February 2019

IFRS® Standards
Project Summary

Discount rates in IFRS Standards

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The International Accounting Standards Board's research programme

The International Accounting Standards Board (Board) conducts research projects to gather evidence so that it can assess whether a financial reporting problem exists; whether any identified problem is sufficiently important that standard-setting is required; and whether a feasible solution to such a problem can be found.

This Project Summary has been compiled by the IFRS Foundation (Foundation) staff and has not been approved by the Board. It summarises the material that was prepared by the staff for the Board, and the Board's discussion of that material. This Project Summary does not form part of IFRS Standards.

Contents of this Project Summary

For more information

More information about the project is available on the IFRS Foundation website at www.ifrs.org/projects/work-plan/discount-rates/

At a glance

From 2014 to 2017, the Board conducted a research project on discount rates in IFRS Standards.

The objectives of the project were to:

- investigate reasons for inconsistencies between requirements relating to discount rates in IFRS Standards; and
- assess whether the Board should consider addressing those inconsistencies.

Summary of findings

The Board's investigation found that:

- in some cases, inconsistencies arise between requirements relating to discount rates in IFRS Standards.
- these inconsistencies arise in specifying either:
  - which types of inputs to use in a present value measurement technique; or
  - how to determine the amount of the inputs.
- some of those inconsistencies arise because different IFRS Standards adopt different measurement bases. Other inconsistencies, mostly relating to entity-specific current value measurements, arise partly because different IFRS Standards were developed at different times and with different areas of focus.

Conclusions and follow-up

In March 2017 the Board concluded that:

- the project had met its objectives; and
- the Board had no need to seek public feedback on the outputs of the project.

The project has two outputs:

- the research findings (see page 8); and
- a summary listing matters that the staff will consider in the future when developing recommendations for the Board on present value measurement requirements (see page 11).

The Board will use those outputs in other projects in considering:

- whether and how to address some of the inconsistencies identified; and
- how to avoid creating unjustifiable inconsistencies in the future.

The Board has no plans to conduct a separate project on discount rates.

Introduction

Why did the Board do this research?

Several IFRS Standards permit or require entities to measure assets or liabilities by discounting estimates of future cash flows to their present values.

However, different IFRS Standards developed over the years have required different inputs to be reflected in such present values. This in turn means different IFRS Standards permit or require use of different discount rates. Comments received during the Board's 2011 and 2015 Agenda Consultations suggest that the reasons for using different discount rates in different IFRS Standards are not well understood. Some respondents suggested that such differences result in needlessly inconsistent requirements in IFRS Standards.

As a result, the Board started a research project in 2014 to examine the differences in requirements.

Present value measurement techniques

The time value of money is a core concept of finance. This concept holds that money at the present time is typically worth more than the same amount of money at a future date.

Present value measurement techniques apply this concept to express an amount of cash to be received or paid in the future as a present value. Such techniques discount estimates of future cash flows to translate them into an equivalent amount of cash held at the present time.

Present value measurement techniques are often used in measuring assets or liabilities for the purpose of financial reporting. These techniques require two main sets of inputs:

- an estimate of the amount, timing and uncertainty of future cash flows; and
- discount rates to translate those cash flows to an equivalent amount of cash held at the measurement date.

Future cash flows from an asset or a liability are often subject to uncertainty about:

- how much cash the asset will generate, or the liability will require the entity to pay, at a future date; and
- in some cases, when the future date will be.

Uncertainty can be reflected in a present value measurement technique in various ways. The technique selected needs to reflect uncertainty in a way that is consistent with the measurement basis being used.

Present value measurement techniques are not measurement bases. They are techniques used in applying a measurement basis. Hence, when using such a technique, it is necessary to identify which measurement basis is being applied and to ensure that the technique reflects inputs consistent with that measurement basis.

Introduction continued

Measurement bases in IFRS Standards

The *Conceptual Framework for Financial Reporting* (*Conceptual Framework*) identifies the following measurement bases:

- **historical cost**, which uses information derived, at least in part, from the price of the transaction or other event that gave rise to the assets, liabilities and related income and expenses. Historical cost is not updated for changes in prices.
- **current value**, which reflects conditions at the measurement date. Current value measurement bases include:
  - fair value;
  - value in use for assets and fulfilment value for liabilities; and
  - current cost.

The *Conceptual Framework* explains that an IFRS Standard may need to describe how to implement the measurement basis selected in that IFRS Standard and that a description could include:

- specifying techniques that may or must be used to estimate a measure applying a particular measurement basis;
- specifying a simplified measurement approach that is likely to provide information similar to that provided by a preferred measurement basis; or
- explaining how to modify a measurement basis, for example, by excluding from the fulfilment value of a liability the effect of the possibility that the entity may fail to fulfil that liability (own credit risk).

When are present value measurement techniques used in IFRS Standards?

Present value measurement techniques are widely used in applying IFRS Standards, both in current value measurements and in determining the amortised cost of some financial assets and some financial liabilities. A present value measurement technique may be used:

- as one of the techniques that can be used to arrive at a measure using a specified measurement basis;
- on its own, as the only technique that can be used to arrive at a measure; and
- as a measurement ceiling for some assets—that ceiling is not used directly to arrive at a measure, but generates an upper limit for the measure.

This project focused on the uses of present value measurement techniques in applying a current value measurement basis and did not review their uses in measurements based on historical cost (for example in IFRS 16 *Leases* or in amortised cost measurements). Their uses in current value measurements are summarised in Tables 1 and 2.

Key terms used in this Project Summary

measurement basis—an identified feature—for example, historical cost, fair value or fulfilment value—of an item being measured

present value measurement technique—a measurement technique, used in applying a measurement basis, that expresses future cash flows as a present value

present value measure—the output of applying a present value measurement technique, ie the amount at which an asset or a liability is measured

Introduction continued

Table 1—When are present value measurement techniques used in current value measurements?		
As one of the techniques that can be used	**As the required technique**	**As a measurement ceiling**
assets and liabilities measured at fair value	provisions insurance contracts defined benefit pension obligations significant financing component in contracts with customers	when recoverable amount is value in use for non-financial assets

Table 2—Main IFRS Standards that use present value measurement techniques in current value measurements (when applicable)
IAS 19 *Employee Benefits*
IAS 36 *Impairment of Assets*
IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*
IFRS 13 *Fair Value Measurement*

Evidence gathered

What did the Board do in this project?
A desktop study, including: • a review of requirements in IFRS Standards relating to discount rates; • a review of topics discussed by the IFRS Interpretations Committee relating to discount rates; and • a limited review of empirical evidence, including a sample of financial statements and a selection of academic literature. Targeted consultation, including: • meetings with actuaries and valuation professionals, auditors, investors, preparers of financial statements, regulators and standard-setters; • meetings with the Board's advisory bodies, including the Accounting Standards Advisory Forum and the Emerging Economies Group; and • feedback received during the 2011 and 2015 Agenda Consultations.

When did the Board discuss this project?	
June 2014	Project scope
September 2015, December 2015 and January 2016	Project findings
April 2016	Feedback from the 2015 Agenda Consultation
March 2017	Concluding the research

Research findings

In examining requirements for current value measurements in IFRS Standards, the Board reviewed:

- measurement bases for which present value measurement techniques are used;
- measurement inputs;
- approaches to determine inputs used in such techniques; and
- presentation and disclosures.

Appendix A summarises the findings by topic and by IFRS Standard.

Measurement bases

IFRS Standards require different measurement bases for different assets and liabilities. And different measurement bases can necessitate different discount rates.

Many IFRS Standards specify a clear measurement basis, however:

- IAS 19 does not specify a measurement basis; and
- IAS 37 specifies a measurement basis, but does not describe it clearly.

Measurement inputs

Individual IFRS Standards specify which inputs are to be used in a present value measurement technique, with recent IFRS Standards being more specific in this regard. Some older IFRS Standards are unclear about which inputs should be included; or they are unclear about what those inputs are meant to reflect. This lack of clarity is exacerbated when an IFRS Standard does not specify a clear measurement basis:

- the measurement requirements in IAS 19 are prescriptive, include inputs that do not directly relate to the cash flows and in some respects are inconsistent with requirements for other similar liabilities; and
- IAS 37 is not clear on which inputs should be included in the discount rates used to measure provisions. In particular, it is unclear whether own credit risk is included.

Approaches to determine inputs to present value measurement techniques

IFRS Standards generally explain the need for internal consistency between inputs used in present value measurement techniques. However, a prescriptive approach to determining discount rates can create internal inconsistencies between the discount rate and other inputs. For example, if the amount of pension benefits depends on returns on plan assets, the requirements in IAS 19 lead to an inconsistency between inputs used in estimating the cash flows and those used to determine discount rates.

Some aspects of a present value measurement technique may have a more significant effect in some contexts than in others. Particular IFRS Standards tend to include more details on those aspects that are typically more significant in the context covered by the particular IFRS Standard. However, sometimes the requirements seem unnecessarily prescriptive—for example, the requirement in IAS 36 to use pre-tax discount rates in impairment testing.

Research findings continued

Presentation and disclosures

In reviewing requirements for presentation and disclosures when present value measurement techniques are used, the Board identified:

- inconsistencies in requirements for when to include income or expenses in other comprehensive income, instead of in profit or loss;
- inconsistencies between entities in presenting the effect on profit or loss of changes in present value measures—for example, for pensions, net interest on the net defined benefit liability may be presented in finance costs or in another line item; and
- differences in requirements for information to be disclosed about present value measures.

Feedback from advisory bodies

The staff discussed the project findings, and possible follow-up, with the Accounting Standards Advisory Forum and the Global Preparers Forum.

Members of the Accounting Standards Advisory Forum advised that:

- publishing the research findings would create a useful reference point for future standard-setting.
- individual issues could then be addressed, starting with measurement bases. The Board should consider addressing some issues in its other projects.
- further steps might include the preparation of education materials at some future date.

Members of the Global Preparers Forum generally expressed a preference for any standard-setting activities to occur through a cross-cutting project done at one time as opposed to piecemeal amendments to different IFRS Standards at different times.

How will the Board use the findings?

The Board and the staff are using the research findings, and will continue to use them:

- in existing projects by considering some of the inconsistencies identified in the research; and
- through a summary listing matters for staff to consider in future standard-setting work relating to discount rates and to other aspects of present value measurements. Considering those matters will help to avoid creating unjustifiable inconsistencies in the future.

Matters being considered in existing projects

- IAS 19 allows entities to report net interest on a net defined benefit liability in various ways, for example, as an operating expense or as a finance cost. The Primary Financial Statements project is considering how to reduce that variety in reporting. In that project, the Board tentatively decided in November 2017 to require presentation of this interest in a single location in the statement of financial performance.
- IAS 36 contains a requirement to use pre-tax discount rates when determining value in use. The research suggested that many view this requirement as needlessly onerous. This finding is being considered in the Goodwill and Impairment research project. In that project, the Board tentatively decided in January 2018 to consider removing the explicit requirement to use pre-tax inputs to calculate value in use.

Matters that may be considered in existing projects

- In the Provisions research project, the Board is gathering evidence to help it decide whether to undertake a project to amend aspects of IAS 37. If the Board decides to undertake such a project, it could consider developing proposals to clarify which inputs should be included in the measurement of provisions—for example, whether own credit risk should be a part of the measurement.
- The Targeted Standards-level Review of Disclosures project includes a review of some disclosures relating to present value measures. The review covers IAS 19 and IFRS 13.
- If the amount of pension benefits depends on returns on assets, there is an inconsistency between inputs (assumptions) made in estimating the cash flows and the discount rates. In September 2018 the Board started a research project to assess whether it is feasible to eliminate that inconsistency, without reviewing other aspects of IAS 19.

How will the Board use the findings? continued

Matters that the Board does not plan to consider

In the light of its discussions during the 2015 Agenda Consultation, the Board does not plan to address the following matters identified by the staff in this research project:

- inconsistencies in requirements on when to include income or expenses in other comprehensive income, rather than in profit or loss.
- the fact that IAS 19 does not specify a measurement basis for pension obligations.
- potential inconsistencies in the interaction between income taxes and discount rates. The Board had some initial discussions on this topic when it considered the project findings in January 2016. But the Board did not identify evidence of any need to continue the discussion.

The research findings on those matters will be useful if the Board decides to look at these matters in the future. The staff is making use of the findings when addressing requests for Interpretations or performing other relevant research.

Summary listing matters to consider in future standard-setting work

The staff has prepared a summary listing matters for staff to consider in future standard-setting work when developing recommendations for the Board on discount rates and other aspects of present value measurements. The summary covers:

- selecting a measurement basis;
- determining when to use present values;
- selecting measurement inputs;
- ensuring consistency between measurement inputs; and
- approaches to determine inputs to use in present value measurement.

Further feedback

The Board decided it did not need to seek further feedback from stakeholders on the findings from this research project, because:

- for the matters being addressed in individual projects, the Board will seek feedback in those projects; and
- in the light of input received during the 2015 Agenda Consultation and the Board's review of its priorities at that time, the Board has no plan to carry out either a comprehensive or targeted separate standard-setting project on discount rates.

Appendix A—Summary of findings

Table A1—Measurement bases and inputs				
IFRS Standard	**IFRS 13** *Fair Value Measurement*	**IAS 36** *Impairment of Assets*	**IAS 37** *Provisions, Contingent Liabilities and Contingent Assets*	**IAS 19** *Employee Benefits*
Item measured	assets and liabilities required or permitted by other IFRS Standards to be measured at fair value	non-financial assets tested for impairment when recoverable amount is value in use	provisions	defined benefit obligations
Measurement basis explicit	yes	yes	yes	no
Measurement basis clear	yes	yes	no	no
Measurement basis (as described or inferred)	fair value	value in use	amount to settle or transfer	present value of estimated ultimate cost
Measurement inputs included:				
• **Central estimate of cash flows**[1]	yes	yes	yes	yes
• **Time value of money**	yes	yes	yes	yes
• **Risk premium**[2]	yes	yes	implicit (mixed practice)	no
• **Liquidity**	yes	yes	unclear (not observed in practice)	some (if implicit in bond rate)
• **Own credit risk**	yes	n/a	unclear (mixed practice)	some (issuers' credit risk implicit in bond rate)
Measurement inputs clear	yes	yes	no	no

1 Paragraph 6.94 of the *Conceptual Framework* states that '[A] central estimate depends on estimates of future cash flows and possible variations in their amounts or timing. It does not capture the price for bearing the uncertainty that the ultimate outcome may differ from that central estimate (that is, the factor described in paragraph 6.14(d)).'

2 The risk premium is the factor described in paragraphs 6.14(d) and 6.94 of the *Conceptual Framework* as the price for bearing the uncertainty that the ultimate outcome may differ from the central estimate of the cash flows.

Appendix A—Summary of findings continued

Table A2—Approach to determining inputs to present value measures				
IFRS Standard	**IFRS 13**	**IAS 36**	**IAS 37**	**IAS 19**
Item measured	assets and liabilities at fair value	non-financial assets (impairment)	provisions	defined benefit pension obligations
Measurement basis	fair value	value in use	amount to settle or transfer	present value of estimated ultimate cost
Risk reflected in rate or cash flows	either	either	either	neither
Inputs pre-tax or post-tax	either	pre-tax[3]	pre-tax	pre-tax (implicit)
Inputs real or nominal	either	either	either (implicit)	nominal (unless real more reliable)

Table A3—Presentation of changes in present value measures in profit and loss (P&L) or in other comprehensive income (OCI)			
IFRS Standard	**IFRS 13**	**IAS 19**	**IAS 37**
Unwinding of discount (interest income/expense)	not presented separately	P&L (entity can choose whether to include in finance costs)	P&L (finance costs)
Change in discount rate	P&L or OCI, as required by underlying Standard	OCI	P&L
Change in cash flows	P&L or OCI, as required by underlying Standard	OCI	P&L

3 As part of its Goodwill and Impairment project, in January 2018 the Board tentatively decided to propose removing from IAS 36 the requirement to use pre-tax rates.

Appendix A—Summary of findings continued

Table A4—Disclosure requirements relating to present value measures				
Description of disclosure requirement	**IFRS 13 (Level 3)**	**IAS 19**	**IAS 36**	**IAS 37**
Explicit disclosure objective	yes	yes	no	no
Disclosure requirements in IFRS 13 for Level 3 measurements				
Description of valuation technique and inputs used	yes	depends	yes	no[4]
Quantitative information about significant unobservable inputs	yes	yes	yes	no[4]
Changes to valuation technique and reasons	yes	IAS 8[5]	IAS 8[5]	IAS 8[5]
Reconciliation from opening to closing balance	yes	yes	n/a	yes
Unrealised gains/losses recognised in profit or loss	yes	n/a	yes[6]	yes[6]
Description of valuation processes and policies	yes	no	no	no
Sensitivity to unobservable inputs (narrative)	yes	yes	no	yes
Sensitivity to reasonably possible change in assumptions (quantitative)	yes[7]	yes	partly[8]	no
Method for calculating reasonably possible change in assumptions	yes	yes	no	no
Disclosure requirements in other IFRS Standards (not in IFRS 13)				
Discount rate used	–	yes	yes	no
Effect of unwinding of discount	–	yes	n/a	yes
Effect of change in discount rate	–	yes	n/a	yes

4 Although IAS 37 does not explicitly require disclosure of inputs used in a measure, it requires an entity to disclose, for each class of provision, an indication of the uncertainties about the amount or timing of the outflows. An entity is also required to disclose, where necessary to provide adequate information, the major assumptions made concerning future events.

5 Although IAS 19, IAS 36 and IAS 37 have no specific requirements to disclose changes to valuation techniques, IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* requires disclosure about changes in accounting estimates.

6 IAS 36 and IAS 37 require a reconciliation of the carrying amounts at the beginning and end of the period. They require entities to separately identify within that reconciliation income/expenses some stakeholders might regard as unrealised gains or losses. Those Standards do not use the term 'unrealised'.

7 Required for financial instruments only.

8 IAS 36 requires the information to be disclosed only for cash-generating units that include goodwill or intangible assets with an indefinite useful life.

Appendix B—Matters identified and follow-up planned

Type of difference identified	Cause(s) attributed by staff	Potential matter to be considered further	Follow-up planned
different discount rates to apply different measurement basis	different measurement basis	none	none
discounting not used at all in some places	cost–benefit considerations	none	the summary listing matters to consider reminds staff to consider whether to recommend requiring discounting if the effect is material.
measurement basis not explicit or not clear	limited guidance on measurement in *Conceptual Framework* before 2018	no explicit measurement basis for defined benefit obligations in IAS 19	the Board has no plans to introduce an explicit measurement basis into IAS 19.
		unclear measurement basis in IAS 37	Provisions research project is gathering evidence to help the Board decide whether to undertake a project to amend aspects of IAS 37. The staff are likely to recommend limiting the scope of any such project to targeted improvements to existing requirements. Reviewing the measurement basis is likely to be beyond the scope of any project recommended by the staff.
			Conceptual Framework describes various measurement bases and the factors to consider in selecting a measurement basis.
			the summary listing matters for staff to consider emphasises the benefits of an explicit and clear measurement basis in future standard-setting.

continued ...

Appendix B—Matters identified and follow-up planned continued

Type of difference identified	Cause(s) attributed by staff	Potential matter to be considered further	Follow-up planned
not always clear which inputs to include in a present value measure	no explicit or clear measurement basis	diversity in practice for own credit risk in measurement of provisions	if the Board decides to undertake a project to amend aspects of IAS 37, it could consider developing proposals to clarify whether own credit risk should be a part of the measurement.
different level of detail in how to arrive at a measure	no framework for present value measurement techniques[9]	possibly unjustified requirement in IAS 36 to use only pre-tax rates in value in use	the Goodwill and Impairment research project is reviewing the use of pre-tax rates in IAS 36. See footnote 3 on page 13.
		interaction between tax and discount rates not clear	no plans to work on income taxes. The summary listing identifies this as a matter to consider in future standard-setting projects on particular topics.
inconsistency between measurement inputs	no explicit measurement basis, or measurement basis not clear or requirements prescriptive	in IAS 19, if the amount of pension benefits depends on returns on assets, inconsistency between cash flow assumptions and the discount rates	the Board has started a research project to assess whether it is feasible to eliminate that inconsistency. The Board does not plan to review other aspects of IAS 19.
		credit risk included in the IAS 19 discount rate does not relate to the cash flows. It reflects generic credit risk but not the reporting entity's own credit risk	no plans to address the IAS 19 measurement basis. The summary listing identifies own credit risk as a matter to consider in future standard-setting projects on particular topics.

continued ...

9 *Conceptual Framework* now discusses cash-flow based measurement techniques.

Appendix B—Matters identified and follow-up planned continued

Type of difference identified	Cause(s) attributed by staff	Potential matter to be considered further	Follow-up planned
differences in presentation requirements	no framework supporting decisions about when to use profit or loss and when to use other comprehensive income	differences in approach to classification in profit or loss or in other comprehensive income	the *Conceptual Framework* now provides high level concepts. No plans for more specific follow-up.
	no definition of finance costs	net interest on net defined benefit liabilities presented inconsistently within profit or loss	presentation of unwinding of discount is being considered in the Primary Financial Statements project, with a tentative decision (November 2017) to require presentation in a single location in the statement of financial performance. In that project, the Board has also tentatively decided to define expenses from financing activities.
differences in disclosure requirements	differences in disclosure objectives	differences in content and wording of disclosure requirements	the project on a Targeted Standards-level Review of Disclosure requirements includes a review of IAS 19 and IFRS 13.
	no disclosure objectives		
	no disclosure framework		

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The International Accounting Standards Board (Board) is the independent standard-setting body of the IFRS® Foundation.

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