

CAS Task Force on Fair Value Liabilities

White Paper on Fair Valuing Property/Casualty Insurance Liabilities

Executive Summary

This white paper was undertaken by the CAS Task Force on Fair Value Liabilities in reaction to recent developments by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Committee (IASC). It is meant to be an objective discussion of the issues surrounding the fair valuing of property/casualty insurance liabilities, particularly in the United States. While the recent FASB and IASC proposals are mentioned and quoted, the white paper is meant to be applicable to the "fair value" issue in general, wherever the issue appears.

The paper begins with an introduction and background, including a definition of "fair value." In general, fair value is defined as the market value, if a sufficiently active market exists, or an estimated market value otherwise. Most definitions also include a requirement that the value reflect an "arms length" price between willing parties, so as to eliminate "fire sale" valuations. Most observers agree that a sufficiently active market does **not** exist in most cases for property/casualty insurance liabilities. Hence, estimation methods have to be used to determine their fair value.

A short history of the fair value concept then follows. In brief, the concept of "fair value" gained prominence as a result of the 1980's Savings & Loan crisis in the United States. The accounting rules for these banks at that time did not require the recording of assets at market value, hence, banks were able to manipulate their balance sheets through the selective selling of assets. Troubled banks could sell those assets with market values higher than recorded book values and inflate their reported equity, even as the quality of their balance sheet was deteriorating. The concern was raised that any time financial assets are not held at their economic value (i.e., market or fair value), financial reports can be manipulated through the selective buying and selling of assets.

Since then, the FASB has been embarked on a long-term project to incorporate "fair value" concepts in the accounting for financial assets and liabilities. In December of 1999, they released a document labeled "Reporting Financial Instruments and Certain Related Assets and Liabilities at Fair Value (Preliminary Views)." This document proposed, for the first time, that certain insurance liabilities also be reported at "fair value."

At around the same time, the IASC, in its efforts to develop consistent international accounting standards, released its "Insurance Issues" paper. This paper also proposed a fair value standard for the recording of insurance liabilities.

The paper is organized into the following sections after the introduction

- A. **Background** regarding fair value concepts
- B. **Fair Value in the insurance context**
- C. **Alternatives to Fair Value Accounting** for p/c insurance liabilities.
- D. **Methods of Estimating Risk Adjustments** - a brief discussion of possible methods for determining risk adjustments, required in the fair valuing of insurance liabilities. Pros and cons for each method are listed. Detailed discussions of these methods can be found in the technical appendix.
- E. **Accounting Presentation Issues**, including alternative income statement or balance

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- sheet formats in a "fair value" world.
- F. **Implementation Issues** surrounding the fair valuing of p/c insurance liabilities for financial accounting statements.
 - G. **Accounting Concepts**, or how well fair value accounting and the issues discussed in the earlier sections would be viewed in the context of general accounting concepts (such as reliability, relevance and representational faithfulness).
 - H. **Credit Standing and Fair Value Liabilities**, a discussion of issues related to the reflection of credit standing in determining the fair value of liabilities. This issue has given rise to vigorous discussion, both within and outside the actuarial profession. Due to the controversial nature of this issue, it has been given its own separate section, rather than including it within the earlier sections.
 - I. **Professional Readiness**
 - J. **Summary and observations**.
 - K. **Technical Appendices**.

These sections are meant to be conceptual discussions, with any discussion of detailed implementation procedures left to the technical appendices. The appendices also include a list of references for each section.

Key findings of the task force include:

1. New requirement

In all the accounting conventions that we were aware of, insurance liabilities have not been stated at fair value, resulting in a lack of established practice to draw on. This has implications in numerous areas, including estimation methods, implementation problems and practitioner standards. As with any new requirement, the switch to a fair value valuation standard for property/casualty insurance liabilities would probably result in many unanticipated consequences. These consequences could be mitigated if implementation is phased in. For example, one phase-in alternative would be to institute disclosure requirements at first, followed by full fair value reporting depending on the results of the disclosure period.

2. Alternatives to fair value

There are several alternatives to fair value accounting. These alternatives range from the current use of undiscounted liabilities to conservative discounting approaches to hybrid approaches that combine fair value accounting with other present value methods. Some of these alternatives may result in many of the benefits of fair value accounting, but avoid some of the disadvantages. It is also clear that all approaches have some disadvantages.

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3. Expected Value versus best estimate

All the methods discussed in this paper assume that expected value estimates are the starting point in the fair value estimation process. The task force recognizes that confusion sometimes exist as to where current practice stands. While the term "best estimate" is commonly used in current accounting literature, it is not clear whether this means the best estimate of the expected value (*mean*), or the *mode* (i.e., most likely value), *median* (the value which will be too low half the time, and too high half the time) or *midpoint* (the average of the high and low of the range of "reasonable" estimates). While a recent U.S. actuarial standard has cleared up some of this confusion (ASB No. 36, Statement of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves, discussion of "expected value estimates" and "risk margins"), the task force believes that clarification on this topic within the accounting standards would be beneficial, and would become even more important in a fair value context.

4. Multiple methods

There are multiple methods for estimating the fair value of property/casualty insurance liabilities. All of these methods have their own advantages and disadvantages. No one method works well in all situations. As such, those estimating fair value may need to use a variety of methods. The task force sees a need for any accounting standard to provide for flexibility in estimation methods.

5. Continuum from pricing methods

Several of the possible methods for estimating insurance liability fair values are currently used for pricing. In addition, given that the charged premium may generally be assumed to be a "market" price (in a sufficiently competitive market), that charged premium may be a reasonable initial estimate of the unexpired policy liabilities' fair value. Hence, the initial estimate of a policy's liabilities' fair value may be the result of an existing pricing model.

6. "Typical" line / "typical" company limitation of most current methods

A major issue in determining the fair value of insurance liabilities is the reflection of risk. There are several methods in the current actuarial and financial literature that can be used to calculate this risk margin, for a "typical" line in a "typical" company. Most of these methods will require further development to go beyond the typical line / typical company limitation.

7. A fair value accounting standard would lead to new research

The previous finding discussed a limitation of current fair value estimation methods. The implementation of a fair value accounting standard would lead to new research to address these and other limitations in a fair value estimation process. This would be analogous to the expansion of methods to quantify risk transfer, following the implementation in the United States of FAS 113 (reinsurance accounting).

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8. When market prices and "fair value" estimates are in conflict.

The task force observed that there are at least four situations where market prices may be in conflict with the results of a fair value estimation process. In these situations, the fair value estimation process may be preferred over a market value for financial reporting. These situations include:

- *Market disequilibrium.* Given a belief in an efficient market, disequilibrium positions should be only temporary, but how long is temporary? Restrictions on insurance market exit and entry (legal, regulatory and structural) can lead to disequilibrium positions that last years. The underwriting cycle is viewed by some as a sign of temporary disequilibrium, whereby the market price at certain points in the cycle may not equal what some believe to be a fair value.
- *Market disruption.* At various points in time, new events lead to significant uncertainty and temporary disruption in the market for insurance products. Examples can include a threatening hurricane, a newly released wide-ranging court decision and new legislation (e.g., Superfund, or California Proposition 103?). At such times, market prices right after the event may be wildly speculative, or the market may even be suspended, making fair value estimation even more uncertain.
- *Information Asymmetry.* The market price for a liability traded on an active market is likely to be quite different depending on the volume of liabilities actually traded. For example, if a primary insurer cedes 1% of its liabilities, the reinsurers will quite rationally believe that this liability is not a fair cross-section of the primary's entire portfolio: i.e., the ceding insurer is selecting against the reinsurer. Consequently, the price will be rather high, compared to the case where the entire portfolio (or a pro-rata section of it) is transferred. Thus, the "actual market price" is not a better fair value representation than an internal cash flow based measurement unless most of the insurer's liabilities are actually transferred. This situation arises because the market (i.e., reinsurance market) does not have access to the insurer's private information on the liabilities. If all of the private information were public, then the actual market prices for liability transfers would better represent their fair value."
- *Significant intangibles.* Market prices for new business may be set below expected costs for such business, due to the value of expected future renewals. As such, an estimated fair value that ignores this intangible may be materially different from the market price.

Both the IASC and FASB proposals indicate a preference for the use of observed market values over estimated valuations. Given the imbalances noted above, the task force is uncertain as to how to reconcile the realities of the insurance marketplace with the IASC's and FASB's preferences for observed market value. It may be that internal estimates can sometimes be preferable to market based estimates in a fair value accounting scheme.

9. Implications of risk margin approaches without value additivity

Some risk margin methods produce risk adjustments (when expressed as a percentage adjustment) that are independent of the company holding them or the volume of business. Such risk adjustments are said to show "value additivity," i.e., the risk margin for the sum of two items

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is the sum of their two risk margins.

Not all risk margin methods result in value additivity. When this is the case, reporting problems can occur. For example, if the risk margin for the sum of line A and line B is less than the sum of the two risk margins, how should this synergy be reported? As an overall adjustment, outside of the line results? Via a pro-rata allocation to the individual lines?

The issue of risk margins and value-additivity centers around discussions of whether markets compensate for diversifiable risk. Diversifiable risk is generally not additive. For example, the relative risk or uncertainty in insuring 2,000 homes across the country is generally less than twice the relative uncertainty from insuring 1,000 homes across the country.

It is not clear whether value-additivity should or should not exist for risk margins in a fair value system. A key question in the debate is the role of transaction costs, i.e., the costs of managing and/or diversifying risk, and how the market recognizes those costs in its quantification of risk margins.

The task force has not taken a final position on this issue. Instead it has flagged the issue wherever it has been a factor in the discussion.

10. Susceptibility to actuarial estimation

We have found nothing in the estimation of fair value that is beyond the abilities of the actuarial profession. We have also found existing models that can be used in the endeavor. This is not to say that the initial results of such actuarial estimation would be problem-free. Problems would undoubtedly occur during any initial implementation, and new techniques and concepts would have to be learned. In short, if fair value accounting rules were implemented for insurance liabilities, actuaries would be capable of producing such fair value estimates, with improvement to be expected over time in both the breadth of estimation methods and actuarial expertise in applying these methods.

11. Increased reliance on subjective assumptions in financial statements

The implementation of fair value accounting for insurance liabilities would increase the number of assumptions underlying reported insurance liabilities. For example, fair value estimates would require assumptions about "market" risk margins and future yields not currently part of the typical property/casualty reserving process. This increased reliance on judgment has been cited by some as a disadvantage of a fair value accounting standard. The task force suspects however that any additional uncertainty caused these additional assumptions is likely to be second order compared to differences in the various company's expected value estimates (before application of risk margins and discounting).

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12. Historical comparisons - implementation issues, presentation issues

The implementation of fair value accounting would cause problems with the traditional ways of making historical comparisons, particularly for historic development triangles. One difficulty involves the possible need to restate history, to bring past values to a fair value basis. Should these restated values reflect perfect hindsight, or should some attempt be made to reflect the uncertainty (and estimation risk) that probably existed back then? (Any such restatement may have to consider restating several years of history, based on current reporting requirements.) Or should historic development data not be reported on a fair value basis, similar to current reporting requirements in the U.S. statutory statement, Schedule P, whereby undiscounted values are reported even if the held reserves are discounted?

13. Gross versus net provisions.

Under most accounting systems, both gross and net (of reinsurance) liabilities must be reported. Assuming that the net liabilities contain less risk than the gross liabilities, this would imply the cession of a risk provision. This could change the character of ceded liabilities, as they are currently reported and commonly interpreted.

14. Tax issues.

The change to fair value accounting may have tax implications, where the applicable tax laws rely on financial reporting impacted by the change. Of particular concern is the treatment of risk margins in fair value estimates, relative to tax laws. While risk margins are clearly part of market pricing realities, their acceptance by tax authorities and statutes may not be as clear. This should not be an issue for U.S. property casualty insurers, given the current U.S. tax code, but may have major implications in other jurisdictions.

15. Credit standing reflection in valuing liabilities.

The most contentious issue in the current fair value accounting proposals is whether or not the obligator's credit standing should be reflected in fair valuing its liabilities. Many feel that the existence of guaranty funds, the priority position of policyholders among other creditors in the event of insurer insolvency, and the need for insurers to be seen as solid in order to stay in business make this issue mostly immaterial. There are still strongly held concerns, for those situations where the adjustment may be material. Many feel that the impact of credit standing on liabilities should not be reflected independent on its impact on franchise value, and are concerned that some fair value proposals would fail in this regard. Rather than advocating a certain position, the task force has listed arguments on both sides of this issue.

16. Actuarial workload requirements

Fair value accounting may require reserving actuaries to monitor many more variables than they currently monitor. New items for the reserving actuary to track the impact of may include yield curves, market risk premiums, asset betas, and credit standing. The calculation of the fair value for unexpired in-force policy liabilities may noticeably increase the actuarial workload, relative to the unearned premium and premium deficiency liabilities that they replace. Fair value accounting may also require more frequent "fresh start" updates of estimates than traditional accounting, at least to reflect changing market interest rates.

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17. Professional Readiness

Given no established practice in this area to-date, some education effort will probably be required. Professional readiness may also not be determinable until general understanding of the issue increases.

18. Standards versus principles

There is limited amount of practice in this area today. The task force believes that it would be appropriate to first develop general principles or a practice note, and defer development of official standards until practice has had a chance to develop.

The task force hopes this white paper will aid in the understanding of fair value accounting issues as applied to property/casualty insurance. We acknowledge that no one paper can include all that is known about a topic, especially one as new and emerging as this one. As such, we expect this to be only an initial step in the understanding of the issue.

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