ACTUARIAL STANDARDS BOARD

● EXPOSURE DRAFT ●

Proposed Revision of
Actuarial Standard of
Practice No. 20

Discounting of Property/Casualty Unpaid Claim Estimates

Comment Deadline
May 1, 2011

Developed by the
Casualty Committee of the
Actuarial Standards Board

Approved for Exposure by the
Actuarial Standards Board
December 2010

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<u>EXPOSURE DRAFT—December 2010</u>

December 2010

TO: Members of Actuarial Organizations Governed by the Standards of the Actuarial Standards Board and Other Persons Interested in Discounting of Property/Casualty Unpaid Claim Estimates

FROM: Actuarial Standards Board (ASB)

SUBJ: Proposed Revision of Actuarial Standard of Practice (ASOP) No. 20

This document is an exposure draft of a proposed revision of ASOP No. 20, now titled *Discounting of Property/Casualty Unpaid Claim Estimates*.

Please review this exposure draft and give the ASB the benefit of your comments and suggestions. Each written response and each response sent by e-mail to the address below will be acknowledged, and all responses will receive appropriate consideration by the drafting committee in preparing the final document for approval by the ASB.

The ASB accepts comments by either electronic or conventional mail. The preferred form is e-mail, as it eases the task of grouping comments by section. However, please feel free to use either form. If you wish to use e-mail, please send a message to **comments@actuary.org**. You may include your comments either in the body of the message or as an attachment prepared in any commonly used word processing format. **Please do not password protect any attachments**. Include the phrase "ASB COMMENTS" in the subject line of your message. Please note: Any message not containing this exact phrase in the subject line will be deleted by our system's spam filter.

If you wish to use conventional mail, please send comments to the following address:

ASOP No. 20 Revision
Actuarial Standards Board
1850 M Street, Suite 300
Washington, DC 20036

Deadline for receipt of responses in the ASB office: **May 1, 2011**

<u>Background</u>

ASOP No. 20 was adopted by the ASB in April 1992. The ASB decided that a revision of ASOP No. 20 was necessary to reflect current terminology and practice. This exposure draft was developed by the ASB Casualty Committee.

EXPOSURE DRAFT—December 2010

The title of this proposed revision of ASOP No. 20 has been changed to be consistent with the title of ASOP No. 43, *Property/Casualty Unpaid Claim Estimates*. The format of the standard has been revised to be consistent with the current format adopted by the ASB.

Key Changes

Many changes were made to the format and terminology used in this standard. Noteworthy changes to the content include the following:

- guidance regarding assumptions underlying the projected timing of future payments (section 3.3.1);
- discount rates requested by another party (section 3.4.1(c);
- guidance regarding ranges (section 3.5);
- guidance regarding the relevance of risk margins (section 3.6); and
- expanded guidance regarding communications and disclosures (section 4).

Request for Comments

The Casualty Committee and the ASB would appreciate comments on all areas of this proposed revision to ASOP No. 20 and, in particular, on the above key changes.

The ASB reviewed this draft at its December 2010 meeting and approved its exposure.

The ASB establishes and improves standards of actuarial practice. These ASOPs identify what the actuary should consider, document, and disclose when performing an actuarial assignment. The ASB's goal is to set standards for appropriate practice for the U.S.

PROPOSED REVISION OFACTUARIAL STANDARD OF PRACTICE NO. 20

DISCOUNTING OF PROPERTY/CASUALTY UNPAID CLAIM ESTIMATES

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date

1.1 Purpose— This actuarial standard of practice (ASOP) provides guidance to actuaries when performing professional services relating to discounting unpaid claims to present value for property/casualty coverages. Any reference to "unpaid claims" in this standard includes (unless explicitly stated otherwise) the associated unpaid claim adjustment expense even when not accompanied by the estimation of unpaid claims.

1.2 Scope—This standard addresses the discounting to present value of unpaid claim estimates for property/casualty coverages. In determining the undiscounted unpaid claim estimate, the actuary should be guided by ASOP No. 43, *Property/Casualty Unpaid Claim Estimates*.

This standard applies when performing professional services related to developing discounted unpaid claim estimates only for events that have already occurred or will have occurred, as of an accounting date, exclusive of estimates developed solely for ratemaking purposes. This standard applies when estimating discounted unpaid claims for all classes of entities, including self-insureds, insurance companies, reinsurers, and governmental entities. This standard applies to estimates of gross amounts before recoverables (such as deductibles, ceded reinsurance, and salvage and subrogation), estimates of amounts after such recoverables, and estimates of amounts of such recoverables.

This standard applies only with respect to discounted unpaid claim estimates that are communicated as an actuarial finding in an actuarial document (as described in ASOP No. 41, *Actuarial Communications*). Actions taken by the actuary's principal regarding such estimates are beyond the scope of this standard.

The terms "reserves" and "reserving" are sometimes used to refer to "unpaid claim estimates" and "unpaid claim estimate analysis." In this standard, the term "reserve" is limited to its strict definition as an amount booked in a financial statement. Services described above are covered by this standard, regardless of whether the actuary refers to the work performed as "reserving," "estimating unpaid claims" or any other term.

This standard does not address the appropriateness of using discounted unpaid claim estimates in specific contexts.

This standard does not apply to the estimation of items that may be a function of discounted unpaid claim estimates or claim outcomes, such as (but not limited to) loss-based taxes, contingent commissions and retrospectively rated premiums.

This standard does not apply to unpaid claims under a "health benefit plan" covered by ASOP No. 5, *Incurred Health and Disability Claims*, ASOP No. 6, *Measuring Retiree Group Benefit Obligations*, or included as "health and disability liabilities" under ASOP No. 42, *Determining Health and Disability Liabilities Other Than Liabilities for Incurred Claims*. However, this standard does apply to health benefits associated with state or federal workers' compensation statutes and liability policies.

An actuary may develop a discounted unpaid claim estimate in the context of issuing a written statement of actuarial opinion regarding property/casualty loss and loss adjustment expense reserves. In such context, the actuary should be guided by ASOP No. 36, *Statements of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves*, to address additional considerations associated with the issuance of such a statement.

If the actuary departs from the guidance set forth in this standard in order to comply with applicable law (statutes, regulations, and other legally binding authority) or for any other reason the actuary deems appropriate, the actuary should refer to section 4.

1.3 Cross References—When this standard refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate.

1.4 Effective Date—This standard will be effective for any actuarial work product covered by this standard's scope issued on or after four months after adoption by the Actuarial Standards Board (ASB).

Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice.

2.1 Book Value—The value of an asset or assets, as included in a financial statement or other financial reporting context.

2.2 Credit Risk—Risk associated with the possibility of a loss on an investment arising from a borrower who does not make payments as promised.

2.3 Discounted Unpaid Claim Estimate—The actuary's estimate of the present value of the unpaid claim estimate.

2.4 Investment Risk—Uncertainty surrounding the realization of a specified investment income stream. Elements of investment risk include credit risk and liquidity risk.

2.5 Liquidity Risk—The risk stemming from limited marketability of an investment.

2.6 Present Value—The value on a given date of a future payment or series of future payments, discounted to reflect the time value of money.

2.7 Risk-Free Interest Rate—The theoretical rate of return of an investment with zero risk with respect to payment timing and amount.

2.8 Risk Margin—A provision for uncertainty in an unpaid claim estimate.

2.9 Unpaid Claim Estimate—The actuary's estimate of the obligation for future payment resulting from claims due to past events. For clarity and unless otherwise indicated, this estimate is on an undiscounted basis and the terms "unpaid claim estimate" and "undiscounted unpaid claim estimate" are used interchangeably throughout this standard.

Section 3. Analysis of Issues and Recommended Practices

3.1 Appropriateness in Context—The actuary should be aware of the context in which the discounted unpaid claim estimate is to be used. The actuary should use a methodology and assumptions in the discounting process that are appropriate for that context.

3.2 Relative Significance of Assumptions—If both an undiscounted unpaid claim estimate and a discounted unpaid claim estimate are determined, the actuary should be aware of the differences in the relative significance of various assumptions between undiscounted and discounted unpaid claim estimates. For example, a development factor at an advanced maturity (such as, a "tail factor") is less significant to a discounted unpaid claim estimate than to an undiscounted unpaid claim estimate. Conversely, a change in the timing of loss payments may be more significant to a discounted unpaid claim estimate.

3.3 Payment Timing for Discounting—The actuary should project the timing of future payments in order to derive a discounted unpaid claim estimate. A range of estimates for the timing of payments may be reasonable.

3.3.1 Assumptions—The actuary should consider the reasonableness of the assumptions underlying the projected timing of future payments. Assumptions generally involve significant professional judgment. Assumptions may be implicit or explicit, and may involve interpreting past data or projecting future trends. The actuary should use assumptions that, in the actuary's professional judgment, have no known significant bias to underestimation or overestimation of the identified intended measure and are not internally inconsistent.

The actuary should consider the sensitivity of the timing of future payments to reasonable alternative assumptions. (See section 4.1(f) for related disclosure requirements.)

The actuary may provide the principal with results based on a set of assumptions that differ from the actuary's assumptions, subject to appropriate disclosure as described in section 4.1.

3.3.2 Reconciliation of Estimates—The cumulative amount of payments used by the actuary for discounting should be consistent with the amount of the unpaid claim estimate, even if the latter has not been derived by techniques based on payment data.

3.3.3 Consistency of Assumptions—The actuary should use assumptions in estimating the timing of payments that are consistent with the assumptions used in developing the undiscounted unpaid claim estimate to the extent appropriate.

3.3.4 Consistency with Expected Future Conditions—The actuary should determine estimates of the timing of payments that are consistent with conditions expected to prevail during the future payment period. If such conditions are expected to be different from those prevailing during the historical evaluation period, the actuary should make appropriate adjustments.

3.3.5 Data—The actuary should refer to ASOP No. 23, *Data Quality*, with respect to selection of data to be used, relying on data supplied by others, reviewing data, and using data.

3.3.6 Recoverables—The actuary should consider to the extent appropriate the timing and amount of expected recoverables (for example, deductibles, ceded reinsurance, and salvage and subrogation) when projecting the timing of future payments.

3.3.7 Unpaid Claim Components—The actuary should consider whether such components that have a material effect on the timing and amount of future payments have been reflected appropriately when projected future payments are comprised of multiple components (for example, line of business, accident year, claim adjustment expense).

3.4 Discount Rates—Projected future payments are discounted to present value using discount rate assumptions.

3.4.1 Discount Rate Basis—Discounted unpaid claim estimates may be used in a variety of contexts and the appropriate selected discount rates are a function of the context. A range of discount rates may be reasonable. The selected discount rates may be based on the following approaches:

a. Risk-Free Approach—The selected discount rates in this approach approximate risk-free interest rates. Risk-free interest rates can be approximated by rates of investment return available on fixed income assets having low investment risk and timing characteristics comparable to those assumed in the discounting of unpaid claim estimates.

b. Portfolio Approach—The selected discount rates in this approach are based on the anticipated return from a selected portfolio of assets. The actuary should consider to the extent appropriate the relationships between the book and market values of assets, between the anticipated portfolio rates of return and market rates of return, and between the maturities of the assets and the estimated timing of future payments on unpaid claims. The portfolio rates of return should be net of investment expenses.

c. Discount Rates Requested by Another Party—It is generally expected that the actuary is responsible for the discount rates employed in preparing the actuarial findings. The actuary should be guided by section 3.4.4 of ASOP No. 41, *Actuarial Communications*, when using discount rates requested by another party.

3.4.2 Effect of Income Taxes—The actuary should consider whether the discount rates should be consistent with investment returns before or after the payment of income taxes.

3.5 Ranges—The actuary should consider the uncertainty in the discounted unpaid claim estimate when determining a range. The actuary should recognize that the uncertainty inherent in discounted unpaid claim estimates generally is different than the uncertainty inherent in undiscounted unpaid claim estimates.

3.6 Risk Margins—The actuary should be aware of the relationship between discounting unpaid claim estimates and risk margins. Discounting an unpaid claim estimate diminishes the margin in an undiscounted unpaid claim estimate. The actuary should consider whether an explicit risk margin is appropriate.

Section 4. Communications and Disclosures

4.1 Actuarial Communication—When issuing an actuarial communication subject to this standard, the actuary should consider the intended purpose or use of the discounted unpaid claim estimate and refer to ASOP Nos. 23 and 41 for additional guidance on disclosure.

In addition, consistent with the intended purpose or use, the actuary should disclose the following in an appropriate actuarial communication:

a. the assumptions as to selected discount rates and the basis for those assumptions, including the effect of income taxes, as described in section 3.4;

b. to the extent practical, the difference between the undiscounted unpaid claim estimate and the discounted unpaid claim estimate;

c. whether the discounted unpaid claim estimate includes a risk margin, and if so, the basis for the risk margin (for example, stated percentile of distribution or stated percentage load above expected);

d. significant limitations, if any, that constrained the actuary's discounted unpaid claim estimate analysis such that, in the actuary's professional judgment, there is a significant risk that a more in-depth analysis would produce a materially different result;

e. the following dates: (1) the accounting date of the discounted unpaid claim estimate, which is the date used to separate paid versus unpaid claim amounts; (2) the valuation date of the discounted unpaid claim estimate, which is the date through which transactions are included in the data used in the discounted unpaid claim estimate analysis; and (3) the review date of the discounted unpaid claim estimate, which is the cutoff date for including information known to the actuary in the discounted unpaid claim estimate analysis, if appropriate.

f. specific significant risks and uncertainties, if any, with regard to actual timing of future payments; and

g. significant events, assumptions, or reliances, if any, underlying the discounted unpaid claim estimate that, in the actuary's professional judgment, have a material effect on the discounted unpaid claim estimate, including assumptions regarding the accounting basis or application of an accounting rule;

h. the disclosure in ASOP No. 41, section 4.2, if any material assumption or method was prescribed by applicable law (statutes, regulations, and other legally binding authority);

i. the disclosure in ASOP No. 41, section 4.3, if the actuary states reliance on other sources and thereby disclaims responsibility for any material assumption or method selected by a party other than the actuary; and

j. the disclosure in ASOP No. 41, section 4.4, if, in the actuary's professional judgment, the actuary otherwise deviated materially from the guidance of this ASOP.

4.2 Additional Disclosures—In certain cases, consistent with the intended purpose or use, the actuary may need to make the following disclosures in addition to those in section 4.1:

a. When the actuary specifies a range of estimates, the actuary should disclose the basis of the range provided.

b. When the unpaid claim estimate is an update of a previous estimate, the actuary should disclose changes in assumptions, procedures, methods or models that the actuary believes to have a material impact on the discounted unpaid claim estimate and the reasons for such changes to the extent known by the actuary. This standard does not require the actuary to measure or quantify the impact of such changes.

Appendix

Background and Current Practices

Note: This appendix is provided for informational purposes, but is not part of the standard of practice.

Background

In 1992, the ASB issued ASOP No. 20, *Discounting of Property and Casualty Loss and Loss Adjustment Expense Reserves*. Prior to that, there was no standard of practice concerning discounting of property and casualty loss and loss adjustment expense reserves. Since the issuance of ASOP No. 20, the ASB has issued ASOP No. 36, *Statements of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves* and, ASOP No. 43, *Property/Casualty Unpaid Claim Estimates*. This revision provides more consistency with the language in these two ASOPs, and is more relevant now with the increased use of discounting related to fair value calculations.

The appropriateness of discounting unpaid claim estimates in various financial reporting contexts is a controversial topic. Traditionally, property and casualty unpaid claim estimates have not been discounted except in certain narrowly defined circumstances. However, the issue of discounting reserves has been discussed for many years. For example, the issue appeared in the 1927 *Proceedings of the Casualty Actuarial Society,* in an article by Benedict D. Flynn. In 1986, the U.S. Congress passed legislation prescribing discounting procedures for income-tax purposes. In the past, most state insurance departments prohibited discounting; some departments have permitted discounting for some lines of business. The National Association of Insurance Commissioners has consistently been opposed to discounting except in certain specific circumstances. The accounting profession is studying the issue as it relates to financial reporting.

Historically, the issue of reserve discounting has been closely related to the issue of risk margins. Undiscounted reserves are often considered to contain a needed implicit risk margin in the difference between undiscounted reserves and discounted reserves. If discounted reserves were incorporated into financial statements, many would argue that an explicit risk margin would become necessary. Suggestions for the treatment of that risk margin include treatment as a liability item, a segregated surplus item, or an off-balance-sheet item.

The discounting of unpaid claim estimates and risk margins are both important elements in estimating the fair value of unpaid claim estimates, yet neither is explicitly included in most current financial reporting. Much of the rationale for unpaid claim estimate discounting is related to the issue of fair value; however, some believe that discounted unpaid claim estimates without risk margin may be a poorer estimate of fair value than undiscounted unpaid claim estimates.

Unpaid claim estimate discounting calculations are commonly performed in conjunction with valuations of insurance companies for purposes such as acquisition or merger, or with transfers of portfolios or unpaid claims. In these instances and for other reasons, there are increasing numbers of circumstances where actuaries are asked to determine or evaluate discounted unpaid claim estimates.

Current Practices

Actuaries are currently guided by the existing ASOP No. 20. Other ASOPs issued by the Actuarial Standards Board pertaining to discounting of unpaid loss and loss adjustment expense estimates include ASOP No. 23, *Data Quality*; ASOP No. 36, ASOP No. 41, *Actuarial Communications*, and ASOP No. 43. In addition, disclosures related to discounting are required by the National Association of Insurance Commissioners, and guidance may be forthcoming as part of new International Financial Reporting Standards that are currently under development.

Numerous educational papers are in the public domain that are relevant to the topic of discounting and risk loads, including those published by the Casualty Actuarial Society. While these may provide useful educational guidance to practicing actuaries, these are not actuarial standards and are not binding.