

# Essex Pension Fund

Funding Update Report

as at 31 March 2015

Graeme D Muir FFA  
Barnett Waddingham LLP

2 September 2015

## Contents

1.	Introduction	3
2.	Assets	4
3.	Changes in market conditions – market yields and discount rates	5
4.	Summary of results	6
Appendix 1	Financial position since previous valuation	8

## 1. Introduction

- 1.1. We have carried out an annual monitoring assessment of the Essex Pension Fund (the Fund) as at 31 March 2015. The purpose of this assessment is to provide an update on the funding position.
- 1.2. 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.
- 1.3. In addition, and for information, we have also assessed the funding position on an alternative "gilts plus" basis where assets are taken at market value and discount rates are a fixed premium over gilt yields (we have assumed a 2% premium). This is the model typically used in the private sector and also by some LGPS Funds.

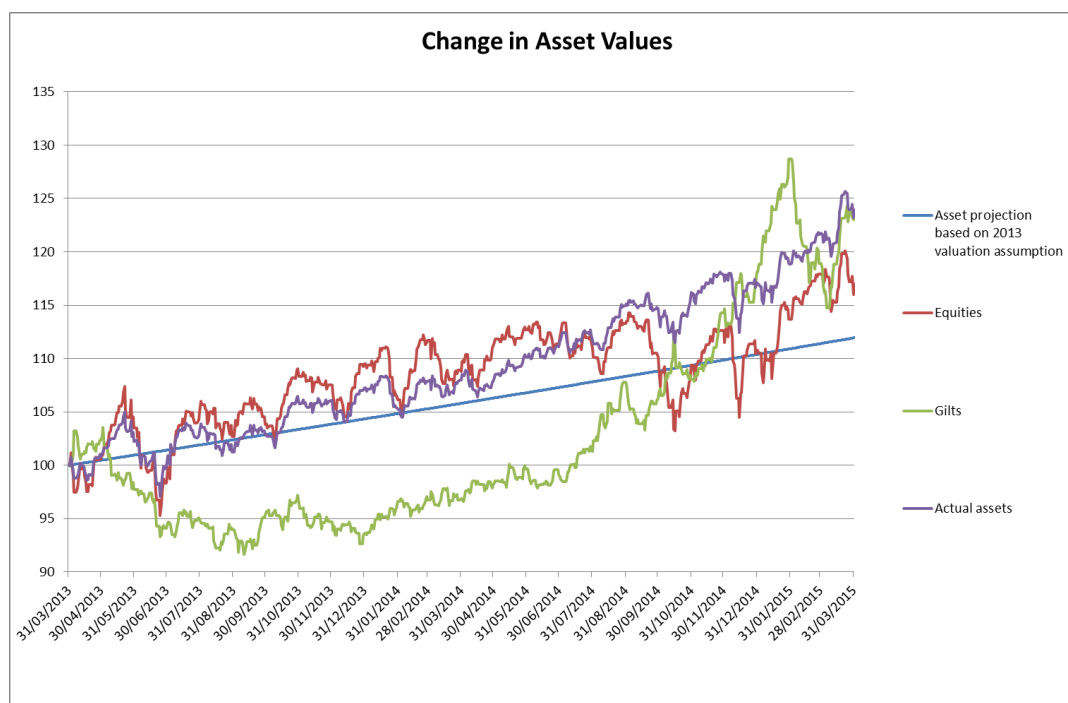
## 2. Assets

2.1. The estimated asset allocation in market value terms of the Essex Pension Fund as at 31 March 2015 is as follows:

Assets (market value)	31 Mar 2015		31 Mar 2014		31 Mar 2013	
	£000s	%	£000s	%	£000s	%
Global Equities	3,303,487	67%	2,856,327	66%	2,628,196	66%
Property	539,587	11%	468,964	11%	418,595	11%
Index Linked Gilts	216,532	5%	344,996	8%	264,371	7%
Corporate Bonds	549,562	11%	371,627	9%	336,050	8%
Infrastructure	158,975	3%	127,236	3%	113,567	3%
Financing Fund	11,921	0%	14,529	0%	16,213	0%
Timber	49,057	1%	34,705	1%	30,972	1%
Cash	103,502	2%	118,990	3%	150,509	4%
<b>Total assets</b>	<b>4,932,623</b>	<b>100%</b>	<b>4,337,374</b>	<b>100%</b>	<b>3,958,473</b>	<b>100%</b>

2.2. The investment return achieved by the Fund's assets in market value terms for the year to 31 March 2015 is 14.8%. The return achieved since the previous valuation is 12.2% p.a.

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



2.4. As we can see asset value as at 31 March 2015 in market value terms is more than where it was projected to be at the previous valuation.

### 3. Changes in market conditions – market yields and discount rates

- 3.1. 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. The following table show how the assumptions under our BW economic model have changed since the last triennial valuation:

Assumptions BW economic model	31 Mar 2015		31 Mar 2014		31 Mar 2013	
	Nominal	Real	Nominal	Real	Nominal	Real
	% p.a.		% p.a.		% p.a.	
Pension increases	2.54%	-	2.78%	-	2.74%	-
Salary increases	4.34%	1.80%	4.58%	1.80%	4.54%	1.80%
Discount rate	5.45%	2.91%	5.89%	3.11%	5.80%	3.06%

- 3.2. The key assumption which has the greatest impact on the valuation of liabilities is the real discount rate – the higher the real discount rate the lower the value of liabilities. As we see the real discount rate under the BW economic model is broadly similar as at the 2013 valuation, maintaining the value of liabilities used for funding purposes.
- 3.3. The following table shows how assumptions have changed under the alternative “gilts plus” model with a 2% risk premium:

Assumptions (Gilts plus model)	31 Mar 2015		31 Mar 2014		31 Mar 2013	
	Nominal	Real	Nominal	Real	Nominal	Real
	% p.a.		% p.a.		% p.a.	
Pension increases	2.48%	-	2.83%	-	2.80%	-
Salary increases	4.28%	1.80%	4.63%	1.80%	4.60%	1.80%
Discount rate	4.32%	1.84%	5.62%	2.79%	5.14%	2.34%

- 3.4. As we see the real discount rate under the gilts plus model has decreased which increases the value placed on liabilities under the gilts plus basis.

## 4. Summary of results

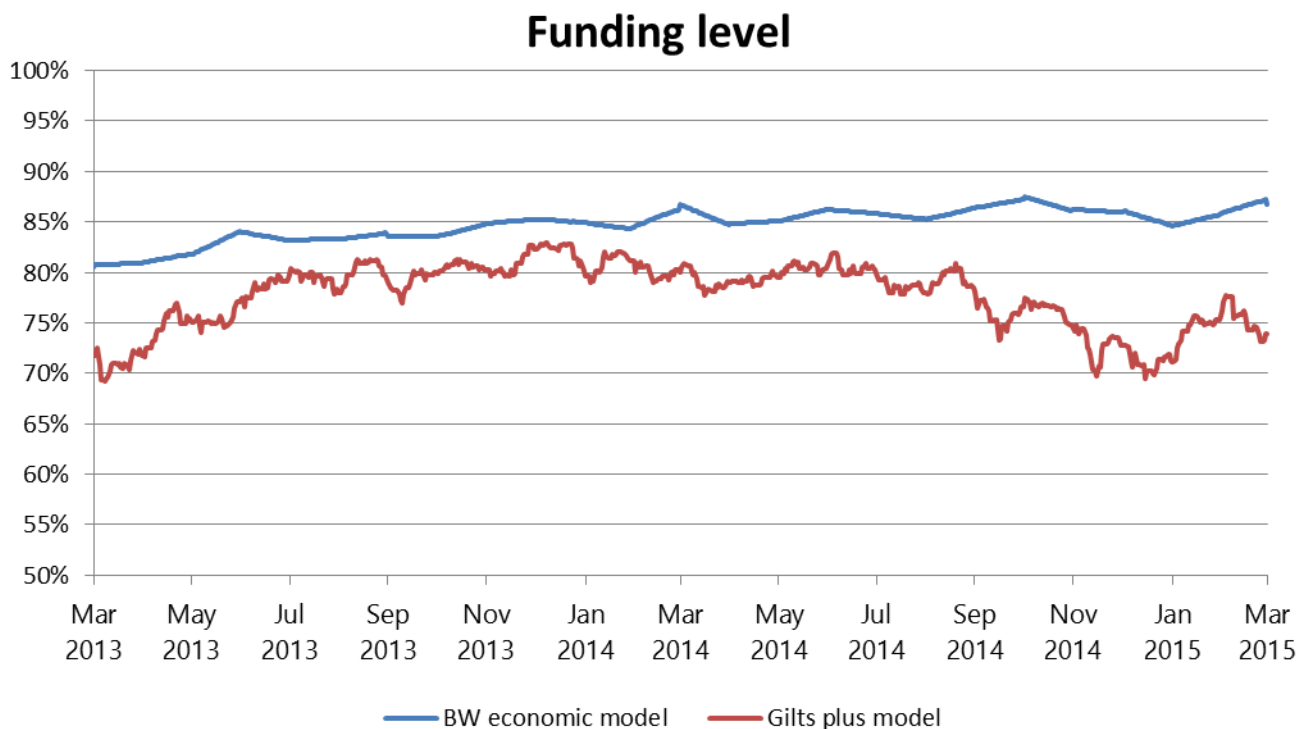
4.1. The results of our assessment indicate that:

- The current projection of the smoothed funding level as at 31 March 2015 is 86.8% and the average required employer contribution would be 20.3% of payroll assuming the deficit is to be paid by 2033;
- This compares with the reported (smoothed) funding level of 80% and average required employer contribution of 21.7% of payroll at the 2013 funding valuation.

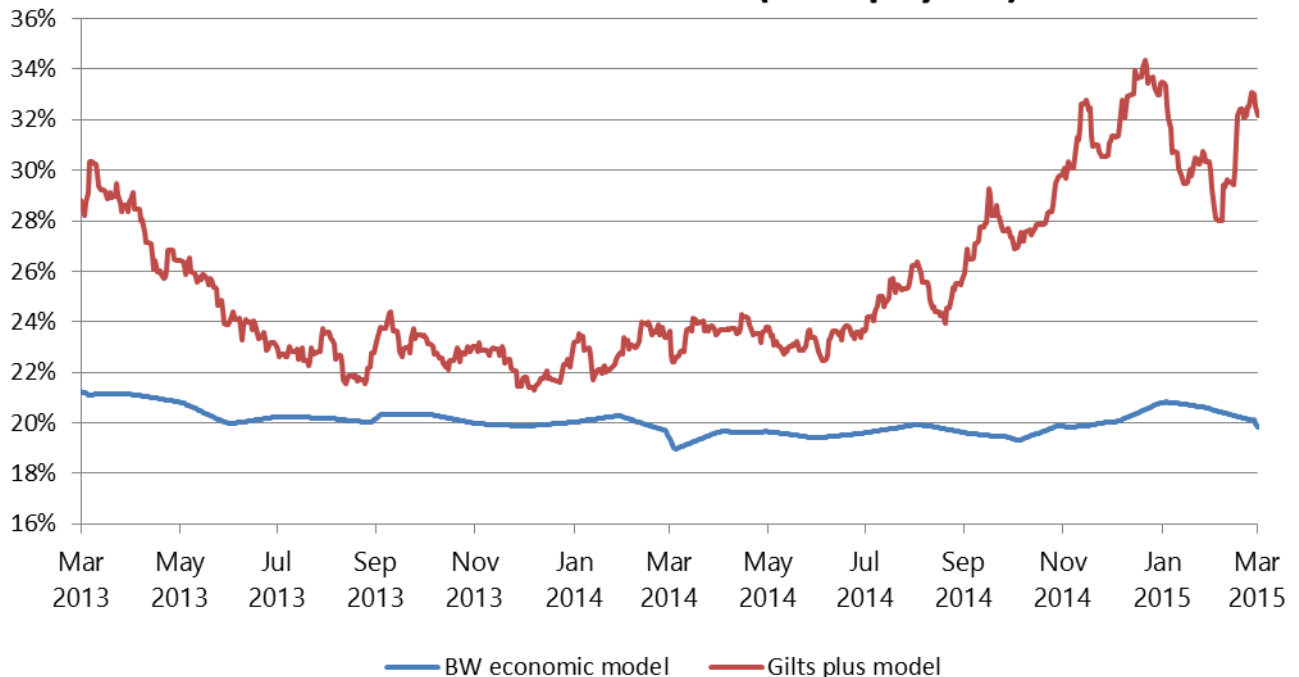
4.2. The discount rate underlying the smoothed funding level as at 31 March 2015 is 5.5% p.a. The investment return required to restore the funding level to 100% by 2033, without the employers paying deficit contributions, would be 6.2% p.a.

4.3. More detailed results are 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.

4.4. The following charts show how the funding position and average required employer contribution rate have changed under both funding models since the last valuation date:



### Total contribution rate (% of payroll)



4.5. The two key observations are:

- The BW economic model continues to deliver more stable funding levels and employer contribution rates;
- Since the previous report as at 31 March 2014, gilt yields have fallen significantly which has caused the results of the gilts plus model to change dramatically, however, the results under the BW economic model remains reasonably stable.

4.6. Since 31 March 2015 equity markets have been particularly volatile and generally heading south. However the BW economic model is designed to try and cope with such volatility and the estimated funding level as at the date of this report (2 September) is not that different to the estimated position as at 31 March. Under the gilts plus model however the estimated funding level is down around 5% since March to around 70% with daily fluctuations of up to 2%.

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

**Graeme D Muir FFA**  
**Partner**

## Appendix 1 Financial position since previous valuation

BW economic model										
Valuation date	Assets £000s	Liabilities £000s	Surplus/ Deficit £000s	Funding level %	Final salary ongoing cost (% of payroll)	CARE ongoing cost	Past service ctbm	Total ctbm (% of payroll)	Discount rate	Return required to restore funding level (p.a.)
31 Mar 2013	3,925,714	4,878,393	(952,679)	80%	14.5%	14.3%	7.2%	21.7%	5.8%	6.9%
30 Apr 2013	3,949,259	4,886,071	(936,812)	81%	14.4%	14.2%	6.9%	21.2%	5.9%	6.9%
31 May 2013	3,993,852	4,896,855	(903,003)	82%	14.4%	14.2%	6.7%	20.9%	5.9%	6.9%
30 Jun 2013	4,097,214	4,899,393	(802,179)	84%	14.3%	14.1%	6.0%	20.1%	5.9%	6.8%
31 Jul 2013	4,059,381	4,910,205	(850,824)	83%	14.2%	14.1%	6.4%	20.5%	5.9%	6.9%
31 Aug 2013	4,062,355	4,915,543	(853,188)	83%	14.2%	14.0%	6.4%	20.4%	5.9%	6.9%
30 Sep 2013	4,107,344	4,962,847	(855,503)	83%	14.3%	14.1%	6.5%	20.6%	5.9%	6.9%
31 Oct 2013	4,139,030	4,988,774	(849,744)	83%	14.3%	14.2%	6.4%	20.6%	5.9%	6.9%
30 Nov 2013	4,223,411	5,013,700	(790,290)	84%	14.4%	14.2%	6.0%	20.2%	5.9%	6.8%
31 Dec 2013	4,270,083	5,037,264	(767,181)	85%	14.4%	14.2%	5.9%	20.1%	5.9%	6.7%
31 Jan 2014	4,273,027	5,055,694	(782,666)	85%	14.4%	14.2%	6.0%	20.4%	5.9%	6.8%
28 Feb 2014	4,263,768	5,074,979	(811,211)	84%	14.4%	14.2%	6.2%	20.6%	5.9%	6.8%
31 Mar 2014	4,380,183	5,091,462	(711,278)	86%	14.4%	14.2%	5.5%	19.7%	5.9%	6.7%
30 Apr 2014	4,335,174	5,115,198	(780,024)	85%	14.1%	14.1%	5.5%	19.7%	5.9%	6.8%
31 May 2014	4,384,481	5,153,554	(769,072)	85%	14.2%	14.1%	5.5%	19.7%	5.8%	6.7%
30 Jun 2014	4,483,539	5,200,664	(717,125)	86%	14.3%	14.1%	5.1%	19.4%	5.8%	6.6%
31 Jul 2014	4,492,079	5,234,601	(742,521)	86%	14.3%	14.3%	5.3%	19.6%	5.8%	6.6%
31 Aug 2014	4,497,383	5,274,301	(776,918)	85%	14.4%	14.4%	5.6%	19.9%	5.7%	6.6%
30 Sep 2014	4,587,532	5,309,744	(722,212)	86%	14.4%	14.4%	5.2%	19.6%	5.7%	6.5%
31 Oct 2014	4,672,836	5,339,916	(667,080)	88%	14.4%	14.4%	4.8%	19.2%	5.6%	6.4%
30 Nov 2014	4,635,375	5,374,226	(738,851)	86%	14.5%	14.5%	5.3%	19.8%	5.6%	6.4%
31 Dec 2014	4,656,162	5,417,560	(761,398)	86%	14.5%	14.5%	5.5%	20.1%	5.5%	6.4%
31 Jan 2015	4,642,278	5,485,989	(843,711)	85%	14.7%	14.7%	6.1%	20.8%	5.5%	6.4%
28 Feb 2015	4,736,707	5,532,198	(795,491)	86%	14.8%	14.8%	5.8%	20.6%	5.5%	6.3%
31 Mar 2015	4,851,969	5,590,984	(739,015)	87%	15.0%	15.0%	5.4%	20.3%	5.5%	6.2%

Gilts plus model										
Valuation date	Assets £000s	Liabilities £000s	Surplus/ Deficit £000s	Funding level %	Final salary ongoing cost (% of payroll)	CARE ongoing cost	Past service ctbm	Total ctbm (% of payroll)	Discount rate	Return required to restore funding level (p.a.)
31 Mar 2013	3,958,473	5,511,016	(1,552,543)	72%	18.1%	17.8%	11.0%	29.1%	5.1%	6.8%
30 Apr 2013	3,991,155	5,557,464	(1,566,309)	72%	18.2%	18.0%	10.8%	28.8%	5.0%	6.7%
31 May 2013	4,049,552	5,394,496	(1,344,944)	75%	17.2%	16.9%	9.5%	26.4%	5.3%	6.8%
30 Jun 2013	3,953,018	5,125,305	(1,172,286)	77%	15.6%	15.4%	8.5%	23.9%	5.6%	6.9%
31 Jul 2013	4,086,906	5,125,899	(1,038,993)	80%	15.4%	15.2%	7.6%	22.9%	5.6%	6.8%
31 Aug 2013	4,011,615	5,147,154	(1,135,538)	78%	15.4%	15.2%	8.4%	23.6%	5.7%	7.0%
30 Sep 2013	4,074,833	5,158,260	(1,083,427)	79%	15.4%	15.2%	8.0%	23.2%	5.6%	6.8%
31 Oct 2013	4,206,434	5,248,017	(1,041,583)	80%	15.8%	15.6%	7.7%	23.2%	5.6%	6.7%
30 Nov 2013	4,227,682	5,235,350	(1,007,668)	81%	15.6%	15.4%	7.5%	22.9%	5.7%	6.8%
31 Dec 2013	4,288,707	5,169,018	(880,311)	83%	15.1%	14.9%	6.6%	21.5%	5.8%	6.8%
31 Jan 2014	4,219,284	5,240,848	(1,021,564)	81%	15.4%	15.2%	7.7%	23.1%	5.6%	6.8%
28 Feb 2014	4,335,272	5,275,922	(940,650)	82%	15.5%	15.3%	7.1%	22.6%	5.6%	6.6%
31 Mar 2014	4,337,374	5,358,349	(1,020,975)	81%	15.8%	15.6%	7.7%	23.3%	5.6%	6.7%
30 Apr 2014	4,284,965	5,420,117	(1,135,152)	79%	15.8%	15.8%	7.8%	23.5%	5.6%	6.8%
31 May 2014	4,377,711	5,506,829	(1,129,118)	79%	16.0%	16.0%	7.7%	23.8%	5.5%	6.7%
30 Jun 2014	4,419,120	5,493,512	(1,074,392)	80%	15.8%	15.8%	7.4%	23.3%	5.5%	6.7%
31 Jul 2014	4,446,726	5,562,260	(1,115,534)	80%	16.0%	16.0%	7.7%	23.7%	5.4%	6.6%
31 Aug 2014	4,579,709	5,875,540	(1,295,830)	78%	17.5%	17.5%	8.8%	26.3%	5.0%	6.4%
30 Sep 2014	4,571,422	5,849,960	(1,278,538)	78%	17.2%	17.2%	8.7%	25.9%	5.1%	6.5%
31 Oct 2014	4,635,518	5,984,140	(1,348,622)	77%	17.7%	17.7%	9.2%	26.9%	5.0%	6.4%
30 Nov 2014	4,706,031	6,298,082	(1,592,051)	75%	19.2%	19.2%	10.6%	29.8%	4.7%	6.3%
31 Dec 2014	4,678,071	6,427,892	(1,749,821)	73%	19.7%	19.7%	11.6%	31.3%	4.5%	6.3%
31 Jan 2015	4,751,920	6,677,258	(1,925,338)	71%	20.8%	20.8%	12.6%	33.5%	4.0%	5.9%
28 Feb 2015	4,868,474	6,467,837	(1,599,363)	75%	19.6%	19.6%	10.7%	30.3%	4.5%	6.1%
31 Mar 2015	4,932,623	6,678,230	(1,745,607)	74%	20.5%	20.5%	11.6%	32.2%	4.3%	6.0%

A1.1. Note that market values of assets under the gilts plus model at dates other than March are estimates. Asset values under the economic model are smoothed (estimated) values.