Background and purpose of this paper

1. The IASB Exposure Draft *Insurance Contracts* and the FASB discussion paper *Preliminary Views on Insurance Contracts* base the measurement of insurance contracts on the following building blocks:

IASB	FASB
1. Expected value of future cash flows	1. Expected value of future cash flows
2. Time value of money (discount rate)	2. Time value of money (discount rate)
3. Risk adjustment	3. Composite margin
4. Residual Margin	

2. Participants in our outreach activities and respondents who sent comment letters commonly identified the selection of the discount rate as a critical issue for the boards to address during redeliberations.

3. We have therefore scheduled this educational session to present proposed alternative solutions for the selection of the discount rate. We have invited external speakers to present their proposed solutions for selecting the discount rate.

4. This paper will:

   (a) present the concerns raised during the outreach and in the comment letters;

   (b) review criteria for discount rate selection;

   (c) identify groups of discount rates proposed; and

   (d) provide brief background information on the external speakers.

5. Because the purpose of this session is to discuss possible solutions proposed for the discount rate selection, in this session we will not discuss the merits of locking in the discount rate. This will be the subject of a later paper.

6. This session is for educational purposes. We will not ask the boards for any decision.

Concerns raised during outreach activity and through comment letters

7. For non-participating business, the boards propose that the discount rate should be a risk-free rate plus a liquidity adjustment and to disregard the insurers' own non-performance risk. The issue of identifying the appropriate discount rate is typically linked to concerns about volatility in performance reporting because of accounting mismatches and economic mismatches that are not necessarily indicative of the long-term nature of the insurance business. Additionally, day one losses are a significant concern for long-duration contracts. Respondents have raised the following specific concerns:

(a) There is no established method for determining the illiquidity adjustment proposed. Consequently, there will be diversity in practice and comparability will be lost. The loss of comparability and diminished usefulness of financial statements will lead to increased costs of capital.

(b) The pricing of insurance contracts is based upon what the insurer expects to earn on the assets invested to fulfil the liability, less a deduction for credit losses and a further deduction for the risk that credit losses may exceed their expected level. Insurers believe the yield included in the pricing will be higher than the risk-free rate plus the proposed liquidity adjustment. This is because insurers believe that they are able to benefit to a higher extent as a result of portfolio diversification and of the illiquidity of the contracts. Not accounting for these factors in the selection of the discount rate will lead to overstating the insurance liability at inception, possibly leading to day one losses for some long-duration contracts.

(c) Even if insurers select the fair value category under IFRS 9 *Financial Instruments*, the discount rate for measurement of the assets would include a credit spread (ie a spread for non-performance risk), which would be matched by a corresponding spread in the discount rate used for measurement of the liabilities. Some insurers believe that the short-term volatility created by this selection is not indicative of the economics of long-duration contracts and will not provide useful information to users of financial statements. However, staff note that the majority of the participants in our outreach activities and respondents who sent comment letters do not think that it is appropriate to include the insurer's own non-performance risk as part of the measurement of the insurance liability. This is because they do not think that it is a characteristic of the liability that ought to be reflected in measurement and thus have not favoured such a solution.

8. Some property and casualty insurers, specifically those with short-tail contracts, question the value added through discounting of the insurance liabilities. Their concerns are rather related to discounting in general and are not focused on the selection of the appropriate discount rate. Any alternative selection of the discount rate will not address these concerns. However, the selection of the appropriate discount rate should consider the needs of all insurance contracts. Whether or not to discount for certain contracts will be discussed in a later paper.

Criteria for selecting the appropriate discount rate

9. The question of the appropriate discount rate should consider the following:

   (a) What is the objective of the discount rate for insurance contract liabilities?

   (b) What are the factors to include in the discount rate?

   (c) How are these factors included in the discount rate?

10. The discount rate measures the time value of money component of the building block approach for the expected cash flows in the insurance contract. For the purpose of this session it is assumed that it is the boards' intention that the discount rate should reflect the characteristics of the liability. To avoid double counting, the discount rate should therefore measure the characteristics of the liability that are not already measured in the other building blocks.

11. The boards also decided that for participating insurance contracts, where some or all of the cash flows arising under the contracts may depend on the performance of the assets, the performance of the assets therefore needs to be considered in measuring the corresponding insurance contract liability, either in the discount rate or elsewhere in the building blocks.

12. For non-participating contracts, the boards identified the following factors to be included in the measurement of the liability:

(a) the risk-free rate; ie, the interest rate that would incorporate the time value of money for cash flows with zero remaining risk and uncertainty; and

(b) a liquidity adjustment; ie, taking into account the fact that insurance contracts do not have the same liquidity characteristics as assets traded in liquid markets.

13. Observable discount rates may also incorporate the following factors (but that are not included in the discount rate proposed by the boards):

(a) credit spread; ie expected defaults and unexpected defaults (the risk that actual defaults may exceed the expected defaults); for the purposes of measuring the liability, credit spread reflects the company's own credit spread;

(b) currency risk; and

(c) other factors that are not already included in the measurement of the cash flows.

14. When analysing the asset or liability that is measured, it is important to determine which of the listed factors in paragraph 13 should be included in the discount rate. Consequently, in order to determine the appropriate discount rate to measuring an insurance contract, only factors related to the characteristics of the insurance contract liability should be included in the discount rate determination.

15. Feedback from participants in our outreach activities and from comment letters indicates that the credit risk of the insurer should not be reflected in the measurement of the liability. The market's view of foreign currency risk is reflected by measuring cash flows in that foreign currency, discounting these at rates appropriate for that currency and translating the present values at the current spot rate.

Identifying groups of proposed discount rates

16. The outreach participants and comment letters identify the following groups of discount rates as possible solutions:

    (a) building a discount rate bottom up starting at a risk-free rate and then adding factors identified in paragraphs 12 and 13 that are relevant to the measurement of the liability;

    (b) starting top-down from actual or estimated asset earnings and then eliminating factors identified in paragraphs 12 and 13 that are irrelevant to the measurement of the liability; or

    (c) use an observable discount rate (for example high quality corporate bond rate) as a practical expedient to approximate either a bottom-up or a top-down approach.

17. The boards propose a bottom-up approach. However, many believe that a top-down approach would be more consistent with the way in which insurers approach the setting of the discount rate. Consequently, the speakers will discuss three alternative proposals for a top-down approach. We will not discuss a high quality corporate bond rate in this paper because we regard it as a pragmatic expedient that does not incorporate explicitly the factors identified in paragraphs 9-15. The proposals discussed today will cover:

    (a) reference asset portfolio based rate; speakers: Francesco Nagari and Andrew Smith, Deloitte LLP;

    (b) economic default adjusted rate (EDAR); speaker: Rob Esson, IAIS/ NAIC;

    (c) actual asset portfolio based rate; speaker Nick Bauer, Eckler Ltd.

18. Each presentation will deal with the following questions:

    (a) How does this discount rate reflect the characteristics of the liability?

    (b) Which factors/risks are included and excluded by this discount rate?

(c) What are the sensitivities of both assets and liabilities to these factors in the rate?

(d) How complicated is it to derive this rate in practice?

Speakers' biography

Francesco Nagari

19. Partner, Deloitte's global IFRS Insurance Leader, member of the UK IFRS Centre of Excellence.

20. Expert on insurance reporting issues across IFRS, US, UK, French and Italian GAAPs and on insurance transition to IFRS from other GAAPs. He has gained this expertise from over 18 years of work as an auditor and as a business adviser to several insurance organisations.

21. Member of the Insurance Accounting Working Group of the European Financial Reporting Advisory Group (EFRAG).

22. Author of several articles and publications on the subject of reporting in the insurance sector including illustrative financial statements for insurers, research on insurance investors' views on insurance reporting, comparison of Solvency II and IFRS insurance liability valuations and Deloitte's regular newsletter on the IASB/FASB joint project on insurance contracts.

Andrew Smith

23. Partner, Deloitte; developed stochastic investment models for use in asset-liability modelling and pricing. He has led technical projects on multinational arbitrage-free yield curve models and ways of modelling discontinuous price processes. He has also worked with stochastic models on the liability side, and has experience in modelling such issues as premium cycles, reserving variability, bonus strategies, new business elasticity, frictional costs, option pricing and quantitative operational

risk measures. He leads a team of analysts and IT specialists who develop, support and market Deloitte's flagship capital market modelling technology - the Smith Model.

24. Andrew has published many papers in insurance, pensions and financial matters. In 1996 he won the Institute of Actuaries' prize for his paper "How Actuaries can use Financial Economics", another prize in 2002 for his joint paper “Corporate Bond Models”, and a further prize for his 2004 paper “The Cost of Capital for Financial Firms”. He serves actively on a number of professional working parties.

Rob Esson

25. Rob Esson was educated at Oxford University and subsequently qualified as a Chartered Accountant with Arthur Andersen in London. He is now Senior Policy Fellow, International Affairs at the National Association of Insurance Commissioners (NAIC) in the US, and is involved with many of the NAIC initiatives relating to International Accounting and the Solvency Modernization Initiative.

26. At the International Association of Insurance Supervisors (IAIS), his Chairmanship of the Insurance Contracts Subcommittee has just been specially extended. He is also a member of the Common Framework for the Supervision of Internationally Active Insurance Groups Task Force (‘ComFrame’), and participates in a number of other IAIS Subcommittees and groups.

27. The Insurance Contracts Subcommittee is responsible for formulating the IAIS positions on the International Accounting Standards Board’s (IASB) Insurance Contracts, Financial Instruments and Revenue Recognition projects. He is also an official IAIS observer member on the IASB’s Insurance Working Group and Financial Instruments Working Group, a member of the joint IASB/FASB Financial Institutions Advisory Group on Financial Statement Presentation, and an official observer member of the Expert Advisory Panel on Impairment of

Financial Assets. He has also represented the IAIS at the majority of the meetings of the Financial Crisis Advisory Group.

Nick Bauer

28. Nick has been a Fellow of the Society of Actuaries and of the Canadian Institute of Actuaries since 1967. After a 26-year career with a Canadian life insurance company (the last seven of which as CEO), he embarked on a consulting career with Eckler Ltd, the largest Canadian actuarial consulting firm to financial institutions. He has acted as Appointed Actuary to several life insurance companies for many years and has also specialised in advice on mergers, acquisitions and divestitures, asset-liability management, demutualisation, actuarial aspects of life insurance taxation and reinsurance.

29. Nick has also been active within the profession, having served two terms on the Board of the Society of Actuaries, and one term on the Board (then Council) of the Canadian Institute of Actuaries. He has also been an elected vice-president. He served for three years on the Institute's Practice Standards Council and has been on, and chaired, a number of its committees and task forces. He was a member, then for several years the Chair, of the Asset Risk Experience Committee (later renamed the Private Placement experience committee) of the Society of Actuaries. Its mandate was to compile and study the credit risk experience of private placement bonds.

30. Most recently, he completed four years as a member of the Canadian Actuarial Standards Board and led its working group on IFRS, which is being adopted in Canada as of 1 January 2011.