Appendix A

Essex Pension Fund

Funding update report as at 31 March 2021

Barnett Waddingham LLP

22 November 2021

Contents

Introduction

Essex County Council, as administering authority for the Essex Pension Fund (the Fund), has asked that we carry out an annual monitoring assessment of the Fund as at 31 March 2021. The purpose of this assessment is to provide an update on the funding position.

The Fund participates in the Local Government Pension Scheme (LGPS). The LGPS is a defined benefit statutory scheme administered in accordance with Local Government Pension Scheme Regulations 2013 (the Regulations).

We have taken account of current LGPS Regulations (as amended) as at the date of this report.

On 13 May 2021 the Government issued a ministerial statement on the proposed remedy to be applied to LGPS benefits in response to the McCloud and Sargeant cases relating to age discrimination. The statement confirms that changes will be made to the LGPS Regulations to compensate members directly affected by the change to career average benefits from 1 April 2014. The Government's intention is that regulations will come into force on 1 April 2023 or possibly 1 October 2023, and draft regulations are expected in 2022. An allowance consistent with that adopted for the Fund's 31 March 2019 valuation has been made for the expected changes in LGPS benefits, details of which can be found in the Changes in market conditions – market yields and discount rates section.

The information in this report is addressed to and is provided for use by Essex County Council as the administering authority to the Fund. This report may be shared with other interested parties but it does not constitute advice to them.

This report complies with Technical Actuarial Standard 100: Principles for Technical Actuarial Work (TAS 100) and Technical Actuarial Standard 300: Pensions (TAS 300) as issued by the Financial Reporting Council (FRC).

We assess the funding position on a smoothed basis which is an estimate of the average position over a six month period spanning the reporting date. As the smoothing adjustment reflects average market conditions spanning a six month period straddling the reporting date, the smoothed figures are projected numbers and likely to change up until three months after the reporting date. The smoothed results are indicative of the underlying trend.

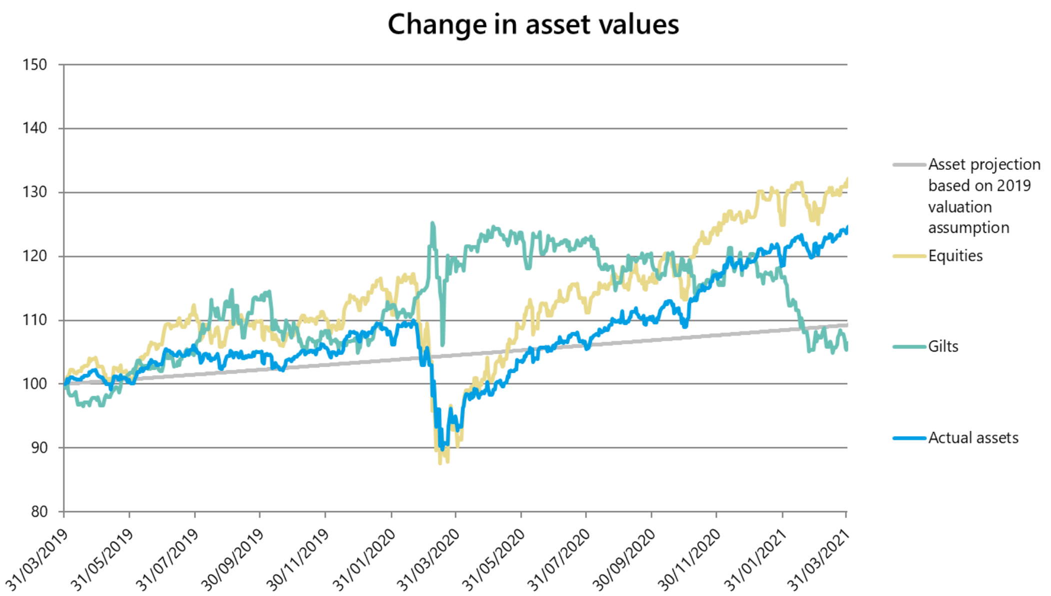
Assets

The estimated (unsmoothed) market value asset allocation of the Essex Pension Fund as at 31 March 2021, based on data received from Essex County Council, is as follows:

Assets (market value)	31 March 2021		31 March 2020		31 March 2019	
	£000s	%	£000s	%	£000s	%
Equities	5,528,201	63%	3,871,288	58%	4,385,834	62%
Gilts	222,663	3%	285,066	4%	391,041	6%
Other bonds	425,110	5%	400,724	6%	404,594	6%
Property	615,862	7%	594,737	9%	609,876	9%
Cash/temporary investments	220,131	3%	287,837	4%	183,309	3%
Alternative Assets	1,004,417	11%	762,729	12%	687,026	10%
Other managed funds	722,752	8%	425,244	6%	365,608	5%
Total assets	**8,739,136**	**100%**	**6,627,625**	**100%**	**7,027,288**	**100%**

The investment return achieved by the Fund's assets in market value terms for the year to 31 March 2021 is estimated to be 29.3%. The return achieved since the previous valuation is estimated to be 23.6% (which is equivalent to 11.2% p.a.).

The following chart shows the changes in equity and bond markets since the previous actuarial valuation and compares them with the estimated actual fund returns and the expected fund returns assumed at the previous valuation:



As we can see the asset value as at 31 March 2021 in market value terms is more than where it was projected to be at the previous valuation.

For funding purposes, we use a smoothed value of the assets rather than the market value. The financial assumptions that we use in valuing the liabilities are smoothed around the valuation date so that the market conditions used are the average of the daily observations over the six month period around 31 March 2021. Therefore, we value the assets in a consistent way and apply the same smoothing adjustment to the market value of the assets.

Changes in market conditions – market yields and discount rates

The actual investment returns earned by the Fund will affect the value of the Fund's assets. The value of the Fund's liabilities, however, is dependent on the assumptions used to value the future benefits payable.

For the purpose of this exercise it is appropriate to use the method and assumptions consistent with those set by the Fund actuary for the purpose of the 31 March 2019 actuarial valuation, updated where necessary to reflect market conditions, except for the inflation assumption which has been updated in light of new market information. Following the Government's response (on 25 November 2020) to the consultation on the reform of RPI, and the expectation that the UK Statistics Authority will implement the proposed changes to bring RPI in line with CPIH from 2030, it has been agreed with the administering authority that CPI inflation will be 0.8% p.a. below the 20 year point on the Bank of England implied inflation curve with effect from 31 December 2020. This has been updated from the assumption at the 2019 valuation where this gap was assumed to be 1.0% p.a. We have implemented this change and smoothed it into our assumptions over the six month period straddling this date (consistent with the Fund's existing funding approach) and this results in an overall assumption that CPI inflation will be 0.8% p.a. below the 20 year point on the Bank of England implied inflation curve as at 31 March 2021. Further details of this update are available on request.

The following table show how the main financial assumptions have changed since the last triennial valuation:

	31 March 2021		31 March 2020		31 March 2019	
Assumptions (smoothed)	Nominal	Real	Nominal	Real	Nominal	Real
	% p.a.		% p.a.		% p.a.	
Pension increases (CPI)	2.66%	-	2.20%	-	2.65%	-
Salary increases	3.66%	1.00%	3.20%	1.00%	3.65%	1.00%
Discount rate	3.87%	1.22%	4.07%	1.87%	4.51%	1.86%

The discount rate assumption is set with reference to the Fund's long term investment strategy and therefore reflects the long term expected return on assets for the Fund. Consistent with the method adopted for the 31 March 2019 valuation, we have included in the discount rate assumption an explicit prudence allowance of 1.3%. This includes an allowance for current uncertainties in LGPS benefits (relating to the effects of the McCloud/Sargeant judgement and the cost cap).

As noted in the Introduction, the final remedy in response to the McCloud/Sargeant judgement will only be known once the Government's consultation is finalised and a final set of remedial Regulations are published. Furthermore, it is also not known yet what benefit changes in addition to the McCloud remedy (if any) may be made in light of the results of the cost cap process.

The key assumption which has the greatest impact on the valuation of liabilities is the real discount rate (the discount rate relative to CPI inflation) – the higher the real discount rate the lower the value of liabilities. As we see, the real discount rate is lower than at the 31 March 2019 valuation, increasing the value of liabilities used for funding purposes.

Results

The funding position for each month has been rolled forward from the formal valuation and is shown in Appendix 1. It should be borne in mind that the nature of the calculations is approximate and so the results are only indicative of the underlying position.

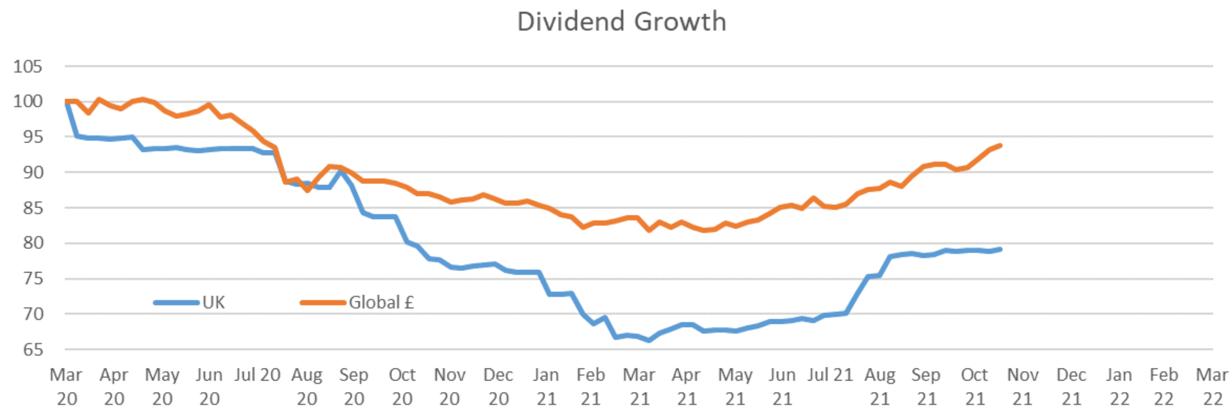
The results of our assessment indicate that:

- The current projection of the smoothed funding level as at 31 March 2021 is 98.8% and the average required employer contribution would be 25.7% of payroll assuming the deficit is to be paid by 31 March 2032. The total employer contribution rate of 25.7% comprises of a primary rate of 24.7% and a secondary rate of 1.0%.
- This compares with the reported (smoothed) funding level of 97.0% and average required employer contribution of 21.9% of payroll at the 31 March 2019 funding valuation. The total employer contribution rate of 21.9% comprises of a primary rate of 20.0% and a secondary rate of 1.9%.

The discount rate underlying the smoothed funding level as at 31 March 2021 is 3.9% p.a. The investment return required to restore the funding level to 100% by 31 March 2032, without the employers paying deficit contributions, would be 4.0% p.a.

The funding level has improved since the last valuation. The main reason for this are the higher than expected Fund returns which have now more than made up for the fall in asset values following the start of the Covid 19 pandemic at the start of 2020. However, the total contributions required have increased mainly due to a reduction in the discount rate net of inflation.

The reduction in the discount rate is in part due to the suspension or reduction in equity dividends in the early months of the pandemic. The following chart shows how UK and global dividends have changed since the start of the pandemic in March 2020.



As we see dividends declined rapidly but have been recovering in the last 6 months as companies resume paying more "normal" levels of dividend. We will continue to monitor this in the run up to the next valuation as at March 2022. The funding model uses global dividends as the income component in the equity return model which is still 5% less than where it was in March 2020. As with all aspects of the funding model we will be reviewing this aspect of the model to ensure it reflects long term expectations and is not being distorted by short term factors.

Final comments

There are many factors that affect the Fund's funding position and could lead to the Fund's funding objectives not being met within the timescales expected. Some of the key risks that could have a material impact on the Fund include longevity risk, financial risks (including inflation and investment risk) and regulatory risks. There is more detail on this contained within the Fund's Funding Strategy Statement and the 31 March 2019 actuarial valuation report.

Note that the funding position at a future date will be dependent on the investment performance of the Fund as well as future market conditions which determine the financial assumptions.

We would be pleased to answer any questions arising from this report.

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Partner
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Appendix 1 Financial position since previous valuation

Below we show the financial position on a smoothed basis for each month since the previous full valuation. As the smoothing adjustment reflects average market conditions spanning a six month period straddling the reporting date, the smoothed figures for the previous three months are projected numbers and likely to change up until three months after the reporting date.

Please note that the results shown below are sensitive to the underlying assumptions. For example, increasing the discount rate assumption by 0.5% will increase the funding level by about 10%, and increasing the CPI inflation assumption by 0.5% will reduce the funding level by about 9%.

Smoothed results	Assets (incl. volatility reserve deduction)	Liabilities	Surplus / (Deficit)	Funding level	CARE ongoing cost	Past service ctbn	Total ctbn	Discount rate	Return required to restore funding level
Valuation date	£000s	£000s	£000s	%	% of pay	% of pay	% of pay	% p.a.	% p.a.
31 Mar 2019	6,711,392	6,917,143	(205,751)	97%	20.0%	1.9%	21.9%	4.5%	4.7%
30 Apr 2019	6,757,048	6,992,002	(234,954)	97%	20.3%	2.1%	22.4%	4.5%	4.7%
31 May 2019	6,838,037	7,041,013	(202,976)	97%	20.4%	1.8%	22.2%	4.4%	4.7%
30 Jun 2019	6,879,470	7,084,235	(204,765)	97%	20.5%	1.8%	22.3%	4.4%	4.6%
31 Jul 2019	6,859,096	7,110,517	(251,421)	96%	20.5%	2.2%	22.7%	4.4%	4.6%
31 Aug 2019	6,906,350	7,148,569	(242,219)	97%	20.6%	2.2%	22.8%	4.3%	4.6%
30 Sep 2019	6,941,403	7,183,781	(242,378)	97%	20.7%	2.2%	22.9%	4.2%	4.5%
31 Oct 2019	7,027,276	7,223,437	(196,161)	97%	20.7%	1.8%	22.5%	4.2%	4.4%
30 Nov 2019	7,093,226	7,268,839	(175,613)	98%	20.8%	1.6%	22.4%	4.1%	4.3%
31 Dec 2019	7,015,019	7,203,388	(188,369)	97%	20.4%	1.7%	22.1%	4.1%	4.3%
31 Jan 2020	6,874,759	7,166,062	(291,303)	96%	20.1%	2.7%	22.8%	4.1%	4.4%
29 Feb 2020	6,871,422	7,154,422	(283,000)	96%	19.9%	2.6%	22.5%	4.1%	4.4%
31 Mar 2020	6,900,714	7,173,612	(272,898)	96%	19.9%	2.6%	22.5%	4.1%	4.4%
30 Apr 2020	6,799,962	7,196,882	(396,920)	94%	19.9%	3.5%	23.4%	4.0%	4.5%
31 May 2020	6,820,279	7,251,019	(430,740)	94%	20.1%	3.8%	23.9%	4.0%	4.5%
30 Jun 2020	6,972,716	7,416,835	(444,119)	94%	20.8%	4.0%	24.8%	4.0%	4.5%
31 Jul 2020	7,106,449	7,587,242	(480,793)	94%	21.4%	4.3%	25.7%	3.9%	4.5%
31 Aug 2020	7,353,494	7,731,909	(378,415)	95%	22.0%	3.4%	25.4%	3.9%	4.3%
30 Sep 2020	7,452,437	7,865,965	(413,528)	95%	22.5%	3.7%	26.2%	3.8%	4.3%
31 Oct 2020	7,625,445	7,990,027	(364,582)	95%	23.0%	3.3%	26.3%	3.8%	4.2%
30 Nov 2020	7,784,548	8,081,843	(297,295)	96%	23.3%	2.7%	26.0%	3.8%	4.1%
31 Dec 2020	7,897,392	8,191,596	(294,204)	96%	23.6%	2.7%	26.3%	3.8%	4.1%
31 Jan 2021	8,056,822	8,320,757	(263,935)	97%	24.1%	2.4%	26.5%	3.8%	4.1%
28 Feb 2021	8,297,012	8,423,170	(126,158)	99%	24.5%	1.2%	25.7%	3.8%	4.0%
31 Mar 2021	8,413,097	8,516,876	(103,779)	99%	24.7%	1.0%	25.7%	3.9%	4.0%

Appendix 2 Data, method and assumptions

Data

In completing our calculations we have used the following items of data, which we received from Essex County Council:

- The results of the valuation as at 31 March 2019 which was carried out for funding purposes;
- Actual whole Fund income and expenditure items for the period to 31 March 2021; and
- Actual Fund returns based on Fund asset statements provided to 31 March 2021, and Fund income and expenditure as noted above.

The data has been checked for reasonableness and we are happy that the data is sufficient for the purpose of this report.

Full details of the benefits being valued are as set out in the Regulations as amended and summarised on the LGPS website and the Fund's membership booklet. We have made no allowance for discretionary benefits.

Method

To assess the value of the Fund's liabilities as at 31 March 2021, we have rolled forward the value of the liabilities calculated for the funding valuation as at 31 March 2019 using the financial assumptions below and actual cashflows paid to and from the Fund.

It is not possible to assess the accuracy of the estimated value of the liabilities as at 31 March 2021 without completing a full valuation. However, we are satisifed that the approach of rolling forward the previous valuation data to 31 March 2021 should not introduce any material assumptions in the results provided that the actual experience of the Fund is broadly in line with the underlying assumptions and that the structure of the liabilities is substantially the same as at the latest formal valuation. From the information we have received there appears to be no evidence that this approach is inappropriate.

We have been provided with the Fund assets at various dates but for dates that these are not available, we calculate the Fund assets by rolling forward the previous assets provided allowing for investment returns (estimated where necessary), and actual cashflows paid to and from the Fund. The latest date that we have been provided with the Fund assets is 31 March 2021.

Assumptions

For the purpose of this exercise it is appropriate to use the method and assumptions consistent with those set by the Fund actuary for the purpose of the 31 March 2019 actuarial valuation, updated where necessary to reflect market conditions, except for the inflation assumption which has been updated in light of new market information.

Following the Government's response (on 25 November 2020) to the consultation on the reform of RPI, and the expectation that the UK Statistics Authority will implement the proposed changes to bring RPI in line with CPIH from 2030, it has been agreed with the administering authority that CPI inflation will be 0.8% p.a. below the 20 year point on the Bank of England implied inflation curve with effect from 31 March 2021. This has been updated from the assumption at the 2019 valuation where this gap was assumed to be 1.0% p.a. We have implemented this change and smoothed it into our assumptions over the six month period straddling this date (consistent with the Fund's existing funding approach) and this results in an overall assumption that CPI inflation will be 0.8% p.a. below the 20 year point on the Bank of England implied inflation curve as at 31 March 2021. Further details of this update are available on request.

A summary of the main financial assumptions adopted is set out in the main body of this report.

As noted in the Introduction, an allowance has been made for current uncertainties in LGPS benefits (relating to the effects of the McCloud/Sargeant judgement and the cost cap). This is allowed for in the prudence allowance in the ongoing discount rate.

At the time of producing this report the outcome of the effects relating to the McCloud/Sargeant judgement are still to be agreed upon. The final remedy in response to the judgement will only be known once the Government's consultation is finalised and a final set of remedial Regulations are published. Furthermore, it is also not known yet what benefit changes in addition to the McCloud remedy (if any) may be made in light of the results of the cost cap process.

The main demographic assumptions are:

- The post retirement mortality tables adopted are the S3PA tables with a multiplier of 110% for males and 115% for females.;
- The dependant post retirement mortality tables adopted are the S3DA tables with a multiplier of 95% for males and 105% for females.

These base tables are then projected using the CMI 2018 Model, allowing for a long-term rate of improvement of 1.25% p.a, a smoothing parameter of 7.5 and an initial addition parameter of 0.5% p.a.

The other key demographic assumptions are:

- Members retire at a single age, based on the average age at which they can take each tranche of their pension; and
- It is assumed that members will exchange 50% of their commutable pension for cash at retirement.

Further details of the derivation of the financial and demographic assumptions can be found in the relevant actuarial valuation report.