ACCOUNTING STANDARDS FOR PENSION COSTS IN CORPORATE ACCOUNTS – the present and the future

1. INTRODUCTION

Employer-sponsored pension arrangements

1.1 In the majority of developed countries of the world, the cost of providing retirement and death benefits represents a substantial employment cost for most companies.

1.2 Retirement benefits are generally provided through a mix of Social Security benefits and employer-sponsored pension plans. In some countries, including major ones in Western Europe, the Social Security benefits are dominant, with companies providing either very limited benefits or benefits restricted to a small number of senior employees. In many other countries, however, the retirement benefits provided through employer-sponsored plans are substantial, with corresponding costs. Some of these arrangements are funded and some not.

1.3 The methods of provision of retirement benefits may be broadly summarised as follows:

(1) A funded defined contribution plan.

(2) A funded defined benefit plan.

(3) An unfunded plan where benefits are promised by the employer.
(4) Ex-gratia arrangements where benefits are paid in practice by the employer, but no advance promise of benefits is made.

The cost to the employer

1.4 Of these types of plan, the company's liability in relation to (1), a defined contribution plan, is fully extinguished once the contributions in relation to a particular period have been paid. Thus, in the case of that type of plan, the pension expense properly equals the contribution paid by the company.

1.5 All the other types of plan provide benefits for which provision has either to be made in advance by contributing into a fund or the benefits have to be paid by the company when they arise. In the case of a funded plan, contributions are determined as a result of actuarial valuations based on assumptions. With fluctuating experience from time to time, contributions can vary, typically between zero and, say, 20% of earnings. Variations in benefit payments by the Company under (3) or (4) can be even wider.

1.6 It is obvious that such fluctuating payments, if recorded as the pension expense in the corporate accounts could lead to significant distortions in statements of corporate earnings from year to year, and in the case of (3) or (4) could lead to the build-up of a large hidden liability for which no provision had been made in the balance sheet. Hence the need for accounting guidelines and standards in relation to pension costs.

Basic accounting principle

1.7 Since retirement benefits are provided in relation to a period of service with a company, it is sound financial sense to make provision for the benefits during that period of service out of the earnings of the company at the time. Furthermore, in order to avoid distortions of corporate earnings from year to year, provision should be
made on a systematic basis which results in a pension expense which is as stable as possible from year to year – ideally level in "real" terms; probably as a percentage of employees' earnings.

1.8 This basic principle is enshrined in International Accounting Standard IAS19, published in 1983. It requires the cost of retirement benefits to be determined using either an accrued or projected benefit costing method based on appropriate actuarial assumptions. Both the method and the assumptions must be applied consistently from year to year. The Standard requires current service costs to be charged systematically over the expected remaining working lives of the employees concerned, and past service costs (arising for whatever reason) to be charged either as they arise or systematically over a period not exceeding the expected remaining working lives of the employees. There are no specific requirements in relation to assumptions or methods, so that the Standard is a general guideline only.

National accounting standards

1.9 Specific accounting standards in relation to the way in which pension expense is calculated and recorded in corporate accounts currently exist in the following countries:


1.10 In a number of other countries, there are varying disclosure requirements in relation to retirement benefit plans, but currently none which specify a particular basis for the recording of pension expense in the corporate accounts.

1.11 All of the national standards in 1.9 above conform with the principles in IAS19. Their basic objective is the recording of pension cost on a systematic and reasonably stable basis in such a way that there is a reasonable degree of comparability between the accounts of different companies. However, at that point, the similarity amongst the four standards largely ends.

1.12 One reason for differences of approach lies in the varying practices and tax laws affecting pension provision in the various countries. This is most obvious in the comparison between Germany, where most pension plans operate on an unfunded book reserve system, and the other three countries where the standards are designed primarily to apply to funded (tax qualified) plans, but also to unfunded (usually non-qualified) plans.

1.13 In the next section of the paper, there is a summary, in the broadest terms, of the approaches taken under the four standards. The differences are then analysed, followed by a summary of the strengths and weaknesses of each standard. Some comments are then made on the problems which arise in relation to multi-national companies where more than one standard needs to be complied with.
2. CURRENT ACCOUNTING REQUIREMENTS

Outlines of approaches under National Accounting Standards

2.1 BiRiLiG Law in West Germany: This law requires the pension expense and book reserves to be recorded in commercial accounts and balance sheets using an accrued benefits method. However, compliance is compulsory only in relation to "new pension promises" made after 1986. The method corresponds to book reserve calculations for tax purposes, but assumptions may differ. A bulletin on valuation principles is being prepared by the German Institute of Auditors.

2.2 USA, Canada, UK: The FAS, CICA and SSAP requirements apply virtually universally to all pension plans. Each requires pension expense for a defined benefit plan to be calculated in two parts: the current service cost (or normal cost or regular cost) corresponding to the future accrual of benefits under the plan, and a past service cost relating to unfunded past service liabilities (positive cost) or past service surpluses (negative cost), including where these have arisen as a result of actuarial gains or losses.

2.3 USA – FAS87: The actuarial costing method must be projected unit credit. The actuarial assumptions underlying the liabilities are essentially market-related with each assumption individually having to represent the most realistic estimate. Assets must be valued either at market value or on a market-related basis.

The annual pension expense is assessed as: current service cost + interest on projected benefits obligation (past service liability) – expected return on assets for the year + amortisation of unfunded PBO.

The amortisation charge consists of a number of parts, and is derived by simply dividing the relevant unfunded liability by the number of
years over which it is to be amortised, this being generally the average future service life of the membership. Actuarial gains or losses up to 10% of the greater of the PBO and the assets do not have to be amortised.

2.4 **Canada – CICA:** The actuarial costing method which must be used is projected unit credit. The assumptions used in valuing the liabilities must individually represent a best estimate and should reflect the company's judgement. Assets must be valued at either market value or on a market-related basis. The composition of the annual pension expense is similar to that under FAS, except that all actuarial gains and losses must be amortised; i.e., there is no 10% "corridor".

2.5 **UK – SSAP24:** Any projected benefits method may be used in assessing pension cost; this allows projected unit credit, attained age normal (aggregate) or entry age normal. The assumptions for valuing the liabilities, the value placed on the assets and the costing method must, when considered as a whole, represent the actuary's best estimate of the future. Assets can be valued on any reasonable actuarial method, including one based on discounted future income.

Annual pension expense is calculated as: Current service cost + amortisation of unfunded past service liability (or surplus) + interest on any balance sheet provision for pensions at the start of the year.

The amortisation of the unfunded past service liability is generally over the average future service life of the membership, but no particular method of amortisation is specified, leaving essentially three possibilities: as a percentage of pay, as a level monetary amount on an annuity certain basis or on a method akin to FAS87.

A funding assessment for SSAP24 purposes does not have to be carried out every year. The SSAP calculations can be based, if necessary, on the results of the most recent triennial actuarial valuation.
Analysis of differences between standards

2.6 Liability assumptions: Both FAS and CICA require each assumption individually to be a best estimate. However, whereas FAS requires the assumptions to reflect a current view, there is more room for long-term judgement in the case of CICA. There are therefore more frequent changes in assumptions and the changes are of greater magnitude under FAS than under CICA. However, in terms of pension expense, this is countered to some extent by the existence of the 10% corridor under FAS for actuarial gains and losses which do not have to be amortised. There is no such corridor under CICA.

SSAP simply requires the entire basis of calculation to be the actuary's "best estimate" which, by definition, is open to wide interpretation. It enables a long term view to be taken, which inevitably gives ample room for divergence of view. Hence the potential for substantial variations in pension cost.

Another feature of SSAP, which contrasts with the approach under FAS and CICA, is that it strongly encourages advance provision in the liabilities for discretionary (non-contractual) pension increases where these are a regular feature of a plan. This is preferred to the alternative of accounting for the liability for such increases as they are awarded.

2.7 Asset valuation: Both FAS and CICA require assets to be valued at fair market value or on a market-related basis. SSAP on the other hand also permits the use of an actuarially calculated value of assets based on the discounted value of future investment proceeds in the form of income and redeemed capital. In the context of the UK, this method, or a variant thereof, is probably favoured by the majority of actuaries. This may well represent a major cultural difference as between UK and North American actuaries. The use of market
value on the valuation date must undoubtedly lead to fluctuations in pension expense, particularly under CICA where no 10% "corridor" for gains and losses exists. A market-related value, based on average market values over a period of up to 5 years will serve to smooth out short term fluctuations in asset values, but, particularly with equities, will tend generally to under-value, particularly at times when dividend/earnings growth in the recent past has been strong.

2.8 Actuarial calculation method: The fact that SSAP permits the use of projected benefit methods other than the projected unit credit method is a potential source of variation in pension expense.

2.9 Amortisation methods: The absence of specification of any particular amortisation method (as opposed to amortisation period) under SSAP gives rise to significant potential differences in pension expense. The three methods available vary from one which produces increasing amortisation amounts in monetary terms, through one where they remain level, to one where they decrease each year.

Strengths and weaknesses of standards

2.10 SSAP24 leaves a great deal to the actuary's judgement. If the actuary advises his client of all the possibilities by way of costing method, amortisation method, asset valuations and assumptions, the client would be furnished with a vast choice of pension expense figures, at least in the first year of compliance. Also, there is provision for the pension expense calculation for a given year to be based on a substantially out of date valuation. Given this degree of flexibility, the degree of comparability between the accounts of different companies must be potentially poor. A major advantage of SSAP24, however, if followed consistently from year to year is that, because of its emphasis on long-term assumptions and the ability to use an actuarially calculated value of assets, there is less likelihood of fluctuations in pension expense.
2.11 **FAS87** is almost certainly the most successful attempt by accountants to regulate the assumptions and methods used by actuaries in a way which they can reasonably verify. All assumptions are market-related and have to be justified in current terms, so leaving relatively little room for actuarial judgement. The resulting changes produce more variation in current service cost than under any other standard.

The use of market-related liability assumptions alongside a market or market-related valuation of assets might look to be a reasonable correspondence for the assessment of past service costs. However, a significant problem, particularly in cases where market value is used, is the fact that the market values of equities (which tend to constitute the larger part of most pension plan investment portfolios) can often move in the opposite direction to bond markets, while the settlement rate underlying the valuation of liabilities is generally related to bond yields. This potential source of fluctuation makes the 10% corridor in relation to gains and losses sensible. However, the existence of the corridor will tend to mean that gains and losses are never fully amortised.

2.12 **CICA** allows for a greater degree of judgement by the actuary and the client in selecting the assumptions for valuing the liabilities than under FAS. However, the use of market or market-related values can still lead to fluctuations, which can cause amortisation payments (in the absence of the 10% corridor) to vary substantially more than under FAS. Against this, however, current service cost should be more stable under CICA.

**Considerations for multi-nationals**

2.13 Real difficulties arise in situations where a company operating in a particular country has to conform with more than one of the accounting standards in relation to the pension plans in that country. This happens, for example, with a UK subsidiary of a US company.
It also occurs in the case of a number of multi-nationals which are quoted on, say, both the Canadian and US Stock Markets. In these circumstances, particularly on the first occasion when compliance with two standards is required, there is often pressure from the client to attempt to make pension expense and balance sheet entries the same under the two standards.

2.14 It is extremely difficult in general to make the assumptions under FAS and SSAP coincide. It is slightly easier as between CICA and SSAP. Similar assumptions as between FAS and CICA can be managed in a number of circumstances, but the combination of changing assumptions under FAS and the necessity of amortising all gains and loses under CICA generally leads to greater fluctuations in pension expense than either standard intends.

2.15 There is nothing under SSAP which stops the costing, amortisation or asset valuation methods under FAS and CICA being used. There could, however, be difficulty in using straight market value, while a moving average market value of UK equities tends consistently to under-value the largest asset class in a typical UK plan for the reason stated in 2.7 above.

2.16 The broad conclusion is that it may well be possible to construct a situation where similar results can be obtained by way of pension expense under two of the standards in a particular year, but the difficulty lies in maintaining this in future years, given the need to follow through the principles underlying each standard.
3. **FUTURE DEVELOPMENTS**

**The need for evolution**

3.1 In the analysis of the existing national accounting standards, it has been demonstrated that there is significant room for variation in the calculation of pension expense as between the standards and within each standard depending on its interpretation. The latter is especially true of SSAP24 in the UK.

3.2 At this point, it is worth re-stating the basic objective of the accounting standards: comparability of pension expense and balance sheet provisions as between different companies, with pension expense being recorded systematically as the liabilities are accrued so as to produce reasonably stable charges. Both theory and practice indicate that stability has been subordinated to comparability in the case of FAS87. This is demonstrated by experience in the first few years of operation of the Standard which have shown some large swings in pension expense figures. There is less experience with the other standards, but is is fair to say in advance that SSAP24 is too flexible to achieve the basic objective of comparability between companies.

**The role of actuaries**

3.4 As actuaries looking at the principles of accounting for pension costs, we need to remind ourselves that we are dealing with accounting standards; i.e., standards of another profession. Yet those standards are dealing with areas in which we have fully more expertise and understanding than the accountants.

3.5 The USA has the longest history of accounting standards for pension costs, and it is there that accountants have done most to remove actuaries' discretion in determining the basis of calculation of pension
expense. The result, in FAS87, is an essentially short-term basis of determining assumptions for what are long-term liabilities and assets. This is arguably regrettable.

3.6 Against this background there is a need, initially within each country, for the actuarial and accounting professions to communicate at the highest level much more effectively than they have in the past. The ideal would be to agree on a narrow range of long term assumptions which could be applied in the calculation of pension expense. Inevitably this would need to be kept under review.

**Likely national developments**

3.7 For all kinds of reasons, it is probably unlikely that such an accord will be achieved in any one, never mind in most, countries. The most likely development is the further evolution of the existing standards so as to improve on the basic objectives of comparability between companies and stability of cost. This will almost certainly mean a tightening up on methods and assumptions. Because it is the longest established standard, FAS is again likely to lead the way. For this reason, plus the dominance of the US economy, it is probably unlikely that accountants in the US will pay much attention to developments in other countries. CICA may well then, at least in part, follow developments under FAS.

3.8 SSAP24 meets the comparability criterion only in the most general of terms. Tightening up on costing and amortisation methods must be the most likely development, together with the question of the frequency of valuations for pension expense calculation purposes.

**International considerations**

3.9 With the growing number of multi-national companies headquartered in a large number of countries, there is an increasing need for a more common approach internationally. Accounting standards on pension
costs may well be developed in other countries, including Australia, New Zealand, Japan, and possibly some other European countries.

3.10 Clearly, there would be practical advantages if future developments could be in the direction of a common approach. A reasonable, and possibly attainable, objective might be the acceptance for all accounting purposes of the national accounting standard in relation to pension plans operating in each country. Thus, for example, pension expense in relation to a UK subsidiary of a US corporation could be included in the US corporation's accounts based on the UK accounting standard. This would be acceptable only if the various standards had considerably more common ground than currently. One significant advantage of such a procedure would be that the necessity to interpret and adapt a national accounting standard, which has been designed around its own country's customs and practices, to the practices of another country would be avoided.

3.11 A possible encouragement to such developments might be the replacement of IAS19 by something much more specific which could then provide the base for more common national accounting standards.

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