expectancy for current pensioners - women currently age 65 | 23.7 years |
| Average life expectancy for future pensioners - men currently age 45 | 22.6 years |
| Average life expectancy for future pensioners - women currently age 45 | 25.1 years |
| | |
| Past service funding position - SAB basis (for comparison purposes only) | |
| Market value of assets | £4,928,587,000 |
| Value of liabilities | £4,257,610,000 |
| Funding level on SAB basis (assets/liabilities) | 116% |
| Funding level on SAB basis (change since last valuation) | 13% increase |
| Contribution rates payable | |
| Primary contribution rate | 18.5% of pay |
| Secondary contribution rate (cash amounts in each year in line with CIPFA guidance): | |
| Secondary contribution rate 2020/21 | £17,432,000 |
| Secondary contribution rate 2021/22 | £17,752,000 |
| Secondary contribution rate 2022/23 | £18,079,000 |
| Giving total expected contributions: | |
| Total expected contributions 2020/21 (£ figure based on assumed payroll of £645.9m) | £136,732,000 |
| Total expected contributions 2021/22 (£ figure based on assumed payroll of £665.6m) | £140,675,000 |
| Total expected contributions 2022/23 (£ figure based on assumed payroll of £685.8m) | £144,736,000 |
| Average employee contribution rate (% of pay) | 6.3% of pay |
| Employee contribution rate (£ p.a. figure based on assumed payroll of £645.9m) | £40,420,000 |
| Additional information | |
| Percentage of liabilities relating to employers with deficit recovery periods of longer than 20 years | 0% |
| Percentage of total liabilities that are in respect of Tier 3 employers | 11% |
| | |



Revised Rates and Adjustments certificate

In accordance with regulation 62(4) of the Regulations we have made an assessment of the contributions that should be paid into the Fund by participating employers for the period 1 April 2020 to 31 March 2023 in order to maintain the solvency of the Fund.

The method and assumptions used to calculate the contributions set out in the Rates and Adjustments certificate are detailed in the Funding Strategy Statement dated 08 January 2020 and in Appendix 2 of our report on the actuarial valuation dated 31 March 2020. These assumptions underpin our estimate of the number of members who will become entitled to a payment of pensions under the provisions of the LGPS and the amount of liabilities arising in respect of such members.

This is an update to the Rates and Adjustments certificate dated 31 March 2020, included in the final valuation report for the 31 March 2019 formal actuarial valuation of the Fund. The table below summarises the whole fund Primary and Secondary Contribution rates for the period 1 April 2020 to 31 March 2023. The Primary rate is the payroll weighted average of the underlying individual employer primary rates and the Secondary rate is the total of the underlying individual employer secondary rates, calculated in accordance with the Regulations and CIPFA guidance.

| Whole Fund Contribution Rate | | | | |
|------------------------------|---------|------------|--|--|
| Primary Rate (% of pay) | 18. | 5% | | |
| Secondary Rate (£) | 2020/21 | 17,196,000 | | |
| | 2021/22 | 17,509,000 | | |
| | 2022/23 | 17,829,000 | | |

The required minimum contribution rates for each employer in the Fund are set out below.

| Employer code | | | | | | Secon | dary Rate | | | | Total Contribution Rate | |
|------------------|---|--|---------------------------------|-----------------|------------------------|-----------------|------------------------|-----------------|------------------------|--|--|--|
| | | Contributions currently | Primary Rate % | 202 | 0/2021 | 1 | 21/2022 | 202 | 2/2023 | | | |
| | Employer/Pool name | in payment 2019/2020 | 1 April 2020 - 31 March 2023 | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| Councils | | | | | | | | | | | | |
| Councils | Destruction County Course (1) | 14.5% plus £15.536.000 | 18.2% | -2.7% | £15.536.000 | -2.7% | £15.536.000 | -2.7% | £15.536.000 | 15.5% plus £15.536.000 | 15.5% plus £15.536.000 | 15.5% plus £15.536.000 |
| | Derbyshire County Council ⁽¹⁾ | 14.5% plus £15,530,000 | 10.270 | -2.170 | £15,550,000 | -2.170 | £15,550,000 | -2.170 | £15,530,000 | 13.3% plus £13,330,000 | 15.5% plus £15,550,000 | 15.5% plus £15,550,000 |
| | Derby City Council | 13.5% plus £6.981.000 | 17.6% | -3.1% | £6.981.000 | -3.1% | £6.981.000 | -3.1% | £6.981.000 | 14.5% plus £6.981.000 | 14.5% plus £6.981.000 | 14.5% plus £6.981.000 |
| 460 | ENGIE Services Ltd ⁽²⁾ | 20.6% | 28.0% | -3.0% | £0 | -3.0% | £0 | -3.0% | £0 | 25.1% | 25.1% | 25.1% |
| 479 | Action For Children ⁽²⁾ | 28.1% | 28.6% | -12.1% | £0 | -12.1% | £0 | -12.1% | £0 | 16.5% | 16.5% | 16.5% |
| | 7 Substitution Chinaron | | | | | | | | | | | |
| | High Peak Borough Council | 12.4% plus £1,833,000 | 18.3% | -4.9% | £1,833,000 | -4.9% | £1,833,000 | -4.9% | £1,833,000 | 13.4% plus £1,833,000 | 13.4% plus £1,833,000 | 13.4% plus £1,833,000 |
| 485 | Alliance Environmental Services | 16.9% | 18.3% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 18.3% | 18.3% | 18.3% |
| | | | | | | | | | | | | |
| | Erewash Borough Council | 13.1% plus £1,125,000 | 17.8% | -3.7% | £999,000 | -3.7% | £999,000 | -3.7% | £999,000 | 14.1% plus £999,000 | 14.1% plus £999,000 | 14.1% plus £999,000 |
| 499 | Parkwood Leisure (Erewash) ⁽²⁾ | 27.2% | 28.1% | -1.3% | £0 | -1.3% | £0 | -1.3% | £0 | 26.8% | 26.8% | 26.8% |
| | Daybushina Dalaa District Council | 13.6% plus £645.000 | 17.6% | -3.0% | £561.000 | -3.0% | £561.000 | -3.0% | £561.000 | 14.6% plus £561.000 | 14.6% plus £561.000 | 14.6% plus £561.000 |
| 493 | Derbyshire Dales District Council Wealden Leisure Ltd (Freedom Leisure) ⁽²⁾ | 24.5% | 26.9% | -1.2% | £361,000 | -3.0% | £361,000 | -1.2% | £561,000 | 25.8% | 25.8% | 25.8% |
| 493 | Wealdern Leisure Ltd (Freedom Leisure)** | 24.576 | 20.970 | -1.270 | LU | -1.270 | LU | -1.270 | £U | 23.0 % | 23.070 | 23.070 |
| | Chesterfield Borough Council | 14.2% plus £1,991,000 | 17.7% | -2.5% | £1,991,000 | -2.5% | £1.991.000 | -2.5% | £1.991.000 | 15.2% plus £1,991,000 | 15.2% plus £1,991,000 | 15.2% plus £1,991,000 |
| 441 | Arvato ⁽³⁾ | 14.5% | 30.1% | -15.6% | 0 | -15.6% | 0 | -15.6% | 0 | 14.5% | 14.5% | 14.5% |
| 442 | Kier Ltd ⁽³⁾ | 13.8% | 29.9% | -16.1% | 0 | -16.1% | 0 | -16.1% | 0 | 13.8% | 13.8% | 13.8% |
| 772 | Nei Llu | 10.070 | 20.070 | -10.170 | | -10.170 | Ŭ | -10.170 | 0 | 10.070 | 10.070 | 10.070 |
| 131 | Bolsover District Council | 13.9% plus £962,000 | 18.1% | -3.2% | £962,000 | -3.2% | £962,000 | -3.2% | £962,000 | 14.9% plus £962,000 | 14.9% plus £962,000 | 14.9% plus £962,000 |
| 136 | North East Derbyshire District Council | 13.7% plus £1,527,000 | 18.0% | -3.3% | £1,527,000 | -3.3% | £1,527,000 | -3.3% | £1,527,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 | 14.7% plus £1,527,000 |
| | South Derbyshire District Council | 13.8% plus £678,000 | 17.6% | -2.8% | £678,000 | -2.8% | £678,000 | -2.8% | £678,000 | 14.8% plus £678,000 | 14.8% plus £678,000 | 14.8% plus £678,000 |
| 130 | Amber Valley Borough Council | 14.0% plus £1,057,000 | 18.3% | -3.3% | £1,057,000 | -3.3% | £1,057,000 | -3.3% | £1,057,000 | 15.0% plus £1,057,000 | 15.0% plus £1,057,000 | 15.0% plus £1,057,000 |
| | Town and Parish Councils (Pre 2001) | 23.8% | 18.4% | -0.2% | £0 | -0.2% | 03 | -0.2% | £0 | 18.2% | 18.2% | 18.2% |
| | Town and Parish Councils (Pre 2001) | 17.2% | 18.4% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.2% | 18.2% | 18.2% |
| | TOWN and Parish Councils (Post 2001) | 17.270 | 19.170 | -0.376 | LU | -0.376 | 2.0 | -0.376 | £0 | 10.070 | 10.070 | 10.070 |
| Other Schedu | iled Bodies | | | | | | | | | | | |
| 40 | Peak District National Park Authority | 14.0% plus £224,000 | 18.0% | -3.0% | £224,000 | -3.0% | £224,000 | -3.0% | £224,000 | 15.0% plus £224,000 | 15.0% plus £224,000 | 15.0% plus £224,000 |
| 123 | Derby Homes Ltd | 13.4% plus £290,000 | 17.5% | -3.1% | £290,000 | -3.1% | £290,000 | -3.1% | £290,000 | 14.4% plus £290,000 | 14.4% plus £290,000 | 14.4% plus £290,000 |
| | Rykneld Homes | 16.4% | 17.6% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 17.4% | 17.4% | 17.4% |
| 139 | Chesterfield Crematorium | 17.8% plus £29,000 | 18.0% | 0.8% | £29,000 | 0.8% | £29,000 | 0.8% | £29,000 | 18.8% plus £29,000 | 18.8% plus £29,000 | 18.8% plus £29,000 |
| 403 | Police and Crime Commissioner for Derbyshire Derbyshire Fire & Rescue | 12.9% plus £1,465,000 13.2% plus £170,000 | 17.3% 17.5% | -3.4% -3.3% | £1,465,000 £170,000 | -3.4% -3.3% | £1,465,000 £170,000 | -3.4% -3.3% | £1,465,000 £170,000 | 13.9% plus £1,465,000 14.2% plus £170,000 | 13.9% plus £1,465,000 14.2% plus £170,000 | 13.9% plus £1,465,000 14.2% plus £170,000 |
| 403 | Derbystille File & Rescue | 13.2% plus £170,000 | 17.570 | -3.370 | £170,000 | -3.370 | £170,000 | -3.370 | £170,000 | 14.270 plus £170,000 | 14.2% plus £170,000 | 14.2% plus £170,000 |
| Further Educa | ation Establishments | | | | | | | | | | | |
| | University of Derby | 12.7% plus £745,000 | 21.0% | -4.7% | £0 | -3.6% | £0 | -2.6% | £0 | 16.3% | 17.4% | 18.4% |
| | Derby College | 13.7% plus £441,000 | 21.6% | -5.1% | £350,000 | -4.1% | £360,000 | -3.1% | £371,000 | 16.5% plus £350,000 | 17.5% plus £360,000 | 18.5% plus £371,000 |
| | Chesterfield College | 12.9% plus £158,000 | 21.5% | -6.5% | £166,000 | -5.2% | £171,000 | -3.9% | £176,000 | 15.0% plus £166,000 | 16.3% plus £171,000 | 17.6% plus £176,000 |
| Cammunit: A | Idminaion Padica | | | | | | | | | | | |
| 120 | Admission Bodies Futures Housing (Amber Valley Housing) | 23.9% plus £103,000 | 33.4% | 0.0% | £95.000 | 0.0% | £95.000 | 0.0% | £95,000 | 33.4% plus £95,000 | 33.4% plus £95,000 | 33.4% plus £95,000 |
| 185 | Belber Leisure Centre Ltd | 23.9% plus £103,000 31.4% | 33.4% | 0.0% | £95,000 £1,000 | 0.0% | £95,000 £1.000 | 0.0% | £95,000 £1.000 | 33.4% plus £95,000 33.3% plus £1,000 | 33.4% plus £95,000 33.3% plus £1,000 | 33.4% plus £95,000 33.3% plus £1,000 |
| 404 | Derbyshire Student Residences Ltd | 25.8% | 27.7% | 0.0% | £1,000 | 0.0% | £1,000 | 0.0% | £1,000 | 27.7% | 27.7% | 27.7% |
| 457 | Derby Museums & Art Trust | 19.2% | 28.0% | -5.9% | £0 | -5.9% | £0 | -5.9% | £0 | 22.1% | 22.1% | 22.1% |
| 467 | Derby County Community Trust | 23.1% | 35.5% | 0.0% | £8,000 | 0.0% | £8,000 | 0.0% | £8,000 | 35.5% plus £8,000 | 35.5% plus £8,000 | 35.5% plus £8,000 |
| | | | | | | | | | | | | |
| Transferee Ad | dmission Bodies | | | | | | | | | | | |
| 404 | Leisure Amber Valley | 13.8% | 30.2% | -16.5% | 0 <u>3</u> | -16.5% | 0 <u>3</u> | -16.5% | £0 | 13.8% | 13.8% | 13.8% |
| 124 128 | East Midlands Homes (Three Valleys Housing Ltd) Waterloo Housing Group | 22.3% plus £161,000 28.1% plus £18.000 | 28.4% 30.2% | -7.3% -18.8% | £0 | -7.3% -18.8% | £0 £0 | -7.3% -18.8% | £0 | 21.1% 11.4% | 21.1% 11.4% | 21.1% |
| 170 | Crich Tramway Museum | 28.1% plus £18,000 24.0% plus £15.000 | 30.2% | -18.8% | £0 | 0.0% | £0 | -18.8% | £0 | 30.8% | 30.8% | 30.8% |
| 184 | Chesterfield Care Group | 25.2% | 28.8% | -25.5% | £0 | -25.5% | £0 | -25.5% | £0 | 3.3% | 3.3% | 3.3% |
| 414 | Veolia (Chesterfield Refuse) | 17.5% | 31.2% | -22.9% | £0 | -22.9% | £0 | -22.9% | £0 | 8.3% | 8.3% | 8.3% |

| | Employer/Pool name | | Primary Rate % | Secondary Rate | | | | | | | Total Contribution Rate | |
|------------|---|-------------------------|---------------------------------|-----------------|----------|-----------------|----------|-----------------|----------|----------------|-------------------------|----------------|
| Employer | | Contributions currently | 1 April 2020 - 31 March 2023 | 2020/2021 | | 2021/2022 | | 2022/2023 | | | | |
| code | | in payment 2019/2020 | | % of pay | £ | % of pay | £ | % of pay | £ | 2020/2021 | 2021/2022 | 2022/2023 |
| ansferee A | dmission Bodies continued | | | | | | | | | | | |
| 416 | VINCI (ex Norwest Holst) | 33.0% | 33.8% | -24.2% | £0 | -24.2% | £0 | -24.2% | £0 | 9.5% | 9.5% | 9.5% |
| 417 | Veolia (Amber Valley Refuse) | 6.1% | 31.9% | -31.9% | £0 | -31.9% | £0 | -31.9% | £0 | 0.0% | 0.0% | 0.0% |
| 418 | Interserve Integrated Services | 7.1% | 33.2% | -12.4% | £0 | -12.4% | £0 | -12.4% | £0 | 20.8% | 20.8% | 20.8% |
| 419 | Interserve Catering Services | 20.2% | 32.8% | -8.5% | £0 | -8.5% | £0 | -8.5% | £0 | 24.4% | 24.4% | 24.4% |
| 424 | Balfour Beatty Living Places(Balfour Beatty PLC) | 16.5% | 32.2% | -14.8% | £0 | -14.8% | £0 | -14.8% | £0 | 17.3% | 17.3% | 17.3% |
| 425 443 | MacIntyre Care Mitie Facilities Services Ltd | 2.0% | 30.1% 32.5% | -30.1% -2.3% | £0 £0 | -30.1% -2.3% | £0 £0 | -30.1% -2.3% | £0 £0 | 0.0% 30.2% | 0.0% 30.2% | 0.0% 30.2% |
| 443 | Compass Services (DCC) | 16.5% | 31.7% | -2.3% | £0 | -2.3% | £0 | -2.3% | £0 | 18.5% | 18.5% | 18.5% |
| 446 | Active Nation | 28.2% plus £2.000 | 31.8% | -13.2% | £0 | -13.2% | £0 | -13.2% | £0 | 19.8% | 19.8% | 19.8% |
| 451 | Compass Services (City) | 10.3% | 31.6% | -14.7% | £0 | -14.7% | £0 | -14.7% | £0 | 17.0% | 17.0% | 17.0% |
| 453 | Clean Slate (Pottery) | 30.4% plus £600 | 32.7% | -16.3% | £0 | -16.3% | £0 | -16.3% | £0 | 16.4% | 16.4% | 16.4% |
| 466 | Arvato Public Services Ltd (Derbyshire Dales) | 13.8% | 29.6% | -29.6% | £0 | -29.6% | £0 | -29.6% | £0 | 0.0% | 0.0% | 0.0% |
| 468 | Aspens Services Ltd | 28.2% plus £1,000 | 30.4% | -1.9% | £0 | -1.9% | £0 | -1.9% | £0 | 28.5% | 28.5% | 28.5% |
| 470 | VINCI Contruction UK LTD (Ashcroft & Portway) | 31.7% | 33.4% | -2.6% | £0 | -2.6% | £0 | -2.6% | £0 | 30.8% | 30.8% | 30.8% |
| 471 | NSL Limited | 22.3% | 30.1% | -9.9% | £0 | -9.9% | £0 | -9.9% | £0 | 20.3% | 20.3% | 20.3% |
| 472 | Mellors Catering Services Ltd | 25.7% | 32.3% | -32.3% | £0 | -32.3% | £0 | -32.3% | £0 | 0.0% | 0.0% | 0.0% |
| 475 | Connex Community Support | 13.3% | 34.4% | -13.4% | £0 | -34.4% | £0 | -34.4% | £0 | 21.0% | 0.0% | 0.0% |
| 478 | Taylor Shaw Ltd (Edwards and Blake, Elior) | 34.7% | 31.9% | -7.5% | £0 | -7.5% | £0 | -7.5% | £0 | 24.4% | 24.4% | 24.4% |
| 480 | CSE Educational Systems | 29.0% | 32.4% | -6.1% | £0 | -6.1% | £0 | -6.1% | £0 | 26.3% | 26.3% | 26.3% |
| 481 | Mellors (Murray Park) | 31.7% | 34.0% | -3.9% | £0 | -3.9% | £0 | -3.9% | £0 | 30.0% | 30.0% | 30.0% |
| 482 | Derbyshire Building Control Partnership Limited | 23.2% | 26.1% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 26.1% | 26.1% | 26.1% |
| 483 484 | Amber Valley School Sports Partnership Caterlink Ltd (Lea Primary) | 21.0% 30.2% | 24.1% 27.6% | -1.1% | £0 £0 | -1.1% | 0£ 0£ | -1.1% -14.8% | £0 £0 | 23.0% 12.9% | 23.0% | 23.0% 12.9% |
| 486 | Insight Services Ltd- Tibshelf Infant School - (KCLS Ltd) | 34.4% | 34.1% | -14.6% | £0 | -14.6% | £0 | -14.6% | £0 | 6.9% | 6.9% | 6.9% |
| 488 | Caterlink (Shirebrook Stubbin Wood) | 30.8% | 34.1% | -27.2% | £0 | -27.2% | £0 | -27.2% | £0 | 16.0% | 16.0% | 16.0% |
| 490 | Caterlink (Swanwick Hall) | 29.8% | 31.7% | 25.7% | £0 | 25.7% | £0 | 25.7% | £0 | 57.4% | 57.4% | 57.4% |
| 491 | Caterlink (St Mary's Chesterfield) | 29.1% | 31.8% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 33.4% | 33.4% | 33.4% |
| 492 | Caterlink (Reigate Primary) | 27.9% | 27.0% | 31.9% | £0 | 31.9% | £0 | 31.9% | £0 | 58.9% | 58.9% | 58.9% |
| 494 | Caterlink (Abercrombie) | 27.8% | 31.0% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 28.8% | 28.8% | 28.8% |
| 495 | Caterlink Ltd (St Mary's High School) | 31.8% | 30.6% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 31.2% | 31.2% | 31.2% |
| 497 | Churchill Contract Services Ltd (St Mary's Chesterfield) | 32.0% | 31.8% | 8.2% | £0 | 8.2% | £0 | 8.2% | £0 | 40.0% | 40.0% | 40.0% |
| 500 | Caterlink Ltd (De Ferrers Trust) | 30.2% | 30.5% | 1.3% | £0 | 1.3% | £0 | 1.3% | £0 | 31.7% | 31.7% | 31.7% |
| 502 | Caterlink Ltd (Cavendish Learning Trust) | 28.3% | 30.5% | -0.8% | £0 | -0.8% | £0 | -0.8% | £0 | 29.6% | 29.6% | 29.6% |
| 503 | Parkwood Leisure (HPBC - Buxton Pavillion) | 24.3% | 24.0% | 0.3% | £0 | 0.3% | £0 | 0.3% | £0 | 24.3% | 24.3% | 24.3% |
| 505 | Accuro FM Ltd | 32.4% | 28.9% | 3.5% | £0 | 3.5% | £0 | 3.5% | £0 | 32.4% | 32.4% | 32.4% |
| Academies | | | | | | | | | | | | |
| | Cavendish Learning Trust | 19.3% | 18.5% | 2.5% | £0 | 2.5% | 03 | 2.5% | £0 | 21.1% | 21.1% | 21.1% |
| | Djanogly Learning Trust | 21.0% | 19.3% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 17.9% | 17.9% | 17.9% |
| | Esteem Multi-Academy Trust Odyssey Collaborative Trust | 21.0% | 18.1% 17.8% | -1.5% 1.9% | £0 £0 | -1.5% 1.9% | £0 £0 | -1.5% 1.9% | £0 £0 | 16.6% 19.7% | 16.6% 19.7% | 16.6% 19.7% |
| | Ormiston Ilkeston Enterprise Authority | 23.7% | 19.2% | 5.5% | £0 | 6.5% | £0 | 7.5% | £0 | 24.7% | 25.7% | 26.7% |
| | Peak Multi-Academy Trust | 20.9% | 18.8% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 20.3% | 20.3% | 20.3% |
| | Queen Elizabeth Grammar School Multi-Academy Trust | 21.6% | 18.1% | 4.5% | £0 | 5.5% | £0 | 6.5% | £0 | 22.6% | 23.6% | 24.6% |
| | Frederick Gent School | 21.0% | 18.5% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.3% | 18.3% | 18.3% |
| 487 | RM Education Ltd ⁽²⁾ | 28.8% | 30.3% | 3.3% | £0 | 3.3% | £0 | 3.3% | £0 | 33.7% | 33.7% | 33.7% |
| 199 | Derby Manufacturing University Technical College | 21.1% | 17.9% | 2.2% | £0 | 1.2% | £0 | 0.2% | £0 | 20.1% | 19.1% | 18.1% |
| 336 | The Ecclesbourne School | 22.6% | 18.5% | 5.1% | £0 | 6.1% | £0 | 7.1% | £0 | 23.6% | 24.6% | 25.6% |
| 337 | Kirk Hallam Community Academy | 18.4% | 18.0% | 1.4% | £0 | 2.4% | £0 | 3.4% | £0 | 19.4% | 20.4% | 21.4% |
| 338 | John Port Spencer Academy | 20.4% | 18.2% | 3.2% | £0 | 4.2% | £0 | 5.2% | £0 | 21.4% | 22.4% | 23.4% |
| 340 | Brookfield Academy | 20.0% | 18.4% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.0% | 22.0% | 23.0% |
| 341 | The Long Eaton School | 19.9% | 17.8% | 3.1% | £0 | 4.1% | £0 | 5.1% | £0 | 20.9% | 21.9% | 22.9% |
| 342 | West Park School | 21.2% | 18.5% | 3.7% | £0 | 4.7% | £0 | 5.7% | £0 | 22.2% | 23.2% | 24.2% |
| 345 | Hope Valley College | 23.3% | 18.0% | 6.3% | £0 | 7.3% | £0 | 8.3% | £0 | 24.3% | 25.3% | 26.3% |

| U |
|---------------|
| מ |
| 9 |
| Ф |
| \rightarrow |
| ∞ |
| 0 |
| |

| Employer | Employer/Pool name | Contributions currently in payment 2019/2020 | Primary Rate % | | | | | | | Total Contribution Rate | | | | |
|------------|--|--|----------------|--------------|------------|--------------|----------|--------------|----------|-------------------------|----------------|----------------|--|--|
| code | | | 1 April 2020 - | 2020/2021 | | 202 | 1/2022 | 2022 | /2023 | 2020/2021 | 2021/2022 | 2022/2023 | | |
| | | | 31 March 2023 | % of pay | | % of pay | | % of pay | | 2020/2021 | 2021/2022 | 2022/2023 | | |
| ademies c | ontinued | | | | | | | | | | | | | |
| 347 | Pennine Way Junior Academy | 19.7% | 18.7% | 2.0% | £0 | 3.0% | £0 | 4.0% | £0 | 20.7% | 21.7% | 22.7% | | |
| 348 | Heanor Gate Science College | 20.5% | 19.0% | 2.5% | £0 | 3.5% | £0 | 4.5% | £0 | 21.5% | 22.5% | 23.5% | | |
| 349 | Lees Brook Community School | 19.7% | 17.8% | 2.9% | £0 | 3.9% | £0 | 4.9% | £0 | 20.7% | 21.7% | 22.7% | | |
| 351 | Redhill Academy | 20.7% | 19.2% | 2.5% | £0 | 3.5% | £0 | 4.5% | £0 | 21.7% | 22.7% | 23.7% | | |
| 352 | St John Houghton Catholic Voluntary Academy | 20.6% | 16.6% | 5.0% | £0 | 6.0% | £0 | 7.0% | £0 | 21.6% | 22.6% | 23.6% | | |
| 353 | Allestree Woodlands School | 19.9% | 17.8% | 3.1% | £0 | 4.1% | £0 | 5.1% | £0 | 20.9% | 21.9% | 22.9% | | |
| 354 | Grampian Primary Academy | 19.2% | 16.6% | 3.6% | £0 | 4.6% | £0 | 5.6% | £0 | 20.2% | 21.2% | 22.2% | | |
| 360 | Saint Benedict Voluntary Catholic Academy | 22.0% | 19.0% | 4.0% | £0 | 5.0% | £0 | 6.0% | £0 | 23.0% | 24.0% | 25.0% | | |
| 361 | St Mary's Catholic High School, a Catholic Voluntary Academy | 21.4% | 18.7% | 3.7% | £0 | 4.7% | £0 | 5.7% | £0 | 22.4% | 23.4% | 24.4% | | |
| 362 | St John fisher Catholic Voluntary Academy | 21.7% | 19.4% | 3.3% | £0 | 4.3% | £0 | 5.3% | £0 | 22.7% | 23.7% | 24.7% | | |
| 363 | St Georges Voluntary Catholic Academy | 20.1% | 17.9% | 3.2% | 0 <u>£</u> | 4.2% | 03 | 5.2% | £0 | 21.1% | 22.1% | 23.1% | | |
| 364 365 | Wyndham Primary Academy The Bolsover School | 16.7% 20.9% | 17.7% 19.1% | 0.0% | £0 | 1.0% | £0 £0 | 2.0% | £0 £0 | 17.7% 21.9% | 18.7% 22.9% | 19.7% 23.9% | | |
| 365 | Landau Forte Academy Moorhead (Landau Forte Charitable Trust) | 20.9% 19.6% | 19.1% | 2.8% | £0 | 3.8% | £0 | 4.8% | £0 | 21.9% | 22.9% | 23.9% | | |
| 367 | Derby Pride Academy | 15.5% | 15.8% | 0.7% | £0 | 1.7% | £0 | 2.7% | £0 | 20.6% | 17.5% | 18.5% | | |
| 368 | Merrill Academy | 22.5% | 15.8% | 5.4% | £0 | 6.4% | £0 | 7.4% | £0 | 23.5% | 24.5% | 25.5% | | |
| 371 | English Martyrs Catholic Voluntary Academy | 18.5% | 18.8% | 0.7% | £0 | 1.7% | £0 | 2.7% | £0 | 19.5% | 20.5% | 21.5% | | |
| 372 | Newbold Church of England Primary School | 17.3% | 17.7% | 0.6% | £0 | 1.6% | £0 | 2.6% | £0 | 18.3% | 19.3% | 20.3% | | |
| 373 | Bishop Lonsdale Church of England Primary School & Nursery | 25.8% | 19.3% | 5.5% | £0 | 4.5% | £0 | 3.5% | £0 | 24.8% | 23.8% | 22.8% | | |
| 374 | Zaytouna Primary School | 20.0% | 17.6% | 2.4% | £0 | 2.4% | £0 | 2.4% | £0 | 20.0% | 20.0% | 20.0% | | |
| 375 | The Ripley Academy | 25.0% | 19.0% | 7.0% | £0 | 8.0% | £0 | 9.0% | £0 | 26.0% | 27.0% | 28.0% | | |
| 376 | St Joseph's Catholic Primary School A Voluntary Academy(Mansfield) | 17.6% | 18.1% | 0.5% | £0 | 1.5% | £0 | 2.5% | £0 | 18.6% | 19.6% | 20.6% | | |
| 377 | Dovedale Primary School | 20.9% | 17.8% | 3.1% | £0 | 3.1% | £0 | 3.1% | £0 | 20.9% | 20.9% | 20.9% | | |
| 378 | Sawley Infant and Nursery School | 20.0% | 19.2% | 1.8% | £0 | 2.8% | £0 | 3.8% | £0 | 21.0% | 22.0% | 23.0% | | |
| 379 | Sawley Junior School | 21.2% | 18.5% | 2.7% | £0 | 2.7% | £0 | 2.7% | £0 | 21.2% | 21.2% | 21.2% | | |
| 380 | Shardlow Primary School | 23.3% | 19.7% | 2.6% | £0 | 1.6% | £0 | 0.6% | £0 | 22.3% | 21.3% | 20.3% | | |
| 381 | Immaculate Conception Catholic Primary | 20.7% | 17.7% | 2.0% | £0 | 1.0% | £0 | 0.0% | £0 | 19.7% | 18.7% | 17.7% | | |
| 382 | Allenton Primary School | 27.9% | 17.8% | 9.1% | £0 | 8.1% | £0 | 7.1% | £0 | 26.9% | 25.9% | 24.9% | | |
| 383 | Outwood Academy Newbold | 20.2% | 18.4% | 2.8% | £0 | 3.8% | £0 | 4.8% | £0 | 21.2% | 22.2% | 23.2% | | |
| 384 | Turnditch Church of England Primary School | 20.2% | 18.0% | 3.2% | £0 | 4.2% | £0 | 5.2% | £0 | 21.2% | 22.2% | 23.2% | | |
| 385 | William Gilbert Endowed (C of E) Primary School | 21.2% | 20.1% | 2.1% | £0 | 3.1% | £0 | 4.1% | £0 | 22.2% | 23.2% | 24.2% | | |
| 386 | St Laurence CofE VA Primary School | 21.2% | 18.4% | 2.8% | £0 | 2.8% | £0 | 2.8% | £0 | 21.2% | 21.2% | 21.2% | | |
| 387 | Akaal Primary School | 19.5% | 17.5% | 1.0% | £0 | 0.0% | £0 | -1.0% | £0 | 18.5% | 17.5% | 16.5% | | |
| 388 | Inkersall Primary School | 20.2% | 18.1% | 3.1% | 0 <u>£</u> | 4.1% | £0 | 5.1% | £0 | 21.2% | 22.2% | 23.2% | | |
| 389 | St Philip Howard Catholic Voluntary Academy | 20.2% | 17.4% | 2.8% | 0 <u>3</u> | 2.8% | 03 | 2.8% | 03 | 20.2% | 20.2% | 20.2% | | |
| 390 391 | St Giles CofE Aided Primary School (Matlock) Walter Evans CofE Primary & Nursery School | 20.3% | 17.6% 18.3% | 3.7% 2.9% | £0 £0 | 4.7% 2.9% | £0 £0 | 5.7% 2.9% | £0 £0 | 21.3% 21.1% | 22.3% | 23.3% | | |
| 391 | Swanwick Hall School | 20.2% | 18.6% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.1% | 21.1% | 23.2% | | |
| 393 | John Flamsteed Community School | 20.2% | 18.6% | 2.6% | £0 | 3.6% | £0 | 4.6% | £0 | 21.2% | 22.2% | 23.2% | | |
| 395 | David Nieper Academy | 17.8% | 18.2% | 0.6% | £0 | 1.6% | £0 | 2.6% | £0 | 18.8% | 19.8% | 20.8% | | |
| 396 | Christ Church Primary School | 21.5% | 19.0% | 2.5% | £0 | 2.5% | £0 | 2.5% | £0 | 21.5% | 21.5% | 21.5% | | |
| 422 | Landau Forte College Derby (Landau Forte Charitable Trust) | 12.3% plus £3,000 | 16.6% | -3.1% | £0 | -2.1% | £0 | -1.1% | £0 | 13.5% | 14.5% | 15.5% | | |
| 439 | Shirebrook Academy | 20.4% | 18.0% | 3.4% | £0 | 4.4% | £0 | 5.4% | £0 | 21.4% | 22.4% | 23.4% | | |
| 601 | Holbrook CE Primary School | 22.4% | 18.6% | 3.8% | £0 | 3.8% | £0 | 3.8% | £0 | 22.4% | 22.4% | 22.4% | | |
| 602 | St Edwards Catholic Academy | 20.0% | 18.7% | 1.3% | £0 | 1.3% | £0 | 1.3% | £0 | 20.0% | 20.0% | 20.0% | | |
| 603 | St Joseph's Catholic Primary School (Matlock) | 20.0% | 19.5% | 1.5% | £0 | 2.5% | £0 | 3.5% | £0 | 21.0% | 22.0% | 23.0% | | |
| 604 | Mary Swanwick Primary School | 21.0% | 19.0% | 1.2% | £0 | 1.2% | £0 | 1.2% | £0 | 20.2% | 20.2% | 20.2% | | |
| 605 | Brimington Manor Infant School | 18.9% | 19.6% | 0.3% | £0 | 1.3% | £0 | 2.3% | £0 | 19.9% | 20.9% | 21.9% | | |
| 606 | Brimington Junior School | 18.3% | 19.2% | 0.1% | £0 | 1.1% | £0 | 2.1% | £0 | 19.3% | 20.3% | 21.3% | | |
| 607 | Noel-Baker Academy | 21.0% | 18.7% | 4.8% | £0 | 4.8% | £0 | 4.8% | £0 | 23.5% | 23.5% | 23.5% | | |
| 608 | All Saints CofE Infant School (Matlock) | 21.0% | 18.1% | -0.3% | £0 | -0.3% | £0 | -0.3% | £0 | 17.8% | 17.8% | 17.8% | | |
| 609 | St Giles CE Primary School (Killamarsh) | 21.0% | 17.7% | -0.8% | £0 | -0.8% | £0 | -0.8% | £0 | 16.9% | 16.9% | 16.9% | | |
| 612 | All Saints Junior School (Matlock) | 21.0% | 19.1% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 19.1% | 19.1% | 19.1% | | |
| 613 | Heritage High | 21.0% | 18.6% | -0.6% | £0 | -0.6% | £0 | -0.6% | £0 | 18.0% | 18.0% | 18.0% | | |
| 614 | New Whittington Primary | 21.0% | 18.4% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 16.2% | 16.2% | 16.2% | | |
| 615 | Eckington Juniors | 19.4% | 19.1% | 0.3% | £0 | 0.3% | £0 | 0.3% | £0 | 19.4% | 19.4% | 19.4% | | |

| | Employer/Pool name | | Primary Rate % | | | Second | dary Rate | Total Contribution Rate | | | | |
|------------|--|-------------------------|---------------------------------|---------------------|----------|--------------|-----------|-------------------------|--------------|----------------|----------------|----------------|
| Employer | | Contributions currently | 1 April 2020 - 31 March 2023 | 2020/2021 2021/2022 | | | | 2022 | /2023 | | | |
| code | | in payment 2019/2020 | | % of pay | £ | % of pay | | % of pay | | 2020/2021 | 2021/2022 | 2022/2023 |
| cademies c | ontinued | | | | | | | | | | | |
| 616 | Darley Churchtown Primary School | 21.0% | 18.1% | -0.6% | £0 | -0.6% | £0 | -0.6% | £0 | 17.5% | 17.5% | 17.5% |
| 617 | Temple Normanton Junior Academy | 21.0% | 20.2% | 4.6% | £0 | 4.6% | £0 | 4.6% | £0 | 24.8% | 24.8% | 24.8% |
| 618 | Da Vinci Academy | 21.0% | 18.1% | 6.0% | £0 | 6.0% | £0 | 6.0% | £0 | 24.1% | 24.1% | 24.1% |
| 619 | The Pingle Academy | 21.0% | 19.0% | -0.1% | £0 | -0.1% | £0 | -0.1% | £0 | 18.9% | 18.9% | 18.9% |
| 621 | Derwent Community Primary School | 21.0% | 17.9% | 2.9% | £0 | 2.9% | £0 | 2.9% | £0 | 20.8% | 20.8% | 20.8% |
| 622 | Breadsall Hill Top Primary | 21.0% | 18.6% | 1.8% | £0 | 1.8% | £0 | 1.8% | £0 | 20.4% | 20.4% | 20.4% |
| 623 | Pear Tree Junior School | 21.0% | 19.1% | 2.5% | £0 | 2.5% | £0 | 2.5% | £0 | 21.6% | 21.6% | 21.6% |
| 624 | Granville Academy | 21.0% | 17.2% | -1.7% | £0 | -1.7% | £0 | -1.7% | £0 | 15.5% | 15.5% | 15.5% |
| 625 | St Georges CofE Primary (New Mills) | 21.0% | 18.9% | 0.3% | £0 | 0.3% | £0 | 0.3% | £0 | 19.2% | 19.2% | 19.2% |
| 626 | Scargill CofE Primary | 21.0% | 19.5% | 0.4% | £0 | 0.4% | £0 | 0.4% | £0 | 19.9% | 19.9% | 19.9% |
| 627 | Cavendish Close Junior Academy | 21.0% | 18.2% | 1.3% | £0 | 1.3% | 03 | 1.3% | 03 | 19.5% | 19.5% | 19.5% |
| 628 | Cloudside Academy | 21.0% | 18.8% | -1.4% | £0 | -1.4% | 03 | -1.4% | 03 | 17.4% | 17.4% | 17.4% |
| 629 | Somercotes Infants Somerlea Park Junior | 21.0% | 18.4% | -2.3% 0.7% | £0 | -2.3% | £0 | -2.3% 0.7% | £0 | 16.1% | 16.1% | 16.1% |
| 630 631 | Someriea Park Junior Bolsover CofE Junior School | 21.0% | 19.3% 18.3% | -0.4% | £0 £0 | 0.7% | £0 | -0.4% | 0 <u>£</u> 0 | 20.0% | 20.0% | 20.0% 17.9% |
| 633 | Firs Primary School | 21.0% | 18.3% 18.6% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 17.9% | 17.9% | 17.9% |
| 634 | Hardwick Primary School | 21.0% | 18.6% | 1.8% | £0 | 1.8% | £0 | 1.8% | £0 | 18.5% | 18.5% | 19.4% |
| 635 | Derby Moor Academy | 21.0% | 17.6% | 0.5% | £0 | 0.5% | £0 | 0.5% | £0 | 19.4% | 19.4% | 17.4% |
| 636 | John King Infant Academy | 21.0% | 18.0% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 17.4% | 17.4% | 17.4% |
| 637 | Longwood Infant Academy | 21.0% | 18.4% | -2.1% | £0 | -2.1% | £0 | -2.1% | £0 | 16.3% | 16.3% | 16.3% |
| 639 | Kirkstead Junior Academy | 21.0% | 18.4% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 18.0% | 18.0% | 18.0% |
| 641 | Ironville and Codnor Park Primary School | 21.0% | 17.9% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 17.0% | 17.0% | 17.0% |
| 644 | Chaddesden Park Primary School | 21.0% | 18.6% | 4.7% | £0 | 4.7% | £0 | 4.7% | £0 | 23.3% | 23.3% | 23.3% |
| 645 | Eckington School | 21.0% | 19.0% | 0.2% | £0 | 0.2% | £0 | 0.2% | £0 | 19.2% | 19.2% | 19.2% |
| 646 | Village Primary Academy | 21.0% | 18.0% | 2.1% | £0 | 2.1% | £0 | 2.1% | £0 | 20.1% | 20.1% | 20.1% |
| 647 | Street Lane Primary School | 21.0% | 19.7% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 19.0% | 19.0% | 19.0% |
| 648 | Ash Croft Primary Academy | 21.0% | 18.9% | 1.5% | £0 | 1.5% | £0 | 1.5% | £0 | 20.4% | 20.4% | 20.4% |
| 649 | Langwith Bassett Junior Academy | 21.0% | 18.2% | -2.1% | £0 | -2.1% | £0 | -2.1% | £0 | 16.1% | 16.1% | 16.1% |
| 650 | Friesland School | 21.0% | 18.7% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 16.5% | 16.5% | 16.5% |
| 657 | All Saints Catholic Voluntary Academy (Glossop) | 21.0% | 17.2% | -1.2% | £0 | -1.2% | £0 | -1.2% | £0 | 16.0% | 16.0% | 16.0% |
| 658 | Christ the King Catholic Voluntary Academy | 21.0% | 18.8% | -1.4% | £0 | -1.4% | 03 | -1.4% | £0 | 17.4% | 17.4% | 17.4% |
| 659 | St Alban's Catholic Voluntary Academy (Derby) | 21.0% | 18.7% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 20.3% | 20.3% | 20.3% |
| 660 | St Anne's Catholic Voluntary Academy (Buxton) | 21.0% | 19.9% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 19.2% | 19.2% | 19.2% |
| 661 | St Charles Catholic Primary Voluntary Academy (Hadfield) | 21.0% | 18.6% | -1.1% | £0 | -1.1% | £0 | -1.1% | £0 | 17.5% | 17.5% | 17.5% |
| 662 | St Elizabeth's Catholic Voluntary Academy (Belper) | 21.0% | 19.1% | -1.8% | £0 | -1.8% | £0 | -1.8% | £0 | 17.3% | 17.3% | 17.3% |
| 663 | St Joseph's Catholic Voluntary Academy (Derby) | 21.0% | 19.0% | 1.1% | £0 | 1.1% | £0 | 1.1% | £0 | 20.1% | 20.1% | 20.1% |
| 664 | St. Margaret's Catholic Voluntary Academy (Glossop) | 21.0% | 18.7% | -2.2% | £0 | -2.2% | £0 | -2.2% | £0 | 16.5% | 16.5% | 16.5% |
| 665 | St Mary's Catholic Voluntary Academy (Derby) | 21.0% | 18.2% | 2.1% | £0 | 2.1% | £0 | 2.1% | £0 | 20.3% | 20.3% | 20.3% |
| 667 | St Mary's Catholic Voluntary Academy (New Mills) | 21.0% | 18.3% | -2.8% | £0 | -2.8% | £0 | -2.8% | £0 | 15.5% | 15.5% | 15.5% |
| 668 | St Thomas Catholic Voluntary Academy (Ilkeston) | 21.0% | 18.7% | -1.2% | £0 | -1.2% | £0 | -1.2% | £0 | 17.5% | 17.5% | 17.5% |
| 669 | St Thomas More Voluntary Academy (Buxton) | 21.0% | 19.1% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 18.2% | 18.2% | 18.2% |
| 670 | Derby Cathedral School | 21.0% | 19.7% | -0.4% | £0 | -0.4% | £0 | -0.4% | £0 | 19.3% | 19.3% | 19.3% |
| 671 | St Mary's Catholic Voluntary Academy (Glossop) | 21.0% | 19.5% | -0.5% | £0 | -0.5% | £0 | -0.5% | £0 | 19.0% | 19.0% | 19.0% |
| 672 | Alvaston Junior Academy | 21.0% | 19.4% | 3.3% | £0 | 3.3% | £0 | 3.3% | £0 | 22.7% | 22.7% | 22.7% |
| 673 | Reigate Park Primary Academy | 21.0% | 18.2% | 0.5% | £0 | 0.5% | 03 | 0.5% | 03 | 18.7% | 18.7% | 18.7% |
| 674 | Cottons Farm Primary Academy | 21.0% | 19.4% | 2.1% | £0 | 2.1% | 03 | 2.1% | 03 | 21.5% | 21.5% | 21.5% |
| 675 | Hilton Primary School | 21.0% | 18.4% | -1.4% | £0 | -1.4% | 03 | -1.4% | 03 | 17.0% | 17.0% | 17.0% |
| 676 | Loscoe CofE Primary School and Nursery | 21.0% | 18.2% | -1.5% | £0 | -1.5% | 03 | -1.5% | 03 | 16.7% | 16.7% | 16.7% |
| 677 | Ashwood Spencer Academy | 21.0% | 18.7% | 1.6% | £0 | 1.6% | £0 | 1.6% | £0 | 20.3% | 20.3% | 20.3% |
| 678 | Wilsthorpe School | 21.0% | 18.5% | 0.5% | £0 | 0.5% | 03 | 0.5% | 03 | 19.0% | 19.0% | 19.0% |
| 679 | Gamesley Primary Academy | 21.0% | 18.0% 17.3% | -0.1% 1.8% | £0 | -0.1% | £0 | -0.1% | £0 | 17.9% | 17.9% | 17.9% |
| 682 | Lakeside Primary Academy | 21.0% | | 11011 | £0 | 1.8% | £0 | 1.8% | £0 | 19.1% | 19.1% | 19.1% |
| 684 685 | Walton on Trent CofE Primary & Nursery School | 21.0% 21.0% | 18.9% 19.2% | 0.1% 3.2% | £0 £0 | 0.1% 3.2% | £0 | 0.1% 3.2% | £0 £0 | 19.0% 22.4% | 19.0% 22.4% | 19.0% 22.4% |
| 686 | Griffe Field Primary School | 21.0% | 19.2% | 0.2% | £0 | 0.2% | £0 | 0.2% | £0 | 18.8% | 18.8% | 18.8% |
| | Horsley Woodhouse Primary School | | | | | | | | | | | |
| 687 | Kilburn Junior School | 21.0% | 17.7% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 16.8% | 16.8% | 16.8% |

| U |
|----------|
| a |
| Q |
| Ф |
| _ |
| ∞ |
| Ň |

| | | | | Primary Rate % | | | Secon | dary Rate | Total Contribution Rate | | | | |
|----------|----------------|--|--|----------------|----------|----------|----------|-----------|-------------------------|--------------|----------------|----------------|----------------|
| | Employer | Employer/Pool name | Contributions currently in payment 2019/2020 | 1 April 2020 - | 2020 | /2021 | 202 | 1/2022 | 2022 | 2/2023 | | | 2022/2023 |
| | code | | | 31 March 2023 | % of pay | | % of pay | | % of pay | | 2020/2021 | 2021/2022 | |
| | Academies co | ontinued | | | | | | | | | | | |
| | 688 | Aldercar Infant School | 21.0% | 18.5% | -0.2% | £0 | -0.2% | £0 | -0.2% | £0 | 18.3% | 18.3% | 18.3% |
| | 689 | Heath Primary School | 21.0% | 17.3% | -0.9% | £0 | -0.9% | £0 | -0.9% | £0 | 16.4% | 16.4% | 16.4% |
| L | 690 | Howitt Primary Community School | 21.0% | 18.9% | -0.7% | £0 | -0.7% | £0 | -0.7% | £0 | 18.2% | 18.2% | 18.2% |
| - | | Derby St Chad's CofE (VC) Nursery and Infant School | 21.0% | 18.2% | 1.1% | £0 | 1.1% | £0 | 1.1% | £0 | 19.3% | 19.3% | 19.3% |
| H | 693 | Arboretum Primary School | 21.0% | 17.4% | 1.2% | £0 | 1.2% | £0 | 1.2% | £0 | 18.6% | 18.6% | 18.6% |
| h | Post 2019 valu | uation employers | | | | | | | | | | | |
| Ī | 701 | Portway Junior School (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| | 702 | Cherry Tree Hill Primary (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| | 703 | Beaufort Primary School (Odyssey Collaborative Trust) | 21.0% | 17.8% | 1.9% | £0 | 1.9% | £0 | 1.9% | £0 | 19.7% | 19.7% | 19.7% |
| L | 704 | Holme Hall Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| - | 705 | Brookfield Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| - | 706 | Richardson Endowed Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| - | 707 | Woodthorpe CofE Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | 0 <u>£</u> 0 | 21.0% | 21.0% | 21.0% |
| ŀ | 708 709 | Ashgate Croft Primary Old Hall Junior School | 21.0% 21.0% | 21.0% 21.0% | 0.0% | £0 £0 | 0.0% | £0 | 0.0% | 0 <u>£</u> 0 | 21.0% 21.0% | 21.0% 21.0% | 21.0% 21.0% |
| H | 710 | Walton Holymoorside Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| U | 710 | Westfield Infants | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| ַעַ | 713 | Brooklands Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| มี | 714 | Tupton Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| ָ ט | 716 | Carlyle Infant & Nursery School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 717 | Hodthorpe Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| ∞ | 718 | Kensington Junior School (Djanogly Learning Trust) | 21.0% | 19.3% | -1.4% | £0 | -1.4% | £0 | -1.4% | £0 | 17.9% | 17.9% | 17.9% |
| S | 719 | Longford CofE Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| L | 720 | NE Derbyshire Support Centre (Esteem Trust) | 21.0% | 18.1% | -1.5% | £0 | -1.5% | £0 | -1.5% | £0 | 16.6% | 16.6% | 16.6% |
| L | 721 | St Clares Special School (Esteem Trust) | 21.0% | 18.1% | -1.5% | £0 | -1.5% | £0 | -1.5% | £0 | 16.6% | 16.6% | 16.6% |
| - | 722 | St Andrews Special School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| - 1 | 723 | Church Gresley Infant and Nursery School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | 03 | 0.0% | 03 | 21.0% | 21.0% | 21.0% |
| H | 724 | Ravensdale Junior School | 21.0% | 21.0% 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 £0 | 21.0% 21.0% | 21.0% 21.0% | 21.0% 21.0% |
| H | 725 726 | Chellaston Fields Academy The Mease at Hilton | 21.0% 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| ŀ | 727 | Hackwood Primary | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| F | 728 | Iw House School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| ŀ | 729 | Tupton Hall School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 730 | St Werburgh Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 731 | St Giles Primary Chaddesden | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 732 | The Green Infant School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 733 | Lawn Primary School | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| | 734 | St Peter's CE Aided Junior | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| L | 735 | Springwell Community College | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |
| . L | 736 | North Wingfield Primary & Nursery Academy | 21.0% | 21.0% | 0.0% | £0 | 0.0% | £0 | 0.0% | £0 | 21.0% | 21.0% | 21.0% |

Notes

- (1) The contributions due for 1 April 2020 to 31 March 2023 are shown in the table. With the agreement of the Administering Authority, this employer has agreed to make a cash payment of £56,379,340 in April 2020 in respect of contributions due for the year to 31 March 2021. The cash amount payable for the year to 31 March 2021 will be reduced in return for this early payment by 1.75% for the period 1 April 2020 to 31 March 2021 (i.e. the above amounts will be multiplied by 0.9825). With the agreement of the Administering Authority, the employer may also make a cash payment in April 2021 in respect of contributions due in the year to 31 March 2022 and/or April 2022 in respect of contributions due in the year to 31 March 2023. The reduction in the amount payable will be calculated by the Fund actuary at that time based on updated payroll estimates. As the employer has estimated, in advance, the pensionable pay for 2020/21 (and will estimate for 2021/22 and/or 2022/23 if prepaying those contributions), a balancing adjustment to reflect the actual pensionable pay over the year would be made at the end of each year (no later than 30th April following the year-end).
- (2) These are pass through employers for which we have calculated a stand-alone rate. However, they are pooled with their respective Awarding Authority for all funding risks. For the employer RM Education Ltd (487), this is Frederick Gent School.
- (3) These are pass through employers with a fixed rate. They are pooled with Chesterfield Borough Council for all funding risks.
- (4) Contributions expressed as a percentage of payroll should be paid into Derbyshire Pension Fund ("the Fund") at a frequency in accordance with the requirements of the Regulations;
- (5) Further sums should be paid to the Fund to meet the costs of any early retirements and/or augmentations using methods and factors issued by us from time to time or as otherwise agreed.
- (6) Payments may be required to be made to the Fund by employers to meet the capital costs of any ill-health retirements that exceed those allowed for within our assumptions. If an employer has ill health liability insurance in place with a suitable insurer and provides satisfactory evidence to the Administering Authority, then their certified contribution rate may be reduced by the value of their insurance premium, for the period the insurance is in place.
- (7) The certified contribution rates represent the **minimum** level of contributions to be paid. Employing authorities may pay further amounts at any time and future periodic contributions may be adjusted on a basis approved by the Fund Actuary.

- (8) There has been significant volatility in the financial markets during February and March 2020 as a result of the COVID-19 pandemic. This volatility may impact funding balance sheets for those employers planning to exit the Fund during the period covered by this Rates and Adjustments Certificate. In order to effectively manage employer exits from the Fund, the Administering Authority reserves the right to revisit the contribution rates for employers that are expected to cease participation in the Fund before 31 March 2023. An employer will be contacted by the Administering Authority in this instance.
- (9) The Town and Parish Councils are split as per the following table:

| Tow | n and Parish Councils (Pre 2001) | Tov | vn and Parish Councils (Post 2001) |
|-----|----------------------------------|-----|---------------------------------------|
| 144 | Shirebrook Town Council | 142 | Morton Parish Council |
| 145 | New Mills Town Council | 155 | Glapwell Parish Council |
| 147 | Clay Cross Parish Council | 161 | Burnaston Parish Council |
| 148 | Eckington Parish Council | 165 | North Wingfield Parish Council |
| 149 | Smalley Parish Council | 174 | Tupton Parish Council |
| 150 | Pinxton Parish Council | 186 | Alfreton Town Council |
| 151 | Wirksworth Town Council | 187 | Wingerworth Parish Council |
| 152 | Old Bolsover Town Council | 188 | Heanor & Loscoe Town Council |
| 153 | Bakewell Town Council | 189 | Darley Dale Town Council |
| 157 | Belper Town Council | 234 | Tibshelf Parish Council |
| 159 | Elmton Parish Council | 235 | Kilburn Parish Council |
| 160 | Killamarsh Parish Council | 236 | Codnor Parish Council |
| 162 | Dronfield & District Jnt Burial | 237 | Shardlow & Great Wilne Parish Council |
| 171 | Ashbourne Town Council | 238 | Ticknall Parish Council |
| 172 | Dronfield Town Council | 239 | Stenson Fields Parish Council |
| 173 | Whitwell Parish Council | 240 | Heath & Holmewood Parish Council |
| 175 | Staveley Town Council | 241 | Bretby Parish Council |
| 178 | Matlock Town Council | 242 | Breaston Parish Council |
| 179 | Whaley Bridge Town Council | 243 | Woodville Parish Council |
| 181 | Willington Parish Council | 244 | Elvaston Parish Council |
| 182 | Holymoorside Parish Council | 245 | Hatton Parish Council |
| | | 248 | Clowne Parish Council |
| | | 250 | Draycott Parish Council |
| | | 251 | Blackwell Parish Council |



Jan M

Rill W.

Signature:

Name: Barry Dodds

Richard Warden

Qualification: Fellows of the Institute and Faculty of Actuaries

Firm: Hymans Robertson LLP

20 Waterloo Street

Glasgow G2 6DB

Date: 30 April 2020

This page is intentionally left blank







