

Final

**Final Standards – Practice-Specific
Standards for Insurers (P&C Insurance) –
Subsection 2250 Margin for Adverse
Deviations**

Actuarial Standards Board

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2240 PRESENT VALUES

- .01 The expected investment return rate for calculation of the present value of cash flow is that to be earned on the assets which support the policy liabilities. It depends on
- the method of valuing assets and reporting investment income,
 - the allocation of those assets and that income among lines of business,
 - the return on the assets at the balance sheet date,
 - the yield on assets acquired after the balance sheet date,
 - the capital gains and losses on assets sold after the balance sheet date, and
 - investment expenses, and losses from default (C-1 risk).
- .02 The actuary need not verify the existence and ownership of the assets at the balance sheet date, but would consider their quality.

2250 MARGIN FOR ADVERSE DEVIATIONS - GENERAL

- .01 *The criteria for selection of the margin for adverse deviations for an assumption are the considerations for that assumption. The selected margin for adverse deviations used in the valuation of policy liabilities should tend toward a higher margin for adverse deviations to the extent that the considerations for that assumption, viewed in the aggregate but considering their individual relative importance,*
- have been unstable during the period covered by the experience data on which the selection of the corresponding expected assumption is based and the effect of that instability cannot be quantified, or*
 - otherwise undermine confidence in the selection of the corresponding expected assumption,*
- and should tend toward a lower margin for adverse deviations to the extent that the opposite is the case.*
- 1740.39
- .02 *The selected margin for adverse deviations should vary*
- between premium liabilities and claim liabilities,*
 - among lines of business, and*
 - among accident years, policy years, or underwriting years, as the case may be,*
- according to how those considerations so vary. [Effective December 31, 2009]*
- [2250.10](#)

Assumptions subject to a margin for adverse deviations

- .03 The actuary would include a margin for adverse deviations in the assumptions for claims development, recovery from reinsurance ceded, and investment return rates.

Expression of a margin for adverse deviations

- .04 The margin for adverse deviations for claims development would be a percentage of the claim liabilities excluding provision for adverse deviations.
- .05 The margin for adverse deviations for recovery from reinsurance ceded would be a percentage of the amount deducted on account of reinsurance ceded in calculating the premium liabilities or claim liabilities, as the case may be, excluding provision for adverse deviations.
- .06 The margin for adverse deviations for investment return rate would be a deduction from the expected investment return rate per year.
- .07 The actuary would not usually include a margin for adverse deviations in the other assumptions. An example of an unusual circumstances that warrants an exception is a salvage and subrogation assumption when presented as an asset separate from the claim liabilities.

Considerations

- .08 The actuary would select and evaluate considerations for each assumption that are appropriate to the circumstances of the insurer, including insurer practices, for example, the guidelines for setting and reviewing case estimates, data, for example, the stability of claims frequency and average claim cost, reinsurance, for example, the history of claim and coverage disputes with reinsurers, investments, for example, the matching of assets and liabilities and risk of asset default, and the external environment, for example, the effect of regulatory change on claim settlements.

.09 A consideration for an assumption generates a lack of confidence in that assumption as a result of past or future instability of the consideration or a shortcoming in its quality, quantity, or performance. Significant considerations indicating difficulties in properly estimating the best estimate assumption would include

instability in the guidelines for setting and reviewing case estimates possibly resulting in inconsistent development among accident years,

the credibility of the company's experience being too low to be the primary source of data,

future experience being difficult to estimate,

lack of homogeneity in the cohort of risks,

operational risks adversely affecting the likelihood of obtaining the best estimate assumption,

past experience not being representative of the future experience and the experience possibly deteriorating, or

the derivation of the best estimate assumption being unrefined.

Other significant considerations may exist, but would be tied to specific assumptions.

2260 MARGIN FOR ADVERSE DEVIATIONS - DETERMINISTIC ANALYSIS

.01 *The actuary should select a margin for adverse deviations for an assumption that is at least as much as the amount defined by the low margin for adverse deviations and is not excessive.*
[Effective December 31, 2009]

.02 The range of margin for adverse deviations would be,

	<u>High</u>	<u>Low</u>
claims <u>development</u>	20%	2.5%
recovery from reinsurance ceded	15%	0
investment return rates	200 basis points	25 basis points

.03 Usually, a selection above this high margin for adverse deviations would be considered excessive.

.04 A selection above this high margin for adverse deviations would be appropriate, however, for unusually high uncertainty or when the resulting provision for adverse deviations is unreasonably low because the margin for adverse deviations is expressed as a percentage and the best estimate is unusually low.

2270 MARGIN FOR ADVERSE DEVIATIONS - STOCHASTIC ANALYSIS

- .01 *The margin for adverse deviations selected based on stochastic techniques should not be less than the low margin for adverse deviations set out in paragraph 2260.02 and should not be excessive. [Effective December 31, 2009]*
- .02 It is expected that margins for adverse deviations obtained using stochastic techniques would generally be consistent with the range provided in paragraph 2260.02.
- .03 In addition to the circumstances described in paragraph 2260.04, a selection above the high margin for adverse deviations set out in paragraph 2260.02 may be appropriate when stochastic modeling indicates variability in estimates of policy liabilities that may not be identified using deterministic analysis.