

Essex Pension Fund

Funding update report as at 31 March 2020

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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 2020. 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. An allowance consistent with the approach at the 2019 valuation has been made for current uncertainties in LGPS benefits (in relation to the effects of the McCloud/Sargeant judgement and cost cap). At the time of producing this report the outcome of these matters is still to be agreed so the exact impact they will have on LGPS benefits is unknown.

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.

In addition, we assess the funding position on an unsmoothed basis where assets are taken at market value and discount rates are taken as the spot rates at the reporting date.

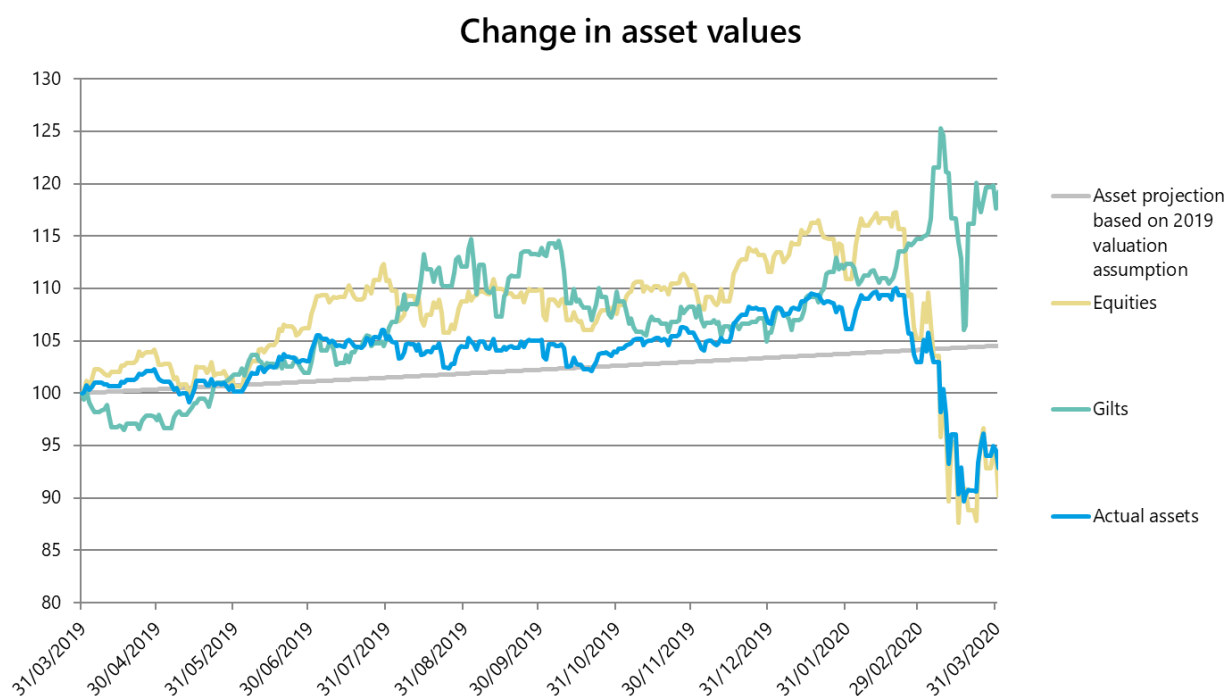
Assets

The market value and asset allocation of the Essex Pension Fund as at 31 March 2020, based on data received from Essex County Council, is as follows:

Assets (market value)	31 March 2020		31 March 2019	
	£000s	%	£000s	%
Equities	3,871,288	58%	4,385,834	62%
Gilts	285,066	4%	391,041	6%
Other bonds	400,724	6%	404,594	6%
Property	594,737	9%	609,876	9%
Cash/temporary investments	287,837	4%	183,309	3%
Alternative Assets	762,729	12%	687,026	10%
Other managed funds	425,244	6%	365,608	5%
Total assets	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 2020 is estimated to be -5.4%.

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 2020 in market value terms is less 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 2020. 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. Further details of the derivation of the financial and demographic assumptions can be found in the relevant actuarial valuation report.

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

Assumptions (smoothed)	31 March 2020		31 March 2019	
	Nominal	Real	Nominal	Real
	% p.a.		% p.a.	
Pension increases (CPI)	2.20%	-	2.65%	-
Salary increases	3.20%	1.00%	3.65%	1.00%
Discount rate	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%.

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 broadly similar as at the 31 March 2019 valuation, maintaining 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 2020 is 96.2% and the average required employer contribution would be 22.5% of payroll assuming the deficit is to be paid by 31 March 2032. The total employer contribution rate of 22.5% comprises a primary rate of 19.9% and a secondary rate of 2.6%.
- 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 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 2020 is 4.1% 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 4.4% p.a.

The funding level has decreased very slightly but by less than the drop in market value of the assets due to the smoothing mechanisms in the model. As we smooth assets in the 6 months spanning the valuation date we capture the bounce in markets in the 3 months after the valuation date. However the deficit in cash terms is higher than at 2019 increasing the required deficit contribution whilst the cost of future benefits is broadly unchanged leading to a small increase in the total required contribution rate.

Update to funding assumptions

Future investment returns that will be achieved by the Fund in the short term are more uncertain than usual, in particular the return from equities due to actual and potential reductions and suspensions of dividends. The funding model assumes that dividends will increase by 1.5% more than CPI in the longer term.

Dividend futures markets can provide an indication of future dividend expectations and although quite volatile in early April, as the pandemic started to hit the Western world, were suggesting potentially a 20% reduction for calendar year 2020 compared to 2019 in US dollar terms. The market was also suggesting that it would take seven years to recover to the same cash levels before the reduction.

However a lot of the reduction in dividends, at least in the UK, is due to the Government requiring banks and encouraging insurers to suspend dividends. The biggest dividend payer in the UK market, the oil company Shell hit the headlines when not long into lockdown, it announced it was cutting its dividend by two thirds. A number of other large companies also decided to reduce or suspend dividends, due to the uncertain times ahead. Dividends paid by Q2 payers in the UK dropped almost 50% in the second quarter of 2020 compared to the second quarter of 2019 with about half of this accounted for by the banks and others in the finance sector.

As at the end of August the dividends from UK companies in the 12 months to 31 August were 11% less than the 12 months to 31 August 2019. Dividends from global equities were down 12% for the same period in sterling terms but only 3% in local currency terms due to the decline in sterling.

If global dividends were to reduce by 20% without any additional long term growth to compensate then the funding level at March 2020 would reduce by around 6% from 96.2% to 90.2% and the total contribution rate would increase by around 7% of payroll from 22.5% to 29.2% of payroll.

The key issue here is if the reduction in dividends is due to a reduction in earnings, or, whether companies are just retaining their earnings to strengthen their balance sheet due to the uncertainty and this may simply just be deferring payment if the outturn is not as bad as they are assuming. In reality it is probably a bit of both. However it would not be unreasonable to assume that with dividends having fallen quite far then the future growth in dividends in the short term is likely to be higher than it otherwise would have been. Increasing 100 by 10 is a 10% increase – 20% if you are starting from 50.

We have therefore modelled two scenarios in terms of higher than average dividend growth in the short term assuming a 20% initial fall in 2020. Under the first scenario we have assumed that dividend growth will be 1.5% more over the next seven years than the long term average assumption of 1.5% more than CPI – so 3% more than CPI. The second scenario assumes 2% extra growth per annum rather than 1.5%.

Under the first scenario, the extra dividend growth means that rather than a 6% fall in funding level, the reduction is only 3.4% resulting in a funding level of 92.8% and the total contribution rate would increase by 3.7% to 26.2% rather than by 7% of payroll. Under the second scenario the reduction in funding level falls further to 2.5% from 96.2% to 93.7% and the total contribution rate would only increase by 2.7% of payroll from 22.5% to 25.2% of payroll.

Once we understand the longer term effects of the current crisis on the investment markets, we suggest we review the valuation assumptions remain appropriate for the purposes of these funding updates.

Impact of the volatility reserve

At the 2019 valuation an asset shock or volatility reserve of 5% was deducted from the smoothed assets to protect the Fund against adverse experience and to achieve stability in funding and contribution rates.

The question is then, given the recent market turmoil, do we have enough volatility reserve to maintain funding levels and more importantly contribution rates at the 2019 valuation levels?

Before allowing for any reduction in dividends, to maintain the average employer contribution rate at the 2019 level of 21.9%, we would need to utilise around 20% of the 5% volatility reserve as at 31 March 2020 – so 1% of the assets still leaving 4%.

Under the scenario where global dividends were to reduce by 20% as described in the previous section and without using the volatility reserve the funding level as at 31 March 2020 would 90.2% and the required employer contribution rate would increase from the current average level of 21.9% to 29.2% at the last valuation.

Under this scenario, using all of the volatility reserve would lead to the funding level increasing from 90.2% to 94.9% and the required total contribution rate would increase by 4.0% of pay from 21.9% to 25.9%. The reserve would therefore help to offset some of the increase in the required contribution rate as a result of the assumed fall in dividend yields, but not all of it.

However, under the higher short term dividend growth scenarios, then assuming 1.5% extra short term growth and using all of the volatility reserve we would produce a funding level of 97.7%. However the total average employer contribution rate would still increase under this scenario from 21.9% to 22.8%. This is primarily to the increase in the primary rate not quite being offset by the reduction in secondary rate.

Finally, assuming an additional 2.0% extra short term growth then using up 65% of the volatility reserve (so 3.25% of the total assets) would be sufficient to broadly maintain both the total average employer contribution rate and the funding level at the 2019 levels.

So in summary we have the following

Scenario	31 March 2019	31 March 2020	31 March 2020 20% dividend fall	31 March 2020 20% dividend fall 1.5% add. growth	31 March 2020 20% dividend fall 2.0% add. growth
Funding level	97.0%	96.2%	90.2%	92.8%	93.7%
Total average contribution rate	21.9%	22.5%	29.2%	26.2%	25.2%
% of volatility reserve used	n/a	20%	100%	100%	65%
Funding level using vol. reserve	n/a	97.2%	94.9%	97.7%	96.9%
Total average contribution rate using vol. reserve	n/a	21.8%	25.9%	22.8%	21.9%

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.

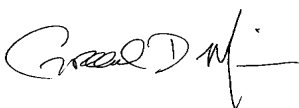
The results of this interim review indicate a slight reduction in funding level and an increase in the average required employer contribution rate at 31 March 2020 compared to 31 March 2019 but perhaps not so bad as might have been expected. This is due to the funding model which aims to smooth out short term market volatility and keep employer contributions rates as stable as possible, even through the most testing times.

Some of this stability comes from the 6 month smoothing mechanism, but some of it also comes from the assumption that companies normally tend to smooth their dividend payments to shareholders. The reduction in dividends so far in 2020 and the outlook for the rest of the year however will be unprecedented and be far more severe than we saw in the financial crisis of 2008/09. However, as in that crisis, we are likely to see some rebound that will make up some of the cuts although it is likely to take some time to get back to pre-crisis levels.

The long term assumption is that dividends will increase by CPI plus 1.5% which is around 4% per annum at current inflation levels. What the scenario testing shows is that if we have a 20% initial drop in dividends in 2020 but then rather than 4% per annum growth we have 6% per annum for the next 7 years (and then reverting to the long term 4%), the volatility reserve set aside at the 2019 valuation will have been sufficient to maintain employer contributions at the 2019 levels.

Of course there is still much uncertainty ahead, but the prudent approach adopted at the 2019 valuation, and the setting aside of the volatility reserve means that the Fund will hopefully come through this crisis relatively unscathed – certainly in better shape than some other Funds.

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



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Barnett Waddingham LLP

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.

The smoothed assets shown in the table below include a 5% volatility reserve reduction consistent with the actuarial valuation as at 31 March 2019.

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 9%, 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%

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 2020; and
- Actual Fund returns based on Fund asset statements provided to 31 March 2020, 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 2020, 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 2020 without completing a full valuation. However, we are satisfied that the approach of rolling forward the previous valuation data to 31 March 2020 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 2020.

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.

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

The post retirement mortality 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.