Pension Scheme Deficits of UK Universities

Universities have to comply with FRS17 – Retirement Benefits – when publishing their annual accounts. The main thrust of FRS17 is to bring on to the balance sheet deficits and surpluses in occupational pension schemes (OPS). Prior to this FRS, the financial impact of pension schemes was to record the employer contributions as a charge against the Income and Expenditure account; there was no recognition of the financial position of the various schemes in University balance sheets, save for some limited disclosures under the now superceded SSAP 24. FRS17 was mandatory for the 2005/06 financial year. The purpose of this article is to highlight the impact its adoption has had on the published accounts of Universities – it does not seek to provide a detailed explanation of the technical aspects of the standard.

Universities have two main categories of OPS; the large national schemes of the Universities Superannuation Scheme (USS) and the Teachers' Pension Scheme (TPS) and then smaller regional or locally based schemes, either based on the Local Government Pension Scheme (LGPS) or schemes set up by individual (or small groups of) Universities. In the main, USS and TPS provide for academic staff and LGPS and other schemes provide for non – academic staff.

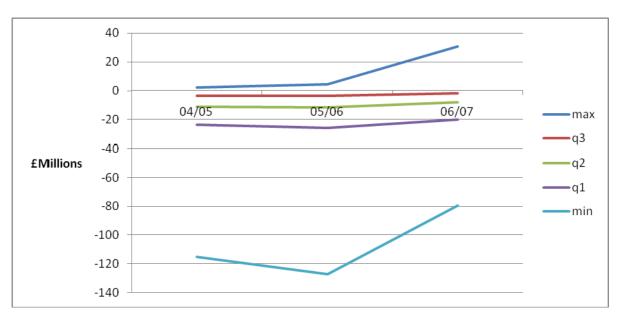
Because of technical difficulties in allocating scheme assets and liabilities to individual Universities, Universities use an exemption provided by FRS17 and continue to account and report for USS and TPS on the basis of employer contributions due as a charge against the I and E account. Full FRS17 disclosures relate in the main to LGPS and other local schemes. Table 1 sets out the reported net pension deficits for all UK universities from 2004/05 to 2006/07 for these schemes.

Table 1 Net Pension Deficit £ Billion

Year	04/05	05/06	06/07
Total Deficit	2.25	2.38	1.68

The quartile ranges for these deficits/surpluses are as follows.

Chart 1



There are several features to note.

- Not all Universities are in deficit at the 2006/07 year end 10 Universities had a surplus.
- The majority of Universities reported a deficit at the 2006/07 year end.
- The position worsened slightly from 2004/05 to 2005/06 but then improved greatly 2005/06 to 2006/07.

It's important to provide some sort of context for these figures - one way of doing this is to set the pension deficit against the net assets excluding the pension scheme position. Net assets are made up of fixed assets, investments and working capital less long term loans and provisions. On this basis, we obtain the following quartile data.

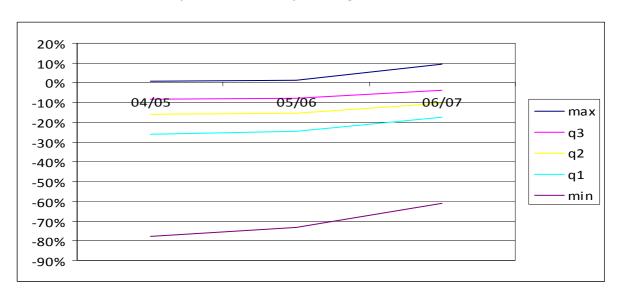


Chart 2 Pension Scheme surplus/ (deficit) as a percentage of net assets

As with the absolute levels of deficits, this shows an improving position, but even so pension scheme deficits amount to 10% or more of net assets for over half of the Universities reporting deficits under FRS17.

Analysis of movements on pension scheme deficits/surpluses

In total the net deficit on pension schemes reduced by about £700 million from July 2006 to July 2007, having increased by about £100 million from July 2005 to July 2006. The calculations underlying FRS17 are beyond the scope of this article, but in summary they involve comparing the present value of liabilities of a scheme with the fair value of the assets of the scheme.

Calculating the present value of the liabilities entails calculating future pensions (which
entails estimates of what pensions will be payable and for how long, and so uses estimates
of pension inflation, salary inflation and demographics such as life expectancy) and then
discounting such liabilities to present day values.

• The fair value of scheme assets will be based on quoted market values, market value of property and estimates for assets where a ready market price is not available.

It can be seen that the process involves a number of estimates of key variables; contrast this to the simplicity pre FRS17 of simply accounting for contributions made.

The movements of the net surplus/deficit between years are passed either through the Statement of Total Recognised Gains and Losses (STRGL) or the I and E account with employers' contributions actually made shown in the cash flow statement. The movements linking 2004/05 to 2005/06 to 2006/07 are as follows.

Table 2 - Broad Categories of Pension Deficits movement - £ millions

	2005/06	2006/07
Statement of Total recognised Gains and Losses	(93)	670
I and E Account	(256)	(297)
Cash Flow (employers' contributions)	250	246
Total	(99)	621

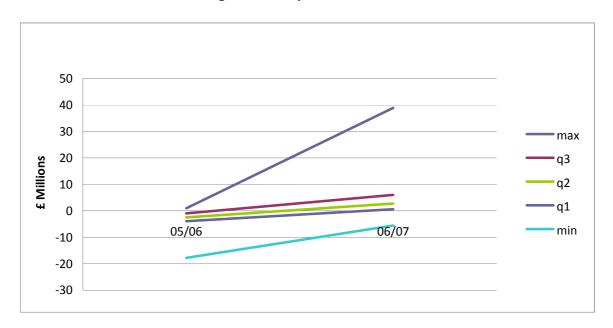
Clearly, the entries being posted through the STRGL have had most impact. These can be further analysed as follows.

Table 3 – Analysis of amounts recognised through STRGL - £ millions

	2005/06	2006/07
Assumptions	(336)	446
Excess return on Assets	289	231
Gains/(losses) on liabilities	(46)	(7)
Total	(93)	670

The largest and most volatile element here is the impact of changes in assumptions in valuing the pension scheme's liabilities. Chart 2 provides a quartile analysis. The overall trend is one of moving from loss to gain under this category. A key variable is the discount rate used to obtain the present value of liabilities – this should represent the yield obtainable on a suitably dated, AA rated corporate bond. FRS17 requires the discount rate used to be disclosed; for most Universities the rate altered from 5.1% for 2005/06 to 5.8% for 2007/07. A higher discount rate will result in a lower present value of future liabilities, and of course vice versa.

Chart 2 - Movements due to changes in Assumptions



In summary, the majority of Universities had a loss due to the changes in assumptions for 2005/06. For 2006/07, the position had reversed with the majority having a gain. Indeed, for one University, the impact of changes in assumptions was an improvement five times more than the opening surplus on the scheme – the actual figures being a gain under changes in assumptions of £18 million on an opening surplus of £4 million

I and E Impact

The impact on the published surpluses/deficits of UK Universities was set out in table 2. A more detailed breakdown is shown in table 4.

Table 4 - Analysis of I and E charges - £ millions

		2005/06	2006/07
Financing	Expected return on assets	349	381
	Interest on liabilities	(353)	(389)
	Sub total	(4)	(7)
Operating Charge	Current service cost	(270)	(290)
	Past service cost	21	2
	Other	(3)	(2)
	Sub total	(252)	(290)
Grand Total		(256)	(297)

The charge to the Income and Expenditure accounts of Universities is split between financing charges and operating charges. The financing figures are based on expected returns on the scheme assets – any returns above or below this pass through the STRGL, and are shown in table 3. From that table it can be seen that for 2005/06 and 2006/07 actual returns were substantially higher than expected returns. The expected returns on assets are therefore another key assumption. An assumption of low expected returns will reduce the income flowing into the I and E account (and so reduce reported surpluses), with the benefit of the additional actual return flowing through the STRGL. This is a potential means of manipulating reported I and E surpluses/deficits, and is currently being reviewed by the Accounting Standards Board. The interest on liabilities represents the increase in the present value of the liabilities due to the "unwinding" of the discount.

The operating charge represents the increase in liabilities in respect of benefits accruing over the financial year – for example another year of pension entitlement. Past service costs represent changes due to benefit entitlements for previous years. In the figures shown in table 4, the changes have been assessed as reducing the liabilities of the schemes.

Comparing the total I and E account impact with employers' contributions actually made shows the following.

Table 5 - Comparison of FRS17 I and E charge with Employers' Contributions

	2005/06	2006/07
I and E Charge	(256)	(297)
Employers' contributions	250	246

This shows that the adoption of FRS17 was largely neutral in 2005/06 but resulted in an additional charge of £M51 in 2006/07.

Summary

A key feature of FRS17 is a dependence on various assumptions to calculate pension scheme assets and liabilities. As has been shown above, changes to these assumptions can result in significant changes in reported scheme deficits/surpluses and certain assumptions (e.g the expected returns on assets) provide a means to move financial performance from the I and E account to the STRGL.

A further point of interest will be to see what impact the current turbulence in global financial markets will have on the results for 2007/08.

Copyright S Hicks december 2008