

## STAFF PAPER

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Emerging Economies Group Meeting

Project	Present value measurements research		
Paper topic	Use of present value measurements in IFRS and measurement objectives		
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**Introduction**

1. This is the first in a series of papers on research on present value measurements in IFRS, to be discussed at the May 2015 EEG meeting. This paper discusses where present value measurement is used in IFRS, and the measurement objectives for IFRS present value measurements in the scope of the review.
2. Other papers discussed at the meeting include:
  - (a) A cover paper including a list of questions for the EEG;
  - (b) Paper 1B—Further research and next steps (including review of research on the components of present value measurement included in different IFRS and the methodology for arriving at present values); and
  - (c) Paper 1C—Summary of stakeholder views on present value measurements.
3. Appendix 1 includes contents list for this paper.
4. **It is important to note that this, and the other papers discussed at the meeting, are work in progress, and should not be read as final findings from the research project.**
5. Throughout this paper, we ask the EEG the following questions:
  - (a) **Question 1:** In which areas of IFRS is present value measurement most significant for your jurisdiction (for example are there many defined benefit

obligations, provisions, insurance contracts or leases, or frequent instances in which value in use has to be calculated)? Do you think your answer is specific to emerging economies?

- (b) **Question 2:** Do you think the use of present value measurement in IFRS should be extended? If so, in which areas and why? Is your answer specific to emerging economies? If the use of present value measurement were to be extended, how would it affect emerging economies?
- (c) **Question 3:** Before reading the papers for the meeting, were you aware that the IFRS requirements for present value measurement are different for different Standards? Do differences and potential inconsistencies relating to measurement objectives in IAS 19, IAS 36, and IAS 37, which we have discussed in preceding sections, create an issue in your jurisdiction? Which ones and why?

## Background

- 6. We use present value measurement techniques (present value measurement) to reflect the time value of money. Present value measurement translates a sum of money to be held at a future date (a future value) into an equivalent in terms of money held today (a present value). So, for example, if an entity is certain that it will have CU105<sup>1</sup> in one year and if the rate of return is 5 per cent, present value measurement converts the future value of CU105 into a present value of CU100.
- 7. This basic description, however, is trivial. One former IASB member has observed that *any* combination of cash flow estimates and a discount rate is a present value<sup>2</sup>. The questions are what is the *objective* of the measurement and what are the *components* of the estimates.
- 8. A present value technique is not limited to discounting certain future cash flows using a fixed rate of return. In the real world, there is no certainty about the future. Any of the following may be uncertain:

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<sup>1</sup> In this paper, currency amounts are denoted in 'currency units' (CU).

<sup>2</sup> If the cash flows are discounted to the present date.

- (a) how much money (cash) an item, for example an asset or liability, will generate or require at the future date;
  - (b) in some cases, when the future date will be; and
  - (c) what the purchasing power of a specified sum of money will be at the specified date.
9. We find it useful to examine how these elements are incorporated by grouping present value measurements into several categories. Later in this paper we analyse:
- (a) *Direct measurements* at initial recognition and subsequent remeasurements. The measurement may not include all of the possible elements (see Agenda Paper 1B for more details on the components), but those that are included are based on current information and assumptions.
  - (b) *Amortisation*. The measurement of an asset or a liability is based on a combination of some current information and assumptions and some that are set at initial recognition.

## Objective of present value measurement in IFRS

10. IFRS does not set a single objective for present value measurement technique—it is a method that can be used in meeting various measurement objectives. The measurements arrived at in different Standards differ, because they have different measurement objectives. In this paper we will use the terms ‘measurement objective’ and ‘measurement basis’ interchangeably.
11. The existing *Conceptual Framework for Financial Reporting* (‘the Framework’) does not, however, recognise present value merely as a method, but refers to it as a measurement basis in its own right (without any description of what it represents or includes). However, the Framework is being revised and the current proposals describe present value measurement merely as a method. The specific proposals for the Framework do not refer to present value measurement explicitly but make a broader reference to cash-flow-based measurement techniques.
12. The current draft of the *Conceptual Framework Exposure* (the paragraph A2 of ballot draft of the forthcoming Exposure Draft (ED)) includes the following discussion:

Cash-flow-based measurement techniques are not measurement bases in their own right. Hence, when using a cash-flow-based measurement technique, it is necessary to identify the objective of using the technique (the measurement basis being estimated)....

13. We have now established that present value measurement itself is not a distinct measurement basis, so what are the measurement bases used in IFRS?
14. Proposals in the forthcoming Framework Exposure Draft consider two main measurement categories, namely historical cost and current value. Current values can be determined from an entity<sup>3</sup> perspective (value in use and value in fulfilment) or from a market perspective (fair value). Each category is described briefly in the following sections (the descriptions come from the ballot draft of the forthcoming ED of the Framework).

### ***Historical cost***

15. Measures based on historical cost provide monetary information about assets, liabilities, income and expenses using information derived from the past transaction or an event that created them. The historical cost measures of assets or liabilities do not reflect changes in prices. However, the measures do reflect changes such as consumption or impairment of assets and fulfilment of liabilities.

### ***Current values***

#### ***Fair value***

16. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
17. Fair value reflects the perspective of market participants. That is, the asset or liability is measured using the same assumptions that market participants would use when

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<sup>3</sup> We discuss more about entity vs market perspective in Agenda Paper 1B, discussing the components and methodology for present value measurement.

pricing the asset or the liability if those market participants act in their economic best interest.

18. Fair value reflects the following factors:
  - (a) estimates of future cash flows;
  - (b) possible variations in the estimated amount and timing of future cash flows for the asset or liability being measured, which are caused by the uncertainty inherent in the cash flows;
  - (c) the time value of money;
  - (d) the price for bearing the uncertainty inherent in the cash flows (ie a risk premium or a risk discount). The price for bearing that uncertainty depends on the extent of that uncertainty. It also reflects the fact that investors would generally pay less for an asset (would generally expect to receive more for taking on a liability) that has uncertain cash flows than for an asset (liability) whose cash flows are certain; and
  - (e) other factors, such as liquidity, that market participants would take into account in the circumstances.
19. For a liability, factors (b) and (d) include the possibility that the entity may fail to fulfil the liability (own credit risk).

*Value in use and fulfilment value*

20. Value in use and fulfilment value are entity-specific values. Value in use is the present value of the cash flows that an entity expects to derive from the continuing use of an asset and from its ultimate disposal. Fulfilment value is the present value of the cash flows that an entity expects to incur as it fulfills a liability.
21. Value in use and fulfilment value cannot be directly observed and are determined using cash-flow-based measurement techniques. In principle, value in use and fulfilment value reflect the same factors as described for fair value, but are determined by using entity-specific assumptions instead of those of market participants. In practice, to provide the most useful information, value in use and fulfilment value may need to be customised, for example:

- (a) to require the use of market participant assumptions about the time value of money or the risk premium; or
  - (b) to exclude from fulfilment value the effect of the possibility of non-performance by the entity.
- 22. These different measurement bases go some way to explain why different discount rates are used within different Standards. For example, a historical cost measure would use the original discount rate, whereas current value would use updated information.
- 23. However, the measurement objectives within individual Standards that require or allow the use of present value techniques do not always fit neatly in one of the categories proposed in the Framework. As a consequence, the discount rate differences go further. This is recognised in the proposals for the Framework, which discuss the use of cash-flow-based measurement to arrive at a ‘customised measurement basis’; for example fulfilment value may or may not be customised to include a risk premium.
- 24. The measurement basis for each Standard that requires or allows the use of present value technique is shown in the table on the following page, and is tentatively mapped to its closest matching category in the proposed Framework. It should be noted that many Standards do not set an explicit measurement objective, and the table infers objectives for those Standards.

Item measured	Objective explicit	Measurement objective (as described or inferred)	Proposed <i>Conceptual Framework</i>
Defined benefit obligation (IAS 19)	✗	Ultimate cost	Fulfilment value[4]
Impaired non-financial asset (IAS 36)	✓	Value in use[4]	Value in use
Provisions (IAS 37)	✓	Amount required to settle or to transfer the obligation	Fulfilment value
Insurance contracts (2013 ED)	✗	Present value of net cash flows expected to fulfil	Fulfilment value
Lease liability (2013 ED)	✗	Cost	Historical cost
Financial instruments at amortised cost (IFRS 9)	✗	Amortised cost	Historical cost

**Table 1 Individual measurement objectives and the Framework<sup>4</sup>**

25. Before we go on to discuss measurement objectives within individual Standards in more detail, we will now review the circumstances in which present value measurement is used in IFRS.

### When is present value measurement used in IFRS financial reporting?

26. Present value measurement is widely used in IFRS financial reporting. Sometimes it is used:
- (a) on its own, as the only method by which to arrive at a measurement;
  - (b) as a means to determine fair value when observable prices are not available; and

<sup>4</sup> Although fulfilment value is the closest matching measurement basis for the IAS 19 measurement, the IAS 19 measurement is quite different, as described later in the paper.

<sup>4</sup> Value in use is not a measurement basis per se, but a part of a threshold measurement that an asset cannot exceed. See discussion on IAS 36 in later section.

- (c) as a threshold test—an asset measurement that cannot be exceeded but that is not always recognised

27. These different uses are summarised in the table on the following page:

	①	②	③
Discount rate	PV as one of measurement methods	PV as the only measurement method	PV as a threshold measurement
Historical discount rate		Lease liabilities, financial instruments measured at amortised cost	
Current discount rate	Assets and Liabilities measured at Fair Value	Provisions, Insurance, Pensions	Value in use for non-financial assets
Discount rate not used		Deferred tax, Prepayments	Net realisable value for inventories

**Table 2 Use of present value measurements in IFRS**

28. The following sections discuss each of the three categories identified in the table. We then discuss other uses of present value measurement as well as when discount rates are not used (but could be).

### ***Present value as one of the measurement methods (1)***

29. IFRS sometimes requires or allows assets and liabilities to be measured at fair value. IFRS 13 *Fair Value Measurement* allows the use of various valuation techniques for fair value measurement, with present value measurement being one. However, valuation techniques are allowed only if observable prices for the asset or the liability are not available.



## ***Present value as the only measurement method (2)***

30. Some Standards specifically require the use of present value measurement in meeting the measurement objective of the Standard. These include IAS 17 *Leases* and the forthcoming *Leases* Standard, IAS 19 *Employee Benefits*, IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, and IFRS 4 *Insurance Contracts* and the forthcoming *Insurance Contracts* Standard.

### ***Initial measurement***

31. For most<sup>5</sup> assets, initial measurement is based on the price paid for the asset at the date of initial recognition and therefore does not require the use of present value measurement.
32. For liabilities, present value measurement is used in the following circumstances:
- (a) present value measurement is used in the initial measurement of liabilities incurred in an exchange transaction in which the value of the asset or service received cannot be measured directly and the payment is made in the future. Examples of these are lease liabilities accounted for in accordance with IAS 17 and the proposals in the 2013 Exposure Draft (ED) *Leases*, defined benefit pension liabilities accounted for in accordance with IAS 19 and insurance contracts accounted for in accordance with the proposals in the 2013 ED *Insurance Contracts*.
  - (b) present value measurement is used in the initial measurement of liabilities that are not obtained in an exchange transaction and that do not have an observable price. Examples of these include provisions within the scope of IAS 37.

### ***Subsequent measurement***

33. Some liabilities are both initially and subsequently measured using present value measurement (Direct measurements).
34. Financial assets and financial liabilities measured at cost typically have a price at their initial measurement that is used as a basis for measurement. However, they are

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<sup>5</sup> Two exceptions to this are: (i) finance lease assets and (ii) some assets acquired in a business combination.

subsequently measured using an effective interest method (amortisation), which requires the use of a discount rate that was determined at initial recognition. That measurement is therefore a present value measurement, although it does not seek to determine the current value. This method simply seeks to allocate the original cost using present value measurement, allowing for any impairment that has occurred.

### ***Present value as a threshold measurement (3)***

35. Present value measurement is also used when testing whether assets (measured at cost) have become impaired or have ceased to be impaired, which includes calculating the value in use in accordance with the requirements in IAS 36 *Impairment of Assets*. In IAS 36, value in use is used as a threshold measurement, not a measurement basis; if the asset's carrying amount (which is not determined using present value measurement) is lower than its value in use,—the carrying amount remains unchanged. In addition, an asset is measured at value in use only if the value in use is higher than the asset's fair value less costs to sell (in which case the value in use is the recoverable amount).
36. If the value in use is below the asset's carrying amount, the difference between value in use and the asset's carrying amount is recognised as an impairment loss. If the asset was previously impaired and the new value in use exceeds the asset's carrying amount, part or all of the previous impairment loss is reversed (if this is allowed). However, paragraph 116 of IAS 36 specifies that an impairment loss cannot be reversed if the only reason for that reversal is the passage of time (ie, the unwinding of the discount).
37. The requirements in IAS 36 for impairment testing, including computing value in use, apply to some assets within the scope of other Standards; this includes investments in associates accounted for in accordance with IAS 28 *Investments in Associates and Joint Ventures* and assets reclassified from the available-for-sale category in IFRS 5 *Noncurrent Assets held for Sale and Discontinued Operations*.
38. There are separate impairment requirements for financial instruments in IFRS 9 *Financial Instruments* that require an estimate of any expected future losses, which is

discounted using historical rate (usually a contractual rate). This amount, if any, is recognised separately.

### ***Other uses of present value measurements***

39. If the timing of payment for a good or service provided to a customer is not the same as the time when the good or service was provided, IFRS 15 *Revenue from Contracts with Customers* requires sellers to account for the financing component separately from the consideration, if financing is significant. This can result in interest income or interest expense being recognised.
40. IFRS 5 requires discounting of the expected costs to sell that are included within a measurement of an asset held for sale, if sale is expected to occur beyond one year (see paragraph 17 of IFRS 5).
41. The discount rate is also used in some assessments that do not affect measurements directly, such as assessing whether an exchange transaction has commercial substance, in accordance with IAS 16 *Property, Plant and Equipment*. (See paragraph BC22 of IAS 16.)
42. This section summarised where is present value used in IFRS. We would be interested in finding out if any of these areas are more relevant to emerging economies than others.

#### **Question 1 for the EEG**

In which areas of IFRS is present value measurement most significant for your jurisdiction (for example are there many defined benefit obligations, provisions, insurance contracts or leases, or frequent instances in which value in use has to be calculated)?

Do you think your answer is specific to emerging economies?

### ***When is present value measurement not used in IFRS?***

43. Even though IFRS generally requires the time value of money to be reflected in measurements, there are instances in which it does not. Some of these constitute significant parts of the statement of financial position for many entities.

44. IFRS sometimes requires measurement that is based on future cash flows, but that either prohibits or does not require discounting. This includes:

(a) the measurement of inventories at net realisable value in accordance with IAS 2 *Inventories* does not take into account the time it would take to sell inventories or put inventories into use. IAS 2 does not have a full Basis for Conclusions and does not explain the reason for this; one possible explanation could be that the time value of money was not considered to be material in these circumstances.

(b) requirements for accounting for deferred taxes do not permit discounting. Paragraph 54 of IAS 12 *Income Taxes* notes:

The reliable determination of deferred tax assets and liabilities on a discounted basis requires detailed scheduling of the timing of the reversal of each temporary difference. In many cases such scheduling is impracticable or highly complex. Therefore, it is inappropriate to require discounting of deferred tax assets and liabilities.

However, some maintain that deferred taxes that arise from assets and liabilities measured on a present value basis are automatically discounted. This is because, when the tax base of the item is zero (such as is common for a decommissioning liability), the deferred tax measurement is derived by multiplying the carrying amount (present value) by the tax rate, and that amount represents the present value of the future tax benefit.

45. IFRS often requires measurement that is based on past cash flows, but does not always consider the time value of money. Such areas include:

(a) prepaid expenses, which are generally measured as the aggregation of past cash flows. (Note there is mixed practice on this and the IFRS Interpretations Committee (IFRS IC) is currently researching this issue. In its previous discussions, some suggested analogising to the requirements in IFRS 15, which deal with the accounting by the recipient of these payments, and which requires the time value of money to be considered); and

- (b) property, plant and equipment and intangible assets carried at cost in accordance with IAS 16 *Property, Plants and Equipment* and IAS 38 *Intangible Assets*. Those Standards do not permit depreciation and amortisation to reflect the time value of money when computing the consumption of future economic benefits. This has been discussed as a part of the IASB's work on some of the more recent projects such as leases (when discussing how to amortise the right-of-use asset).
46. Finally, IFRS does not require discounting when the effect of discounting is deemed to be immaterial, in line with the general materiality concept in the *Conceptual Framework*. Some Standards provide explicit materiality expedients; for example, IFRS 15 does not require discounting if the time between performance and payment is less than one year.
47. This section has summarised areas of IFRS in which discount rates are not used (but could be). Some have called for the use of present value measurement to be extended (see the Agenda Paper 1C for stakeholders' views), and we are interested in hearing views from emerging economies.

**Question 2 for the EEG**

Do you think the use of present value measurement in IFRS should be extended?

If so, in which areas and why? Is your answer specific to emerging economies?

If the use of present value measurement were to be extended, how would it affect emerging economies?

48. This section discussed when present value measurement is used, and when it is not. The following section begins exploration of IFRS present value measurement requirements by considering its effect on performance reporting. In particular, we will be discussing unwinding of discount and reassessment of present value and how is their impact presented in the profit or loss.

## **Present value in subsequent measurement and its effect on performance reporting**

49. Two factors give rise to changes in a present value measurement—the unwinding of the discount with the passage of time, and the reassessment of the components of the present value measurement. This reassessment can arise from reassessment of the discount rate, the cash flow amounts or their timing. These changes are discussed in more detail in the following section.

### ***Unwinding of discount/historical cost interest***

50. The difference in a present value measurement from one period to another, if nothing else changes, is the effect of the passage of time, which reflects the time value of money. It is also referred to as the unwinding of discount. The unwinding of the discount is generally only relevant to measurements that exclusively use a present value method, ie current measurements, in column 2 in Table 2 above
51. The discount rate used for unwinding of the discount can be either current, if the measurement objective is current value, or historic/contractual, if the measurement objective is cost. However, sometimes historical cost interest is presented in profit or loss even though a current value measurements is recognised in the statement of financial position, for example under the proposals for insurance contracts or for some financial assets measured at fair value through other comprehensive income under IFRS9.
52. The unwinding of the discount in liabilities is usually recognised in the financial statements as part of finance/borrowing/interest cost, (unless capitalised as a part of an asset). This is specifically referred to in IAS 37, IFRS 4 and, IFRS 5, as well as in IAS 19<sup>6</sup>. IAS 37 notes that the effect of passage of time is to be recognised as the borrowing cost (see paragraph 60 of IAS 37), IAS 19 refers to interest (see paragraphs 8 and 123-124 of IAS 19), whereas IFRS 5 refers to ‘financing cost’ (paragraph 17 of IFRS 5) and IAS 17 refers to ‘finance expense’ (paragraph 27 of IAS 17) as well as

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<sup>6</sup> Note that interest expense in IAS 19 should be recognised as a net basis (a net interest) on a net defined benefit liability, if any. Interest on the entire defined benefit liability is only disclosed as a part of obligation reconciliation in the notes.

‘finance charge’ (paragraph 25 of IAS 17). Thus, different terms are used for this effect, but all could be considered to mean interest.

53. The unwinding of discount for assets is recognised as finance income in leases in IAS 17 (paragraph 39 of IAS 17), and as interest income for financial assets within the scope of IFRS 9 as well as in IFRS 15.
54. IAS 1 *Presentation of Financial Statements* requires ‘finance costs’ to be presented as a separate line item in profit or loss (paragraph 82 of IAS 1). However, IAS 1 does not define what finance costs are and some Standards, in particular IAS 19 and proposals for the insurance contracts, do not stipulate where the interest costs recognised by the Standard are to be presented on the face of the statement of profit or loss. Consequently, not all interest recognised from unwinding of discount is required to be presented in the finance costs line item in the statement of profit or loss, although it is always disclosed as interest in the notes.
55. In applying IAS 19, entities may choose how to present net interest on a net defined benefit liability (asset). It can be presented either in the finance costs or together with other costs arising from employee benefits. Anecdotal evidence suggests that some entities are separating interest from other employee benefit costs and presenting it as a part of finance costs in the statement of profit or loss<sup>7</sup>

## ***Present value reassessments***

### *Present value as one of the measurement methods*

56. Changes in fair value measurement (which can be determined using present value method) are recognised in profit or loss, apart for when other comprehensive income is used to reflect some or all changes in fair value, in the following circumstances:
  - (a) changes in own credit risk for financial liabilities if the entity elects to measure them at fair value in accordance with IFRS 9

#### *Financial Instruments;*

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<sup>7</sup> Company Reporting: CR Interim Monitor Issue 2015/0405, CR Monitor Issue 2014/0811 ([www.companyreporting.com](http://www.companyreporting.com))

- (b) changes in fair value of financial assets measured at fair value through other comprehensive income in accordance with IFRS 9, excluding the amount recognised in profit or loss, which is the same as the amount that would have been recognised in profit or loss if the asset had been measured at amortised cost.
- (c) increases<sup>8</sup> in the fair value of property, plant and equipment carried at revalued amount in accordance with IAS 16 *Property, Plant and Equipment*.

*Present value as the only measurement method*

- 57. Present value measurement requirements can either specify use of historical discount rates and cash flows (amortisation), in which case no remeasurement arises (apart from potential impairment which is always recognised through profit or loss). Remeasurement arises when present value measurement components have to be updated at every reporting period (direct measurements).
- 58. This is summarised in the following table:

Discount rate	Asset/liability	Remeasurement required
Historical rate	Financial instruments at amortised cost, Lease liabilities	Not for liabilities <sup>9</sup> Assets only if impaired
Current rate	Insurance, Provisions, Pensions	Yes

**Table 3 Remeasurement requirements for direct measurements**

<sup>8</sup> Unless increase reverses previous a revaluation decrease, which would have been recognised through profit or loss.

<sup>9</sup> The discount rate used to measure lease liabilities is typically the historical discount rate determined at lease commencement. However, in some circumstances, the rate is updated (for example, if the lease term changes).



59. The effect of remeasurement is reflected in either profit or loss or other comprehensive income, or a combination thereof. This is illustrated in the table on the following page:

Effect of remeasurement of	Pensions      Provisions <sup>10</sup> Insurance <sup>11</sup>		
Discount rate	Other comprehensive income	Profit or loss	Accounting policy choice
Cash flows	Other comprehensive income	Profit or loss	Profit or loss <sup>12</sup>

**Table 4 Performance impact of present value remeasurement**

60. The table shows that the remeasurement is recognised differently, depending on the asset or liability measured. Some think that this creates distortion in how requirements are applied in practice, see the paper 1C on stakeholders views for details.

#### *Present value as a measurement threshold*

61. As discussed earlier, a change in the value in use of an asset does not immediately lead to recognition of that change in the carrying amount of the asset. If the change is recognised, it goes to the profit or loss, as an impairment loss or reversal of a previous impairment loss (when IAS 36 allows reversal).

<sup>10</sup> Please note that IFRIC 1 requires changes in decommissioning liabilities, for which discounting is most significant due to their size and long-term nature, to be reflected as an adjustment to the cost of the asset and not through profit or loss.

<sup>11</sup> Tentative, the new Insurance Standard is not yet finalised. Also, insurance presentation in the table is much simplified, as effect of reassessment differs depending on the type of insurance contract and some of the changes do not go directly through either profit or loss or other comprehensive income, but are offset against the contractual service margin.

<sup>12</sup> Only for changes relating to past or current period service

## More on direct measurements

62. The focus of the remainder of this paper is on the current measurements in IFRS that require or allow use of present value measurement (direct measurements). Historical cost measurements that require the use of present value method, use it simply as a way to allocate cost (amortisation). Thus, for these measurements, the following discussion of details of the discount rates and methodology is not relevant.
63. The Standards that we have reviewed are:
- (a) IAS 19, in which present value measurement is required for the measurement of defined benefit obligation and other long-term employee benefits<sup>13</sup>;
  - (b) IAS 36, in which present value measurement is required to determine the value in use of non-financial assets, to ascertain whether they are impaired (and also can be used to determine fair value of assets in the scope of the Standard).
  - (c) IAS 37, in which present value measurement is required to measure the provisions.
64. IFRS 13 is a recent Standard that reflects the Board's latest thinking. However, although we refer to fair value measurement in the paper, it is not within the scope of this review as such.
65. We start the review by considering the measurement objectives in each of the Standards reviewed. We do not discuss the measurement objective for the forthcoming insurance contract Standard because drafting of the Standard is not finalised.
66. In mapping the measurement objectives of individual Standards to the proposed categories in the Conceptual Framework in Table 1 Individual measurement objectives and the Framework above, all three measurements are described as entity-specific current value measurements. However, the exact measurement objectives and

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<sup>13</sup> We don't discuss other long-term employee benefits further in the paper because the impact of present value measurement on them is the same as for the defined benefit obligation.

related present value measurement requirements are expressed differently and are not fully explicit in each of the Standards reviewed.

67. As we discuss the measurement objectives in individual standards, we would like to hear the EEG members' views on the potential inconsistencies and their impact:

**Question 3 for the EEG**

Before reading the papers for the meeting, were you aware that the IFRS requirements for present value measurement are different for different Standards?

Do differences and potential inconsistencies relating to measurement objectives in IAS 19, IAS 36, and IAS 37, which we have discussed in preceding sections, create an issue in your jurisdiction? Which ones and why?

## ***IAS 19 Employee Benefits***

### *Measurement objective*

68. IAS 19 sets out the requirements for the measurement of employee benefits. This includes liabilities that arise out of defined benefit schemes, which are measured as the present value of future cash flows. The Standard does not set out an explicit measurement objective for a defined benefit obligation. It only mentions estimates of the ultimate cost of providing post-employment benefits. For example, paragraph BC126(b) accompanying IAS 19 notes:

.....This is consistent with the measurement objective that the defined benefit obligation should be determined on the basis of the ultimate cost of the benefits.

69. The Standard explicitly requires discounting and specifies in paragraph 83 how to arrive at a discount rate to use:

The rate used to discount post-employment benefit obligations (both funded and unfunded) shall be 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.

70. There is no specific objective of discounting stated nor there is an explanation of what the discount rate aims to represent. IAS 19 makes reference to reflecting time value of money in the discount rate (see paragraph 84 and the Basis for Conclusions for IAS 19) but not as an explicit or sole objective. An explanation of discount rate requirements is included in the Basis for Conclusions<sup>14</sup>, paragraph BC 134:

IASB had not identified clear evidence that the expected return on an appropriate portfolio of assets provides a relevant and reliable indication of the risks associated with a defined benefit obligation, or that such a rate can be determined with reasonable objectivity. Consequently, IASB decided that the discount rate should reflect the time value of money, but should not attempt to capture those risks. Furthermore, the discount rate should not reflect the entity's own credit rating, because otherwise an entity with a lower credit rating would recognise a smaller liability. IASB decided that the rate that best achieves these objectives is the yield on high quality corporate bonds. In countries where there is no deep market in such bonds, the yield on government bonds should be used.

71. So, the Standard required two different rates to be used in different circumstances.
72. Some raised concerns about inconsistencies arising from using two different rates. Thus, in 2009, the IASB published an Exposure Draft proposing to remove the requirement to use a government bond rate when there is no deep market in high quality corporate bonds. Instead, the proposal was to require an entity to estimate the rate for a high quality corporate bond using the guidance on determining fair value. However, the responses to the ED indicated that the proposed amendment raised more complex issues than had been expected. The IASB therefore decided that it would

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<sup>14</sup> Please note that the Basis for Conclusions does not form a part of the authoritative guidance.

address measurement issues, such as the discount rate, only in the context of a fundamental review of IAS 19. The proposals in that Exposure Draft were dropped.

### *IAS 19 discount rate in practice*

73. So, which of the two discount rates is used when applying IAS 19 in practice? The International Actuarial Association (IAA) has conducted a limited survey of its members to identify which jurisdictions used corporate and which use government bond rates. Their findings are summarised as follows:

Deep market = high quality corporate bonds used	Mixed practice	Market not deep = government bonds used
Canada	Portugal	Australia
Eurozone	Mexico	Brazil
Japan	Sweden	Caribbean Region
South Korea		Colombia
Switzerland		Croatia
UK		Czech Republic
US		Hong Kong
		India
		Russia
		South Africa

**Table 5 Depth of corporate bond markets in jurisdictions with highest pension liabilities**

74. The analysis shows that companies use government bond rates for measuring defined benefit liabilities in several jurisdictions. However, the proportionate value of pension liabilities measured using government bond rates, compared to estimated total pension liabilities, is small. For example, study on global pension assets conducted by Towers Watson<sup>15</sup> can be interpreted to mean that 98 per cent of global pension liabilities are accounted for using corporate bond rates. A summary of the study findings interpreted by the International Actuarial Association is shown in the table on the following page:

<sup>15</sup> Global Pensions Assets Study 2013, Towers Watson

Jurisdiction	Assets funding defined benefit plans/total pension assets (%)						Discount rate used(2)
	Total pension assets (USD bln)		Estimated defined benefit obligations (USD bln)(1)				
	2013	2012	2013	2012	2013	2012	
US	18,878	16,851	42	42	9,911	8,847	Corporate bonds
UK	3,263	2,736	72	74	2,937	2,025	Corporate bonds
Japan	3,236	3,721	97	98	3,924	3,647	Corporate bonds
Canada	1,451	1,483	96	96	1,741	1,424	Corporate bonds
Netherlands	1,359	1,199	95	94	1,614	1,127	Corporate bonds
Switzerland (3)	786	732	100	100	983	732	Corporate bonds
Germany	509	498	100	100	636	498	Corporate bonds
Australia	1,565	1,555	16	19	313	295	Government bonds
France	169	168	55 (4)	55 (4)	116	92	Corporate bonds
Ireland	130	113	55 (4)	55 (4)	89	62	Corporate bonds
Hong Kong	114	104	55 (4)	55 (4)	78	57	Government bonds
Brazil	284	340	10	10	36	34	Government bonds
South Africa	236	252	10	10	30	25	Government bonds
Total	31,460	29,160			22,407	18,865	
Liabilities measured using corporate bonds/total liabilities							
					98%	98%	

(1) Based on Towers Watson asset/liability indicator which estimates liabilities are on average 25% higher than assets at the end of 2013

(2) Based on IAA limited member survey

(3) Switzerland has a return underpin and therefore like defined benefit for this purpose

(4) Average proportion used, no stats available for the jurisdiction

**Table 6 Estimated size of corporate bond liabilities in the jurisdictions with most pension liabilities**

75. It should also be noted that, as the world is recovering from the most recent financial crisis, the markets are getting more liquid. For example, some countries, which currently use government bond rates have been reviewing their markets and Australian companies<sup>16</sup> have recently concluded that its corporate bond market is now deep and the entities should therefore use corporate bond rates when applying IAS 19.

*What about emerging economies?*

76. The previous tables analyse pension liabilities in countries that account for most private defined benefit obligations, and include two emerging economies –Brazil and South Africa. Their estimated pension liabilities account for 0.3 per cent of the global defined benefit pension liabilities and are growing faster than the world average. Emerging economies are more likely to use government bonds due to relatively less developed bond markets, as in the case of both Brazil and South Africa. We would like to hear the EEG members experience on this (refer back to question 1).

*Potential inconsistencies*

77. The measurement objective in IAS 19 mostly resembles fulfilment value. However the measurement objective is not explicitly stated in the Standard. Lack of a fully described measurement objective shifts the focus to the detailed discount rate guidance resulting in rules based accounting and inability to apply judgement.
78. In addition, the specific measurement requirements depart from the measurement objectives of fulfilment value, which is an entity-specific measurement, as set out in the proposals in the Framework project (see paragraph 5). The IAS 19 discount rate is not entity-specific but rather an average from some market participants and is irrelevant to the liability measured. This impairs comparability with other liabilities measured at fulfilment value. We discuss components of discount rates in more detail in paper 1B.
79. Also, use of two different discount rates impairs comparability of pension liabilities between jurisdictions which have and those that do not have deep markets in

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<sup>16</sup> Research commissioned by Group 100 in Australia. [http://www.group100.com.au/media/mr\\_20150415.htm](http://www.group100.com.au/media/mr_20150415.htm)

corporate bonds. However, empirical research (see Table 6 Estimated size of corporate bond liabilities in the jurisdictions with most pension liabilities) suggests this is not a big issue as most pension liabilities are measured using corporate bond rates.

## **IAS 36 Impairment of Assets**

### *Measurement objective*

80. IAS 36 applies to non-financial assets that are measured either at cost or fair value. The objective of the Standard is to ensure that the amount that the asset is carried at is recoverable, ie not higher than its fair value less costs to sell or its value in use. As such, the Standard does not set an objective for the measurement of the assets within its scope but instead specifies the measurement, or a threshold, that the asset's carrying amount may not exceed. If the carrying amount does exceed the threshold, the difference is written off and recognised as an impairment loss.
81. The part of the IAS 36 measurement that we review here is the asset's value in use. The value in use is defined in IAS 36 as 'the present value of the future cash flows expected to be derived from an asset or cash-generating unit'.
82. By referring to present value in the definition of value in use, IAS 36 makes it clear that a discount rate is needed, because any present value measurement requires a discount rate.
83. The definition of value in use does not give further clues as to what should be a part of the measurement. However, the Standard provides detailed requirements on what the value in use should include and which discount rate to use (see Agenda Paper 1B on further research on the components of a discount rate).



### *IAS 36 in practice*

84. The findings of some studies<sup>17</sup> (with a limited sample) indicate that, when determining recoverable amount in accordance with IAS 36, entities mainly use value in use. We are doing further research on the use of value in use.

### *What about emerging economies*

85. Some think that fair value information is less available in emerging economies and entities there often have to compute value in use as a part of impairment testing. We would like to hear about the experience of the EEG members on this (refer back to Question 1).

### *Potential inconsistencies*

86. The objective of value in use measurement is consistent with its description in the proposals in the Framework, so there are no inconsistencies relating to the measurement objective. It is also worth noting that the guidance in IAS 36 is the only IFRS guidance relating to value in use, so there is no other standard with which to be inconsistent.
87. The detailed guidance in IAS 36 does create some questions as to whether value in use is truly entity-specific, for example with respect to tax and risks. In addition, it can be quite difficult in practice to find the rate to apply in value in use calculation and some short-cuts can be used that are not necessarily consistent with the measurement objective. These detailed aspects are discussed in a separate paper on the discount rate components and the methodology.

## ***IAS 37 Provisions, Contingent Liabilities and Contingent Assets***

### *Measurement objective*

88. IAS 37 includes requirements for measuring provisions, which are defined in IAS 37 as liabilities of uncertain timing and/or amount. The measurement objective is ‘the best estimate of the expenditure required to settle the present obligation at the end of

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<sup>17</sup> PETERSEN, C. and PLENBORG, T. (2010), How Do Firms Implement Impairment Tests of Goodwill?. *Abacus*, 46: 419–446

the reporting period’. The standard goes on to explain that this is ‘the amount that an entity would rationally pay to settle the obligation at the end of the reporting period or to transfer it to a third party at that time’.

89. The amount that an entity would rationally pay to transfer a liability to a third party sounds similar to the fair value, which is defined in IFRS 13 as ‘the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date’.
90. However, IAS 37 also notes that the measurement should be at an amount that **an entity** would rationally pay, whereas fair value is the price that would be paid by a **market** participant to transfer the liability in the market. IAS 37 is generally interpreted as having an entity-specific measurement objective. Consequently, we have mapped the IAS 37 measurement objective as being closest to fulfilment value.

#### *IAS 37 in practice*

91. In a 2011 analysis<sup>18</sup> of 26 European companies, IAS 37 provisions ranged from only 0.1 per cent to 24.2 per cent of total liabilities. The ratio was lowest for banks (no more than 0.4 per cent) and highest for oil and gas and mining companies (at least 20 per cent)..
92. Some have suggested that entities do not fully update the rate in line with the market movements. Consider this extract from recent annual report of company with significant provisions:

We use a long-term bond rate to match the long-term nature of most of our provisions and, although the discount rate is reviewed annually, we do not adjust for changes in that rate which we consider to be more short-term in nature, the effects of which would not be material

#### *What about emerging economies?*

93. Some might expect that provisions recognised in emerging economies may be more short-term in nature, because as the regulatory environment that would give rise to

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<sup>18</sup> Company Reporting analysis of 26 listed European companies, which feature in the Standard & Poor’s Europe 350 dataset with period ends of 31 December 2011.

long-term provisions may not be as developed. We would like to get the EEG members' views on this (refer back to Question 1).

*Potential inconsistencies*

94. IAS 37 expresses the measurement objective as both the 'best estimate of expenditure required to settle...at the end of the reporting period' and 'what you would rationally pay to settle or to transfer it to the third party'—these are not necessarily the same things and it is not clear what they mean. Therefore, different entities may draw different conclusions resulting in diversity in practice.
95. Another feature of the IAS 37 measurement objective is that, although it seems most akin to fulfilment value, it is not expressed in those terms. Fulfilment value is the present value of the cash flows that an entity expects to incur as it fulfills the liability, and this is not how the measurement objective is expressed in IAS 37. This raises a question of which cash flows should be included in the measurement. For more details on the components included, see Agenda Paper 1B on further research on the components.
96. Overall, however, the question is whether these perceived inconsistencies matter in practice. Measurement of provisions in IAS 37 involves a lot of uncertainty and requires judgement, so differences are likely to remain.

## Appendix 1

### Contents

Introduction .....	1
Background .....	2
Objective of present value measurement in IFRS.....	3
Historical cost.....	4
Current values .....	4
Fair value .....	4
Value in use and fulfilment value.....	5
When is present value measurement used in IFRS financial reporting? .....	7
Present value as one of the measurement methods (1).....	8
Present value as the only measurement method (2) .....	9
Initial measurement .....	9
Subsequent measurement .....	9
Present value as a threshold measurement (3) .....	10
Other uses of present value measurements .....	11
When is present value measurement not used in IFRS? .....	11
Present value in subsequent measurement and its effect on performance reporting .....	14
Unwinding of discount/historical cost interest.....	14
Present value reassessments .....	15
Present value as one of the measurement methods.....	15
Present value as the only measurement method .....	16
Present value as a measurement threshold .....	17
More on direct measurements .....	18
IAS 19 Employee Benefits.....	19

Measurement objective.....	19
IAS 19 discount rate in practice .....	21
What about emerging economies?.....	23
Potential inconsistencies.....	23
IAS 36 Impairment of Assets .....	24
Measurement objective.....	24
IAS 36 in practice .....	25
What about emerging economies .....	25
Potential inconsistencies.....	25
IAS 37 Provisions, Contingent Liabilities and Contingent Assets .....	25
Measurement objective.....	25
IAS 37 in practice .....	26
What about emerging economies?.....	26
Potential inconsistencies.....	27
Appendix 1.....	28

#### List of tables:

Table 1 Individual measurement objectives and the Framework .....	7
Table 2 Use of present value measurements in IFRS .....	8
Table 3 Remeasurement requirements for direct measurements.....	16
Table 4 Performance impact of present value remeasurement .....	17
Table 5 Depth of corporate bond markets in jurisdictions with highest pension liabilities.....	21
Table 6 Estimated size of corporate bond liabilities in the jurisdictions with most pension liabilities .....	23