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This document is provided as a convenience to observers at Employee Benefits Working Group meetings, to assist them in following the discussion. It does not represent an official position of the IASB. Board positions are set out in Standards.

Note: These notes are based on the staff paper prepared for the Employee Benefits Working Group Meetings. Paragraph numbers correspond to paragraph numbers used in the Employee Benefits paper. However, because these notes are less detailed, some paragraph numbers are not used.

#### **INFORMATION FOR OBSERVERS**

| IASB Meeting: | Employee Benefits Working Group       |            |
|---------------|---------------------------------------|------------|
| Paper:        | Agenda Paper 4A – Cash balance plans: | Background |

## Introduction

- 1. Cash balance plans are pension plans in which the pension benefit is determined by reference to amounts credited to an employee's account. Those amounts typically comprise in each year a principal amount based on current salary and a specified interest credit. The plan may be funded or unfunded. If the plan is funded, it may be invested in assets that differ from those that determine the interest credit. On retirement or leaving service, the employee is entitled to a lump sum equal to the total amount credited to his account. That entitlement may be subject to vesting conditions.
- 2. Cash balance plans first emerged in the US in the 1980s and are now widespread there. They are also increasingly common in Europe. They are often used as a replacement for traditional final salary pension plans. Reasons given for this trend are that, compared to a traditional final salary plan:
  - a. cash balance plans are more appropriate for a mobile workforce (see discussion below).
  - b. cash balance plans are better understood and therefore more highly valued by employees.

- c. cash balance plans reduce the risks for the employer and, depending on the contributions and interest credits chosen, can reduce the costs.
- 3. Under a traditional final salary plan, employees that change jobs often get significantly less benefit than if they stayed with one employer. This is because the benefit accrued from each employer is frozen at the employee's final salary with that employer, and does not increase with salary increases from future employers.<sup>1</sup> Under a cash balance plan, the benefits vest more evenly over the working life of an employee and changes in employment usually have less impact on the total benefit received.<sup>2</sup>
- 4. This paper describes:
  - a. the problems in applying IAS 19 to cash balance plans.
  - b. the work done to date on cash balance plans by the IFRIC prior to the Board embarking on Phase 1.
  - c. the status of work on cash balance plans in US GAAP.
  - d. the approach taken by the Board so far.

### Problems in applying IAS 19 to cash balance plans

- 5. Cash balance plans are usually defined benefit plans under IAS 19 because the employer bears investment risk. The following problems arise in applying the IAS 19 requirements for defined benefit plans to cash balance plans:
  - a. the attribution of benefit to periods of service
  - b. the measurement of any benefit that depends on future returns on assets
  - c. the measurement of a benefit that includes a comparison of two amounts.
- 6. These problems are described below. We have also posted the presentations from the Board's education session in October 2006 on the Employee Benefits Working Group website. These documents may be useful as background reading.

#### The attribution of benefit to periods of service

7. The benefit under cash balance plans is determined by reference to a principal amount credited to the employee's account each year (a contribution or notional contribution)

<sup>&</sup>lt;sup>1</sup> In some jurisdictions there is statutory revaluation of benefits for deferred members, but usually at a rate lower than the average earnings increase.

<sup>&</sup>lt;sup>2</sup> The impact will depend on any specific vesting conditions attached to the cash balance benefit.

and an interest credit. The contribution is usually determined by reference to the employee's current salary. The question arises as to whether the total benefit expected to accrue to the employee over his service life should be attributed to periods of service:

- a. based on the benefit formula, ie recognise the cost of the contribution and interest based on current salary each year or
- b. under paragraph 67 of IAS 19, potentially on a straight line basis, ie recognising a cost based on expected average salary each year.
- 8. The question is illustrated in the following example. Consider a plan under which a contribution of 10 per cent of current salary is credited to the employees' account and the employees receive the contributions and an annual return on the contribution of 4 per cent per year over the period to when the benefits are paid. Assume also that expected salary increases are 7 per cent per year and the contributions are due and are made at the beginning of the year. The benefits projected over an expected service life of five years are as follows.

|         |                |             |          |          |          |         | Benefit            |
|---------|----------------|-------------|----------|----------|----------|---------|--------------------|
|         | Year 1         | Year 2      | Year 3   | Year 4   | Year 5   | Total   | allocated          |
|         |                |             |          |          |          | per the | on a               |
|         |                |             |          |          |          | benefit | straight-          |
|         |                |             |          |          |          | formula | line               |
|         |                |             |          |          |          |         | basis <sup>3</sup> |
| Year 1  | 100.0          | $4.2^{4}$   | 4.3      | 4.5      | 4.7      | 121.7   | 128.9              |
| benefit | (contribution) | (return)    | (return) | (return) | (return) |         |                    |
|         | 4.0 (return)   |             |          |          |          |         |                    |
| Year 2  |                | $107.0^{5}$ | 4.5      | 4.6      | 4.8      | 125.2   | 128.9              |
| benefit |                | 4.3         |          |          |          |         |                    |
| Year 3  |                |             | 114.5    | 4.8      | 5.0      | 128.9   | 128.9              |
| benefit |                |             | 4.6      |          |          |         |                    |
| Year 4  |                |             |          | 122.5    | 5.1      | 132.5   | 128.9              |
| benefit |                |             |          | 4.9      |          |         |                    |
| Year 5  |                |             |          |          | 131.1    | 136.3   | 129.0              |
| benefit |                |             |          |          | 5.2      |         |                    |
| Total   |                |             |          |          |          | 644.6   | 644.6              |
| benefit |                |             |          |          |          |         |                    |

<sup>&</sup>lt;sup>3</sup> Paragraph 67 of IAS 19 requires benefits to be allocated on a straight-line basis if the benefit formula attributes materially higher benefits to later periods of service. For the purposes of this example, it is assumed that the benefits attributed to later years of service are materially higher.

<sup>&</sup>lt;sup>4</sup> 4.2 is the return of 4% on the asset balance of 104 (100 plus 4) at the end of year 1.

<sup>&</sup>lt;sup>5</sup> The contribution has increased by 7% since year 1 because of salary increases.

The question is whether the service cost in each year should be the present value of the total according the benefit formula, or the benefit allocated on a straight-line basis.
Both the IFRIC and the FASB did some work on this issue, as discussed in paragraphs 18-30.

#### The measurement of benefits that depend on future asset returns

- 10. Under IAS 19, the defined benefit obligation is measured by projecting forward the benefit promised to settlement date using best estimate assumptions. The portion of the total benefit attributed to service up to the balance sheet date is then discounted to a present value using the yield on high quality corporate bonds. So, in the example above, the amounts in one of the last two columns (depending on the attribution method chosen) would be discounted using a high quality corporate bond rate.
- 11. The justification in IAS 19 for the use of such a rate is that it is a proxy for a risk-free rate. Given this justification, for a cash balance plan in which the interest credit is a fixed rate (as in the example above), the use of a high quality corporate bond rate is as appropriate for cash balance plans as it is for any traditional final salary plans.
- 12. However, often the interest credit in a cash balance plan depends on future returns on assets, rather than being a specified fixed rate. For example, a plan may offer a benefit of contributions of 5% of current salary with an interest credit rate equal to the rate of return on a specified group of equities. For such plans, the methodology in IAS 19 for measuring the defined benefit obligation requires projecting forward the benefit at the best estimate of the rate of return on the specified group of equities and then discounting back that amount using a high quality corporate bond rate.
- 13. Many feel uncomfortable about such a calculation. They would argue that it is equivalent to valuing CU100 of equities by projecting CU100 forward at the expected rate of return on equities and discounting that amount to a present value at the rate of return on high quality corporate bonds. That present value will not equal CU100.
- 14. The IFRIC has explored this issue and the FASB staff made some comment on it, as discussed in paragraphs 18-30.

# The measurement of a benefit that includes a comparison of two amounts

15. The benefit in a cash balance plan is sometimes the higher of two amounts, for example the higher of:

- a. contributions of 3% of current salary plus interest credits of 4% and
- b. contributions of 3% of current salary plus the actual return on the assets in which the contributions are invested.
- 16. Under IAS 19, the defined benefit obligation is measured using best estimate assumptions at the balance sheet date. That would lead to a measure of the higher of the two alternatives. It would not attribute any value to the existence of the alternative measure, even though its existence always adds value to the benefit.
- The IFRIC has done some work on this issue as discussed as discussed in paragraphs 18-24.

## Work by the IFRIC – D9

- 18. In 2003, the IFRIC was asked for guidance on how IAS 19 *Employee Benefits* should be applied to employee benefit plans with a promised return on actual or notional contributions. Such plans are cash balance plans. The examples considered by the IFRIC are:
  - a. a plan in which a contribution is made each year based on the employee's current salary and the employee receives a benefit (a lump sum or an annuity) equal to the contributions plus the higher of (i) the actual return generated on the contributions and (ii) a minimum fixed return on the contributions over the period to when the benefit is paid; and
  - b. a plan in which the promised benefit is a notional contribution each year plus a return on the notional contribution that is the higher of (i) the return based on specified assets, for example the return on quoted bonds, and (ii) a fixed return, for example 4 per cent. The plan may or may not hold assets.
- 19. In July 2004, the IFRIC issued Exposure Draft D9 *Employee Benefit Plans with a Promised Return on Contributions or Notional Contributions*. D9 addressed how IAS 19 should be applied to a plan that would be a defined contribution plan but for the existence of a minimum return guarantee. D9 argues that such plans are defined benefit plans and proposes guidance on the treatment of the following benefits:
  - a. a guarantee of a fixed return,
  - b. a benefit that depends on future asset returns, and

- c. a combination of (a) and (b).
- 20. D9 proposes that the liability for a benefit of a guarantee of a fixed return should be determined by projecting forward the contributions at the guaranteed fixed return to estimate the amount that will ultimately be paid. In deciding whether the benefit formula attributes materially higher benefits to later years of service, expected future salary increases should be taken into account. The amount attributed to service to the balance sheet date should be discounted back to a present value using the high-quality corporate bond rate required by IAS 19. All those proposals are relatively straightforward interpretations of IAS 19, except perhaps for the attribution method.
- 21. In contrast, for benefits that depend on future asset returns, D9 proposes that an estimate of the amount that will ultimately be paid should not be made. Instead, the liability should be determined by the value of the assets upon which the benefit is specified at the balance sheet date (ie usually the balance in the employee's account). That proposal is harder to fit into the existing requirements of IAS 19, although there is a justification in the Basis for Conclusions to D9.
- 22. Lastly, D9 proposes that the liability for a benefit that combines a guaranteed fixed return and the returns on future assets should be the higher of the liabilities for each separate element.
- 23. The responses to D9 raised the following concerns:
  - a. the attribution method for benefits of a fixed return
  - b. difficulties in separating some benefits into a fixed element and a benefit that depends on future asset returns
  - c. a view that the proposed methodology requires an amendment to rather than interpretation of IAS 19
  - d. the proposed methodology does not properly measure the total benefits when the benefits include a comparison of two amounts.
- 24. The IFRIC started to consider the responses to D9 in 2005 but work on D9 was superseded by the Board's decision to address cash balance plans as part of Phase 1.

# Cash balance plans in US GAAP

- 25. The definition of defined benefit plans is different under US GAAP to that in IAS 19. Nonetheless, cash balance plans are also usually defined benefit plans under US GAAP. The same problems listed in paragraph 5 broadly arise in applying SFAS 87.
- 26. In 2003, the EITF issued EITF 03-4 Determining the Classification and Benefit Attribution Method for a 'Cash Balance' Pension Plan. It states that:
  - a. a cash balance plan with a benefit of contributions of a percentage of current salary and a fixed interest credit should be regarded as a defined benefit plan under SFAS 87; and
  - b. the projected unit credit method should not be applied to attribute the benefits of such a plan. Instead the traditional unit credit method should be used. In IAS 19 terms, this is equivalent to using the benefit formula to attribute benefit and not a straight-line method (see example in paragraph 8.)
- 27. As a result of discussions during the development of this EITF Abstract, the EITF decided to limit the scope of the Abstract to cash balance plans with a fixed interest credit. The FASB also started a general project on cash balance plans.
- 28. The original objective of the FASB project was to provide measurement guidance on cash balance plans. In October 2004, the FASB expanded the scope of the project to cover all defined benefit plans that provide plan participants with a lump sum benefit at the date of separation from employment. After that decision, no further work was done on the project and in 2005 the FASB decided to address issues relating to cash balance plans as part of their broader pensions project.

## The IASB's approach

- 29. As noted above, both the FASB and IASB staff have already been involved in work on cash balance plans. Nonetheless, there are still substantial issues to resolved, including:
  - a. how can cash balance plans be distinguished from other pension plans?
  - b. how should benefits be attributed to periods of service in a cash balance plan?
  - c. what is an appropriate measurement attribute for the defined benefit obligation in a cash balance plan?

- d. how should benefit obligations that depend on a comparison of two amounts be measured?
- 30. The FASB had decided not to address these or other issues relating to cash balance plans in a short-term project. However, the Board noted that cash balance pension plans are a common and growing type of defined benefit plan which are not properly addressed by existing IFRSs. Constituents raised them as an issue with the IFRIC because of significant problems and diversity in practice. Those problems are likely to continue and grow without guidance from the IASB.
- 31. The Board further noted that the IFRIC is not best placed to deal with these issues because the requirements of IAS 19 were not designed with such plans in mind and are not always appropriate. A Board project would be required to resolve the issues by seeking the best solution, rather than one that can be squeezed into the existing IAS 19. Although the FASB concluded that it could not resolve issues relating to cash balance plans in a short-term project, it was constrained by a desire to issue improvements to SFAS 87 within 1 year. The Board's longer timeframe and willingness to discuss an interim solution to cash balance plans that is not constrained by IAS 19 would make it possible to achieve a high-quality solution to cash balance plans in phase 1. Accordingly, the Board decided that cash balance plans should form part of Phase 1 of its post-employment benefits project.