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International
Accounting Standards
Board

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These notes are based on the staff papers prepared for the IASB. Paragraph numbers correspond to paragraph numbers used in the IASB papers. However, because these notes are less detailed, some paragraph numbers are not used.*

INFORMATION FOR OBSERVERS

Board Meeting: March 2009, London

Project: Post-employment Benefits

Subject: Additional issues raised in comment letters - Additional guidance on the discount rate (Agenda paper 8D)

Purpose of this paper and staff recommendation

1. The purpose of this paper is to examine current IAS 19 requirements concerning the determination of the discount rate used to present value the defined benefit obligation, and recommend whether any additional guidance or clarification is required.
2. **The staff recommends:**
 - (a) **the Board does not investigate changing the required discount rate from high quality corporate bonds or government bonds (paragraph 13).**
 - (b) **the Board does not amend IAS 19 to allow the use of an unobservable rate (paragraph 18). This does not preclude an entity extrapolating observable short term maturities over the yield curve.**
 - (c) **the Board amends IAS 19 to include guidance on how to determine whether a deep market exists (paragraph 29).**

- (d) **the Board does not include guidance on determining whether a corporate bond index is high quality (paragraph 37). In the staff's view the principle of using 'high quality' bonds should be sufficient for entities to apply their own judgement.**

3. Does the Board agree with the staff recommendations?

The issue

4. Paragraph 78 of IAS 19 requires the post-employment benefit obligation to be discounted using a rate that is

...determined by reference to market yields at the end of the reporting period on high quality corporate bonds. In countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds shall be used. The currency and term of the corporate bonds or government bonds shall be consistent with the currency and estimated term of the post-employment benefit obligations.

5. Paragraph 81 of IAS 19 further states:

In some cases, there may be no deep market in bonds with a sufficiently long maturity to match the estimated maturity of all the benefit payments. In such cases, an entity uses current market rates of the appropriate term to discount shorter term payments, and estimates the discount rate for longer maturities by extrapolating current market rates along the yield curve. The total present value of a defined benefit obligation is unlikely to be particularly sensitive to the discount rate applied to the portion of benefits that is payable beyond the final maturity of the available corporate or government bonds.

6. Many respondents have noted the effect of the credit crisis on the measurement of defined benefit obligations. They observe the following:
- (a) The requirement to use a high quality corporate bond rate has previously been interpreted to mean the rate on a AA corporate bond index or above. Arguably, not all bonds currently rated as AA are high quality as the rating agencies seem to be lagging behind market perceptions of default risk. The higher rates applied to corporate bonds have caused

substantial reductions in reported liabilities.¹ In some cases, entities have moved from a deficit to a surplus, in spite of falling asset values due to the effect of the discount rate on the pension liability.

- (b) Trading volumes in previously deep bond markets have reduced dramatically, while trading in less developed markets has dried up altogether. Some argue that the high quality corporate bond market for long maturities can no longer be considered as deep.
 - (c) IAS 19 also permits the discount rate to be determined by extrapolating market rates based on market references for high quality shorter maturity corporate bonds. However, the dispersion of the market references for short maturity bonds has increased to a situation where any attempt to extrapolate a yield curve cannot be regarded as reliable.
 - (d) The difference between corporate and government bond rates can have a material effect under the current circumstances. In some cases, equal obligations are valued at very much higher values in some countries than in other countries next door, depending on whether there is considered to be a deep market in high quality corporate bonds in that country. Differences of 50-60%² can be found. Respondents think this is an unacceptably wide difference in valuation without any real justification.
7. This has led to the comment letters raising the following issues:
- (a) how should an entity assess whether there is a deep market in high quality corporate bonds?
 - (b) Does IAS 19 allow the use of a rate that is not a directly observable rate? Or does it require defaulting to government bonds instead?
 - (c) If IAS 19 allows the use of rates that are not directly observable, what could be an appropriate methodology to determine a suitable discount rate?
 - (d) what are high quality corporate bonds in the current economic climate?

¹ One newspaper estimated that pension liabilities of the UK's 350 biggest companies may be understated by as much as £160bn as a result.

² for example credit spread 2.25%, mean term 20 years gives a difference of 56%

Feedback from Working Group

8. Most working group members were in favour of additional guidance for the discount rate, citing the following reasons:
 - (a) The credit crisis has resulted in a reduced volume of trading in corporate bond markets. This has led to the spread between corporate and government bonds widening further than historical levels. The reduced volume of trade has also affected credit indices as the range of individual yields has also widened within corporate bond indices. The crisis has highlighted some long standing issues regarding the determination of the discount rate.
 - (b) Some indices are perceived as being flawed because there has been considerable lag in rating agencies re-ratings. Additional guidance on when companies can be carved out of the index would help practitioners.
 - (c) Credit markets are thinly traded (for example there are only around 14 bonds from 10 issuers in the EU during normal market times).
 - (d) Guidance would be helpful regarding the treatment of subordinated/seniority of bonds in indexes.
 - (e) It is unclear whether to use swap spreads across major currencies to construct the yield curve.
9. Some members raised the following concerns about any guidance:
 - (a) Finalisation of any guidance may be too late given that the issues faced may be transitory.
 - (b) As long as the requirements are prescriptive there could always be problems. A more descriptive principles based approach would be preferable.

Possible Solutions

10. Paragraph 1.11 of the discussion paper noted that the discount rate would be one of the factors to be considered in a comprehensive review of measurement. However some respondents stated that the board should consider addressing this issue now.
11. Some have suggested the following solutions in order to address the issues:

- (a) Change the required rate to something similar to the rate in the proposals for contribution based promises (i.e. a discount rate implicit in fair value) or to a long term average rate or amend the paragraph to apply a descriptive rather than a prescriptive approach.
- (b) Permit entities to make a reasonable estimate of what credit spreads might be in jurisdictions where the corporate bond market is not in practice considered “deep”.
- (c) Introduce guidance on how to determine whether a market is considered ‘deep’.
- (d) Require entities to remove bonds from market reference indices that are outside a statistical variance or have non-standard features.

Staff analysis and recommendations

Changing the required discount rate

- 12. The staff believe that changing the required discount rate would be possible only in the context of a fundamental review of measurement of defined benefit obligations as a whole. As such, it is matter that we have previously stated we will not address within the scope of this project.
- 13. **Accordingly the staff recommends the Board does not investigate changing the required discount rate from high quality corporate bonds or government bonds.**

Allowing the use of an unobservable rate

- 14. In June 2005 IFRIC discussed whether, when there is no deep market in high quality corporate bonds in a country, the discount rate could be determined by reference to a synthetically constructed equivalent instead of using the yield on government bonds. IFRIC came to the conclusion that ‘it is clear that a synthetically constructed equivalent to a high quality corporate bond by reference to the bond market in another country may not be used to determine the discount rate.’

15. Some constituents argue that it is not appropriate that an entity in an economy that has a deep bond market is able to measure its liability at a smaller amount than an entity in an economy with an equal risk-free rate but no deep market in corporate bonds.
16. If we consider allowing a synthetic equivalent then we would need to address how the credit spread could be determined. Some have suggested the following:
 - (a) Use a historical average
 - (b) Look to economies with a similar risk-free yield and a deep corporate bond market and use that spread
 - (c) Use the spread between risk free and corporate bonds which are multi-national/supranational
17. We note the following arguments against the above proposals:
 - (a) A historical average will not be an appropriate way to discount future cash flows.
 - (b) Using the spread between high quality corporate bonds and government bonds for an alternate currency as a basis to value a liability denominated in another currency may have unintended consequences. The underlying risk-free yield curves would have to be identical in order to avoid substituting one economy's risk for another. Otherwise the divergence of the yield curves would represent different risk profiles and it would be inappropriate to apply a spread based on one risk profile to a liability with another. Any similarity between the risk free yield curves of the two economies at a point in time could be considered transitory and coincidental.
 - (c) Multi-national or supra-national bonds (such as those issued by the World Bank) offer an equivalent credit rating to government bonds. However these types of bonds would usually only be issued in the major currencies, and it is likely that these economies will already have a deep market in corporate bonds.
18. **Accordingly the staff recommends the Board does not amend IAS 19 to allow the use of an unobservable rate. This does not preclude an entity extrapolating observable short term maturities over the yield curve. Does the Board agree with the staff recommendation?**

Assessing when a market is considered deep

19. Constituents in some jurisdictions have had difficulty determining what is meant by a 'deep market' in corporate bonds. The decision whether to use a corporate bond rate or a government bond rate can have a material impact on the value of the obligation.
20. Some suggest that a 'deep' market could be said to be one where individual transactions do not distort the price. The price would reflect the views of many market participants, both on the demand and the supply side (i.e. if we look a little above or below the market price, there is a large incremental quantity available for sale or being sought to buy). Given a transaction represents a certain quantity at a certain price, then the depth of a market could be determined by reference to the quantity needed to move the price a significant amount.
21. Indicators of a deep market are often expressed in terms of³:
 - (a) Trading Volume – The higher trading volume the deeper the market is likely to be.
 - (b) Total and Individual Issue Size – The larger the market in total the deeper it is considered to be and the larger the size of individual issues the deeper the market is likely to be.
 - (c) Bid-Ask spread – The smaller the spread between the bid and ask prices the deeper the market is likely to be.
22. Some organisations set thresholds to determine whether a given market is deep. For example, the European Central Bank applies some of the following criteria when selecting bonds for the construction of their euro area yield curves⁴:
 - (a) Only actively traded central government bonds with a maximum bid-ask spread per quote of three basis points are selected. The prices/yields are those at close of market on the reference day.
23. We note the current requirements of IAS 19 require the reporting entity to apply its own judgements. Changing the requirements to include certain thresholds to

³ BIS Quarterly Review, June 2004, Asian local currency bond markets

⁴ http://www.ecb.int/stats/money/yc/html/technical_notes.pdf

indicate market depth may not be appropriate in all circumstances and entities would still have to take into account all facts and circumstances when determining if their local market is deep.

24. The staff notes that the concept of a 'deep market' used in IAS 19 is closely related to the concept of an active market used in other IFRSs and currently being considered as part of the Board's *Fair Value Measurement* project.
25. In the Board's *Fair Value Measurement* project, the current working definition of an *active market* is as follows:

A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

26. The same project also defines an *inactive market* as:

A market in which there are few transactions for the asset or liability, the prices are not current, or price quotations vary substantially either over time or among market makers (eg some brokered markets), or in which little information is released publicly (eg a principal-to-principal market).

27. IAS 39 defines an active market as:

A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

28. One option for consideration by the Board would be to replace the term 'deep market' with 'active market' and use the guidance developed in the fair value project.
29. **The staff recommends the Board amends IAS 19 to include guidance on how to determine whether a deep market exists. This guidance can be in the form of indicators as described in paragraph 21 above or the Board can adopt the wording and guidance used in the fair value project. Does the Board agree with the staff recommendation?**

What is meant by ‘high quality corporate bonds’

30. IAS 19 states that an entity should use a rate ‘determined by reference to market yields at the end of the reporting period on high quality corporate bonds’. The standard does not explicitly state what a high quality corporate bond is but in practice this is understood to mean corporate bonds with an AA rating or higher. Typically an index yield is used.
31. As noted above (paragraph 6(a)), there has been an increase in corporate bond index yields in recent times. This could be due to a number of factors, including delays in rating agencies re-rating bonds and the impact of bonds included in the index which have non standard features (such as convertibles, subordinated etc).
32. The question is whether we should require preparers to remove such bonds from the index they are using or whether the requirements currently in the standard are sufficient enough to imply they should do this anyway.
33. It could be argued that bonds that have not been re-rated but whose yield lies outside some statistical measure of all other standard bond yields are not ‘high quality’. It could also be argued that bonds in a given index with non-standard features are not strictly ‘corporate *bonds*’.
34. Some believe that explicitly requiring the removal of these types of bonds from the index will help clarify what is meant by the words in the standard. We could require that bonds are removed from the reference index based on some statistical deviation from the mean and whether they feature subordination or convertibility.
35. For example, the European Central Bank applies some of the following criteria when selecting bonds for the construction of their euro area yield curves⁵:
 - (a) Bonds with special features, including ones with specific institutional arrangements, are excluded.
 - (b) Only fixed coupon bonds with a finite maturity and zero coupon bonds are selected. Variable coupon bonds, including inflation-linked bonds, and perpetual bonds, are not included.

⁵ http://www.ecb.int/stats/money/yc/html/technical_notes.pdf

- (c) An outlier removal mechanism is applied to bonds that have passed the above selection criteria. Bonds are removed if their yields deviate by more than twice the standard deviation from the average yield in the same maturity bracket. Afterwards, the same procedure is repeated.
36. The US Department of the Treasury also applies similar techniques when determining the Treasury High Quality Market Corporate Bond Yield Curve for the Pension Protection Act of 2006⁶:

“The bonds currently chosen for the bond set pay fixed nominal semiannual coupons and the principal amount at maturity. Bonds with other characteristics, such as convertible bonds or bonds with floating coupons, are generally omitted. Bonds with embedded options are also excluded at present, although bonds with make-whole call provisions are included. All bonds are issued by U.S. corporations; asset-backed bonds are excluded.”

- 37. The staff recommends the Board does not include guidance on determining whether the corporate bond index used is high quality. In the staff’s view, the principle of using ‘high quality’ bonds should be sufficient for entities to apply their own judgement. Does the Board agree with the staff recommendation?**

⁶ http://www.treas.gov/offices/economic-policy/reports/corporate_yield_curve_2007.pdf