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Pension Accounting and Fair Value

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INTRODUCTION

Accounting for pensions, and other benefits due to employees after they retire, has been one of the most controversial areas of financial reporting over the past 25 years. In the late 1970s, many employers accounted for their pension plans on a mainly cash basis, and pension assets and liabilities were rarely recognized on the employers’ balance sheets. The effect of a series of financial reporting standards has transformed the position, so that employers are now required to recognize substantial liabilities (or, more rarely, assets) reflecting their obligations to provide pensions and other post-retirement benefits.

During this period, the main conceptual emphasis of pension accounting has shifted, reflecting the growing focus on assets and liabilities as the core elements of financial statements. Early pension standards, such as the first version of International Accounting Standard (IAS) 19 *Accounting for Retirement Benefits in the Financial Statements of Employers* (IASC 1983), and the first UK provision, Statement of Standard Accounting Practice 24 *Accounting for Pension Costs* (ASC 1988), focused on the determination of pension expense. These standards permitted a wide degree of flexibility in the measurement of pension expense, so long as the employer would ‘recognise the cost of providing pensions on a systematic and rational basis over the period during which he benefits from the employees’ services’ (SSAP24: para. 16).

These standards distinguished the normal or regular pension cost that arises on an ongoing basis from year to year, and depends on the actuarial measurement method used, from variations attributable to such factors as actual outcomes differing from assumptions, and permanent changes in assumptions. Liabilities or assets would arise only to the extent that the aggregate amount recognized as pension cost had not been paid in the form of benefits or contributions to a pension fund or plan.

In the United States, Statement of Financial Accounting Standards (FAS) 87, *Employers’ Accounting for Pensions* (FASB 1985) promulgated an accounting treatment that still concentrated on the measurement of pension costs. Calculating the pension cost shown in the income statement involved the determination of a ‘service cost’ based on attributing benefits to different periods and adjusting this by spreading various variations over the expected remaining service periods of employees (FAS87: para. 20). FAS87 treated pension assets and liabilities as the differences between costs recognized in past and current periods and amounts contributed by the employer to a pension plan, but required the recognition of a liability when the value of the plan assets was less than a particular measure of the plan’s obligations to pay benefits. This standard was the first to require the use of fair values for measuring the plan’s assets (FAS87: para. 49).

More recent pension standards have moved steadily closer to a balance sheet focus. IAS19 was reissued in 1993 as *Retirement Benefit Costs*, following the IASC’s ‘comparability/improvements’ project (Ernst & Young 2004: 4), but substantial revisions to this document were made in the current version of IAS19 *Employee Benefits*, issued in 1998. This is not a pure ‘balance sheet’ standard, as elements of more traditional pension accounting survive. For example, various ‘actuarial gains and losses’ that are small in relation to the size of the pension assets and obligations need not be recognized (IAS19: para. 92 – this is referred to as the ‘corridor’ and will be discussed below), while ‘past service costs’, arising from changes in the benefits due in respect of service in years before the current period, may in some circumstances be spread over several future periods (IAS19: para. 96).

In 2000, the UK’s Accounting Standards Board published Financial Reporting Standard (FRS) 17 *Retirement Benefits*. This standard comes closest to a fully-fledged balance sheet approach for pension accounting. The standard defines a pension surplus as the excess of plan assets over the present value of plan obligations and a pension deficit as any shortfall of plan assets below plan obligations. Deficits are recognized as liabilities on the employer’s balance sheet and surpluses as assets, to the extent that the employer can recover the surplus through future reduced contributions or refunds (FRS17: para. 37). There is no deferral or spreading of costs arising from actuarial gains and losses, though these items are not reflected in the income statement but rather in the statement of total recognized gains and losses (FRS17: para. 57). Plan assets are measured at fair value, while plan obligations are measured using an actuarial approach.

Pension accounting gives rise to various conceptual issues. What the pension liability consists of, how the existence of a separate vehicle for a pension plan (such as a trust holding the plan assets and primarily responsible for paying the promised benefits) affects the employer’s balance sheet and income statement, and the relationship between actuarial and economic measures of pension costs and obligations, are all factors that need to be considered in understanding the impact of the fair value concept on pension accounting. It is significant that, while recent financial reporting standards mandate the use of fair value for plan assets, they still rely on actuarial calculations for liabilities.

THE FUNDING OF PENSION OBLIGATIONS

In countries where provision of retirement pensions by employers (rather than by the state or through individual saving) is significant, the usual practice on the part of employers is to establish separate entities (pension funds or plans) to which the employer (and often employees as well) pays regular contributions. These contributions are invested and retirement benefits are paid by the pension plans rather than by the employer. In many countries, this structure gives rise to significant tax benefits. In the United Kingdom, for example, contributions to pension funds are tax deductible (within quite generous limits), the income and capital gains of pension funds are tax exempt, and part of the ultimate pension benefits may be received tax free. Pension plans are broadly of two kinds: ‘defined contribution’, where the pension benefits ultimately received by employees will depend on the amounts contributed to the pension fund and the extent to which the fund grows through retained earnings and capital appreciation; and ‘defined benefit’, where the benefits are calculated according to some formula. A common defined benefit model is the final salary scheme, where the pension received depends on an employee’s earnings at or close to the retirement date and on the number of years that the employee has worked for the employer up to retirement. For example, in a scheme paying one sixtieth of final salary for each year of service, an employee who had worked for an employer for 30 years and who retires with a final salary of £60,000 would be entitled to an annual pension of 30 sixtieths of £60,000, namely £30,000.

In defined contribution schemes, the employee bears the risk that investments by the pension fund will be relatively unsuccessful – the greater the return that can be earned on the pension fund assets, the bigger will be the pension. In defined benefit schemes, however, the amount of the benefits that will have to be paid does not normally depend on the returns on the pension fund assets, so the investment risk is borne by the employer. In estimating how much should be contributed to a defined benefit pension fund, employers take the advice of actuaries, who have developed a range of methods for estimating the amounts and pattern of contributions. All of these methods require the actuary to make assumptions. It is necessary to estimate such factors as how long employees will live after retiring, how many employees will leave employment before the normal retirement date (and be entitled to a ‘deferred pension’), how likely it is that additional benefits, such as payments to the families of employees who die in service or to widows, widowers and dependants of pensioners, will have to be paid, how salary levels will change for current and future employees up to retirement ages, and what returns will be earned on the fund’s investments. Even given a particular set of actuarial assumptions, there is scope for different patterns of contribution to be determined. For example, the actuary may attempt to compute the contributions as a percentage of the payroll that is expected to remain stable for several years, or may try to develop a contribution pattern involving larger (or smaller) contributions in earlier years, traded off against a possibility for relatively smaller contributions, or a need for larger contributions, in later years.

In evaluating a pension fund, actuaries have traditionally performed a periodic ‘actuarial valuation’, which will typically involve a comparison of (a) the fund’s investments, and (b) estimated future employer and employee contributions, with (c) estimated benefits payable in the future. If the current investments together with the estimated future contributions are calculated to be less than the estimated future benefits, then the fund is in ‘deficit’, and there is an ‘actuarial liability’. Actuaries have tended to regard the objective of the valuation process as providing guidance to the employer on the contributions required:

It is important to appreciate that valuation is not the final objective of the funding methodology. Instead, the ultimate requirement is to come up with a funding plan, confirming that, under plausible business assumptions, the assets are sufficient to pay benefits or that assets plus future contributions will be enough to pay future benefits. If the assets are expected to earn a high return, for example on account of their riskiness, it could be argued that it is appropriate to take this into account when drawing up a funding plan, particularly given the special circumstances of having an underlying promise to pay from the employer. … In other words, although the funding basis is weak and the pension fund assets may not be enough to meet the promised benefits, the additional security afforded by the employer results in an overall acceptable level of risk. The liabilities are not being ‘valued’ but rather budgeted for.

(Exley et al. 1997: 851)

To actuaries, therefore, a liability on a pension valuation is a signal that the assets of the pension fund, together with currently budgeted contributions from employer and employees, will not be enough over the remaining life of the fund to pay all the estimated benefits as they fall due. An actuary could recommend several courses of action to the employer. First, the actuary could simply recommend carrying on as previously planned. This is likely if the actuarial liability is relatively small, as actuaries are aware that their calculations incorporate significant estimates and small changes in their assumptions can have a substantial effect on the measure of the actuarial liability. The ‘corridor’ approach permitted by IAS19, where relatively small actuarial gains and losses need not be recognized, is an accounting analogy of such an actuarial treatment. Secondly, the actuary could recommend an increase in the rate of contributions being paid by employer and employees (in the case of an actuarial surplus, a reduction in contributions could be recommended). Thirdly, the actuary could recommend a reduction in the benefits being offered. This is unlikely to be popular with employees, though some UK pension plans have recently achieved an effective reduction in benefits by raising the normal retirement age or moving from a final salary to a career average salary basis for determining pensions. Finally, the actuary could recommend that the plan assets are invested more aggressively in the hope of higher investment returns.

Whatever the actuarial liability is, it is *not* a current obligation to transfer resources from the employer to the pension plan. However, the existence of an actuarial liability may indicate that the employer will have to make payments greater than previously expected to the pension plan. Does this constitute an *accounting* liability? Opinion is divided on this matter, though the trend reflected in financial reporting standards over the past 25 years suggests that accounting standard setters are increasingly of the opinion that an accounting liability does indeed arise. Standards basically ignore the separation of pension plan and employer, and require employers to calculate a gross pension liability based on attributing benefits to years of service.

Calculating the pension liability

An authoritative definition of an accounting liability is given in the International Accounting Standards Board’s *Framework for the Preparation and Presentation of Financial Statements*:

A liability is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

(IASC 1989: para. 49(b))

Until the development of financial reporting standards for pensions, there was a widespread view that pensions were a form of gift or ‘gratuity’ given by employers to employees in return for long and loyal service, and subject to the employer’s continuing benevolence (Stone 1984: 24). This implies that employers do not have an obligation to pay pensions, and therefore do not need to recognise a liability in their balance sheets. Although this view of pensions had some validity for employers who granted pensions on an unsystematic basis to some but not all employees, it was difficult to justify for employers who granted pensions to all eligible employees on standard terms that were announced in advance. Even if there was no legal liability to pay a pension, there was a reasonable expectation that, if an employee reached retirement age, then a pension would be paid.

The practice of setting up a separate pension plan or fund added an extra layer of conceptual complexity. Under the Trust Deeds constituting many pension plans, the employer was required to make such contributions to the plan as recommended by the plan’s actuary, while the immediate obligation to pay benefits fell on the plan itself. Moreover, the employer often had the right to cease making contributions on giving relatively short notice. Did this mean that the employer’s accounting liability was limited to paying contributions, or did the employer have a further obligation to ensure that the pension plan had sufficient assets to ensure that the stated benefits would be paid? As late as the 1970s, there was no consensus on this (Napier 1983: 22–25).

During the 1980s, the general view of pension liabilities was that the employer was indeed obligated to ensure that benefits promised were paid. Some saw this primarily as a requirement to make good any actuarial deficits in the pension plan, while others regarded the employer as liable ‘in substance’ for all benefits, though plan assets, as the first port of call for paying benefits, could be offset against this liability. Legislation in countries such as the US (the Employee Retirement Income Security Act of 1974) and the UK (the Pensions Act of 1995) imposed obligations on employers to ensure that benefits were paid (up to statutory limits), so employers could no longer deny the existence of a pension liability.

However, there could still be disagreement over how the pension liability should be measured. In a defined benefit plan, the pensions and other benefits are likely to depend not on current pay levels but on salaries in the future. How far should future pay levels be taken into account in calculating the pension liability? This was a point of disagreement between members of the Financial Accounting Standards Board when FAS87 was being developed. FAS87 was approved by four votes to three, the dissenters arguing that it was not appropriate to take notice of possible future salary increases in determining pension expense and liabilities. FAS87 involved a strange compromise whereby pension expense was based on the ‘projected benefit obligation’, which FAS87 defines as ‘the actuarial present value as of a date of all benefits attributed by the pension benefit formula to employee service rendered prior to that date’, making it clear that ‘the projected benefit obligation is measured using assumptions as to future compensation levels if the pension benefit formula is based on those future compensation levels’. However, the balance sheet liability, if any, was based on the ‘accumulated benefit obligation’, which does not take into account future pay increases. FAS87 has recently been amended by FAS158 (FASB 2006b), which requires any balance sheet liability to be based on the projected benefit obligation.

Accounting liabilities are present obligations, but obligations can extend beyond what is due under law or contract. Both IAS19 and FRS17 require the plan liabilities to be measured in terms of future salary levels. This is the case whether there is a legal obligation to pay pensions based on future salary levels or merely a ‘constructive obligation’, which would arise if the employer’s past practice was to reflect future salary levels in pension payments or failing to do so in the future would lead to such damage to the employer-employee relationship that such as course of action would not be realistic (IAS19: para. 52, FRS17: para. 27).

Although some pension and other post-retirement benefits are more like insurance entitlements (for example, many pension plans pay a ‘death-in-service’ benefit for employees who die before they retire, which may be a fixed amount or one that depends only on salary), the most significant benefits in a defined benefit scheme usually depend on an employee’s length of service. An employee who has worked for an employer for 20 years and expects to work a further 10 years before retiring may anticipate receiving a pension based on 30 years’ service, but is all of the pension a *present* obligation of the employer? Financial reporting standards are unanimous that the answer to this question is ‘No’. Benefits are to be attributed to periods of service. This would usually be based on the pension plan’s benefit formula (for example, a plan that granted one sixtieth of final salary for every year of service would imply that an equal ‘unit’ of benefit should be attributed to each year of service), though if the benefit formula assigns a ‘disproportionate’ share of the benefits to later years, a straight-line attribution method should be used (IAS19: para. 67, FRS17: para. 22). Hence the pension obligation in respect of an employee with a final salary pension plan would be based on that employee’s period of service up to the accounting date, but the employee’s expected final salary. This is sometimes referred to as the ‘projected unit method’ or the ‘projected unit credit method’, as benefits are determined based on projected final salaries and divided into units for each period of service. The principal financial reporting standards specify the use of this method (FAS87: para. 40, IAS19: para. 64, FRS17: para. 20).

The final stage in calculating the pension liability reflects the facts that (a) pensions and other benefits are payable not immediately but in the future, and (b) various events between now and normal retirement date may affect the amount of benefits payable. For example, if employees move to a new job with a different employer, they may be entitled to a deferred pension based on their salary when they leave, which is likely to be less than their expected final salary if they stay until normal retirement. On the other hand, an employee retiring early on grounds of ill health may be able to draw a larger pension than expected. The expected pension benefits attributed to a particular period need to be discounted for both these ‘actuarial’ factors and for the time value of money.

Actuaries undertaking valuations of pension plans traditionally used a discount rate based on the rates of return expected on plan assets over the long term. Their justification for this was that they were in effect projecting forward the cash inflows to the plan from asset returns and the cash outflows in the form of benefits, determining the pension deficit or surplus as the present value of the net cash flows each year over the time horizon of the valuation. As Exley et al. (1997: 851) note: ‘If asset and liability cash flows are both discounted at the assumed reinvestment rate, then the ratio of the discounted amounts is exactly the required funding level.’

However, accounting standard setters have argued that the expected rate of return on the plan assets is not an appropriate basis for measuring pension liabilities for accounting purposes, because, in a defined benefit plan, the benefits do not depend on the investment performance of the plan assets. Using the return on plan assets as the discount rate for plan liabilities would lead to the unacceptable position that the same liabilities would be measured differently by employers whose pension plans adopted different investment strategies (IAS19: Basis of Conclusions, para. 27). Although many commentators argued that a long-run rate of return on equities should be used, both the IASC and the ASB determined that a corporate bond rate should be used for discounting pension liabilities (IAS19: para. 78, FRS17: para. 32). In a recent study, Khorasanee (2004) has shown that, even though there is evidence of a long-run correlation between real pay growth and real returns on equities in the UK, the association is not strong enough to justify the use of equity returns for discounting pension liabilities. Khorasanee concludes that the use of a corporate bond rate, though an ad hoc way of dealing with the risk that an employer would default on pension obligations, is a reasonable pragmatic compromise.

IS THE PENSION LIABILITY MEASURED AT FAIR VALUE?

The fair value concept is usually discussed in terms of assets but it extends to liabilities as well. The standard definition of fair value, reiterated in IAS19, is ‘the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm’s length transaction’. A debtor that owes a sum of money to a creditor can conceive of settling the liability by either paying off the sum of money (or in some cases a different amount) to the creditor or paying a third party to take over the obligation. A third possibility is that the debtor simply pays the amount due to the creditor when it falls due for payment, but this may not constitute ‘settlement’ as accounting standard setters understand it. For example, the Financial Accounting Standards Board, in its Concepts Statement No. 7, observes:

When using present value techniques to estimate the fair value of a liability, the objective is to estimate the value of the assets required currently to (a) settle the liability with the holder or (b) transfer the liability to an entity of comparable credit standing.

(FASB 2000: para. 75)

The difficulty with pension liabilities is that it is usually impractical – and often illegal – for an employer to ‘settle’ the liability by paying off pensioners, deferred pensioners and employees. Although pension rights are economic assets of pensioners and employees, most countries forbid pensioners from selling or mortgaging their pension rights, whether to the employer or to a third party. Conceivably, an employer could transfer the pension liability to another entity. This happens regularly when individual employees change jobs: if the employee does not want to retain an entitlement to a deferred pension payable at the normal retirement date but based on the salary and period of service up to the date of leaving, then the old employer’s pension plan makes a ‘transfer payment’ to the new employer’s plan. At first sight, this would imply that the fair value of the pension liabilities could be computed by working out what would be the transfer payment if all employees were to leave employment at the accounting date and adding the cost of purchasing suitably designed annuities for current and deferred pensioners. In practice, this yields a measure roughly comparable to the accumulated benefit obligation of FAS87. Although individual ‘early leavers’ are usually prepared to trade off a lower measure of their accrued pension benefits, in the form of a transfer payment, against expected improvements in pay and other work conditions on the new job, it is unlikely that the whole workforce would accept such a diminution in expectations.

The implication of this is potentially controversial: either no ‘transactions-based’ fair value measure is relevant for pension liabilities or the fair value of pension liabilities should be measured in terms of what it would cost the employer to transfer benefits relating to service up to the accounting date to a third party. Any such transfer is most unlikely to take into account anything beyond strict obligations under the terms of the pension plan. For example, if the plan has been granting cost of living increases for pensions in payment, even though not required to do so, it is probable that a transfer would lead to such increases being frozen. Transfers for existing employers would be based on current rather than projected salary levels. Any ‘constructive’ obligation that IAS19 or FRS17 would require the employer to take into account in measuring the pension liability would be unlikely to be reflected in the amount that a third party would pay to take over the employer’s pension liabilities.

If a ‘transactions-based’ measure of fair value is not available for pension liabilities, then we are thrown back onto the sort of actuarially based present value calculation required by the financial reporting standards. To some, this measurement approach could legitimately be labelled as ‘fair value’ anyway. The FASB, in its standard FAS157 on fair value measurement issued in 2006, identified three different levels of fair value measurement. In Level 1, market prices exist for identical assets and liabilities, while in Level 2, the market prices of closely comparable assets and liabilities can be adjusted rationally to obtain fair value measures. However, if market prices for identical or comparable assets and liabilities are not available, then a Level 3 measurement is required and this requires fair value to be estimated (FASB 2006: para. 30). Critics of this approach (e.g. Ernst & Young 2005) argue that whatever one may think of such estimates, they should not be described as ‘fair values’. At present, markets do not exist for pension liabilities (although some insurance products such as annuities, which could be used as valuation surrogates for some types of pension liability, are increasingly being traded on markets, or at least have current and reliable prices). Hence, an actuarial present value approach is the most reliable way of assessing pension liabilities at present.

PENSION ASSETS

Should the employer’s balance sheet show pension fund assets and the full amount of pension fund liabilities, or should only a net asset or liability be disclosed? Over 30 years ago, the financial economist Jack Treynor, writing as ‘Walter Bagehot’, argued that, economically, if employers were expected to ensure that promised pension benefits were paid, then they bore the risk that there would not be sufficient assets in the pension plan to meet benefits as they fell due. Hence, in substance, the full amount of pension liabilities (and the full amount of pension plan assets) should be attributed to the employer. He suggested an ‘augmented’ balance sheet showing the present value of pension obligations alongside the employer’s other liabilities and the pension plan assets alongside the employer’s other assets (Bagehot 1972).

In fact, the accounting standard setters do not require an augmented balance sheet, even though they consider that, in substance, the plan assets ‘belong to’ the employer, because the principal role of plan assets is to discharge the specific pension liabilities. Hence only the net pension liability (or asset) arrived at by deducting the plan assets from the present value of the plan obligations, is shown on the face of the balance sheet. An augmented balance sheet would for many companies look dramatically different from the balance sheet actually published. For example, British Airways plc, in its group balance sheet at 31 March 2006, shows total assets (excluding recoverable pension surpluses) of £12.0bn and total liabilities (excluding pension and other employee benefit obligations) of £8.3bn. Employee benefit obligations are a net £1.7bn, and shareholders’ equity is £2.0bn. The augmented balance sheet would show total assets (including pension plan assets valued at £12.1bn) of £24.1bn and total liabilities (including gross employee benefit obligations of £14.3bn) of £22.6bn. Shareholders’ equity would fall to £1.5bn, reflecting actuarial losses that IAS19 allows employers to defer rather than recognizing immediately.

The measurement of pension plan assets is, for accounting standard setters, straightforward: they are measured at fair value (IAS19: para. 54, FRS17: para. 14). Mostly, plan assets will be securities (whether debt, equity or derivative) traded on active financial markets. In this case, the mid-market price is taken as the basis of fair value. In some cases, pension plans invest in assets such as investment properties, and these are to be valued at open market value (FRS 17: para. 16). Where the plan holds insurance policies that exactly match particular identifiable benefits in terms of amounts and timing, then the fair value of the policies is taken as the present value of the related obligation (IAS19: para. 104, FRS17: para. 18). The standards do not give precise guidance on estimating fair value for other classes of asset, but it is reasonable to presume that such assets would be valued on the same basis as similar assets of an entity that is not a pension plan.

The use of fair values (essentially market values) for measuring plan assets is a source of controversy, as it is one of the main causes of volatility in the measurement of pension costs and liabilities. Traditionally, actuaries largely ignored current market values, regarding these as unrepresentative of long-term returns from assets:

The use of assessed values for assets reflects an underlying philosophy that funding levels and professional judgement matter, while absolute sterling amounts and market values do not. This exemplifies the “scheme centred” approach which actuaries have traditionally adopted.

(Exley et al. 1997: 851–2)

In the UK, the Pensions Act 2004 regulates the accounting statements of pension plans. This requires pension plans either to prepare their accounts in accordance with the Statement of Recommended Practice (SORP) *Financial Reports of Pension Schemes* (PRAG 2002) or state why they have not followed the SORP. The IASC issued a standard (IAS26 *Accounting and Reporting by Retirement Benefit Plans*) in 1987. IAS26 requires the use of fair values for pension plan assets, but the UK SORP does not specifically use that term. However, it requires investments to be shown at ‘market value’ (PRAG 2002: para. 2.58). Hence the valuation of plan assets should be consistent in both the plan accounts and the employer’s financial statements.

FAIR VALUES AND VOLATILITY

The main objection to the use of fair values for measuring pension assets and obligations is that fair values are inherently volatile. This is because they are normally market prices for traded securities and are subject to the short-term fluctuations of financial markets. The pension commitment is, however, a very long-term one, extending potentially over decades rather than years. Although the current accounting standards for retirement benefits use devices (such as the ‘corridor’) for disregarding or spreading certain results of market volatility, these come across as devices to mitigate the full rigours of fair value accounting rather than as conceptually sound accounting treatments. The counter-argument is that volatility, and the concomitant risk of significant deficits, has always been present in defined benefit pension arrangements, and modern accounting for pensions simply exposes what has previously been hidden.

The changes in the accounting requirements for retirement benefits, moving towards a fair value accounting approach, arguably came at a bad time. In recent years, increasing life expectancy, coupled with a dramatic stock market slump and generally falling interest rates, led pension plans to experience at the same time substantial increases in the present value of obligations and significant falls in the fair value of assets. Pension plans that had been in comfortable surplus in the 1990s began to fall into dramatic deficit with the coming of the new century (Sutcliffe 2005). This has led to many employers in the UK and other countries deciding to close their defined benefit pension plans (at least to new employees) and move to defined contribution plans (Clark and Monk 2006). If fair value accounting for retirement benefits is simply revealing an ‘economic reality’ that has previously been obscured, then arguably it allows users of financial statements to assess more accurately the risks undertaken by employers offering defined benefit pension plans. It appears that investors are less willing than before to tolerate such risks, hence management seeks to reduce the risks through closing defined benefit plans. Ironically, an accounting treatment that increases volatility in employer balance sheets in the short term may reduce volatility in the longer term (though even if a plan is closed to new employees, it must still continue for existing employees and pensioners for a long time into the future). Recent empirical evidence (Hann et al. 2006) suggests that fair value pension accounting generated superior information in comparison with FAS87 figures in the late 1990s but less valuable information in the more volatile and declining markets of the early 2000s. They find that splitting the transitory elements arising from actuarial gains and losses from the regular pension cost improves the informativeness of the accounting numbers. This evidence provides some support for the approach of FRS17, which is likely to be adopted more widely when IAS19 is reviewed.

Applying fair value ideas to accounting for retirement benefits has a straightforward aspect when assets are measured, as most pension plan assets are marketable securities or other items where solid valuation techniques have developed. However, it is questionable whether meaningful ‘fair values’ of pension obligations will be possible in the foreseeable future, if it is necessary to base fair values on some sort of transaction-generated measure such as market value. Perhaps secondary markets for pension obligations will develop as employers seek to disentangle themselves from the remnants of closed defined benefit plans (Clark and Monk 2006, suggest this as a possibility, in the same way as buyers have emerged for the closed with-profits funds of insurers). This would give a firmer basis to the valuation of pension obligations. For the time being, however, the actuarially based approach still implicit in the accounting standards will have to be deemed to give a fair value for the pension liability.

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