Essex Pension Fund

Funding Update Report
as at 31 March 2012

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Public Sector Consulting

13 August 2012

Introduction and Summary

We have carried out an assessment of the financial position of the Essex Pension Fund as at 31 March 2012. The purpose of this assessment is to provide an update on the funding position and required employer contribution rates.

This report complies fully with "Technical Accounting Standard R: Reporting Actuarial Information" issued by the Board for Actuarial Standards and this is the only Technical Actuarial Standard which applies to this report. The figures in this report which relate to the 2 year period to 31 March 2012 count as part of a "planning exercise" for the purposes of TAS-R.

We have assessed financial position on 2 bases.

The first approach we have adopted is consistent with the methods and assumptions adopted at the 2010 valuation carried out by Mercers. We have also carried calculations using our own methods and assumptions that we intend using at the forthcoming 2013 valuation.

There are 2 key differences between the 2 approaches which are set out in the following table:

Feature	2010 Valuation (Gilt Plus Model)	2013 Valuation (Economic Model)
Discount Rate	Multiple discount rates based on gilts yields plus an "asset outperformance allowance"	Single discount rate based on expected asset returns, in particular, equity returns derived from economic factors rather than gilts plus an outperformance allowance.
Smoothing	No smoothing adopted – market value of assets at valuation date and assumptions based on spot yields at valuation date.	Asset values and assumptions smoothed over 6 months spanning the valuation date.

We have used the results from the 2010 triennial valuation in producing our report.

The results of our assessment indicate that:

- The current estimate of the funding level as at 31 March 2012 using the Economic Model is 73.8% and the average required employer contribution would be 21.1% of payroll assuming a deficit recovery period of 20 years.

- The current estimate of the funding level as at 31 March 2012 using the Gilt Plus Model is 64.5% and the average required employer contribution would be 27.5% of payroll assuming a deficit recovery period of 20 years.
- This compares with the reported (smoothed) funding level of 71.4% and average required employer contribution of 21.4% of payroll at the 2010 funding valuation.

The funding position for each month since the formal valuation is shown in Section “Financial Position since Previous Valuation”. 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 calculations do not make any allowance for the proposed reforms to the LGPS.

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

Graeme D Muir FFA
Partner

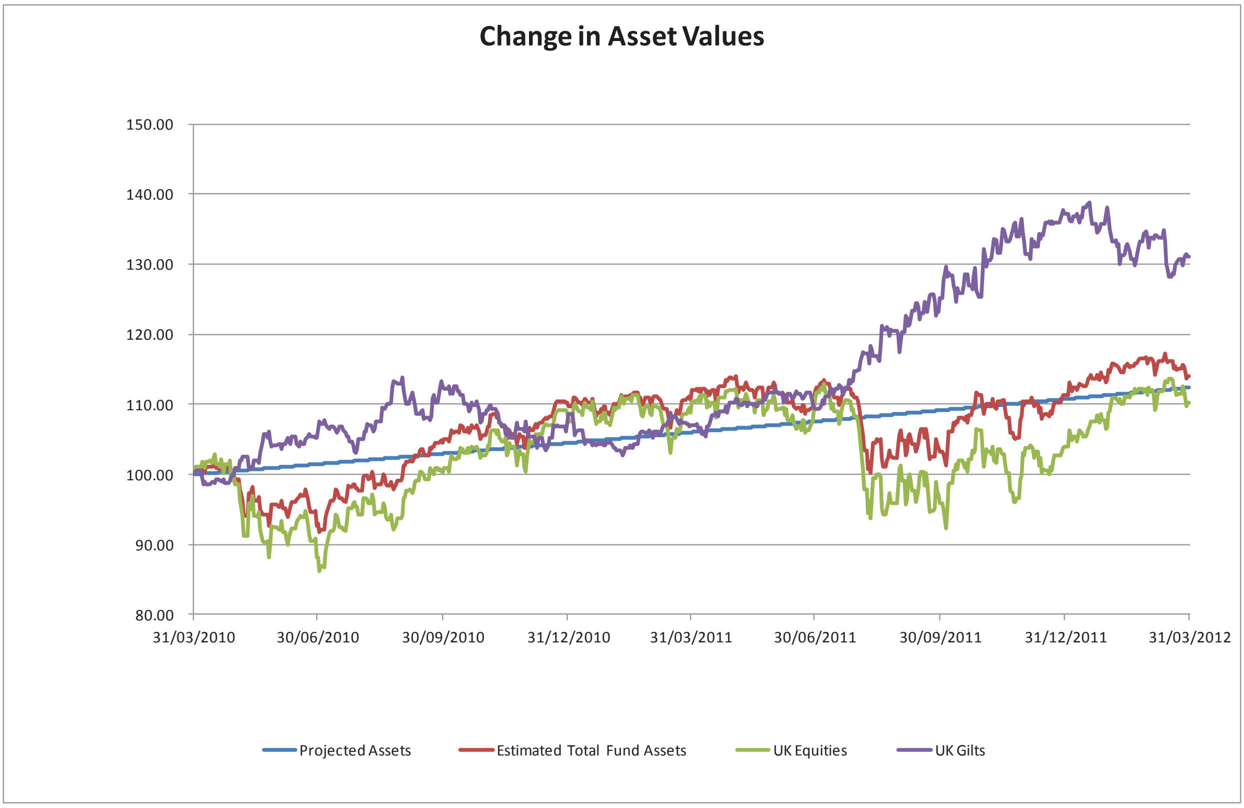
Assets

The estimated asset allocation of the Essex Pension Fund as at 31 March 2012 is as follows:

Assets (Market Value)	31 March 2012		31 March 2011		31 March 2010	
	£000's	%	£000's	%	£000's	£000's
UK Equities	368,741	10.5%	343,945	10.1%	308,500	10.0%
Overseas Equities	1,816,866	51.6%	1,774,914	52.0%	1,635,050	53.0%
Fixed Interest	170,600	4.8%	226,019	6.6%	37,020	1.2%
Property	433,905	12.3%	382,208	11.2%	370,200	12.0%
Index Linked	127,446	3.6%	171,839	5.0%	117,230	3.8%
Corporate Bonds	0	0.0%	0	0.0%	169,675	5.5%
LIBOR+	0	0.0%	0	0.0%	185,100	6.0%
Private Equity	154,545	4.4%	0	0.0%	185,100	6.0%
Infrastructure	131,183	3.7%	0	0.0%	77,125	2.5%
Cash	127,990	3.6%	96,087	2.8%	0	0.0%
Managed Funds	163,410	4.6%	406,820	11.9%	0	0.0%
Other	25,082	0.7%	12,180	0.4%	0	0.0%
Total Assets	**3,519,768**	**100%**	**3,414,012**	**100%**	**3,085,000**	**100%**

The investment return achieved by the Fund's assets in market value terms for the year to 31 March 2012 is estimated to be 1%. The return achieved since the previous valuation is estimated to be 10.7% (which is equivalent to 5.2% per annum).

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:



As we can see asset values as at 31 March 2012 in market value terms are slightly more than they were projected to be.

Changes in Market Conditions – Market Yields and Discount Rates

The actual investment returns earned by the Fund will impact on the value of the Fund's assets. The value of the Fund's liabilities however is affected by expectations of future returns represented by the discount rate and inflation.

The following tables show how these assumptions have changed since the last triennial valuation using both funding models.

Assumptions (Economic Model)	31 March 2012		31 March 2011		31 March 2010	
	Nominal	Real	Nominal	Real	Nominal	Real
	%p.a.		%p.a.		%p.a.	
RPI Increases	3.06%	0.00%	3.50%	0.00%	3.49%	0.00%
CPI Increases	2.56%	-0.50%	3.00%	-0.50%	2.99%	-0.50%
Salary Increases	4.06%	1.00%	4.50%	1.00%	4.49%	1.00%
Discount Rate (Smoothed)	5.41%	2.28%	5.60%	2.04%	5.89%	2.33%

Assumptions (Gilt Plus Model)	31 March 2012		31 March 2011		31 March 2010	
	Nominal	Real	Nominal	Real	Nominal	Real
	%p.a.		%p.a.		%p.a.	
RPI Increases (Unsmoothed)	3.31%	0.00%	3.58%	0.00%	3.50%	0.00%
CPI Increases (Unsmoothed)	2.55%	-0.50%	2.91%	-0.50%	3.00%	-0.50%
Salary Increases (Unsmoothed)	4.05%	1.00%	4.41%	1.00%	4.50%	1.00%
Discount Rate (Unsmoothed)	4.81%	1.45%	5.90%	2.24%	6.00%	2.42%

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 and vice versa.

As we see the real discount rate using the Economic Model is relatively similar to the rate at the at the 2010 valuation. However under the Gilt Plus Model, the real discount rate is much lower, significantly increasing the value of liabilities used for funding purposes.

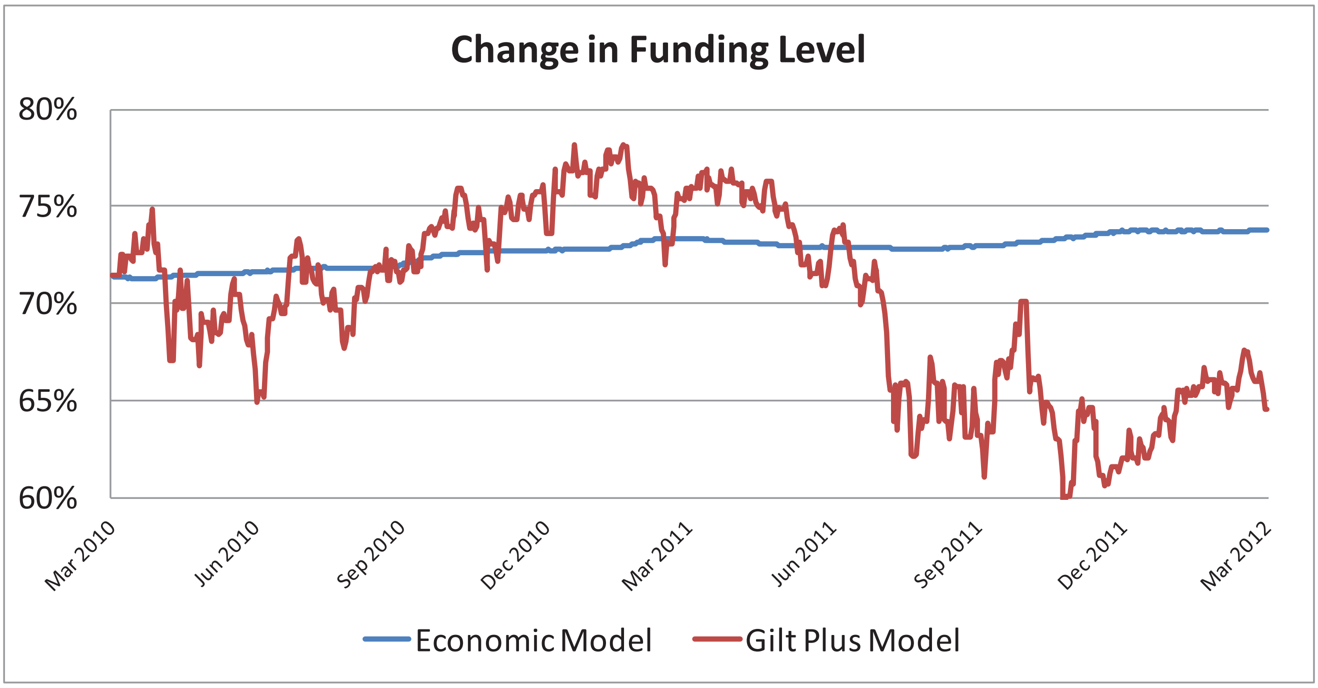
Financial Position since Previous Valuation

Below we show the financial position on both models for each month since the previous triennial valuation. As the smoothing adjustment reflects average market conditions spanning a 6 month period straddling the reporting date, the smoothed figures for the previous 3 months are projected numbers and likely to change up until 3 months after the reporting date.

Economic Model Valuation Date	Assets £000's	Liabilities £000's	Surplus/Deficit £000's	Funding Level %	Ongoing Cost (% of Payroll)	Past Service Ctbn	Total Ctbn (% of payroll)	Discount Rate	Return required to restore funding level
March 2010	3,085,000	4,319,000	(1,234,000)	71%	12.2%	9.2%	21.4%	5.9%	7.6%
April 2010	3,089,001	4,330,228	(1,241,227)	71%	12.2%	9.3%	21.5%	5.8%	7.5%
May 2010	3,118,779	4,361,417	(1,242,638)	72%	12.2%	9.3%	21.5%	5.8%	7.5%
June 2010	3,142,172	4,387,377	(1,245,206)	72%	12.3%	9.3%	21.5%	5.7%	7.4%
July 2010	3,167,197	4,412,475	(1,245,278)	72%	12.3%	9.2%	21.5%	5.6%	7.3%
August 2010	3,218,470	4,483,206	(1,264,736)	72%	12.5%	9.3%	21.8%	5.6%	7.2%
September 2010	3,281,812	4,559,333	(1,277,520)	72%	12.7%	9.3%	22.0%	5.5%	7.2%
October 2010	3,354,225	4,624,311	(1,270,085)	73%	12.9%	9.2%	22.1%	5.5%	7.2%
November 2010	3,411,334	4,694,571	(1,283,237)	73%	13.1%	9.2%	22.3%	5.5%	7.2%
December 2010	3,449,021	4,741,584	(1,292,562)	73%	13.2%	9.2%	22.4%	5.6%	7.2%
January 2011	3,478,881	4,780,531	(1,301,650)	73%	13.3%	9.2%	22.5%	5.6%	7.2%
February 2011	3,509,306	4,799,221	(1,289,915)	73%	13.3%	9.1%	22.4%	5.6%	7.2%
March 2011	3,532,108	4,814,663	(1,282,556)	73%	13.3%	9.0%	22.3%	5.6%	7.2%
April 2011	3,533,902	4,830,657	(1,296,755)	73%	13.3%	9.1%	22.4%	5.6%	7.2%
May 2011	3,493,294	4,788,075	(1,294,781)	73%	13.0%	9.1%	22.1%	5.7%	7.3%
June 2011	3,462,374	4,749,636	(1,287,262)	73%	12.8%	9.1%	21.8%	5.7%	7.3%
July 2011	3,438,091	4,718,408	(1,280,316)	73%	12.6%	9.0%	21.6%	5.6%	7.2%
August 2011	3,417,421	4,694,492	(1,277,071)	73%	12.4%	9.0%	21.4%	5.6%	7.2%
September 2011	3,407,688	4,670,131	(1,262,443)	73%	12.2%	8.9%	21.1%	5.6%	7.2%
October 2011	3,408,402	4,661,243	(1,252,841)	73%	12.1%	8.8%	20.9%	5.5%	7.1%
November 2011	3,463,511	4,720,014	(1,256,503)	73%	12.2%	8.8%	21.0%	5.4%	7.0%
December 2011	3,522,375	4,777,832	(1,255,457)	74%	12.4%	8.7%	21.1%	5.4%	6.9%
January 2012	3,551,874	4,819,169	(1,267,295)	74%	12.5%	8.8%	21.2%	5.4%	6.9%
February 2012	3,561,022	4,831,038	(1,270,017)	74%	12.4%	8.8%	21.2%	5.4%	7.0%
March 2012	3,568,174	4,835,571	(1,267,397)	74%	12.4%	8.7%	21.1%	5.4%	6.9%

Gilt Plus Model Valuation Date	Assets £000's	Liabilities £000's	Surplus/Deficit £000's	Funding Level %	Ongoing Cost (% of Payroll)	Past Service Ctbn	Total Ctbn (% of payroll)	Discount Rate	Return required to restore funding level
March 2010	3,085,000	4,319,000	(1,234,000)	71%	12.2%	9.2%	21.4%	6.0%	7.7%
April 2010	3,064,406	4,271,979	(1,207,573)	72%	11.9%	9.2%	21.1%	6.0%	7.7%
May 2010	2,953,022	4,278,609	(1,325,588)	69%	11.9%	10.1%	21.9%	5.8%	7.7%
June 2010	2,869,910	4,311,256	(1,441,346)	67%	11.9%	10.9%	22.8%	5.7%	7.8%
July 2010	3,013,410	4,239,951	(1,226,541)	71%	11.5%	9.3%	20.9%	5.8%	7.6%
August 2010	3,075,513	4,495,835	(1,420,322)	68%	12.5%	10.5%	23.0%	5.3%	7.2%
September 2010	3,221,666	4,525,137	(1,303,471)	71%	12.6%	9.6%	22.2%	5.4%	7.1%
October 2010	3,258,721	4,409,712	(1,150,991)	74%	12.0%	8.5%	20.6%	5.7%	7.2%
November 2010	3,201,111	4,439,016	(1,237,905)	72%	12.1%	9.1%	21.2%	5.8%	7.4%
December 2010	3,385,039	4,599,529	(1,214,491)	74%	12.7%	8.8%	21.5%	5.7%	7.3%
January 2011	3,345,628	4,432,150	(1,086,522)	75%	11.9%	8.0%	19.9%	6.0%	7.4%
February 2011	3,423,568	4,510,015	(1,086,447)	76%	12.1%	7.9%	20.1%	5.9%	7.3%
March 2011	3,414,012	4,530,133	(1,116,121)	75%	12.1%	8.1%	20.2%	5.9%	7.3%
April 2011	3,509,058	4,608,857	(1,099,800)	76%	12.4%	7.9%	20.3%	5.7%	7.1%
May 2011	3,491,160	4,646,083	(1,154,922)	75%	12.4%	8.3%	20.7%	5.7%	7.1%
June 2011	3,450,844	4,696,840	(1,245,996)	73%	12.6%	8.9%	21.4%	5.8%	7.4%
July 2011	3,423,534	4,852,099	(1,428,565)	71%	13.1%	10.0%	23.1%	5.5%	7.3%
August 2011	3,260,367	4,851,265	(1,590,898)	67%	13.0%	11.1%	24.1%	5.4%	7.4%
September 2011	3,182,991	5,037,233	(1,854,241)	63%	13.7%	12.7%	26.4%	5.0%	7.3%
October 2011	3,386,787	5,015,033	(1,628,246)	68%	13.5%	11.2%	24.7%	4.8%	6.8%
November 2011	3,407,500	5,416,073	(2,008,573)	63%	15.0%	13.3%	28.3%	4.6%	6.9%
December 2011	3,435,448	5,542,446	(2,106,997)	62%	15.4%	13.7%	29.2%	4.5%	6.9%
January 2012	3,500,971	5,564,052	(2,063,081)	63%	15.4%	13.4%	28.8%	4.5%	6.8%
February 2012	3,573,832	5,470,708	(1,896,876)	65%	15.0%	12.4%	27.4%	4.7%	6.8%
March 2012	3,519,768	5,453,213	(1,933,445)	65%	14.8%	12.7%	27.5%	4.8%	7.0%

The following chart plots the change in funding level using both models.

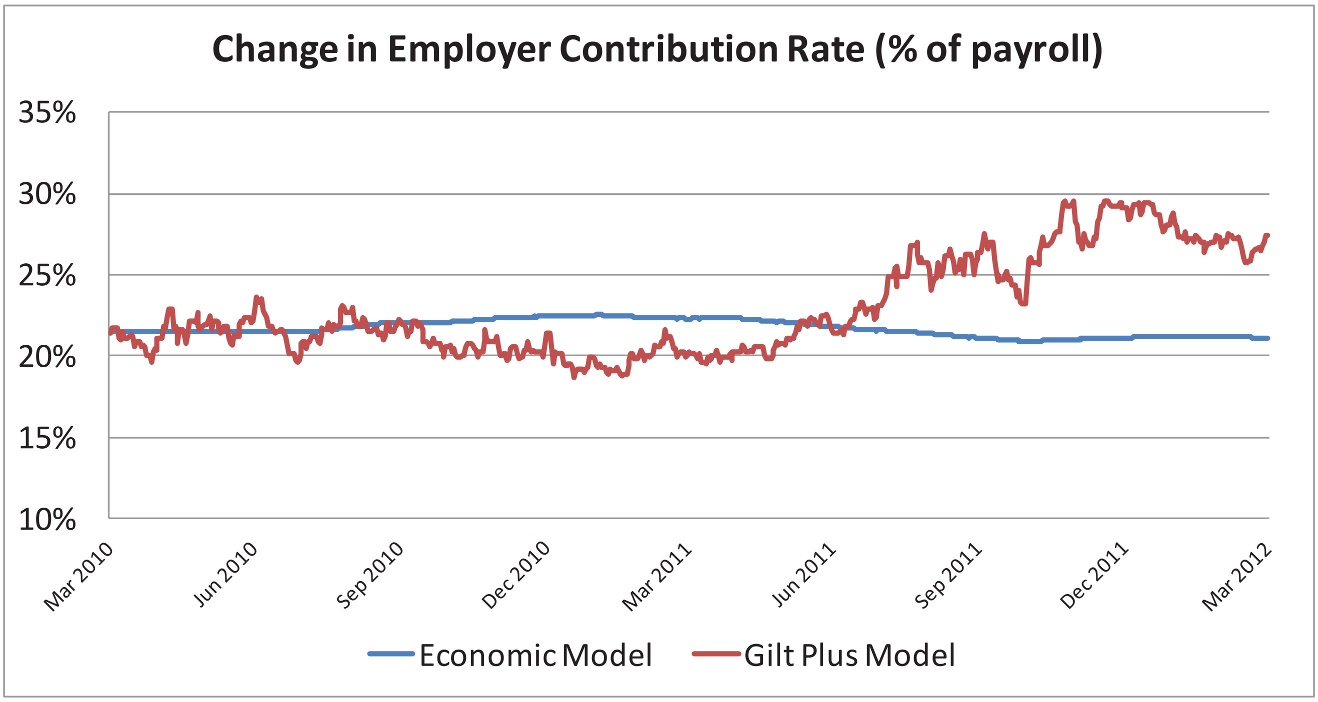


The reduction in funding level under the Gilt Plus Model is primarily due to the reduction in discount rate underlying the liability valuation. The discount rate is a function of gilt yields which have reduced significantly since the previous valuation, some of which is most likely to be due to the Bank of England's "Quantitative Easing" program where they are buying gilts regardless of price to put more cash into the economy.

The discount rate underlying the Economic Model is not based purely on gilt yields and so has not been impacted to the same extent.

From the chart we also see the benefit of not assessing the funding position on a single day with significantly less volatility.

The following chart shows the change in required average employer contribution rate.


Change in Employer Contribution Rate (% of payroll)
35%
30%
25%
20%
15%
10%
Mar 2010
Jun 2010
Sep 2010
Dec 2010
Mar 2011
Jun 2011
Sep 2011
Dec 2011
Mar 2012
Economic Model
Gilt Plus Model