Introduction and Objectives

The IASC Insurance Issues Paper (the IASC Paper) mentions in a number of places the concept of “market expectations” regarding the expected value and corresponding adjustments for risk associated with the experience factors used in measuring the value of the liabilities of insurance contracts. This paper has been prepared primarily in response to these references in Sub-issue 6D of the IASC Paper. While it focuses on appropriate values in a fair value environment, many of the observations are also pertinent to any approach to accounting for insurance liabilities.

Sub-issue 6D of the IASC Paper briefly discusses the difference between entity-specific and fair value approaches to the measurement of expected future cash flows. This is a significant issue, as it will influence the selection of assumptions used to determine actuarial estimates of the future cash flows associated with insurance contracts. According to IAS 32, the definition of fair value is “the amount for which an asset could be exchanged, or a liability settled, between knowledgeable willing parties in an arm’s length transaction.” Paragraph 206 of the IASC Paper refers to an entity-specific measurement of a liability as using insurer expectations.

In a manner similar to that given in paragraph 209 of the IASC Paper, the factors that should be reflected in the accounting basis under which actuarial estimates are developed, can be classified in the following manner:

1. Regardless of the accounting approach used, the characteristics of the inforce insurance portfolio at the valuation date must be reflected. These characteristics reflect past events in the acquisition, selection and maintenance of applicable groups of insureds. In addition, the effect of any expected changes in the environment, such as inflation, should be reflected. Both entity-specific and fair value bases would reflect these in the same way.

2. Future cash flows may be affected by future company operations. Estimates of future experience may be affected by the type of company operations assumed; that is, whether current operations are expected to continue, whether changes will take place that would result in average industry experience, or whether changes will take place that turn the insurer into the most cost-efficient operation in the industry. In essence, this issue is whether value-in-current-use continues or operations will change to be consistent with aggregate industry experience expected by the “market”. In any case, all relevant experience factors that would be expected to affect future cash flows in a material manner should be considered (the IAA assumes that actuarial standards of practice developed regarding an IAS on accounting for insurance contract liabilities will reflect this approach).
3. Estimates of expected cash flows will by necessity reflect judgment. Someone will have to either observe the results of these estimates or expectations will be developed. One potential source of difference could result from who develops the expectations – management, the actuary, or the market as implied by market transaction prices. One example of a situation that may arise is the estimation of the rate of future mortality improvement that should be expected – the expectations of two actuaries could differ substantially, one may assume current levels to continue while the other may expect a one percent annual improvement. This issue contrasts with (2) above in that it deals with the expectations of experience considering a given set of company operations, while (2) focuses on what set of operations is assumed.

4. In a fair value accounting environment, the Steering Committee has accepted that the characteristics of the asset portfolio should not be reflected, although the fair value of a hypothetical asset portfolio matching the characteristics of the corresponding obligations may be. Note that a thorough discussion of the treatment of expected future investment margins is included in a separate IAA paper entitled “FUTURE INVESTMENT MARGINS” and so is not included here.

We strongly believe that any measurement of the liability for insurance contracts should incorporate the characteristics of the insurance portfolio, including the expected influence of past events (1). The following discusses the extent to which expected company-specific future operations (2) or company-specific expectation (3) should be reflected. Some actuaries believe that insurance liabilities should be measured entirely on the basis of company-specific operations, including the company’s current asset portfolio and at least some of the effect of the risk contained therein (including asset/liability mismatch risk). The discussion of this approach to the issue is outside the scope of this paper.

In addition, objective market expectations (including such factors as future mortality trends, general inflation, and future interest rates) should be reflected as a basis for determining future experience assumptions.

Although a prospective approach to value future cash flows is not unique to insurance, this issue is of particular relevance to the measurement of insurance liabilities because of the long-term nature of many insurance contracts.

This paper does not address the specific elements to be considered in the determination of how to or whether to reflect risk in such calculations. Rather, it focuses on the basis for applicable expected values.

**Characteristics of the Inforce Insurance Portfolio**

As asserted above, any measurement of the liability of a portfolio of insurance contracts should reflect the characteristics of that portfolio and the influence of relevant past
actions and events. In addition, because the valuation of liabilities incorporates estimates of future cash flows, assumptions regarding future operations and related future events are pertinent to this measurement.

It is useful to examine a few examples of sources of future cash flows associated with future insurance liabilities and the impact of the characteristics of the insurance inforce.

- **Mortality.** Future mortality experience is influenced by a number of factors, the most significant of which is the expected future level and type of exposure to mortality in an inforce insurance portfolio determined on the basis of both the characteristics of this business and the expected overall mortality trends. The makeup of the current insurance portfolio is affected by past underwriting and marketing actions. It may also be influenced by future company actions, particularly those affecting the rates of future policy continuation that will determine which insurance contracts will remain inforce. Moreover, for the two hundred year of existence of the life insurance market as we know it, mortality has improved; it is not unreasonable to assume such trends will continue in the future. For a number of countries, tables of mortality improvements have been produced which can provide benchmark assumptions.

- **Property/casualty loss payments.** Future loss payments associated with past claim occurrences are influenced by a number of factors, including the characteristics of the contracts involved as a result of past underwriting and marketing actions, by the type and effect of losses that have occurred, as a result of future changes in legislation and judicial decisions, and by claims management. For instance, regarding the last of these, a new claims manager could decide to fight every single outstanding claim, rather than follow the enterprise’s prior strategy of quickly settling all such claims. If the effects of claims mitigation techniques already introduced has been demonstrated, it may be appropriate to anticipate the continued effects of such a policy. However, it may not be appropriate to reflect lower loss levels before they are demonstrated. In this case, because of the need to demonstrate the effect of contemplated changes in operations, it may be appropriate to assume that current claims operations will remain in effect in the future. Moreover, it may be inappropriate to assume that a third party will effectively adopt a tougher approach following a transfer of responsibility for the management of claims, as the regulator authorizing the transfer may require a continuation of current claim settlement policy so that the contract-owners will not be disadvantaged.

- **Contract continuation.** Factors affecting contract continuation (opposite of termination) experience include:

  1) Various past and future marketing and distribution related factors,
  2) Characteristics of the insureds and their contracts,
3) Contract-owners ability to pay,
4) Future relationships with an insurer’s distribution system,
5) Future levels of service provided to the contract-owner service, and
6) Relative competitive position of the contracts.

- **Interest rate margins** (the difference between interest earned, after adjustment for asset default risk, and interest credited to the savings portion of certain insurance contracts, which sometimes takes the form of an investment management fee). The extent to which expected future interest rate margins in the valuation of a contract’s liability should be reflected is controversial. However, if they were reflected, they could be based on either historical company margins, margins achieved by the industry during periods consistent with the expected future competitive environment, or by applications of the earnings of a replicating portfolio rather than actual insurer assets. Whether any willing exchange for these liabilities would include a portion of the expected interest rate margin expected to accrue to an insurer. This topic is further covered in another IAA paper entitled “FUTURE INVESTMENT MARGINS.”

**An Illustrative Case – Future Expenses**

Due to the long-term nature of many insurance contracts, an especially relevant experience assumption is the level of future operating expenses. Management may be able to incur a wide range of expense levels, as evidenced by the wide variety of insurer expense levels.

For the purpose of this discussion, future expenses should be considered in two classes – those that are guaranteed through contract, such as renewal commissions, and those that are not. The former class is a characteristic of existing contracts, which clearly should be entity-specific. The nature of the latter that should be reflected is discussed further below.

Future expense levels are of course a function of anticipated future insurer operation. Possible alternative operating scenarios include:

1. **Current operations** (included expected planned changes in these operations).

2. **Industry average experience**, whether at a “worse” or “better” than current operating level. Note that in many cases, due to such factors as differences in mix of business or in distribution network, it is often difficult, if not impractical, to determine what industry average experience would be as applied to the insurance portfolio of a certain insurer.
3. **“Best” or most favorable level of performance.** This assumes that management would change its method of operation to achieve optimal short-term financial results (if it is not already operating at this level). This may be quite optimistic relative to historical performance.

The use of current operational experience is consistent with the application of a company-specific expectation assumption. The other two options could be considered possible types of fair value assumptions, reflecting how any improvement in the expense base would be shared between the willing seller and a willing buyer.

**An analogy**

A non-insurance example may provide some insight. If the company involved was a mom-and-pop retail store and future operating expense levels had to be reflected in determining its liabilities, would it be appropriate to use an assumption of operating at a Wal-Mart performance level or at its current level? The former would be so inconsistent with current conditions as to provide a meaningless value in relation to its future obligations. However, given the size, location, and personal service level of the mom-and-pop store, Wal-Mart may not be able to operate that much more efficiently. Many companies plan strategically to provide a higher level of service associated with their higher level of expenses. In such case, it would be appropriate to reflect the current company-specific approach.

We use this analogy to support our belief that it is not appropriate to reflect future experience that is significantly different than the current level of operation. For example, lower expense levels should be demonstrated to be achievable before they should be recognized. Some argue that, if expense levels were high, then reasonable management would outsource that part of the operation and thereby achieve savings. However, there may be a reason why the operation of the company has not yet been outsourced. For example, the outsourcing itself could generate its own costs (e.g., of redundancies) which would alter the price at which an enterprise is willing to sell its business. Although it is tempting to recognize outsourcing cost savings long before they have been demonstrated and before this approach to expense management has even been thought of, the timing of associated reported income could be so significantly skewed that the results would be at best misleading.

Of course, future management or current management under new owners could operate in a different manner, for example, by slashing current expense levels. In estimating an exit value, would it be meaningful to assume significantly different level of expenses? Should the most efficient level always be reflected in the determination of liabilities? We do not believe so. If this were done, in certain cases significant profits could be reported at issue, with losses occurring over each succeeding year of the contract, as actual expenses continues to be reported at higher levels. Moreover, should an efficient
company be forced to report a loss on sale because industry average experience is so much higher than its own?

Another topic to be addressed is when the impact of changes in company expense levels in a fair value environment should be reflected when company expense levels change should be addressed. Although some feel that it is not appropriate to reflect the present value of the changes in such future expenses when changes in the level of expenses occur, this is not consistent with fair values. Once a given level of expense has been demonstrably changed, the new level is the best current information upon which to base estimates of future experience. To retain the original assumptions is to lapse into the deferral and matching construct that the Steering Committee has rejected. To ignore current activity by using another set of operations may mislead.

In addition, it is not logical to ask an insurer to evaluate its balance sheet under future expense assumptions that are significantly different from those currently anticipated or planned for. In reporting income, management would have to report, as a source of profit or loss, the difference between actual experience and the expectation of expense levels that it might experience either if it was an average company or the most efficient it could be.

**Recommended approach**

It is our contention that the best approach is to assume that the willing buyer would operate the business in a similar manner. In extreme cases, reported performance may make little sense if conditions other than company-specific conditions are used. There is significant potential for the financial statements to mislead, simply from the imposition of an external expense measure.

Such an assumption could also be inconsistent with the company’s strategy which may be high premium / high service philosophy. Although it is appropriate to recognize differences in experience when they are realized, it would generally be inappropriate to assume that dramatic changes in this experience will occur prior to it having been demonstrated as achieved.

Whatever type of expense assumption is permitted, it would be appropriate to reflect overhead since, despite the fact that the fair value of a pool of insurance contracts is being examined, financial reporting is done at an enterprise level. At such a level, all expenses, including overhead expenses, become marginal in nature. Therefore, it is appropriate to incorporate overhead expenses into the valuation.
Future Conditions and Whose Expectations?

The above discussion show that the characteristics of the current insurance contract portfolio and past events expected to influence future cash flows need to be reflected in the measurement of the liability. However, it would be useful if future operating conditions could be reflected in a consistent manner for all experience assumptions. The use of fair value compared with an entity-specific value may have a widely different effect depending on the degree to which future management action can influence various experience assumptions. For some experience assumptions, such as mortality, future conditions will have relatively little if any impact. For others, such as non-contractually provided expenses, future conditions may have a significant effect.

The estimation of both types of fair value approaches (market average or best provider) present significant practical challenges. Not only because available industry data is often unreliable but, probably more importantly, when available it may not be relevant to the company’s actual portfolio of contracts. Each company’s operations, mix of business and distribution methods are unique, rendering the application of industry-average operating expense levels to be potentially inappropriate and misleading.

Unlike some other financial instruments not incorporating the long-term nature of many insurance contracts, the effect of differences in future expense experience may be quite material. For many types of entities, future operating expenses and/or overhead expenses are not currently reflected in the balance sheet. For example, if two banks hold identical asset portfolios, but one is locked into custodian fees of 25 basis points while the other can obtain that service for 5 basis points, they do not show different carrying values for their assets. The difference in expense levels would flow through earnings as they emerge, rather than be capitalized in the balance sheet. This in itself may be misleading, as the second bank offers additional value. Nevertheless, most people who are involved with insurance would conclude that operating expenses, at least, should be so reflected.

What then does constitute a fair representation of such market expectation if an efficient market does not exist? Particularly with respect to future operating expenses, the best approach may to reflect current business operations (in some accounting circles referred to as “value in use”). A significant factor to be incorporated is a projection of the future environment in which the cash flows are expected to occur. This is problematic since the future conditions expected after exchange is unknown.

One assumption that has been used in practice is to trend a company specific assumption into a market assumption over a period of years. Typically this is applied if a current “expense over-run” situation exists which is trended to a benchmark level over, say, five years.
With regard to whose expectations should be used, the only reasonable answer is that expectations should be determined in an objective manner, reflecting both the in-force contract characteristics and expected future conditions. They should be developed in a disciplined, rigorous, and objective manner, in compliance with applicable standards of practice. Of course, if a company’s estimates have not been developed in an objective manner or the assumptions used are unsupportable, they should be rejected.

With any approach, it is useful to validate whether fundamental accounting objectives are met, including relevance and reliability. For both of these criteria, it appears to be more appropriate in practice to reflect the current contract portfolio, the current operating environment, as well as an objective measurement of expected future experience. This approach could be characterized as being a “fair-value-in-use” approach.

If the current operating environment were not to be recognized, we would strongly recommend that the notes to the accounts contain information regarding the effect such an assumption would have.

31 May 2000