STAFF PAPER

IASB Meeting

Present value measurement– discount rates research

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This paper has been prepared by staff of the IFRS Foundation. The views expressed in this paper reflect the individual views of the author[s] and not those of the IASB or the IFRS Foundation. Comments on the application of IFRSs do not purport to set out acceptable or unacceptable application of IFRSs.

Introduction

1. As a part of research on present value measurement – discount rates we have conducted limited outreach to understand the stakeholders’ views on present value measurements and practical issues they find. This paper summarises the findings.

2. The paper is provided for the IASB information only.

3. The paper includes:
   (a) Feedback from outreach during research, when we have spoken with a small selection of stakeholders. This includes actuaries and valuation professionals, investors, regulators, preparers, standard-setters and emerging economies.
   (b) Analyses of most common alternative performance measures and adjustments that relate to present value measurements.
   (c) Work of IFRS Interpretations Committee relevant to discount rates and present value measurements; and
   (d) Analysis of relevant comments received during 2011 IASB Agenda Consultation.

4. This paper is proposed to be included as an appendix to the Research Paper on present value measurements.
Outreach during research

Actuaries

5. Discussion with the actuaries (in particular members from the Interaction Actuarial Association (IAA)) has focussed on practical aspects of application of present value measurement requirements, IAS 19 in particular, and different environments in which the requirements are applied.

6. Their views on IAS 19 include;

(a) Important to keep simplicity of discount rate as there are many smaller plans with limited actuarial resources (unlike for insurance), in particular in Canada, Ireland and Germany.

(b) IAS 19 approach seems overly prudent, with future salary growth taken into account, but discounted at a rate close to risk-free rate. This is exacerbated when using a government bond rate, which usually includes less risks than corporate bonds.

(c) Even if risks are not included in measurement, there should be quantitative disclosure of all risks – IFRS does not require this today (IFRS 7 Financial Instruments does not apply to pension liabilities in the scope of IAS 19).

(d) Increasing presence of negative rates in practice was mentioned.

7. The IAA has also pointed out that markets are sometimes less liquid on the day at the end of the reporting period, when markets inputs are used for accounting measurement purposes. They have helped identify literature looking at this issue (the findings are not conclusive).

8. The IAA has also provided useful practical data to assist with the research, some of which is included throughout the Research Paper. This includes data on the size of defined benefit pension liabilities in various jurisdictions, use of corporate vs government bonds for measurement of defined benefit liabilities, pension tax regimes in different jurisdictions.
**Investors**

9. We have spoken to a few investors (mostly individual members from Capital Markets Advisory Committee) who reported the following:

   (a) Investors generally like IAS 19 rate, because they see it as transparent and comparable. However, some adjustments compared to market data are needed, eg to adjust for duration; investors need to judge if those adjustments are appropriate.

   (b) Some investors say it is hard to assess IAS 19 rates as there are usually related to several currencies (for a multinational company), which can also mean a combination of government and corporate bonds is used.

   (c) Some investors seem unaware that government bond rates can be used and sometimes are. One reason suggested for this lack of awareness was that there are significant differences between regimes in different jurisdictions so pension liabilities are not considered comparable globally anyway.

   (d) Some investors consider IAS 37 measurement less reliable because the companies there is no disclosure of how it is calculated and the measurements do not seem to move with market as much as those in IAS 19 even though those measurements are meant to be based on a market-based rate.

   (e) Some investors maintain that impairment testing in accordance with IAS 36 is of limited use to investors, because impairment is often recognised after the market has already taken it into account so no new information is provided when an impairment loss is recognised.

**Preparers**

10. Preparers (in particular Global Preparers Forum) commented on discount rates required in IAS 19:

   (a) Some preparers stated that investors seem to prefer consistency of application over relevance, and that this seems to explain investors’ preference for rates based on more rigid rules, such as those in IAS 19.
(b) Other preparers stated that IAS 19 rates give a false sense of consistency as companies often have to use models to extrapolate the market rates to reflect the timing of their pension liabilities, so the rates used are neither applied consistently nor relevant.

(c) Some preparers stated that use of judgement is always required in present value measurements. The requirements should be consistent so the consistent judgement is applied. IAS 19 is currently not consistent with other IFRS.

11. Some preparers asked whether using current market rates at the year-end in general makes sense as temporary fluctuations can have a major and volatile impact on measurement of a long-term liability. It was noted that at least one local GAAP uses five-year average rates, but this is not allowed in IFRS.

12. Several preparers expressed a desire for use of other comprehensive income (OCI) to report the effects of changes in discount rates for all assets and liabilities, to achieve consistency and to avoid misleading volatility in profit or loss. They stated that it was inconsistent to use OCI for some changes in discount rates (eg pensions) and not others (eg provisions within the scope of IAS 37).

13. Some preparers expressed a desire to exclude own-credit from measurement of all liabilities as they do not believe that including own credit provides relevant information, especially for non-financial institutions. They noted that own credit is currently included in measuring some items (eg financial liabilities at fair value) but not others (eg pensions and provisions).

14. Some preparers have expressed a preference that any standard-setting action should occur through cross-cutting projects as opposed to piecemeal amendments to different individual standards at different times.

**Regulators**

15. We asked regulators (through IOSCO working groups and ESMA) about the most common issues they find with the application of present value measurement requirements and discount rates and the regulatory actions taken.
16. Most regulatory action reported was in relation to value in use calculation in IAS 36, and related disclosures, for example:

(a) Discount rate inconsistent with cash flows or not independent of funding;
(b) Problems with calculation of WACC – unjustified changes in risk premia, non-comparable data used;
(c) Disclosure of pre-tax rates – some regulators require entities to calculate and disclose pre-tax rates, whereas other allow post-tax rates, together with corresponding, post-tax cash flows;
(d) Sometimes disclosures of the rate and the approach used to determine the rate are not provided.

17. A few regulators said they would prefer to see the rates used disclosed by Cash Generating Units, and not shown as a range or a single average rate as is common.

18. Some regulators also reported regulatory action in relation to IAS 19 and IAS 37 discount rates – for IAS 19 to disclose the rate used and for IAS 37 to explain change in methodology used to determine discount rate and disclose its effect.

19. The regulators also pointed to a few areas where they have taken no regulatory action but thought there were issues. These mainly related to methodology and include:

(a) what constitutes a deep market for high quality corporate bonds – assessment needed for application of IAS 19. (We understand that jurisdictions which raised this issue were considered to not have deep markets but are currently reassessing this);
(b) companies sometimes make a mistake and add risks to the discount rate in IAS 37 instead of deducting from the rate. Guidance would help;
(c) determining very long-term rate is challenging – eg for dismantling costs recognised in line with IAS 37; and
(d) inconsistent application of IAS 37 in Canada – some include and others exclude own credit risk.
Emerging economies

20. We have spoken to about a dozen standard-setters from emerging economies (mostly members of the IASB’s Emerging Economies Group) to understand practical issues with application of present value measurement requirements in IFRS and the inconsistencies they see. Some of these countries have not yet adopted IFRS. We also spoke to a group of various stakeholders from and with an experience in emerging economies. The following paragraphs summarise the main points heard:

(a) Present value measurement is widely used in emerging economies, with reports that most fair values are determined using present value method because there usually are no observable prices. Similarly, IAS 36 is mostly applied by determining value in use. There is a perception amongst some in emerging economies that, when markets are not liquid, entity-specific present value measurements, such as value in use, are in practice no different to market-specific measurements as all inputs are determined by entity anyway so value in use guidance in IAS 36 for example adds unnecessary complexity in this view.

(b) State pensions are still very common in many emerging economies but private defined benefit pensions are on the rise (eg in Brazil). Mostly government bonds rates are used when applying IAS 19 in emerging economies as there are generally no deep markets in corporate bonds. However, some jurisdictions have difficulties with adopting IAS 19 as their governments do not issue bonds (and there are no deep markets in corporate bonds in their jurisdictions).

(c) Prepayments are very common in emerging economies and effect of time value of money can be material which is currently not reflected in IFRS.

(d) Extent of judgement involved in present value measurements, especially when there are no developed markets, is such that some consider present value measurements such as value in use to be unreliable. There is a historical preference for undiscounted amounts in some emerging economies which means many accountants are reluctant to apply judgement. As a consequence more guidance and training are needed.
(e) Some specific methodology issues, such as preference for using real (and not nominal) inputs when inflation is relatively high. Also use of pre-tax and post-tax terms misunderstood and conversion not clear.

(f) Need for more guidance for practitioners. Also, some prefer narrow scope amendments to IFRS to deal with some of the issues whereas others advocate for a whole new present value measurement Standard, similar to IFRS 13.

(g) Some have stated that even if only clarifying which components are included in which present value measurements (for example when risk adjustment included) would help.

**Standard-setters**

21. In outreach with standard-setters (in particular Accounting Standards Advisory Forum), some thought that further guidance on discount rates is needed, because of difficulties involved with applying some of the current guidance. They provided the following suggestions:

(a) the principle of accounting for the time value of money should be emphasised, preferably in the *Conceptual Framework for Financial Reporting*;

(b) discounting of deferred taxes would eliminate some undesirable effects of not discounting, such as recognising a bargain purchase gain when acquiring an entity with significant deferred tax assets;

(c) reflecting the time value of money in prepayments is the opposite side of the accounting in IFRS 15 and should be addressed;

(d) it would be worth considering whether PVMs always provide relevant information in the current low-interest environment, and how to identify discount rates for very long-term periods;

(e) there are inconsistencies in the impact of discounting on performance reporting but these might be better addressed in other projects;
(f) the guidance in the Conceptual Framework should address when and why some items should be recognised in OCI and not in profit or loss. The guidance in the Conceptual Framework Exposure Draft (ED) may not be sufficient;

(g) a clear measurement objective should be a starting-point for determining how to arrive at a present value, but many Standards do not provide a clear objective. Addressing the lack of a measurement objective in IAS 19 Employee Benefits was seen as a priority for some ASAF members;

(h) the concept of value in use is not so complex and should remain but there are concerns about possible manipulation and about whether it is enforceable; and

(i) it is not clear what it means to adopt an entity perspective in measurement and different interpretations may arise.

22. As a part of research, we have also looked at what adjustments with respect to present value measurements are typically made when communicating financial performance. The next section summarises the findings.

Present value measurements and key performance indicators

23. In assessing financial performance and financial position of an entity, investors sometimes adjust reported numbers to better adapt them for the purpose of their analysis. The investor adjusted earnings are sometimes referred to as ‘Street earnings’. They also adjust balance sheet items, for example, investors often capitalise operating leases which are currently not recognised on the balance sheet.

24. In reporting their financial performance, entities often provide alternative measures of financial performance which they believe help better explain their performance and predict future performance. These are sometimes referred to as ‘pro-forma earnings’. In preparing these metrics preparers exclude or adjust measures calculated in accordance with IFRS – these metrics are often collectively referred to as non-GAAP measures. Some of these adjustments relate to items arising from present value measurements.
25. Street earnings and pro-forma earnings are not defined measures. We have identified some of the more common adjustments made to measures reported for pensions, liabilities non-financial asset impairment which are summarised in the following subsections.

**Defined benefit pension liability in IAS 19**

26. Since the IASB issued revised IAS 19 (effective since 2013), which eliminated the use of expected return on assets and created consistency in the discount rates used to measure the liability and recognise interest, there seem to be fewer adjustments investors make relating to pensions reported. However, some investors say they do not make any adjustments to reported pension liability because they do not have sufficient data available.

27. We have seen no evidence suggesting preparers consistently make adjustments to their reported numbers relating to employee benefits.

**Long-term provisions in IAS 37**

28. Some equity analysts report that they ignore IAS 37 decommissioning liabilities in their analysis – as it is beyond their investment horizon. Others say they take it into account.

29. Some credit analysts treat long-term provisions as debt and related unwinding of discount as cost of borrowing. The carrying amount is adjusted to take into account any future tax savings (recognised separately as a deferred tax asset in the financial statements) and any funding arrangements already in place (e.g., dedicated assets) and the net amount is treated as debt.

30. Other credit analysts however treat the liability and the related expense as operating, not financing items, partly to improve comparability with US GAAP financial statements, which treats these as operating items.

31. In computing pro-forma earnings, such as adjusted EBITDA, preparers exclude some expenses recognised in line with IAS 37, for example the cost of litigation. Some credit rating agencies do the same (not all).
**Impairment charge in IAS 36**

32. Some investors consider IAS 36 impairment information irrelevant, as it comes too late and has no predictive value.

33. Impairment charge is usually excluded from calculation of EBITDA as it is considered similar to depreciation and amortisation, which are excluded by definition. Furthermore, it is sometimes also excluded from EBIT, because it is considered not to be recurring.

**Submissions to IFRS IC**

34. The following sections summarise requests for interpretations submitted to IFRS IC relating to present value measurements.

**IAS 19 discount rate and IFRS IC**

35. Significance of pension liabilities and sensitivity of the valuation to the selection of a discount rate make selection of the discount rate an important decision in measurement of pension liabilities.

36. There have been several submissions to the IFRS IC on issues related to determining the discount rate in IAS 19. These include determining which bonds are high-quality bonds and whether to use pre-tax or post-tax rate. The IFRS IC did not issue an interpretation for any of these, however it issued one annual improvement. They are summarised below.

37. **Annual improvement 2012 – 2014; IAS 19 discount rate: regional market issue**
   The amendment clarifies that the depth of the market for high quality corporate bonds should be assessed at the currency level.

38. **Calculation of discount rates** (Feb 2002): the Interpretations Committee considered addressing how to determine the discount rate to be used in measuring a defined benefit liability under IAS 19 *Employee Benefits* when there is no deep market in high quality corporate bonds, and the terms of government bonds are much shorter than the benefit obligations. The Interpretations Committee decided not to take this issue onto its agenda because IAS 19 provides sufficient guidance.
39. **Determining the appropriate rate to discount post-employment benefit obligations** (June 2005); the Interpretations Committee considered the following question relating to paragraph 78 of IAS 19. If there is no deep market in high quality corporate bonds in a country, may the discount rate for a post-employment benefit obligation be determined by reference to a synthetically constructed equivalent instead of using the yield on government bonds? The Interpretations Committee took the view that paragraph 78 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. The Interpretations Committee observed that the reference to “in a country” could reasonably be read as including high quality corporate bonds that are available in a regional market to which the entity has access, provided that the currency of the regional market and the country were the same (eg the euro). This would not apply if the country currency differed from that of the regional market.

40. **Pre-tax or post-tax discount rate** (Mar 2013): the Interpretations Committee received a request for guidance on the calculation of defined benefit obligations. In particular, the submitter asked the Interpretations Committee to clarify whether, in accordance with IAS 19 *Employee Benefits (2011)*, the discount rate used to calculate a defined benefit liability should be a pre-tax or post-tax rate. The Interpretations Committee observed that the discount rate used to calculate a defined benefit obligation should be a pre-tax discount rate. On the basis of the analysis above the Interpretations Committee decided not to add this issue to its agenda.

41. **Actuarial assumptions: discount rate** (Nov 2013): The Interpretations Committee received a request for guidance on the determination of the rate used to discount post-employment benefit obligations. In particular, the submitter asked the Interpretations Committee whether corporate bonds with a rating lower than ‘AA’ can be considered to be high quality corporate bonds (HQCB).

42. The Interpretations Committee further noted that ‘high quality’ as used in paragraph 83 of IAS 19 reflects an absolute concept of credit quality and not a concept of credit quality that is relative to a given population of corporate bonds, which would be the case, for example, if the paragraph used the term ‘the highest quality’. The Interpretations Committee discussed this issue in several meetings and noted that issuing additional guidance on, or changing the requirements for, the determination of the discount rate would be too broad for it to address in an efficient manner. The
Interpretations Committee recommended that this issue should be addressed in the IASB’s research project on discount rates. Consequently, the Interpretations Committee decided not to add this issue to its agenda.

**IAS 36 and IFRS IC**

43. There have been no IAS 36 discount rate related submissions to IFRS IC as far.

**IAS 37 and IFRS IC**

44. IFRS IC had received one submission relating to IAS 37 discount rate, as follows

_Inclusion of own credit risk in discount rate (March 2011)_

45. The Interpretations Committee received a request for interpretation of the phrase “the risks specific to the liability” and whether this means that an entity’s own credit risk (performance risk) should be excluded from any adjustments made to the discount rate used to measure liabilities. The request assumed that future cash flow estimates have not been adjusted for the entity’s own credit risk.

46. The Interpretations Committee observed that paragraph 47 of IAS 37 states that “risks specific to the liability” should be taken into account in measuring the liability. The Interpretations Committee noted that IAS 37 does not explicitly state whether or not own credit risk should be included. The Interpretations Committee understood that the predominant practice today is to exclude own credit risk, which is generally viewed in practice as a risk of the entity rather than a risk specific to the liability.

47. The Interpretations Committee also noted that this request for guidance would be best addressed as part of the IASB’s project to replace IAS 37 with a new liabilities Standard, and that the IASB is already considering the request for additional guidance to be incorporated into this new Standard. For this reason, the Interpretations Committee decided not to add this issue to its agenda.
Summary of comment letters on 2011 Agenda Consultation discussing discount rates

48. From 247 comment letters received during the 2011 Agenda Consultation, 47 discussed a potential project on discount rates.

49. Most of those respondents thought the IASB should do a limited-scope project on discount rates. A few respondents suggested a comprehensive review, and a few thought no work was needed.

50. Many of those respondents who thought no work on discount rates was needed justified this by IFRS 13 having been issued, which provides guidance on discount rates. Other respondents were concerned that any project on discount rates might result in a rule-based approach.

51. Some respondents suggested that the purpose and role of discounting should be addressed in the Conceptual Framework project before any Standards-level work was started. Others thought that it is best dealt with at Standards level, because each Standard has different measurement objectives, meaning that cross-cutting examination would not be meaningful.

Suggestions for a limited-scope project

52. The respondents who thought the IASB should carry out a limited-scope project on discount rates mainly focused on improving the consistency of guidance in different Standards that do not rely on the guidance in IFRS 13. For example:

    discount rates can have significant impact on key figures included in financial statements. It would be a useful improvement if more consistent guidance could be given as to how to determine discount rates. This would assist preparers and auditors and would improve the confidence with which users rely on key figures that are a function of discount rates.

    (CL 82)

53. Some of the respondents provided specific suggestions on how to improve consistency, for example by asking for guidance on the use of pre-tax vs post-tax rates. Those respondents thought that only post-tax rates should be used.
54. Several respondents asked for more guidance including requests for detailed guidance on the determination of the risk-free rate used in IAS 19 Employee Benefits. For example:

Further, the recent significant surge in some or rather many European countries government bonds yields offers a new challenge of how to define the risk free rate. CL 150

201. Some respondents focused on the requirements in IAS 19, commenting on the volatility that results from switching from the discount rates on corporate bonds to those on government bonds. Others also remarked that the IAS 19 requirements were rule-based.

Comprehensive project suggestions

202. Most respondents who were in favour of a comprehensive review of discount rates suggested a project that would define and describe how to determine discount rates. Such a project would be similar to the project on fair value, which produced IFRS 13 Fair Value Measurement. Some of those respondents went a step further, also requesting that guidance on how to account for interest should be included as a part of the project. For example:

There are many standards that require the use of a "discount rate" (e.g., IAS 2, IAS 16, IAS 37, IAS 38 and IAS 39), but the Conceptual Framework and those standards are weak on providing guidance on determining the discount rate and on how to account for the interest (difference between the future value and the present value). We believe that this subject would merit a comprehensive project, similar to the Fair Value (IFRS 13).

203. Some of those respondents commented on perceived unexplained inconsistency in the guidance on discount rates in existing IFRSs; for example:

There is currently no guidance on the use of discount rates, and different standards have different discount rate requirements without the appropriate justification to explain the
difference. For example, IAS 19 and IAS 37 Provisions, Contingent Liabilities and Contingent Assets both aim to give a present value figure of the liability by using a discount rate. However, the discount rates required by each standard are different, and the justification for this difference is not apparent.

**Other suggestions**

204. Some of the user respondents asked for more disclosure about key assumptions used in discounting and when using discounted cash flows in general.

205. A respondent from an emerging market asked for uniform treatment of the financing components included in a forward price, commenting that different treatments are required in IAS 2, IAS 16, IAS 38, IAS 39, IAS 37.