



**ASSOCIATION ACTUARIELLE INTERNATIONALE  
INTERNATIONAL ACTUARIAL ASSOCIATION**

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Dear Aida

**Discount Rates Research Paper**

Further to your discussions with Micheline Dionne and Tim Furlan, this letter provides some informal feedback on your draft Discount Rates research paper.

This letter has been prepared by a joint working group of the International Actuarial Association's (IAA) Insurance Accounting and Pensions and Employee Benefits Committees. It has not been subject to the due process required for it to constitute a formal view of the IAA. Thus, these comments do not represent an official view of the IAA. The members of the working group are listed in Appendix B. It is provided as an offer of our assistance with your research project.

We would like to congratulate you on the work to date on the research paper. It is a very comprehensive document that identifies and raises some important issues.

Our feedback on the version of the paper dated January 2016 is provided in Appendix A. We have approached our comments on the basis that we will be of most assistance if we offer suggestions that clarify or simplify the issues and provide a way forward to practical changes that will improve financial reporting. If there is other assistance you think we can offer or specific issues you would like us to explore, please let us know.

If you wish to discuss any of our feedback please do not hesitate to contact Micheline Dionne or me.

Yours sincerely,

Tim Furlan  
On behalf of the Working Group

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## Appendix A – Comments

### Issues with Existing Standards Identified in the Discount Rates Research Paper

The paper identifies 12 issues with the use of discount rates in existing standards. While we have not identified other material issues that we would suggest as separately identified issues in the paper, we suggest expanding further on some of the discussion in the paper. This, may lead to raising other issues. Otherwise, our comments that follow can be readily incorporated into the existing issues.

### Scope of the Paper and Issue 1

The paper largely focuses on value in use and fulfilment value measures. However, it also briefly covers historical cost in issue 1 and in a small number of other sections in the paper.

The paper addresses the scope of the project in two places. Paragraph 4 of the paper provides an indication of the scope:

- 4. The International Accounting Standards Board (IASB) is publishing this Research Paper to communicate with a wide range of stakeholders and consult them about:*
- (a) inconsistencies in reporting requirements for current, entity-specific measurements;*
  - (b) practical issues with reporting requirements for current, entity-specific measurements;*
  - (c) whether those issues should be addressed by the IASB.*

Paragraph 10 of the paper says:

- 10. The objective of this research project was to examine the discount rate requirements in IFRS to identify why differences exist and assess whether there are any unjustified inconsistencies that the IASB should consider addressing.*

We understand that current, entity-specific measurements are typically taken to be value in use and fulfilment value, whereas paragraph 10 can be read more broadly to include discount rates in historic cost measures or even fair value. We also note that fair value is excluded from the scope elsewhere in the paper.

You may wish to consider and confirm the scope of the project. Clearly, a wider scope that includes historic cost and fair value would allow a wider study and opportunity to make recommendation for greater consistency. However, a narrower scope may be more practical.

We suggest that using discount rates and unwinding those discount rates in historical cost measures is a special case of amortisation and depreciation. Historical cost values are not updated for current circumstances, by simply unwinding the discounting. These issues are arguably quite separate from the other issues in the paper.

## Financial and economic framework

Paragraph 13 of the paper notes that the project is a “desktop study of existing IFRS requirements” and hence we understand it is not a review of the academic literature on discount rates or some other more theoretical exercise.

Having said that, the paper may benefit from some reference to the underlying economic and financial phenomena that the accounting seeks to represent. In particular, the paper discusses entity-specific vs market-specific perspectives in some detail and concludes that discount rates are generally based on a market perspective while cash flows are based on an entity perspective. We feel that there is some support for that approach in finance and economics theory.

For instance, finance and economics theory (in particular the theory of intertemporal choice<sup>1</sup>) suggests that the time value of money is personal. Market interest rates are an equilibrium of supply and demand arising from personal preferences. An individual’s desired interest rate may differ significantly from the market rate, making anything that is not based on the equilibrium market price is not comparable with the latter.

Theory on capital structure (proposed by Modigliani and Miller<sup>2</sup>) also supports the idea that the market looks through financing decisions of a firm so there is no objective reason why the time value of money should vary from the market perspective.

Those theories break down where a firm is in a position that is not accessible directly in the market (allowance for the tax rules that apply to the firm being one of the key examples). So it is not surprising that entity-specific perspectives are required in areas where there is no market based fair value.

As noted in various places in the document, the draft conceptual framework also offers some principles and support for particular positions. That is another source of guidance that could be drawn out at the start of the document or the start of each section to give some context and support to your findings.

Throughout the paper, you have identified a number of principles from different IFRSs, for example the components of present value measurement. A section that summarises financial and economic principles might also provide a useful place to summarise the existing accounting principles.

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<sup>1</sup> The theory of intertemporal choice is discussed in many economic texts. However, we can provide more detail if required.

<sup>2</sup> Modigliani and Miller’s work is covered in many modern finance texts. However, we can also provide further detail here if required.

## **Issue 2 and Discounting of Cash Flows in IAS 12**

The paper notes that IAS 12 is not consistent with other standards that require discounting. A practical example that may assist with illustrating the problem this creates is tax-paid investment structures.

A tax-paid investment structure needs to make an allowance for future taxes in unit prices or other valuations for the purpose of investor transactions. In many cases, a deferred tax liability in this type of structure effectively represents an interest-free loan, as the deferred tax liability does not grow and the assets that will be used to meet the liability in due course are available to earn investment returns.

Therefore, the investment structure with a deferred tax liability can expect to benefit from enhanced future returns through gearing the investments. By gearing we mean that the face value of the deferred tax liability is held in productive investments that are expected to deliver positive returns while the deferred tax liability doesn't grow because it hasn't been discounted.

This treatment can present an issue where investors in a tax-paid investment structure are transacting on the basis of values that ignore the value in the interest-free nature of the deferred tax liability.

We note that you covered a similar issue in paragraph 21 of paper 17C for the January 2016 meeting, when you mentioned that discounting deferred taxes would align with market considerations as deferred taxes are considered in the trading of entities. It may also be appropriate to expand on that point in the discount rates research paper.

## **Issue 3 Measurement Objectives in IAS 19**

We agree with the conclusion in paragraphs 99 and 100 of the paper that IAS 19 lacks a fully described measurement objective and that leads to a rules-based approach to accounting. Our view is that this is one of the most material issues in the paper and it goes beyond simply the determination of the discount rate under IAS 19.

We feel that expanding on the issues raised in paragraphs 99 and 100, at a minimum recognising that the implications are broader than discount rates, would help highlight the importance of the issue to the reader.

## **Issue 4 and Potential Inconsistencies between the Discount Rates and Liabilities in IAS 19**

Paragraph 101 states that, "Although the IAS 19 measurement is most akin to the fulfilment value, the rate used for measurement is not relevant to the liability measured in all aspects and is not the rate that would be used in arriving at the fulfilment value. Instead, the rate reflects the average risk of market participants whose bonds are used as reference for the rate used. Arguably, that risk is not relevant to the liability measured."

It may be appropriate to expand on these points so that it is clearer to the reader why the paper takes the view that the rate is not relevant. In doing so, it is worth noting the challenges with hybrid funds where the growth in the liability is tied, at least partially, to some form of asset return. Given the separate post-employment benefits research project that is examining issues with hybrid plans, it may then be appropriate to refer this issue to that project.

Paragraph 103 states that, “Also, the use of two different discount rates impairs the comparability of pension liabilities between jurisdictions that have deep markets in corporate bonds, and those that do not have.”

As you know, we fully concur with this assessment. We continue to believe that the differentiation is arbitrary, since it is usually equally difficult to estimate a discount rate that reflects government bond yields as it is to estimate one that reflects high quality corporate bond rates, since neither is typically prevalent in those countries without a deep corporate bond market.

As you are aware, US-GAAP does not contain a deep market requirement. US-GAAP is applied by US owned subsidiaries in many countries that do not have a deep market in corporate bonds, but we are not aware of this causing practical difficulties. In addition, it may provide useful insight to contrast the two discount rates used under IAS 19 with the application of US GAAP when discussing this issue.

#### **Issues 5 and 6**

We have no specific comments on issues 5 and 6.

#### **Individual Components of Present Value Measurement and Issue 7**

In the paper, a number of issues are discussed, including:

- The time value of money (paragraphs 154-156);
- Profit margins (paragraph 153);
- Risk Premiums (paragraphs 157-166)
- Liquidity risks (paragraphs 167-174)

At the conclusion of those paragraphs, you identify issue 7 as the inconsistent treatment of liquidity risk across standards.

#### *Is Issue 7 Broad Enough?*

The paper identifies several inconsistencies across standards with the treatment of profit margins and risk premiums, but then limits issue 7 to liquidity risk. Arguably, issue 7 could be broader in scope, covering all identified inconsistencies in present value components, or alternatively the paper could be expanded to explain why the identified inconsistencies are not issues for financial reporting.

### *Is the list of Components Complete?*

At this time, negative yields are being observed in a number of different countries. A number of organisations have published research on this issue that provides some details on the volume of bonds currently trading with a negative yield.<sup>3</sup>

We understand that various explanations have been put forward for why investors would purchase a bond, knowing that it will deliver a negative return if held to maturity. Examples of theories including speculation on more extreme results and the way that the costs of physically holding a large volume of currency mean that the natural floor on yields is not a nil yield.

While the reasons may not be fully understood at this stage, it does suggest that the present value components identified in the report may not be complete and there may be other real world factors. It may be appropriate to note that the list may not be complete in the report and offer the example of negative yields to support that view.

### *Availability of data*

The report briefly mentions the availability of data in emerging economies (paragraph 156). Even in developed markets that overall are deep and liquid, at some durations there are may be a lack of relevant data, especially at longer durations.

The report would be more complete if this paragraph did not limit the issue to emerging markets, but also discussed the issue of lack of data in many developed countries, especially at longer durations. It may also be appropriate to cross-reference the issue of a deep market in corporate bonds under IAS 19.

## **Own credit risk**

We note the reference made in the paper to the project the IASB undertook on Own Credit Risk in 2009, and that the IASB decided at the time to stop work on that project. Given the difficulties that this issue presents, we understand the decision not to include the issue in the scope of this paper.

However, as noted in the paper, part of the reason that the IASB stopped work on this issue in 2009 was a view that the issue should be addressed in the Conceptual Framework. It was not addressed in the 2015 Exposure Draft of the Conceptual Framework.

We also understand that the concept of fulfilment value had only recently been raised in 2009. The work done to better understand that concept and include it in the Exposure Draft of the Conceptual Framework has occurred since 2009. The concept of fulfilment value may provide a conceptual basis for including credit risk in the initial measurement, but not

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<sup>3</sup> See Fitch Rating prepared a report dated 4 May 2016 (<https://www.fitchratings.com/site/pressrelease?id=1005505>) or Bank of American Morgan Stanley report dated (details of key finds can be seen here <http://www.marketwatch.com/story/see-how-bonds-with-negative-yields-are-taking-over-the-market-in-one-chart-2016-05-03>)

including it in subsequent remeasurements, consistent with the views expressed by several respondents to the 2009 Own Credit Risk Discussion Paper.

The classic example is a bank loan on the balance sheet of the borrower. The interest rate on the loan at commencement will reflect the borrower's credit rating. However, if there is a deterioration in the borrower's credit rating after issue it will still be expected to repay the loan at the agreed interest rate (provided they are assumed to remain a going concern).

The value of an instrument, such as a call option or corporate bond issued by an entity, that is measured at fair value may differ from the treatment of the fulfilment value. Paragraph 42 of IAS 13 specifically requires allowance for non-performance risk, including own credit risk, in the fair value of a liability.

Given the developments in the conceptual basis for fulfilment value and when fulfilment value or fair value should be used, it may be appropriate to expand the section in the discount rate paper to note those developments.

We also note that the IAS 19 discount rate includes credit risk (although not own credit risk), so some cross-reference between those issues would be appropriate.

The development in thinking about fulfilment value that has taken place since 2009 may provide a conceptual basis for the IAS 19 discount rate. However, we are not expressing a view at this time on whether or not fulfilment value is an appropriate measurement objective for IAS 19.

It could be argued that the IAS 19 discount rate is a practical proxy for allowing for credit risk in financial liabilities that are not valued at fair value, as expressed in views on the 2009 paper. By making a notional allowance for credit risk (based on the credit risk incorporated in high quality bonds) that does not change as the credit rating changes from period to period, there is a credit allowance in initial measurement and that allowance is not updated in subsequent remeasurement.

Given that the nature of pension plans is that the cost of additional service is added in each year's calculation, separating initial measurement and subsequent remeasurement would present challenges. Also, making a different allowance for credit risk for each company (a true own credit risk measurement) would create challenges with comparability across companies.

Non-performance risk is typically inherent in pension systems. In contrast to insurance contracts, the employer can renegotiate the level of benefits, typically downwards (and that has occurred in many countries). It is important to note, however, that the actual level of non-performance risk in pension arrangements varies between countries with differing solvency requirements and statutory guarantee schemes.

### **Illustrations to Support Issues 8, 9 and 10**

Paragraph 219 indicates that at least one example will be added to the final version of the paper in this section. In explaining the interaction of the discount rates and taxes in pension

funds, we have found that it is difficult to explain the issues in writing in a way that a reader can readily grasp. In such a case, numerical examples and illustrations are often much easier for a reader to follow. We support the intention to include at least one example in this section of the paper. We believe that an example will be important to assist readers with understanding the issues raised.

### **Other Methodology – Use of Yield Curves**

In paragraph 232, it is stated that: “... a topical question is what rate to include from the yield curve when determining the unwinding of the discount for the period. Another question is how to adjust available market data for the duration of the items measured. The different choices may have a material impact.”

We note that in the US there are contrary views on different methods.<sup>4</sup>

Since a large proportion of US companies are adopting a new approach to determining interest cost using the full yield curve rather than a single discount rate (interest cost applies to the entire defined benefit obligation under US GAAP accounting), it may be worth reviewing that situation before concluding that it does not raise any financial reporting problems.

The basis for using a full yield curve to determine a net interest cost under IAS 19 where the application is to the surplus or deficit rather than the whole defined benefit obligation is less clear. However, we understand that some organisations are adopting this approach.

### **Issue 11**

We have no specific comment on issue 11.

### **Issue 12 - Disclosure**

The report indicates that disclosing the sensitivity analysis of reported numbers is not always required. We suggest that there would be some value in reviewing and documenting in this report the purposes documented in particular standards for including a sensitivity analysis.

Sensitivity analysis on the assumptions used to develop the present value disclosed in financial statements provides users with a range of alternative values that could have been included in the financial statements instead of the chosen values. However, that is not

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<sup>4</sup> **Auditors KPMG:**

<http://www.kpmg-institutes.com/institutes/financial-reporting-network/articles/2016/03/alternative-approaches-calculating-service-interest-cost.html>

**Analysts: Credit Suisse (David Zion):**

<https://www.credit-suisse.com/us/en/investment-banking/indices-research-analytics/equities-research.html>

(„Equity Research“ of 15.01.2016)

**Academy of Actuaries:**

[http://www.actuary.org/files/Pension\\_Cost\\_Recognition\\_08142015.pdf](http://www.actuary.org/files/Pension_Cost_Recognition_08142015.pdf)

necessarily the same as an indication of the financial risks associated with the item that is the subject of the present value measurement.

We are aware of some data that suggests that there is variation in practice on how the requirement for risk-based sensitivities in IAS 19 (to indicate the range of what is *reasonably possible* – c.f. IAS 19.145) is being implemented by preparers. We assume that this is a symptom of confusion about the purpose of the sensitivity analysis.

Some items that are the subject of present value measurement (for example, pension liabilities) are very long-term in nature. In the case of pensions, the impact of variations in mortality will emerge gradually over many years, so while the long-term risks might be large, any short-term impacts are likely to be small. In contrast, short-term variations from any mismatch between assets and liabilities inside a pension plan could be very large.

It is possible that after further investigation, there will be a sub-issue in that value of sensitivity analysis to users of financial statements could be better established and more useful guidance to preparers could be provided.

## **Appendix B - Members of the Working Group**

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