Atypical Circumstances in Statements of Actuarial Opinion on P&C Loss Reserves: Professional Considerations and Sample Wordings

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While the majority of statements of actuarial opinion regarding loss reserves are relatively straightforward, occasionally the actuary is confronted with atypical situations. These situations may include financially distressed or insolvent companies, ceded reinsurance collectibility issues, significant influence of a small group of claims, items requiring the disclosure of a significant risk of material adverse deviation, exceptional values on IRIS tests, and other unusual circumstances. The paper discusses the professional considerations and judgments applicable to such situations, and provides sample wordings.

1. Introduction

> *"When I use a word," Humpty Dumpty said in a rather scornful tone, "it means just what I choose it to mean - neither more nor less." -- Lewis Carroll -- Through The Looking Glass*

Statements of actuarial opinion regarding loss reserves are an important manifestation of actuarial work. They present actuarial conclusions regarding what is often the most significant balance sheet item of property/casualty insurers in a concise manner while also conveying to the reader information needed to understand those conclusions.

The majority of loss reserve opinions are relatively straightforward; reserves are reasonable and there are no unusual features. The content of such opinions generally reflects boilerplate language as well as disclosure of specific details related to the company. For statutory opinions in the United States, such language is contained in the Annual Statement Instructions promulgated by the National Association of Insurance Commissioners (NAIC) and the *Property and Casualty Practice Note, Statements of Actuarial Opinion on P&C Reserves* (the Practice Note), published annually by the American Academy of Actuaries.

The discussion and analysis contained here is directed primarily towards statements of opinion required to be attached to the financial statements issued by property/casualty insurers in the United States (referred to here as US statutory opinions), and reflect the statutory requirements for year-end 2003. However, in many cases, the underlying professional considerations are applicable to other forms of opinion as well.

The sample wordings presented here are what we believe to be reasonable interpretations of the application of actuarial standards and practices to the special situations included. There are certainly other wordings and approaches that would also be reasonable. The actual approach to any specific situation is the responsibility of the actuary issuing the statement of opinion.

In addition, we have not tried to replicate the detailed guidance included in the Practice Note. While the Practice Note provides guidance in all segments of the US statutory opinion, we focus on the key considerations and wordings for unusual situations that occasionally arise.

2. Relevant Actuarial Standards of Practice and Principles

There are several regulations, standards of practice, and actuarial principles affecting the issuance of statements of actuarial opinion. Most relevant are the following:

- Property and Casualty Annual Statement Instructions issued by the National Association of Insurance Commissioners (NAIC), especially those sections related to the US statutory statement of actuarial opinion.

- Actuarial Standard of Practice No. 36 (ASOP No. 36) – *Statements of Actuarial Opinion Regarding Property/Casualty Loss and Loss Adjustment Expense Reserves*, adopted by the Actuarial Standards Board (ASB), effective for all statements of actuarial opinions on loss reserves evaluated on or after October 15, 2000.

- ASOP No. 9 – *Documentation and Disclosure in Property and Casualty Insurance Ratemaking, Loss Reserving and Valuations*. ASOP No. 9 became effective July 14, 1989 for documentation and disclosure of loss reserving analyses. ASOP No. 9 includes the *Statement of Principles Regarding Property and Casualty Loss and Loss Adjustment Expense Reserves.*

- ASOP No, 20 - *Discounting of Property and Casualty Loss and Loss Adjustment Expense Reserves*, adopted by the ASB, April 1992.

- *Code of Professional Conduct.*

While all of these (and other) ASOPs and statements of principles and actuarial precepts are important and relevant to the preparation of statements of actuarial opinion, ASOP No. 36 provides the most guidance. ASOP No. 36 provides professional guidance regarding the loss reserve analysis, uncertainty, discussion of the range of reasonable estimates, and other issues. It includes at a somewhat summarized level all of the issues covered in greater detail by the other relevant ASOPs.

A requirement of ASOP No. 36 that affects all statements of actuarial opinion to some degree is the need for the actuary to disclose if there are circumstances that would create a significant risk of material adverse deviation in the reserves. This is an important feature for atypical opinions.

3. Key Considerations

There are several key considerations that we believe guide the evaluation of issues falling within the scope of the statement of opinion. These include the following.

- **Purpose of the statement of opinion** – We believe the primary intent of U. S. statutory opinions is to assist regulators in monitoring the solvency of property/casualty insurers. It focuses primarily on the loss and loss adjustment expense reserves contained in the insurer's statutory financial statements, and it is intended to inform the reader – usually the relevant insurance regulatory authorities – regarding the reasonableness of the insurer's carried loss reserves, and the risk factors affecting the reserves of the individual carrier.

- **Knowledgeable User** - It is reasonable to assume that the user of the statement of opinion has a high degree of knowledge regarding the relevant underlying concepts, as well as some knowledge of the insurer.

- **No Guarantee** - It is important to recognize that the opinion is not intended to provide a guarantee that the loss reserves will prove to be adequate and not redundant, nor that the insurer is or will remain financially solvent.

- **Materiality** - We believe items covered by the statement of opinion (e.g., reinsurance collectibility issues, risk factors) are material if they would be reasonably expected to have an effect on the readers conclusions related to the purpose of the opinion. Consequently, given the purpose of the US statutory opinion of solvency monitoring noted above, we believe that an item is material if its eventual disposition is likely to have a significant effect on the insurer's solvency. For comparison, a statement of opinion intended for use in GAAP financial statements may also have purposes related to the income statement. Materiality for such an opinion may be related to net income rather than or in addition to solvency.

- **Focus on Loss Reserves** - The opinion is focused on the reasonableness of loss reserves, and related risk factors. It is not an opinion on the financial condition of the company. It is possible for a financially troubled company to have reasonable reserves.

These considerations imply that the actuary is required to perform at least some level of financial analysis in rendering the opinion. It may not be possible to be concerned only with the loss reserves without regard to other balance sheet and possibly income statement items. For all opinions, and particularly for atypical circumstances, it is important to understand the level of financial analysis required.

We believe a reasonable benchmark for the level of financial analysis is for the actuary to be aware of the income statement and balance sheet, but not necessarily of items that are only contained on the underlying schedules. Under this guide, the actuary should recognize a probable liquidity issue for a company whose assets are all in real estate (which is shown on the balance sheet), but not for a company whose assets are all in long term bonds (which requires a review of Schedule D).

4. Reasonable Reserves

This paper uses the definition of the term "reasonable reserves" as contained in ASOP No. 36; reserves that fall within "... a range of estimates that could be produced by appropriate actuarial methods or alternative sets of assumptions that the actuary judges to be reasonable."

This definition of reasonable relates solely to the actuarial estimate of reserves. In certain of the situations discussed below, one may believe that "adequate," "proper," or "prudent" reserves should exceed a reasonable amount as defined. However, "adequate" would allow a redundant reserve, and has an implication of a guarantee. The terms "proper" and "prudent" seem to go beyond the actuarial calculations to include that the reserve is somehow appropriate to the circumstances of the company. Neither ASOP No. 36 nor the annual statement instructions use these words; they use reasonable.

By using the definition of ASOP No. 36, we are implicitly relegating the additional provision over a reasonable reserve that the other terms imply to another balance sheet item such as a reinsurance bad debt reserve or capital or surplus. When such unusual features exist that make the actuary believe that greater conservatism is required, and the additional amounts are material to the balance sheet or required surplus, disclosures are required. This can be summarized as what is perhaps the key point of this paper:

Reserves can be reasonable, even if the viability of the company is uncertain or even doubtful; this situation, however, requires certain disclosures.

5. Atypical Situations

Many statements of actuarial opinion are prepared for companies with relatively strong reinsurance protection, relatively strong surplus positions, and few or no unusual risk factors. In such cases, the actuarial opinion generally contains the required scope section, required disclosures and the opinion section.

In many cases, however, the statement of opinion applies to less secure situations. This section provides analysis and discussion of several such scenarios, and provides possible wordings to handle them.

5.1. Financially Weak or Insolvent Company

The situation where the insurance company is financially weak or even insolvent poses an unusual challenge to the actuary providing the statement of actuarial opinion. In such cases, it is possible that the carried loss reserves are reasonable, or even conservative, yet the company's surplus is low or negative. Given the use of the statement of actuarial opinion as an important tool in the monitoring of solvency, this situation requires special wording and discussion in the statement of actuarial opinion.

Financially weak is a difficult concept to define in a precise quantifiable manner. One manifestation would be surplus below the Risk Based Capital ("RBC") Authorized Control Level (ACL). For this paper we define insolvency as negative surplus. There are several different situations, including the following:

- Surplus is negative or below RBC action level based on the carried reserve.
- Surplus is positive or above RBC action level based on carried reserves, but there are points in the range of reasonable estimates that cause surplus to cross the boundary.

In addition to disclosing the insolvency or whether reasonably expected reserve fluctuations might cause the company's surplus to fall below certain levels, the actuary may consider whether the company's situation could affect the reserve indications. Since typical reserve formulations implicitly assume an ongoing company, it is relevant to consider whether any change in the operation of the company due to regulatory control, rehabilitation or liquidation may cause changes to the key parameters implicitly underlying the loss reserve analysis. Claim frequency, severity, payment patterns, case reserving, and other key factors will likely be different under such scenarios. However, unless the specifics of the change are known, the effects may not be measurable.

As noted above, in each of these situations reserves may be reasonable in that they are the result of appropriate methods and assumptions applied to the available information. The sample wordings that follow assume that the actuary judges the reserves to be reasonable. However, the statement of opinion requires more that an assertion that reserves are reasonable. These suggested wordings are examples of ways that the actuary can inform the reader of the consequences of the reserve and its inherent uncertainty.

In the situation where the company is insolvent based on carried reserves, we believe that the fact of the insolvency must be disclosed. The reader's understanding of the company's financial condition is enhanced by the actuary's statement that the reserves are the result of reasonable methods and assumptions, and the actuary may also wish to disclose whether the reserve analysis reflected the possible effects caused by the insolvency. However, opining that the reserves make a reasonable provision is likely to be insufficient discussion when there aren't enough assets to go around. In such cases, whether the reserves of an insolvent company meet the requirements of insurance law seems more a legal (or perhaps a philosophical) question. For these reasons we would suggest that the actuary consider including a discussion of the company's position as a risk factor, and we would modify the Opinion section as follows.

> ***Example 5.1.1*** *– The Company's carried reserves are within a reasonable range, however recorded surplus is below zero. The financial condition of the Company creates an additional risk factor. My analysis of reserves implicitly assumes the Company is viable. If it is not viable (e.g., due to developments such as regulatory actions, inability to meet claim payments, etc.), reserves may be affected in ways that cannot be quantified at this time. Therefore I believe that there are significant risks and uncertainties that could result in material adverse deviation in the loss and loss adjustment expense reserves.*

The Opinion section may contain wording such as the following.

> *Given that the Company's surplus is below zero, I believe that the reserves may be affected in ways that cannot be quantified at this time. Therefore I cannot express an opinion on the carried loss and loss adjustment expense reserves.*
>
> *Were it not for the financial condition of the Company, the amounts carried in the Scope paragraph on account of the items identified:*
>
> *a) would meet the requirements of the insurance laws of [state];*

b) would be consistent with amounts computed in accordance with accepted loss reserving standards and principles; and

c) would make a reasonable provision for all unpaid loss and loss expense obligations of the Company under the terms of its contracts and agreements.

Note that this language informs the reader of both the financial condition of the company and the specifics of the actuary's view on the reserves.

The situation where points within the actuary's range of reasonable reserve estimates would cause surplus to be negative clearly requires disclosure of a significant risk of material adverse deviation per ASOP No.36. It may also affect the Opinion section. Possible wording in this situation is as follows.

> ***Example 5.1.2*** *- The Company's carried reserves are within a reasonable range, however other points within the range would cause surplus to be below zero. Therefore I believe that there are significant risks and uncertainties that could result in material adverse deviation in the loss and loss adjustment expense reserves, possibly by amounts exceeding surplus.*
>
> *The financial condition of the Company creates an additional risk factor. My analysis of reserves implicitly assumes the Company is viable. If it is not viable (e.g., due to developments such as regulatory actions, inability to meet claim payments, etc.), reserves may be affected in ways that cannot be quantified at this time.*

The actuary may also change the Opinion section as follows.

> *Because of the uncertainties noted above I cannot express an opinion on the carried loss and loss adjustment expense reserves.*
>
> *Were it not for the financial condition of the Company, the amounts carried in the Scope paragraph on account of the items identified:*
>
> *a) would meet the requirements of the insurance laws of [state];*
>
> *b) would be consistent with amounts computed in accordance with accepted loss reserving standards and principles; and*
>
> *c) would make a reasonable provision for all unpaid loss and loss expense obligations of the Company under the terms of its contracts and agreements.*

Similar risk factor language would be appropriate when the reserve movement would cause surplus to remain positive, but cross a Risk Based Capital threshold.

> ***Example 5.1.3*** *- The Company's carried reserves are within a reasonable range, however other points within the range would cause surplus to be below the Risk Based Capital Authorized Control Level. Therefore I believe that there are significant risks and uncertainties that could result in*

material adverse deviation in the loss and loss adjustment expense reserves.

The financial condition of the Company creates an additional risk factor. My analysis of reserves implicitly assumes the Company is viable. If it is not viable (e.g., due to developments such as regulatory actions, inability to meet claim payments, etc.), reserves may be affected in ways that cannot be quantified at this time.

Strictly speaking, ASOP No.36 requires that the actuary disclose the amount of adverse deviation considered to be material. In the cases of weak or insolvent insurers, we believe that the materiality threshold is implicit in the above.

The language dealing with insolvency and the changes in the Opinion section are possibly not needed when the only issue is RBC triggers.

5.2. Reserve leverage

When reserves are large in relation to surplus, reasonably expected variations in actual results may have a material impact on surplus. In such cases, disclosures may be appropriate even if financial viability is not threatened. The following wording may be considered.

Example 5.2.1 *- The Company's reserves are large in relation to surplus. As a result, reasonably expected fluctuations of actual versus expected results may be material to surplus. Consequently, I believe that there are significant risks and uncertainties that could result in material adverse deviation in the loss and loss adjustment expense reserves. In consideration of the use of this opinion for purposes of solvency monitoring, I consider X% of surplus to be material for this Company.*

When appropriate, the phrase *possibly by amounts exceeding surplus, or by amounts that would cause surplus to fall below an RBC trigger* may be added and language similar to Section 5.1 should be considered.

5.3. Reinsurance Collectibility Concerns

The NAIC Instructions require that the statement of actuarial opinion include comment on topics affecting loss reserves, including reinsurance collectibility. In most cases, the comment on reinsurance collectibility cites the portion of the ceded loss reserves that is with reinsurers rated highly or secured by other means. Occasionally, however, the actuary determines that a material amount of the ceded reserves is with troubled reinsurers, or are uncertain to be collected. In such cases, the statement of actuarial opinion should include additional discussion.

The two important considerations in dealing with ceded reinsurance collection concerns are the definition of reasonable and the fact that the opinion is rendered in the context of insurance law and accounting requirements. Reasonable reserves are defined as the result of appropriate methods and assumptions. Law and accounting rules govern balance sheet credit for ceded reinsurance. We believe that the fact that material amounts are ceded to a financially weak reinsurer does not make the net reserve not reasonable. To do so would require the actuary to consider unreasonable a reserve that law and regulation otherwise allow. This does not seem to be a reasonable place in which to put the actuary. The resolution of this possible conflict is disclosure.

In the case of a material amount of cessions to troubled reinsurer(s), the following collectibility wording may be considered.

> ***Example 5.3.1*** *- My opinion on the loss and loss adjustment expense reserves net of ceded reinsurance assumes that all ceded reinsurance is valid and collectible. Approximately X% of the Company's ceded loss and loss adjustment expense reserves are with companies having secure ratings by a reputable insurance rating agency.* ***The majority of the remaining cessions are to a financially-troubled reinsurer. Based on discussions with Company management, I have assumed that cessions to this reinsurer will be collectible.*** *Other cessions are not material. In addition, the Company has represented to me that it knows of no material uncollectible reinsurance cessions. I have not anticipated any contingent liabilities that could arise if the reinsurers do not meet their obligations to the Company as reflected in the data and other information provided to me.*

In this case where cessions to troubled reinsurer(s) are material, the actuary may consider adding this issue to the discussion of risk factors, as required by the Annual Statement Instructions. If the cessions to troubled reinsurer(s) are a high percentage of surplus, it is possible that the situation represents a material risk of significant adverse deviation as per ASOP No. 36. In that case, the following wording may be appropriate.

> ***Example 5.3.2*** *- As noted above, the Company cedes an amount of loss and loss adjustment expense reserves that is material to (or exceeds) its surplus to a troubled reinsurer. While the probability of failure to collect the full amount of the ceded reserves from this reinsurer is unknown, it is more than remote. Therefore I believe that there are significant risks and uncertainties that could result in material adverse deviation in the loss and loss adjustment expense reserves. In consideration of the use of this opinion for purposes of solvency monitoring, I consider X% of surplus to be material for this Company.*

Another scenario that may require additional comment by the opining actuary is where the company's interpretation of its ceded reinsurance coverage is in dispute with its reinsurers' interpretations. Disputed reinsurance amounts are disclosed in the Notes to Financial Statements in the US Statutory Annual Statement. If the dispute related to any particular issue is considered to be material, a comment such as the following may be appropriate.

> ***Example 5.3.3*** *– The Company has interpreted certain of its ceded reinsurance contracts in a manner that is currently disputed by the Company's reinsurers. If the Company does not prevail in its interpretation, net reserves can increase by approximately $X million.*

As noted above in Example 5.3.2, the actuary may also include this issue in the discussion of risk factors, and possibly include it as a material risk of significant adverse deviation, if appropriate.

Another situation is where net reserves are reasonable, but gross reserves are not. A separate opinion is required on each. When gross reserves are inadequate, the reader's understanding of the financial condition of the company is enhanced by further disclosure related to the potential collectibility of the shortfall. Possible wording for the Opinion section is a follows.

> ***Example 5.3.4*** *- In my opinion, the amounts carried in the Scope paragraph for the sum of items A, B, E and F:*
>
> *a) meet the requirements of the insurance laws of [state];*
>
> *b) are consistent with amounts computed in accordance with accepted loss reserving standards and principles; and*
>
> *c) make a reasonable provision for all unpaid loss and loss expense obligations of the Company under the terms of its contracts and agreements.*
>
> *Further, in my opinion, the amounts carried in the Scope paragraph for the sum of items C, D and F are inadequate. The amounts recorded are $X below my range of reasonable estimates. Because this amount is ceded to reinsurers with [A] or better ratings from a reputable insurance rating agency it is unlikely that this deficiency will have an effect on surplus.*

Of course, if the reinsurers' ratings are less secure, this wording regarding the gross reserves would need to be adjusted, as appropriate.

In addition to the above wording in the Opinion section, this situation may require further disclosures in the reinsurance collectibility section, since Annual Statement values imply ceded amounts below the actuary's estimate. Possible wording is as follows.

> *The ceded reserve amount reflected in the Annual Statement is below my range of reasonable estimates. Consequently, the cessions to one or more individual reinsurers are below my estimate. I assume that the additional amounts will be collectible.*

5.4. Exceptional Values on IRIS Tests

The NAIC Instructions require that statement of actuarial opinion include an explanation of any exceptional values produced for the reserve-related IRIS tests. These tests are:

- One Year Reserve Development to Surplus,
- Two Year Reserve Development to Surplus, and
- Estimated Current Reserve Deficiency to Policyholders Surplus.

It is important to remember that the one year and two year reserve development tests are based on a comparison of historical carried reserves (i.e., from the prior and next prior annual statements) to the current reserves. The implicit assumption underlying these tests is that the amount (percentage) of loss reserve development experienced over the last one and two years may be predictive of the amount of development that the current reserves will experience. If the test results exceed the prescribed tolerances (currently +/- 20%), an exceptional value is produced.

Assuming that the company's current carried reserves are considered to be reasonable, the explanation of the exceptional value(s) needs to focus on why the adverse development experienced by prior reserve levels is not predictive of the developments to be experienced on the current reserves. Possible explanatory paragraphs for several possible causes of an exceptional value on the one-year reserve development IRIS test are as follows. Note that similar language would apply to an adverse result on the two year development test.

Assuming that the exceptional value was related generally to adverse developments on prior years, the following language might be considered.

> ***Example 5.4.1a*** *- I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company shows an exceptional value for IRIS Test 10, One Year Reserve Development to Surplus. The exceptional value on Test 10 is due to significant adverse development during [the most recent calendar year] on prior years' reserves. The associated parameters in my analysis of the loss and loss adjustment expense reserves have been modified accordingly. Therefore, I do not believe that this test indicates a deficiency in the current reserves.*

If the cause of the adverse development can be attributed to a particular type of claim or situation, the following approach could be considered.

> ***Example 5.4.1b*** *- I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company shows an exceptional value for IRIS Test 10, One Year Reserve Development to Surplus. The exceptional value on Test 10 is due to significant adverse development during the most recent calendar year related to reserves for [asbestos, pollution, construction defect, reinsurance assumed] losses. The associated parameters in my analysis of the loss and loss adjustment expense reserves have been modified accordingly. Therefore, I do not believe that this test indicates a deficiency in the current reserves.*

Another possible scenario for an exceptional value on the development test would be changes in inter-company reinsurance arrangements whereby the Company's share of total pooled reserves for older years increases. Possible wording for this scenario is as follows.

> ***Example 5.4.1c*** *- I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company shows an exceptional value for IRIS Test 10, One Year Reserve Development to Surplus. The exceptional value on Test 10 is due to significant adverse development during the most recent calendar year resulting from changes to the Company's inter-company*

pooling (or reinsurance) arrangements. The changes caused a significant increase in prior year loss reserves that are the responsibility of the Company. Therefore, I do not believe that this test indicates a deficiency in the current reserves.

Similar language can be used for other common reasons for exceptional values on the reserve run-off tests such as the development of a single large claim and ceded reinsurance commutation. Exceptional values can also be produced when reserves are large in relation to surplus such that small adverse movements in reserve produce ratios exceeding the tolerance.

The explanation of an exceptional value for the Estimated Current Reserve Deficiency to Policyholders Surplus test is more involved. That test calculates the ratio of loss reserves to earned premium for each of the two prior annual statement evaluations. These ratios reflect the current carried reserves associated with the prior evaluation dates. The average of these two ratios is then applied to the current statement's earned premium to derive the implied needed current loss reserves. The difference between this implied needed reserve and the carried reserve is compared to current policyholders' surplus. If the result exceeds the prescribed tolerance (+/- 25%), an exceptional value is produced.

It is tempting to explain an exceptional value on this test by citing adverse development in the last two years. However, that explanation is usually not appropriate, since the test is based on the assumption that the current indication of the prior two year-end reserves, as a percentage of the prior years' premium, is indicative of what the current reserves to premium relationship should be. Consequently, the explanation needs to focus on reasons why the reserve to premium relationship from prior years is not an appropriate indication of what the current ratios should be. Reasons why the appropriate reserve to premium ratio might change over time include the following:

- Significant rate level activity in the recent year;
- Change in mix of business to significantly shorter or longer tailed lines of business;
- Change in inter-company pooling or reinsurance arrangements;
- Other.

Assuming that the result is due to significant rate activity, the following wording may be appropriate.

***Example 5.4.2a** – I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company produces an exceptional value for IRIS Test 12, Estimated Current Reserve Deficiency to Policyholders Surplus. This exceptional value is caused by the effect of the Company's premium growth in [the most recent calendar year] related to significant rate activity, and the long-tail nature of its business. Therefore, I do not believe that this test indicates a deficiency in the current reserves.*

Another reason why an exceptional value on this test may not be an accurate indication of the reasonableness of current reserves is an abrupt change in mix of business. If the company switched between long-tail and short-tail lines of business, the implied reserve to premium relationship would change, perhaps by enough to create the exceptional value. In this case, the following language could be included in the statement of actuarial opinion.

> ***Example 5.4.2b*** *– I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company produces an exceptional value for IRIS Test 12, Estimated Current Reserve Deficiency to Policyholders Surplus. The exceptional value for Test 12 is due to significant growth [in recent years] in shorter-tailed lines of business. Therefore, I do not believe that this test indicates a deficiency in the current reserves.*

If the exceptional value resulted from a significant change in the terms of inter-company pooling or reinsurance arrangements affecting the share of older years' reserves that are reflected in the company's reserves, the following wording might be appropriate.

> ***Example 5.4.2c*** *– I have reviewed the calculations of IRIS Test numbers 10, 11 and 12. The Company produces an exceptional value for IRIS Test 12, Estimated Current Reserve Deficiency to Policyholders Surplus. This exceptional value is caused by the effect of changes in the most recent year to the Company's inter-company pooling (or reinsurance) arrangements. The changes caused a significant (increase or decrease) in prior year loss reserves that are the responsibility of the Company. Therefore, I do not believe that this test indicates a deficiency in the current reserves.*

5.5. Unquantifiable Situation

It is possible at the time loss reserves are established, and the statement of actuarial opinion is prepared, that some material uncertainty exists due to lack of information or developing legal proceedings. It is possible that in such a case the ultimate loss will be either negligible or highly significant. In this instance, it might be appropriate in the statement of actuarial opinion to provide an explanation of the underlying situation. An example of a hypothetical scenario and possible opinion wording is as follows.

> ***Example 5.5.1*** *– Allegations of fraud and negligent care have recently been made against a specific insured. The Company is exposed to loss from existing coverage and guaranteed tail coverage. Because the underlying facts are still being developed, the ultimate liability under these coverages cannot be estimated at this time. However, because of the possibility that multiple policy limits will be exposed to loss, the ultimate liability could be material to the Company's surplus. Therefore, I believe that this situation represents a significant risk and uncertainty that could result in material adverse deviation. In consideration of the use of this opinion for purposes of solvency monitoring, I consider X% of surplus to be material for this Company.*

5.6. Change In Operations, Data Availability

Sometimes an insurer's operation changes so materially that there is no loss history or other basis on which to estimate loss reserves. The types of changes include changes to policy terms, changes in the lines of business or exposures written, and changes to operational units such as claims and underwriting. In these cases, the added uncertainty associated with these changes may require exceptional opinion wording, such as the following.

> ***Example 5.6.1*** *– The Company wrote liability coverages for commercial risks on both a direct and an assumed basis. Inherent in these coverages are risk factors that expose the Company's loss and loss adjustment expense reserves to variability. Besides the usual risk factors associated with these coverages, I have identified additional risk factors as the lack of detailed statistical information for some of the Company's segments of business, and recent changes in the claim handling and case reserving practices of the Company. The potential impact of these risk factors is unknown at this time. The absence of other risk factors from this listing does not imply that additional factors will not be identified in the future as having been a significant influence on the Company's reserves.*

5.7 Non-Tabular Discounting

Occasionally, insurers carry loss reserves reflecting non-tabular discounting. Both the NAIC Instructions and ASOP No. 36 require that the actuary comment in the statement of actuarial opinion on such discounting. Since the insurance laws of all states do not allow discounting, it is important that special permission to reflect non-tabular discounting be obtained by the insurer from the relevant insurance commissioner. The authority to use non-tabular discount is normally disclosed in the Notes to Financial Statements in the Statutory Annual Statement. The statement of actuarial opinions should also include reference to the reasons why such discounting is allowed.

The actuary's comment should also be guided by ASOP No. 20. Specifically, the comment should disclose the basis of the discounting (e.g., derivation of the payment pattern and interest rate assumptions). ASOP No. 20 also requires that the actuary disclose clearly if the interest rate is not included in the opinion. Possible wording incorporating these considerations is as follows.

> ***Example 5.7.1*** *- With the permission of the (state) Department of Insurance, the Company reflects in the details of write-ins section of the Liabilities, Surplus and Other Funds page a contra-liability for the discount related to its net loss and loss adjustment expense reserves based on an actuarially determined payment pattern and a Y% interest rate. I am not expressing an opinion on this rate. The amount of discount is $X.*

This disclosure should be tailored to the specific way in which the Company reflects the discount. The above assumes that a contra-liability is established. Other scenarios are possible. Also, if the actuary is opining on the interest rate, the penultimate sentence in the above paragraph should be omitted.

5.8. Significant Claim

There are situations where a single claim can be significant. Examples include a company in runoff for a long time, a company just beginning operations and company writing very low frequency/very high severity coverages. In each situation the emergence of a single claim can represent a large portion or even exceed the carried reserves. Actuarial techniques cannot predict a single claim.

For example, a company in runoff may have only $500,000 of reserve, but may have issued policies with $1 million limit. The $500,000 reserve is reasonable as it is based on appropriate methods and assumptions. However one unexpected policy limits claim would cause the reserve to be significantly inadequate. Disclosure of this potential should be considered in particular as it is reasonable to assume that the situation may affect the reader's view of surplus. In this situation, the following wording may be inserted.

> ***Example 5.8.1*** *– The Company wrote liability coverages with policy limits that are large in relation to reserves. Consequently, it is possible that a single claim could occur that would represent a high percentage of reserves. This situation represents a risk factor that exposes the Company's loss and loss adjustment expense reserves to variability.*

5.9. Uncertainty

In practice actuaries often include a comment toward the end of the Opinion section on the inherent uncertainty in loss reserves. Typical wording is as follows.

> ***Example 5.9*** *- In evaluating whether the reserves make a reasonable provision for unpaid losses and loss expenses, it is necessary to project future loss and loss adjustment expense payments. Actual future losses and loss adjustment expenses will not develop exactly as projected and may, in fact, vary significantly from the projections.*

In atypical situations this language could be modified to include statements such as the following:

> *The uncertainty inherent in any estimate of loss reserves is increased because ... [cite reasons for the added uncertainty].*

6. Conclusion

Application of basic principles can guide the actuary in providing actuarial opinions on the loss reserves of property and casualty insurance companies. It is important to evaluate each situation in the context of the intended use of the opinion, and to provide ample disclosure for the user of the opinion to understand the implication of any unusual situations.