



AMERICAN ACADEMY *of* ACTUARIES

June 24, 2005

Mr. Joseph Fritsch, Chairman
Property and Casualty Reinsurance Study Group
National Association of Insurance Commissioners
2301 McGee Street, Suite 800
Kansas City, MO 64108-2604

Re: NAIC Property and Casualty Reinsurance Study Group's Proposed Changes to SSAP 62

Dear Mr. Fritsch:

The Property and Casualty Reinsurance Study Group (“the Study Group”) of the National Association of Insurance Commissioners (“NAIC”) has exposed changes with respect to the Statement of Statutory Accounting Principles No. 62, “Property and Casualty Reinsurance” (SSAP 62). The purpose of this letter is for the Committee on Property and Liability Financial Reporting (“COPLFR”) of the American Academy of Actuaries¹ to provide comments to the Study Group on these proposed changes.

Background

The Study Group is considering changes to SSAP 62, proposed by the New York Insurance Department (“NYID”), to require bifurcation of reinsurance agreements that meet certain criteria. As described in Section N2 of the proposal, “in most instances reinsurance agreements have elements of both insurance risk transfer and pure financing of losses (i.e., no transfer of insurance risk).” Also according to the proposal, bifurcation of a reinsurance agreement entails accounting for a reinsurance transaction in two parts, such that the part of the transaction transferring insurance risk is accounted for as reinsurance and the part of the transaction financing losses and not transferring insurance risk is accounted for as a deposit.

Based on the NYID’s presentation to the Study Group last month, we understand that the issue being addressed is the occurrence of certain contracts where there is sufficient risk transfer to meet the requirements for reinsurance accounting, but the economic substance of the transaction does not appear to match the accounting. We also understand that the issue arises from the “binary” interpretation of the current language of SSAP 62, meaning the entire contract is accounted for either as reinsurance or as financing, instead of the risk transfer portion being accounted for as reinsurance and financing portions accounted for as deposits. The result of the binary interpretation means that contracts with both reinsurance and financing aspects can be accounted for as reinsurance.

¹ The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the profession. The Academy is non-partisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice, and the Code of Professional Conduct for all actuaries practicing in the United States.

The NYID has not proposed changes regarding contracts for which there is insufficient risk transfer to meet the requirements for reinsurance accounting. These are subject to deposit accounting, and this will not change under the SSAP 62 proposal.

Also based on the NYID's presentation, we understand that the exposed changes are to be viewed as a starting point, designed to put something on the table to begin discussion on the topic. Ultimately, when such changes are refined, we understand that the desired outcome of a requirement for bifurcation of certain contracts would be to improve the ability of regulators to perform solvency regulation by having accounting that better matched the economics, thereby reducing the ability of companies to use reinsurance to manipulate financial reporting results.

Purpose of Letter

In addressing the proposed changes, COPLFR has taken the nature of the problem and the desired outcomes outlined above as given. The purposes of this letter are to:

- Address bifurcation conceptually;
- Provide input on the proposed changes as to whether such changes would be feasible to implement, and whether such changes would be likely to achieve the desired outcomes;
- Give examples to illustrate the practical aspects of implementing the proposal; and
- Mention other critical considerations with respect to future changes to SSAP 62.

Conclusions and Recommendations

We believe that there are potential benefits to some form of bifurcation in the limited instances in which an agreement essentially consists of two separate contracts, one of which transfers significant risk and one that does not. The primary benefit in these limited instances would be that bifurcation in some form might allow for a better match of accounting and economic substance than the current binary interpretation of SSAP 62, under which the two contracts might be combined into one legal agreement and accounted for in total as one reinsurance contract. However, we believe that, in most other instances, bifurcation would not be feasible because the parts of a reinsurance contract are often not reasonably separable.

Furthermore, introducing bifurcation into statutory accounting rules would be a significant change. We believe that there should be extensive evaluation of proposed changes to ensure that (1) reinsurance accounting remains more of a principles-based approach instead of a rules-based approach, and (2) to be consistent with the concept of matching accounting with economics, changes, if any, to SSAP 62 should reduce or eliminate circumstances where a small change in economics leads to a large change in accounting. Further, there are other critical considerations:

- The complexity of designing accounting rules to bifurcate contracts, and the introduction of additional judgment in accounting for complex contracts, could result in more varied practice than currently exists.
- Changes to reinsurance accounting could result in significant unintended consequences, such as an unnecessary change in structure, a change in pricing and marketing of traditional reinsurance

contracts, or the bifurcation of contracts not viewed as problematic or as having significant risk limiting features.

- Substantial differences in accounting between U.S. SAP, U.S. GAAP and other accounting bases might introduce significant uncertainties, inefficiencies and other problems with respect to company financial reporting.

Further, we believe that the proposed changes to SSAP 62 as written have significant issues and limitations that should be resolved before such changes are considered for adoption. For example, the proposed changes to SSAP 62:

- Define the bifurcation practice in a way that is subject to a great deal of interpretation and estimation, which might result in a great disparity of practice among insurance companies thereby reducing the ability of users to analyze financial statements.
- Create a “safe harbor” in that certain contracts are exempt from bifurcation; however, it would be relatively easy for many problematic contracts to be restructured into the form of an exempted contract in order to circumvent the bifurcation process.
- Create a “trap door” in that certain contracts must be bifurcated; however, the requirement is so widely defined that many non-problematic contracts will be subject to bifurcation.

The effect of the bifurcation definition, safe harbor and trap door points would result in two additional unintended consequences: one, it would introduce situations in which a provision resulting in little or substantively no change in economics may result in a significant change in accounting, and two, there would still be instances where the accounting does not reflect economics.

Due to the points listed above, and considering the additional information the regulators would have this year due to the additional disclosures, we recommend that the Study Group move slowly and deliberately on this issue. Before making changes to SSAP 62, the Study Group should consider possible alternatives, test proposed changes on a wide variety of actual reinsurance contracts and consider how well the accounting matches the economics. Such changes should reduce or eliminate circumstances where a small change in economics leads to a large change in accounting.

As part of this process, the Study Group might also want to consider proposed changes to reinsurance accounting rules in the context of other statutory accounting rules where the accounting intentionally might not match the economics.

The remainder of this letter contains expanded comments on our conclusions.

Section N3: Safe Harbor Rule

Section N3 of the proposed SSAP 62 language creates a safe harbor by exempting certain types of reinsurance contracts from consideration for bifurcation. The design of a safe harbor rule assumes that there are types of contracts that are not viewed as problematic by regulators. However, some of the contract types listed in the safe harbor, such as excess per risk and per occurrence treaties, are in some instances the subjects of the problems the proposal is intending to solve. Excess per risk treaties with experience accounts, significant profit sharing and many risk-reducing features are common, and such treaties could contain both risk transfer and financing elements.

Further, it would not appear to be difficult to restructure contracts in the form of one described in the safe harbor to circumvent the bifurcation process. For example, a reinsurance treaty can be converted into a facultative contract by requiring prior risk approval, and an excess per aggregate contract can be converted into an excess per risk contract by imposing a per claim deductible. Another example would include the restructuring of a quota share contract into an excess per risk contract with a low attachment point.

Therefore, the safe harbor rule as written would not be effective at limiting the bifurcation decision to problematic contracts.

Section N4: Trap Door Rule

Section N4 of the proposed SSAP 62 language requires that non-exempt contracts that include certain provisions be bifurcated. Our analogy for this rule is a “trap door” because the presence of one provision in a contract automatically drops it into the bifurcation process. The design of this rule implicitly presumes that if one of these provisions is present in a non-exempt contract, the economics and accounting do not match.

Though provisions listed in Section N4 are common in contracts that are typically deemed to be “finite risk,” many of them are also common in most traditional contracts, albeit having less of an impact on the economics. Essentially, the trap door provisions as written would likely eliminate the accounting benefit, and likely the use, of quota share reinsurance but for the simplest agreements. The companies most likely to be impacted by this are small and midsized insurance companies, who use quota-share reinsurance to allow for growth, to help them to compete with larger companies, and to write a larger, more diverse, and less volatile book of business.

In addition, there are several trap door provisions that appear to be unnecessary. For example:

- A funds-held arrangement benefits the ceding company by reducing its credit risk. All else remaining equal, the difference in the reinsurer’s risk profile between a funds-held and a funds transferred agreement is that, under a funds held agreement, the interest on the fund is typically determined by the contract, whereas the interest on funds transferred is determined by market rates.
- Reinstatement premiums are most commonly associated with per occurrence excess contracts, but these are exempt from bifurcation under the safe harbor provision in Section N3.b. Further, the use of a reinstatement premium is very similar to the use of a ceding company co-participation.
- Retroactive reinsurance already receives special segregated accounting treatment under SSAP 62, and many retroactive reinsurance covers are traditional reinsurance with no experience rating.
- Multi-year transactions are quite often traditional deals, and can help companies lock in capacity and price over the multi-year period.

Further, the presence of these contract provisions does not necessarily mean that the economic substance and accounting for the contracts do not match. In many instances, the presence of these contract provisions would make very little difference on the economic substance of a contract, but under the proposal would result in substantial changes in accounting for the contract.

Therefore, the trap door rule as designed is likely to require bifurcation of many contracts that are not the subject of the problem being solved, and introduces a binary situation in which little or no change in economics may result in a significant change in accounting.

Section N5: Bifurcation Rule

Section N5 of the proposed SSAP 62 language requires deposit accounting for cash flow items associated with losses below a 10% confidence level and reinsurance accounting for the remainder. By “10% confidence level,” we mean that there is a 10% probability that ceded losses will be less than some threshold, and a 90% probability that ceded losses will be at least as much as that threshold. The design of the bifurcation rule implicitly assumes that, if the rule is followed, the result will be an accounting treatment that matches the contract’s economics.

Absent support for the approach and the assumptions and practical guidance for implementation, we have significant concerns with this proposed approach. For example, it is unclear as to why the 10% confidence level is a reasonable point to distinguish between risk transfer and financing. Also, there would be a substantial amount of judgment in determining the 10% level and thereby the segregation of the accounting between reinsurance and deposit. Furthermore, it is not clear how ceding commissions and other cash flows under the contract are to be allocated to their respective components, and how the timing of such cash flows should be considered in the allocation process.

Therefore, before adopting this proposal, we believe the Study Group should consider this and other possible alternatives, test proposed changes on a wide variety of actual reinsurance contracts and consider how well the accounting matches the economics. Without such diligence, it is possible that the proposed method, which would require significant interpretation, estimation and judgment, might result in greater disparity of accounting for similar contracts than exists today.

Illustrative Examples

To illustrate some of the points we have made above, we have provided some simple examples of the application of the proposed changes to SSAP 62 on different types of contracts.

Exhibit 1: Quota Share with Loss Ratio Cap

Exhibit 1 shows the effect of the introduction of a loss ratio cap on a quota-share treaty. In our Page 1 example, the 100% loss ratio cap reduces the probability weighted expected ceded loss from \$180 to \$179.8, and there is only a 1.14% probability of hitting the cap. Therefore there is only a slight economic difference between the capped and the uncapped quota-share treaties.

As shown in Columns (1) and (2), introduction of the uncapped quota-share results in a decrease in the premium-to-surplus ratio from 2.08 gross of reinsurance to 1.10 net of reinsurance. As shown in Columns (2) and (3), given the expected loss ratio of 72% there is no difference in the current reinsurance accounting between the capped and the uncapped quota-share treaties. As shown in Columns (3) and (4), the bifurcated accounting increases the premium-to-surplus ratio of the capped agreement from 1.10 to 1.91.

Page 2 of Exhibit 1 shows the underwriting, economic and accounting results using the same quota-share treaty from Page 1, but varying the loss ratio caps from 80% to unlimited. There is a continuum of

risk, so that as the loss ratio cap increases, the risk profile of the reinsurer begins to mirror that of the ceding company. The loss ratio cap scenarios at 110% and above yield approximately the same economic results as the uncapped scenario. The application of bifurcation to the capped treaties results in a substantially different accounting treatment than applied to the uncapped treaties, despite nearly identical economics between the contracts. For example, in the 150% scenario there is virtually no chance of hitting the cap, yet approximately 81.7% of all amounts are still subject to deposit accounting.

Exhibit 2: Sensitivity to Parameter Selection

The bifurcation estimates in Exhibits 1 assumed that 81.7% of losses would be accounted for as a deposit, and the remaining 18.3% would be accounted for as reinsurance. The 81.7% figure was calculated as the 10th percentile loss ratio of 58.8% divided by the expected loss ratio of 72%. One of the critical assumptions underlying this estimate was the selected coefficient of variation (“CV”) of 0.15. The CV parameter is an estimate of the dispersion of the estimated losses around the mean; this parameter is generally subject to considerable uncertainty (i.e., parameter risk) when applied to property and casualty insurance losses.

As shown in Exhibit 2, the bifurcation percentage is very sensitive to the CV assumption. This means that the selection of a very subjective assumption can make a substantial difference in the accounting results under the proposal.

It is important to note that the selections of expected loss ratio and CV assumptions would vary considerably among different actuaries. Actuaries often must predict future results based on the immature historical results of a book of business. Expected loss ratios and CVs vary due to differing assumptions regarding loss trends, rate changes, loss development, and the impact of underwriting and claims handling changes. Moreover, differing assumptions regarding the likelihood of catastrophe and large risk losses often increase differences in projected results. If a change in underwriting management or strategy occurs during the treaty year, the results of that treaty may bear no resemblance to the adjusted historical results. Finally, in many cases pro-rata reinsurance treaties cover relatively new books of business; thus, the actuary may have very limited or no historical data with which to project the expected loss ratio and CV.

Exhibit 3: Quota Share with Loss Corridor

Exhibit 3 shows the effect of the introduction of a loss corridor on a quota-share treaty. In our Page 1 example, the 5% loss corridor attaching at a loss ratio of 72% reduces the probability weighted expected ceded loss from \$180 to \$175.2, and there is a 47% probability of hitting the corridor. Therefore there is still only a slight economic difference between the without-corridor and the with-corridor treaties, although the probability of hitting the corridor is not unlikely.

The accounting effect shown in Columns (1) through (4) is similar for the loss corridor example and the loss ratio cap example in Exhibit 1. As shown in Exhibit 3, Page 2, the 5% loss corridor attaching above a loss ratio of 85% yields similar economic results as the without-corridor scenario. As in Exhibit 1, despite nearly similar economics, the application of bifurcation to the capped treaties results in a substantially different accounting treatment between the without-corridor and the with-corridor treaties.

Exhibit 4: Premium to Limit Ratio Example

The proposed trap door provision in N4.i requires bifurcation where the annual premium is greater than some percentage of the maximum payable loss. Although the percentage is not specified, the implication is that there is some threshold premium to limit ratio, above which point the accounting should differ.

In Exhibit 4 we compare an excess of loss contract protecting short-tailed business vs. long-tailed business. With identical limits and retentions, the short-tailed contract has a premium to limit ratio of 31% and the long-tailed contract has a premium to limit ratio of 57%. However, factoring in the effect of discounting on the reinsurer's expected results, the premium to discounted limits of both contracts are 63%.

Therefore, from the reinsurer's perspective the economic effects are very similar in each case. However, if the trap door threshold were between 31% and 57%, the short-tailed contract would be bifurcated and the long-tailed contract would not.

Real-World Contracts

The examples shown in this letter are very simple, whereas reinsurance contracts actually being sold today typically contain many features that make them much more complex. To bifurcate the more complex contracts, every item of cash flow would need to be fully modeled and then split and assigned to the appropriate category. These might include such items as fixed costs, brokerage, sliding scale or profit sharing adjustments, currency adjustments, impact of inuring reinsurance, etc. While it may seem intuitive that a ceding commission be split on a pro rata basis, an economically realistic division would likely be much more complex.

We would recommend that any proposed bifurcation standard be tested on at least a small sample of real contracts, considering both the initial outcome distribution and the actual accounting transaction. The review of the real-world contracts should also include a review of the subject book of business and the assumptions required to project an expected loss ratio and the CV. This exercise will illustrate the many issues and areas of judgment involved in creating a distribution of loss ratios for a pro-rata treaty.

Critical Considerations and Recommendations

We understand that the proposed changes to SSAP 62 are the product of a great deal of thought and effort on the part of knowledgeable and concerned regulators. As such, our comments on the proposal are intended to highlight the difficulty of creating a rules-based solution for reinsurance, and not as a criticism of the execution.

Given the considerable possibility of unintended consequences, we recommend that the Study Group move deliberately on this issue, consider the possible alternatives, and test proposed changes on a wide variety of real-world reinsurance contracts before implementing such changes.

While we understand the NAIC's sense of urgency, we believe there are substantial benefits to this approach:

- Many of the issues that are encountered result from undisclosed effects of reinsurance agreements on the ceding companies' financial statements. The Study Group has just approved extensive new disclosures that will take effect at year-end 2005. Further, the Study Group has approved a CEO and CFO attestation regarding the documentation of risk transfer and economic purpose for reinsurance

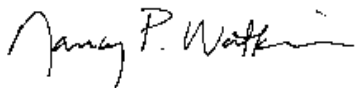
contracts where risk transfer is not reasonably self-evident. We believe such disclosures will have a major impact on the issue.

- There is a project underway in which COPLFR is assisting the NAIC's Casualty Actuarial Task Force ("CATF") to research and evaluate alternative approaches to measuring risk transfer in reinsurance agreements. The results of the project will be available by the end of August 2005. We believe the results of this project, which will consider different risk measurement tools and risk transfer standards, should be an important consideration to the NAIC in evaluating what changes, if any, should be made to SSAP 62.
- The FASB and IASB are working on similar projects to address reinsurance risk transfer and accounting issues. In order to avoid significant divergence between statutory accounting and GAAP accounting for reinsurance contracts, which would create significant inefficiency and confusion within companies, we recommend working on this issue concurrently with the FASB.

As previously stated, we believe that there are limited instances in which bifurcation in some form may be effective. However, to minimize incidence of small changes in economics resulting in large changes in accounting treatment, we believe a principles-based approach is preferable to a bright-line, rules-based approach. We are available to assist the Study Group in evaluating proposals and testing alternative approaches on real-life reinsurance contracts. We are hopeful that, after surveys of current practice and best practices, we can share some useful tools with the Study Group and help the NAIC to move ahead with its goals.

We hope that the comments in this letter are useful to the NAIC. We would be pleased to meet with you and discuss this issue in greater depth.

Sincerely,



Nancy Watkins, Chair
Committee on Property and Liability Financial Reporting
American Academy of Actuaries

cc: John Purple, Chair, Casualty Actuarial Task Force

Quota Share with Loss Ratio Cap

Gross WP	500	
Expected Loss Ratio	72.0%	
CV of Losses	0.150	= standard deviation of losses relative to expected value
Loss Ratio Cap	100.0%	1.14% of hitting this Cap
Reinsurer Share	50.0%	
Ceding Commission	23.00%	
Gross Expected Loss	360	
Ceded Premium	250	
Expected Ceded Loss w/ No Cap	180	179.8 = expected loss based on lognormal with cap
>90% Prob Ground Up Loss Ratio	58.8%	
Reinsurer Result	12.5	

NAIC Proposed Bifurcation %	81.7% accounted for as a deposit
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Summary Financials - 100% Loss Ratio Cap Scenario

	(1)	(2)	(3)	(4)
		<u>Uncapped</u>	<u>Capped</u>	<u>Capped</u>
	<u>GROSS</u>	<u>NET</u>	<u>NET Current Reins Accounting</u>	<u>NET NAIC Proposed Bifurcated Accounting</u>
Assets	600.00	407.50	407.50	564.77
Liabilities	360.00	180.00	180.00	327.06
Surplus	240.00	227.50	227.50	237.71
NWP	500.00	250.00	250.00	454.25
Loss Ratio	72.00%	72.00%	72.00%	72.00%
NWP/Surplus	2.08	1.10	1.10	1.91

Quota Share with Loss Ratio Cap

Comparison of Underwriting, Economic, and Accounting Results

	(1)	(2)	(3)	(4)	(5)	(6)
			<u>Reinsurer</u>	<u>Reinsurer</u>	<u>NAIC</u>	<u>NAIC</u>
	<u>Expected</u>	<u>Probability of</u>	<u>Loss at the</u>	<u>Expected</u>	<u>Proposed</u>	<u>Proposed</u>
	<u>Ceded Loss</u>	<u>Loss to the</u>	<u>90th</u>	<u>Downside</u>	<u>Accounting</u>	<u>Percent</u>
		<u>Reinsurer</u>	<u>Percentile</u>			<u>Deposit</u>
						<u>Accounted</u>
Capped at 80%	176.0	29.99%	-3.0%	-2.6%	Bifurcated	81.7%
Capped at 90%	179.1	29.99%	-9.2%	-6.7%	Bifurcated	81.7%
Capped at 100%	179.8	29.99%	-9.2%	-7.7%	Bifurcated	81.7%
Capped at 110%	180.0	29.99%	-9.2%	-7.9%	Bifurcated	81.7%
Capped at 125%	180.0	29.99%	-9.2%	-7.9%	Bifurcated	81.7%
Capped at 150%	180.0	29.99%	-9.2%	-7.9%	Bifurcated	81.7%
QS no Cap	180.0	29.99%	-9.2%	-7.9%	Not Bifurcated	0.0%

90%-tile of L/R: 86.20%

Notes

- (1) Expected Ceded Loss equals uncapped expected ceded loss less average loss in excess of the cap
- (2) Equal to the likelihood that the reinsurer's profit is negative
- (3) 90th percentile reinsurer profit or loss as a percentage of ceded premium
- (4) Equal to the average of all scenarios where the reinsurer's profit is negative, as a percentage of ceded premium
- (6) Equal to the 10th percentile loss ratio divided by the expected loss ratio.

AAA Letter to NAIC on SSAP62

Exhibit 2

Quota Share with 100% Loss Ratio Cap

Sensitivity to CV Assumption

Expected Loss Ratio	72.0%	72.0%	72.0%
CV of Losses	0.150	0.250	0.350
10th percentile	58.8%	50.9%	44.0%
NAIC Bifurcation %	81.7%	70.8%	61.1%

Notes

(1) Based on the lognormal distribution.

Quota Share with Loss Corridor

Gross WP	500	
Expected Loss Ratio	72.0%	
CV of Losses	0.150	= standard deviation of losses relative to expected value
Size of Loss Corridor	5.0%	
Loss Corridor from	0.72	47.03% of being in the corridor
to	77.0%	29.99% of using 100% of the corridor
Ground Up Expected Loss	360	
Ceding Commission	23.00%	
Reinsurer Share	50.0%	
Ceded Premium	250	
Expected Ceded Loss	180	175.2 = expected loss based on lognormal with cap
>90% Prob Ground Up Loss Ratio	58.8%	
Reinsurer Result	12.5	
NAIC Proposed Bifurcation % 81.7% accounted for as a deposit		

Summary Financials - 5% Loss Corridor from 72% to 77% Scenario

	(1)	(2)	(3)	(4)
		<u>No Loss Corridor</u>	<u>With Loss Corridor</u>	<u>With Loss Corridor</u>
	<u>GROSS</u>	<u>NET</u>	<u>NET Current Reins Accounting</u>	<u>NET NAIC Proposed Bifurcated Accounting</u>
Assets	600.00	407.50	407.50	564.77
Liabilities	360.00	180.00	180.00	327.06
Surplus	240.00	227.50	227.50	237.71
NWP	500.00	250.00	250.00	454.25
Loss Ratio	72.00%	72.00%	72.00%	72.00%
NWP/Surplus	2.08	1.10	1.10	1.91

Quota Share with Loss Corridor

Comparison of Underwriting, Economic, and Accounting Results

	(1)	(2)	(3)	(4)	(5)	(6)
	<u>Expected</u> <u>Ceded Loss</u>	<u>Probability of</u> <u>Loss to the</u> <u>Reinsurer</u>	<u>Reinsurer</u> <u>Loss at the</u> <u>90th</u> <u>Percentile</u>	<u>Reinsurer</u> <u>Expected</u> <u>Downside</u>	<u>NAIC</u> <u>Proposed</u> <u>Accounting</u>	<u>NAIC</u> <u>Proposed</u> <u>Percent</u> <u>Deposit</u> <u>Accounted</u>
<u>5% Corridor</u>						
Beginning at 85%	178.9	29.99%	-8.0%	-6.5%	Bifurcated	81.7%
Beginning at 90%	179.5	29.99%	-9.2%	-7.2%	Bifurcated	81.7%
Beginning at 95%	179.8	29.99%	-9.2%	-7.6%	Bifurcated	81.7%
Beginning at 100%	179.9	29.99%	-9.2%	-7.8%	Bifurcated	81.7%
Beginning at 105%	180.0	29.99%	-9.2%	-7.9%	Bifurcated	81.7%
Beginning at 110%	180.0	29.99%	-9.2%	-7.9%	Bifurcated	81.7%
QS no Corridor	180.0	29.99%	-9.2%	-7.9%	Not Bifurcated	0.0%

90%-tile of L/R: 86.20%

Notes

- (1) Expected Ceded Loss equals uncapped expected ceded loss less average loss in excess of the cap
- (2) Equal to the likelihood that the reinsurer's profit is negative
- (3) 90th percentile reinsurer profit or loss as a percentage of ceded premium
- (4) Equal to the average of all scenarios where the reinsurer's profit is negative, as a percentage of ceded premium
- (6) Equal to the 10th percentile loss ratio divided by the expected loss ratio.

AAA Letter to NAIC on SSAP62

Exhibit 4

Premium to Limit Ratio Example

	Long Tail <u>Low Ratio</u>	Short Tail <u>High Ratio</u>
Limit	350	350
Retention	700	700
Business Covered	Work Comp	Personal Auto
Expected Ground Up Loss	900	900
>90% Prob Ground Up Losses	800	800
Ceded Premium	110	200
Premium to Limit	31%	57%
Expected Ceded Loss	200	200
Discount	0.50	0.90
Present Value Ceded Loss	100	180
Discounted Limit	175	315
Prem to Discounted Limit	63%	63%
Bifurcation Required?	No	Yes
NAIC Proposed Bifurcation %	0%	45%

Notes

- (1) Assumes that the proposed threshold (XX%) is between 31% and 57%.
- (2) The proposed rules would require significant bifurcation for a Short Tail cover.
- (3) Identical coverage of Long Tail liabilities would not require bifurcation.
- (4) Note that the ratio of premium to discounted limit is about the same.