



Top down discount rate

Technical position of the HUB Group on Insurance Contracts

The following report on the “Top down discount rate” reflects a proposal by the HUB global insurance group. This technical paper is being provided to members and staff of the IASB and FASB to assist them in understanding the proposal prior to the Insurance Working Group meeting on 24 March 2011.

This paper provides additional detail on the top down discount rate that was outlined at a high level in the HUB Group’s Insurance Industry Proposal Discussion Paper dated 22 March 2011.

As with all our documents, comments from the public are welcome.

I. Objective

The HUB Group has developed a set of principles for determining the discount rate to be used for measuring insurance contracts under IFRS 4. We are making the following assumptions for the purpose of this discussion:

- ❖ The discount rate will operate under the building blocks and fulfillment models proposed in the IFRS 4 ED. It will be used to discount the current expected cash flows that the insurer will incur as an insurer fulfills its obligations under the contract.
- ❖ Related measurement parameters concerning unbundling, contract boundaries, the development of expected cash flows, the calculations of the risk margin, residual margin and/or composite margins are assumed to be as they were included in the ED.
- ❖ Assets are accounted for under the existing adopted IASB and FASB guidance.
- ❖ The HUB Group has also prepared papers on using a locked in discount rate for insurance contracts and using OCI as a presentation tool. This paper is written primarily from a current discount rate perspective. Where separate consideration is necessary for the locked in or OCI proposals, it will be discussed and noted accordingly.

This paper’s focus is on a discount rate that reflects the characteristics of the liability and produces a relevant, transparent measure of performance of the insurer. It is our contention that our proposal meets the objectives that the Boards tentatively adopted at their February joint meetings as described in the February Update. Of course, we recognize these decisions are tentative and we are prepared to discuss improvements to those decisions.

A primary concern for the HUB group is the accounting volatility of net income and equity that result if the discount rate used in the measurement of policy liabilities is not aligned with both the business model of the reporting entity and the measurement of its assets. Misalignment of the accounting model and the business model will produce financial results that do not truly reflect the financial

performance of the entity. Economic volatility should be reported in a manner that represents a meaningful measure of the change in exposure of *fulfilling* the insurance contract.

II. Introduction

The IASB and FASB propose, in their ED and DP respectively, that the interest rate used to discount expected cash flows should be a risk free rate adjusted for liquidity and other characteristics of the liability. The Boards recently affirmed the principles contained in the ED and DP, but also acknowledged that the principle can be achieved through more than the one approach proposed in the ED/DP.

The HUB Proposal starts with a company's projected investment return on the assets supporting its liabilities, thereby reflecting the business model concept considering asset liability matching and the measurement concept of fulfillment value of the liability. Our proposal is consistent with the Boards' first axiom as it measures economic volatility (resulting from periods where asset and liability cash flows are not matched) and more importantly does not cause an accounting mismatch (resulting from periods where asset and liability flows *are* matched).

In addition, the proposal is consistent with the three characteristics tentatively agreed by the Boards for the non-par discount rate, those being that the rate:

- ❖ be consistent with observable current market prices for instruments with cash flows whose characteristics reflect those of the insurance contract liability, including timing, currency and liquidity, but excluding the effect of the insurer's non-performance risk;
- ❖ exclude any factors that influence the observed rates but that are not relevant to the insurance contract liability (e.g., risks not present in the liability but present in the instrument for which the market prices are observed, such as any investment risk taken by the insurer that cannot be passed to the policyholder); and
- ❖ reflect only the effect of risks and uncertainties that are not reflected elsewhere in the measurement of the insurance contract liability.

Business Model

The concept of the business model in general is discussed in a separate technical paper. For the purposes of this paper, the key business model attribute is whether the portfolio is managed on an asset/liability basis or not. Asset/liability management begins with product design. For instance, product design includes defining policyholder participation in investment returns, guarantees offered based on availability of assets to fund liabilities, etc. It then continues through initial pricing considering market conditions and availability of assets, including hedges at inception, through withdrawing products where assets are not available to setting participation rates or interest crediting rates, all in consideration of the availability of assets in market place, competition, business strategy and, of course, ongoing asset management capabilities and strategies. This interaction of assets and liabilities continues throughout a portfolio's lifetime.

Fulfillment Value

The ED and DP have adopted the principle of fulfillment value as the measurement paradigm for insurance contracts, as opposed to an "exit value" approach that was previously considered by the Boards. The fulfillment value model for measuring insurance contracts is primarily concerned with

how an insurer will fulfill, or fund, its contracts. This view is entirely consistent with the business model in which insurers construct asset portfolios and investment strategies that will economically defease the liabilities. This measurement focus requires consideration of the assets that will fund the liability. (In contrast, an exit value model would primarily be concerned with how the insurer could relieve itself of the liability, and therefore be independent of the assets backing the liabilities.)

III. Proposal

The discount rate should be determined each reporting period. It should be based on the entity's expectation including the projection of future yield on those assets currently owned and investments to be made from future net cash inflows. The projection of future yield rates should be determined based on current yield curves after full reflection of investment expenses and expected future default costs and other asset risks retained by the insurer that are not part of the risk margin. The rates should be determined in a manner consistent with the entity's expectation of future returns and the equivalent determination of default costs for asset values.

The starting yield rates should be determined based on the carrying value of the assets, as determined by the company's accounting model for the assets in the portfolio. This accommodates assets held at either amortized cost or fair value.

1. Guiding principle

- ❖ The measurement of a portfolio of insurance contracts that is part of a cash-matched combined asset/liability portfolio, when taken together with the measurement of the assets, should produce a performance result that is indifferent to changes in market interest rates.
- ❖ The fulfillment approach adopted by the Boards and supported by the industry is inherently a funding model, not an exit value model.
- ❖ Volatility that arises by measuring liabilities without appropriate consideration of the assets that will fund the liabilities will be at least in part non-economic volatility, and will result in periodic recognition of income that will never be realized by the insurer. As the assets are actually used to fund the liabilities, this accounting volatility will reverse and net to zero over the life of the contract.
- ❖ The discount rate should be set using the same conceptual components as the building blocks model:
 - Expected investment performance
 - Less a risk margin related to the investment risks retained by the insurer

There are several approaches to determining the discount rate. The section below describes how the discount rate is derived from the asset portfolio backing the contracts. Smaller insurers and non-insurers applying the building blocks approach could use a high quality corporate bond yield curve or other methods as an approximation.

2. Application guidance

The graphic below describes how the liability discount rate is derived from the gross yield of the assets backing the contracts. The starting Portfolio Gross Yield includes all assets currently backing

the portfolio of insurance contracts and assets expected to be purchased with future net cash inflows of the combined asset/liability portfolio. For very long duration liability products, net cash flows need to be invested for terms longer than available fixed income investments. Therefore it is appropriate and necessary to assume that some portion of these cash flows will be invested in longer duration assets i.e. non fixed income.



The Portfolio Gross Yield will be based on the current carrying value of the assets currently owned and the yields on investments to be made from future net cash inflows. The projection of future yield rates should be determined based on current yield curves where they can be observed grading to long term averages at longer, unobservable points. The use of carrying value as the base for yield on current assets is important to accommodate assets accounted for at both fair value and amortized cost without introducing accounting volatility in the liability measure.

Of the items that are deducted from the Portfolio Gross Yield, two that require explanation are the liquidity losses on forced sale and the risk margin for investments.

The first item is one of the risks that results from an insurer’s asset and liability cash flows being mismatched. If an insurer’s liabilities are shorter than the assets supporting it, the insurer may need to liquidate assets in a disadvantageous market in order to fulfill the liability. For a well matched portfolio this would be insignificant.

The risk margin for investments is conceptually similar to the risk margin that is included in the liability. It reflects the risk that the actual asset portfolio performance (cash flows) may differ in timing and amount from that included in the Expected Portfolio Yield. This includes cash flows on assets currently held by the insurer and assets expected to be acquired as the insurer fulfills the insurance contract. Given the greater uncertainty of returns on non fixed income assets, it is appropriate for there to be an explicit risk margin when non fixed income assets are used in the underlying portfolio used to support a given portfolio of liabilities.

However it is determined, provision for these risks is an appropriate deduction from the gross yield in determining the liability discount rate. Both of these items will reflect how much investment risk the insurer retains under the contract. For certain products, the risk margin for investments could be close to zero since most of the risk is passed on to policyholders. For others it will be larger since the insurer retains the risk.

3. Characteristics of the liability

Under most circumstances, a discount rate based on the asset returns backing the insurance liability reflects the characteristics of that liability. However, this assumes that the assets are appropriately

matched to the liability, and do not reflect excessive risk (such as credit risk or duration mismatch risk)

These conditions are generally met. They represent appropriate business practices, and would often be enforced through regulatory requirements even if the insurer desired to manage its business otherwise. In addition, appropriate disclosures about the discount rate and existing disclosures about the entity’s investments will provide transparency into the entity’s asset/liability management.

Therefore, it is appropriate for there to be a rebuttable presumption that the discount rate based on the asset returns backing the insurance liability (net of defaults and expenses) reflects the characteristics of that liability.

4. Application to Locked In and OCI Proposals

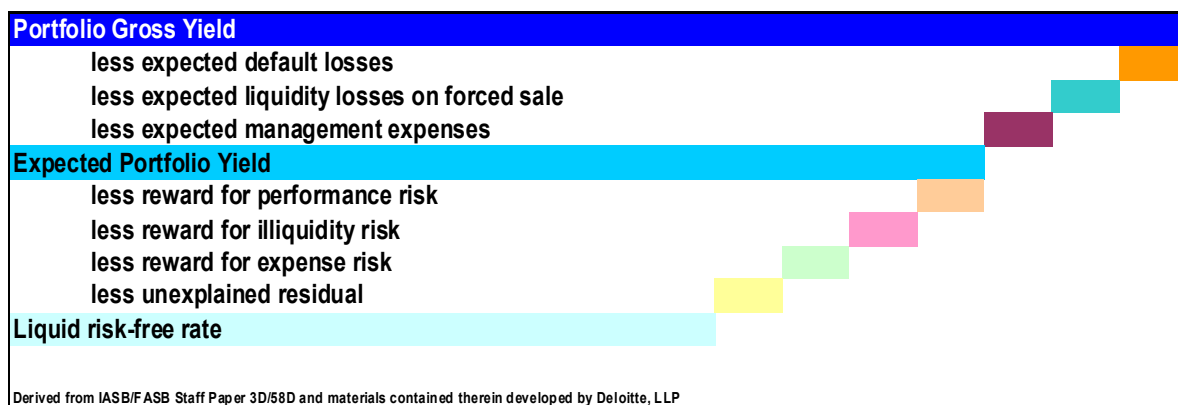
The HUB Group has also prepared two separate technical papers outlining proposals where the discount rate would be locked in or an OCI presentation would be used. The conceptual process described above would apply when discount rates are locked in under the Lock-in proposal or when parts of the liability change are recorded in OCI under the OCI proposal.¹ Discount rates at issue would be as described above in every case. Under each proposal, if and when the interest rates are changed, they would again follow the application guidance above.

IV. Disclosure

We will propose specific disclosures at a later time. These disclosures will be consistent with the goal of providing transparency to the assumptions used in the derivation of the discount rate.

V. Basis for Conclusions

Development of the Discount Rate

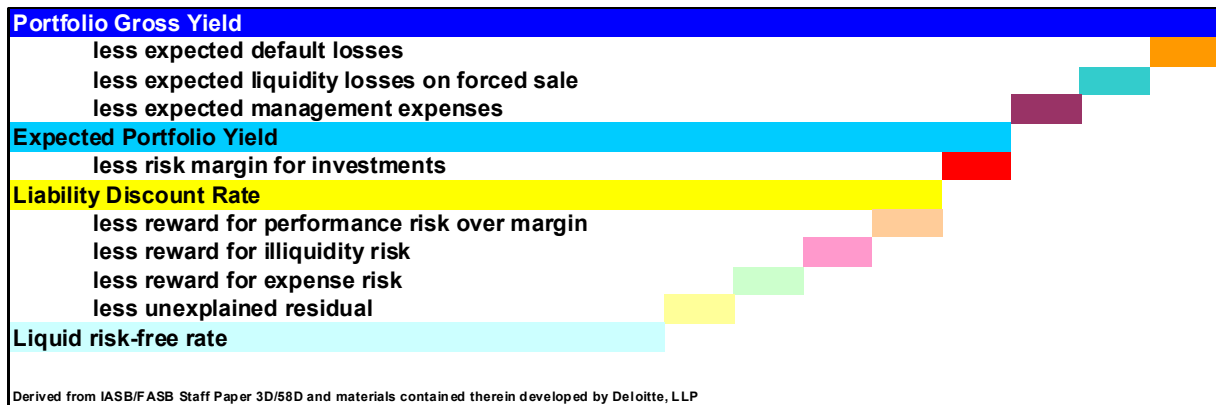


- ❖ The chart above represents a theoretical unbundling of the components of the yield on an asset portfolio.

¹ For portfolios using an OCI approach, the carrying value to determine the liability discount rate for income statement purposes is the asset value used for income statement purposes. The carrying value used to determine the liability discount rate for balance sheet purposes is the asset value shown on the balance sheet.

- ❖ Models similar to this are being used by the IASB in determining how to use observable market prices (which do not exist in any robust way in an observable market for liabilities) to develop a discount rate for insurance liabilities.
- ❖ The items above the “Expected Portfolio Yield” line are asset specific and should be deducted from the gross yield because they are not expected to be realized.

In addition to the items above, since there is risk in the included in the Expected Portfolio Yield, a risk margin for investment performance should also be deducted. The following chart shows the development of the Liability Discount Rate under the HUB Proposal.



- ❖ The items below the “Liability Discount Rate” line then become the conceptual components of the Liability Discount Rate. Their inclusion in the Liability Discount Rate is essential to the removal of accounting volatility.
- ❖ One view of this model is that these items are not asset specific but rather are market driven and apply equally to liabilities with a similar cash flow structure to the assets. The “rewards” are a measure of the market’s appetite for the individual risk at a point in time and apply equally to assets and liabilities. Thus they are characteristics of the liability and appropriate components of the liability discount rate.

This view is supported by the liability markets that exist:

- ❖ Original sale of the insurance contract: One day after the contract is issued, the insurance contract has nearly identical characteristics as it did on the day it was issued, except it is one day older and there may have been changes to capital market conditions during that day. However, assuming that the asset portfolio backing the liability remains appropriately matched with the liabilities, the asset portfolio also changes for these same factors. The assets will be on average one day closer to maturity, and their fair values will reflect changes in market conditions. Thus, the expected return on those assets after adjusting for expected defaults and expenses will continue to be consistent with the characteristics of the liability. For the same reasons, this will continue to be the case the following day and so on throughout the life of the contract.
- ❖ For some contracts, the cash flow characteristics of an inforce contract are identical (or nearly so) to the characteristics of a newly issued contract. For example, a pure life payout annuity issued today has identical future cash flow characteristics to an inforce pure life payout annuity issued to the same policyholder. Both contracts would pay the annuity

payment amount for the rest of the policyholder's life. Thus, since a discount rate equal to the expected return on the appropriately matched assets (net of expected defaults and expenses) would reflect the characteristics of a newly issued life payout annuity, such a rate would also reflect the characteristics of an inforce life payout annuity.

- ❖ Reinsurance: Although an objective price for an inforce contract may not be observable after the contract has been issued, one venue through which a price reflecting the characteristics may occasionally become available is through the reinsurance market. If the insurer was to reinsure the liability contract, the reinsurance contract would have cash flows consistent with those of the direct liability contract being valued. Of course, reinsurance prices would not necessarily be available as of any particular valuation date, indeed they would only be available at times when the insurance company happens to be shopping to reinsure the contract in question. However, the reinsurance company would base its reinsurance price on a discount rate based on its expected return net of its expected default losses and expenses for an asset portfolio that is appropriately matched to the contracts being reinsured. Thus, such a rate would appropriately reflect the characteristics of the insurance contract being valued. While the insurance company would not know the specific portfolio the reinsurance company would develop to accomplish this, its best estimate of the reinsurer's expected returns would be the expected returns on its own appropriately matched asset portfolio. Thus the expected returns on the insurer's own asset portfolio backing the insurance contract net of expected defaults and expenses appropriately reflects the characteristics of the enforce liability.

VI. Comparability

This proposal will not automatically produce equal liabilities for two different entities holding the same liability portfolio because the two entities may be holding different asset portfolios. This does not mean that the two entities' financial position and performance are not comparable. In fact, it means that their respective financial positions and performance are eminently comparable but that such measures reflect their respective business models, which in this instant case, is related to their differing asset portfolios

We submit that comparable financial position between entities is more important than comparable liability measures and therefore makes our proposal preferable when considering comparability.