Notes to the Financial Statements

Discounting of Liabilities for Unpaid Losses and Unpaid Loss Adjustment Expenses

Instructions

State whether any of the liabilities for unpaid losses or unpaid loss adjustment expenses are discounted, including liabilities for Workers' Compensation. If the company is required to respond in the affirmative for non-tabular discounting, it must also respond in the affirmative to Schedule P, Interrogatory 4, and complete Columns 32 and 33 of Part 1, Part 1A, etc., of Schedule P.

If the answer is in the affirmative, furnish the following information for each line of business affected:

a. *If a tabular basis is used:*
   i. *Identify table used.*
   ii. *Rate(s) used to discount.*
   iii. *The amount of discounted liability reported in the financial statement.*
   iv. *The amount of tabular discount, by the line of business and reserve category (i.e., case and IBNR).*

   Definition of Tabular Reserves:

   Tabular reserves by accident year are indemnity reserves that are calculated using discounts determined with reference to actuarial tables which incorporate interest and contingencies such as mortality, remarriage, inflation, or recovery from disability applied to a reasonably determinable payment stream. This definition shall not include medical loss reserves or any loss adjustment expense reserves.

b. *If a non-tabular basis is used:*
   i. *Rate(s) used to discount and the basis for the rate(s) used.*
   ii. *Amount of non-tabular discount disclosed by line of business and reserve category (i.e., case, IBNR, Defense and Cost Containment expense, and Adjusting and Other expense.)*
   iii. *The amount of non-tabular discount reported in the statement.*

a. *If the rate(s) used to discount prior accident years' liabilities have changed from the prior annual statement or if there have been changes in the key discount assumptions such as payout patterns:*
   a. *Amount of discounted current liabilities at current rate(s) assumption(s). (Exclude the current accident year.)*
   b. *Amount of discounted current liabilities at previous rate(s) assumption(s). (Exclude the current accident year.)*
   c. *Change in discounted liability due to change in interest rate(s) assumption(s). (1–2)*
   d. *Amount of non-tabular discount, by line of business and reserve category (i.e., case, IBNR, Defense and Cost Containment expense, and Adjusting and Other expense.)*

Reserve Valuation

Except in limited circumstances, statutory accounting requires full value reserves:

- Tabular reserve discounts are permitted on indemnity portions of workers' compensation long term disability claims (pension cases) and on long term disability

claims written on accident and health insurance policies. These are annuity claims on impaired lives. Just as they are discounted on the life insurance statutory blank, they are discounted on the fire and casualty blank, whether the policies are written by life insurers, health insurers, or workers' compensation insurers. Tabular discounts are not permitted for medical benefits or for loss adjustment expenses, even if these benefits are paid on the same claims.[1]

- Reserve discounts are permitted for certain monoline (primarily single-state) medical malpractice writers. This regulation was designed to help privately organized doctors' mutuals write medical malpractice coverage without having to raise additional capital.
- Reserve discounts may be specifically allowed by the insurance commissioner of the insurer's domiciliary state. These discounts are intended to enable a domestic company to continue operating even with low statutory surplus.[2]

Statutory reserves include expected inflation but not discount (except for tabular discounts). Suppose a permanently disabled employee receives workers' compensation loss of income (indemnity) benefits of $800 a week, increasing each year with the change in the CPI, and medical (home nursing) benefits of about $500 a week, increasing with wage inflation for nurses. The indemnity reserve is valued as an increasing life annuity with a conservative valuation rate ranging from 3.5% to 5.0%. The medical reserve is valued as an increasing life annuity at a 0% valuation rate; the expected inflation in nurses' wages is included, but not the discount for the time value of money.

TABULAR DISCOUNTS AND IBNR CLAIMS

Tabular discounts on known claims (case reserves) are determined by formula from the weekly benefit, the discount rate, the mortality table, and the age, sex, and impairment status of the injured worker. Tabular discounts are permitted on both case and IBNR reserves.

Tabular discounts on IBNR claims sometimes seem anomalous. In most lines of business, IBNR claims have not yet been reported to the company. But state workers' compensation statutes require the employer or its insurer to begin indemnity payments within 2 to 4 weeks of the worker's injury. More serious injuries are reported even more rapidly, and the IBNR for permanent total disability claims should not be material.[3] In addition, tabular discounts depend on the injured worker's sex, age, and disability rating; if a claim has not been reported yet, the sex, age, and rating of the disabled life are not known.

Most large workers' compensation IBNR claims stem from the reclassification of cases, not the emergence of new cases. Most permanent total disability cases are first reported as sprains or strains of the back or neck. These are coded as temporary total cases, and no tabular discount is applied. Some of the employees do not return to work, and their claims are eventually reclassified as permanent total disability cases.

For many insurers, not until four or five years after the accident date have the majority of permanent total disability cases been identified. The reserving actuary estimates the

emergence pattern of permanent disability cases from temporary cases and applies an average severity determined from the experience of mature years.

Illustration: At December 31, 20X7, the insurer has 12,000 unsettled temporary total cases involving sprains or strains of the neck or back for accident year 20X7. Historically, 0.15% of these claims develop into pension cases, so the estimated 20X7 claim count is 18 cases.

For accident year 20X2, the average remaining cost of a permanent total disability case on December 31, 20X7, is $350,000, and the average tabular discount is 18%. In hindsight, the average cost of these cases in 20X2 (with 5 years more payments) would have been $420,000, and the average tabular discount would have been 20%.

If the workers' compensation loss severity trend is 4% per annum, the average cost for a 20X7 permanent total disability claim is $420,000 × 1.04^5 = $510,994. The average tabular discount per claim is 20% × $510,994 = $102,199, and the estimated tabular discount on IBNR claims is 18 × $102,199 = $1,839,579.

DYNAMIC DISCOUNT RATES

Life insurance and annuity policy reserves are held at discounted values on statutory financial statements. The maximum allowable statutory discount rate varies with the yield on investment grade corporate bonds minus a margin that depends on the characteristics of the insurance product; see the 1990 *Standard Valuation Law* for life insurance products.

Post-codification statutory accounting limits the maximum interest rate for *non-tabular* reserve discounts (when discounting is permitted) to the lower of (i) the yield on five year Treasury notes and (ii) the company's investment yield minus 1.5 percentage points.[4] The company's investment yield is

- The company's average yield on *invested* assets if invested assets exceed the loss reserves plus the unearned premium reserves, or
- The company's average yield on *total* assets if invested assets are less than the loss reserves plus the unearned premium reserves.[5]

Suppose a property-casualty insurance company applies non-tabular discounts to certain reserves. The maximum permitted discount rate is based on the following data.

December 31, 20XX loss reserves:	$120 million
December 31, 20XX unearned premium reserves:	$50 million
Average investment yield on invested assets during 20XX:	9.5% per annum
December 31, 20XX–1 total statutory assets:	$195 million
December 31, 20XX total statutory assets:	$205 million
20XX investment income earned (line 8 of U&IE):	$14 million

5 year Treasury note rate on December 31, 20XX	7.5% per annum

The policyholder reserves are $120 million + $50 million = $170 million, and total assets are $205 million. If the investable assets are more than $170 million, we use the 9.5% yield on invested assets minus the statutory margin of 1.5%, or 8.0%. The maximum statutory discount rate is the lower of 8.0% and 7.5%, or 7.5% per annum.

If the investable assets are less than $170 million, we use the yield on total assets, or $14 million / ½ × ($195 + $205) million = 7.0%, minus the statutory margin of 1.5%, or 5.5%. The maximum permitted statutory discount rate is the lower of 5.5% and 7.5%, or 5.5% per annum.

RISK-BASED CAPITAL

The reserving risk and written premium risk charges in the NAIC risk-based capital formula are based on discounted reserves. The RBC formula uses the IRS discounting procedures and loss payment patterns, with a (conservative) 5% discount rate instead of the IRS's 60 month moving average of federal mid-term rates.

The risk-based capital ratio is the company's adjusted surplus divided by its risk-based capital requirements. Adjusted surplus is policyholders' surplus minus non-tabular reserve discounts; tabular discounts are not removed from surplus. Since the risk-based capital ratio is often used as an indicator of financial strength, companies have an incentive to classify reserve discounts as tabular.

Illustration: An insurer has surplus of $500 million and RBC requirements of $300 million. It holds loss reserves of $800 million, with a tabular discount of $100 million and a non-tabular discount of $50 million. Its RBC ratio is ($500 million – $50 million) / $300 million = 150%.

GAAP

GAAP permits discounting when the payment schedule is known or can be reasonably estimated; this is similar to the statutory rule for tabular discounts. Some accountants consider the GAAP rules anomalous. Full value reserves on statutory statements have an implicit margin for adverse deviation. But GAAP statements seek to accurately portray the firm's performance, helping investors and creditors estimate future profitability. For the long-tailed lines of business, full value reserves distort the insurer's true performance; discounted (or fair value) reserves provide a more accurate picture.

The justification of the GAAP treatment is that determining fair value reserves requires assumptions for the payment schedule and the discount rate. There is no accepted means of choosing the discount rate or testing whether a past choice was correct. GAAP places primary importance on objective, verifiable, and consistent standards; these standards are not met by discounted reserves.[6]

DISCLOSURE

Loss reserve discounts are disclosed in Schedule P, the Statement of Actuarial Opinion, and the Notes to the Financial Statements.

Schedule P: Non-tabular discounts are disclosed by line of business and by accident year, separately for losses and loss adjustment expenses, in Schedule P, Part 1, columns 32 and 33; this disclosure is necessary to gross up discounted reserves before IRS loss reserve discounting. Tabular discounts by line of business and by accident year may be inferred from a comparison of Schedule P, Part 1, with Schedule P, Part 2.[7] This implied disclosure does not meet IRS requirements; the explicit disclosure in the *Notes* is needed.

Statement of Actuarial Opinion: The Appointed Actuary comments upon loss reserve discounts that may affect reserve adequacy in the Statement of Actuarial Opinion; see section 11 of the NAIC *Instructions.*

Notes to the Financial Statements: The insurer discloses the discount rates, the basis for these rates, the discount, and the discounted liability. The tabular discount is shown by line of business, separately for case and IBNR [= bulk] reserves. The non-tabular discount is shown by line of business, separately for case reserves, IBNR reserves, defense and cost containment (ALAE) reserves, and adjusting and other (ULAE) reserves. The non-tabular discounts in the Notes should reconcile with Schedule P, Part 1, columns 35 and 36, for losses and loss adjustment expenses, respectively.[8]

CHANGES IN DISCOUNT RATES

If the discount rates have changed from those used in the previous year's *Annual Statement*, the insurer discloses the discounted liabilities at the current and previous rates, and the change in the discounted liability that results from the change in the discount rate; the amounts in this disclosure exclude the current year's liabilities.

Illustration: Suppose an insurer holds $100 million of undiscounted reserves at December 31, 20X7, which it holds at discounted values on its balance sheet. Of these reserves, $15 million are accident year 20X7 claims and $85 million are from previous accident years. At the 4% per annum valuation rate used in 20X7, the discounted reserves from previous accident years are $63 million in 20X7.

In 20X6 the company used a 3.5% valuation rate. The discounted value of the pre-20X7 reserves at year end 20X7, would have been $66 million had the company continued with a 3.5% valuation rate. The disclosure in the *Note to the Financial Statements* is

- The discounted liabilities at the current rate: $63 million
- The discounted liabilities at the previous rate: $66 million
- The change in the discounted liability: $63 million – $66 million = –$3 million

- The discount itself: $85 million – $63 million = $22 million.

CHANGE IN ESTIMATE

A change in an estimate flows through the income statement. An 20X7 increase in a reserve for a claim that occurred in 20X5 is treated as an incurred loss for 20X7. A change in an accounting practice is treated as a direct charge or credit to surplus, not as a revenue or an expense that flows through the income statement.

A change in the discount rate with no change in the expected ultimate loss is treated as a change in an estimate, not a change in accounting practice. If a company holds reserves discounted at a 6.8% valuation rate in 20X6 and at a 6.3% valuation rate in 20X7, the company records an incurred loss for the year even through the expected ultimate value of the losses has not changed.[9]

INTERCOMPANY POOLING ARRANGEMENTS

INSTRUCTIONS

If the company is part of a group of affiliated insurers that utilizes a pooling arrangement that affects the solvency and integrity of the insurer's reserves under which the pool participants cede substantially all of their direct and assumed business to the pool, describe the basic terms of such arrangement(s) and the related accounting. The disclosure should include:

1. *Identification of the lead company and of all affiliated companies participating in the intercompany pool (include NAIC Company Codes) and indication of their respective percentage shares of the pooled business.*
2. *Description of the lines and types of business subject to the pooling agreement.*
3. *Description of cessions to non-affiliated reinsurers of business subject to the pooling agreement, and indication of whether such cessions were prior to or subsequent to the cession of pooled business from the affiliated pooled members to the lead company.*
4. *Identification of all pool members that are parties to reinsurance agreements with non-affiliated reinsurers covering business subject to the pooling agreement and that have a contractual right of direct recovery from the non-affiliated reinsurer per the terms of such reinsurance agreements.*
5. *Explanation of any discrepancies between entities regarding pooled business on the assumed and ceded reinsurance schedules of the lead company and corresponding entries on the assumed and ceded reinsurance schedules of other pool participants.*
6. *Description of intercompany sharing, if other than in accordance with the pool participation percentage, of the Provision for Reinsurance, (schedule f, Part 7) and the write-off of uncollectible reinsurance.*

INTERCOMPANY POOLING

Some large insurers are fleets of affiliated companies under common control. Some of the affiliated companies may be distinct in name only; others may have their own management and staff. There are several reasons for this legal structure.

- A parent company may retain the management and corporate existence of an acquired company; this is particularly true for foreign subsidiaries. A domestic acquisition that

has been operating profitably under local management may also be kept changed.

- An acquired company have a different distribution system (e.g., a regional independent agency company acquired by a direct writer) or a different book of business (e.g., a surety company acquired by a commercial lines insurer).
- A primary company that acquires a reinsurer may wish to keep *arms-length transactions* to prevent conflicts of interest, particularly if the reinsurer assumes business from the parent's competitors.
- An insurer may designate an affiliate to handle run-off business, such asbestos claims.
- An insurer may seek regulatory or tax benefits that require a different domicile (e.g., a company domiciled in the Bermudas to write finite reinsurance).
- An insurer may seek to avoid onerous state regulation. For example, a national company seeking to avoid extra-territorial investment constraints of one state may capitalize a subsidiary to write its business in that state.
- An insurer may seek a multi-tiered rating structure. For example, an auto insurer wishing to differentiate among high-risk, moderate risk, and low-risk drivers may use a fleet of three insurers, each with its own rating structure.

A single management team may run several of the companies, and the managers may desire a single set of underwriting results. Each legal entity cedes its business to a lead company, which retrocedes a percentage of the combined business back to each legal entity.

An intercompany pooling agreement covers premiums, losses, and loss adjustment expenses. Underwriting expenses are allocated to company according to state regulation (see, for example, New York's Regulation 30). Assets, investment income, and surplus are not affected. Asset transactions may be handled by a single investment department, but the assets and investment income of each legal entity are kept distinct.

The coding of cessions to unaffiliated reinsurers and assumptions from unaffiliated companies depends on whether the cessions or assumptions are classified as pooled business.

Illustration: Companies X, Y, and Z are affiliated insurers writing substandard (young male), standard (other high risk), and preferred (all other drivers) business with $10 million, $20 million, and $70 million of premium, respectively. Companies X and Z cede all their premium to company Y, which retrocedes 20% of the business to company X and 30% to company Z.

To avoid the risks of substandard business, Company X reinsures its business under a 50% pro rata treaty before pooling, and company Z assumes $30 million of premium from an unaffiliated insurer. After pooling but before retroceding business to companies X and Z, company Y has an excess-of-loss reinsurance treaty above a $100,000 retention with a 10% reinsurance rate on subject premium.

The same underwriters write all types of business, but they write the business on the paper of the three companies, depending on the risk. Half of the substandard business written on Company X's paper is ceded and pooling, so that all three companies show the cession on their books. Had Company X ceded business after pooling and retrocession, its cession would not appear on the books of its affiliated companies. The excess-of-loss treaty for Company Y covers all three types of business, and all companies would show the cessions. We add cessions after pooling further below.

Because of regulatory constraints, the pooling agreement does not include Massachusetts business. Company X writes $2 million of Massachusetts premium, of which it cedes $1 million by its quota share treaty, and Company Z writes directly $3 million and assumes $1 million of Massachusetts premium, as part of the totals given above.

In January 2000, in anticipation of further common stock appreciation, Company Y switched have its fixed-income securities to stock; its assets are now depleted by poor returns from 2000 through 2003. After pooling, company Y cedes 20% of its net business for surplus relief. This transaction does not affect companies X and Z.

- Company X cedes $8 million to the pool, half of which is ceded pooled business. The $2 million of Massachusetts, of which $1 million is ceded, is not pooled.
- The $70 million direct business by company Z minus the $3 million of Massachusetts premium and the $30 million of assumed business minus $1 million of Massachusetts premium is pooled premium.
- Ceded premiums under the excess-of-loss treaty are ceded pooled premiums. The quota share treaty by Company X inures to the excess-of-loss reinsurer; the pooled premium after the quota share cessions from Company X is $4 million from company X, $20 million from company Y, and $96 million from company Z, for a total of $120 million. Before retrocession, the excess-of-loss premiums and losses are removed.
- The remaining pooled business is shared in the 20%, 50%, 30% percentages.

Intercompany Pooling Agreement (Figures in Millions of Dollars)

	Affiliated Companies			
	X	*Y*	*Z*	*Pooled*
Direct WP, rest of country (pooled)	$8	$20	$67	
Direct WP, Massachusetts (not pooled)	$2	$0	$3	
Assumed WP, rest of country (pooled)	$0	$0	$29	
Assumed WP, Massachusetts (not pooled)	$0	$0	$1	
Direct + assumed pooled WP	$8	$20	$96	$124
Ceded pooled WP	$4	$0	$0	$4
Net pooled WP, before excess-of-loss	$4	$20	$96	$120
Pool excess-of-loss cession to non-affiliates				$12
Net pooled WP, after excess-of-loss				$108
Pool retrocessions to affiliates	$21.6	$54.0	$32.4	
Post-pooling cessions to non-affiliates	$0	$10.8	$0	
Final written premium	$21.6	$43.2	$32.4	

Regulators have several reasons for examining pooling agreements. A state which restricts class relativities used by insurers may not permit affiliated insurers to charge different rates. A state with extra-territorial regulation (such as investment regulation on all assets of the insurer, may not permit a licensed company to pool its results with non-licensed affiliates. The disclosure in the Notes allows state regulators to monitor the pooling arrangements.

Pooled business is treated differently in Schedule P than in other Annual Statement exhibits, such as Schedule F. The disclosure in the Notes eases the reconciliation between Schedule P and the other parts of the Annual Statement.

High Deductibles

Disclose the amount of reserve credit that has been recorded for high deductibles on unpaid claims and the amounts that have been billed and are recoverable.

Statutory accounting for large dollar deductible policies is a cross between the accounting for retrospectively rated contracts and accounting for excess insurance with a (claims handling) service contract.

Similar to retrospective rating

- The insurer is liable for all claims, and it is reimbursed by the employer for losses below the deductible; the reimbursement is similar to retrospective premium for ratable losses.[10]
- The insurer assumes the credit risk that the employer may not pay the reimbursements owed; the same is true for retrospective rating. The insurer's liability to the injured worker is *not* contingent on receiving reimbursement from the employer; if the employer is bankrupt, the insurer is not relieved of its claim liabilities. In contrast, an excess insurer is not responsible for losses below the deductible, and a third party administrator need not pay claims for which it does not expect reimbursement from the employer.
- In states which levy premium taxes and assessments on premium equivalents, not on the actual premium, the reimbursement is treated like premium. The self-insured employer and the third party administrator do not pay state premium taxes and premium-based assessments; the excess insurer pays tax only on the premium it receives for coverage above the retention.

Similar to excess insurance with a (claims handling) service contract[11]

- Loss reserves on statutory statements are net of the expected reimbursements; in contrast, loss reserves on retrospectively rated policies are gross of expected additional premiums, and a separate accrued retrospective premium asset is set up.
- Risk-based capital written premium risk charge is levied on actual premium, not on premium equivalent, and the risk-based capital reserving risk charge is levied on net reserves; in contrast, the written premium risk charge on retrospectively rated policies is levied on the total premium, and the reserving risk charge is levied on gross losses, with a 30% offset for loss sensitive contracts.
- In states which levy premium taxes and assessments on actual premium, not on the premium equivalent, the reimbursement is like service fees to a third party administrator.
- The non-admitted asset charge is levied only on reimbursements for losses that have already been paid, not for reimbursements on unpaid losses. In contrast, the charge for retrospectively rated policies is levied on all accrued retrospective premiums.

Regulatory Concerns

Large dollar deductible policies pose credit risks to the insurer, the employer, and injured workers. The credit risk to the insurer is that expected reimbursements may not be collected; the 10% non-admitted charge for uncollected reimbursements offsets this risk. The risk to the employer is that it may be faced with an LDD assessment that it cannot pay; the requirement that the insurer periodically review the financial status of the employer reduces this risk.[12] The risk to the workers is that the insurer may not handle claims adequately if the employer is unable to pay the reimbursements; the statutory rule that the insurer is directly liable for workers' compensation claims eliminates this risk.

The insurer has a credit risk, since it pays the full claim and then seeks reimbursement from the employer. The insurer's liability to the injured worker is not contingent on its receiving reimbursement from the employer; if the employer is bankrupt, the insurer has full liability for each claim. In contrast, the excess insurer has no credit risk; it get involved in a claim only after the employer has paid the self-insured retention.[13]

Accounting for Unpaid Losses

Statutory accounting for high deductible loss reserves is net of expected reimbursements from employers, just as it is net of reinsurance recoverables. This is similar to the accounting for excess coverage: the excess insurer is not responsible for losses below the retention and holds reserves for excess losses only. For retrospective rating, in contrast, the entire loss reserve is a liability and the accrued retrospective premium is an offsetting asset.

GAAP shows loss reserves gross of reinsurance recoverables and employer reimbursements; the recoverables and reimbursements are separate assets. Only if there is a legal right of offset does GAAP permit net reserving.[14] Since the large dollar deductible insurer is responsible for payments to injured workers, regardless of reimbursements paid by the employer, there is no right of offset, and net accounting is not permitted.

Non-Admitted Assets

GAAP statements show all receivables owed to the insurer, with a bad debt offset for the expected uncollectible amount. If the insurer determines that a receivable will not be collected, it removes it from the balance sheet and *writes it off* through the income statement.

To avoid undue reliance on management discretion, which may not be sufficiently conservative in adverse circumstances, statutory accounting uses formulas to determine the non-admitted portion of receivables. The formula depends on whether the receivable is already due.

If the receivable is *already due* but not yet received, it is not admitted if it is more than 90 days past due; examples are agents balances, premiums due from policyholders, and interest income accrued and already due. Collateral has no effect on the non-admitted asset, since the payment delay may indicate that the party owing the funds may deny liability.[15] If part of the receivable from one entity is more than 90 days past due, the entire receivable is not admitted. Reinsurance recoverables more than 90 days past due are similar, although only 20% of the recoverable is not admitted.[16]

If the receivable is *not yet due*, 10% of the unsecured amount is not admitted; examples are accrued retrospective premiums, earned but unbilled premiums, and large dollar

deductible reimbursements.[17] Unsecured recoverables from unauthorized and slow-paying authorized reinsurer are similar, though the non-admitted portion is 100% for unauthorized and 20% for slow-paying authorized reinsurers. If the receivable is secured it is fully admitted; security includes funds held, offsetting balances, and letters of credit.[18]

SSAP No. 65, "Property and Casualty Contracts," ¶37, says:

> *Amounts accrued for reimbursement of the deductible shall be billed in accordance with the provisions of the policy or the contractual agreement, and shall be aged according to the contractual due date. Ten percent of deductible recoverable in excess of collateral specifically held and identifiable on a per policy basis, shall be reported as a nonadmitted asset; however, to the extent that amounts in excess of the 10% are not anticipated to be collected they shall also be nonadmitted.*[19]

The accounting for retrospectively rated policies is more conservative than the accounting for large dollar deductible policies. For retrospectively rated policies, the full loss reserve is posted, and the accrued retrospective premiums are shown as a separate asset, of which 10% is not admitted. For large dollar deductible policies, the loss reserves are net of the expected reimbursements; the non-admitted charge applies only to reimbursements on paid losses that have yet been collected. Two reasons account for this difference:

- On retrospectively rated policies, the standard premium (or at least the net premium) may be collected up front. If the retrospective premium is based on incurred losses, not on paid losses, the accrued retrospective premiums are relatively small. In contrast, the large dollar deductible reimbursements are due only when the loss is paid.[20]
- The high eligibility requirements in many states for large dollar deductible policies, along with the responsibility of the insurer to periodically monitor the financial stability of the employer, reduce the risk of uncollectible reimbursements. Retrospective rating has low eligibility rules and no requirement for the insurer to monitor the ability of the insured to pay the retrospective premium, so the risk of uncollectible premiums is greater.

Paid Losses

Paid losses are net of reimbursements, even if the reimbursement has not yet been received; this is consistent with the treatment of reinsurance recoverables on paid losses. Paid losses equal incurred losses minus the change in loss reserves. If incurred losses and loss reserves are net of the reimbursement, the paid losses must be net of the reimbursement as well.[21]

Illustration: Accounting for Paid Losses

An insurer sells a large dollar deductible policy with a deductible of $500,000 on January 1. A worker suffers a compensable injury on July 1, for benefits of $1,000 a week and an

expected disability of 1 year. The insurer pays the benefits through the end of the year and intends to bill the employer each July 1 for the policy year's reimbursement. The employer has not yet paid any reimbursement to the insurer by December 31.

Balance sheet: Since statutory accounting is net of expected reimbursements, the case reserve, incurred loss, and paid loss on December 31 are all zero. Cash is credited (taken down) by $26,000 for the benefit payments made by the insurer between July 1 and December 31, and an asset *reimbursements receivable under large dollar deductible policies* is debit by $26,000. Ten percent of this asset, or $2,600, is not admitted, so the admitted asset is $23,400.

Income statement: The insurer's expected future payments on this claim are $26,000, for which it expects to collect full reimbursement from the employer. The net reserve is zero, and there is no non-admitted asset charge. The income statement shows incurred losses of zero.[22] The cash flow statement shows a $26,000 reduction in the cash balance. Surplus decreases by $2,600, which is the increase in the non-admitted assets.

Deferred Tax Asset: Taxable income follows statutory income here. Since the income implied by the statutory balance sheet (–$2,600) is lower than taxable income ($0) and the difference will reverse over the coming year (when the reimbursement is paid), the statutory deferred tax asset is 35% × $2,600 = $910.[23]

Illustration: Accounting for Loss Reserves and Reimbursements

An insurer sells a workers' compensation policy with a $500,000 deductible on July 1, 20X4. By December 31, it has paid $350,000 in reimbursable benefits, for which it has received (so far) $225,000, and it expects to pay $2.5 million in additional benefits, of which $2.2 million is reimbursable; $300,000 is for expected payments above the deductible.

The statutory balance sheet shows loss reserves of $300,000; GAAP shows $2.5 million of loss reserves and $2.2 million of expected reimbursements. The paid losses on the statutory cash flow statement are zero, as are the incurred losses on the statutory income statement. The balance sheet entries are a (net) credit to cash of $125,000 and a corresponding debit to reimbursements on high deductible policies, of which $12,500 are not admitted. GAAP shows a bad debit entry for the expected uncollectible portion of the reimbursements.

INCIDENCE OF LOSS

Insurers use accrual accounting, not paid accounting. Losses are an offset to income when the accidents occur, not when the losses are paid or even when the loss is reported. If the loss is uncertain, an estimate is accrued when the loss occurs. Incurred but not reported losses are no different from other losses; the estimated losses for the policy are

accrued during the policy term. Subsequent changes in the loss estimates are assigned to the period the change is made, not to the accident period.[24]

Most losses on large dollar deductible policies are not even identified until years after the policy expires. Most permanent total disability claims begin as strains or sprains to the back or neck; if the injured worker has not returned to work after four or five years, the claim may be reclassified from temporary to total. Similarly, the liability under an aggregate limit may not be known until years after the policy expires. SSAP No. 65, ¶35, says:

> *The liability for loss reserves shall be determined in accordance with SSAP No. 55. Because the risk of loss is present from the inception date, the reporting entity shall reserve losses throughout the policy period, not over the period after the deductible has been reached. Reserves for claims arising under high deductible plans shall be established net of the deductible, however, no reserve credit shall be permitted for any claim where any amount due from the insured has been determined to be uncollectible.*

Illustration: Accounting for Unidentified Losses

An insurer writes $100 million of workers' compensation large dollar deductible business in 20X4, with deductibles of $250,000 or $500,000. Only two permanent total disability cases are reported during the year, though other cases may develop into permanent total injuries over the coming years. The insurer must accrue the full (estimated) liability during the policy terms; generally, the expected losses are booked as bulk reserves until a reserve estimate can be made.

Illustration: Accounting for Aggregate Deductibles

An insurer sells a workers' compensation policy with a $500,000 aggregate deductible on July 1, 20X4, on which it expects $300,000 of incurred losses. The incurred losses for July 1 through December 31 are $450,000, including one permanent total disability claim reserved for $325,000.

On December 31, the insurer has no liabilities. However, it expects $150,000 of losses in the remaining six months, for expected losses above the aggregate deductible of $100,000. The $100,000 of expected liability is spread over the policy term, and the insurer accrues a portion by December 31. If the expected liability is spread by the protection provided (as the SFAS 60 method for short duration policies), the reserve on December 31, is $50,000. If the expected liability is spread by expected losses, the reserve on December 31 is $100,000 × $450,000 / $600,000 = $75,000.

DISCLOSURES

¶38: The financial statements shall disclose the amount of reserve credit that has been recorded for high deductibles on unpaid claims and the amounts that have been billed and are recoverable on paid claims

NOTE: ASBESTOS AND POLLUTION

Asbestos and pollution exposures, such as remediation of abandoned toxic waste sites, are potentially large, but it is unclear who is liable for the damages or how one might estimate them. The traditional actuarial methods are not appropriate for most asbestos and pollution exposures, and regulators do not know how insurers are assessing their liabilities.

Illustration: Asbestos exposures were generally covered under the pre-1986 Commercial General Liability policy, but the trigger of coverage affects who pays. Suppose an insured was covered by CGL policies from 1950 through 1970 with a $1 million aggregate limit of liability in each year, and it has recently settled class action suits for 10,000 asbestos related claims for $1,000 a claim. If the asbestos claims are spread among all years, the CGL policies cover the entire liability; if the claims are allocated to the last year of exposure for each claimant, the aggregate limits in the latest policies curtail the coverage.

Illustration: A chemical firm deposited toxic wastes from 1965 through 1975 in a landfill that has since been declared an NPL (national priority list) site under the 1980 CERCLA legislation. The firm faces a $15 million remediation cost, which it passes to its CGL insurer. The insurer denies liability by exclusion (f) of the pre-1986 CGL policy, since the pollution was not sudden and accidental. The chemical firm argues that the pollution is covered since the damages were not intentional. State courts vary in their interpretation of the policy language, sometimes favoring insurers' interpretations and other times favoring those of policyholders.

In the early 1990's, few firms fully disclosed their potential asbestos and pollution liabilities. The SEC required special disclosure of potential asbestos and pollution liabilities in the 10K form for publicly traded companies; the NAIC has a similar disclosure in the Notes.

This disclosure is similar to the asset reconciliations in schedules A, B, C, and D, not like reserve adequacy monitoring in Schedule P . Suppose an insurer has $50 million of financial assets (stocks and bonds) and $50 million of policyholder reserves (unearned premiums and losses); regulators seek assurance that the figures are correct. The financial assets are reconciled to those of the previous year as

> asset values of the previous year + purchases – sales – redemptions + accrual of discount – amortization of premium = asset values of the current year.[25]

In contrast, the policyholder reserves are re-estimated each year; no reconciliation with the previous year's reserves is made. The rationale is that the same assets are held from year to year, unless they are sold, redeemed, or newly acquired, whereas most of the current year liabilities are different from those in the previous year.

Illustration: The personal automobile unearned premium reserve at year end 20X5 is for policies written in 20X5 and the 20X5 loss reserve is for accidents occurring primarily in 20X5; they have little relation to the unearned premium or loss reserves at year end 20X4.

Asbestos and pollution liabilities stemming from CGL policies have several characteristics that distinguish them from other reserves. The standard actuarial loss reserving methods rely on patterns of stability in the reporting or settlement of claims. If reported losses increased 20% from 24 month to 36 months after inception of the accident year in the historical loss triangles, reserving actuaries assume that a similar increase can be expected for the more recent accident years. These *triangulation* methods are not applicable to asbestos and pollution reserves, and no standard actuarial methods have yet been developed; regulators desire disclosure of the reserving methods used for these exposures.

Since 1986, the CGL policy excludes most asbestos and pollution exposures, and insurers write these exposures separately.[26] A year to year reconciliation is perhaps the easiest check that past year reserves were adequate, though it does not assess the adequacy of current year reserves. The Notes require a description of the reserving methods and a reconciliation with the reserves of the previous year.

SSAP 65, "Property and Casualty Contracts," Paragraph 42, says:

The financial statements shall disclose the following if the reporting entity is potentially exposed to asbestos and/or environmental claims:

a. *The reserving methodology for both case and IBNR reserves;*
b. *The amount paid and reserved for losses and loss adjustment expenses for asbestos and/or environmental claims, on a gross and net of reinsurance basis;*
c. *Description of the lines of business written for which there is potential exposure of a liability due to asbestos and/or environmental claims, and the nature of the exposure(s);*
d. *The following for each of the five most current calendar years on both a gross and net of reinsurance basis, separately for asbestos and environmental losses (including coverage dispute costs):*

Beginning reserves	$_____
Incurred losses and loss adjustment expenses	_____
Calendar year payments for losses and loss adjustment expenses	_____
Ending reserves	$_____

Reserving methods

We illustrate the required disclosure for asbestos and environmental reserving methods.

Asbestos litigation in the United States is unusual. Juries have awarded large damages

to plaintiffs without evidence of asbestos related illness; in some cases, the fear of contracting asbestosis has been sufficient to file a claim for damages. Asbestos trial lawyers might bring a large class action suit, with perhaps 2,000 plaintiffs seeking $5,000 apiece in damages for unspecified injuries stemming from exposure to asbestos. The insurer find it expedient to settle the claims for, say, $2,500 apiece instead of risking judgment by a capricious jury.

Asbestos reserving is often done policy by policy, unlike accident year methods used for other lines. If the insured's policies covered asbestos exposures and if asbestos suits are being filed against the insured (or may be filed), the reserve is estimated by careful analysis of the policy language in conjunction with review of asbestos court precedents in the state.

Reserving for remediation of abandoned toxic waste sites is often done site by site. Estimates of remediation costs may be obtained from EPA (Environment Protection Agency) documents. The costs are allocated based on the number and size of potentially responsible parties (PRP's), or the firms that have deposited wastes at the site. The reserve is estimated as a percentage of total remediation costs, based on coverage provided to the PRP's and the litigation history in the state (for allocation between insurers and policyholders).

Two benchmarks of reserve adequacy for asbestos and pollution (in addition to the reserving methods) are (i) the ratio of asbestos or environment reserves to the asbestos or environment payments in the most recent three years and (ii) the products liability or general liability market share of the insurer in each state and the expected total liabilities for the state. Some insurers report the benchmark measures in the Notes.

Asbestos liabilities are aggregated as a single products liability exposure and they are covered by excess-of-loss reinsurance treaties written over general liability policies. For many primary insurers, the net liability may be substantially lower than the direct (gross) liability. The Note requires estimates of both the gross and net liabilities, since (i) many reinsurers of old policies have ceased operations, (ii) some reinsurers have denied liability for certain asbestos and environment claims, and (iii) high asbestos and environment exposures have impaired the ability of some reinsurers to pay the recoverables.

The reconciliation of environment reserves with those of the previous year is shown below.

Illustration: The calendar year definition of incurred loss is paid loss plus change in loss reserves, or incurred loss = paid loss + current year's reserves – previous year's reserves. This implies that the current year reserves = the previous year reserves + incurred losses – paid losses. At year-end 20X4, an insurer has $10 million of pollution reserves for remediation as two toxic waste sites. During 20X5, the insurer pays $1.5 million at one waste site and reduces its reserve from $4 million to $3 million. It pays $800,000 for remediation at the second waste site and it does not change the reserves. It adds a $3

million reserves for remediation costs at a third waste site. The insurer shows: $10 million (beginning reserves) + $4.3 million (incurred loss) – $2.3 million (paid loss) = $12 million (ending reserve). The $4.3 million incurred loss comprises $500,000 for the first waste site, $800,000 for the second waste site, and $3 million for the third waste site.

Reinsurance Assumed and Ceded

Instructions

1. *Report the maximum amount of return commission which would have been due reinsurers if they or you had canceled all of your company's reinsurance or if you or a receiver had canceled all of your company's insurance assumed as of the end of the period covered by this annual statement with the return of the unearned premium reserve. Equity amounts should be computed by applying the fixed or provisional commission rate for each contract to the unearned premium reserve.*
2. *Report the additional or return commission, predicated on loss experience or on any other form of profit sharing arrangements in this annual statement as a result of existing contractual arrangements.*

Reinsurance Commissions

Reinsurance serves two functions: risk transfer and capital management. Risk transfer may protect against large losses, catastrophes, and concentrations of risk; capital management frees capital embedded in loss or unearned premium reserves. The capital embedded in loss reserves may be freed with retroactive reinsurance or finite reinsurance; the capital in unearned premium reserves may be freed with surplus aid reinsurance.[27]

Most reinsurance contracts contain a mix of risk transfer and capital management. This Note focuses on the use and potential abuse of reinsurance commissions for surplus relief.

Illustration: An insurer is capitalized with $100 million on January 1 and writes $200 million of personal automobile insurance evenly through the year. Commissions, other acquisition expenses, premium taxes, and underwriting costs are 30% of premium, paid at policy inception. The expected loss ratio is 80% and the present value of the losses is 75% of their undiscounted value. The investment income for the year is $10 million.

The business is profitable: the present value of expected losses and expenses is 90% of the premium. With a two to one premium to surplus ratio, the pre-tax return on surplus is 20%.

But statutory accounting requires a gross unearned premium reserve of $100 million at year end and an undiscounted loss reserve. The cash received plus the beginning surplus is $310 million. The loss and expense payments plus the loss and unearned premium reserves is $240, and the remaining surplus is $70 million. The premium to surplus ratio is $200 million to $70 million or 2.857. This is well above industry averages.

If the company buys a 50% quota share treaty with a 30% reinsurance commission, net

premium is $100 million, net investment income is $5 million, net expenses are $30 million, net undiscounted losses are $40 million, and the net unearned premium reserve is $50 million. At year end, statutory surplus is $85 million. The net premium to surplus ratio is $100 million / $85 million = 1.176.

There is sometimes the perception that the reinsurance commission is set equal to the ceding company's expense ratio. Were this so, reinsurers would lose money, since they would be paying for both the ceding company's and their own expenses, and it would be poor business practice, since a reinsurance commission equal to the ceding company's expenses does not differentiate by the quality of the business reinsured.

The reinsurance commission stems from a quirk in statutory accounting: the unearned premium reserve is the initial written premium amortized over the policy term. Suppose an insurer writes $100 million of business, pays $30 million of expenses, and reinsures the entire book for a premium of $70. The ceding company has no net business and no net dollars paid or incurred, but it shows a $30 million unearned premium reserve (direct of $100 million minus ceded of $70 million), and it has surplus $30 million lower than before it wrote the business. The reinsurance commission repairs the accounting presentation: by reinsuring the business for a $100 million premium with a commission of $30 million, the ceding company shows a zero net unearned premium reserve and zero expenses paid or incurred.

Surplus relief reinsurance can be misleading in two ways.

- If the ceding company faces financial distress, the reinsurer may not renew the treaty, restoring the high premium to surplus ratio.
- To obtain artificial surplus relief, the ceding company may pay a higher reinsurance rate with a higher reinsurance commission. There is no change in the cash flows, but surplus is increased by accounting sleight-of-hand; see the illustration below.

Reinsurance Assumed and Ceded, shows the surplus relief provided by reinsurance commissions. The ceding company reports the return commission due the reinsurer if all reinsurance arrangements were canceled. The *commission equity* in the table below is the unearned premium reserve times the reinsurance commission rate.

	Assumed Reinsurance		Ceded Reinsurance		Net	
	Premium Reserve (1)	Commission Equity (2)	Premium Reserve (3)	Commission Equity (4)	Premium Reserve (5)	Commission Equity (6)
i. Affiliates	$	$	$	$	$	$
ii. All Other	$	$	$	$	$	$
iii. Total	$	$	$	$	$	$

iv. Direct Unearned Premium Reserve $

Illustration 1: Excess-of-Loss Reinsurance Treaty

Excess of loss reinsurance is generally priced without a ceding commission. Suppose the ceding company has $100 million of written premium and $30 million of policyholders' surplus for a 3.33 to 1 premium to surplus ratio.

Let the reinsurance rate for an excess-of-loss treaty with a $250,000 retention be 6% of subject premium. For $100 million of subject premium, the reinsurance premium is $6 million, and the net premium is $94 million. The $6 million premium is offset by a reduction in unearned premium reserves of $6 million, and surplus remains $30 million. The premium to surplus ratio is $94 million to $30 million, or 3.13 to 1, which is still too high.

If the reinsurance rate is changed to 12% of subject premium and a 50% commission is added, the net reinsurance premium is still $6 million, and the treaty covers the same losses, but the accounting presentation is different. The $12 million of reinsurance premium is offset by a $12 million reduction of the unearned premium reserves, and the $6 million of ceding commission is a revenue. The ceding company shows $88 million of net written premium and $36 million of surplus. The ratio of net premium to surplus is $88 million / $36 million = 2.44.[28]

Contingent Commissions

Some reinsurance commissions depend on the loss experience on the reinsured business. An insurer's financial statements reflects its expected commission rate. If its experience worsens, not only may its loss ratio rise, but its reinsurance commissions may decrease.

Illustration: Suppose the reinsurance commission rate in the illustration above varied with the loss ratio as commission rate = 30% + 0.5 x (70% – loss ratio), with bounds at 20% (for a loss ratio of 90%) and 40% (for a loss ratio of 50%). The primary insurer may expect a loss ratio of 70%, and it reports policyholders' surplus of $70 million. If the loss ratio is 90%, the insurer loses an extra $20 million on its uninsured business and $10 million on its reinsurance commission.

Part 2 of this note requires disclosure of contingent commissions, sliding scale commissions, profit sharing arrangements, or other commissions based on loss experience or profitability.

		Reinsurance		
	Direct	Assumed	Ceded	Net
i. Contingent Commission	$	$	$	$
ii. Sliding Scale Adjustments	$	$	$	$
iii. Other Profit Commissions	$	$	$	$
iv. Total	$	$	$	$

Contingent commissions may also be abused, as the illustration below shows.

Illustration 2: Surplus Share with Provisional Commission

Quota share reinsurance is usually priced with a ceding commission. Varying the ceding commission changes the effective reinsurance rate, so the accounting is more subtle. The treaty may use a contingent commission with a high provisional rate to provide surplus relief.

Suppose the ceding company has $100 million of written premium and $20 million of surplus. The 5 to 1 premium to surplus ratio is too high. The quality of the business is poor, and reinsurers expect a loss ratio of about 90%; they offer a 20% quota share treaty with a 10% provisional and 1 for 1 sliding scale ceding commission. The 10% provisional ceding commission assumes a 90% loss ratio. If the actual loss ratio is higher, such as 95%, the ceding commission is reduced to 5%; if the actual loss ratio is lower, such as 80%, the ceding commission is increased to 20%. The reinsurer has little underwriting risk; the purpose of the reinsurance treaty is surplus relief.[29] The reinsurer's net payment is $18 million regardless of the loss ratio.

The net cash flow at inception of the treaty is $20 million × (1 – 10%) = $18 million. The net written premium is $80 million and the adjusted surplus is $22 million. The revised premium to surplus ratio is $80 million / $22 million, or 3.64. This is still too high.

But suppose the ceding company purchases a 40% quota share reinsurance treaty with a 55% provisional 1 for 1 sliding scale ceding commission starting at a 45% loss ratio. The cash flow at inception of the treaty is the same as in the previous scenario: $40 million × (1 – 55%) = $18 million. The net cash flows remain the same. If the actual loss ratio is 45%, the reinsurer's payment is 40% × $45 million = $18 million. If the actual loss ratio is 90%, the payment is 40% × $90 million = $36 million which is offset by a return commission of 45% × 40% × $100 million = $18 million. But the net written premium is $60 million and the adjusted surplus is $42 million. The revised premium to surplus ratio is $60 million / $42 million, or 1.43. This appears excellent.

This is misleading, since the 55% ceding commission is revised 1 for 1 with the actual loss ratio. Yet the apparent premium to surplus ratio of 1.43 provides the needed surplus relief.

RETROACTIVE REINSURANCE

INSTRUCTIONS

(1) Provide the following information for all retroactive reinsurance agreements that transfer liabilities for losses that have already occurred and that will generate special surplus transactions:

a. Reserves transferred;
b. Consideration paid or received;

c. Paid losses reimbursed or recovered;
d. Special surplus from retroactive reinsurance;
e. A list of cedents and reinsurers included in items a. through d.

The insurer (assuming or ceding) shall assign a unique number to each retroactive reinsurance agreement and shall utilize this number for as long as the agreement exists. Do not report transactions utilizing deposit accounting in this note.

(2) Disclose all contracts of reinsurance covering losses that have occurred prior to the inception of the contract that have not been accounted for in conformity with the instructions contained in the NAIC Accounting Practices and Procedures Manual, SSAP 62.

PROSPECTIVE VS. RETROACTIVE REINSURANCE

Reinsurance arrangements may be either prospective (covering future events) or retroactive (covering past events). Retroactive reinsurance provides surplus relief by exchanging full values reserves for their present value.

Illustration: At year-end 20X6, an insurer retroactively cedes the unpaid losses from policy year 20X5 to a reinsurer, and pays their present value plus an expense loading. The premium may be fixed, with loss development borne by the reinsurer, or the contract may require the ceding company to pay for part or all of any adverse loss development.

Before 1992, most states treated retroactive reinsurance (called *loss portfolio transfers*) as ordinary (prospective) reinsurance. In contrast, New York argued that companies used loss portfolio transfers to circumvent reserve valuation rules, since full value reserves were exchanged for their present value. In some cases, the reinsurer assumed no significant underwriting risk: adverse loss development was charged back to the primary company.

In 1992, the NAIC adopted New York's accounting rules and removed the effects of retroactive reinsurance from Annual Statement reserves. The gain from retroactive reinsurance is set aside as special surplus and transferred to unassigned surplus after the losses are paid.

We illustrate the use of retroactive reinsurance as a substitute for loss reserve discounting.[30] Suppose the policy year 20X5 General Liability reserves are $30 million at year-end 20X6, and the reserves will be paid, on average, in 3½ years. At a 6% discount rate, the fair value of the reserves is $30 million × $1.06^{-3.5}$ = $24.465 million. The insurer would like to post reserves of $24.465 million, but statutory accounting requires reserves of $30 million.

To gain the *surplus relief* from discounting, the primary company cedes the reserves to a reinsurer for a premium of $25 million. The primary insurer gets surplus relief of $5 million [= $30 million – $25 million], and the reinsurer gets a profit of about $535,000.

ACCOUNTING PROCEDURES

We show the statutory accounting treatment for illustration above. If the reinsurance contract does not pass the FAS 113 (= SSAP 62) tests, the accounting entries are a credit (reduction) to cash of $25 million and a debit (increase) to a balance sheet account called *deposit with reinsurance company*. No other entries are changed – in particular, loss reserves are not changed – and there is no surplus relief.

On GAAP statements, if a reinsurance contract passes the FAS 113 tests, whether it is prospective and retroactive, the recoverables are assets, with no change to the direct (gross) liabilities for loss reserves or unearned premium reserve. Gains are recognized over the policy term for prospective reinsurance and over the lifetime of the claims for retroactive reinsurance, in accordance with GAAP contract completion principles.

Statutory accounting for retroactive reinsurance differs from GAAP in two ways: the surplus relief is immediate, but the additional surplus is segregated as *special surplus*.

[1] Gross loss reserves are shown on all statutory statements, exhibits, and schedules.[31] The $30 million direct loss reserve remains untouched on the balance sheet, Schedule P, and the Underwriting and Investment Exhibit. The retroactive reinsurance arrangement does not affect any of the reserves in the Annual Statement, but the $25 million credit to cash remains. Were there no other accounting entries, the ceding company would show a $25 million reduction in surplus. Instead →

[2] The recoverables from retroactive reinsurance are a write-in contra-liability for the ceding company and a write-in liability for the reinsurer.[32] The primary company records $30 million as a negative reserve (*contra-liability*) as a write-in liability (page 3, line 20, in 2002). A contra-liability has the same effect as a reduction in the direct loss reserve; it increases statutory surplus by $5 million. Instead →

[3] The gain from retroactive reinsurance is called special surplus, not unassigned surplus.[33] The $5 million gain is shown a special surplus; it is not included in unassigned surplus. The risk-based capital formula makes no distinction between unassigned surplus and special surplus, so this provides immediate surplus relief. Because retroactive reinsurance increases statutory surplus, it is often used for capital management.

[4] The gain from retroactive reinsurance become unassigned surplus once the losses are paid.[34] Using the illustration above, suppose that $12 million of losses are paid to claimants and reimbursed by the reinsurer during the next year. The 20X7 Annual Statement shows $18 million as the remaining reserves, $18 million as the write-in contra-liability, and $5 million as special surplus.

If by December 31, 20X8, $27 million has been paid to claimants and reimbursed by the reinsurer, the 20X8 Annual Statement would show $3 million as the remaining reserves,

$3 million as the write-in contra-liability, $3 million as special surplus, and the remaining $2 million is added to unassigned funds (surplus) (page 3, line 24C, in 2002).

If by December 31, 20X9, all the losses have been paid to claimants and reimbursed by the reinsurer, the 20X9 Annual Statement would show zeros for the remaining reserves and write-ins, and all $5 million is transferred to unassigned surplus.

The description above assumes that the initial reserve estimate was correct. If reserves develop favorably or adversely, adjustments are made to these entries. Suppose that in 20X7, $12 million is paid to claimants and reimbursed by the reinsurer and the remaining unpaid losses are re-estimated as $21 million, for $3 million of adverse loss development.

In the 20X7 Annual Statement, the remaining reserves are $21 million, and the write-in line for retroactive reinsurance is also $21 million. The special surplus entry is $8 million, which is the difference between the total losses [$33 million] and the reinsurance premium [$25 million]. Unassigned surplus on the balance sheet decreases by $3 million.

DISCLOSURE REQUIREMENTS

The aggregate of all retroactive reinsurance contracts still in effect are disclosed in the format shown below. For each individual contract, the insurer must keep the same information, which may be requested by the insurance department.

As:	(1) Assumed	(2) Ceded
A. Reserves Transferred:		
1. Initial Reserves	$_____	$_____
2. Adjustments – Prior Year(s)	$_____	$_____
3. Adjustments – Current Year	$_____	$_____
4. Total	$_____	$_____
B. Consideration Paid or Received:		
1. Initial	$_____	$_____
2. Adjustments – Prior Year(s)	$_____	$_____
3. Adjustments – Current Year	$_____	$_____
4. Total	$_____	$_____
C. Amounts Recovered/Paid (cumulative):		
1. Prior Year(s)	$_____	$_____
2. Current Year	$_____	$_____

3. Total	$_____	$_____
D. Special Surplus from Retroactive Reinsurance:		
1. Initial	$_____	$_____
2. Adjustments – Prior Year(s)	$_____	$_____
3. Adjustments – Current Year	$_____	$_____
4. Closing Balance	$_____	$_____

We complete the Column (2) entries for the ceding company; corresponding entries appear in column (1) of the reinsurer's Annual Statement.

20X6: The reserves transferred of $30 million appear in row A.1; the compensation of $25 million appears in row B.1; the initial special surplus of $5 million appears in row D.1.

20X7: $12 million of losses are paid to claimants and reimbursed by the reinsurer in 20X7, and the remaining reserves are re-estimated at $21 million. The *initial* amounts in the 20X7 Annual Statement are the same as in 20X6. The *current year adjustments* are: $3 million of reserves transferred on row A.3, and $3 million of special surplus on row D.3. The *amounts recovered/paid* in the current year of $12 million is entered in row 3.2, column (2).[35] The four *total* rows are the sums of the entries in the preceding lines. For instance, the total reserves transferred is $30 million + $3 million = $33 million.

The illustration presumes that the reinsurance consideration was fixed at $25 million. Suppose instead that the contract requires the ceding company to pay two thirds of any adverse development. There are two changes to the exhibit.

A *current year adjustment* to the consideration paid/received of $2 million is entered on row B.3. This additional consideration causes a reduction of the ceding company's surplus by $2 million, and the current year adjustment to the special surplus is $1 million, not $3 million.

20X8: The 20X7 *current year* entries are moved to the corresponding *prior years* rows, and a new set of *current year* figures, reflecting 20X8 activity, are entered in 20X8.

This exhibit shows the total for all retroactive reinsurance contracts still in effect. Once all losses have been paid, all entries relating to this contract are removed from the exhibit.

Retroactive reinsurance must also be discussed in the Statement of Actuarial Opinion. This is an independent opinion by the Appointed Actuary, which may differ from management's.

UNCOLLECTIBLE REINSURANCE

INSTRUCTIONS

Describe uncollectible reinsurance written off during the year reported in the following Annual Statement classifications, including the name or names of the reinsurer(s):

- *Losses incurred;*
- *Loss adjustment expenses incurred;*
- *Premiums earned;*
- *Other*

Insurers provide four disclosures for uncollectible reinsurance.

- GAAP statements show management's prospective estimate of uncollectible reinsurance. This non-ledger (year-end) bad debt offset for reinsurance is no different from bad debt offsets for other receivables.

- The statutory provision for reinsurance is based on a formula, not on management discretion.[36] The provision for reinsurance is a minimum bound; if the estimated uncollectibles are larger, the full estimated uncollectible is the provision for reinsurance.[37]

- In the Statement of Actuarial Opinion, the Appointed Actuary comments on reinsurance collectibility and its effect on loss and LAE reserves.[38] This independent *actuarial* evaluation of reinsurance collectibility may differ from management's estimate.

- The Notes to the Financial Statements disclose uncollectible reinsurance written off during the past year. This is a retrospective *disclosure* of reinsurance collectibility.

It is difficult for regulators to assess the adequacy of the provision for reinsurance. Overseas insurers may be authorized to conduct reinsurance business in the domiciliary state of the ceding company, but if they are not licensed, the insurance department can not examine their books. The Note discloses the collectibility experience of the company.

Illustration: An insurer reports a provision for reinsurance of $20 million on December 31, 20X5, based on $100 million of loss recoverables that are more than 90 days past due. In 20X6, the company reports $25 million of reinsurance recoverables written off as uncollectible, and it again reports a provision for reinsurance of $20 million. The insurance regulator may question whether the provision for reinsurance is sufficient.

In most cases, the provision for reinsurance should be several times as large as the uncollectible reinsurance recoverables written off in the Note, for two reasons.

- The provision for reinsurance reflects uncollectible reinsurance recoverables for all years; the note reflects the amounts written off in a single calendar year.

- The provision for reinsurance should be at least as large as the estimated uncollectible reinsurance recoverables.

Structured Settlements

Annual Statement *Instructions*

A. Disclose the amount of reserves no longer carried by the insurer because it has purchased annuities with the claimant as the payee and to the extent to which the insurer is contingently liable for such amounts should the issuers of the annuities fail to perform under the terms of the annuities.

B. Disclose the names and location of the insurance company and the aggregate statement value of annuities due from an y life insurer to the extent that the aggregate value of those annuities equals or exceeds 1% of policyholders' surplus. Include only annuities for which the company has not obtained a release of liability from the claimant as a result of the purchase of an annuity. Also disclose whether the life insurers are licensed in the company's state of domicile.

Background

A structured settlement is an arrangement whereby one party (a property-casualty insurer) makes periodic payments, such as a life annuity, to a second party (an accident victim) as compensation for damages incurred. A structured settlement is often an out-of-court settlement between the casualty insurer and the plaintiff. If the accident victim is a minor or is incompetent, the court may direct the parties to agree to a structured settlement.

Illustration: A negligent driver injures a pedestrian. The pedestrian, age 28 and male, is permanently paralyzed. Medical costs are $60,000 for emergency room treatment plus $24,000 a year, increasing 5% annually, for continuing medical care and rehabilitation. Loss of income is $46,000 a year, increasing 6% annually. The negligent driver is covered by a commercial automobile insurance policy with a $1 million limit of liability and an umbrella policy for $4 million excess of $1 million. Instead of a lump sum settlement, the insurer may agree to $60,000 payable immediately plus a structured settlement for $24,000 a year increasingly 5% annually and $46,000 a year increasing 6% annually.[39]

Structured Settlements and Retroactive Reinsurance

A insurer may use three means of arranging a structured settlement.

- Some insurers, such as workers' compensation carriers accustomed to paying indemnity benefits to disabled workers, may make the payments themselves. The casualty reserve may be undiscounted or may use tabular discounts.
- The casualty insurer may purchase an annuity from a life insurance company. The annuity may be a life annuity or an annuity certain, or it may be a customized annuity to fit the payment schedule agreed upon in the settlement. The life insurance company uses a discounted annuity reserve instead of an undiscounted casualty loss reserve.

- The casualty insurer may purchase an annuity from its own life insurance subsidiary.

The disclosure requirements in this Note pertain to structured settlements that are funded by annuities, either from a third party or from an affiliate.

Funding the structured settlement with an annuity is similar to retroactively reinsuring the loss with a life insurance company. Statutory accounting for retroactive reinsurance does not permit a reduction of the gross loss reserves on the ceding company's statements, exhibits, or schedules.[40] If structured settlements were treated like retroactive reinsurance, companies may be reluctant to use them. For example, suppose an insurer has a choice between a lump sum settlement of $1.5 million and a structured settlement with total payments of $5 million. If the structured settlement were treated as retroactive reinsurance, it would show incurred losses $3.5 million greater and reserves $5 million higher than the lump sum settlement, and it would cause $3.5 million of unassigned surplus to be moved to special surplus funds.

Most structured settlements are beneficial to the injured parties (particularly for minors and incompetent persons). To encourage structured settlements that fairly compensate injured persons, they are not treated as retroactive reinsurance.

RATIONALE FOR STRUCTURED SETTLEMENTS

The motivations for structured settlements are matching payments to damages, management of assets, reimbursement for minors and incompetent persons, and tax advantages,

Matching: Under common law, plaintiffs in civil cases are entitled to lump sum payments for damages. Jurors may agree on the annual damages but not on the life expectancy of the plaintiff or the discount rate to determine present values. A structured settlement allows the jurors to match the compensation to the damages suffered.

Management of Assets: Large lump sums may be squandered, particularly if received by persons not accustomed to handling large sums of money. Accident victims receiving large lump sums may also be subject to fraudulent investment schemes.

Minors: If the injured party is a minor or is otherwise incompetent to manage a financial portfolio, the court may direct the litigants to agree on a structured settlement. Structured settlements are often used for accident victims who suffer brain damage or to provide periodic payments to orphans until they reach maturity.

Taxes: Money received in compensation for damages is exempt from federal income taxes. Any investment income earned subsequently is taxed at regular rates, even if the money is invested in a life annuity. If the lump sum settlement is awarded first and is exchanged for a structured settlement, the structured settlement is taxed as a regular annuity with no tax benefit.

Illustration: A life annuity with benefits of $80,000 a year is purchased for $1 million. The annuitant has a life expectancy of 20 years. The total expected benefits are $1.6 million, and the premium is five eighths of this amount. For each benefit payment, three eighths is subject to federal income taxation and five eighths is exempt from federal income taxation.

If the structured settlement itself is paid as compensation for the damages – not in lieu of a lump sum award – all the payments are exempt from tax. When negotiating a structured settlement, the parties should make no reference to a lump sum amount.

Illustration: A 40 year old male with a remaining life expectancy is 30 years is permanently disabled in an auto accident. We show the tax liability for each scenario below.

- *Scenario A:* The claimant receives $1.5 million in damages, which are invested in bonds yielding 8% per annum. The claimant's tax rate is 30%, and he withdraws the interest each year for living expenses. The investment income is $1.5 million × 8% = $120,000 per annum, and the tax liability is 30% × $120,000 = $36,000 per annum.
- *Scenario B:* The claimant receives $1.5 in damages, with which he buys a life annuity giving $3,500 a week. The cost of the annuity is $1.5 million and the expected benefits are 52 × $3,500 = $182,000 per annum and 30 × $182,000 = $5,460,000 in total. The tax exempt portion of each weekly payment is 1.5 million / 5.46 million = 27.47% and the taxable portion is 72.53%. The tax liability is 30% × 72.53% × $3,500 = $761.57 a week or $39,708 a year.
- *Scenario C:* the claimant receives a structured settlement paying $3,500 a week for life. The tax liability is zero, since all benefits are received for damages incurred.

STATUTORY ACCOUNTING TREATMENT

There are four parties to an annuity: the owner, the writer, the payee, and the measuring life.

- The owner buys the annuity. The original owner may transfer ownership to another party, either for compensation or as a gift.
- The annuity writer is generally a life insurance company.
- The measuring life (for life annuities) determines the duration of benefits.
- The payee receives the annuity payments.

Illustrations: A defined benefits pension plan may purchase annuities to fund retirement benefits; the payee and measuring life is the retired worker. Variable annuities may be used as tax deferred investment vehicles; the investor is the owner, measuring life, and payee.

Statutory accounting depends on whether the insurer or the claimant is the payee. For a

structured settlement, the insurer is the owner and the accident victim is the measuring life. Unless otherwise specified, the insurer is also the payee. Since it is inefficient for the insurer to receive the annuity payments and make separate payment to the accident victim, the insurer either assigns the payments to the accident victim designates the accident victim as the payee. In an assignment, the insurer remains the payee, but the annuity writer makes payments directly to the accident victim.

If the casualty company is the payee, the funding vehicle for the claim payments is a life annuity instead of the insurer's general funds. The reserves are not affected by the mode of payment. The reserve reduction each year (a debit) is offset by a paid loss of that amount and an reduction in cash (a credit). The annuity payment offsets the cash reduction, leaving a zero net change in cash. The change in the book value of the annuity partially offsets the annuity payment; the difference is miscellaneous income.[41]

If the claimant is the payee, the insurer's obligations are transferred to the annuity writer (the life insurer). The cost of the annuity is a paid loss, and the loss reserve is eliminated.[42]

Illustration: A child is permanently disabled by a negligently constructed toy. The manufacturer has a CGL policy with a $1 million policy limit and a $4 million excess of $1 million umbrella policy. The court awards payments of $5,000 a month ($60,000 a year) for the child's lifetime, and the insurer buys a life annuity on December 31, 20X5, to make the payments. The child's remaining life expectancy is 50 years, the cost of the annuity is $1 million, and the amortization of the annuity in the first year (assuming the child lives) is $22,000.[43]

If the insurer is the payee (with the payments assigned to the child), the loss reserve (a credit) is $60,000 × 50 = $3,000,000, and the annuity is a non-invested asset of $1 million (a debit).

December 31, 20X5:		Debit	Credit
Case reserves:	Balance sheet:		$3,000,000
Incurred loss:	Income statement:	$3,000,000	
Cash paid:	Balance sheet:		$1,000,000
Life annuity:	Balance sheet:	$1,000,000	

The credit to case reserves balances the debit to incurred losses ($3 million), and the credit to cash balances the debit to the life annuity account ($1 million). The incurred loss depends on the reserve, not the value of the funding instrument.

As the benefits are paid, the loss reserve is reduced, and the annuity is amortized. The debit (reduction) to the loss reserve balances the credit (reduction) to cash. The cash from the annuity (a $60,000 debit each year) balances the amortization of the annuity (a $22,000 credit the first year) and the miscellaneous income (a $38,000 credit the first year).

December 31, 20X6:		Debit	Credit
Reserve decrease:	Balance sheet	$60,000	
Cash paid:	Balance sheet		$60,000
Cash from annuity:	Balance sheet	$60,000	
Annuity amortization:	Balance sheet		$22,000
Miscellaneous income:	Income statement		$38,000

If the child is the payee, the insurer has transferred its obligations to the annuity writer. The cost of the annuity is a paid loss, and the loss reserve is eliminated.

December 31, 20X5:		Debit	Credit
Incurral of loss:			
Case loss reserve:	Balance sheet		$3,000,000
Incurred loss:	Income statement:	$3,000,000	
Structured settlement and purchase of annuity:			
Cash paid:	Balance sheet	$1,000,000	
Incurred loss:	Income statement:	–$2,000,000	
Case loss reserve:	Balance sheet		–$3,000,000

The net effect is an incurred loss of $1 million (a debit) and a credit to cash of $1 million. Annuity payments in subsequent years do not affect the accounts of the casualty insurer.

GAAP AND STATUTORY ACCOUNTING

Part (b) of this Note to the Financial Statements pertains to the contingent liability of the insurer when the claimant is the payee.

The insurer is contingently liable if the annuity writer fails to make a payment, even if the claimant is the payee. (If the insurer is the payee, it is directly liable for all payments.) If the claimant has released the insurer from further liability, the claimant's only recourse is against the annuity writer.[44] The liability is a matter of law; it does not differ between GAAP and statutory accounting; the income recognition pattern depends on the accounting system.

For long-term contracts, GAAP recognizes revenue ratably over the contract term, either as a percentage of contract completion or as a percentage of the contract term that has elapsed. The income is deferred; it is not recognized immediately.[45] The GAAP treatment if the child is the payee with no release of liability is shown below.[46]

December 31, 20X5:		Debit	Credit
Incurral of loss:			
Balance sheet:	Case loss reserve:		$3,000,000
Income statement:	Incurred loss:	$3,000,000	
Structured settlement and purchase of annuity:			
Balance sheet:	Cash paid:		$1,000,000
Income statement:	Incurred loss:	–$2,000,000	
Balance sheet:	Case loss reserve:		–$3,000,000

The –$2,000,000 incurred loss is a deferred income item; it may not be recognized in 20X5. Since this accounting treatment may deter insurers from using structured settlements, statutory accounting permits the insurer to recognize the $2 million revenue immediately if the claimant is the payee, whether or not it receives a release of liability.

DISCLOSURES

If the claimant is the payee but the insurer has not obtained a release of liability, it must disclose the annuity writer, its state of domicile, and the aggregate value of the annuities if the aggregate values exceeds 1% of the reinsurance company's surplus.[47]

Illustration: ABC Insurance, with surplus of $100 million, has several structured settlements funded with annuities from outside life insurers, as summarized below.

Statutory Value of Annuity	*Life Insurance Company*	*Payee*	*Release of Liability Obtained?*
$1.2 million	W	ABC	N/A
$1.2 million	X	claimant	yes
$0.5 million	Y	claimant	no
$0.3 million	Y	claimant	no
$0.5 million	Z	claimant	no
$0.3 million	Z	claimant	no
$0.3 million	Z	claimant	no

Co W: ABC is the payee, and its reserves are not affected by the annuity; no disclosure.
Co X: The claimant is the payee and has released ABC from further liability; no disclosure.
Co Y: The aggregate value of the annuities, $800,000, is less than 1% of ABC's surplus. ABC is contingently liable if company Y fails to make the payments (and the contingent liability may be disclosed elsewhere); no separate disclosure is required in the Notes.
Co Z: The aggregate value of the annuities is $1,100,000, which is more than 1% of ABC's policyholders' surplus. Since ABC is contingently liable for the payments, it must disclose the annuity writer, its state of domicile, and the aggregate value of the annuities.

Structured settlements cause loss reserves changes if the claimant is the payee of the annuity. The effect on loss development may be reported in Interrogatory 7 of Schedule P. The Appointed Actuary must comment on structured settlements in the *Statement of Actuarial Opinion* if they affect loss reserve adequacy.

Commutation of Ceded Reinsurance

Instructions

Describe commutations of ceded reinsurance during the year reported in the following Annual Statement classifications, including the name or names of the reinsurer(s):

1. *Losses incurred;*
2. *Loss adjustment expenses incurred;*
3. *Premiums earned;*
4. *Other*

A claim commutation is the re-assumption of reinsured claims by the ceding company in exchange for a payment by the reinsurance company. A commutation is the reverse of retroactive reinsurance, since the primary company is re-assuming claims that have already occurred and were previously reinsured.

Illustration: On January 1, 20X2, ABC Insurance cedes an excess layer of workers' compensation business to XYZ Reinsurance with a $900,000 excess of $100,000 treaty. Five years later, only two permanent total disability claims remain outstanding, both of which have pierced the $100,000 retention and are being paid by the reinsurer. The two claims have remaining reserves of $250,000 and $350,000, with present values of $150,000 and $225,000. To commute the claims, the reinsurer may pay $375,000 to the ceding company to re-assume the liability and $5,000 to cover loss adjustment expenses. The disclosure is

	Debit	Credit
• Losses incurred	$600,000	
• Loss adjustment expenses incurred	$5,000	
• Premiums earned		$380,000
• Other		

The disclosures are income statement items, not balance sheet items. The balance sheet has the offsetting entries: $600,000 loss reserve, $5,000 LAE reserves, and $380,000 cash.

Motivations for Commutations

Claim commutations have several purposes.

- The reinsurance treaty transfers risk from the ceding company to the reinsurer. Once

the policy term has expired and most claims have been settled, little underwriting risk remains. The primary company may be more efficient at handling routine claim payments, such as weekly workers' compensation indemnity benefits. The commutation transfers the claim handling responsibilities back to the company that is more efficient at this task.

- To close the books on their reinsurance transactions, companies may commute remaining claims on old treaties regardless of their relative efficiency in handling the claims. The ceding and assuming companies may even agree at treaty inception to commute all remaining claims at a certain time.
- In theory, the companies may differ in their estimates of the costs of the remaining claims, in the present value factors, in the cost of holding capital, or in the tax effects. These items do not generally motivate the commutation, but they affect the commutation price.

Commutations often occur in conjunction with a rehabilitation or a liquidation. Suppose an insurer being liquidated has $40 million of assets, $100 million of liabilities (loss reserves and unearned premium reserves), and $10 million of reinsurance recoverables on WC long-term disability cases. The liquidator may commute the recoverables for a premium of $5 million to pay current debts.

Reinsurance Recoverable in Dispute

Instructions

Reinsurance recoverable on paid and unpaid (including IBNR) losses in dispute by reason of notification, arbitration or litigation shall be identified in the schedule if the amounts in dispute from any company (and/or affiliate) exceeds 5% of the ceding company's policyholders surplus or if the aggregate of all disputed items exceeds 10% of the ceding company's policyholders surplus. "Notification" means a formal written communication from a reinsurer denying the validity of coverage.

Amounts in Dispute and Overdue Recoverables

Twenty percent of reinsurance recoverables more than 90 days past due are offset by a statutory provision for reinsurance, and a reinsurer with more than 20% of its recoverables more than 90 days past due is slow-paying and triggers another provision for reinsurance.

Some recoverables are more than 90 days past due because the reinsurer denies liability, not because the reinsurer is late in its payments. These *amounts in dispute* do not enter the payment schedule in Schedule F, Part 4, but 20% of the amounts in dispute must be included in the provision for reinsurance.

Disclosure Requirements

Reinsurance recoverables may be in dispute in 3 ways: notification, arbitration, or litigation. *Notification* means that the reinsurer has sent a formal letter to the ceding company

denying the claim; *arbitration* and *litigation* mean that the ceding company and the reinsurer are engaged in judicial or similar proceedings to resolve the issues of liability.

Disclosure is required on amounts in dispute whether the loss is paid or unpaid, case reserve or IBNR reserve, and overdue or not.[48] Disclosure is required only if the amount in dispute from one reinsurer exceeds 5% of surplus or if the aggregate from all reinsurers exceeds 10% of surplus. The exhibit below shows an illustrative response to this note.

		By reason of:		
Reinsurer	*Amount in Dispute*	*Notification*	*Arbitration*	*Litigation*
ABC Re	$25,000	$25,000		
XYZRe	$80,000			$80,000
DEF Re	$70,000		$20,000	$50,000

Regulators are concerned with amounts in dispute for two reasons.

Insurers with large amounts in dispute but low provisions for reinsurance may have overstated their surplus. For example, an insurer with $80 million of recoverables in dispute but a provision for reinsurance of only $20 million may have less surplus than it appears to have.

A ceding company may avoid having a reinsurer listed as slow-paying by considering some of the recoverables to be in dispute. A recoverable more than 90 days past due has the same statutory liability as an amount in dispute and it worsens the payment schedule. Amounts in dispute are excluded from the payment schedule.

Illustration: Reinsurer XYZ has $10 million of recoverables owed to the ceding company, of which $2.5 million are more than 90 days past due, giving a payment ratio of 25%. By declaring $1 million of these recoverables to be in dispute, the payment ratio is $1.5 million / $9 million = 16.67%, which would not categorize it as slow-paying.

1.Discounts are also permitted for certain workers' compensation reserves (besides lifetime pension cases) in several jurisdictions, such as New York, Pennsylvania, and Massachusetts. The maximum discount rate is set by statute, such as 4% in Massachusetts and 5% in New York. Further restrictions vary by state; for example, Massachusetts permits discounting only for reserves on policy years that are at least three years old. It is unclear if these state statutes continue after codification.

2.Undiscounted values are also termed nominal values or ultimate values. Discounted values are also termed market values or fair values.

3.Latent occupational injuries to workers in underground mines and certain other hazardous employments were substantial in the mid-20th century; now attorneys prefer to pursue these claims through the tort system.

4.No maximum discount rate is specified by statute for tabular discounts, though most companies use conservative discount rates of 3.5% or 4.0%.

5.See SSAP Number 65, "Property and Casualty Contracts," paragraph 12: When establishing discounted loss reserve liabilities prescribed or permitted by the state of domicile using a non-tabular method . . . the rate used [shall not] exceed the lesser of the following two standards:

- If the reporting entity's statutory invested assets are at least equal to the total of all policyholder reserves, the reporting entity's net rate of return on statutory invested assets, less 1.5%, otherwise, the reporting entity's average net portfolio yield rate less 1.5% as indicated by dividing the net investment income earned by the average of the reporting entity's current and prior year total assets; or
- The current yield to maturity on a United States Treasury debt instrument with maturities consistent with the expected payout of the liabilities.

Non-invested assets include premiums receivable, accrued retrospective premiums, deferred tax assets, and non-investment real estate. If the company's invested assets cover its reserves, it uses the yield on its invested assets; if they do not cover reserves, it uses overall asset yield.

6.The December 1990 AICPA *Discussion Document on Present Value Procedures* agrees that discounting is necessary to fairly estimate profitability but that it is hard to set objective standards for discounting. Both GAAP and statutory accounting permit discounting for life insurance policy reserves, annuity reserves, and pension plan liabilities. The GAAP choice of discount rate is discussed in SFAS 87 for pension plan liabilities. The discount rate for determination of book profits is discussed in SFAS 97 for universal life-type contracts and in SFAS 125 for participating contracts issued by mutual life insurance companies.

7.The implied tabular discount is the current valuation in Schedule P, Part 2, minus the incurred loss plus defense and cost containment expenses (but not adjusting and other expenses) in Part 1.

8.Before the 1986 Tax Reform Act, the statutory full value loss reserves enabled property-casualty insurers to partially defer federal income taxes on underwriting operations; this deferment was removed by the revenue offset and loss reserve discounting provisions in the 1986 Act. The solvency monitoring in the risk-based capital formula uses discounted reserves as well. The current rationale for undiscounted loss reserves on statutory financial statements is a mix of conservatism, disagreement on the proper discount rate, and the need for undiscounted loss reserves

for the Schedule P reserve adequacy tests. The received wisdom is that the statutory requirement for full value loss reserve helps consumers by ensuring the solidity of insurers. In truth, the use of undiscounted reserves raises premium rates, lowers the return on invested capital, and encourages the use of economically inefficient reinsurance practices designed to circumvent the statutory rules.

9.Cf. SSAP No. 65 "Property and Casualty Contracts" Paragraph 13: In accordance with SSAP No. 3, Accounting Changes and Corrections of Errors, a change in the discount rate used in discounting loss reserves shall be accounted for as a change in estimate. SSAP No. 3 requires changes in estimates to be included in the statement of income in the period the change becomes known.

10. In statutory accounting terms, the insurer *funds the deductible*.

11.The service contract provider is often referred to as a third party administrator.

12.SSAP No. 65, "Property and Casualty Contracts," ¶34, says: "Paragraph 34: Certain policies, particularly workers' compensation coverage, are available under high deductible plans. High deductible plans differ from self insurance coupled with an excess of loss policy because state laws generally require the reporting entity to fund the deductible and to periodically review the financial viability of the insured and make an assessment of the suitability of the deductible plan to the insured." An excess insurer is not involved in claims handling until the loss has exceeded the deductible; until then, the insured (the employer) handles the claim. In a large dollar deductible policy, the insurer pays the full claim, and it is reimbursed by the employer. The insurer *funds the deductible* – that is, it puts up the money for the deductible.

13.The status of the excess insurer vis a vis a state liquidator is unclear. In some states, the liquidator may collect the full reinsurance recoverable even if it has paid only part of the damages to the claimant; presumably, the same would apply to an excess insurer.

14.In general, statutory accounting follows GAAP in permitting net accounting only when a legal right of offset exists; reinsurance recoverables and LDD reimbursements are exceptions, not the statutory rule.

15.Collateral guards against an inability to pay because of bankruptcy; it does not guard against a denial of the obligation to pay.

16.Many reinsurance contracts do not have due dates, since they are gentlemen's agreements relying on the utmost good faith of the contracting parties. For reinsurance contracts that do not specify a due date, the reinsurance recoverable is due when the paid loss recoverable is entered on the ceding company's books; this generally occurs when the direct loss is paid, and it is well before the ceding company expects to collect the recoverable from the reinsurer. If the full recoverable more than 90 days past due

were not admitted, companies might have a disincentive to buy reinsurance from authorized companies that did not provide collateral.

17.Accrued retrospective premiums have an alternative admissibility rule, which bases the non-admitted percentage on the credit rating of the employer (insured). Insurers can select either admissibility rule, but they must be consistent among all insureds. An insurer may not use the credit rule for insureds with high credit rating and the 10% rule for the other insureds.

18.An insurer can not have a non-insurance parent or affiliate secure the receivables, since this circumvents the statutory requirements. The security must be either funds deposited by the party owing the receivable or a third party acting on its behalf, such as a bank issuing a letter of credit. The statutory language is that the receivables must be secured on a *per policy basis*.

19.The phrase *shall be aged according to the contractual due date* implies that reimbursements more than 90 days past due are not admitted, just like premium balances receivable from insureds, though this is not explicitly said in the SSAP.

20.*Paid loss retros* are similar to large dollar deductible policies, but they have the same accounting as incurred loss retros.

21. SSAP No. 65, "Property and Casualty Contracts," ¶36, says: "If the policy form requires the reporting entity to fund all claims including those under the deductible limit, the reporting entity is subject to credit risk, not underwriting risk. Reimbursement of the deductible shall be accrued and recorded as a reduction of paid losses simultaneously with the recording of the paid loss by the reporting entity."

22.If this were a retrospectively rated policy, the insurer would show $52,000 of incurred loss, $26,000 of paid loss, $26,000 of unpaid losses, accrued retrospective premiums of $52,000, of which $5,200 is not admitted.

23.GAAP has no non-admitted asset and no deferred tax asset.

24.Non-insurance companies write off IBNR losses when they are reported or paid; they do not accrue the liability when the loss occurs.

25.For foreign securities, the company also shows gains or losses from changes in currency exchange rates.

26.SSAP No. 65, "Property and Casualty Contracts," Paragraph 40, says: "Asbestos exposures are defined as any loss or potential loss (including both first party and third party claims) related directly or indirectly to the manufacture, distribution, installation, use, and abatement of asbestos-containing material, *excluding policies specifically written to cover these exposures*. Environmental exposures are defined as any loss or potential loss, including third party claims, related directly or indirectly to *the remediation*

of a site arising from past operations or waste disposal. Examples of environmental exposures include but are not limited to chemical waste, hazardous waste treatment, storage and disposal facilities, industrial waste disposal facilities, landfills, superfund sites, toxic waste pits, and underground storage tanks" (emphasis added). The disclosure are needed for asbestos and pollution exposures covered (perhaps inadvertently) by the pre-1986 CGL policies, no disclosure is needed for exposures written under asbestos abatement policies. Similarly, the environment exposures relate to site remediation. The environment policies now sold do not cover remediation of old sites.

27.Compare IRIS test number 3, "Surplus Aid to Surplus," which compares surplus aid to statutory surplus.

28.If the reinsurance rate were 100% of subject premium and the reinsurance commission were 94%, the cash flows remain the same, but the premium to surplus ratio is infinite (zero divided by $124 million). This extreme example is too blatant an abuse of statutory accounting to appear in practice, but it points out the problem with the accounting presentation.

29.Some insurance risk must be retained to pass the risk transfer tests in SFAS 113 and SSAP No. 62.

30.See Stephen P. Lowe and Stephen W. Philbrick, "Issues Associated with the Discounting of Property/Casualty Loss Reserves," *Journal of Insurance Regulation*, Volume 4, No. 4 (June 1986), pages 72-102, for further discussion. The NAIC *Instructions* to the Statement of Actuarial Opinion has a threefold definition of retroactive reinsurance: It increases the policyholders' surplus of the ceding company, the loss obligations have already been incurred, and the consideration is derived from present value or discounting concepts.

31.NAIC Instructions say "The ceding company must record, without recognition of the retroactive reinsurance, its loss and loss expense reserves on a gross basis on its balance sheet and in all schedules and exhibits."

32.NAIC Instructions say: "The ceding company and the assuming company must report by write-in item on Page 3, the total amount of all retroactive reinsurance, identified as "retroactive reinsurance reserved ceded or assumed," recorded as a contra-liability by the ceding company and as a liability by the assuming company."

33.NAIC Instructions say: The ceding company must, by write-in item on Page 3, restrict surplus resulting from any retroactive reinsurance as a special surplus fund, designated as "special surplus from retroactive reinsurance account."

34.NAIC Instructions say: "The surplus gain from any retroactive reinsurance may not be classified as unassigned funds [considered earned surplus] until such time as the

actual liabilities transferred have been recovered or terminated."

35.The illustration assumes that $12 million was paid to claimants and reimbursed by the reinsurer. In truth, the amount paid to claimants is not relevant. If $12 million was paid to claimants, but only $8 million had been recovered so far from the reinsurer, the appropriate entry on row C.2 would be $8 million, not $12 million.

36.This difference reflects the audiences and objectives of GAAP and statutory accounting. GAAP statements are geared to current and potential investors in going-concern enterprises who seek information about the future profitability of the firm. Investors want unbiased estimates (not conservative or optimistic estimates) which the firm's management is best qualified to provide. Fixed statutory formulas do not always provide unbiased estimates, and they might be misleading in a GAAP context. Statutory financial statements are geared to regulators, who are most concerned with the potential insolvency of weak firms – who have an incentive to overstate their assets or understate their liabilities. Regulators would not be fulfilling their responsibilities if they relied solely on the opinions of company management; instead, they use fixed formulas.

37.SSAP No. 62, "Reinsurance," paragraph 52, says: "The . . . Provision for Overdue Reinsurance provides for a minimum reserve for uncollectible reinsurance with an additional reserve required if an entity's experience indicates that a higher amount should be provided." Similarly, the Annual Statement *Instructions* say that "if the company's experience indicates that a higher amount should be provided, such higher amount should be entered."

38.The *Instructions* to Statement of Actuarial Opinion say: "Before commenting on reinsurance collectibility, the actuary should solicit information from management on any collectibility problems, review ratings given to reinsurers by a recognized rating service, and examine Schedule F for the current year for indications of regulatory action or reinsurance recoverable on paid losses over 90 days past due. The comment should also reflect any other information the actuary has received from management or which is publicly available about the capability or willingness of reinsurers to pay claims. The actuary's comments do not imply an opinion on the financial condition of any reinsurer."

39.In practice, the compensation would also include pain and suffering awards.

40.The reinsurance recoverable is shown as a write-in contra-liability on page 3, and the surplus relief from the retroactive reinsurance is coded as special surplus, not as unassigned surplus.

41.The life annuity is not an invested asset, so the income is not investment income.

42.SSAP No. 65, "Property and Casualty Contracts," paragraph 17, says: Structured settlements are periodic fixed payments to a claimant for a determinable period, or for life, for the settlement of a claim. Frequently a reporting entity will purchase an annuity

to fund the future payments. Reporting entities may purchase an annuity in which the entity is the owner and payee, or an annuity in which the claimant is the payee. When annuities are purchased to fund periodic fixed payments, they shall be accounted for as follows:

a. When the reporting entity is the owner and payee, no reduction shall be made to loss reserves. The annuity shall be recorded at its present value and reported as an other than invested asset. Income from the annuities shall be recorded as miscellaneous income. The present value of the annuity and the related amortization schedule shall be obtained from the issuing life insurance company at the time the annuity is purchased; and
b. When the claimant is the payee, loss reserves shall be reduced to the extent that the annuity provides for funding of future payments. The cost of the annuities shall be recorded as paid losses.

43.The amortization of the life annuity is based on the illustrative policy values at policy inception.

44.Sometimes the plaintiff (or his attorney) requests that the annuity be issued by an A-rated company; the release of liability is given for the higher quality annuity. If the court directs the structured settlement, it may specify a minimum rating for the annuity writer. If the annuity writer has a higher rating than the casualty insurer, the release of liability along with the higher rated annuity benefits the claimant.

45.The contract completion principle is common for construction contracts. Suppose Company XYZ agrees on 1/1/20X5 to build a warehouse, with an expected completion date of 12/31/20X6. Scheduled payments are $4 million on 1/1/20X5, $2 million on 7/1/20X5, $1 million on 12/31/20X5, and $1 million on 12/31/20X6.

- By 12/31/20X5, XYZ has received $7 million, or ⅞ of the total expected payments. If it uses the contract term as a proxy for contract completion, it can recognize $4 million of revenue (half the total) in 20X5, and the remaining $4 million in 20X6. It defers recognition of $3 million of the cash it has already received.
- If XYZ uses percentage of contract completion and it has completed 60% of the work by 12/31/20X5, it may recognized 60% × $8 million = $4.8 million as revenue is 20X5. The remaining $2.2 million of cash already received is deferred until 20X6.

Deferral of income means that XYZ shows a liability of $3 million (or $2.2 million for the percentage completion method) on its balance sheet on 12/31/20X5, and it recognizes only $4 million (or $4.8 million) on its 20X5 income statement.

46.SSAP No. 65, paragraph 18, discusses the GAAP and statutory accounting rules: Statutory accounting and Generally Accepted Accounting Principles (GAAP) are consistent for the accounting of structured settlement annuities where the reporting

entity is the owner and payee, and where the claimant is the [owner and] payee and the reporting entity has been released from its obligation. GAAP distinguishes structured settlement annuities where the owner is the claimant and a legally enforceable release from the reporting entity's liability is obtained from those where the claimant is the owner and payee but the reporting entity has not been released from its obligation. GAAP requires the deferral of any gain resulting from the purchase of a structured settlement annuity where the claimant is the [owner and] payee yet the reporting entity has not been released from its obligation. Statutory accounting treats these settlements as completed transactions and considers the earnings process complete, thereby allowing for immediate gain recognition.

One can view this as a decision tree. We first ask: "Is the reporting entity the payee?" If yes, then the GAAP treatment equals the statutory accounting treatment. If the answer is "No" – that is, if the claimant is the payee – we ask: "Has the reporting entity been released from its liability?" If the answer is "Yes," the GAAP treatment equals the statutory accounting treatment. If the answer is "No," then the accounting systems differ. In this case, the GAAP treatment is more conservative than the statutory accounting treatment. GAAP reasons that the reporting entity is still at risk. It may not recognize the income up front, since the life insurer which wrote the annuity make become bankrupt. Instead, the reporting entity recognizes the gain – the undiscounted loss reserves minus the cost of the annuity – ratably over the life of the annuity.

47.The statutory instructions are "Disclose the names and location of the insurance company and the aggregate statement value of annuities due from an y life insurer to the extent that the aggregate value of those annuities equals or exceeds 1% of policyholders' surplus. Include only annuities for which the company has not obtained a release of liability from the claimant as a result of the purchase of an annuity. Also disclose whether the life insurers are licensed in the company's state of domicile."

48.Most amounts in dispute are recoverables on paid losses, but they may include recoverables on unpaid losses. For example, a reinsurer may inform the ceding company that a treaty does not cover non-accidental toxic waste dumping or leakage, but the ceding company may assert that these exposures are covered.