

# EXHIBIT 1

**Statement of Statutory Accounting Principles No. 58**

**Mortgage Guaranty Insurance**

**STATUS**

Type of Issue: Property and Casualty  
 Issued: Initial Draft  
 Effective Date: January 1, 2001  
 Affects: No other pronouncements  
 Affected by: No other pronouncements  
 Interpreted by: No other pronouncements

---

**STATUS ..... 1**

**SCOPE OF STATEMENT ..... 3**

**SUMMARY CONCLUSION..... 3**

General ..... 3

Insured Risk..... 4

Pool Insurance ..... 4

Premium Revenue Recognition..... 5

Unpaid Losses and Loss Adjustment Expense Recognition ..... 5

Contingency Reserve..... 6

Premium Deficiency Reserve ..... 6

U.S. Mortgage Guaranty Tax and Loss Bonds..... 6

Contingency Reserve (for Tax Purposes, the Mortgage Guaranty Account)..... 6

Disclosures ..... 7

Effective Date and Transition..... 7

**RELEVANT ISSUE PAPERS..... 7**

## Mortgage Guaranty Insurance

### SCOPE OF STATEMENT

1. This statement establishes statutory accounting principles for mortgage guaranty insurance and addresses areas where mortgage guaranty insurance accounting differs from other lines of insurance. To the extent a topic is not covered by this statement and Appendix A-630, mortgage guaranty insurance accounting shall comply with statutory accounting guidance for other lines of property and casualty insurance.

2. Mortgage guaranty insurance protects a lender against loss of all or a portion of the principal amount of a mortgage loan upon default of the mortgagor. Mortgage guaranty insurance differs from other types of property and casualty insurance in that coverage is long-term, and in most cases premiums are level and paid monthly. Most states require issuers of mortgage guaranty contracts to be monoline insurers and impose limitations on the aggregate amount of risk insured based on geographic territories. Additionally, states may require mortgage guaranty insurers to reinsure with only selected reinsurers.

### SUMMARY CONCLUSION

#### General

3. Mortgage guaranty insurance is provided on residential loans (one to four family residences, including condominiums and townhouses). Coverage can range from as little as 5% on pool insurance to as much as 100% of the outstanding loan amount on individual policies. Most policies cover 10% to 30% of the loan amount and are written on first mortgage loans where the loan amount is a high percentage (generally 80% to 95%) of the value of the mortgaged property.

4. Lenders obtain mortgage guaranty insurance to facilitate sales of mortgage loans in secondary markets. It also enables lenders to make a greater number of high ratio (above 80%) loans and allows them to diversify their portfolio of loans.

5. Mortgage guaranty insurers market directly to mortgage lenders. Individual mortgage loans or pools of mortgage loans are insured under individual insurance certificates or policies; each loan, however, is separately underwritten.

6. Mortgage guaranty insurance companies generally offer the following premium payment plans: (a) monthly premiums, (b) a single premium which provides coverage for periods ranging from three to 15 years, (c) nonlevel annual premiums, and (d) level annual premiums. All policies are renewable at the discretion of the lender. The mortgage guaranty insurer does not have an option to cancel or nonrenew the policy, except for fraud or nonpayment of the premium.

7. Premiums are based upon: (a) the percentage of insurance coverage provided, (b) the ratio of the insured mortgage loan to the property value or sales price, and (c) the term and/or premium payment method selected by the lender. Premiums are quoted as a percentage of the total mortgage loan insured and increase as insurance coverage and loan-to-value ratio increases.

8. If a default occurs, the mortgage guaranty insurer generally requires the lender to foreclose and tender merchantable title to the mortgaged property in order to make a claim. The insurer may then, at its option: (a) purchase the property for the lender's cost (generally the entire remaining principal loan balance plus accumulated interest and allowable expenses), (b) pay the percentage of the lender's cost specified by the policy, or (c) arrange for the lender to sell the property and reimburse the lender for any loss up to an agreed amount. Under settlement option (a), the insurer intends to resell the property with the expectation of reducing the amount of loss which would have resulted if option (b) had been elected.

**Insured Risk**

9. The nature of the insured risk is influenced by certain factors which set mortgage guaranty insurance apart from other types of insurance. These factors are addressed in paragraphs 10 through 12.

**Exposure Period**

10. The exposure period is significantly longer for mortgage insurance than for most other property and casualty insurance products. The exposure period can run for the term of the mortgage; however, the average policy life is seven years. The policy is terminated when the mortgage obligation is satisfied or the lender elects to cancel or not renew the policy. In contrast to mortgage guaranty insurance, most property and casualty products need not be renewed by the insurer at the expiration of the policy. Mortgage insurance is renewable at the option of the insured at the renewal rate quoted when the policy commitment was issued.

**Losses**

11. Losses are affected by the following factors specific to mortgage guaranty insurance:

- a. The insured peril—the default of a borrower arises from the credit risk associated with mortgage loans. The frequency of loss is strongly influenced by economic conditions. The likelihood of individual default is further increased if the property has deteriorated since a borrower in financial difficulty will be less able to sell the property at a price sufficient to discharge the mortgage;
- b. Mortgage insurance losses can be divided into three categories:
  - i. Normal losses associated with regular business cycles, interruptions in the borrower's earning power, and errors made in evaluating the borrower's willingness or ability to meet mortgage obligations;
  - ii. Defaults caused by adverse local economic conditions;
  - iii. Widespread defaults caused by a severe depression in the U.S. economy.

**Loss Incidence**

12. Losses are incurred over the exposure period which runs for the term of the mortgage. However, loss incidence peaks in the earlier years. When a loan has been delinquent two to four months, the policy requires the lender to notify the insurer. The lender generally agrees to institute foreclosure proceedings six to nine months from the date of delinquency. Foreclosure can require an additional 18 months which means a considerable delay between the delinquency and the presentation of the claim. Without adverse economic conditions, most delinquencies do not result in a loss payment. Once a claim is presented, payment normally is made within one or two months and ultimate loss costs can be known relatively quickly.

**Pool Insurance**

13. Mortgage guaranty insurance may be provided on pools of mortgage loans. Typically, pool insurance supports mortgage-backed securities or group sales. Unlike other pool or group products, each loan is individually underwritten.

14. Pool insurance may be provided on loans that are already insured by primary insurance, in which case the pool insurance provides an additional level of coverage, or it may be provided on loans without primary insurance (usually loans with loan-to-value ratios below 80%). Generally, pool insurance



provides 100% coverage and includes a stop-loss limit of liability which may range from 5% to 20% of the initial aggregate principal balance. Because of regulatory requirements in some states, pool insurance usually uses participating reinsurance arrangements to limit the exposure of any one mortgage insurer of a pool of loans to 25% of each mortgage insured.

15. Pool insurance policies are not cancelable by the insurer except for nonpayment of premium. These policies may be written on mortgage pools having terms of up to 30 years. However, the average policy life is 8 to 12 years.

16. Upon default, the insurer has the same options as with individual insured mortgage loans. However, pool insurance loss payments are reduced by settlements under primary insurance and subject to the stop-loss limit.

17. Three kinds of mortgage-backed securities which use pool insurance are:

- a. Mortgage-backed bonds—Issued by banks, savings and loan associations and other mortgage lenders as a general obligation of the issuing institution. These bonds are collateralized by a pool of mortgages and have a stated rate of return and maturity date;
- b. Mortgage revenue bonds—Issued by state and local housing authorities to support housing affordability for targeted income groups;
- c. Mortgage pass-through certificates—Issued by banks, savings and loan associations, mortgage bankers, and others providing an undivided interest in a pool of mortgages with principal and interest payment passed to the certificate holder as received.

#### **Premium Revenue Recognition**

18. Written premium shall be recorded in accordance with *SSAP No. 53—Property Casualty Contracts—Premiums*. Premium revenue shall be earned as follows:

- a. For monthly premium plans, revenues shall be earned in the month to which they relate;
- b. For annual premium plans, revenues shall be earned on a pro rata basis over the applicable year;
- c. For single premium plans, revenues shall be earned over the policy life in relation to the expiration of risk;
- d. Additional first year premiums or initial renewal premiums on nonlevel policies shall be deferred and amortized to income over the anticipated premium paying period of the policy in relation to the expiration of risk.

#### **Unpaid Losses and Loss Adjustment Expense Recognition**

19. Unpaid losses and loss adjustment expenses shall be recognized in accordance with *SSAP No. 55—Unpaid Claims, Losses and Loss Adjustment Expenses* (SSAP No. 55). For mortgage guaranty insurance contracts, the default shall be considered the incident that gives rise to a claim as discussed in SSAP No. 55. If a claim is ultimately presented, the date of default shall be considered the loss incurred date.

20. The process for estimating the liability shall include projections for losses that have been reported as well as those that have been incurred but not reported. The estimates shall be made based on historical data, trends, economic factors, and other statistical information including paid claims, reported losses, insurance in force statistics, and risk statistics.

21. Real estate and mortgages are acquired by mortgage guaranty insurers to mitigate losses. These assets shall be shown on the balance sheet at the lower of cost or net realizable value, net of encumbrances. Gains or losses from the holding or disposition of these assets shall be recorded as a component of losses incurred. Rental income or holding expenses shall be included in loss adjustment expenses.

#### **Contingency Reserve**

22. In addition to the unearned premium reserve, mortgage guaranty insurers shall maintain a liability referred to as a statutory contingency reserve. The purpose of this reserve is to protect policyholders against loss during periods of extreme economic contraction. The annual addition to the liability shall equal 50% of the earned premium from mortgage guaranty insurance contracts and shall be maintained for ten years regardless of the coverage period for which premiums were paid. With commissioner approval, when required by statute, the contingency reserve may be released in any year in which actual incurred losses exceed 35% of the corresponding earned premiums. Any such reductions shall be made on a first-in, first-out basis. Changes in the reserve shall be recorded directly to unassigned funds (surplus).

#### **Premium Deficiency Reserve**

23. When the anticipated losses, loss adjustment expenses, commissions and other acquisition costs, and maintenance costs exceed the recorded unearned premium reserve, contingency reserve, and the estimated future renewal premium on existing policies, a premium deficiency reserve shall be recognized by recording an additional liability for the deficiency with a corresponding charge to operations. Commissions and other acquisition costs need not be considered in the premium deficiency analysis to the extent they have been expensed. If an insurer utilizes anticipated investment income as a factor in the premium deficiency calculation, disclosure of such shall be made in the financial statements.

#### **U.S. Mortgage Guaranty Tax and Loss Bonds**

24. To obtain a current federal income tax benefit derived from annual additions to the statutory contingency reserve (for tax purposes, the mortgage guaranty account), mortgage guaranty insurers must purchase tax and loss bonds to the extent of the tax benefits. These bonds are noninterest bearing obligations of the U.S. Treasury and mature 10 years after issue. The usual purpose of tax and loss bonds is to satisfy taxes that will be due in 10 years when the tax benefit is reversed; however, the bonds may be redeemed earlier in the event of excess underwriting losses. These bonds are reported as admitted assets allowing mortgage insurers to conserve capital. In accordance with *SSAP No. 10—Income Taxes*, temporary differences (as defined in that statement) do not include amounts attributable to the statutory contingency reserve to the extent that “tax and loss” bonds have been purchased.

#### **Contingency Reserve (for Tax Purposes, the Mortgage Guaranty Account)**

25. Under IRS Code Section 832(e), mortgage guaranty insurers are permitted to deduct the annual addition to the contingency reserve from gross income. The tax deduction is generally an amount equal to (a) 50% of earned premium, or (b) taxable income as computed prior to this special deduction if less than 50% of earned premium. Annual deductions not utilized for tax purposes during the current period may be carried forward for eight years on a basis similar to net operating losses. The amount deducted must be restored to gross income after ten years; however, it may be restored to gross income at an earlier date in the event of a taxable net operating loss.

26. The tax deduction is permitted only if special U.S. Mortgage Guaranty Tax and Loss Bonds are purchased in an amount equal to the tax benefit derived from the deduction. Upon redemption the tax and loss bonds can be used to satisfy the additional tax liability that arises when the deduction is restored to income.

### **Disclosures**

27. Mortgage guaranty insurers shall make all disclosures required by other statements within the Accounting Practices and Procedures Manual, including but not limited to the requirements of SSAP No. 55, and *SSAP No. 1—Disclosure of Accounting Policies, Risks & Uncertainties, and Other Disclosures*.

28. Refer to the preamble for further discussion regarding disclosure requirements.

### **Effective Date and Transition**

29. This statement is effective for years beginning January 1, 2001. A change resulting from the adoption of this statement shall be accounted for as a change in accounting principle in accordance with *SSAP No. 3—Accounting Changes and Corrections of Errors*.

### **RELEVANT ISSUE PAPERS**

- Issue Paper No. 88—Mortgage Guaranty Insurance

# EXHIBIT 2

**Statement of Statutory Accounting Principles No. 62**

**Property and Casualty Reinsurance**

**STATUS**

Type of Issue: Common Area  
 Issued: Finalized March 13, 2000  
 Effective Date: January 1, 2001  
 Affects: No other pronouncements  
 Affected by: Paragraph 34 superseded by SSAP No. 75  
 Interpreted by: INT 01-33, INT 02-01, INT 02-06, INT 02-22, INT 03-02

---

**STATUS ..... 1**

**SCOPE OF STATEMENT ..... 3**

**SUMMARY CONCLUSION ..... 3**

General ..... 3

Characteristics of Reinsurance Agreements ..... 4

Required Terms for Reinsurance Agreements ..... 4

Reinsurance Contracts Must Include Transfer of Risk ..... 5

Accounting for Reinsurance ..... 6

Accounting for Prospective Reinsurance Agreements ..... 7

Accounting for Retroactive Reinsurance Agreements ..... 8

Deposit Accounting ..... 10

Assumed Reinsurance ..... 11

Ceded Reinsurance ..... 12

Adjustable Features/Retroactive Rating ..... 12

Commissions ..... 13

Provision for Reinsurance ..... 13

Disputed Items ..... 13

Uncollectible Reinsurance ..... 14

Commutations ..... 14

National Flood Insurance Program ..... 14

Disclosures ..... 14

Relevant Literature ..... 17

Effective Date and Transition ..... 18

**AUTHORITATIVE LITERATURE ..... 19**

Generally Accepted Accounting Principles ..... 19

**RELEVANT ISSUE PAPERS ..... 19**

**CLASSIFYING REINSURANCE CONTRACTS ..... 20**

**SSAP NO. 62—EXHIBIT A ..... 21**

Implementation Questions and Answers ..... 21

## Property and Casualty Reinsurance

### SCOPE OF STATEMENT

1. This statement establishes statutory accounting principles for property and casualty reinsurance. A wide range of methods for structuring reinsurance arrangements can be employed depending on the requirements of individual companies. This statement deals with the more commonly employed methods.

### SUMMARY CONCLUSION

#### General

2. Reinsurance is the assumption by an insurer of all or part of a risk undertaken originally by another insurer. The transaction whereby a reinsurer cedes all or part of the reinsurance it has assumed to another reinsurer is known as a retrocession.

3. Reinsurance has many beneficial purposes. Among them are that it enables an insurance entity to (a) expand its capacity, (b) share large risks with other insurers, (c) spread the risk of potential catastrophes and stabilize its underwriting results, (d) finance expanding volume by sharing the financial burden of reserves, (e) withdraw from a line or class of business, and (f) reduce its net liability to amounts appropriate to its financial resources.

4. Reinsurance agreements are generally classified as treaty or facultative. Treaty reinsurance refers to an arrangement involving a class or type of business written, while facultative reinsurance involves individual risks offered and accepted.

5. Reinsurance coverage can be pro rata (i.e., proportional reinsurance) where the reinsurer shares a pro rata portion of the losses and premium of the ceding entity or excess of loss (i.e., non-proportional) where the reinsurer, subject to a specified limit, indemnifies the ceding entity against the amount of loss in excess of a specified retention. Most reinsurance agreements fall into one of the following categories:

- I. Treaty Reinsurance Contracts—Pro Rata:
  - A. Quota Share Reinsurance—The ceding entity is indemnified against a fixed percentage of loss on each risk covered in the agreement;
  - B. Surplus Share Reinsurance—The ceding entity establishes a retention or “line” on the risks to be covered and cedes a fraction or a multiple of that line on each policy subject to a specified maximum cession;
- II. Treaty Reinsurance Contracts—Excess of Loss:
  - A. Excess Per Risk Reinsurance—The ceding entity is indemnified, subject to a specified limit, against the amount of loss in excess of a specified retention with respect to each risk covered by a treaty;
  - B. Aggregate Excess of Loss Reinsurance—The ceding entity is indemnified against the amount by which the ceding entity’s net retained losses incurred during a specific period exceed either a predetermined dollar amount or a percentage of the entity’s subject premiums for the specific period subject to a specified limit;
- III. Treaty Reinsurance Contracts—Catastrophe: The ceding entity is indemnified, subject to a specified limit, against the amount of loss in excess of a specified retention with respect to an accumulation of losses resulting from a catastrophic event or series of events;

- IV. Facultative Reinsurance Contracts—Pro Rata: The ceding entity is indemnified for a specified percentage of losses and loss expenses arising under a specific insurance policy in exchange for that percentage of the policy's premium;
- V. Facultative Reinsurance Contracts—Excess of Loss: The ceding entity is indemnified, subject to a specified limit, for losses in excess of its retention with respect to a particular risk.

### Characteristics of Reinsurance Agreements

- 6. Common contract provisions that may affect accounting practices include:
  - a. Reporting responsibility of the ceding entity—Details required and time schedules shall be established;
  - b. Payment terms—Time schedules, currencies intended, and the rights of the parties to withhold funds shall be established;
  - c. Payment of premium taxes—Customarily the responsibility of the ceding entity, a recital of nonliability of the reinsurer may be found;
  - d. Termination—May be on a cut-off or run-off basis. A cut-off provision stipulates that the reinsurer shall not be liable for loss as a result of occurrences taking place after the date of termination. A run-off provision stipulates that the reinsurer shall remain liable for loss under reinsured policies in force at the date of termination as a result of occurrences taking place after the date of termination until such time as the policies expire or are canceled; and
  - e. Insolvency clause—Provides for the survival of the reinsurer's obligations in the event of insolvency of the ceding entity, without diminution because of the insolvency.
- 7. Reinsurance contracts shall not permit entry of an order of rehabilitation or liquidation to constitute an anticipatory breach by the reporting entity, nor grounds for retroactive revocation or retroactive cancellation of any contracts of the reporting entity.

### Required Terms for Reinsurance Agreements

- 8. In addition to credit for reinsurance requirements applicable to reinsurance transactions generally, no credit or deduction from liabilities shall be allowed by the ceding entity for reinsurance recoverable where the agreement was entered into after the effective date of these requirements (see paragraphs 76 and 77) unless each of the following conditions is satisfied:
  - a. The agreement must contain an acceptable insolvency clause;
  - b. Recoveries due the ceding entity must be available without delay for payment of losses and claim obligations incurred under the agreement, in a manner consistent with orderly payment of incurred policy obligations by the ceding entity;
  - c. The agreement shall constitute the entire contract between the parties and must provide no guarantee of profit, directly or indirectly, from the reinsurer to the ceding entity or from the ceding entity to the reinsurer;
  - d. The agreement must provide for reports of premiums and losses, and payment of losses, no less frequently than on a quarterly basis, unless there is no activity during the period. The report of premiums and losses shall set forth the ceding entity's total loss and loss



expense reserves on the policy obligations subject to the agreement, so that the respective obligations of the ceding entity and reinsurer will be recorded and reported on a basis consistent with this statement; and

- e. With respect to retroactive reinsurance agreements, the following additional conditions apply:
  - i. The consideration to be paid by the ceding entity for the retroactive reinsurance must be a sum certain stated in the agreement;
  - ii. Direct or indirect compensation to the ceding entity or reinsurer is prohibited;
  - iii. Any provision for subsequent adjustment on the basis of actual experience in regard to policy obligations transferred, or on the basis of any other formula, is prohibited in connection with a retroactive reinsurance transaction, except that provision may be made for the ceding entity's participation in the reinsurer's ultimate profit, if any, under the agreement;
  - iv. A retroactive reinsurance agreement shall not be canceled or rescinded without the approval of the commissioner of the domiciliary state of the ceding entity.

#### **Reinsurance Contracts Must Include Transfer of Risk**

9. The essential ingredient of a reinsurance contract is the transfer of risk. The essential element of every true reinsurance agreement is the undertaking by the reinsurer to indemnify the ceding entity, i.e., reinsured entity, not only in form but in fact, against loss or liability by reason of the original insurance. Unless the agreement contains this essential element of risk transfer, no credit shall be recorded.

10. Insurance risk involves uncertainties about both (a) the ultimate amount of net cash flows from premiums, commissions, claims, and claims settlement expenses (underwriting risk) and (b) the timing of the receipt and payment of those cash flows (timing risk). Actual or imputed investment returns are not an element of insurance risk. Insurance risk is fortuitous—the possibility of adverse events occurring is outside the control of the insured.

11. Determining whether an agreement with a reinsurer provides indemnification against loss or liability (transfer of risk) relating to insurance risk requires a complete understanding of that contract and other contracts or agreements between the ceding entity and related reinsurers. A complete understanding includes an evaluation of all contractual features that (a) limit the amount of insurance risk to which the reinsurer is subject (e.g., experience refunds, cancellation provisions, adjustable features, or additions of profitable lines of business to the reinsurance contract) or (b) delay the timely reimbursement of claims by the reinsurer (e.g., payment schedules or accumulating retentions from multiple years).

12. Indemnification of the ceding entity against loss or liability relating to insurance risk in reinsurance requires both of the following:

- a. The reinsurer assumes significant insurance risk under the reinsured portions of the underlying insurance agreements; and
- b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.

13. A reinsurer shall not have assumed significant insurance risk under the reinsured contracts if the probability of a significant variation in either the amount or timing of payments by the reinsurer is remote. Implicit in this condition is the requirement that both the amount and timing of the reinsurer's payments depend on and directly vary with the amount and timing of claims settled by the ceding entity.



Contractual provisions that delay timely reimbursement to the ceding entity prevent this condition from being met.

14. The ceding entity's evaluation of whether it is reasonably possible for a reinsurer to realize a significant loss from the transaction shall be based on the present value of all cash flows between the ceding and assuming companies under reasonably possible outcomes, without regard to how the individual cash flows are described or characterized. An outcome is reasonably possible if its probability is more than remote. The same interest rate shall be used to compute the present value of cash flows for each reasonably possible outcome tested. A constant interest rate shall be used in determining those present values because the possibility of investment income varying from expectations is not an element of insurance risk. Judgment is required to identify a reasonable and appropriate interest rate.

15. Significance of loss shall be evaluated by comparing the present value of all cash flows, determined as described in paragraph 14, with the present value of the amounts paid or deemed to have been paid to the reinsurer. If, based on this comparison, the reinsurer is not exposed to the reasonable possibility of significant loss, the ceding entity shall be considered indemnified against loss or liability relating to insurance risk only if substantially all of the insurance risk relating to the reinsured portions of the underlying insurance agreements has been assumed by the reinsurer. In this narrow circumstance, the reinsurer's economic position is virtually equivalent to having written the insurance contract directly. This condition is met only if insignificant insurance risk is retained by the ceding entity on the retained portions of the underlying insurance contracts, so that the reinsurer's exposure to loss is essentially the same as the reporting entity's.

16. Payment schedules and accumulating retentions from multiple years are contractual features inherently designed to delay the timing of reimbursement to the ceding entity. Regardless of what a particular feature might be called, any feature that can delay timely reimbursement violates the conditions for reinsurance accounting. Transfer of insurance risk requires that the reinsurer's payment to the ceding entity depend on and directly vary with the amount and timing of claims settled under the reinsured contracts. Contractual features that can delay timely reimbursement prevent this condition from being met. Therefore, any feature that may affect the timing of the reinsurer's reimbursement to the ceding entity shall be closely scrutinized.

#### **Accounting for Reinsurance**

17. Reinsurance recoverables shall be recognized in a manner consistent with the liabilities (including estimated amounts for claims incurred but not reported) relating to the underlying reinsured contracts. Assumptions used in estimating reinsurance recoverables shall be consistent with those used in estimating the related liabilities. Certain assets and liabilities are created by entities when they engage in reinsurance contracts. Reinsurance assets meet the definition of assets as defined by *SSAP No. 4—Assets and Nonadmitted Assets* and are admitted to the extent they conform to the requirements of this statement.

18. Accounting for members of a reinsurance pool shall follow the accounting for the pool member which issued the underlying policy. Specific accounting rules for underwriting pools and associations are addressed in *SSAP No. 63—Underwriting Pools and Associations Including Intercompany Pools*.

19. Reinsurance recoverable on loss payments is an admitted asset. Notwithstanding the fact that reinsurance recoverables on paid losses may meet the criteria for offsetting under the provisions of *SSAP No. 64—Offsetting and Netting of Assets and Liabilities* (SSAP No. 64), reinsurance recoverables on paid losses shall be reported as an asset without any available offset. Unauthorized reinsurance is included in this asset and reflected separately as a liability to the extent required. Penalty for overdue authorized reinsurance shall be reflected as a liability.

20. Funds held or deposited with reinsured companies, whether premiums withheld as security for unearned premium and outstanding loss reserves or advances for loss payments, are admitted assets

provided they do not exceed the liabilities they secure and provided the reinsured is solvent. Those funds which are in excess of the liabilities, and any funds held by an insolvent reinsured shall be nonadmitted.

21. Prospective reinsurance is defined as reinsurance in which a reinsurer agrees to reimburse a ceding entity for losses that may be incurred as a result of future insurable events covered under contracts subject to the reinsurance. Retroactive reinsurance is defined as reinsurance in which a reinsurer agrees to reimburse a ceding entity for liabilities incurred as a result of past insurable events covered under contracts subject to the reinsurance. A reinsurance agreement may include both prospective and retroactive reinsurance provisions.

22. The distinction between prospective and retroactive reinsurance agreements is based on whether the agreement reinsures future or past insured events covered by the underlying insurance policies. For example, in occurrence-based insurance, the insured event is the occurrence of a loss covered by the insurance contract. In claims-made insurance, the insured event is the reporting to the insurer, within the period specified by the policy, of a claim for a loss covered by the insurance agreement. A claims-made reinsurance contract that reinsures claims asserted to the reinsurer in a future period as a result of insured events that occurred prior to entering into the reinsurance agreement is a retroactive agreement. (However, a reinsurance agreement that reinsures claims reported to an insurer that are covered under currently effective claims-made insurance policies is a prospective reinsurance agreement.)

23. It is not uncommon for a reinsurance arrangement to be initiated before the beginning of a policy period but not finalized until after the policy period begins. Whether there was agreement in principle at the beginning of the policy period and, therefore, the agreement is substantively prospective shall be determined based on the facts and circumstances. However, except as respects business assumed by a U.S. reinsurer from ceding companies domiciled outside the U.S. and not affiliated with such reinsurer, or business assumed by a U.S. reinsurer where either the lead reinsurer or a majority of the capacity on the agreement is domiciled outside the U.S. and is not affiliated with such reinsurer, if an agreement entered into, renewed or amended on or after January 1, 1994 has not been finalized, reduced to a written form and signed by the parties within nine months after the commencement of the policy period covered by the reinsurance arrangement, then the arrangement is presumed to be retroactive and shall be accounted for as a retroactive reinsurance agreement. This presumption shall not apply to: (a) facultative reinsurance contracts, nor to (b) reinsurance agreements with more than one reinsurer which are signed by the lead reinsurer (i.e., the reinsurer setting the terms of the agreement for the reinsurers) within nine months after the commencement of the policy period covered by the reinsurance agreement, nor to (c) reinsurance agreements with more than one reinsurer (whether signed by the lead reinsurer or not) which were entered into, renewed or amended on or before December 31, 1996, (and which were not renewed or amended after that date) if reinsurers representing more than 50% of the capacity on the agreement have signed cover notes, placement slips or similar documents describing the essential terms of coverage and exclusions within nine months after the commencement of the policy period covered by the reinsurance arrangement. Also exempt from this presumption are reinsurance agreements where one of the parties is in conservation, rehabilitation, receivership or liquidation proceedings.

24. Prospective and retroactive provisions included within a single agreement shall be accounted for separately. If separate accounting for prospective and retroactive provisions included within a single agreement is impracticable, the agreement shall be accounted for as a retroactive agreement provided the conditions for reinsurance accounting are met.

#### **Accounting for Prospective Reinsurance Agreements**

25. Amounts paid for prospective reinsurance that meet the conditions for reinsurance accounting shall be reported as a reduction of written and earned premiums by the ceding entity and shall be earned over the remaining contract period in proportion to the amount of reinsurance protection provided or, if applicable, until the reinsurer's maximum liability under the agreement has been exhausted. If the amounts paid are subject to adjustment and can be reasonably estimated, the basis for amortization shall

be the estimated ultimate amount to be paid. Reinstatement premium, if any, shall be earned over the period from the reinstatement of the limit to the expiration of the agreement.

26. Changes in amounts of estimated reinsurance recoverables shall be recognized as a reduction of gross losses and loss expenses incurred in the current period statement of income. Reinsurance recoverables on paid losses shall be reported as an asset, reinsurance recoverables on loss and loss adjustment expense payments, in the balance sheet. Reinsurance recoverables on unpaid case-basis and incurred but not reported losses and loss adjustment expenses shall be netted against the liability for gross losses and loss adjustment expenses.

#### Accounting for Retroactive Reinsurance Agreements

27. Certain reinsurance agreements which transfer both components of insurance risk cover liabilities which occurred prior to the effective date of the agreement. Due to potential abuses involving the creation of surplus to policyholders and the distortion of underwriting results, special accounting treatment for these agreements is warranted.

28. All retroactive reinsurance agreements entered into, renewed or amended on or after January 1, 1994 (including subsequent development of such transactions) shall be accounted for and reported in the following manner:

- a. The ceding entity shall record, without recognition of the retroactive reinsurance, loss and loss expense reserves on a gross basis on the balance sheet and in all schedules and exhibits;
- b. The assuming entity shall exclude the retroactive reinsurance from loss and loss expense reserves and from all schedules and exhibits;
- c. The ceding entity and the assuming entity shall report by write-in item on the balance sheet, the total amount of all retroactive reinsurance, identified as retroactive reinsurance reserve ceded or assumed, recorded as a contra-liability by the ceding entity and as a liability by the assuming entity;
- d. The ceding entity shall, by write-in item on the balance sheet, restrict surplus resulting from any retroactive reinsurance as a special surplus fund, designated as special surplus from retroactive reinsurance account;
- e. The surplus gain from any retroactive reinsurance shall not be classified as unassigned funds (surplus) until the actual retroactive reinsurance recovered exceeds the consideration paid;
- f. The special surplus from retroactive reinsurance account for each respective retroactive reinsurance agreement shall be reduced at the time the ceding entity begins to recover funds from the assuming entity in amounts exceeding the consideration paid by the ceding entity under such agreement, or adjusted as provided in subparagraph 28 j.;
- g. For each agreement, the reduction in the special surplus from retroactive reinsurance account shall be limited to the lesser of (i) the actual amount recovered in excess of consideration paid or (ii) the initial surplus gain resulting from the respective retroactive reinsurance agreement. Any remaining balance in the special surplus from retroactive reinsurance account derived from any such agreement shall be returned to unassigned funds (surplus) upon elimination of all policy obligations subject to the retroactive reinsurance agreement;

- h. The ceding entity shall report the initial gain arising from a retroactive reinsurance transaction (i.e., the difference between the consideration paid to the reinsurer and the total reserves ceded to the reinsurer) as a write-in item on the statement of income, to be identified as Retroactive Reinsurance Gain and included under Other Income;
- i. The assuming entity shall report the initial loss arising from a retroactive reinsurance transaction, as defined in the preceding subparagraph 28 g., as a write-in item on the statement of income, to be identified as Retroactive Reinsurance Loss and included under Other Income;
- j. Any subsequent increase or reduction in the total reserves ceded under a retroactive reinsurance agreement shall be reported in the manner described in the preceding subparagraphs 28 h. and 28 i., in order to recognize the gain or loss arising from such increase or reduction in reserves ceded. The Special Surplus from Retroactive Reinsurance Account write-in entry on the balance sheet shall be adjusted, upward or downward, to reflect such increase or reduction in reserves ceded. The Special Surplus from Retroactive Reinsurance Account write-in entry shall be equal to or less than the total ceded reserves under all retroactive reinsurance agreements in-force as of the date of the financial statement. Special surplus arising from a retroactive reinsurance transaction shall be considered to be earned surplus (i.e., transferred to unassigned funds (surplus)) only when cash recoveries from the assuming entity exceed the consideration paid by the ceding entity as respects such retroactive reinsurance transaction; and
- k. The consideration paid for a retroactive reinsurance agreement shall be reported as a decrease in ledger assets by the ceding entity and as an increase in ledger assets by the assuming entity.

(For an illustration of ceding entity accounting entries see Question 33 in Exhibit A.)

29. Portfolio reinsurance is the transfer of an insurer's entire liability for in force policies or outstanding losses, or both, of a segment of the insurer's business. Loss portfolio transactions are to be accounted for as retroactive reinsurance.

30. The accounting principles for retroactive reinsurance agreements in paragraph 28 shall not apply to the following types of agreements (which shall be accounted for as prospective reinsurance agreements):

- a. Structured settlement annuities for individual claims purchased to implement settlements of policy obligations;
- b. Novations, (i.e., (i) transactions in which the original direct insurer's obligations are completely extinguished, resulting in no further exposure to loss arising on the business novated or (ii) transactions in which the original assuming entity's obligations are completely extinguished) resulting in no further exposure to loss arising on the business novated, provided that (1) the parties to the transaction are not affiliates (or if affiliates, that the transaction has the prior approval of the domiciliary regulators of the parties) and (2) the accounting for the original reinsurance agreement will not be altered from retroactive to prospective;
- c. The termination of, or reduction in participation in, reinsurance treaties entered into in the ordinary course of business; or



- d. Intercompany reinsurance agreements, and any amendments thereto, among companies 100% owned by a common parent or ultimate controlling person provided there is no gain in surplus as a result of the transaction.

31. Retroactive reinsurance agreements resulting in surplus gain to the ceding entity (with or without risk transfer) entered into between affiliates or between insurers under common control (as those terms are defined in Appendix A-440) shall be reported as follows:

- a. The consideration paid by the ceding entity shall be recorded as a deposit and reported as a nonadmitted asset; and
- b. No deduction shall be made from loss and loss adjustment expense reserves on the ceding entity's balance sheet, schedules, and exhibits.

32. The accounting and reporting provisions applicable to retroactive reinsurance apply to all transactions transferring liabilities in connection with a court-ordered rehabilitation, liquidation, or receivership. The requirement to include stipulated contract provisions in the reinsurance agreements shall not apply to these transactions, with written approval of the ceding entity's domiciliary commissioner.

33. Novations meeting the requirements of subparagraph 30 b. shall be accounted for as prospective reinsurance agreements. The original direct insurer, or the original assuming insurer, shall report amounts paid as a reduction of written and earned premiums, and unearned premiums to the extent that premiums have not been earned. Novated balances (e.g., loss and loss adjustment expense reserves) shall be written off through the accounts, exhibits, and schedules in which they were originally recorded. The assuming insurer shall report amounts received as written and earned premiums, and obligations assumed as incurred losses in the statement of income.

#### **Deposit Accounting**

34. To the extent that a reinsurance agreement does not, despite its form, transfer both components of insurance risk, all or part of the agreement shall be accounted for and reported as deposits in the following manner:

- a. At the outset of the reinsurance agreement the net consideration paid by the ceding entity (premiums less commissions or other allowances) shall be recorded as a deposit by the ceding entity and as a liability by the assuming entity. The deposit shall be reported as an admitted asset by the ceding entity if (i) the assuming entity is licensed, accredited or otherwise qualified in the ceding entity's state of domicile as described in Appendix A-785 or (ii) there are funds held by or on behalf of the ceding entity as described in Appendix A-785;
- b. Throughout the life of the agreement, receipts and disbursements shall be recorded through the deposit/liability accounts;
- c. When individual case reserves are the basis for the deposit and the assuming entity pays in excess of the amount transferred by the ceding entity, the amount paid in excess of the deposit received shall be recognized as a loss by the assuming entity and as a gain by the ceding entity as Other Income in the statement of income;
- d. When the agreement is completed, or when there is a loss payment in excess of the deposit, any difference between consideration and recoveries shall be recorded in the Other Income or Loss account as a loss to the reinsurer and as a gain in the Other Income or Loss account by the reinsured;

- e. With regard to bulk reserves,(i.e., IBNR) it shall be assumed that any cash transactions for the settlement of losses will reduce the asset/liability accounts by the amount of the cash transferred. When the remaining losses are revalued upward, an increase in the liability shall be recorded as a loss recognized by the assuming entity. Conversely, the ceding entity shall increase its deposit (asset) and outstanding loss liability;
- f. No deduction shall be made from the loss and loss adjustment expense reserves on the ceding entity's balance sheet, schedules, and exhibits; and
- g. The assuming entity shall record net consideration to be returned to the ceding entity as liabilities.

### Assumed Reinsurance

35. Reinsurance premiums receivable at the end of the accounting period are combined with direct business receivables and reported as agents' balances or uncollected premiums. Where the ceding entity withholds premium funds pursuant to the terms of the reinsurance agreement, such assets shall be shown by the assuming entity as funds held by or deposited with reinsured companies. Reporting entities shall record any interest earned or receivable on the funds withheld as a component of aggregate write-ins for miscellaneous income.

36. Reinsurance premiums more than 90 days overdue shall be nonadmitted except (a) to the extent the assuming entity maintains unearned premium and loss reserves as to the ceding entity, under principles of offset accounting as discussed in SSAP No. 64, or (b) where the ceding entity is licensed and in good standing in assuming entity's state of domicile. Reinsurance premiums are due pursuant to the original contract terms (as the agreement stood on the date of execution). In the absence of a specific contract date, reinsurance premiums will be deemed due thirty (30) days after the date on which (i) notice or demand of premium due is provided to the ceding entity or (ii) the assuming entity books the premium (see *SSAP No. 6—Uncollected Premium Balances, Bills Receivable for Premiums, and Amounts Due From Agents and Brokers*).

37. A lag will develop between the time of the entry of the underlying policy transaction on the books of the ceding entity and the transmittal of information and entry on the books of the assuming entity. Assuming companies shall estimate unreported premiums and related costs to the extent necessary to prevent material distortions in the loss development contained in the assuming entity's annual statement schedules where calendar year premiums are compared to accident year losses.

38. Proportional reinsurance (i.e., first dollar pro rata reinsurance) premiums shall be allocated to the appropriate annual statement lines of business in the Underwriting and Investment exhibits. Non-proportional assumed reinsurance premiums shall be classified as reinsurance under the appropriate subcategories.

39. Assumed retroactive reinsurance premiums shall be excluded from all schedules and exhibits as addressed in subparagraph 28 k.

40. Amounts payable by reinsurers on losses shall be classified as unpaid losses. Assumed reinsurance payable on paid losses shall be classified as a separate liability item on the balance sheet. IBNR losses on assumed reinsurance business shall be netted with ceded losses on the balance sheet and listed separately by annual statement line of business in the Underwriting and Investment exhibits.

**Ceded Reinsurance**

41. Ceded reinsurance premiums payable (net of ceding commission) shall be classified as a liability. Consistent with SSAP No. 64, ceded reinsurance premiums payable may be deducted from amounts due from the reinsurer, such as amounts due on assumed reinsurance, when a legal right of offset exists.

42. Amounts withheld by the ceding entity that would otherwise be payable under the reinsurance agreement shall be reported as funds held by entity under reinsurance treaties. Reporting entities shall record any interest due or payable on the amounts withheld as a component of aggregate write-ins for miscellaneous income.

43. Ceded reinsurance transactions shall be classified in the annual statement line of business which relates to the direct or assumed transactions creating the cession or retrocession.

44. Ceded retroactive reinsurance premiums shall be excluded from all schedules and exhibits as addressed in subparagraph 28 k.

**Adjustable Features/Retropective Rating**

45. Reinsurance treaties may provide for adjustment of commission, premium, or amount of coverage, based on loss experience. The accounting for common examples is outlined in the following paragraphs:

Commission Adjustments

46. An accrual shall be maintained for the following adjustable features based upon the experience recorded for the accounting period:

- a. Contingent or Straight Profit—The reinsurer returns to the ceding entity a stipulated percentage of the profit produced by the business assumed from the ceding entity. Profit may be calculated for any specified period of time, but the calculation is often based on an average over a period of years; and
- b. Sliding Scale—A provisional rate of commission is paid over the course of the agreement, with a final adjustment based on the experience of the business ceded under the agreement.

Premium Adjustments

47. If the reinsurance agreement incorporates an obligation on the part of the ceding entity to pay additional premium to the assuming entity based upon loss experience under the agreement, a liability in the amount of such additional premium shall be recognized by the ceding entity during the accounting period in which the loss event(s) giving rise to the obligation to pay such additional premium occur(s). The assuming entity shall recognize an asset in a consistent manner. If the reinsurance agreement incorporates an obligation on the part of the assuming entity to refund to the ceding entity any portion of the consideration received by the assuming entity based upon loss experience under the agreement, an asset in the amount of any such refund shall be recognized by the ceding entity during the accounting period in which the loss event(s) giving rise to the obligation to make such refund occur(s). The initial provisional or deposit premium is recalculated retrospectively, based on loss experience under the agreement during a specified period of time; the calculation is often based on an average over a period of years. The assuming entity shall recognize a liability in a consistent manner.

Adjustments in the Amount of Coverage

48. The amount of coverage available for future periods is adjusted, upward or downward, based on loss experience under the agreement during a specified period of time. If the reinsurance agreement incorporates a provision under which the reinsurance coverage afforded to the ceding entity may be increased or reduced based upon loss experience under the agreement, an asset or a liability shall be recognized by the ceding entity in an amount equal to that percentage of the consideration received by the assuming entity which the increase or reduction in coverage represents of the amount of coverage originally afforded. The asset or liability shall be recognized during the accounting period in which the loss event(s) (or absence thereof) giving rise to the increase or decrease in reinsurance coverage occur(s), and shall be amortized over all accounting periods for which the increased or reduced coverage is applicable. The term "consideration" shall mean, for this purpose, the annualized deposit premium for the period used as the basis for calculating the adjustment in the amount of coverage to be afforded thereafter under the agreement.

Impairment

49. Include as a nonadmitted asset, amounts accrued for premium adjustments on retrospectively rated reinsurance agreements with respect to which all uncollected balances due from the ceding company have been classified as nonadmitted.

**Commissions**

50. Commissions payable on reinsurance assumed business shall be included as an offset to Agents' Balances or Uncollected Premiums. Commissions receivable on reinsurance ceded business shall be included as an offset to Ceded Reinsurance Balances Payable.

51. If the ceding commission paid under a reinsurance agreement exceeds the anticipated acquisition cost of the business ceded, the ceding entity shall establish a liability, equal to the difference between the anticipated acquisition cost and the reinsurance commissions received, to be amortized pro rata over the life of the reinsurance agreement.

**Provision for Reinsurance**

52. The NAIC Annual Statement Instructions for Property and Casualty Companies for Schedule F—Provision for Overdue Reinsurance, provide 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. The minimum reserve Provision for Reinsurance is recorded as a liability and the change between years is recorded as a gain or loss directly to unassigned funds (surplus). Any reserve over the minimum amount shall be recorded on the statement of income by reversing the accounts previously utilized to establish the reinsurance recoverable.

53. The provision for reinsurance is calculated separately for unauthorized and authorized companies. An authorized reinsurer is licensed, accredited or approved by the ceding entity's state of domicile; an unauthorized reinsurer is not so licensed, accredited or approved.

**Disputed Items**

54. Occasionally a reinsurer will question whether an individual claim is covered under a reinsurance agreement or may even attempt to nullify an entire agreement. A ceding entity, depending upon the individual facts, may or may not choose to continue to take credit for such disputed balances. A ceding entity shall take no credit whatsoever for reinsurance recoverables in dispute with an affiliate.



55. Items in dispute are those claims with respect to which the ceding entity has received formal written communication from the reinsurer denying the validity of coverage.

#### **Uncollectible Reinsurance**

56. Uncollectible reinsurance balances shall be written off through the accounts, exhibits, and schedules in which they were originally recorded.

#### **Commutations**

57. A commutation of a reinsurance agreement, or any portion thereof, is a transaction which results in the complete and final settlement and discharge of all, or the commuted portion thereof, present and future obligations between the parties arising out of the reinsurance agreement.

58. In commutation agreements, an agreed upon amount determined by the parties is paid by the reinsurer to the ceding entity. The ceding entity immediately eliminates the reinsurance recoverable recorded against the ultimate loss reserve and records the cash received as a negative paid loss. Any net gain or loss shall be reported in underwriting income in the statement of income.

59. The reinsurer eliminates a loss reserve carried at ultimate cost for a cash payout calculated at present value. Any net gain or loss shall be reported in underwriting income in the statement of income.

60. Commuted balances shall be written off through the accounts, exhibits, and schedules in which they were originally recorded.

#### **National Flood Insurance Program**

61. The National Flood Insurance Program was created by the Federal Emergency Management Agency (FEMA) and is designed to involve private insurers in a write-your-own (WYO) flood insurance program financially backed by FEMA at no risk to the insurer. To become a participating WYO entity, the entity signs a document with the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency known as the Financial Assistance/Subsidy Arrangement.

62. Premium rates are set by FEMA. The WYO participating companies write the flood insurance coverage qualifying for the program on their own policies, perform their own underwriting, premium collections, claim payments, administration, and premium tax payments for policies written under the program.

63. Monthly accountings are made to FIA and participants draw upon FEMA letters of credit for deficiencies of losses, loss expenses, and administrative expenses in excess of premiums, subject to certain percentage limitations on expenses.

64. Balances due from or to FEMA shall be reported as ceded reinsurance balances receivable or payable.

#### **Disclosures**

65. Unsecured Reinsurance Recoverables:

- a. If the entity has with any individual reinsurers, authorized or unauthorized, an unsecured aggregate recoverable for losses, paid and unpaid including IBNR, loss adjustment expenses, and unearned premium, that exceeds 3% of the entity's policyholder surplus, list each individual reinsurer and the unsecured aggregate recoverable pertaining to that reinsurer; and

- b. If the individual reinsurer is part of a group, list the individual reinsurers, each of its related group members having reinsurance with the reporting entity, and the total unsecured aggregate recoverables for the entire group.

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

67. Uncollectible Reinsurance—Describe uncollectible reinsurance written off during the year reported in the following annual statement classifications, including the name(s) of the reinsurer(s):

- a. Losses incurred;
- b. Loss adjustment expenses incurred;
- c. Premiums earned; and
- d. Other.

68. Commutation of Ceded Reinsurance—Describe commutation of ceded reinsurance during the year reported in the following annual statement classifications, including the name(s) of the reinsurer(s):

- a. Losses incurred;
- b. Loss adjustment expenses incurred;
- c. Premiums earned; and
- d. Other.

69. Retroactive Reinsurance—The table illustrated in the NAIC Annual Statement Instructions for Property and Casualty Companies under Retroactive Reinsurance in the Notes to Financial Statements section shall be completed for all retroactive reinsurance agreements that transfer liabilities for losses that have already occurred and that will generate special surplus transactions. 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. Transactions utilizing deposit accounting shall not be reported in this note.

70. Reinsurance Assumed and Ceded—The tables illustrated in the NAIC Annual Statement Instructions for Property and Casualty Companies under "Reinsurance Assumed and Ceded in the Notes to Financial Statements" section shall be completed as follows:

- a. The financial statements shall disclose the maximum amount of return commission which would have been due reinsurers if all reinsurance were canceled with the return of the unearned premium reserve; and
- b. The financial statements shall disclose the accrual of additional or return commission, predicated on loss experience or on any other form of profit sharing arrangements as a result of existing contractual arrangements.

71. A specific interrogatory requires information on reinsurance of risk accompanied by an agreement to release the reinsurer from liability, in whole or in part, from any loss that may occur on the risk or portion thereof.

72. Disclosures for paragraphs 73-78 represent annual statement interrogatories, which are required to be included with the annual audit report beginning with audit reports on financial statements as of and for the period ended December 31, 2006. The disclosures required within paragraphs 73-78 shall be included in accompanying supplemental schedules of the annual audit report beginning in year-end 2006.

73. Disclose if any risks are reinsured under a quota share reinsurance contract with any other entity that includes a provision that would limit the reinsurer's losses below the stated quota share percentage (e.g. a deductible, a loss ratio corridor, a loss cap, an aggregate limit or any similar provisions)? If yes, indicate the number of reinsurance contracts containing such provisions and if the amount of reinsurance credit taken reflects the reduction in quota share coverage caused by any applicable limiting provision(s).

74. Disclose if the reporting entity ceded any risk under any reinsurance contract (or under multiple contracts with the same reinsurer or its affiliates) for which during the period covered by the statement: (i) it recorded a positive or negative underwriting result greater than 3% of prior year-end surplus as regards policyholders or it reported calendar year written premium ceded or year-end loss and loss expense reserves ceded greater than 3% of prior year-end surplus as regards policyholders; (ii) it accounted for that contract as reinsurance and not as a deposit; and (iii) the contract(s) contain one or more of the following features or other features that would have similar results:

- a. A contract term longer than two years and the contract is noncancellable by the reporting entity during the contract term;
- b. A limited or conditional cancellation provision under which cancellation triggers an obligation by the reporting entity, or an affiliate of the reporting entity, to enter into a new reinsurance contract with the reinsurer, or an affiliate of the reinsurer;
- c. Aggregate stop loss reinsurance coverage;
- d. An unconditional or unilateral right by either party to commute the reinsurance contract, except for such provisions which are only triggered by a decline in the credit status of the other party;
- e. A provision permitting reporting of losses, or payment of losses, less frequently than on a quarterly basis (unless there is no activity during the period); or
- f. Payment schedule, accumulating retentions from multiple years or any features inherently designed to delay timing of the reimbursement to the ceding entity.

75. Disclose if the reporting entity during the period covered by the statement ceded any risk under any reinsurance contract (or under multiple contracts with the same reinsurer or its affiliates), excluding cessions to approved pooling arrangements or to captive insurance companies that are directly or indirectly controlling, controlled by, or under common control with (i) one or more unaffiliated policyholders of the reporting entity, or (ii) an association of which one or more unaffiliated policyholders of the reporting entity is a member, where:

- a. The written premium ceded to the reinsurer by the reporting entity or its affiliates represents fifty percent (50%) or more of the entire direct and assumed premium written by the reinsurer based on its most recently available financial statement; or
- b. Twenty-five percent (25%) or more of the written premium ceded to the reinsurer has been retroceded back to the reporting entity or its affiliates.

76. If affirmative disclosure is required for paragraph 74 or 75, provide the following information:

- a. A summary of the reinsurance contract terms and indicate whether it applies to the contracts meeting paragraph 74 or 75;
- b. A brief discussion of management's principal objectives in entering into the reinsurance contract including the economic purpose to be achieved; and
- c. The aggregate financial statement impact gross of all such ceded reinsurance contracts on the balance sheet and statement of income.

77. Except for transactions meeting the requirements of paragraph 30 of SSAP No. 62—Property and Casualty Reinsurance, disclose if the reporting entity ceded any risk under any reinsurance contract (or multiple contracts with the same reinsurer or its affiliates) during the period covered by the financial statement, and either:

- a. Accounted for that contract as reinsurance (either prospective or retroactive) under statutory accounting principles ("SAP") and as a deposit under generally accepted accounting principles ("GAAP"); or
- b. Accounted for that contract as reinsurance under GAAP and as a deposit under SAP?

78. If affirmative disclosure is required for paragraph 77, explain in a supplemental filing why the contract(s) is treated differently for GAAP and SAP.

79. Refer to the preamble for further discussion regarding disclosure requirements.

#### **Relevant Literature**

7380. This statement adopts *FASB Statement No. 113, Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts* (FAS 113) with modification and *FASB Emerging Issues Task Force No. 93-6, Accounting for Multiple-Year Retrospectively Rated Contracts by Ceding and Assuming Enterprises* with modification for the following:

- a. Reinsurance recoverables on unpaid case-basis and incurred but not reported losses and loss adjustment expenses shall be reported as a contra-liability netted against the liability for gross losses and loss adjustment expenses;
- b. Amounts paid for prospective reinsurance that meet the conditions for reinsurance accounting shall be reported as a reduction of unearned premiums;
- c. The gain created by a retroactive reinsurance agreement because the amount paid to the reinsurer is less than the gross liabilities for losses and loss adjustment expenses ceded to the reinsurer is reported in the statement of income as a write-in gain in other income by the ceding entity and a write-in loss by the assuming entity. The gain created by a retroactive reinsurance agreement is restricted as a special surplus account until the actual retroactive reinsurance recovered is in excess of the consideration paid;
- d. This statement requires that a liability be established through a provision reducing unassigned funds (surplus) for unsecured reinsurance recoverables from unauthorized reinsurers and for certain overdue balances due from authorized reinsurers;
- e. Some reinsurance agreements contain adjustable features that provide for adjustment of commission, premium or amount of coverage, based on loss experience. This statement requires that the asset or liability arising from the adjustable feature be computed based

on experience to date under the agreement, and the impact of early termination may only be considered at the time the agreement has actually been terminated;

- f. Structured settlements are addressed in *SSAP No. 65—Property and Casualty Contracts*. Statutory accounting and FAS 113 are consistent in accounting for structured settlement annuities where the reporting entity is the owner and payee and where the claimant is the payee and the reporting entity has been released from its obligation. FAS 113 distinguishes structured settlement annuities where the claimant is the payee and a legally enforceable release from the reporting entity's liability is obtained from those where the claimant is the 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 reporting entity has not been released from its obligation; and
- g. This statement requires that reinsurance recoverables on unpaid losses and loss adjustment expenses be presented as a contra-liability. Requirements for offsetting and netting are addressed in *SSAP No. 64*.

7481. This statement rejects *AICPA Statement of Position No. 92-5, Accounting for Foreign Property and Liability Reinsurance*. This statement incorporates Appendix A-785 as applicable.

#### **Effective Date and Transition**

7582. This statement shall apply to:

- a. Reinsurance agreements entered into, renewed, or amended on or after January 1, 1994. An amendment is any revision or adjustment of contractual terms. The payment of premiums or reimbursement of losses recoverable under the agreement shall not constitute an amendment; and
- b. Reinsurance agreements in force on January 1, 1995, which cover losses occurring or claims made on or after that date on policies reinsured under such agreements.

7683. The guidance shall not apply to:

- a. Reinsurance agreements which cover only losses occurring or claims made before January 1, 1994, and which were entered into before January 1, 1994, and were not subsequently renewed or amended; and
- b. Reinsurance agreements that expired before and were not renewed or amended after January 1, 1995.

7784. The guidance in paragraphs 45 through 49 shall be effective for all accounting periods beginning on or after January 1, 1996, and shall apply to reinsurance agreements entered into, renewed or amended on or after January 1, 1994.

7885. This statement is effective for years beginning January 1, 2001. Changes resulting from the adoption of this statement shall be accounted for as a change in accounting principle in accordance with *SSAP No. 3—Accounting Changes and Corrections of Errors*.

## **AUTHORITATIVE LITERATURE**

### **Generally Accepted Accounting Principles**

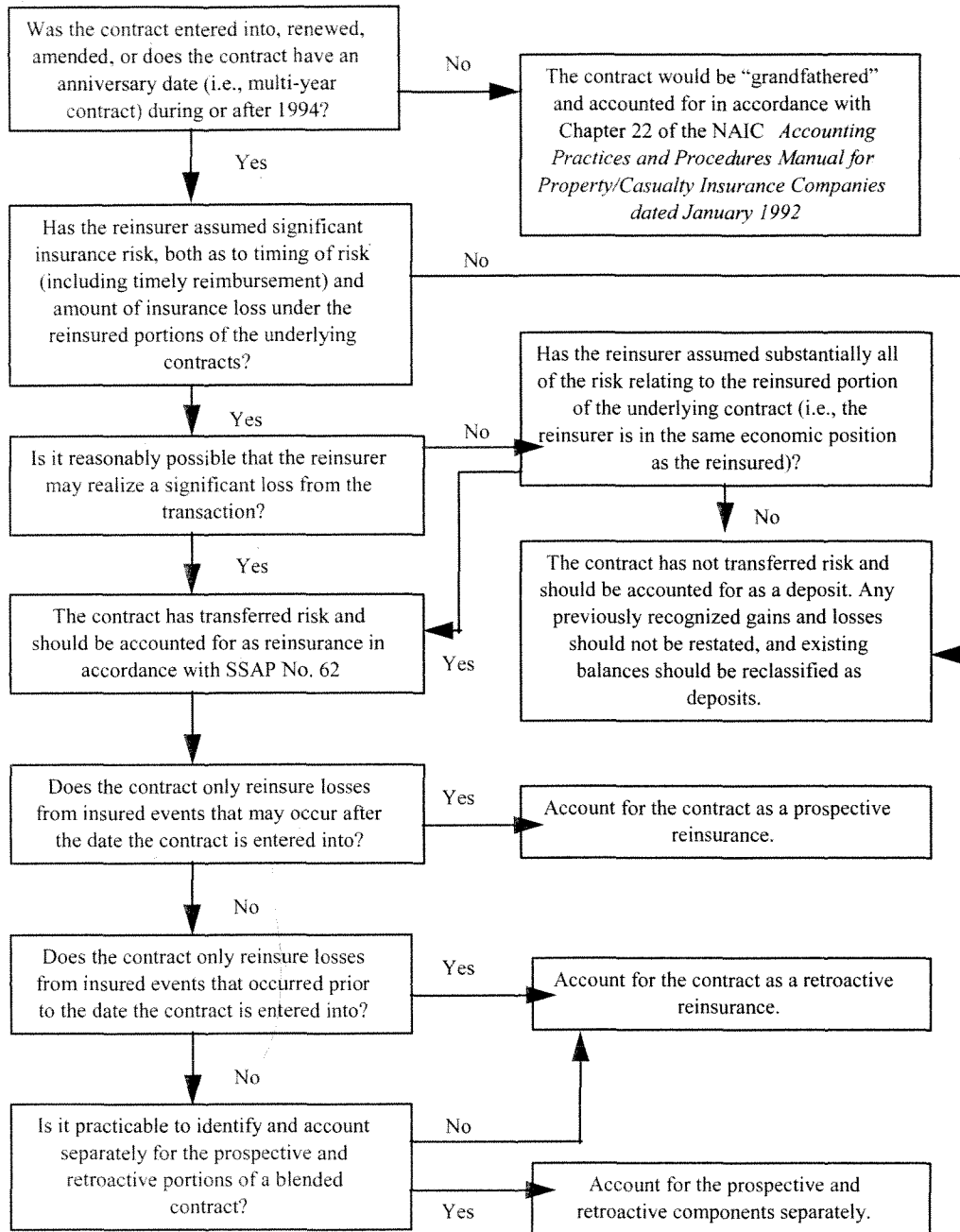
- *FASB Statement No. 113, Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts*
- *FASB Emerging Issues Task Force Issue No. 93-6, Accounting for Multiple-Year Retrospectively Rated Contracts by Ceding and Assuming Enterprises*

### **RELEVANT ISSUE PAPERS**

- Issue Paper No. 75—Property and Casualty Reinsurance



**CLASSIFYING REINSURANCE CONTRACTS**



**SSAP NO. 62—EXHIBIT A****Implementation Questions and Answers**Applicability

1. Q: The accounting practices in SSAP No. 62 specify the accounting and reporting for reinsurance contracts. What contracts are considered reinsurance contracts for purposes of applying these accounting practices?  
  
A: Any transaction that indemnifies an insurer against loss or liability relating to insurance risk shall be accounted for in accordance with the accounting practices included in SSAP No. 62. Therefore, all contracts, including contracts that may not be structured or described as reinsurance, shall be accounted for as reinsurance when those conditions are met.
2. Q: The provisions of this statement will apply to (a) reinsurance contracts entered into, renewed or amended on or after January 1, 1994, and (b) any other reinsurance contracts that are in force on January 1, 1995 and cover insurable events on the underlying insurance policies that occur on or after that date. What contracts would be exempt from the new accounting rules included in SSAP No. 62?  
  
A: The only exempt contracts are:
  - 1) Purely retroactive reinsurance contracts that cover only insured events occurring before January 1, 1994, provided those contracts were entered into before that date and are not subsequently amended and
  - 2) Contracts that expired before January 1, 1995 and are not amended after that date.
3. Q: This statement is to be applied to contracts which are amended on or after January 1, 1994. What if the change in terms is not significant, or the terms changed have no financial effect on the contract?  
  
A: In general, the term *amendment* should be viewed broadly to include all but the most trivial changes. Examples of amendments include, but are not limited to, replacing one assuming entity with another (including an affiliated entity), or modifying the contract's limit, coverage, premiums, commissions, or experience-related adjustable features. No distinction is made between financial and non-financial terms.
4. Q: Must the accounting provisions of SSAP No. 62 be applied to an *otherwise exempt* contract if the ceding entity pays additional premiums under the contract on or after January 1, 1994?  
  
A: The answer depends on why the additional premiums are paid. If the additional premiums are the result of a renegotiation, adjustment, or extension of terms, the contract is subject to the accounting provisions of SSAP No. 62. However, additional premiums paid without renegotiation, adjustment, or extension of terms would not make an otherwise exempt contract subject to those provisions.
5. Q: Prospective and retroactive portions of a reinsurance contract are allowed to be accounted for separately, if practicable. Can the retroactive portion of an existing contract be segregated and, therefore, exempted with other retroactive contracts covering insured events occurring prior to January 1, 1994?  
  
A: No. The transition provisions apply to an entire contract, which is either subject to or exempt from the revised provisions of SSAP No. 62. A ceding entity may bifurcate a contract already



subject to the new accounting rules in SSAP No. 62 and then account for both the prospective and retroactive portions in accordance with the new accounting standard.

### Risk Transfer

6. Q: Do the new risk transfer provisions apply to existing contracts?

A: Yes, the new risk transfer provisions apply to some existing contracts. SSAP No. 62 applies in its entirety only to existing contracts which were renewed or amended on or after January 1, 1994, or which cover losses occurring or claims made after that date. Therefore, those contracts must be evaluated to determine whether they transfer risk and qualify for reinsurance accounting. For accounting periods commencing on or after January 1, 1995, balances relating to such contracts which do not transfer insurance risk shall be reclassified as deposits and shall be accounted for and reported in the manner described under the caption Reinsurance Contracts Must Include Transfer of Risk.

SSAP No. 62 does not apply to existing contracts which were entered into before, and were not renewed or amended on or after, January 1, 1994, and which cover only losses occurring or claims made before that date, nor to contracts which expired before, and were not renewed or amended on or after, January 1, 1995. Those contracts will continue to be accounted for in the manner provided by SSAP No. 62 before these revisions.

7. Q: How does the effective date affect the assessment of whether a significant loss to the reinsurer was reasonably possible?

A: The risk transfer assessment is made at contract inception, based on facts and circumstances known at the time. Because that point in time has passed for existing contracts, some have suggested that the risk transfer provisions be applied as of the effective date. However, that approach to the risk transfer assessment would violate the requirement to consider all cash flows from the contract. Therefore, the test must be applied from contract inception, considering the effect of any subsequent contract amendments. Careful evaluation and considered judgment will be required to determine whether a significant loss to the reinsurer was reasonably possible at inception.

8. Q: Should risk transfer be reassessed if contractual terms are subsequently amended?

A: Yes. When contractual terms are amended, risk transfer should be reassessed. For example, a contract that upon inception met the conditions for reinsurance accounting could later be amended so that it no longer meets those conditions. The contract should then be reclassified and accounted for as a deposit.

9. Q: How should the risk transfer assessment be made when a contract has been amended?

A: No particular method is prescribed for assessing risk transfer in light of a contract amendment. Whether an amended contract in substance transfers risk must be determined considering all of the facts and circumstances in light of the risk transfer requirements. Judgment also will be required to determine whether an amendment in effect creates a new contract.

10. Q: For purposes of evaluating whether a contract with a reinsurer transfers risk, what constitutes a contract?

A: A contract is not defined, but is essentially a question of substance. It may be difficult in some circumstances to determine the boundaries of a contract. For example, the profit-sharing

provisions of one contract may refer to experience on other contracts and, therefore, raise the question of whether, in substance, one contract rather than several contracts exist.

The inconsistency that could result from varying interpretations of the term *contract* is limited by requiring that features of the contract or other contracts or agreements that directly or indirectly compensate the reinsurer or related reinsurers for losses be considered in evaluating whether a particular contract transfers risk. Therefore, if agreements with the reinsurer or related reinsurers, in the aggregate, do not transfer risk, the individual contracts that make up those agreements also would not be considered to transfer risk, regardless of how they are structured.

11. Q: If the assessment of risk transfer changes after the initial assessment at contract inception, how should the ceding entity account for the change?

A: The status of a contract should be determinable at inception and, absent amendment, subsequent changes should be very rare. If the risk of significant loss was not deemed reasonably possible at inception, and a significant loss subsequently occurred, the initial assessment was not necessarily wrong, because remote events do occur. Likewise, once a reasonable possibility of significant loss has been established, such loss need not occur in order to maintain the contract's status as reinsurance.

12. Q: SSAP No. 62 requires that reasonably possible outcomes be evaluated to determine the reinsurer's exposure to significant loss. What factors should be considered in determining whether a scenario being evaluated is reasonably possible?

A: The term *reasonably possible* means that the probability is more than remote. The test is applied to a particular scenario, not to the individual assumptions used in the scenario. Therefore, a scenario is not reasonably possible unless the likelihood of the entire set of assumptions used in the scenario occurring together is reasonably possible.

13. Q: In determining the amount of the reinsurer's loss under reasonably possible outcomes, may cash flows directly related to the contract other than those between the ceding and assuming companies, such as taxes and operating expenses of the reinsurer, be considered in the calculation?

A: No. The evaluation is based on the present value of all cash flows *between the ceding and assuming enterprises* under reasonably possible outcomes and, therefore, precludes considering other expenses of the reinsurer in the calculation.

14. Q: In evaluating the significance of a reasonably possible loss, should the reasonably possible loss be compared to gross or net premiums?

A: Gross premiums should be used.

15. Q: How does a commutation clause affect the period of time over which cash flows are evaluated for reasonable possibility of significant loss to the reinsurer?

A: All cash flows are to be assessed under reasonably possible outcomes. Therefore, unless commutation is expected in the scenario being evaluated, it should not be assumed in the calculation. Further, the assumptions used in a scenario must be internally consistent and economically rational in order for that scenario's outcome to be considered reasonably possible.

16. Q: What interest rate should be used in each evaluated scenario to make the present value calculation?

- A: A reasonable and appropriate rate is required, which generally would reflect the expected timing of payments to the reinsurer and the duration over which those cash flows are expected to be invested by the reinsurer.
17. Q: SSAP No. 62 refers to payment schedules and accumulating retentions from multiple years as features that delay timely reimbursement of claims. Does the presence of those features generally prevent a contract from meeting the conditions for reinsurance accounting?
- A: Yes. Payment schedules and accumulating retentions from multiple years are contractual features inherently designed to delay the timing of reimbursement to the ceding entity. Regardless of what a particular feature might be called, any feature that can delay timely reimbursement violates the conditions for reinsurance accounting. Transfer of insurance risk requires that the reinsurer's payments to the ceding entity depend on and directly vary with the amount and timing of claims settled under the reinsured contracts. Contractual features that can delay timely reimbursement prevent this condition from being met. Therefore, any feature that may affect the timing of the reinsurer's reimbursement to the ceding entity should be closely scrutinized.
18. Q: What if a contract contains a feature such as a payment schedule or accumulating retention but could still result in the reasonable possibility of significant loss to the reinsurer?
- A: Both of the following conditions are required for reinsurance accounting:
- a. Transfer of significant risk arising from uncertainties about both (i) the ultimate amount of net cash flows from premiums, commission, claims, and claim settlement expenses paid under a contract (underwriting risk) and (ii) the timing of the receipt and payment of those cash flows (timing risk); and
  - b. Reasonable possibility of significant loss to the reinsurer.

Because both condition (a) and condition (b) must be met, failure to transfer significant timing and underwriting risk is not overcome by the possibility of significant loss to the reinsurer.

19. Q: Is it permissible to evaluate timely reimbursement on a present value basis?
- A: No. The word timely is used in the ordinary temporal sense to refer to the length of time between payment of the underlying reinsured claims and reimbursement by the reinsurer.
- While the test for reasonable possibility of significant loss to the reinsurer provides for a present value-based assessment of the economic characteristics of the reinsurance contract, the concept of timely reimbursement relates to the transfer of insurance risk (condition a above), not the reasonable possibility of significant loss (condition b above). Accordingly, timely reimbursement should be evaluated based solely on the length of time between payment of the underlying reinsured losses and reimbursement by the reinsurer.
20. Q: Are there any circumstances under which the conditions for risk transfer need not be met?
- A: Yes. An extremely narrow and limited exemption is provided for contracts that reinsure either an individual risk or an underlying book of business that is inherently profitable. When substantially all of the insurance risk relating to the reinsured portions of the underlying insurance contracts has been assumed by the reinsurer, the contract meets the conditions for reinsurance accounting. To qualify under this exception, no more than trivial insurance risk on the reinsured portions of the underlying insurance contracts may be retained by the ceding entity. The reinsurer's economic position must be virtually equivalent to having written the relevant portions of the reinsured contracts directly.

21. Q: In determining whether a reinsurance contract qualifies under the exception referred to in the preceding question, how should the economic position of the reinsurer be assessed in relation to that of the ceding entity?

A: The assessment should be made by comparing the net cash flows of the reinsurer under the reinsurance contract with the net cash flows of ceding entity on the reinsured portions of the underlying insurance contracts. This may be relatively easy for reinsurance of individual risks or for unlimited-risk quota-share reinsurance, because the premiums and losses on these types of reinsurance generally are the same as the premiums and losses on the reinsured portions of the underlying insurance policies.

In other types of reinsurance, determining the reinsurer's net cash flows relative to the insurer is likely to be substantially more difficult. For example, it generally would be difficult to demonstrate that the ceding entity's premiums and losses for a particular layer of insurance are the same as the reinsurer's premiums and losses related to that layer. If the economic position of the reinsurer relative to the insurer cannot be determined, the contract would not qualify under the exception.

#### Accounting Provisions

22. Q: An existing contract that was accounted for as reinsurance no longer qualifies for reinsurance accounting under the new accounting rules included in SSAP No. 62. How should the ceding and assuming companies account for the contract in future periods?

A: Because the statement of income cannot be restated, previously recognized gains and losses are not revised. If the contract was entered into before, and not renewed or amended on or after, January 1, 1994 and covers only losses occurring or claims made before that date, or the contract expired before January 1, 1995 and was not renewed or amended on or after that date, it would continue to be accounted for in the manner provided before these revisions.

For accounting periods commencing on or after January 1, 1995, existing balances relating to contracts which do not transfer insurance risk and which were entered into on or after January 1, 1994 (covering losses occurring or claims made after that date) would be reclassified as deposits.

Premium payments to a reinsurer would be recorded as deposits. Likewise, losses recoverable from a reinsurer would not be recognized as receivables. Rather, any reimbursement for losses would be accounted for upon receipt as a refund of a deposit.

23. Q: What is the definition of past insurable events that governs whether reinsurance coverage is prospective or retroactive? For example, could a reinsurance contract that covers losses from asbestos and pollution claims on occurrence-based insurance policies effective during previous periods be considered prospective if the reinsurance coverage is triggered by a court interpretation that a loss is covered within the terms of the underlying insurance policies?

A: The distinction between prospective and retroactive reinsurance is based on whether a contract reinsures future or past insured events covered by the underlying reinsurance contracts. In the example above, the insured event is the occurrence of loss within the coverage of the underlying insurance contracts, not the finding of a court. Therefore, the fact that the asbestos exposure or pollution is covered under insurance policies effective during prior periods makes the reinsurance coverage in this example retroactive.

24. Q: Would the answer to the above question change if the reinsurance were written on a claims-made basis?

A: No. The form of the reinsurance—whether claims-made or occurrence-based—does not determine whether the reinsurance is prospective or retroactive. A claims-made reinsurance contract that reinsures claims asserted to the reinsurer in a future period as a result of insured events that occurred prior to entering into the reinsurance contract is a retroactive contract.

25. Q: What is the effect of adjustments to future premiums or coverage in determining whether reinsurance is prospective or retroactive?

A: Adjustments to future premiums or coverage may affect the accounting for a reinsurance contract. Whenever an adjustment results in a reinsurer providing new or additional coverage for past insurable events, that coverage is retroactive. For example, if subsequent years' premiums under a multiple accident year contract create additional coverage for previous accident years, the additional coverage is retroactive, even if the original coverage provided in the contract for those accident years was prospective. Likewise, if current losses under a multiple-year contract eliminate coverage in future periods, some or all of the premiums to be paid in those future periods should be charged to the current period.

26. Q: A reinsurance contract is entered into after the contract's effective date. Is the coverage between the contract's effective date and the date the contract was entered into prospective or retroactive?

A: The portion of the contract related to the period of time between the effective date of the contract and the date the contract was entered into is retroactive because it covers insured events that occurred prior to entering into the reinsurance contract.

27. Q: How is the date the reinsurance contract was entered into determined?

A: It is not uncommon for a reinsurance arrangement to be initiated before the beginning of a policy period but not finalized until after the policy period begins. Whether there was agreement in principle at the beginning of the policy period and, therefore, the contract is substantively prospective must be determined based on the facts and circumstances. For example, a contract may be considered to have been substantively entered into even though regulatory approval of that contract has not taken place.

The absence of agreement on significant terms, or the intention to establish or amend those terms at a later date based on experience or other factors, generally indicates that the parties to the contract have not entered into a reinsurance contract, but rather have agreed to enter into a reinsurance contract at a future date. If contractual provisions under a contract substantively entered into at a future date covered insurable events prior to that date, that coverage is retroactive.

In any event, SSAP No. 62 provides that if a contract (except facultative contracts and contracts signed by the lead reinsurer and certain cover notes or similar documents signed by reinsurers representing more than 50% of the capacity on the contract) has not been finalized, reduced to written form and signed by the parties within 9 months after its effective date, it is presumed to be retroactive.

28. Q: Are contracts to reinsure calendar-year incurred losses considered blended contracts that have both prospective and retroactive elements?

A: Yes. Most reinsurance contracts covering calendar-year incurred losses combine coverage for insured events that occurred prior to entering into the reinsurance contract with coverage for future insured events and, therefore, include both prospective and retroactive elements.



In any event, SSAP No. 62 provides that if a contract (except facultative contracts, contracts signed by the lead reinsurer and certain cover notes or similar documents signed by reinsurers representing more than 50% of the capacity on the contract) has not been finalized, reduced to written form and signed by the parties within 9 months after its effective date it is presumed retroactive.

29. Q: When the prospective and retroactive portions of a contract are being accounted for separately, how should premiums be allocated to each portion of the contract?

A: No specific method for allocating the reinsurance premiums to the risks covered by the prospective and retroactive portions of a contract is required. However, separate accounting for the prospective and retroactive portions of a contract may take place only when an allocation is practicable.

Practicability requires a reasonable basis for allocating the reinsurance premiums to the risks covered by the prospective and retroactive portions of the contract, considering all amounts paid or deemed to have been paid regardless of the timing of payment. If a reasonable basis for allocating the premiums between the prospective and retroactive coverage does not exist, the entire contract must be accounted for as a retroactive contract.

30. Q: A retroactive reinsurance contract contains a cut-through provision that provides the ceding entity's policyholders and claimants with the right to recover their claims directly from the reinsurer. May the ceding entity immediately recognize earned surplus associated with this type of contract?

A: No. SSAP No. 62 states that earned surplus may not be recognized "until the actual retroactive reinsurance recovered exceeds the consideration paid".

31. Q: A ceding entity enters into a retroactive reinsurance agreement that gives rise to segregated surplus. If the reinsurer prepays its obligation under the contract, may the ceding entity recognize earned surplus at the time the prepayment is received?

A: Segregated surplus arising from retroactive reinsurance transactions is earned as actual liabilities that have been transferred are recovered or terminated. Therefore, earned surplus is based on when the reinsurer settles its obligations to the ceding entity, and it may be appropriate to recognize earned surplus at the time the prepayment is received.

However, all of the facts and circumstances must be considered to determine whether the ceding entity has substantively recovered the liabilities transferred to the reinsurer. For example, if the ceding entity agrees to compensate the reinsurer for the prepayment, such as by crediting the reinsurer with investment income on prepaid amounts or balances held, the ceding entity has not, in substance, recovered its transferred liabilities but rather has received a deposit from the reinsurer that should be accounted for accordingly.

32. Q: If the ceding entity does not expect to receive any recoveries because the reinsurer has agreed to reimburse claimants under the reinsured contracts directly, would the ceding entity be considered to have recovered or terminated its transferred liabilities?

A: No. In the example given, the reinsurer is substantively acting as disbursing agent for the ceding entity. Therefore, the ceding entity cannot be said to have recovered amounts due from the reinsurer before payment is made to the claimant.

33. Q: What accounting entries would a ceding entity make to report a retroactive reinsurance contract?

A: Accounting Entries for a Ceding Entity to Report a Retroactive Reinsurance Contract:

Entry 1

Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)	10,000	
Retroactive Reinsurance Gain (I/S)		2,000
Cash		8,000

To record initial portfolio transfer see items #3 and #8. The ceding entity must establish the segregated surplus per item #4.

Entry 1A

Retro. Reins. Gain	2,000	
Profit/Loss Account		2,000

To close gain from retroactive transaction.

Entry 1B

Profit/Loss Account	2,000	
Special Surplus from Retro. Reins.		2,000

To close profit from retroactive reinsurance to special surplus.

Entry 2

Cash	2,000	
Retroactive Reinsurance Reserves		2,000
Ceded or Assumed (B/S)		

To record recovery of paid losses from the reinsurer. Outstanding ceded reserves after this recovery equals \$8,000, and special surplus from retroactive reinsurance account equals \$2,000; therefore, segregated surplus account is not changed per item #10.

Entry 3

Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)	3,000	
Retroactive Reinsurance Gain (I/S)		3,000

To record subsequent revision of the initial reserves ceded per item #10. The segregated surplus account is increased to \$5,000 as a result of this upward development.

Entry 3A

Retro. Reinsurance Gain	3,000	
Profit/Loss Account		3,000

To close profit from retroactive reinsurance.

Entry 3B

Profit/Loss (I/S)	3,000	
Special Surplus from Retro. Reins.		3,000

To close profit and loss account to special surplus. (Retroactive reinsurance reserves ceded or assumed account balance equals \$11,000. Special Surplus from retroactive reinsurance balance equals \$5,000.)

Entry 4

Cash	4,000	
Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)		4,000

To record recovery of paid losses from the reinsurer. Outstanding ceded reserves after this recovery equals \$7,000, therefore segregated surplus account is not changed per item #10.

Entry 5

Cash	3,000	
Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)		3,000

To record recovery of paid losses from reinsurer. Outstanding ceded reserves after recovery equals \$4,000, therefore the following entry is needed per items #6 and #10.

Entry 5A

Special Surplus—Retro. Reins.	1,000	
Unassigned Funds		1,000

Retroactive Reinsurance reserves ceded or assumed after this entry equals \$4,000.

Entry 6

Retroactive Reinsurance Loss (I/S)	1,000	
Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)		1,000

To record subsequent revision of the initial reserves ceded per item #10. The segregated surplus account is decreased as a result of this downward development to \$3,000. The following entry is needed per items #6 and #10.

Entry 6A

Profit/Loss Account	1,000	
Retro. Reins. Loss		1,000

To close loss to profit and loss account.



Entry 6B

Special Surplus from Retro. Reins.	1,000	
Profit/Loss Account		1,000

To close profit and loss account to special surplus. (Remaining balance of retroactive reinsurance reserve ceded or assumed account equals \$3,000.) (Special surplus from retro. reins. account balance equals \$3,000.)

Entry 7

Cash	2,500	
Retroactive Reinsurance Gain (I/S)	500	
Retroactive Reinsurance Reserves		
Ceded or Assumed (B/S)		3,000

Entry 7A

Profit and Loss Account	500	
Retro. Reins. Gain		500

To close other income to profit and loss account.

Entry 7B

Special Surplus from Retro. Reins.	500	
Profit/Loss Account		500

To close profit and loss account to special surplus. (Remaining balance of special surplus from retro. reins. account equals \$2,500.) (Remaining balance of retroactive reinsurance reserve ceded or assumed account -0-.)

Entry 7C

Special Surplus from Retro. Reins.	2,500	
Unassigned Funds		2,500

To close remaining special surplus account to unassigned surplus.

34. Q: How should the parties account for an adverse loss development reinsurance contract where, as of the statement date, the attachment level of the contract exceeds the ceding company's current case and IBNR reserves for the covered accident years (i.e. no surplus gain and no reinsurance recoverable as of the statement date), and the ceding company transferred cash to the reinsurer at the inception of the contract?

A: An adverse loss development reinsurance contract covering prior accident years meets the definition of "retroactive reinsurance" set forth in paragraph 21 of SSAP No. 62:

....reinsurance in which a reinsurer agrees to reimburse a ceding entity for liabilities incurred as a result of past insurable events covered under contracts subject to the reinsurance....

Subparagraph 28 k of SSAP No. 62 specifically provides that the consideration paid for a retroactive reinsurance contract is to be recorded as a decrease in ledger assets by the ceding entity and an increase in ledger assets by the assuming entity.

Question 33 illustrates the accounting entries for retroactive reinsurance contracts.

If the retroactive reinsurance contract transfers both components of insurance risk then, pursuant to paragraph 28 of SSAP No. 62, the ceding company would record the consideration paid as a decrease in ledger assets, recognize an expense for the reinsurance ceded through Other Income or Loss accounts as a write-in item identified as "Retroactive Reinsurance Ceded", and record the recoverable from the reinsurer as a contra liability.

No contra liability is established until and unless (and then only to the extent that) the ceding company establishes reserves which exceed the attachment point.

For the contract described, at inception no contra liability is recorded to offset current liability for the business ceded, since the ceded retroactive reinsurance premium relates to coverage in excess of the current liabilities recorded by the ceding company.

Once the ceding company's recorded liabilities exceed the attachment point of the adverse loss development reinsurance contract and triggers reinsurance recoverable from the reinsurer, a contra liability is established by the ceding company for the amount of the reinsurance recoverable. Any surplus resulting from the retroactive reinsurance is carried as a write-in item on the balance sheet designated as "Special Surplus from Retroactive Reinsurance Account". The surplus gain may not be classified as unassigned funds (surplus) until the actual retroactive reinsurance recovered exceeds the consideration paid.

If any portion of a retroactive reinsurance contract does not transfer insurance risk, then the portion which does not transfer risk is accounted for as a deposit pursuant to paragraph 34 of SSAP No. 62. The deposit is reported as an admitted asset of the ceding company if the reinsurer is licensed, accredited or otherwise qualified in the ceding company's state of domicile as described in Appendix A-785, or if there are funds held by or on behalf of the ceding company as described in that appendix. Receipts and disbursements under the contract are recorded through the deposit/liability accounts. Amounts received in excess of the deposit made are recognized as a gain in the Other Income or Loss account.

Accounting entries for a ceding entity to report a retroactive reinsurance contract at the inception of which the cedent's reserves are lower than the attachment point of the reinsurance coverage:

Assume the company pays \$16m to purchase adverse development coverage of \$50m, above an attachment point.

Entry 1: Payment of Retrospective Reinsurance Premium

Retrospective Reinsurance Expense*	\$16m	
Cash		\$16m

The company pays \$16m premium for the retrospective reinsurance contract

\*This is an Other Expense item, it does not flow through Schedule F or Schedule P

Entry 2: Adverse Development reaches the Attachment Point

Losses Incurred	\$25m	
Gross Loss Reserve		\$25m
Recoverable on Retro Reinsurance Contract**	\$25m	
Other Income*		\$9m
Contra – Retro Reinsurance Expense*		\$16m
Surplus***	\$9m	
Segregated Surplus***		\$9m

The company incurs \$25m development on reserves related to the contract

\*These are Other Income/Expense items, do not flow through Schedule F or Schedule P

\*\*A contra-liability write-in item, not netted against loss reserves

\*\*\*Surplus is segregated in the amount of [\$25m - \$16m = \$9m] recoverables less consideration paid

Entry 3: Cash is Recovered on Paid Losses

Cash	\$20m	
Recoverable on Retrospective Reinsurance Contract		\$20m
Segregated Surplus	\$4m	
Surplus		\$4m

The company recovers \$20m cash from reinsurer on this retro contract. Segregated Surplus decreases in the amount of [\$20m - \$16m = \$4m] (decreases for amount recovered in excess of consideration paid)

35. Q: How should a ceding company account for payment of the premium for a retroactive reinsurance contract by the ceding company’s parent company or some other person not a party to the reinsurance contract (for example, adverse loss development reinsurance contracts purchased by the parent company in the context of the purchase or sale of the ceding company)?

A: If the reinsurance premium is not paid directly by the ceding company but is instead paid on behalf of the ceding company by the ceding company’s parent company or some other entity not a party to the reinsurance contract, then the ceding company should (1) record an increase in gross paid in and contributed surplus in the amount of the reinsurance premium to reflect the contribution to surplus by the parent or third party payor, and (2) record an expense in the amount of the reinsurance premium and account for the contract as provided in Questions 33 and 34.

# EXHIBIT 3

# Statement of Financial Accounting Standards No. 113

FAS113 Status Page  
FAS113 Summary

Accounting and Reporting for Reinsurance of  
Short-Duration and Long-Duration Contracts

December 1992



Financial Accounting Standards Board  
of the Financial Accounting Foundation  
401 MERRITT 7, P.O. BOX 5116, NORWALK, CONNECTICUT 06856-5116

Copyright © 1992 by Financial Accounting Standards Board. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Financial Accounting Standards Board.

**Statement of Financial Accounting Standards No. 113**

**Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts**

**an amendment of FASB Statement No. 60**

**December 1992**

**CONTENTS**

	Paragraph Numbers
Introduction	1–5
Standards of Financial Accounting and Reporting:	
Applicability and Scope	6–7
Indemnification against Loss or Liability Relating to Insurance Risk	8–13
Reinsurance of Short-Duration Contracts	9–11
Reinsurance of Long-Duration Contracts	12–13
Reporting Assets and Liabilities Related to Reinsurance Transactions	14–16
Recognition of Revenues and Costs	17–26
Recognition of Revenues and Costs for Reinsurance of Short-Duration Contracts	21–25
Recognition of Revenues and Costs for Reinsurance of Long-Duration Contracts	26
Disclosure	27–28
Amendments to Other Pronouncements	29–32
Effective Date and Transition	33
Appendix A: Basis for Conclusions	34–119
Appendix B: Illustrations	120
Appendix C: Glossary	121



## FAS 113: Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts

### FAS 113 Summary

This Statement specifies the accounting by insurance enterprises for the reinsuring (ceding) of insurance contracts. It amends FASB Statement No. 60, *Accounting and Reporting by Insurance Enterprises*, to eliminate the practice by insurance enterprises of reporting assets and liabilities relating to reinsured contracts net of the effects of reinsurance. It requires reinsurance receivables (including amounts related to claims incurred but not reported and liabilities for future policy benefits) and prepaid reinsurance premiums to be reported as assets. Estimated reinsurance receivables are recognized in a manner consistent with the liabilities relating to the underlying reinsured contracts.

This Statement establishes the conditions required for a contract with a reinsurer to be accounted for as reinsurance and prescribes accounting and reporting standards for those contracts. The accounting standards depend on whether the contract is long duration or short duration and, if short duration, on whether the contract is prospective or retroactive. For all reinsurance transactions, immediate recognition of gains is precluded unless the ceding enterprise's liability to its policyholder is extinguished. Contracts that do not result in the reasonable possibility that the reinsurer may realize a significant loss from the insurance risk assumed generally do not meet the conditions for reinsurance accounting and are to be accounted for as deposits.

This Statement requires ceding enterprises to disclose the nature, purpose, and effect of reinsurance transactions, including the premium amounts associated with reinsurance assumed and ceded. It also requires disclosure of concentrations of credit risk associated with reinsurance receivables and prepaid reinsurance premiums under the provisions of FASB Statement No. 105, *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*.

This Statement applies to financial statements for fiscal years beginning after December 15, 1992, with earlier application encouraged.

## INTRODUCTION

1. Insurance provides indemnification against loss or liability from specified events and circumstances that may occur or be discovered during a specified period. In exchange for a payment from the policyholder (a premium), an insurance enterprise agrees to pay the policyholder if specified events occur or are discovered. Similarly, the insurance enterprise may obtain indemnification against claims<sup>1</sup> associated with contracts it has written by entering into a reinsurance contract with another insurance enterprise (the **reinsurer**<sup>2</sup> or **assuming enterprise**). The insurer (or **ceding enterprise**) pays (cedes) an amount to the reinsurer, and the reinsurer agrees to reimburse the insurer for a specified portion of claims paid under the reinsured contracts. However, the policyholder usually is unaware of the reinsurance arrangement, and the insurer ordinarily is not relieved of its obligation to the policyholder. The reinsurer may, in turn, enter into reinsurance contracts with other reinsurers, a process known as retrocession.

2. FASB Statement No. 60, *Accounting and Reporting by Insurance Enterprises* (issued in 1982), specified the accounting by insurance enterprises for reinsurance contracts. Statement 60 is an extraction of requirements of the AICPA Industry Audit Guides, *Audits of Fire and Casualty Insurance Companies* and *Audits of Stock Life Insurance Companies* (1979 editions). It continued the long-established practice that originated in statutory accounting whereby ceding enterprises reported insurance activities net of the effects of reinsurance. If a reinsurance contract indemnified the ceding enterprise against loss or liability, Statement 60 required the ceding enterprise to reduce unpaid claim liabilities by related estimated amounts recoverable from reinsurers (ceded reserves or reinsurance recoverables) and to reduce unearned premiums by related amounts paid to reinsurers (ceded unearned premiums or prepaid reinsurance premiums).

3. APB Opinion No. 10, *Omnibus Opinion—1966*, paragraph 7, states, "It is a general principle of accounting that the offsetting of assets and liabilities in the balance sheet is improper except where a right of setoff exists." FASB Interpretation No. 39, *Offsetting of Amounts Related to Certain Contracts*, specifies criteria for determining whether a right of setoff exists but does not change the offsetting permitted or required by existing accounting pronouncements. Amounts payable to the policyholder and amounts receivable from the reinsurer do not meet the criteria for offsetting in Opinion 10 or Interpretation 39. Those criteria include the requirement that the reporting party have the legal right to set off the amount owed to one party with an amount receivable from that same party.

4. The issues of (a) whether net reporting of the effects of reinsurance is appropriate and (b) what is meant by indemnification against loss or liability under a reinsurance contract (generally referred to as risk transfer) have been studied by the insurance industry and the accounting and actuarial professions for some time. Interest in those issues has grown in recent years as a result

of widespread public attention focused on failures of insurance enterprises. Risks associated with reinsurance have been cited as a contributing factor in several of those failures. Some commentators have observed that the offsetting of reinsurance-related assets and liabilities and inadequate reinsurance disclosures obscure risks associated with reinsurance. Others have observed that the accounting guidance in Statement 60 allows the use of reinsurance to accelerate the recognition of income relating to the reinsured contracts.

5. The increasing concerns about the effect of reinsurance accounting for contracts that do not indemnify the ceding enterprise against loss or liability, the limited accounting guidance on reinsurance in Statement 60, the lack of disclosure requirements for reinsurance transactions, and the inconsistency between the net accounting for reinsurance-related assets and liabilities and the established criteria for offsetting led the Board to reconsider the accounting and reporting for reinsurance required by Statement 60.

## STANDARDS OF FINANCIAL ACCOUNTING AND REPORTING

### Applicability and Scope

6. This Statement applies to all insurance enterprises to which Statement 60 applies. Insurers may enter into various types of contracts described as reinsurance, including those commonly referred to as **fronting arrangements**. This Statement provides guidance in paragraphs 8-13 on determining whether those contracts indemnify the ceding enterprise against loss or liability and therefore meet the conditions for reinsurance accounting. Contracts that meet those conditions shall be accounted for according to the provisions of paragraphs 14-26 of this Statement; other contracts with reinsurers are accounted for as deposits. The accounting provisions for reinsurance depend on whether the contract is long duration or short duration and, if short duration, on whether the contract is considered **prospective reinsurance** or **retroactive reinsurance**. Regardless of its form, any transaction that indemnifies an insurer against loss or liability relating to **insurance risk** shall be accounted for according to the provisions of this Statement.

7. This Statement does not address or change existing practice in accounting for reinsurance assumed, other than to provide guidance on indemnification against loss or liability relating to insurance risk in paragraphs 8-13 and require certain disclosures in paragraph 27.

### Indemnification against Loss or Liability Relating to Insurance Risk

8. Determining whether a contract with a reinsurer provides indemnification against loss or liability relating to insurance risk requires a complete understanding of that contract and other contracts or agreements between the ceding enterprise and related reinsurers. A complete

understanding includes an evaluation of all contractual features that (a) limit the amount of insurance risk to which the reinsurer is subject (such as through experience refunds, cancellation provisions, adjustable features, or additions of profitable lines of business to the reinsurance contract) or (b) delay the timely reimbursement of claims by the reinsurer (such as through payment schedules or accumulating retentions from multiple years).

#### **Reinsurance of Short-Duration Contracts**

9. Indemnification of the ceding enterprise against loss or liability relating to insurance risk in reinsurance of short-duration contracts requires both of the following, unless the condition in paragraph 11 is met:

- a. The reinsurer assumes significant insurance risk under the reinsured portions of the underlying insurance contracts.
- b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.

A reinsurer shall not be considered to have assumed significant insurance risk under the reinsured contracts if the probability of a significant variation in either the amount or timing of payments by the reinsurer is remote. Contractual provisions that delay timely reimbursement to the ceding enterprise would prevent this condition from being met.

10. The ceding enterprise's evaluation of whether it is reasonably possible for a reinsurer to realize a significant loss from the transaction shall be based on the present value of all cash flows between the ceding and assuming enterprises under reasonably possible outcomes, without regard to how the individual cash flows are characterized. The same interest rate shall be used to compute the present value of cash flows for each reasonably possible outcome tested.

11. Significance of loss shall be evaluated by comparing the present value of all cash flows, determined as described in paragraph 10, with the present value of the amounts paid or deemed to have been paid<sup>3</sup> to the reinsurer. If, based on this comparison, the reinsurer is not exposed to the reasonable possibility of significant loss, the ceding enterprise shall be considered indemnified against loss or liability relating to insurance risk only if substantially all of the insurance risk relating to the reinsured portions of the underlying insurance contracts has been assumed by the reinsurer.<sup>4</sup>

#### **Reinsurance of Long-Duration Contracts**

12. Indemnification of the ceding enterprise against loss or liability relating to insurance risk in reinsurance of long-duration contracts requires the reasonable possibility that the reinsurer may realize significant loss from assuming insurance risk as that concept is contemplated in Statement 60 and FASB Statement No. 97, *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments*. Statement 97 defines long-duration contracts that do not subject the insurer to mortality or morbidity risks as investment contracts. Consistent with that definition, a contract

that does not subject the reinsurer to the reasonable possibility of significant loss from the events insured by the underlying insurance contracts does not indemnify the ceding enterprise against insurance risk.

13. The evaluation of mortality or morbidity risk in contracts that reinsure policies subject to Statement 97 shall be consistent with the criteria in paragraphs 7 and 8 of that Statement. Evaluation of the presence of insurance risk in contracts that reinsure other long-duration contracts (such as those that reinsure ordinary life contracts or contracts that provide benefits related only to illness, physical injury, or disability) also shall be consistent with those criteria.

### **Reporting Assets and Liabilities Related to Reinsurance Transactions**

14. Reinsurance contracts that are legal replacements of one insurer by another (often referred to as assumption and novation) extinguish the ceding enterprise's liability to the policyholder and result in removal of related assets and liabilities from the financial statements of the ceding enterprise. Reinsurance contracts in which a ceding enterprise is not relieved of the legal liability to its policyholder do not result in removal of the related assets and liabilities from the ceding enterprise's financial statements. Ceding enterprises shall report estimated **reinsurance receivables** arising from those contracts separately as assets. Amounts paid to the reinsurer relating to the unexpired portion of reinsured contracts (prepaid reinsurance premiums) also shall be reported separately as assets.

15. Amounts receivable and payable between the ceding enterprise and an individual reinsurer shall be offset only when a right of setoff exists, as defined in Interpretation 39.

16. The amounts of earned premiums ceded and recoveries recognized under reinsurance contracts either shall be reported in the statement of earnings, as separate line items or parenthetically, or those amounts shall be disclosed in the footnotes to the financial statements.

### **Recognition of Revenues and Costs**

17. The financial reporting for a contract with a reinsurer depends on whether the contract is considered to be reinsurance for purposes of applying this Statement. Paragraphs 8-13 identify the conditions necessary for a contract to be accounted for as reinsurance. Financial reporting for a reinsurance contract also depends on whether the contract reinsures short-duration or long-duration insurance contracts and, for short-duration contracts, on whether the contract is prospective or retroactive. Paragraphs 18-20 prescribe accounting standards applicable to all reinsurance contracts. Paragraphs 21-25 prescribe accounting standards specifically applicable to reinsurance of short-duration contracts, and paragraph 26 prescribes accounting standards for reinsurance of long-duration contracts.

18. This Statement does not specify the accounting for contracts that do not meet the conditions for reinsurance accounting, other than to incorporate the following provisions from

paragraphs 39 and 40 of Statement 60, which continue in effect:

- a. To the extent that a reinsurance contract does not, despite its form, provide for indemnification of the ceding enterprise by the reinsurer against loss or liability, the premium paid less the premium to be retained by the reinsurer shall be accounted for as a deposit by the ceding enterprise. A net credit resulting from the contract shall be reported as a liability by the ceding enterprise. A net charge resulting from the contract shall be reported as an asset by the reinsurer.
- b. Proceeds from reinsurance transactions that represent recovery of acquisition costs shall reduce applicable unamortized acquisition costs in such a manner that net acquisition costs are capitalized and charged to expense in proportion to net revenue recognized.<sup>5</sup> If the ceding enterprise has agreed to service all of the related insurance contracts without reasonable compensation, a liability shall be accrued for estimated excess future servicing costs under the reinsurance contract. The net cost to the assuming enterprise shall be accounted for as an acquisition cost.

19. Reinsurance contracts do not result in immediate recognition of gains unless the reinsurance contract is a legal replacement of one insurer by another and thereby extinguishes the ceding enterprise's liability to the policyholder.

20. Reinsurance receivables shall be recognized in a manner consistent with the liabilities (including estimated amounts for claims incurred but not reported and future policy benefits) relating to the underlying reinsured contracts. Assumptions used in estimating reinsurance receivables shall be consistent with those used in estimating the related liabilities.

#### **Recognition of Revenues and Costs for Reinsurance of Short-Duration Contracts**

21. Amounts paid for prospective reinsurance that meets the conditions for reinsurance accounting shall be reported as prepaid reinsurance premiums and amortized over the remaining **contract period** in proportion to the amount of insurance protection provided. If the amounts paid are subject to adjustment and can be reasonably estimated, the basis for amortization shall be the estimated ultimate amount to be paid.

22. Amounts paid for retroactive reinsurance that meets the conditions for reinsurance accounting shall be reported as reinsurance receivables to the extent those amounts do not exceed the recorded liabilities relating to the underlying reinsured contracts. If the recorded liabilities exceed the amounts paid, reinsurance receivables shall be increased to reflect the difference and the resulting gain deferred. The deferred gain shall be amortized over the estimated remaining **settlement period**. If the amounts and timing of the reinsurance recoveries can be reasonably estimated, the deferred gain shall be amortized using the effective interest rate inherent in the amount paid to the reinsurer and the estimated timing and amounts of recoveries from the reinsurer (the interest method). Otherwise, the proportion of actual recoveries to total estimated recoveries (the recovery method) shall determine the amount of amortization.



23. If the amounts paid for retroactive reinsurance exceed the recorded liabilities relating to the underlying reinsured contracts, the ceding enterprise shall increase the related liabilities or reduce the reinsurance receivable or both at the time the reinsurance contract is entered into, so that the excess is charged to earnings.

24. Changes in the estimated amount of the liabilities relating to the underlying reinsured contracts shall be recognized in earnings in the period of the change. Reinsurance receivables shall reflect the related change in the amount recoverable from the reinsurer, and a gain to be deferred and amortized, as described in paragraph 22, shall be adjusted or established as a result.<sup>6</sup> When changes in the estimated amount recoverable from the reinsurer or in the timing of receipts related to that amount occur, a cumulative amortization adjustment shall be recognized in earnings in the period of the change so that the deferred gain reflects the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction.

25. When practicable,<sup>7</sup> prospective and retroactive provisions included within a single contract shall be accounted for separately. If separate accounting for prospective and retroactive provisions included within a single contract is impracticable, the contract shall be accounted for as a retroactive contract provided the conditions for reinsurance accounting are met.

#### **Recognition of Revenues and Costs for Reinsurance of Long-Duration Contracts**

26. Amortization of the estimated cost of reinsurance of long-duration contracts that meets the conditions for reinsurance accounting depends on whether the reinsurance contract is long duration or short duration. The cost shall be amortized over the remaining life of the underlying reinsured contracts if the reinsurance contract is long duration, or over the contract period of the reinsurance if the reinsurance contract is short duration. Determining whether a contract that reinsures a long-duration insurance contract is long duration or short duration in nature is a matter of judgment, considering all of the facts and circumstances. The assumptions used in accounting for reinsurance costs shall be consistent with those used for the reinsured contracts. The difference, if any, between amounts paid for a reinsurance contract and the amount of the liabilities for policy benefits relating to the underlying reinsured contracts is part of the estimated cost to be amortized.

#### **Disclosure**

27. All insurance enterprises shall disclose the following in their financial statements:
- a. The nature, purpose, and effect of ceded reinsurance transactions on the insurance enterprise's operations (Ceding enterprises also shall disclose the fact that the insurer is not relieved of its primary obligation to the policyholder in a reinsurance transaction.<sup>8</sup>)
  - b. For short-duration contracts, premiums from direct business, reinsurance assumed, and



reinsurance ceded, on both a written and an earned basis; for long-duration contracts, premiums and amounts assessed against policyholders from direct business, reinsurance assumed and ceded, and premiums and amounts earned

c. Methods used for income recognition on reinsurance contracts.

28. A ceding enterprise shall disclose concentrations of credit risk associated with reinsurance receivables and prepaid reinsurance premiums under the provisions of FASB Statement No. 105, *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk*.

### **Amendments to Other Pronouncements**

29. This Statement supersedes paragraphs 38-40 and 60(f) of Statement 60, which address reinsurance, and incorporates the provisions of paragraphs 39 and 40 of Statement 60 in paragraph 18 of this Statement.

30. This Statement amends FASB Statement No. 5, *Accounting for Contingencies*, to include the following footnote at the end of paragraph 44:

\*Paragraphs 8-13 of FASB Statement No. 113, *Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts*, identify conditions that are required for a reinsurance contract to indemnify the ceding enterprise against loss or liability and to be accounted for as reinsurance. Any transaction between enterprises to which FASB Statement No. 60, *Accounting and Reporting by Insurance Enterprises*, applies must meet those conditions to be accounted for as reinsurance.

31. Paragraph 27 of Statement 97, which refers to the reinsurance guidance in Statement 60, is amended to read as follows:

The provisions of Statement 60 addressing loss recognition (premium deficiency) and financial statement disclosure, and the provisions of FASB Statement No. 113, *Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts*, addressing reinsurance shall apply to limited-payment and universal life-type contracts addressed by this Statement.

32. Interpretation 39 does not modify the accounting prescribed by authoritative pronouncements in specific circumstances that result in offsetting or in a presentation that is similar to the effect of offsetting. Paragraph 7 of Interpretation 39 includes examples of that accounting and is amended to delete the reference to reinsurance in Statement 60.

### **Effective Date and Transition**

33. This Statement is effective for financial statements for fiscal years beginning after

December 15, 1992, with earlier application encouraged. The provisions of paragraphs 8-13 that establish the conditions for reinsurance accounting and paragraphs 17-26 that address recognition of revenues and costs of reinsurance need not be applied in financial statements for interim periods in the year of initial application, but amounts reported for those interim periods shall be restated if they are reported with annual financial statements for that fiscal year. Restatement of financial statements for earlier years to apply the provisions of paragraphs 8-13 and 17-26 is prohibited. Restatement of financial statements for earlier years to apply paragraphs 14-16 relating to gross reporting is encouraged but not required. The provisions of this Statement that establish the conditions for reinsurance accounting and address recognition of revenues and costs apply to reinsurance contracts entered into, renewed, amended,<sup>9</sup> or having an anniversary date in the year of adoption.

**The provisions of this Statement need  
not be applied to immaterial items.**

*This Statement was adopted by the unanimous vote of the seven members of the Financial Accounting Standards Board:*

Dennis R. Beresford, *Chairman*  
Joseph V. Anania  
Victor H. Brown  
James J. Leisenring  
Robert H. Northcutt  
A. Clarence Sampson  
Robert J. Swieringa

## Appendix A

### BASIS FOR CONCLUSIONS

#### CONTENTS

	Paragraph Numbers
Introduction .....	34–35
Background Information .....	36–40
Benefits and Costs .....	41–44
Scope .....	45–55
Indemnification against Loss or Liability Relating to Insurance Risk .....	56–69
Reinsurance of Short-Duration Contracts .....	61–67
Reinsurance of Long-Duration Contracts .....	68–69
Reporting Assets and Liabilities Related to Reinsurance Transactions .....	70–87
Recognition of Revenues and Costs .....	88–111
Recognition of Revenues and Costs for Reinsurance of Short- Duration Contracts .....	94–109
Recognition of Revenues and Costs for Reinsurance of Long- Duration Contracts .....	110–111
Disclosure .....	112–116
Effective Date and Transition .....	117–119

## **Appendix A: BASIS FOR CONCLUSIONS**

### **Introduction**

34. This appendix summarizes considerations deemed significant by Board members in reaching the conclusions in this Statement. It includes reasons for accepting certain approaches and rejecting others. Individual Board members gave greater weight to some factors than to others.

35. An FASB Exposure Draft, *Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts*, was issued for public comment in March 1992 and distributed to members of various industry organizations, in addition to the standard distribution, to encourage comment by those most affected by the proposal. Fifty-three comment letters were received in response to the Exposure Draft. The Board concluded that it could reach an informed decision without holding a public hearing. However, those who responded to the Exposure Draft were invited to participate in a public Board meeting, which took place in September 1992.

### **Background Information**

36. For reinsurance contracts that indemnified the ceding enterprise against risk of loss or liability, Statement 60 continued the long-established practice that originated in statutory accounting whereby ceding enterprises reported insurance activities net of the effects of reinsurance. Unearned premiums and unpaid claim liabilities represent an insurance enterprise's obligation to policyholders at different times during the period of an insurance contract. Similarly, prepaid reinsurance premiums and reinsurance receivables represent probable future economic benefits to be received from a reinsurer. Statement 60 required insurance liabilities to be reported net of the related reinsurance amounts and also allowed reporting of earned premiums and claims costs net of reinsurance amounts in the statement of earnings.

37. Whether this offsetting of reinsurance amounts in financial statements of insurance enterprises should continue has been a recurring issue. Opinion 10 states, "It is a general principle of accounting that the offsetting of assets and liabilities in the balance sheet is improper except where a right of setoff exists." In issuing Interpretation 39, the FASB did not modify accounting treatments specified in existing FASB and AICPA accounting pronouncements that result in offsetting, including the accounting for reinsurance under Statement 60.

38. How to determine whether a reinsurance contract indemnifies the ceding enterprise against loss or liability has been another recurring issue. Statement 5 requires deposit accounting for insurance and reinsurance contracts that do not indemnify the insured or ceding

enterprise against loss or liability. Statement 60 incorporates that guidance for reinsurance contracts without specifying further the conditions under which loss or liability is indemnified. At the time Statement 60 was issued, the insurance industry and the accounting and actuarial professions were studying what circumstances constitute indemnification against loss or liability in a reinsurance transaction.

39. Many have expressed concern about the appropriateness of reporting the effects of reinsurance on a net basis, the effect of reinsurance accounting for contracts written as reinsurance that do not indemnify the ceding enterprise against loss or liability, the adequacy of reinsurance disclosures, and the limited accounting guidance for reinsurance contracts in Statement 60. In response to those concerns, the Board decided to reconsider the reinsurance provisions of Statement 60.

40. The Board had two objectives in adding this project to its agenda. The first objective was to consider the inconsistency between accounting for reinsurance and the established criteria for offsetting and to address the perceived deficiencies in the reporting of reinsurance transactions. Amounts recoverable from reinsurers are a very significant asset for some insurance enterprises. However, the netting provisions of Statement 60 and the exclusion of insurance contracts from Statement 105 have resulted in limited reporting about the amounts receivable from reinsurers, the effects of reinsurance on the reporting enterprise's operations, and the resulting exposure to credit risk. The second objective was to address the recognition of revenues and costs resulting from reinsurance transactions. The Board concluded that it was necessary to consider the lack of guidance in Statement 60 on recognition issues relating to reinsurance because of the increasing diversity and complexity of reinsurance arrangements and the proliferation of nontraditional reinsurance contracts. There also was an apparent inconsistency between the practice of immediately recognizing gains and losses on reinsurance contracts and the premise that reinsurance does not result in extinguishment of the related liabilities.

### **Benefits and Costs**

41. The FASB's mission statement calls for the Board to determine whether a proposed standard will fill a significant need and whether the costs it imposes, compared with the possible alternatives, will be justified in relation to the overall benefits. The costs to implement an accounting standard and the benefits of reporting consistent, comparable, and reliable information in financial statements ordinarily must be assessed in general terms and cannot be quantified. There also is no common measure for objectively comparing those costs and benefits. Moreover, implementation costs are borne primarily by the preparers of financial statements rather than the broader constituency that also benefits from improved reporting. In establishing standards that are cost-effective, the Board must balance the diverse and often conflicting needs of a variety of constituents.

42. In addressing this project, the Board determined that the information provided to users about the effects of reinsurance transactions could be improved by (a) eliminating the industry

practice of offsetting reinsurance assets and liabilities, (b) requiring disclosures about the credit risk associated with reinsurance receivables, and (c) limiting diversity among ceding enterprises in recognizing revenues and costs from reinsurance contracts.

43. The Board concluded that not all accounting issues relating to reinsurance contracts could be effectively addressed in this Statement. However, information provided to users about the effects of reinsurance could be improved and inconsistencies could be reduced by providing guidance for both short-duration and long-duration contracts. The Exposure Draft provided only general implementation guidance and did not attempt to identify and address all issues that could arise. Some respondents recommended that the Statement provide far more extensive implementation guidance and additional examples, particularly on applying the conditions for reinsurance accounting. Those requests were evaluated individually and, in certain instances, the Board concluded that additional guidance was warranted. However, because the Board believes that the cost of implementing very detailed standards for reinsurance accounting would outweigh the benefits, the overall approach of providing general rather than detailed guidance was retained. The Board believes the increased usefulness of the information provided on the effects of reinsurance transactions will exceed the costs of complying with this Statement.

44. The information required by this Statement should be readily available to the reporting enterprise because of similar regulatory reporting guidelines. Modification of existing systems may be required to facilitate reporting concentrations of credit risk and to comply with the provisions for recognizing revenues and costs required by this Statement. The Exposure Draft would have required prospective and retroactive elements of all reinsurance contracts to be accounted for separately. Respondents indicated that the cost of allocating amounts related to these provisions could be significant and that allocation might not always be practicable. To address these concerns, the Board concluded that contracts containing both prospective and retroactive elements should be accounted for as retroactive contracts when allocation is impracticable.

### Scope

45. After reviewing current practice and the nature of reinsurance contracts, the Board concluded that an extensive reconsideration of the accounting for reinsurance is not necessary at this time; concerns could be addressed by modifying the standards of financial accounting and reporting for reinsurance in Statement 60 and by providing limited additional guidance. The guidance in paragraphs 39 and 40 of Statement 60 was not reconsidered and continues in effect. The provisions of those paragraphs have been incorporated in this Statement for convenience.

46. This Statement applies to any transaction that indemnifies an insurer against loss or liability relating to insurance risk. All transactions must meet the conditions in paragraphs 8-13 of this Statement to be accounted for as reinsurance. The Exposure Draft would have amended paragraph 44 of Statement 5 to indicate that similar conditions are required for an insurance policy to indemnify the insured against loss or liability. While that amendment was not expected



to have a significant effect in practice, some respondents indicated its effect would be greater than anticipated. The Board decided not to extend the provisions in paragraphs 8-13 to primary insurance transactions. This potential inconsistency was accepted, even though paragraph 44 of Statement 5 suggests it is appropriate to apply a uniform concept of indemnification to both insurance and reinsurance, because the Board's intention was to not significantly change the accounting for primary insurance transactions in this narrow-scope project.

47. Likewise, the Board concluded that it was not necessary to address the accounting for reinsurance by the assuming enterprise. An assuming enterprise generally accounts for a reinsurance contract in the same manner as an insurance contract sold to an individual or non-insurance enterprise, as prescribed in Statements 60 and 97. Some constituents recommended that the Board specify the accounting by assuming enterprises and require symmetrical accounting by both parties to a reinsurance transaction. Those recommendations were not adopted because addressing the accounting for assuming enterprises would inevitably require a reconsideration of the accounting for primary insurance, which was beyond this project's scope. However, the conditions for reinsurance accounting in paragraphs 8-13 and certain disclosure requirements apply to both ceding and assuming enterprises.

48. Some respondents to the Exposure Draft asked that certain types of entities or transactions be excluded from the scope. The Board was urged to limit the scope to loss portfolio transfers or other transactions that some consider prone to abusive accounting under current standards. The Board considered and rejected that approach because it perceived the need for improved accounting and reporting guidance for reinsurance in general. The transactions in question also could not be distinguished conceptually from other reinsurance transactions. Insurers may enter into various transactions with reinsurers that serve legitimate business purposes but do not meet the conditions for reinsurance accounting in this Statement. The Board's objective was only to specify the accounting standards for reinsurance, as distinct from other transactions.

49. For similar reasons, fronting arrangements are included within the scope of this Statement. Some insurance enterprises currently do not report fronting arrangements as reinsurance contracts. However, the ceding enterprise in a fronting arrangement retains the same risks associated with any other type of reinsurance contract and is not relieved of its obligation to the policyholders.

50. Several respondents questioned whether servicing carriers for involuntary risk pools should be included in the Statement's scope. Servicing carriers generally retain the primary obligation to the policyholder and have no right to offset claim liabilities against amounts due from other pool participants. Although the credit risk associated with involuntary pools may be reduced because of the pool membership's joint and several liability, the servicing carrier is still dependent on the ability of other pool members to pay their proportionate share of claims. State authorities oversee such pools and may act to support the solvency of a pool, but that action generally is voluntary. The Board concluded that it was unable to effectively distinguish servicing carrier business from other types of reinsurance for accounting purposes. Separate

presentation or disclosure of servicing carrier activity is not precluded by this Statement.

51. Some respondents asked the Board to limit the Statement's scope to short-duration contracts, citing a perceived lack of accounting abuse related to long-duration contracts and the differences between the long-duration and short-duration insurance models. However, reinsurance of long-duration contracts sometimes is used to accelerate income recognition by effectively unlocking the assumptions used in estimating benefit reserves. In addition, reinsurance of long-duration contracts is not unique and the specific questions raised by respondents about how the standard would be applied to long-duration contracts were not so complex or difficult as to justify a separate project to develop additional detailed guidance for reinsurance of long-duration contracts.

52. Reinsurance contracts sometimes are used to "sell" a line of business by coinsuring all or substantially all of the risks related to the line. Some respondents asked that those contracts be exempt from the requirements of this Statement. The Board concluded that unless the ceding enterprise is legally relieved of its liability to the policyholder, as described in paragraph 19, such reinsurance does not constitute a sale and immediate recognition of a gain should be precluded.

53. Some respondents asked whether structured settlement transactions are included within the scope of this Statement. Structured settlements may, in some circumstances, legally replace one insurer by another and thereby extinguish the primary insurer's liability to the policyholder. This Statement requires that an immediate gain or loss be recognized when such an extinguishment occurs. A structured settlement transaction that does not constitute an extinguishment is accounted for as reinsurance if the annuity funding the settlement meets the conditions for reinsurance accounting. Otherwise, the transaction is accounted for in accordance with paragraph 18 of this Statement. Whether a ceding enterprise has been legally relieved of its entire obligation to the policyholder under a structured settlement is a factual question that depends on the settlement's terms.

54. This Statement applies only to enterprises to which Statement 60 applies and, thus, continues the exemption in Statement 60 for mutual life insurance enterprises. The Board specifically considered whether that exemption is appropriate in accounting and reporting for reinsurance. Mutual life insurance enterprises are included within the scope of Interpretation 39 and Opinion 10, suggesting that they also should be required to separately report assets and liabilities arising from reinsurance. However, the Board observed that this Statement's provisions on reporting revenues and costs are closely linked to the accounting model for long-duration contracts found in Statement 60. Determining how those provisions would apply to enterprises that do not follow the Statement 60 model might be time-consuming and could involve considering the appropriate accounting for insurance contracts by mutual life insurance enterprises.

55. The Board also noted that it has asked the AICPA to expeditiously complete its project on

the accounting for insurance activities, including reinsurance, by mutual life insurance enterprises. Accordingly, the Board did not expand this Statement's scope to encompass those topics, and concluded that this Statement should apply only to enterprises to which Statement 60 applies.

### **Indemnification against Loss or Liability Relating to Insurance Risk**

56. This Statement incorporates the provisions of paragraph 40 of Statement 60 that require deposit accounting for reinsurance contracts that do not indemnify the ceding enterprise against loss or liability. Those provisions incorporate without change the guidance in paragraph 44 of Statement 5. Determining whether a reinsurance contract indemnifies the ceding enterprise against loss or liability has been controversial and problematic in practice. The Board concluded that this Statement should provide general guidance on the circumstances under which reinsurance contracts provide indemnification against loss or liability and therefore meet the conditions for reinsurance accounting.

57. Transactions other than reinsurance may provide indemnification against various types of loss or liability. Under this Statement, the distinguishing characteristic of reinsurance is indemnification against loss or liability related to insurance risk. As contemplated in Statements 60 and 97, insurance risk is the risk associated with the occurrence of insured events under an insurance contract. Those risks include the uncertainties relating to both the ultimate amount of payments and the timing of those payments. Risks other than those associated with the occurrence of insured events under an insurance contract, such as the risk that investment income will vary from expectations, are not elements of insurance risk. Although insurers may face significant exposure to risks other than insurance risk, indemnification against loss or liability in a reinsurance transaction is a function of the insurance risk assumed by the reinsurer.

58. Determining whether a reinsurance contract indemnifies the ceding enterprise against loss or liability relating to insurance risk requires a complete understanding of all contracts or agreements with related reinsurers. Although an individual contract may appear to indemnify the ceding enterprise, the risk assumed by the reinsurer through one reinsurance contract may have been offset by other contracts or agreements. A contract does not meet the conditions for reinsurance accounting if features of the reinsurance contract or other contracts or agreements directly or indirectly compensate the reinsurer or related reinsurers for losses. That compensation may take many forms, and an understanding of the substance of the contracts or agreements is required to determine whether the ceding enterprise has been indemnified against loss or liability relating to insurance risk. For example, contractual features may limit the reinsurer's exposure to insurance risk or delay the reimbursement of claims so that investment income mitigates exposure to insurance risk. Examples of those contractual features, which are not intended to be all-inclusive, are included in paragraph 8 of this Statement.

59. Reinsurance programs often entail the reinsurance of various layers of exposure through multiple reinsurance contracts. The Board concluded that indemnification against loss or

liability relating to insurance risk should be determined in relation to the provisions of the individual reinsurance contract being evaluated. That is, to meet the conditions for reinsurance accounting, the terms of the individual reinsurance contract must indemnify the ceding enterprise against loss or liability relating to insurance risk.

60. Several respondents to the Exposure Draft observed that this requirement could result in different accounting for similar transactions depending on the contractual structure of the transactions. Those respondents recommended that the conditions for reinsurance accounting be evaluated based on whether a reinsurance program, taken as a whole, indemnifies the insurer against loss or liability related to insurance risk. That approach was rejected because it would not have been practicable to define what constitutes a reinsurance program. Further, contracts that are not, in substance, reinsurance could meet the conditions for reinsurance accounting by being designated as part of a program that, as a whole, met those conditions.

#### **Reinsurance of Short-Duration Contracts**

61. A short-duration insurance contract requires that an insurer make payments to the policyholder because insured events occurred during the contract period. However, an insurer's exposure to risk does not end with the close of the contract period. Exposure to risk extends beyond that date to the date when the last claim is settled and paid. During that period, many factors may affect the ultimate claims paid. Policyholders may discover and assert more claims than expected or may assert them more quickly than expected. The costs of individual claims may exceed the insurer's expectations. Courts and legislative bodies may extend the insurer's exposure beyond that originally contemplated. A reinsurance contract may limit the insurer's exposure to some or all of those circumstances. The extent of protection provided may range from very little to a considerable amount.

62. The Board concluded that two conditions must be met for reinsurance of a short-duration contract to indemnify the ceding enterprise against loss or liability relating to insurance risk. First, the reinsurer must assume significant insurance risk under the reinsured portions <sup>10</sup> of the underlying contracts. Implicit in this condition is the requirement that both the amount and timing of the reinsurer's payments depend on and directly vary with the amount and timing of claims settled under the reinsured contracts. Contractual features that delay timely reimbursement to the ceding enterprise prevent the reinsurer's payments from directly varying with the claims settled under the reinsured contracts.

63. Second, even if the first condition is met, the contract does not indemnify the ceding enterprise against loss or liability relating to insurance risk unless either (a) it is reasonably possible that the assuming enterprise may realize a significant loss <sup>11</sup> from the transaction or (b) the contract fulfills the condition described in paragraph 11.

64. The Exposure Draft did not specify how to determine exposure to significant loss, and a number of respondents asked for additional guidance in this area. Paragraph 10 requires that

significance be determined based on the present value of all cash flows between the ceding and assuming enterprise under reasonably possible outcomes. All cash flows are included because payments that effectively represent premiums or refunds of premiums may be described in various ways under the terms of a reinsurance contract. The way a cash flow is characterized does not affect whether it should be included in determining the reinsurer's exposure to loss. Consistent with Statement 5, an outcome is reasonably possible if its probability is more than remote.

65. Respondents asked for more guidance about the benchmark for measuring significance. The Board clarified this provision to indicate that significance of loss is evaluated in relation to the present value of the amounts paid to the reinsurer.

66. The cash flows between the ceding and assuming enterprise and the amounts paid to the reinsurer are compared at their present values to achieve a consistent temporal frame of reference. A constant interest rate is used in determining those present values because the possibility of investment income varying from expectations is not an element of insurance risk. The Board concluded that it was not necessary to specify in detail the interest rate used in the calculation; judgment is required to identify a reasonable and appropriate rate.

67. Under very limited circumstances, the reinsurer need not be exposed to the reasonable possibility of significant loss for a contract to meet the conditions for reinsurance accounting. For example, applying the "reasonable possibility of significant loss" condition is problematic when the underlying insurance contracts themselves do not result in the reasonable possibility of significant loss to the ceding enterprise.<sup>12</sup> The Board concluded that, when the reinsurer has assumed substantially all of the insurance risk in the reinsured portions of the underlying policies,<sup>13</sup> even if that risk does not result in the reasonable possibility of significant loss, the transaction meets the conditions for reinsurance accounting. In this narrow circumstance, the reinsurer's economic position is virtually equivalent to having written the insurance contract directly. The risks retained by the ceding enterprise are insignificant, so that the reinsurer's exposure to loss is essentially the same as the insurer's.

#### **Reinsurance of Long-Duration Contracts**

68. The Board considered the concept of insurance risk as it relates to certain long-duration contracts when it deliberated Statement 97 and concluded that, to be considered insurance, those contracts must subject the insurance enterprise to mortality or morbidity risk. Indemnification of a ceding enterprise against loss or liability relating to insurance risk under a related reinsurance contract requires that the reinsurer be subject to those same risks. Even though other risks, such as investment yield risk, are significant business elements of a long-duration insurance contract, those risks are not unique to insurance or reinsurance. Consistent with Statement 97, reinsurance of long-duration contracts that does not subject the reinsurer to mortality or morbidity risks associated with the underlying reinsured contracts is, in substance, an investment contract. The Board also concluded that for a long-duration contract to meet the conditions for reinsurance



accounting, the contract must subject the reinsurer to the reasonable possibility of significant loss from the insurance risk assumed.

69. Statement 97 focuses on certain life insurance-type contracts and excludes various other types of long-duration contracts, such as health and disability insurance contracts. The Board concluded that the conditions for reinsurance accounting for other types of long-duration contracts should be consistent with those described in paragraph 68 of this Statement. To be accounted for as reinsurance, the contract must subject the reinsurer to the risks insured by the underlying reinsured contracts.

### **Reporting Assets and Liabilities Related to Reinsurance Transactions**

70. The Actuarial Standards Board's Actuarial Standard of Practice No. 11, *The Treatment of Reinsurance Transactions in Life and Health Insurance Company Financial Statements*, acknowledges the need to evaluate the gross liability to policyholders in establishing an appropriate net liability under a reinsurance contract. Auditing guidance issued by the AICPA identifies reinsurance as an area with potential for increased audit risk and emphasizes the exposure associated with the gross insurance liability. However, some observers have expressed concern that actuarial and audit practices sometimes focus on net exposures and may fail to adequately assess and analyze gross exposures.

71. The Board determined that the net reporting of assets and liabilities related to reinsurance is inconsistent with the established conditions for offsetting and does not result in a meaningful presentation in financial statements of insurance enterprises. Some respondents to the Exposure Draft objected to gross reporting on the basis that disclosure is adequate to ensure a meaningful presentation. However, disclosure of offsetting amounts is not equivalent to the recognition of assets and liabilities in the statement of financial position. In addition, some reinsurance disclosures are not easily understood or comparable with disclosures of other insurance enterprises.

72. The net accounting for reinsurance prescribed in Statement 60 also may obscure the required accounting for the underlying reinsured contracts. A number of constituents indicated that the current practice of reporting insurance net of reinsurance activity is consistent with the way insurers view and manage their businesses. These constituents maintained that reporting the net exposure from the reinsured contracts appropriately reflects the role of reinsurance in mitigating risk. However, the existence of a reinsurance contract does not alter the measurement of the liabilities that should be recognized on the underlying reinsured contracts. The Board concluded that separate reporting of reinsurance receivables and the related liabilities will provide a more relevant and representationally faithful presentation of the effects of reinsurance. The additional disclosures required for reinsurance transactions in paragraph 27 should provide users of financial statements with information about the purpose of reinsurance and its role in mitigating risk.



73. The Board also concluded that reinsurance receivables should be recognized consistent with recognition of the liabilities related to the underlying reinsured contracts. Because the valuation of reinsurance receivables depends on the terms of the reinsurance contract and on estimates used in measuring the liabilities relating to the reinsured contracts, the Board chose not to stipulate a specific valuation method. However, the ceding enterprise must assess the collectibility of those receivables in accordance with Statement 5.

74. Some respondents to the Exposure Draft disputed the Board's characterization of reinsurance receivables on unpaid claims as assets. In their view, the reporting of a claim is the event triggering asset recognition; otherwise, the reinsurer has no contractual obligation to the ceding enterprise. However, reinsurance receivables on unpaid claims represent probable future economic benefits controlled by the ceding enterprise as a result of the payment of a reinsurance premium and the occurrence of an insured event. The entity that controls the economic benefit need not have the ability to convert it to cash or another asset immediately, through sale or assertion of a contractual right, to meet the established criteria for recognition. Reporting and settlement of claims relate to measurement of the asset rather than the criteria for recognition. Those events represent the conditions<sup>14</sup> necessary to establish the ultimate amount of the asset and the timing of its collection.

75. Some respondents suggested that reinsurance recoverables be reported as valuation accounts associated with the claim liability. FASB Concepts Statement No. 6, *Elements of Financial Statements*, paragraph 43, describes a liability valuation account:

A separate item that reduces or increases the carrying amount of a liability is sometimes found in financial statements. For example, a bond premium or discount increases or decreases the face value of a bond payable to its proceeds or present value. Those "valuation accounts" are part of the related liability and are neither liabilities in their own right nor assets.

Reinsurance receivables are an asset, not a liability valuation account. Valuation accounts exist only as part of a measurement of a liability, not as a complete measurement of a liability.

76. Amounts recoverable from reinsurers on unasserted claims may be included with other reinsurance receivables in the statement of financial position. Some respondents objected to the combined presentation because users of financial statements might find that presentation confusing. However, similar concerns could be expressed about other balances typically reported in an insurer's financial statements. For example, claim liabilities generally include amounts relating to both reported and unreported claims. Although this Statement requires amounts recoverable on unasserted claims to be reported as reinsurance receivables, it does not preclude separate presentation or disclosure of various types of receivables.

77. Statement 60 requires that unearned premiums received by an insurance enterprise relating to the unexpired portion of short-duration contracts be reported separately from other liabilities.

The Board concluded that a ceding enterprise should likewise report amounts paid to reinsurers relating to the unexpired portion of short-duration contracts (referred to in Statement 60 as ceded unearned premiums) separately from reinsurance receivables. Those amounts represent prepaid premiums on prospective reinsurance contracts.

78. Several balances may arise between the ceding and assuming enterprise in a reinsurance contract, including funds withheld on ceded premiums, commissions, unsettled claims, and funds advanced by the assuming enterprise. Those items may qualify for offsetting under the conditions established by Interpretation 39, and this Statement does not preclude offsetting when appropriate. However, an insurance enterprise must evaluate each situation in light of the conditions required for offsetting in determining the appropriate financial statement presentation.

79. Some respondents suggested that gross reporting of amounts related to reinsurance would result in less useful financial statements. Those respondents generally maintained that users of financial statements are more interested in the net exposure, consistent with the way management views its business. Some were concerned that enterprises engaging heavily in reinsurance transactions will be perceived as being financially stronger because of the correspondingly larger assets and liabilities that will be reported. Others stated that financial ratios and trend data used by analysts will be adversely affected by the change. Respondents also suggested that commingling assets and liabilities related to servicing carrier business with other types of reinsurance will diminish the usefulness of financial statements. However, a number of respondents indicated that gross information would be more useful than net information.

80. The comments on usefulness often referred to the perceived relevance and representational faithfulness of net reporting. The Board carefully considered those comments and concluded that financial statements from which significant amounts of assets and liabilities are omitted generally lack relevance and are not representationally faithful. Offsetting reinsurance assets against the related liabilities implies a relationship between those assets and liabilities that does not exist unless the established criteria for offsetting are met. Further, offsetting reinsurance receivables against the related liabilities obscures the credit risk associated with reinsurance.

81. Examples of other accounting literature in which net reporting is permitted, such as pension accounting and leveraged leases, were cited by some respondents as a basis for continuing the practice of net reporting of reinsurance transactions. Interpretation 39 did not modify the accounting treatment of those transactions. The Board decided to include the exemptions in Interpretation 39 as a practical matter to avoid disturbing certain longstanding accounting practices without full exploration of the issues involved. Having addressed those issues for reinsurance, the Board concluded that the benefits of reporting reinsurance assets and liabilities separately are sufficient to justify the change.

82. A number of respondents asked the Board to consider allowing reinsurance recoverables

on unpaid claims to be reported as a contraliability against claim reserves, rather than as an asset. Many of the same arguments made against gross reporting were provided as reasons for a contraliability presentation.

83. Advocates of a contraliability presentation also observed that the amount recoverable from the reinsurer and the related claim liabilities are difficult to measure. In their view, the volatile nature of the reinsured risks renders the gross amounts unreliable, but the presence of reinsurance permits measurement of a net exposure with more reliability. Contraliability presentation would minimize the effect of that volatility by presenting the reinsurance recoverable and the related liabilities together.

84. Advocates of a contraliability presentation also cited the linkage between the reinsured liabilities and the amounts recoverable from the reinsurer. In reinsurance, the asset arises from and is dependent on the same transaction as the liability for both the amount and timing of its realization. These respondents believe that relationship is more faithfully represented by displaying those amounts together rather than as a separate asset and liability.

85. The Board acknowledged the potential volatility of the estimates and the close linkage between the asset and liability but rejected the contraliability approach. Reinsurance recoverables on unpaid claims meet the qualifications for recognition as an asset and should be reported as such. Contraliabilities are not considered a financial statement element under the Board's conceptual framework. The Board also was not persuaded that the characteristics of a reinsurance transaction are sufficiently different from other transactions to justify a presentation other than that prescribed in Interpretation 39. The additional disclosure requirements this Statement prescribes, including the requirement to disclose the nature, purpose, and effect of reinsurance on the enterprise's operations, should provide users of financial statements with additional information to assess the effect of volatility and the ability of reinsurance to mitigate it.

86. Paragraph 38 of Statement 60 allowed, but did not require, amounts paid to reinsurers and reinsurance recoveries to be netted against related earned premiums and incurred claim costs in the statement of earnings. Most enterprises report those amounts on a net basis consistent with the presentation in the statement of financial position. The Board determined that reporting gross amounts in the statement of earnings would be preferable. However, the Board acknowledged that the reasons for gross reporting in the statement of earnings are less compelling. Opinion 10 and Interpretation 39 address only the offsetting of assets and liabilities. Further, unlike the statement of financial position, the statement of earnings does not convey information about credit risk.

87. As proposed in the Exposure Draft, enterprises could have reported the effects of reinsurance on earned premiums and claim costs (that is, the amount by which earned premiums are reduced by amounts paid or payable to reinsurers, and the amount by which claim costs are reduced by amounts received or receivable from reinsurers) either as separate line items or

parenthetically within the statement of earnings. Appendix B illustrates those presentations. Respondents recommended that the Board also allow those amounts to be reported net, with appropriate footnote rather than parenthetical disclosure. The Board agreed that earned premiums ceded and reinsurance recoveries may be disclosed rather than reported separately in the statement of earnings.

### **Recognition of Revenues and Costs**

88. Accounting for the effects of reinsurance contracts on the revenues and costs of the ceding enterprise is complicated because reinsurance contracts serve various objectives. An insurance enterprise may purchase reinsurance to reduce exposure to losses from the events it has agreed to insure, similar to a direct insurance contract purchased by an individual or noninsurance enterprise. The insurance enterprise also may contract with a reinsurer to facilitate the writing of contracts larger than those normally accepted, to obtain or provide assistance in entering new types of business, or to accomplish tax or regulatory objectives. It is not practicable to identify and separately account for each individual element of a reinsurance contract, and the guidance in Statement 60 is inadequate to result in consistent accounting for the payments and proceeds resulting from reinsurance contracts. The Board determined that this Statement should prescribe in more detail the accounting for revenues and costs of reinsurance contracts.

89. Although a contract may meet the conditions for reinsurance accounting, the difference between the amount paid to the reinsurer and the liabilities related to the reinsured contracts may result from underwriting, investment, service, sales, or financing activities. Varying applications of the provisions of Statement 60 have sometimes resulted in immediate recognition of a gain or loss equal to that difference. The Exposure Draft concluded that immediate recognition of gains or losses from reinsurance contracts generally is inappropriate and inconsistent with the premise that the insurance enterprise has not been relieved of its obligations to the holders of the reinsured contracts.<sup>15</sup>

90. Some constituents stated that it would be appropriate to recognize the effects of reinsurance in income immediately, referring to reinsurance as a sale or a form of extinguishment of debt. Others stated that, when the ceding enterprise has been indemnified against loss or liability relating to insurance risk, sufficient risk has been transferred to the reinsurer to result in immediate recognition. However, in the Board's view, immediate recognition is not appropriate unless an extinguishment has taken place. The conditions necessary for indemnification against insurance risk are considerably less stringent than those required for extinguishment, which occurs only when the ceding enterprise has been entirely relieved of its obligations to the policyholder.

91. A few respondents stated that the reinsurance transaction is a significant event that should result in remeasurement of the related liabilities and recognition of the effects of remeasurement in income. The Board concluded that reinsurance does not alter the nature or amount of the obligations owed to the policyholder. Rather, the ceding enterprise has acquired a separate

asset—the right to recoveries from the reinsurer.

92. Some respondents said that the significant gains sometimes recognized by ceding enterprises under the current standards result from an accounting anomaly, and the Board's proposed accounting would not resolve that anomaly. The amounts paid to the reinsurer may reflect the time value of money as an element of pricing. The ceding enterprise's gains occur at least partly because the related liabilities are not stated at present value under current accounting standards. Several constituents recommended that the Board defer reaching a conclusion about reinsurance until the fundamental question of the role of discounting in measuring assets and liabilities is resolved. Those constituents correctly described the nature of the issue, but the Board decided that delaying resolution of the inconsistencies in reinsurance accounting would not be appropriate.

93. The Board concluded that estimated reinsurance receivables should be recognized in a manner consistent with the related liability. The accounting for amounts that represent recovery of acquisition costs is addressed in paragraph 39 of Statement 60 and incorporated in paragraph 18 of this Statement. Other amounts paid or received, other than advances or forms of collateral, are presumed to be part of the net cost of reinsurance discussed in paragraphs 94-109.

#### **Recognition of Revenues and Costs for Reinsurance of Short-Duration Contracts**

94. Contracts that meet the conditions for reinsurance accounting also may include elements of a financing arrangement. Existing accounting pronouncements do not provide guidance that would allow an insurer to identify the separate elements and costs of reinsurance. If a reinsurance contract is prospective, reinsurance activities affect the results of the ceding enterprise while the reinsured contracts are in force (the contract period) and during the subsequent period over which claims are settled. If a reinsurance contract is retroactive, the coverage period is closed and the reinsurance contract can affect only the remaining settlement period.

95. The distinction between prospective and retroactive reinsurance contracts is based on whether the contract reinsures future or past insured events covered by the underlying contracts. For example, in occurrence-based insurance, the insured event is the occurrence of a loss covered by the insurance contract. In claims-made insurance, the insured event is the reporting to the insurer, within the period specified by the policy, of a claim for a loss covered by the insurance contract. A claims-made reinsurance contract that reinsures claims asserted to the reinsurer in a future period as a result of insured events that occurred prior to entering into the reinsurance contract is a retroactive contract.

96. Some constituents stated that, in their view, the distinction between prospective and retroactive contracts is unnecessary because all reinsurance transactions that indemnify the ceding enterprise against loss or liability relating to insurance risk should be treated alike. However, the Board was not prepared to impose settlement period accounting on all reinsurance transactions without a more complete exploration of the insurance accounting model.



97. Some would prefer that the distinction between prospective and retroactive contracts be based on the event covered by the reinsurance contract rather than the insured event under the insurance contract. Others recommended using management's intentions to determine whether the contract is prospective or retroactive. The Board concluded that the significant distinction in reinsurance is whether an insured event has occurred under the underlying insurance contracts. The nature of the risks assumed by the reinsurer is fundamentally different when an insured event has already occurred. The Board also believes that management's intentions do not determine whether a contract is retroactive or prospective.

98. Reinsurance contracts may include both prospective and retroactive provisions. For example, a reinsurance contract that reinsures liabilities relating to contracts written during one or more prior years also may reinsure losses on contracts to be written during one or more future years. Reinsurance also may be acquired some time after the reinsured contract has been written, but before the close of the coverage period for that contract, and be made effective as of the beginning of the contract period. This may result in a reinsurance contract with prospective and retroactive provisions that relate to a single contract year.<sup>16</sup>

99. A troublesome issue for the Board was deciding whether and how to separate the various elements of such mixed contracts. The Exposure Draft proposed separate accounting for the prospective and retroactive elements of all contracts having elements of both. Respondents observed that the cost to separate these elements could be significant and separation would not be practicable in all circumstances. They generally would have resolved this problem by making the classification based on the contract's predominant characteristics. The Board rejected that approach because the criterion for making the determination was vague and could require extremely detailed implementation guidance. When practicable, separate accounting is required for the prospective and retroactive provisions of the contract. Otherwise, the contract is classified as retroactive.

100. The Board concluded that amounts paid for prospective reinsurance should be amortized over the contract period in proportion to the amount of insurance protection provided. This approach ignores the protection provided by reinsurance over the remaining settlement period but is consistent with the basic insurance accounting model in Statement 60 for short-duration contracts, which recognizes estimated revenues and costs over the contract period. Subsequent changes in estimates are recognized in income of the period in which the estimates are changed.

101. The amounts paid for retroactive reinsurance are made up of various elements of the reinsurance contract. The primary elements are the implicit discounting of the related liabilities and a premium for indemnification against loss from adverse development on the reinsured contracts. It generally is not practicable to identify the effect of each element, and the Board has not required these elements to be accounted for separately. However, the amount paid to the reinsurer for retroactive reinsurance may exceed the recorded liabilities relating to the reinsured contracts. In the Exposure Draft, the Board concluded that amounts paid for a reinsurance



contract in excess of the related liabilities either may result from significant risk of future adverse development under the reinsured contracts or may indicate that the liabilities are understated. The Exposure Draft would have permitted amounts in excess of the recorded liabilities to be recognized as an asset to the extent they represented protection against future adverse development.

102. Respondents who addressed this issue generally disagreed with the Board's conclusion. Some pointed out that, when such differences arise from retroactive transactions, the reinsured events have already occurred. The uncertainty that is being reinsured is the estimation of the liabilities relating to those past events, and the amount paid to the reinsurer in excess of the recorded liabilities may be viewed as representing at least the minimum liability that should be accrued. Otherwise, the amount does not reflect anticipated future recoveries from the reinsurer and should not be recorded as an asset. The Board concluded that amounts paid for retroactive reinsurance in excess of recorded liabilities should be charged to expense at the inception of the reinsurance contract. The offsetting adjustment may increase the liability, reduce the amount recoverable from the reinsurer, or both, depending on the facts and circumstances. Recognizing an appropriate liability for the claims relating to the underlying reinsured contracts may require a charge to expense greater than the amount paid in excess of the recorded liabilities, but the charge to expense will not be less than that amount.

103. The Board concluded that costs and revenues of retroactive reinsurance other than amounts in excess of the recorded liabilities should be accounted for over the settlement period of the underlying insurance contracts. Unlike prospective reinsurance, a retroactive reinsurance contract cannot provide protection over the coverage period. That period is past, and any protection provided by retroactive reinsurance must relate to the remaining settlement period.

104. Some respondents objected to the inconsistency between settlement period accounting for retroactive contracts and the contract period accounting required by the insurance accounting model. However, the Board observed that resolving that inconsistency would entail a comprehensive review of insurance accounting, including reconsideration of revenue and expense recognition, measurement (discounting), and financial statement presentation. One solution to the inconsistency that likely would be considered if such a comprehensive review were undertaken is accounting for all insurance and reinsurance contracts over the settlement period. Although the Board has not deliberated this issue, some believe that the settlement period best represents the period over which services are provided by insurers and reinsurers and, therefore, is the appropriate period over which all revenues and costs should be recognized. The Board concluded that the concerns raised in this project are not sufficient to expand the scope to a general reconsideration of insurance accounting and that users would be better served by a more timely resolution of concerns specific to reinsurance reporting.

105. The Board faced similar issues in defining the amortization method for gains deferred for retroactive reinsurance contracts. To the extent the deferred gain arises from the implicit discounting of liabilities, amortization using the interest method would appear appropriate.

However, the difference being amortized is the net accounting effect of all elements of the reinsurance contract, including the effects of discounting and of the premium paid for indemnification against loss or liability relating to insurance risk. Separate identification and accounting for each element is not considered feasible and would have greatly increased the complexity of this Statement. The interest method also requires estimates of the amount and timing of payments, which may not be practicable in some circumstances. Consequently, the Exposure Draft would have permitted ratable recognition as amounts are recovered under the reinsurance contract (the recovery method) or on a straight-line basis.

106. The Board's decision to eliminate the deferral of amounts in excess of recorded liabilities (as described in paragraph 23) made the straight-line method unnecessary. Many respondents to the Exposure Draft found that method objectionable on conceptual grounds. A number of respondents also recommended that the interest method be required when practicable. Upon reconsideration, the Board agreed to require the interest method when the amount and timing of the recoveries can be reasonably estimated and require the recovery method in other circumstances.

107. Amortization of deferred amounts arising from retroactive reinsurance under both the interest method and the recovery method is based on the ceding enterprise's estimates of the expected timing and total amount of cash flows. The Board concluded that the timing of changes in those estimates should not alter the recognition of the revenues and costs of reinsurance. Therefore, this Statement requires changes in estimates of the amount recoverable from the reinsurer to be accounted for consistently both at the inception of and after the reinsurance transaction.

108. Establishing an amount recoverable from a reinsurer may result in a deferred gain, reflecting the amount by which the recorded liabilities exceed the amounts paid to the reinsurer. Likewise, a change in the estimate of the amount recoverable from a reinsurer after the inception of the reinsurance transaction results in or adjusts the amount of a deferral. Previously deferred amounts are reduced when the estimate is decreased. However, if the revised estimate of the related liabilities is less than the amounts paid to the reinsurer, a loss is not deferred. The resulting difference is charged to expense, as described in paragraph 23.

109. Changes in the estimated amount recoverable from a reinsurer or the timing of receipts related to those amounts affect amortization through a catch-up adjustment. When the change in estimate is recognized, the deferral is adjusted to the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction, with an offsetting charge or credit to income.

#### **Recognition of Revenues and Costs for Reinsurance of Long-Duration Contracts**

110. When a long-duration contract is reinsured, there may be a difference between the amounts paid for the reinsurance contract and the amount of liabilities related to the underlying reinsured contracts. That difference results from differences between the assumptions used by

the ceding enterprise and those used by the reinsurer in estimating the future performance of the reinsured contracts.

111. The Board concluded that the difference between the amounts paid for a reinsurance contract and the amount of liabilities related to the underlying long-duration contracts should be considered part of the net cost of the reinsurance at the time it is acquired. The cost of reinsurance should be recognized over the remaining life of the underlying reinsured contracts unless the reinsurance contract is short duration in nature, when the cost should be recognized over the period of the reinsurance contract. Determining whether reinsurance of a long-duration contract is short duration in nature is a matter of judgment. For example, some contracts described as yearly renewable term may be, in substance, long-duration contracts, depending on their terms and how they are priced. Paragraphs 7 and 8 of Statement 60 provide guidance on distinguishing between short-duration and long-duration contracts.

### **Disclosure**

112. Statement 60 required disclosure of the nature and significance of reinsurance transactions to the enterprise's operations, including total reinsurance premiums assumed and ceded, and estimated amounts recoverable from reinsurers, which are offset against claim liabilities. Current reinsurance disclosures are not comparable, are often difficult to understand, and are not as useful as they could be in assessing the effect of reinsurance on the operating results of an insurance enterprise. Moreover, disclosures about the credit risk associated with reinsurance receivables currently are not provided.

113. This Statement supersedes the disclosure requirements in paragraph 60(f) of Statement 60. Because of the complexities of reinsurance, the Board concluded that the gross amounts reported in the financial statements should be supplemented by disclosure about the nature, purpose, and effect of reinsurance transactions on the ceding enterprise. However, because the uses of reinsurance are varied, the Board did not specify what information is useful in assessing the effect of reinsurance, other than to require an indication by ceding enterprises that reinsurance does not relieve the insurer of its obligation to the policyholder. Appendix B provides some illustrations of disclosures required by this Statement. The Board determined that information about the significance of reinsurance, as reflected in the total amount of reinsurance premiums ceded and assumed, should be provided, including information about both written and earned premiums relating to short-duration contracts (if the difference is significant).

114. In reviewing current disclosure practices, the Board observed that credit risk associated with amounts due from reinsurers, although significant to some insurance enterprises, is not disclosed. Insurance contracts were among the financial instruments excluded from the scope of Statement 105, because the significant business risks involved generally are other than credit and market risk, namely, uncertainty about the ultimate timing and amount of claims. Because receivables and payables that result from insurance contracts are not subject to the same insurance risks that persuaded the Board to exclude insurance contracts from Statement 105, the

Board concluded that Statement 105 disclosures are required for concentrations of credit risk for reinsurance receivables and prepaid reinsurance premiums.

115. The Board considered whether disclosures about the extent to which reinsurance contracts indemnify the ceding enterprise against loss or liability relating to insurance risk would be useful in assessing the viability of an insurance enterprise and the objectives of reinsurance. The Board decided that a specific disclosure requirement should not be imposed in this Statement. The extent to which risk is transferred between enterprises has broader implications than reinsurance. For example, those disclosures would be relevant for insurance purchased by any enterprise and for transactions that purport to hedge financial positions. Developing verifiable and reliable disclosures may be difficult, but the Board encourages appropriate disclosure of indemnification policies as part of this Statement's required disclosure about the nature and effect of reinsurance transactions.

116. Some respondents asked the Board to consider requiring numerous additional disclosures other than those included in the Exposure Draft. Several of these would have imposed more stringent requirements on insurers than are imposed on other enterprises in the same circumstances. For example, a number of respondents suggested additional disclosures about credit risk that would have effectively amended Statement 105 to result in stricter requirements for insurers. The Board rejected these suggestions because it believes disclosures applicable to all enterprises should be applied consistently across industries. In considering requests for additional disclosures, the Board also balanced concerns about "disclosure overload" with requests from some respondents for additional disclosures that financial statement users might find useful. The Board concluded that the disclosures required in this Statement achieve an appropriate balance between those concerns.

### **Effective Date and Transition**

117. The Board concluded that this Statement should be applied in a manner that will minimize the accounting changes that must be made for existing reinsurance contracts. The Board discussed effective dates intended to allow insurance enterprises sufficient time to gather the required information for restatement of assets and liabilities of prior periods, if desired. Because information similar to that required by this Statement must be reported under current regulatory requirements and should be available to the reporting enterprise and because constituents indicated that improved reporting in this area is needed as soon as is practicable, the Board concluded that this Statement should be effective for fiscal years beginning after December 15, 1992. However, to allow more time for adoption, the provisions of this Statement relating to indemnification against loss or liability relating to insurance risk and recognition of revenues and costs need not be applied in financial statements for interim periods in the year of adoption. If those interim amounts are reported with annual financial statements for that fiscal year, restatement is required.

118. The Exposure Draft would have allowed restatement of previously reported revenues and

costs if the financial statements also were restated to report gross amounts. Upon reconsideration, the Board concluded that restatement was not appropriate because of the significance of management's intentions in determining whether and when to enter into a reinsurance transaction. Prohibiting restatement of revenues and costs also will result in more consistent reporting during the transition period and will lessen implementation costs for some enterprises.

119. The Exposure Draft would have applied to transactions entered into or renewed in the year of adoption. Respondents asked how this provision should be applied to continuous and multiple-year contracts and to contract amendments. The Board concluded that this Statement should apply to transactions having an anniversary date in the year of adoption, effectively subjecting all in-force reinsurance contracts to its provisions. The Board also concluded that this Statement should apply to all contract amendments, including amendments of contracts that were otherwise excluded from this Statement under the transition provisions. However, because financial statements will not be restated to reflect the provisions on recognition of revenues and costs, previously recognized amounts relating to existing contracts are not affected by this Statement.

## **Appendix B: ILLUSTRATIONS**

### **Introduction**

120. This appendix contrasts reporting of gross amounts for reinsurance contracts, as required by this Statement, and reporting of net amounts for those contracts, as previously required by Statement 60. The requirements of this Statement are applied to a property-casualty insurance enterprise that issues short-duration contracts in Illustration 1 and to a life insurance enterprise that issues long-duration contracts in Illustration 2. The illustrations include examples of reinsurance disclosures that would be appropriate under the provisions of this Statement. Significant judgment is required in assessing the adequacy of disclosures. These examples are not intended to incorporate all possible types of disclosure that may be relevant.

**Illustration 1**

**The Property-Casualty Insurance Company**  
**Statement of Financial Position**  
(in millions)

	<u>Gross</u>	<u>Net <sup>a</sup></u>
Assets:		
Investments	\$ 8,500	\$ 8,500
Cash	20	20
Receivables:		
Reinsurance <sup>b</sup>	1,400	100
Other	1,900	1,900
Deferred policy acquisition costs	300	300
Prepaid reinsurance premiums <sup>c</sup>	250	—
Other assets	<u>1,400</u>	<u>1,400</u>
Total assets	<u>\$13,770</u>	<u>\$12,220</u>
Liabilities and equity:		
Liabilities for claims and claim settlement expenses	\$ 7,600	\$ 6,300
Unearned premiums	1,700	1,450
Other liabilities	2,300	2,300
Equity	<u>2,170</u>	<u>2,170</u>
Total liabilities and equity	<u>\$13,770</u>	<u>\$12,220</u>

**The Property-Casualty Insurance Company**  
**Statement of Earnings**  
(in millions)

	<u>Gross</u>	<u>Net <sup>a</sup></u>
Revenues:		
Premiums earned	\$3,350	\$2,900
Premiums ceded <sup>d</sup>	<u>(450)</u>	<u>—</u>
Net premiums earned	2,900	2,900
Net investment income	1,700	1,700
Other revenues	<u>400</u>	<u>400</u>
Total revenues	<u>5,000</u>	<u>5,000</u>
Expenses:		
Claims and claim settlement expenses	2,200	1,900
Reinsurance recoveries <sup>d</sup>	<u>(300)</u>	<u>—</u>
Net claims and claim settlement expenses	1,900	1,900



**The Property-Casualty Insurance Company**  
**Statement of Earnings**  
(in millions)

	<u>Gross</u>	<u>Net</u> <sup>a</sup>
Revenues:		
Premiums earned	\$3,350	\$2,900
Premiums ceded <sup>d</sup>	<u>(450)</u>	<u>—</u>
Net premiums earned	2,900	2,900
Net investment income	1,700	1,700
Other revenues	<u>400</u>	<u>400</u>
Total revenues	<u>5,000</u>	<u>5,000</u>
Expenses:		
Claims and claim settlement expenses	2,200	1,900
Reinsurance recoveries <sup>d</sup>	<u>(300)</u>	<u>—</u>
Net claims and claim settlement expenses	1,900	1,900
Policy acquisition costs	1,450	1,450
Other expenses	<u>1,150</u>	<u>1,150</u>
Total expenses	<u>4,500</u>	<u>4,500</u>
Earnings before tax	<u>\$ 500</u>	<u>\$ 500</u>

**The Property-Casualty Insurance Company**  
**Notes to Financial Statements**

**Summary of Significant Accounting Policies**

In the normal course of business, the Company seeks to reduce the loss that may arise from catastrophes or other events that cause unfavorable underwriting results by reinsuring certain levels of risk in various areas of exposure with other insurance enterprises or reinsurers.

Amounts recoverable from reinsurers are estimated in a manner consistent with the claim liability associated with the reinsured policy. The amount by which the liabilities associated with the reinsured policies exceed the amounts paid for retroactive reinsurance contracts is amortized in income over the estimated remaining settlement period using the interest method. The effects of subsequent changes in estimated or actual cash flows are accounted for by adjusting the previously deferred amount to the balance that would have existed had the revised estimate been available at the inception of the reinsurance transactions, with a corresponding charge or credit to income.

**Reinsurance**

Reinsurance contracts do not relieve the Company from its obligations to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible. The Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk arising from similar geographic regions, activities, or economic characteristics of the reinsurers to minimize its exposure to significant losses from reinsurer insolvencies. At December 31, 19X3, reinsurance receivables with a carrying value of \$260 million and prepaid reinsurance premiums of \$45 million were associated with a single reinsurer. The Company holds collateral under related reinsurance agreements in the form of letters of credit totaling \$150 million that can be drawn on for amounts that remain unpaid for more than 120 days.

The effect of reinsurance on premiums written and earned is as follows (in millions):

	<u>Written</u>	<u>Earned</u>
Direct	\$2,880	\$2,730
Assumed	630	620
Ceded	<u>(470)</u>	<u>(450)</u>
Net premiums	<u>\$3,040</u>	<u>\$2,900</u>

**Illustration 2**

**The Life Insurance Company**  
**Statement of Financial Position**  
(in millions)

	<u>Gross</u>	<u>Net<sup>a</sup></u>
<b>Assets:</b>		
Investments	\$13,100	\$13,100
Cash	20	20
<b>Receivables:</b>		
Reinsurance <sup>b</sup>	1,400	100
Other	1,900	1,900
Deferred policy acquisition costs	300	300
Other assets	<u>1,400</u>	<u>1,400</u>
Total assets	<u>\$18,120</u>	<u>\$16,820</u>
<b>Liabilities and equity:</b>		
Liability for policy benefits	\$ 7,200	\$ 6,300
Policyholders' contract deposits	5,000	4,600
Other liabilities	3,750	3,750
Equity	<u>2,170</u>	<u>2,170</u>
Total liabilities and equity	<u>\$18,120</u>	<u>\$16,820</u>

**The Life Insurance Company**  
**Statement of Earnings**  
(in millions)

	<u>Gross</u>	<u>Net<sup>a</sup></u>
<b>Revenues:</b>		
Premiums and policyholder fees earned	\$3,350	\$2,900
Premiums ceded <sup>c</sup>	<u>(450)</u>	<u>—</u>
Net premiums and policyholder fees earned	2,900	2,900
Net investment income	1,700	1,700
Other revenues	<u>400</u>	<u>400</u>
Total revenues	<u>5,000</u>	<u>5,000</u>
<b>Expenses:</b>		
Policyholder benefits	2,200	1,900
Reinsurance recoveries <sup>c</sup>	<u>(300)</u>	<u>—</u>
Net policyholder benefits	1,900	1,900

Amortization of deferred policy acquisition costs	950	950
Other expenses	<u>1,650</u>	<u>1,650</u>
Total expenses	<u>4,500</u>	<u>4,500</u>
Earnings before tax	<u>\$ 500</u>	<u>\$ 500</u>

**The Life Insurance Company**  
**Notes to Financial Statements**

**Summary of Significant Accounting Policies**

In the normal course of business, the Company seeks to limit its exposure to loss on any single insured and to recover a portion of benefits paid by ceding reinsurance to other insurance enterprises or reinsurers under excess coverage and coinsurance contracts. The Company retains a maximum of \$500,000 of coverage per individual life.

Amounts paid or deemed to have been paid for reinsurance contracts are recorded as reinsurance receivables. The cost of reinsurance related to long-duration contracts is accounted for over the life of the underlying reinsured policies using assumptions consistent with those used to account for the underlying policies.

**Reinsurance**

Reinsurance contracts do not relieve the Company from its obligations to policyholders. Failure of reinsurers to honor their obligations could result in losses to the Company; consequently, allowances are established for amounts deemed uncollectible. The Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk arising from similar geographic regions, activities, or economic characteristics of the reinsurers to minimize its exposure to significant losses from reinsurer insolvencies. At December 31, 19X3, reinsurance receivables with a carrying value of \$260 million were associated with a single reinsurer. The Company holds collateral under related reinsurance agreements in the form of letters of credit totaling \$150 million that can be drawn on for amounts that remain unpaid for more than 120 days.

The effect of reinsurance on premiums and amounts earned is as follows (in millions):

Direct premiums and amounts assessed against policyholders	\$2,730
Reinsurance assumed	620
Reinsurance ceded	<u>(450)</u>
Net premiums and amounts earned	<u>\$2,900</u>

## **Appendix C: GLOSSARY**

121. This appendix defines certain terms as they are used in this Statement. Various other terms common to the insurance industry are defined in Appendix A of Statement 60.

### **Assuming enterprise**

The party that receives a reinsurance premium in a reinsurance transaction. The assuming enterprise (or reinsurer) accepts an obligation to reimburse a ceding enterprise under the terms of the reinsurance contract.

### **Ceding enterprise**

The party that pays a reinsurance premium in a reinsurance transaction. The ceding enterprise receives the right to reimbursement from the assuming enterprise under the terms of the reinsurance contract.

### **Contract period**

The period over which insured events that occur are covered by the reinsured contracts. Commonly referred to as the coverage period or period that the contracts are in force.

### **Fronting arrangements**

Reinsurance arrangements in which the ceding enterprise issues a policy and reinsures all or substantially all of the insurance risk with the assuming enterprise.

### **Insurance risk**

The risk arising from uncertainties about both (a) the ultimate amount of net cash flows from premiums, commissions, claims, and claim settlement expenses paid under a contract (often referred to as underwriting risk) and (b) the timing of the receipt and payment of those cash flows (often referred to as timing risk). Actual or imputed investment returns are not an element of insurance risk. Insurance risk is fortuitous—the possibility of adverse events occurring is outside the control of the insured.

### **Prospective reinsurance**

Reinsurance in which an assuming enterprise agrees to reimburse a ceding enterprise for losses that may be incurred as a result of future insurable events covered under contracts subject to the reinsurance. A reinsurance contract may include both prospective and retroactive reinsurance provisions.

### **Reinsurance receivables**

All amounts recoverable from reinsurers for paid and unpaid claims and claim settlement expenses, including estimated amounts receivable for unsettled claims, claims incurred

but not reported, or policy benefits.

**Reinsurer**

Refer to **Assuming enterprise**.

**Retroactive reinsurance**

Reinsurance in which an assuming enterprise agrees to reimburse a ceding enterprise for liabilities incurred as a result of past insurable events covered under contracts subject to the reinsurance. A reinsurance contract may include both prospective and retroactive reinsurance provisions.

**Settlement period**

The estimated period over which a ceding enterprise expects to recover substantially all amounts due from the reinsurer under the terms of the reinsurance contract.



### Footnotes

FAS113, Footnote 1--The term *claim* is used in this Statement in the sense used in FASB Statement No. 60, *Accounting and Reporting by Insurance Enterprises*, to describe a demand for payment of a policy benefit because of the occurrence of an event insured by a long-duration or short-duration insurance contract.

FAS113, Footnote 2--Words that appear in the glossary are set in **boldface type** the first time they appear.

FAS113, Footnote 3--Payments and receipts under a reinsurance contract may be settled net. The ceding enterprise may withhold funds as collateral or may be entitled to compensation other than recovery of claims. Determining the amounts paid or deemed to have been paid (hereafter referred to as "amounts paid") for reinsurance requires an understanding of all contract provisions.

FAS113, Footnote 4--This condition is met only if insignificant insurance risk is retained by the ceding enterprise on the reinsured portions of the underlying insurance contracts. The term *insignificant* is defined in paragraph 8 of FASB Statement No. 97, *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments*, to mean "having little or no importance; trivial" and is used in the same sense in this Statement.

FAS113, Footnote 5--Paragraph 29 of Statement 60 addresses recognition of acquisition costs.

FAS113, Footnote 6--Decreases in the estimated amount of the liabilities shall reduce the related amount recoverable from the reinsurer and accordingly reduce previously deferred gains. However, if the revised estimate of the liabilities is less than the amounts paid to the reinsurer, a loss shall not be deferred. The resulting difference shall be recognized in earnings immediately, as described in paragraph 23.

FAS113, Footnote 7--This term is used in the sense used in paragraph 15 of FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, to mean that the prospective and retroactive provisions can be accounted for separately without incurring excessive costs.

FAS113, Footnote 8--As indicated in paragraph 16, the amount of recoveries recognized under reinsurance contracts also must be disclosed by the ceding enterprise if not reported separately in the statement of earnings.

FAS113, Footnote 9--Any change or adjustment of contractual terms is considered an amendment for purposes of applying this Statement.

FAS113, Appendix A, Footnote 10--A ceding enterprise may reinsure only part of the risks associated with the underlying contracts. For example, a proportionate share of all risks or only specified risks may be reinsured. The conditions for reinsurance accounting are evaluated in relation to the reinsured portions of the underlying insurance contracts, rather than all aspects of those contracts.

FAS113, Appendix A, Footnote 11--The Exposure Draft would have required the possibility of significant gain or loss. Based on comments received, the Board concluded that possibility of loss is the essential condition for indemnification and deleted the reference to gain from this Statement.

FAS113, Appendix A, Footnote 12--Most commonly, this arises when an individual risk or insurance contract, rather than a group of risks or contracts, is reinsured. The probability of loss from any individual short-duration insurance contract generally is considered to be remote. Therefore, outcomes that would expose the assuming enterprise to risk of significant loss ordinarily could not be characterized as reasonably possible.

FAS113, Appendix A, Footnote 13--It is presumed that those policies qualify as insurance for accounting purposes.

FAS113, Appendix A, Footnote 14--Among the transactions specifically addressed by Interpretation 39 is the offsetting of amounts related to conditional contracts, whose obligations or rights depend on the occurrence of some specified future event that is not certain to occur.

FAS113, Appendix A, Footnote 15--The Board decided, as a number of respondents to the Exposure Draft recommended, that losses relating to retroactive contracts should be distinguished from other gains and losses arising from reinsurance transactions. The accounting for retroactive contracts is described in paragraphs 22-24.

FAS113, Appendix A, Footnote 16--It is not uncommon for a reinsurance arrangement to be initiated before the beginning of a policy period but not finalized until after the policy period begins. Whether there was agreement in principle at the beginning of the policy period and, therefore, the contract is substantively prospective must be determined based on the facts and circumstances.

FAS113, Appendix B, Footnote a--Net numbers are presented for illustrative comparison and are not required by this Statement.

FAS113, Appendix B, Footnote b--Under Statement 60 requirements, typically only the amount receivable for paid claims and claim settlement expenses would be reported as a reinsurance receivable. This Statement requires that estimated amounts receivable from reinsurers include amounts related to paid and unpaid claims and claims incurred but not reported. Details of the

amounts comprising reinsurance receivables may be presented separately.

FAS113, Appendix B, Footnote c--Prepaid reinsurance premiums include amounts paid to reinsurers relating to the unexpired portion of reinsured policies, often referred to as ceded unearned premiums.

FAS113, Appendix B, Footnote a--Net numbers are presented for illustrative comparison and are not required by this Statement.

FAS113, Appendix B, Footnote d--Alternatively, the effect of reinsurance on premiums earned and claim costs may be shown parenthetically or may be disclosed. For example, following is an illustration of a parenthetical presentation:

Premiums earned (net of premiums ceded totaling \$450)	\$2,900
	=====
Claims and claim settlement expenses (net of reinsurance recoveries totaling \$300)	\$1,900
	=====

FAS113, Appendix B, Footnote d--Alternatively, the effect of reinsurance on premiums earned and claim costs may be shown parenthetically or may be disclosed. For example, following is an illustration of a parenthetical presentation:

Premiums earned (net of premiums ceded totaling \$450)	\$2,900
	=====
Claims and claim settlement expenses (net of reinsurance recoveries totaling \$300)	\$1,900
	=====

FAS113, Appendix B, Footnote a--Net numbers are presented for illustrative comparison and are not required by this Statement.

FAS113, Appendix B, Footnote b--Under Statement requirements, typically only the amount receivable for benefits and expenses paid would be reported as a reinsurance receivable. This Statement requires that estimated amounts receivable from reinsurers include amounts related to paid and unpaid benefits, including amounts related to liabilities recognized for future policy benefits. Details of the amounts comprising reinsurance receivables may be presented separately.

FAS113, Appendix B, Footnote a--Net numbers are presented for illustrative comparison and are not required by this Statement.

FAS113, Appendix B, Footnote c--Alternatively, the effect of reinsurance on premiums earned

and benefit costs may be shown parenthetically or may be disclosed. For example, following is an illustration of a parenthetical presentation:

Premiums and policyholder fees earned (net of premiums ceded totaling \$450)	\$2,900
	=====
Benefits (net of reinsurance recoveries totaling \$300)	\$1,900
	=====

FAS113, Appendix B, Footnote c--Alternatively, the effect of reinsurance on premiums earned and benefit costs may be shown parenthetically or may be disclosed. For example, following is an illustration of a parenthetical presentation:

Premiums and policyholder fees earned (net of premiums ceded totaling \$450)	\$2,900
	=====
Benefits (net of reinsurance recoveries totaling \$300)	\$1,900
	=====

# EXHIBIT 4

*Accounting Rule Guidance Statement of  
Financial Accounting Standards No. 113—  
Considerations in Risk Transfer Testing*

**CAS Valuation, Finance, and  
Investments Committee**



Considerations in Risk Transfer Testing

**Accounting Rule Guidance**  
**Statement of Financial Accounting Standards No. 113**  
**Considerations in Risk Transfer Testing**

**Valuation, Finance, and Investments Committee (VFIC).**

Mike Belfatti, Paul Brehm, Karen Davies, Rick Gorrivett, Aaron Halpert, Alex Krutov,  
Rasa McKean, Mike McCarter, Claus Metzner, Ken Quintilian, Don Rainey, Jason Russ,  
Manalur Sandilya, Dan Schlemmer, Chris Suchar, Chet Szczepanski, Gary Venter, Bob  
Wolf

Considerations in Risk Transfer Testing

## 1. Synopsis.

### Genesis.

In an effort to provide some considerations to the CAS membership on risk transfer testing, the CAS Valuation, Finance, and Investment Committee (VFIC) conducted a research project. This paper is the culmination of VFIC's work.

The demonstration of risk transfer for a reinsurance contract is required by FAS 113 in order for the contract in question to receive reinsurance accounting treatment for GAAP purposes. However, there is little supporting literature from which to draw guidance on risk transfer testing methodology, risk metrics, or threshold values; hence this paper.

### Approach

After a brief introduction, this paper begins with an overview of FAS 113 (§3) and other related risk transfer statements (§4). VFIC conducted a brief survey of risk transfer practices, which is presented in §5. Next, a series of examples are presented (§6) to illustrate the data requirements, methodology, and considerations involved in approaches commonly used today to demonstrate risk transfer in reinsurance contracts. The remaining sections of the paper (§7-8) are devoted to the discussion of other risk metrics that actuaries could use to characterize the level of risk present in a reinsurance contract.

### Conclusions.

*Methodology.* FAS 113 states that risk transfer testing of reinsurance contracts must include 1) a thorough understanding of contract provisions, 2) a model of the incidence of cash flows between parties, 3) a single, appropriate discount rate, and 4) insurance risk only. By their absence, these requirements preclude consideration of income taxes, reinsurer expenses, brokerage, or credit risk in the determination of risk transfer. To meet the FAS 113 requirements we recommend that risk transfer analysis include a view of the distribution of expected contract losses, identification of an appropriate risk metric and threshold values, and duration-matched or immunized yields as the appropriate discount rates.

*Risk Metric.* Current practice tends to split risk transfer analysis into separate tests of probability (of an adverse result) and significance (magnitude of the result). A measure of loss at a given probability is called value at risk, or VaR.

While FAS 113 couches risk transfer in words like “reasonable possibility” and “significant loss,” the broader issue is whether a particular contract transfers risk. In this vein, a variety of other risk metrics were explored. VFIC analyzed expected deficit measures (such as expected policy holder deficit, or EPD), tail value at risk (TVaR), and distributional transforms such as the exponential and Wang transforms. Some of the positive and negative aspects of each of these are discussed in this paper.

*Threshold or Critical Values.* Over time, common practice seems to have concluded that a 10% chance represents a ‘reasonable probability,’ and a 10% loss represents a

**Considerations in Risk Transfer Testing**

'significant loss.' That is, the critical value for VaR is -10% at a probability of 10%. Thus we have what many term the 10-10 rule. In practice, other critical values are commonly used. It must be stressed that such rules-of-thumb are used in practice, but FAS 113 itself does not dictate critical values.

Our analysis of TVaR suggested that critical values in the range of -25% would represent minimal risk transfer. The discussion of distribution transforms proposes a critical value for the Wang transform of -10% that is wholly consistent with the 10-10 rule.

Regardless of the model employed or the risk metric used, judgment is still required as to where to establish the threshold or critical values for what constitutes risk transfer and what does not.

Intuitively, it seems natural to judge risk transfer for a reinsurance contract by analyzing whether the cedant has transferred (reduced) risk, not, as FAS 113 requires, by whether the reinsurer has assumed risk. While the answers to these two questions may be the same when focusing on a single transaction (as done in FAS113), on an enterprise-wide basis, they can be different. It should be noted that the recommendation on Index Securitization proposed the opposite to FAS 113: analysis is done from the cedant's perspective on an enterprise-wide basis. This could lead to different accounting treatments for reinsurance products and index securitizations, unless both tests are required for securitization and industry loss triggers.

Considerations in Risk Transfer Testing

## 2. Introduction.

The Valuation, Finance, and Investment Committee (VFIC), a CAS research committee, was asked by CAS membership to investigate and recommend considerations regarding risk transfer testing for reinsurance contracts due to the requirements set forth by FAS 113. This paper is the result of VFIC's research and discussions on the subject. The intent of this paper is to illustrate how risk transfer could be tested given the requirements set forth.

FAS 113 dictates the conditions, namely risk transfer, required for a reinsurance contract to be accounted for as reinsurance for GAAP purposes. Failing these conditions, the contract receives deposit accounting treatment. The statement itself does not provide specific guidelines for the quantification of risk transfer; FASB never intended to provide such specific guidance.

Numerical guidelines for measuring risk transfer—such as the well-known 10-10 rule—have become widely used. While often used in an audit context, auditors are not the only audience for risk transfer, however. Regulators, rating agencies and securities analysts all may want to evaluate whether or not a deal has enough risk transfer to meet FAS 113 requirements, and typical audit criteria may not suit their purposes.

The next section is a review of FAS 113 and related requirements. This is followed by a brief review of current practice. Examples of risk transfer testing are given, shedding light on key considerations. We then look more broadly at how risk transfer might be viewed by actuaries.

## 3. Overview of FAS 113

**Statement.** The stated purpose of FAS 113 is as follows.

“This statement establishes the conditions required for a contract with a reinsurer to be accounted for as reinsurance and prescribes accounting and reporting standards for those contracts.”

It is clear from the stated intent that FASB did not intend to make 113 a prescription of methodology.

The summary of FAS 113 goes on to portray the essence of risk transfer:

“Contracts that do not result in the *reasonable possibility* that the reinsurer may realize a *significant loss* from the *insurance risk* assumed generally do not meet

Considerations in Risk Transfer Testing

the conditions for reinsurance accounting and are to be accounted for as deposits.”  
[emphasis added]

The phrases *reasonable possibility* and *significant loss* are clearly the key considerations in the analysis of risk transfer, but they are largely undefined. The terms *reasonable* and *significant* indicate that FASB is inviting the application of informed judgment. In the measurement methods discussed below, a line has to be drawn to define a cutoff between enough risk for 113 and not enough. It is not the primary intent of this paper to draw those lines, instead different methods of measuring risk that could provide a consistent framework for applying such judgment are emphasized.

**Risk Transfer Tests.** Property-casualty reinsurance contracts are covered by paragraphs 9 – 11 of FAS 113 – “Reinsurance of Short-Duration Contracts.” Paragraph 9 of FAS 113 defines risk transfer conditions as follows.

“Indemnification of the ceding enterprise against loss or liability relating to insurance risk in reinsurance of short duration contracts requires both of the following, unless the condition in paragraph 11 is met:

- “a. The reinsurer assumes significant insurance risk under the reinsured portions of the underlying reinsurance contracts.
- “b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.”

Paragraph 9 is clear that risk due to “loss” refers only to insurance risk, i.e. (a) ultimate amount of net cash flows between the parties, **and** (b) the timing of the receipt of cash. Risk factors do not include recognition of reinsurer costs, investment risk, taxes, or credit risk to name a few.

The ‘condition in paragraph 11’ referred to above states, “(failing tests a and b) the ceding enterprise shall be considered indemnified against a loss or liability relating to insurance risk only if substantially all the insurance risk relating to the reinsured portions of the underlying insurance contracts has been assumed by the reinsurer.” (For the sake of discussion, we will refer to this as test c.) The condition described in test c covers fronting arrangements, where a deal may appear highly lucrative, but the assuming party does, in fact, assume virtually the entire risk.

So, in essence, to answer the question of risk transfer affirmatively, the reinsurance contract must meet either test c or tests **a &**.

Except in the extreme case of c, where the cedant ends up with virtually no risk on the ceded portions, the criteria for risk transfer does not look at whether or not the ceding

Considerations in Risk Transfer Testing

insurer reduces its risk. Rather the test **a & b** is on whether on not the reinsurer assumes risk<sup>1</sup>.

The closest FAS 113 comes to a definition of *significant insurance risk* is in footnote 4 to paragraph 11, which references FAS 97. Here, “*insignificant*” is defined as “having little or no importance; trivial.” Presumably a failure to be insignificant would connote significance.

Neither does FAS 113 elaborate on what constitutes a *reasonable possibility*. The term *reasonably possible* is used in FASB Statement No. 5, “Accounting for Contingencies,” to mean the scenario’s “probability is more than remote.” ‘Remote’ is not defined further in the statement. Based on FAS 5, it can be concluded that the test is applied to the scenario as a whole, not to the individual assumptions in a scenario. Thus, the entire set of assumptions must be reasonably possible.

Tests **a & b**: are discussed in paragraphs 9, 10 and 11 of FAS 113. In paragraph 9, test **a** is characterized by

“A reinsurer shall not be considered to have assumed significant insurance risk under the reinsured contracts if the probability of a significant variation in either the *amount or timing* of payments by the reinsurer is *remote*. Contractual provisions that delay timely reimbursement to the ceding enterprise would prevent this condition from being met.”<sup>2</sup>

This is the more clear-cut of the two tests, in that the reinsurer does not have to be able to lose money to meet it but just have uncertainty about both the timing and amount of payments. Again, “remote” is not defined further.

Paragraph 10 discusses test **b** in more detail. It appears that an examination of *reasonably possible outcomes* is anticipated in order to show that this test is met.

“The ceding enterprise’s evaluation of whether it is reasonably possible for a reinsurer to realize a significant loss from the transaction shall be based on the present value of all cash flows between the ceding and assuming enterprises under reasonably possible outcomes, without regard to how the individual cash flows are characterized. The same interest rate shall be used to compute the present value of the cash flows for each reasonably possible outcome tested.”

---

<sup>1</sup> This is in contrast to the issue of securitization and reinsurance based on parametric triggers – for example when the insurer gets a pre-defined recovery if a force 4 hurricane hits Florida. The tests the NAIC is considering for statutory accounting in such cases are based on whether or not the cedant gets a reduction in underwriting risk from entering into such a contract. A number of tests of risk reduction have been proposed to test this. However these are not directly relevant to risk transfer under FAS 113, as the test here is on the reinsurer increasing risk, not on the insurer reducing risk.

<sup>2</sup> This clause was added to avoid contracts that cede losses but allow actual reimbursements according to a schedule in such a way that the reinsurer locks in a profit based on the float of funds.

#### Considerations in Risk Transfer Testing

A simulation of randomly generated outcomes would be one way to carry out test b. "Reasonably possible" would then be defined using the probability of observing a result equal to or worse than some critical value based on simulation output. This would be the likely basis of the "10% chance" measure widely used today.

For the set of outcomes examined, the evaluation of whether or not there is a significant loss is one where the present value of the payments to the cedant exceeds the present value of the payments to the reinsurer by a threshold amount. This is never stated so directly, however. This section creates the companion measure of "10% loss," i.e., the net present value of losses ceded is 10% greater than the net present value of the consideration paid. However, when payments are based on netting out of offsetting items, it can be difficult to distinguish the consideration paid from losses and expense credits. For instance, reinstatement premium is very similar to a loss participation.

Paragraph 10 does provide some explicit guidance on risk transfer testing. Namely, it is based on 1) the net present values of cash flows, 2) on cash flows between the parties (e.g., no taxes, no consideration of reinsurer expenses), 3) using a constant interest rate.

Paragraph 11 specifies that the test of significance of loss is relative to the amounts ceded to the reinsurer. Thus presumably the significance of a given loss amount, say \$10,000, might be different given different ceded premiums, say \$100,000 vs. \$1 billion. Thus we put the two parts of the test together and have a "10% chance of a 10% loss," as opposed to a test in dollar terms.

It would be easier to interpret paragraphs 10 and 11 if they could be used to separate the test of a reasonable possibility of a significant loss into two independent steps: generate a lot of scenarios and first test each to see if it generates a significant loss. Then see how many did so, and test to see if enough did. You would need a test of significance to do the first step and a test of reasonable possibility to do the second step, and these could be independent.

However, the wording of these two sections keeps *reasonably possible* and *significant loss* intertwined. It seems completely consistent with these paragraphs to require a stricter standard for *reasonably possible* when *significant loss* is interpreted more broadly, and vice versa. Thus a 5% chance of a loss of 100% of premium might provide as much or more *reasonable possibility of significant loss* as a 10% chance of a loss of 25% of premium, for example.

In fact this kind of linkage might actually be implied by the lack of separation of the two phrases. Under this viewpoint one would still count loss scenarios as part of the test, but the test of reasonable possibility would not be independent of the test of significant loss.

Thus to sum up tests a & b:

- test a is met if the reinsurer has risk of variation in both timing and amount of payments, and payments must be timely to meet this criterion;



#### Considerations in Risk Transfer Testing

- test **b** requires an examination of possible outcomes. To meet this test, at least some of the outcomes have to produce a loss for the reinsurer, where a loss is determined using present values of all cash flows. The significance of losses is to be evaluated relative to the present value of payments to the reinsurer. The test is of reasonable possibility of significant loss, and it would be appropriate, though not required, to evaluate reasonability and significance conjointly.

Looking at test **c**, the reference to *reinsured portions* of the underlying insurance contracts is potentially ambiguous. It could mean *reinsured percentage*, as in a quota share contract, or *reinsured sections*, as in the liability portion of a homeowner's policy. These are actually both rather narrow interpretations of *portions* and probably are consistent with the intent of FAS 113. For example, if a company writes a very profitable book of auto collision insurance, so profitable that it virtually cannot have an underwriting loss, but reinsures some of this on a quota share basis in order to meet financial ratio tests, the reinsurer probably will not be able to meet test **b**. But test **c** would be satisfied so this deal would qualify for reinsurance accounting. Here the reinsurer and ceding insurer share the risk on an equal basis.

A broader interpretation of *portions* would allow a portion of a homeowner's book to constitute all losses on all policies in all events where the insurer's event loss is less than \$100 million. If this qualifies as a portion, then there might be cases where a reinsurer could write a capped quota share in which it would be virtually guaranteed a profit even though the cedant could suffer a major loss on the retained book, and this would qualify for reinsurance accounting under test **c**. This broad a definition of *portion* could probably be stretched to fit in any reinsurance deal, and so would negate the need for tests **a** & **b**.

Thus a more narrow definition of *portions* is implied. Interpreting *reinsured portions* as *reinsured percentage* seems to be well within the intent of FAS 113. The same might apply to *reinsured sections*, particularly if there is a separately identifiable premium for the sections under consideration. Conditions that do not refer to individual policy provisions but rather the insurer's experience on a book of policies would seem to stretch the intent of *portions* beyond what FAS 113 seems to consider.

To sum up test **c**: a portion of policies has to be fully ceded, where *portion* probably is restricted to percentage or section, or something similar, and the only risk the cedant can retain on this portion must be trivial, having no importance. This situation describes fronting sorts of relationships and straight unrestricted quota share reinsurance.

Considerations in Risk Transfer Testing

#### 4. Related statements.

**Statutory Accounting.** In statutory accounting, reinsurance is primarily addressed in Chapter 22 of the *NAIC Accounting Practices and Procedures Manuals for Property and Casualty Insurance Companies*. Amendments were made after the GAAP adoption of FAS 113. As a result, the statutory accounting principles established regarding risk transfer and reinsurance accounting are generally consistent with GAAP. Chapter 22 states:

**“Reinsurance Contracts Must Include Transfer of Risk**

The essential ingredient of a reinsurance contract is the shifting of risk. The essential element of every true reinsurance contract is the undertaking by the reinsurer to indemnify the ceding insurer (i.e., reinsured company), not only in form but in fact, against loss or liability by reason of the original insurance. Unless the so-called reinsurance contract contains this essential element of risk transfer, no credit whatsoever shall be allowed on account thereof in any accounting financial statement of the ceding insurer.”

SSAP 62, as part of codification, provides the following guidance, drawing heavily on FAS 113:

[§11] Determining whether an agreement with a reinsurer provides indemnification against loss or liability (transfer of risk) relating to insurance risk requires a complete understanding of that contract and other contracts or agreements between the ceding entity and related reinsurers. A complete understanding includes an evaluation of all contractual features that (a) limit the amount of insurance risk to which the reinsurer is subject (e.g., experience refunds, cancellation provisions, adjustable features, or additions of profitable lines of business to the reinsurance contract) or (b) delay the timely reimbursement of claims by the reinsurer...

[§12] Indemnification of the entity company against loss or liability relating to insurance risk in reinsurance requires both of the following:

- a. The reinsurer assumes significant risk under the reinsured portions of the underlying insurance agreements; and
- b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.

**IASB.** The International Accounting Standards Board’s (IASB) Insurance Steering Committee has drafted a statement of principles on accounting for insurance contracts. As the statement is not final, it may well be modified before being officially released to the public. With these caveats in mind, it is instructive to compare the IASB’s views on risk transfer to FAS 113.

**Considerations in Risk Transfer Testing**

As currently construed, the IASB's Principle 1.2 defines an insurance contract. Reinsurance is simply treated as a sub-set of insurance contracts. Principle 1.3 defines the uncertainty required for a contract to qualify as an (re)insurance contract. This principle, then, is closely related to the risk transfer requirement in FAS 113. Principle 1.3 does introduce the word "*material*" in describing uncertainty or risk transfer, much like FAS 113 refers to "*significant*." Principle 1.3, however, does not distinguish between underwriting risk and timing risk as does FAS 113.

Considerations in Risk Transfer Testing

**5. Current Practices.**

As risk transfer tests are only defined in broad conceptual terms, practitioners of risk transfer testing are left to model insurance processes as they think best and define key terms such as “remote” and “significant” operationally. In practice, if the cedant’s analysis passes muster with their auditor, reinsurance accounting is granted. Thus auditors, and sometimes the cedant’s consultant, need to be able to recognize risk transfer when they see it.

VFIC conducted a brief, informal poll of actuaries at two major consulting firms and three major audit firms regarding their risk transfer testing. In particular, the practitioners were asked 1) does your firm have an official policy regarding risk transfer testing, 2) what threshold value do you use for determining *reasonably possible*, 3) how big of a loss is *significant*, and 4) what methods are used. A brief summary of the interviews follows.

	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
Official Policy?	No	No	Yes	Don't know	Don't know
Probability	5% or 10%	10% or 20%	“Reasonable worst case chance”	20%	10%
Significance	5% or 10%	10% or 20%	10%	20%	10%
Method	Establish a probability distribution of expected losses, reflecting the timing thereof. Compare to the present value of premium.	Compare expected value of present value of losses to expected value of present value premiums by scenario	Scenario testing	NA	Net present value of all cash flows.

While there are certainly differences in practices indicated above, there are also some common themes. First, while probability threshold (“possibility”) is rarely codified, 5%, 10%, and 20% are typical; 10% is in fact the most typical. The critical value defining significance is almost always the same as the probability threshold, i.e., 5%-5%, 10%-10%, 20%-20%. Again, 10% is the most typical, and thus we have what has become known as the “10-10 rule,” whereby if the reinsurer has a 10% chance of suffering a 10% loss, then the contract is deemed to have transferred risk.

It must be emphasized that this 10-10 rule has become a *de facto* practice. FAS 113 makes no reference to it, nor does the statement define “remote” and “significant” thresholds with any numbers, let alone 10% and 10%. Furthermore, the 10-10 rule has not been officially propagated by anyone.

#### Considerations in Risk Transfer Testing

The 10-10 rule is a test utilizing value-at-risk (VaR) as the risk measure. That is to say, the ceding company must demonstrate a VaR of 10% at the 90<sup>th</sup> percentile of the distribution of the net present value of underwriting losses on the contract in question. And, in practice, a VaR test makes sense given the construct of FAS 113, i.e., the explicit reference to probability and significance gives rise to viewing risk in two parts – frequency and severity.

There are some other common practices, as well. First, the view is always prospective in nature. Second, “loss” as respects the reinsurer is always measured as the net present value of future cash flows. Finally practitioners interviewed are consistent in their view that reinsurer expenses, taxes, investment risk, and credit risk are not subject of the risk analysis.

One problem with the 10-10 rule is that many standard reinsurance contracts, ones that everyone would acknowledge are highly risky, would not pass the test. Typical high layer property catastrophe treaties are but one example. Although these can be handled on an exception basis, it would be useful to have methods of measuring risk that agree with the assessments of experienced practitioners. The next section uses a series of examples to highlight this issue as well as to illuminate considerations required in traditional risk transfer testing.

Considerations in Risk Transfer Testing

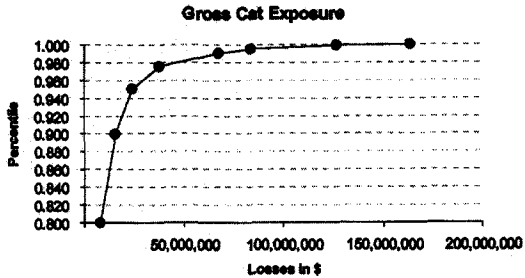
**6. Examples and considerations.**

Given currently accepted practice, how could the practitioner prove that there is a less-than-remote-chance that their reinsurers could suffer a significant loss? Following are a series of numerical examples, designed to illustrate the basic data requirements and analysis of present day risk transfer testing. While such analysis presumably suffices for purposes of FAS 113, the examples will serve to show the inadequacies of a simple 10-10 rule (or VaR tests in general).

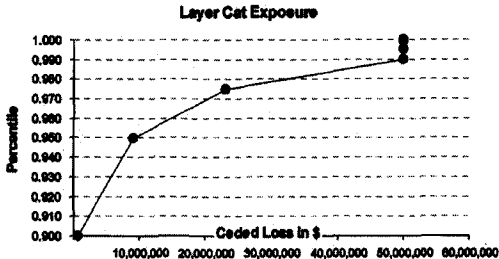
**Example 1. Property Catastrophe Excess of Loss**

An insurance company has exposure to southeastern U.S. hurricanes. Standard industry catastrophe models were applied, and the following catastrophe loss event cumulative distribution function was produced:

Probability	Loss
0.001	63
0.005	85
0.010	528
0.025	2,877
0.050	28,180
0.100	95,939
0.200	303,325
0.300	607,426
0.400	1,146,368
0.500	2,001,899
0.600	3,185,892
0.700	4,925,404
0.800	8,150,810
0.900	15,632,088
0.950	24,208,088
0.975	38,072,833
0.990	67,451,525
0.995	83,883,074
0.999	126,792,315
0.9999	163,627,870



Assume the company is content with a \$15 million retention, roughly absorbing up to the one-in-ten-year event. Assume, too, that the company accepts a \$50 million layer, thereby going through the top on a one-in-one-hundred-year event. Catastrophe losses were simulated according to the above distribution, and layer losses were calculated.



Considerations in Risk Transfer Testing

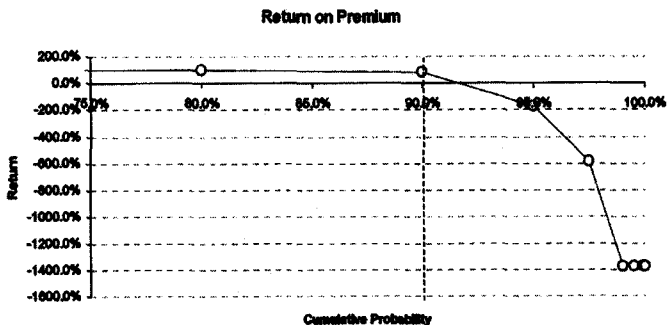
The above distributions produce an expected gross catastrophe loss of \$6 million and an expected ceded loss of \$1.625 million.

Assume for simplicity that the reinsurance market is pricing catastrophe covers to a 50% loss ratio (premium equals \$3.25 million). For this purpose we will ignore reinstatements. Further assume that premiums are paid in full at the beginning of the year and losses are paid in full at the end of the year. As we are dealing with short duration losses, a discount rate of 4% was used.

Given the data and assumptions, the net present value of cash flows between the cedant and the reinsurer can be calculated (shown below as ROP – Return on Premium).

Probability	Gross Loss	Ceded Loss	Reinsurer		
			Loss Ratio	NPV	ROP
0.001	63	-	0.0%	0.0%	100.0%
0.005	85	-	0.0%	0.0%	100.0%
0.010	528	-	0.0%	0.0%	100.0%
0.025	2,877	-	0.0%	0.0%	100.0%
0.050	28,160	-	0.0%	0.0%	100.0%
0.100	95,939	-	0.0%	0.0%	100.0%
0.200	302,299	-	0.0%	0.0%	100.0%
0.300	607,428	-	0.0%	0.0%	100.0%
0.400	1,146,366	-	0.0%	0.0%	100.0%
0.500	2,001,899	-	0.0%	0.0%	100.0%
0.600	3,185,892	-	0.0%	0.0%	100.0%
0.700	4,925,404	-	0.0%	0.0%	100.0%
0.800	8,150,810	-	0.0%	0.0%	100.0%
0.900	15,632,088	632,088	19.4%	18.7%	81.3%
0.950	24,206,066	9,206,066	282.9%	272.1%	-172.1%
0.975	38,072,833	23,072,833	709.1%	681.8%	-581.8%
0.990	67,451,525	50,000,000	1536.7%	1477.6%	-1377.6%
0.995	83,683,074	50,000,000	1536.7%	1477.6%	-1377.6%
0.999	126,792,315	50,000,000	1536.7%	1477.6%	-1377.6%
0.9999	163,627,870	50,000,000	1536.7%	1477.6%	-1377.6%

The reinsurer’s “profit curve,” the trace of the ROP versus the cumulative probability looks as follows.





#### Considerations in Risk Transfer Testing

A catastrophe example was deliberately chosen as the first example. No one would dispute the clear risk transfer that exists between cedant and reinsurer in a property catastrophe excess of loss program. Yet the above graph clearly demonstrates that the sample transaction fails the 10-10 rule. At the 90<sup>th</sup> percentile the reinsurer makes an 82% return on premium, thus it is not true that there is at least a 10% chance of at least a 10% loss. Perhaps this can be rectified by simply choosing a different probability to reflect the “reasonable possibility,” for at the 95<sup>th</sup> percentile, the reinsurer suffers a 172% loss.

The first example illustrates a number of key points.

1. Key considerations in this analysis included:
  - A thorough understanding of the reinsurance contract,
  - A probability distribution of expected losses, as determined by the cedant,
  - Incidence or timing of cash flows between the parties,
  - A duration-appropriate discount rate.
2. Elements that were not and should not be considered include:
  - Reinsurer expenses,
  - Brokerage, and
  - Taxes
3. A VaR test may work, but risk transfer cannot be judged on a single, simple rule such as 10%-chance-of-a-10%-loss. The whole of the reinsurer’s profit and loss curve is important to consider. In this case, while the reinsurer is still in a profit position at the 90<sup>th</sup> percentile, there is clearly a precipitous and deep drop shortly thereafter. In this situation, the reinsurer or reinsurers stand to lose a considerable amount of money relative to the premium revenue.

Considerations in Risk Transfer Testing

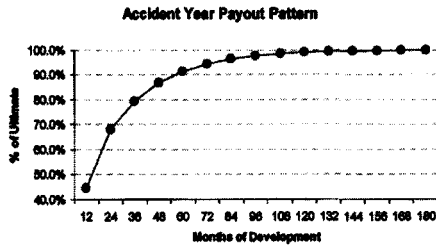
**Example 2: Quota Share Reinsurance Example**

In this example, an insurance company seeks a 50% quota share protection on its accident year results. Even though test c may apply, it may be interesting to see how tests a and b would view this type of contract under different risk measures.

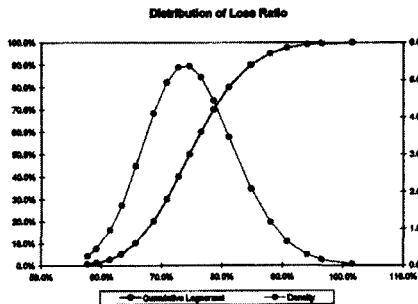
For the upcoming year, this company forecasts:

Written Premium	\$1,000
Earned Premium	1,000
Accident Year Loss Ratio	75%
<u>Expense Ratio</u>	<u>32%</u>
Combined Ratio	107%

To complete this example, we assume that the insurance company in question is an industry-typical, all lines writer and has an accident year loss payout pattern that mirrors the industry total<sup>3</sup>:

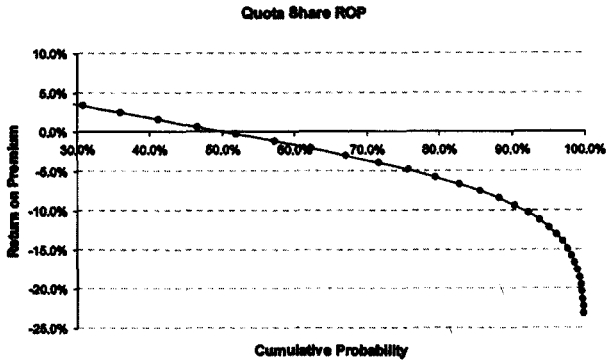


The company has estimated the distribution of the upcoming accident year loss ratio as part of its normal forecasting process. We assume the loss ratio is distributed lognormally with a mean of 75% and a coefficient of variation of 10%.



Considerations in Risk Transfer Testing

The quota share treaty has a 30% ceding commission. Premiums and commissions are paid evenly throughout the year. Under these assumptions, the reinsurer's profit/loss curve looks as follows.



At the 90.4<sup>th</sup> percentile, the reinsurer suffers a 9.5% of premium loss. It does not literally pass the 10-10 rule test. However, given the precipitous drop in profitability in the tail, and given the inherent uncertainties of the analysis itself, it should be evident that there are “reasonable possibilities” of “significant losses.”

<sup>3</sup> Source: 1999 Industry total Schedule P, all lines paid triangle from A.M. Best's.

Considerations in Risk Transfer Testing

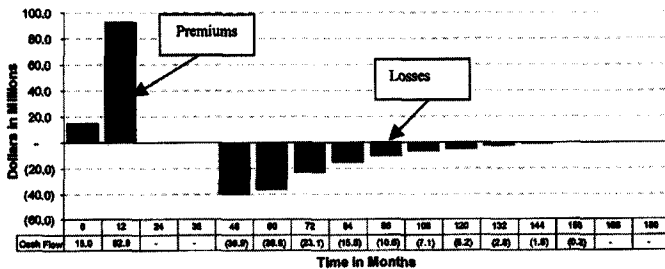
**Example 3: Finite Reinsurance Example.**

Finite reinsurances are often the principal source of risk transfer questions. In this example, all underlying numbers are the same as in the quota share example. This time, however, the cedant is seeking protection in excess of the planned loss ratio up to a 5%-point limit (i.e., the corridor from 75% to 80%).

Assume the reinsurer charges an up front premium (often called the deposit premium, minimum and deposit premium, the reinsurance premium, or the margin) of \$15. As is typical in finite transactions, for every dollar of loss ceded, an additional premium (AP) is charged, in this case 65% of the ceded loss. Because additional premium is ceded, the net expense ratio will deteriorate with increasing cessions. To compensate for the expense ratio effect, losses are typically “over ceded” such that the net combined ratio (or underwriting result) is immunized. So, here ceded losses are grossed up by dividing by 1-AP. The ceding rule is:

<u>If the actual loss ratio is:</u>	<u>Cede:</u>
<75%	0
>75%	$(LR-75\%)/(1-.65)$
	subject to a maximum of the grossed up 5% limit – $5/(1-.65)$ .

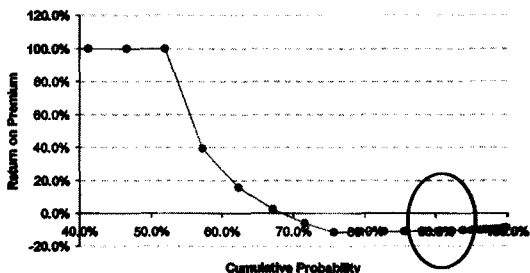
To compute the incidence of the cash flows, we assume that the deposit premium is paid at the beginning of the year, and that the AP is paid in full at the end of the year. A recoverable is established on the company’s statutory and GAAP balance sheets immediately when the expected ultimate exceeds the retention. Loss recoveries are not made until the *paid loss ratio* exceeds the retention. For a loss ratio of 80%, the cash flows between the cedant and the reinsurer would look as follows.



Considerations in Risk Transfer Testing

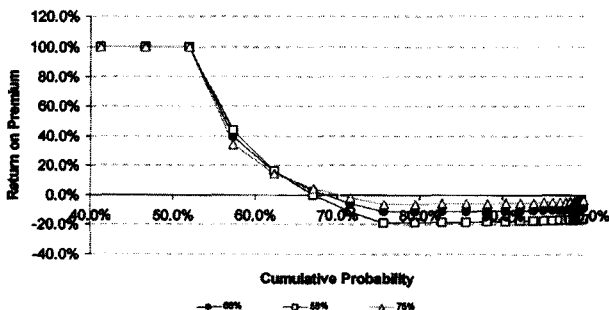
The cash flow graph above highlights the zeal behind using aggregate stop loss contracts, especially in a soft market. A ceded recoverable is established for the full, nominal dollar loss reserves above a certain loss ratio, but due to the time lag in receiving recoveries, the reinsurance price reflects a sizable discount. The difference between the discount and the nominal value of the reserves in question becomes income for statutory or GAAP purposes. Economically speaking, no value is really created nor destroyed beyond the reinsurer's margin.

Cash flows as shown above were produced for loss ratios ranging from 70% to 100%. For each loss ratio, the net present value of cash flows was calculated using a 5% discount rate. Net present values were graphed as a function of cumulative probability (of the loss ratio) to produce the reinsurer's profit/loss curve.



This finite example was produced to demonstrate the 10-10 rule almost exactly. Here there is a chance of a 10% loss or more at the 90.4<sup>th</sup> percentile, almost exactly satisfying the 10-10 rule.

This same graph was re-drawn for the above base case as well as cases with a 55% AP and a 75% AP:



### Considerations in Risk Transfer Testing

In the above graph, the 75% AP program would presumably not pass risk transfer under a 10-10 rule test. The 55% program would pass. Even in the 65% example, however, consideration must be given to the entire profit/loss curve, not just the 90<sup>th</sup> percentile. How much profit is made on the upside? How bad is the downside?

Aggregate stop loss deals specifically and finite reinsurance in general can be considerably more complicated than this example. It is critically important here to have a thorough understanding of the contract terms. Some common variations include:

- Funds held arrangements<sup>4</sup>,
- Commutation provisions,
- Capacity charges,
- Margin charges,
- Inclusion of expenses, and
- Caps on economic loss.

### Summary of Considerations in Applying VaR tests.

Risk transfer testing requirements are prospective in nature. Thus the mean result (loss ratio, statutory underwriting result, GAAP underwriting result...) is a forecast of a future period. The actuary must account for pricing changes, loss trends, credibility, etc., i.e., all of the typical on-leveling adjustments ordinarily made to historic data.

Practitioners must go beyond the mean. The distribution associated with the mean result should be calculated in accordance with the model employed for the forecasting. Distributions can be estimated by methods applied to loss triangles, collective risk theory models, or variances estimated from time series of relevant results

A model of the incidence of cash flows is required. The model must distinguish between funds held and funds transferred between parties. Dependencies between cash flows and the magnitude of the loss must be accounted for, e.g., the effect of catastrophes on an assumed loss payout pattern. Cash flows should be discounted at the same, appropriate rate. A risk free rate is specified, preferably a pre tax, immunized yield

In the end, a discounted cash flow model, perhaps a dynamic model should suffice. Clearly a thorough understanding of the contract terms is required for a thorough analysis.

“Remote” results can be judged on the basis of closed form distributions of results, simulations, or through scenario testing. Significance is defined by the magnitude of the net present value of cash flows between parties as a percent of revenues.

---

<sup>4</sup> Funds held arrangements, wherein the cedant holds the loss fund and earns the associated investment income. Here the actuary must consider what constitutes the basis for measuring the 10% loss. Is premium the appropriate base? On one hand, it would seem not, as it is not cash between the parties. On the other hand, FAS 113 states, “Payments and receipts under a reinsurance contract may be settled net. The ceding enterprise may withhold funds...Determining the amounts paid or deemed to have been paid (hereafter referred to as “amounts paid”) for reinsurance requires and understanding of all contract provisions.”

Considerations in Risk Transfer Testing

### 7. Beyond VaR Tests.

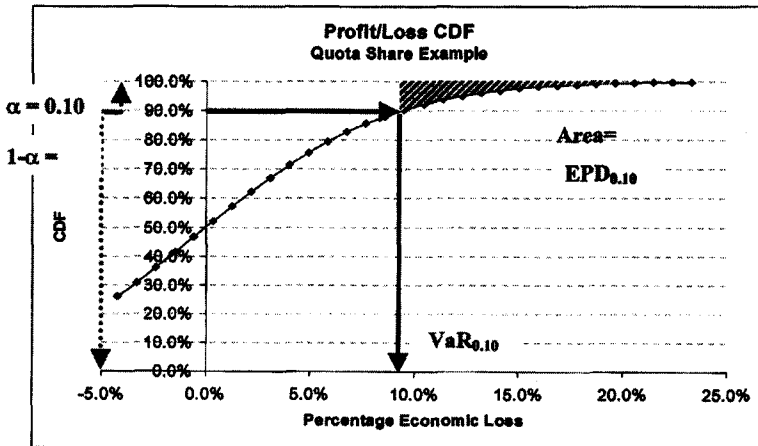
FAS 113 does not prescribe a specific method to test for risk transfer. Furthermore, given a model, FAS 113 does not precisely define whether the model output would imply that the contract in question passed or failed. While we must meet the considerations of FAS 113, actuaries needn't demonstrate risk transfer using the 10-10 rule or VaR test more generally.

#### Expected Deficit Methods.

The examples presented above suggest that a single point of *remote probability* and a single critical value for *significance* maybe inadequate, e.g., 10-10. Instead risk/reward is perhaps better viewed across the entire spectrum of profit and loss (consider the property catastrophe example). That is, there is a trade-off between probability and significance.

The 10-10 rule is used as a rule of thumb, for simplicity or as a starting point. Assume for the moment that a 10% chance of a 10% loss is, in fact, evidence of risk. It is simply not an exclusive evidence of risk. What if risk was defined by the trace of a line – almost akin to an efficient frontier – of those points that, by their combination of probability and magnitude, define risk transfer: 10-10, 5-20, 1-100, 0.1-1000? From such a set of points, one coordinate measuring probability, one measuring the magnitude of the loss, we can construct a single risk measure: the expected policyholder deficit (or in this case, the expected reinsurer's deficit).

The graph below compares the 10-10 rule ( $VaR_{\alpha=0.10}$ ) with EPD. This graph was drawn using the data from the quota share example provided above.





### Considerations in Risk Transfer Testing

In the continuous case, expected reinsurer's deficit (ERD) is defined as

$$\int_{NPV(loss) > NPV(premium)}^{\infty} [NPV(premium) - NPV(loss)] f(x) dx$$

In the discrete case, the expected reinsurer's deficit is

$$\sum_{NPV(loss) > NPV(premium)}^{\infty} [NPV(premium) - NPV(loss)] Pr(x)$$

That is, the expected reinsurer's deficit is the average, or expected, deficit over all values where a deficit exists. If the NPV's above are divided by premiums (or cash to the reinsurer) the expected deficit is per unit of revenue. Using the pairs of numbers above, assuming these were our only loss scenarios, the ERD =  $(.10 * -.10) + (.05 * -.20) + (.01 * -1.0) + (.001 * -10) = -.04$  or -4%. For comparison, the ERD's calculated for the three examples previously are as follows.

- Property Catastrophe = -40%
- Quota Share = -3%
- Finite = -3%

This metric has some appeal in that it is well grounded in actuarial theory concerning the measurement of risk. It also overcomes the 10-10 rule weakness (or VaR rules in general) of relying on a singular point to define risk transfer. We still have the problem of critical values, however: in this instance, what ERD defines risk transfer? In the above examples, property catastrophe has a -40% ERD, a number significant enough to likely be granted worthy of risk transfer (even though it didn't pass the 10-10 rule test). The quota share and finite examples have -3% ERDs. Here it is less clear that there is meaningful risk transfer.

Considerations in Risk Transfer Testing

**Tail Value at Risk.**

More recently, VaR and EPD measures have come under criticism in actuarial and finance circles because they are not coherent measures of risk. Given random losses X and Y, a risk measure,  $\rho$ , is considered coherent if it conforms to the following properties<sup>5</sup>.

1. Sub-additivity: For variables X and Y,  $\rho(X+Y) \leq \rho(X) + \rho(Y)$
2. Monotonicity: If  $X \leq Y$ ,  $\rho(X) \leq \rho(Y)$
3. Positive Homogeneity: for  $\lambda \geq 0$ ,  $\rho(\lambda X) = \lambda \rho(X)$
4. Translation Invariance:  $\rho(X+a) = \rho(X) + a$

The sub-additivity property simply requires that the combination of two risk factors does not create additional risk; in fact, risk is the same or less. Value at Risk, despite its popularity, violates this axiom.

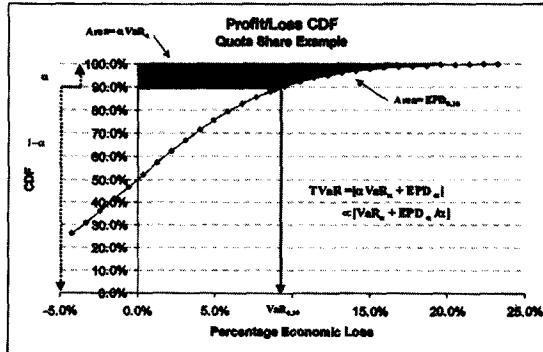
In the alternative, Tail Value at Risk, or TVaR, is a coherent risk measure. TVaR is equal to the expected value of a loss variable, say X, given that X exceeds the critical value  $VaR_\alpha$ , i.e.,

$$TVaR_\alpha = E[X | x > VaR_\alpha ]$$

If  $\alpha$  is the probability of default, then  $VaR_\alpha$  is the total assets, and TVaR may be expressed as:

$$TVaR_\alpha = \alpha * \text{assets} + EPD, \text{ or } TVaR \propto \text{assets} + EPD_\alpha / \alpha$$

As in the EPD case, above, TVaR can be represented graphically as follows.



<sup>5</sup> See the discussion in Meyers [2]

### Considerations in Risk Transfer Testing

TVaR's were calculated for each of the three examples above at the 90<sup>th</sup> percentile.

- Property Catastrophe = -319%
- Quota Share = -42%
- Finite = -23%

Recall from the previous section that the "ERD" did not discriminate between the quota share contract and the finite contract. TVaR does, and indicates that the quota share contract has more risk.

We do not have enough research, or perhaps even the prerogative, to suggest a threshold TVaR that implies a contract passes risk transfer. However, in the examples presented here, a finite contract, that by all accounts only marginally passes more traditional, 10-10 test and has no meaningful downside beyond the 10% loss, has a TVaR of -23%. Perhaps this suggests a threshold value in the 20-25% range or less would reflect minimal risk transfer.

### Other Coherent Risk Measures

Coherent risk measures are characterized statistically as expected values of outcomes under adjusted probability distributions. For instance, TVaR, is expressed as:

$$E[X | x > VaR_{\alpha}]$$

This could equally well be expressed as the adjusted expected value of  $X$  under transformed probabilities, where the transformed probability is zero for  $X < VaR_{\alpha}$  and is the actual probability adjusted to sum to unity otherwise.

This particular measure has been criticized on at least two grounds (e.g., see Wang (2001) *A Risk Measure that Goes Beyond Coherence*, Institute of Insurance and Pension Research, Research Report No. 18, University of Waterloo). First, it ignores all results below  $VaR_{\alpha}$ . Second, it just measures losses above  $VaR_{\alpha}$  on an expected basis, which is an under-weighting compared to moment-based measures, which use higher powers to represent the extreme risks of extreme events.

An alternative probability adjustment, which produces an alternative coherent risk measure that addresses these concerns, is provided by the Wang transform. This transform adjusts each scenario probability  $u$  by first calculating the normal-distribution percentile of  $u$ , then applying a functional transform to that percentile, and finally taking the normal probability of the transformed percentile. In mathematical notation:

Let  $\Phi(x)$  be the standard normal cumulative distribution function, and  $\Phi^{-1}(u)$  be its inverse, the percentile function, which applied to a probability  $u$  gives the corresponding percentile. Let  $h(x)$  be the percentile distortion function. Then the probability transform

### Considerations in Risk Transfer Testing

applied to a cumulative loss probability  $u$  is  $v = g(u) = \Phi[h(\Phi^{-1}(u))]$ . A simple example is to take  $h(x)$  linear, such as  $bx+a$ , or even an additive constant, such as  $x+a$ .

One use of risk measures is to calculate the market price of risk transfer. Wang has shown that prices of risk in a number of markets, including catastrophe bonds, corporate bonds, and stock options can be approximated fairly closely by choosing the appropriate  $h$  function for each market. (Risk pricing may vary across markets in part due to the degree of hedging and liquidity available, as well as to the degree to which financial results are subject to sudden large drops.) The key issue to getting the right  $h$  function is applying enough probability distortion in the tails of the distributions to capture the market reaction to tail events. However, even a linear  $h$  function provides a non-linear price effect in the tails, and thus can be used for benchmarking.

Quantifying the market price of the risk inherent in a given transaction could be an alternative method for determining if there is enough risk transfer to satisfy the requirements of FAS 113. Even if a contract is priced above the market value of the risk it has, it still might meet the FAS requirements for risk transfer. However, as *significant loss* is to be interpreted relative to ceded premium, a deal could fail risk transfer, but pass if the premium is reduced. Thus there is a pricing continuum from weak pricing to strong pricing to excessive pricing to not enough risk transfer for 113 to no risk at all.

As an example of the application of the Wang transform to risk transfer, let  $h(x) = 0.7x - 1.3$ . This gives prices quite a bit above market standards, but might be in the area between excessive pricing and no risk transfer. To apply this to risk transfer testing, a number of scenarios can be simulated showing the present-value profitability to the reinsurer for each scenario, and resorted into a cumulative probability distribution. The expected value of the profit should be positive under this distribution, or the reinsurer would not be interested. But if you distort the probabilities with the Wang transform to give more weight to the adverse scenarios, the transformed expected value could be negative. If it is negative with the target  $h$  function selected, then risk transfer would be deemed to be established.

With the linear  $h$  assumed, the 50 excess 15 catastrophe cover in Example 1 would pass risk transfer, with a transformed mean of  $-440\%$ , and would still barely pass (with a mean of  $-2\%$ ) with the premium increased to as much as  $\$25M.$ , which gives a 1% probability of a 92% loss. This premium is well above typical market standards, but may be in the gray area between no risk transfer and excessive pricing. Setting the  $h$  function would be the judgment part of this approach. With these values, the quota share from Example 2 easily passes risk transfer with a transformed mean return of  $-19\%$ .

Premium for the catastrophe cover much above  $\$25M$  would fail risk transfer by this standard. It might seem unusual to find a catastrophe cover not meeting risk transfer, but grossly overpriced catastrophe covers could be used as payback or to add the appearance of risk to basically cosmetic deals. An actuarial risk-measurement procedure should be able to identify them.

Considerations in Risk Transfer Testing

**Exponential Transform**

Oakley Van Slyke and Rodney Kreps, in an unpublished manuscript [2], suggest another possible approach to testing risk transfer through measuring the capital cost inherent in a reinsurance transaction. This is based on the work of Karl Borch, 1962 on quantifying risk costs. Borch shows that under certain assumptions the only risk-reflecting pricing transform that properly measures risk cost is an exponential transform. His assumptions - as discussed in Giuseppe Russo and Oakley E. Van Slyke [4] are essentially:

- There are no arbitrage opportunities. That is, the cedant would never pay more to cede a loss than the amount of the loss. In turn, no one would be able to sell insurance for a premium greater than the amount of the exposure.
- The evaluation of an alternative is robust with respect to the input data. That is, a small change in an input parameter should not lead to a large change in the evaluation of an alternative.
- The evaluation of an alternative is robust with respect to the analytical process one is using. For example, making small refinements to a particular scenario should not drastically change the evaluation of a particular alternative.
- The evaluation of an alternative is robust to changes in the time scale. For example, changing the time intervals of the analysis from quarterly to monthly should not have a significant change in the evaluation of an alternative.
- If there is no risk, one can determine the present value of a stream of future cash flows by discount factors derived from the term structure of interest rates.

These assumptions lead to establishing an equivalent constant risk-adjusted value (RAV) of a risky deal, subject to the risk capacity  $c$  that is carried. First let  $X$  represent the random loss from the deal, prior to any premium payments. Then the Risk Adjusted Value of liabilities for risk-carrying capacity  $c > 0$  is:

$$RAV(c) = c \ln \left\{ E \left[ e^{X/c} \right] \right\}$$

this emphasizes large losses, more so as  $c$  is small and less so as  $c$  is large.

The risk load to take on these liabilities =  $RAV(c) - E[X]$ , is then expressed as:

Considerations in Risk Transfer Testing

$$\pi = c \ln \left\{ E \left[ e^{X/c} \right] \right\} - E[X]$$

Van Slyke and Kreps then impose the condition that the capacity available is a multiple of the risk load:

$$c = \pi/s \Rightarrow \pi = \pi/s \ln \left\{ E \left[ e^{sX/\pi} \right] \right\} - E[X]$$

If you subtract a constant premium  $p$  from  $X$  and then evaluate the risk in the deal,  $E[X]$  and the RAV also decrease by  $p$ . Thus the risk load to package and resell the whole deal is the same as that for the losses alone. Then taking the financial scale as multiples of  $p$  would make  $X$  the negative of the return on premium. Taking  $Y = -X$  as the return on premium gives:

$$\pi = E[Y] + (\pi/s) \ln E[e^{-sY/\pi}]$$

as the equation for the risk load as a percent of premium for reselling the entire deal. If the market  $s$  is known, this equation can be solved numerically for  $\pi$ , which then can be used to compute the risk adjusted value of the deal. If the RAV is positive, the price is below market levels. If RAV is slightly negative, the deal is priced above the market, but still could be fairly risky. As with the Wang transform, however, when the RAV is too negative, the pricing eventually crosses the line between excessive pricing and no risk transfer.

Van Slyke did some other research that suggests that  $s = 0.4$  would fairly represent pricing in a number of financial markets. This value will be assumed in the discussion which follows.

Taking the RAV cutoff point for return on premium as  $RAV = -70\%$  would be similar to the Wang transform values illustrated above. For Example 1, the RAV would be about positive 75%, which would suggest that the postulated pricing is light in terms of market risk pricing. With the premium increased to \$25M, the RAV drops to  $-67.2\%$ , so barely passes risk transfer by this standard. For the quota share Example 2, the RAV is about 25%, which suggests there is considerable risk remaining in this deal.

The Borch approach is based on somewhat different market assumptions than the transformed distribution approach. Although these are consistent for independent risks, there could be inconsistencies for correlated risks. For example, see G.G. Venter, *Premium Calculation Implications of Reinsurance without Arbitrage*, ASTIN Bulletin 21, #2, November 1991, where it is shown that arbitrage-free pricing for both correlated and independent risks can be done only with expected values from transformed distributions. This was one of the precursors of Wang's work. However by just focusing on the ending

### Considerations in Risk Transfer Testing

distribution and ignoring intermediate changes in value, distribution transforms fail to account for the sudden drops in value that are modeled in stochastic financial pricing methods. The potential for discontinuous price drops seems to require more risk premium, possibly because dynamic hedging strategies are less effective. Thus although probability transforms on ending distributions can produce good benchmarking rules, they are not as fundamental as the financial stochastic process models, and have to be calibrated separately to each market studied.

#### Transformed 10 – 10 Rule

If the 10 – 10 rule is accepted for normal distributions, then a transformation can provide an equivalent standard for skewed distributions.

To see this, let  $X$  represent the ROP (return on premium) of the contract to the reinsurer, when this is negative and zero otherwise. For this variable  $X$  with distribution  $F$ , define a new risk-measure as follows:

1. For a pre-selected security level  $\alpha=10\%$ , let  $\lambda = \Phi^{-1}(\alpha) = -1.282$ , which is the  $\alpha$ -th percentile of the standard normal distribution.
2. Apply the Wang Transform:  $F^*(x) = \Phi[\Phi^{-1}(F(x)) - \lambda]$ .
3. Calculate the expected value under  $F^*$ :  $WT(\alpha) = E^*[X]$ .
4. If  $WT(\alpha) < -10\%$ , it passes the test, otherwise it fails the test.

When  $X$  has a Normal( $\mu, \sigma^2$ ) distribution,  $WT(\alpha)$  is identical to the  $100\alpha$ -th percentile. This serves as a base or benchmark for 10-10-rule. For distributions that are non-normal,  $WT(\alpha)$  may correspond to a percentile higher or lower than  $\alpha$ , depending on the shape of the distribution.

For Example 1, the catastrophe layer, these values of the transform are a little less strict than the tests evaluated above, with premium as high as \$34M for the layer meeting the test. For Example 2, the quota share,  $WT(0.10) = -14.39\% < -10\%$ , so it passes the transformed 10-10-rule.

In conclusion, at its core, FAS 113 requires only that risk transfer be present to gain reinsurance accounting treatment. FAS 113 does not require a 10-10 rule in gauging the risk transfer. The preceding sections offered some alternative measures such as TVaR, the Wang Transform, and the exponential transform for judging the degree of risk.



## Considerations in Risk Transfer Testing

## 8. Beyond FAS 113.

### Insights from the Securitization Task Force.

As configured, FAS 113 requires that the cedant establish that the reinsurer has assumed some amount of risk. If one were to consider the evaluation of risk transfer beyond that which is described in FAS 113, it would seem preferable that the cedant demonstrate a complementary concept: that they have, in fact, ceded risk. Thus, risk transfer would not be defined based on cash flows between parties, but rather the changed risk of the cedant – before and after application of the contract in question. This is essentially the logic the Index Securitization Task Force has used in proposing methods and metrics for companies to justify whether or not a hedge should qualify for reinsurance accounting.

The Index Securitization Task Force, in its paper [1], *Evaluating the Effectiveness of Index-Based Derivative in Hedging Property/Casualty Insurance Transactions*, describes potential quantitative measures of hedge effectiveness. These include change in Expected Policyholder Deficit, change in Value at Risk, change in Standard Deviation, coverage ratio and correlation. Of these, the first three examine the reduction of risk attributable to the hedge. At the request of the task force, VFIC narrowed this list to two measures that best demonstrated a reduction in exposure to loss, thus enabling a hedge to receive underwriting accounting treatment versus investment accounting treatment. These measures are: reduction in Tail Value at Risk and reduction in Standard Deviation.

As discussed above, Tail Value at Risk is defined as the average of all loss scenarios over the 100<sup>p</sup> th percentile, where p is a selected probability level, such as .90. One can consider this measure a melding of the expected policyholder deficit and value at risk measures. The tail value at risk measure captures both the probability and magnitude of large under-recoveries. Based on empirical studies, the committee found that tail value at risk produced more consistent results than value at risk when the probability levels were varied.

The other measure the committee recommended, reduction in standard deviation, distinguishes between true hedges and speculative investments since it is sensitive to both upside deviation and downside risk.

With respect to the degree of risk reduction, one may consider that risk has been transferred if both or either of these measures demonstrates that their value is less following the application of the hedge or reinsurance contract. A more conservative view would set specific thresholds by some predefined amount.

Given this application of risk measurement for gauging the effectiveness of a hedge for reinsurance accounting treatment, it is not inconceivable that the same sort of standard be utilized to gauge risk transfer in reinsurance contracts. In fact, in the absence of consistent treatment, there is the potential for different standards and approaches to be applied when evaluating a reinsurance contract for risk transfer versus evaluating hedge effectiveness for index-based securitization.

## Considerations in Risk Transfer Testing

## 9. Conclusions.

In order to garner reinsurance accounting treatment for GAAP accounting purposes, a reinsurance contract must meet the requirements set forth in FAS 113. FAS 113 requires that a reinsurance contract transfer risk. There is little supporting literature to find guidance in what constitutes an acceptable demonstration of the existence of risk in a reinsurance contract. In an effort to provide some guidance to the CAS membership on risk transfer testing, VFIC conducted a research project on risk transfer. Based on this research and analysis, VFIC concludes:

1. **Statement.** FAS 113 requires the reinsurer to be exposed to a “*reasonable possibility*” of a “*significant loss*” from the “*insurance risk*,” but it stops short of prescribing methodology for testing, metrics for measuring, or specific thresholds to judge risk transfer against. This is appropriate given the diversity and complexity of reinsurance transactions.
2. **Methodology.** Regarding methodology, FAS 113 articulates that risk transfer testing include:
  - A thorough understanding of contract provisions,
  - A model of the incidence of cash flows between parties,
  - Cash flows should be discounted at the same, appropriate rate, and
  - Incorporating insurance risk only

These requirements preclude consideration of income taxes, reinsurer expenses, brokerage, or credit risk in the determination of risk transfer.

To meet the FAS 113 requirements, we recommend that risk transfer analysis include:

- “*Reasonable possibility*” requires a view of the distribution of expected contract losses,
  - Identification of threshold values for “*reasonable possibility*” of a “*significant loss*” based on the loss distribution, and
  - Duration-matched or immunized yields as the appropriate discount rates,
3. **Metrics.** Current practice, born out of the phrases “*reasonable possibility*” of a “*significant loss*,” splits risk transfer analysis into separate tests of probability and significance. Using a singular loss metric for a given probability is a metric known as Value at Risk, or VaR. This paper offered examples of three types of reinsurance contracts and calculated a VaR for each using 10% as the “*reasonable possibility*.”

One weakness of VaR is that it does consider only a single point on the loss distribution. While FAS 113 literally speaks to the existence of a “*reasonable possibility*” of a “*significant loss*,” the broader issue involved with FAS 113 is whether a particular contract transfers risk. In this vein, VFIC explored risk

### Considerations in Risk Transfer Testing

metrics other than VaR. First among these was expected policyholder deficit (EPD). Expected deficit methods were able to illustrate risk transfer for a property catastrophe example where the standard VaR measure (with  $\alpha=10\%$ ) was not.

Both VaR and EPD measures have been criticized as risk measures because they are not coherent. Tail Value at Risk (TVaR) is a coherent risk measure. TVaR was analyzed, as well, and was found in simple examples to discriminate risk levels between contract types where EPD and VaR did not. Even TVaR has been criticized as a risk measure in that it ignores losses below  $VaR_{\alpha}$  and loss above  $VaR_{\alpha}$  are treated on an expected basis only.

Distributional transforms were researched as alternatives to traditional risk measures. Transforms are coherent and address the shortcomings of TVaR noted above. The exponential and Wang transforms provide risk transfer metrics founded in the risk load required for a market-based transaction to transfer the risk.

4. **Thresholds or Critical Values.** Over time, common practice seems to have concluded that a 10% chance represents a reasonable probability, and a 10% loss represented a significant loss. Thus we have what many term the 10-10 rule. This rule-of-thumb is really just a statement of the critical values associated with a VaR risk measure. There are clearly exceptions to this “rule,” as other critical values are frequently used in practice.

A sample finite reinsurance contract, designed to have minimal risk transfer, generated a TVaR of -23%. While this represents limited research, it may suggest a minimal threshold value for demonstrating risk transfer with this measure.

Section 7 proposes a transformed 10-10 rule for the Wang transform, suggesting a critical value of -10% from the mean of the transformed distribution as an adequate demonstration of risk transfer.

Regardless of the model employed or the risk metric used, judgment is still required as to where to establish the threshold values for probability (frequency) and significance (severity) for VaR tests or for pass/fail more generally for other risk measures. .

5. Intuitively, it seems natural to judge risk transfer for a reinsurance contract by analyzing whether the cedant has transferred (reduced) risk, not, as FAS 113 requires, by whether the reinsurer has assumed risk. On an enterprise-wide basis, the two can be different. On a single transaction, as FAS 113 addresses, the two perspectives may be the same. However, it should be noted that the recommendation on Index Securitization proposed the opposite: analysis is done from the cedant's perspective on an enterprise-wide basis. This could lead to

**Considerations in Risk Transfer Testing**

**different accounting treatments for reinsurance products and index securitizations, unless both tests are required for securitization and industry loss triggers.**

Considerations in Risk Transfer Testing

## 10. Bibliography.

- [1] AAA Index Securitization Task Force, "Evaluating the Effectiveness of Index-Based Insurance Derivatives in Hedging Property/Casualty Insurance Transactions," October 4, 1999.
- [2] Kreps, Rodney and Oakley E. Van Slyke. "When is Risk "Significant" in a Reinsurance Contract," an unpublished paper
- [3] Meyers, Glenn G. "The Cost of Financing Insurance," Casualty Actuarial Society Forum, Spring 2001, p.21.
- [4] Russo, Giuseppe, and Oakley E. Van Slyke. "Interpreting Model Output – The California Earthquake Authority and the Cost of Capital of the Reinsurance Layer," Casualty Actuarial Forum, July 1996
- [5] Venter, Gary G., "Premium Calculation Implications of Reinsurance without Arbitrage," ASTIN Bulletin 21, #2, November 1991
- [6] Wang, Shaun. "A Risk Measure that Goes Beyond Coherence," , Institute of Insurance and Pension Research, Research Report No. 18, University of Waterloo

# EXHIBIT 5

**In the Matter of:**  
**Captive Reinsurance**

*August 13, 2013*  
*Samuel Rosenthal*

**Condensed Transcript with Word Index**



For The Record, Inc.  
(301) 870-8025 - [www.ftrinc.net](http://www.ftrinc.net) - (800) 921-5555



1

1 CONSUMER FINANCIAL PROTECTION BUREAU  
2  
3 In Re: )  
4 CAPTIVE REINSURANCE )  
5 ----- )  
6  
7 Tuesday, August 13, 2013  
8 Weiner Brodsky Kider, P.C.  
9 1300 19th Street, N.W.  
10 Washington, D.C. 20036  
11  
12 C O N F I D E N T I A L  
13  
14 The above-entitled matter came on for  
15 investigational hearing, pursuant to notice, at  
16 9:01 a.m.  
17  
18  
19  
20  
21  
22  
23  
24  
25

2

1 APPEARANCES:  
2  
3 ON BEHALF OF THE CFPB:  
4 DONALD R. GORDON, ESQ.  
5 KIMBERLY J. RAVENER, ESQ.  
6 TROY SCHULER, Law Clerk  
7 FATIMA MAHMUD, Paralegal  
8 Consumer Financial Protection Bureau  
9 1700 G Street, N.W.  
10 Washington, D.C. 20552  
11 (202) 435-7357  
12 donald.gordon@cfpb.gov  
13 ON BEHALF OF PHH MORTGAGE and WITNESS:  
14 DAVID M. SOUDERS, ESQ.  
15 ROSANNE L. RUST, ESQ.  
16 Weiner Brodsky Kider, P.C.  
17 1300 19th Street, N.W.  
18 5th Floor  
19 Washington, D.C. 20036-1609  
20 (202) 628-2000  
21 souders@thewbkfirm.com  
22 and  
23 WALTER WRONKA, ESQ.  
24 PHH Mortgage In-House Counsel  
25

3

1 C O N F I D E N T I A L  
2 P R O C E E D I N G S  
3 - - - - -  
4 Whereupon--  
5 SAMUEL L. ROSENTHAL,  
6 a witness, called for examination, having been first  
7 duly sworn, was examined and testified as follows:  
8 EXAMINATION  
9 BY MR. GORDON:  
10 Q. Good morning, Mr. Rosenthal. I'm Don  
11 Gordon, I'm an enforcement attorney with the Consumer  
12 Financial Protection Bureau. It is just after 9 a.m.  
13 We are at the offices of Weiner Brodsky on  
14 19th Street in Washington, D.C. It is August 13th.  
15 This is an investigational hearing being conducted by  
16 the CFPB pursuant to 12 USC Section 5562 and the  
17 Bureau's final investigational rules which are at  
18 12 CFR part 1080.  
19 Objections that may be properly raised are  
20 limited as set forth in those rules. Also as set  
21 forth in those rules, this hearing may not be recorded  
22 by any means except by the official court reporter.  
23 Mr. Rosenthal, would you please state your  
24 first and last name?  
25 A. Samuel Rosenthal.

4

1 Q. And, Mr. Rosenthal, are you represented by  
2 counsel today?  
3 A. I am not, personally.  
4 MR. GORDON: You may --  
5 THE WITNESS: Yes, you are -- yes, I am.  
6 Yes, I am.  
7 MR. GORDON: I'll invite counsel to make  
8 appearances for the record.  
9 MR. SOUDERS: Dave Souders for Weiner  
10 Brodsky representing Mr. Rosenthal.  
11 MS. RUST: Rosanne Rust from Weiner Brodsky  
12 Kider, PC, as well, representing Sam Rosenthal.  
13 MR. WRONKA: Walter Wronka, I'm in-house  
14 counsel with PHH Mortgage Corp.  
15 MR. GORDON: Just to clarify, Mr. Wronka,  
16 are you here representing Mr. Rosenthal personally?  
17 MR. WRONKA: No.  
18 MR. GORDON: Also present from the Bureau  
19 today -- actually, I'm sorry, please go ahead.  
20 MS. RAVENER: Kim Ravener representing CFPB.  
21 MR. GORDON: And also present for the Bureau  
22 are Fatima Mahmud, paralegal, and Troy Schuler, law  
23 clerk.  
24 BY MR. GORDON:  
25 Q. Mr. Rosenthal, who is your current employer?

5

1 A. PHH Mortgage.  
 2 **Q. And where is your employer located?**  
 3 A. Mount Laurel, New Jersey.  
 4 **Q. And what's your current position at**  
 5 **PHH Mortgage?**  
 6 A. Vice president.  
 7 **Q. Is there a, is it vice president for a**  
 8 **particular category?**  
 9 A. Capital markets, balance sheet risk  
 10 management.  
 11 **Q. I just want to as a preliminary matter**  
 12 **explain to you some things about how today's hearing**  
 13 **will proceed.**  
 14 **For the purposes of this hearing,**  
 15 **Ms. Ravener and I are officers of the United States.**  
 16 **Do you understand that we're here in an**  
 17 **official capacity on behalf of the United States**  
 18 **Government?**  
 19 A. Yes.  
 20 **Q. And, Mr. Rosenthal, you're appearing today**  
 21 **pursuant to a Bureau Civil Investigative Demand; is**  
 22 **that right?**  
 23 A. Yes.  
 24 **Q. Okay. And I'm going to hand you what has**  
 25 **been pre-marked as Exhibit 203. This is a multi-page**

6

1 **document which is headed at the top of the first page**  
 2 **CFPB and Civil Investigative Demand.**  
 3 **Mr. Rosenthal, if you'd take a moment and**  
 4 **just review that document and you can give me a nod**  
 5 **when you've had a chance to look it through, look it**  
 6 **over.**  
 7 A. (Witness examining document)  
 8 **Q. Mr. Rosenthal, I don't mean to interrupt,**  
 9 **you should take your time; but I just want to let you**  
 10 **know, the only thing I'm going to ask about in**  
 11 **particular is the document as a whole and the last two**  
 12 **pages. But feel free to review whatever you need to.**  
 13 A. No, thank you. I'll glance through it  
 14 quickly.  
 15 (Witness examining document)  
 16 **Q. Okay. Is this document the Civil**  
 17 **Investigative Demand pursuant to which you are**  
 18 **appearing today?**  
 19 A. Yes.  
 20 **Q. Okay. If you would turn to the last two**  
 21 **pages, that's the portion headed on page**  
 22 **Exhibit 203-0017, notice to persons supplying**  
 23 **information; do you see that?**  
 24 A. Yes.  
 25 **Q. There are two sections with headers on that**

7

1 **page; one labeled A, false statements, semi colon,**  
 2 **perjury, and two, labeled B, the Fifth Amendment, your**  
 3 **right to counsel.**  
 4 **I just wanted to make sure that you've had a**  
 5 **chance to review those sections. Have you?**  
 6 A. Yes.  
 7 **Q. Great. You can put that aside.**  
 8 **Do you know of any reason you might not be**  
 9 **able to give truthful, complete and accurate testimony**  
 10 **today?**  
 11 A. No.  
 12 **Q. And I just wanted to ask you a little bit or**  
 13 **talk a little bit about kind of the ground rules under**  
 14 **which we'll proceed today.**  
 15 **So first of all, I want to ask you, have you**  
 16 **ever given testimony before in a deposition or in**  
 17 **trial?**  
 18 A. No.  
 19 **Q. So here's in broad terms how we'll proceed.**  
 20 **I'll be asking you a series of questions.**  
 21 **You understand that you're under oath and**  
 22 **you are sworn to tell the truth just as if you were in**  
 23 **a Court of law?**  
 24 A. Yes.  
 25 **Q. And I'll ask for a couple of understandings**

8

1 **from you.**  
 2 **First, that as you have noticed, we have a**  
 3 **court reporter writing down everything we say, so**  
 4 **please make all of your responses verbally.**  
 5 **Can you do that?**  
 6 A. Yes.  
 7 **Q. I will do my very best not to start my**  
 8 **question before you've finished your answer and I**  
 9 **would ask you the same courtesy, to wait until I**  
 10 **finish the question before you begin your answer.**  
 11 **Can you do that?**  
 12 A. Yes.  
 13 **Q. If you don't understand a question, please**  
 14 **let me know and I'll try to ask a better question.**  
 15 **If you answer my question, I will assume you**  
 16 **understood.**  
 17 **Is that fair?**  
 18 A. Yes.  
 19 **Q. We'll take breaks periodically throughout**  
 20 **the day. If you would like to take a break, please**  
 21 **let me know and I'll try to accommodate you as soon as**  
 22 **I can. I would only ask one thing from you and that**  
 23 **is, if there's a question pending, that you answer the**  
 24 **question before we take a break.**  
 25 **Do you understand?**

25

1 eight times as large as the wholesale. We were never  
2 very large in wholesale. There was a period of time  
3 when correspondent grew to approximately 40 percent of  
4 our business, which would have been in the 2009, '10,  
5 '11 time frame, in that time.

6 **Q. But before and after that it was**  
7 **substantially less?**

8 A. Correct.

9 **Q. So you were telling me about how retail**  
10 **mortgages get assigned to MI.**

11 **How do correspondent mortgages get assigned**  
12 **to MI?**

13 A. It is my understanding that the  
14 correspondent can choose the MI provider or the, or  
15 the correspondent can ask PHH to select the MI  
16 provider. So loans go down two paths.

17 **Q. And when you say it's your understanding,**  
18 **what's the basis of your understanding?**

19 A. There's a symbol in our system which is  
20 called correspondent to choose MI and based upon that  
21 symbol, I've been told the correspondent choose that  
22 MI or the, or the correspondent asked PHH to choose  
23 that MI.

24 **Q. Was there ever any financial consequence to**  
25 **the correspondent choosing one or another MI for a**

26

1 **PHH Mortgage?**

2 A. There have been price hits on our rate sheet  
3 if the correspondent chooses an MI who didn't have a  
4 systematic relationship with PHH where all the systems  
5 and protocols were set up. So it would become a more  
6 manual process.

7 **Q. And that, those providers that were set up**  
8 **that way, are those the ones who were called preferred**  
9 **providers?**

10 A. I'm not real familiar with the term  
11 preferred provider, but from a conceptual standpoint,  
12 yes.

13 **Q. So with respect to the dialer and the retail**  
14 **mortgages, in your experience what are the factors PHH**  
15 **has used to decide how the dialer is set or how**  
16 **business is allocated to a particular MI or MIs?**

17 A. The decisions on the dialer have been made  
18 based upon the counter-party strength of the MI.  
19 They've been made upon the payment history, the  
20 default payment, do they pay the claims when we need  
21 them to pay the claims. They've been based upon do we  
22 have, you know, transmissions all set up on the, you  
23 know, between the two computer systems. Those have  
24 been the driving -- oh, also, yeah, just, just those  
25 things and you want to make sure that it's balanced

27

1 between, you know, balance between the two so you have  
2 a breadth of product offering.

3 **Q. Balance between?**

4 A. Balance between the multiple MIs, whatever  
5 MIs are in the system. So the product offering of the  
6 different MIs is varied through time, so they don't  
7 all just close loans like the product offering of MI  
8 one doesn't necessarily equal the product offering of  
9 MI number two.

10 **Q. Are there any other factors you can think**  
11 **of?**

12 A. No.

13 **Q. Have those factors changed over time?**

14 A. Yes. The product offering in the old days,  
15 pre 2006, 7, wasn't quite as important because the  
16 product offerings between the MIs were very, very  
17 similar prior to that time.

18 When the market began to experience  
19 difficulties, that's when the product offerings  
20 started to diverge. So that has gained further  
21 importance more recently.

22 The counter-party strength, we've always  
23 looked at it, but it's become much more important in  
24 the recent years as some of the MIs have begun to  
25 struggle.

28

1 One other thing, I'm sorry. Sometimes the  
2 MIs, they had big marketing forces in the field and  
3 they would, they are out there selling to other  
4 correspondents and they are driving correspondents to  
5 sell loans to us, so to the extent they drove volume  
6 in to us, we, you know, they were helping us and we  
7 would choose to send more business to them.

8 **Q. So that, does that just apply to the**  
9 **correspondent channel or generally in your business?**

10 A. Mostly the correspondent channel because  
11 they really didn't drive a retail borrower to us.

12 **Q. But in terms -- I'm sorry, were you**  
13 **finished?**

14 A. Yes.

15 **Q. In terms of your priorities for allocating**  
16 **business to them, that was retail business as a result**  
17 **of these correspondent?**

18 A. Oh, now I understand. Yes. It would have  
19 been retail or correspondent business. We, we didn't  
20 distinguish so much between the two.

21 **Q. During your time at PHH or during the time**  
22 **that you've been working on MI matters, to which MIs,**  
23 **if any, has PHH sent the most business?**

24 A. At the beginning it was UGI. In 2000 or  
25 2001 we began doing business with Genworth and then it

7 (Pages 25 to 28)

29

1 was kind of a, you know, back and forth between the  
2 two as to who was getting more business in the  
3 mixture.

4 And then in mid-2006 or 7 we opened up the  
5 dialer to more entities.

6 **Q. I was going to ask you a little bit more  
7 about that a little bit later, but wanted to clarify,  
8 I think you had said UGI and that's United Guaranty?**

9 A. Yes.

10 **Q. Okay. And Genworth I understand used to be  
11 called Gemico, G-E-M-I-C-O; is that the same entity?**

12 A. I, I am not certain of how the names changed  
13 through time, but it's the same entity through time, I  
14 believe. It just was spun off.

15 **Q. Okay. So based on what you just told me  
16 about UGI at the beginning and then Genworth starting  
17 around 2000 or 2001, I take it that not all of the MIs  
18 were always on the dialer; is that correct?**

19 A. That is correct.

20 **Q. Do you know why that is?**

21 A. It's expensive to put somebody on to the  
22 dialer. It cost resources and IT and the business to  
23 program it properly to make sure that eligible loans  
24 are chosen and go in. So every time we wanted to add  
25 somebody it was a big project.

30

1 **Q. And I just wanted to make sure I understand,  
2 the dialer is, it's an algorithm or some sort of  
3 automated process?**

4 A. Yes, so there's a -- yes, basically you put  
5 in this percentage of eligible loans should go to  
6 company A, a different percentage of eligible loans  
7 should go to company B, C, et cetera, and then on an  
8 automated fashion these loans hit the system, I'm not  
9 sure of how they're randomly selected, but they would  
10 be distributed from the point of rate lock into the  
11 various, the loans that were getting MI into the  
12 various buckets.

13 **Q. Would it be possible to send a significant  
14 amount of business to an MI that was not on the  
15 dialer?**

16 A. Not, not possible because it would be  
17 incredibly manual and there was no methodology for  
18 jumping into the loans to move them one by one.

19 **Q. So it would be labor intensive?**

20 A. Very labor intensive.

21 **Q. And so costly?**

22 A. Very costly.

23 **Q. And so if, again, so that I understand what  
24 you were saying before, before about 2006, 2007, as  
25 far as you know, PHH didn't send any MI business to**

31

1 **anyone other than UGI and Genworth?**

2 A. I believe that would be the case.

3 **Q. I wanted to ask you some questions now about  
4 the captive reinsurance business and Atrium, the two  
5 Atrium entities that we discussed.**

6 A. Okay.

7 **Q. You've had some involvement with captive  
8 reinsurance at PHH; is that correct?**

9 A. Yes.

10 **Q. Over what time period?**

11 A. 2000 to 2002 and then again from 2006 to  
12 current date.

13 **Q. And so during that earlier period, I'm just  
14 trying to put this together with what you said before,  
15 who were you reporting to between 2000 and 2002?**

16 A. Joe Suter.

17 **Q. And it would be Mr. Bradfield for all of the  
18 more recent periods since '06?**

19 A. Yes.

20 **Q. Describe Atrium's business for me.**

21 A. Atrium provides reinsurance to the mortgage  
22 insurance companies and in exchange they receive a  
23 portion of the premiums that the mortgage insurance  
24 companies collect.

25 **Q. Atrium does?**

32

1 A. Yes. So Atrium provides capital and accepts  
2 risk in exchange for a portion of the premiums.

3 **Q. Is that the totality of Atrium's business?**

4 A. Atrium also invests the money that it has as  
5 capital in a variety of short-term instruments which  
6 are allowable or permissible under Atrium's  
7 contractual obligations with the MIs.

8 **Q. Do you have an understanding of what PHH's  
9 purpose was in creating I guess it was Atrium  
10 Insurance Company, initially?**

11 A. It was created prior to my coming to the  
12 company -- joining the company. I'm assuming that  
13 what the purpose was PHH, because we originated  
14 quality mortgages, good performing, well-performing  
15 mortgages and we had good systems in place to  
16 manufacture these mortgages, we could place these  
17 mortgages into -- place these mortgages with an MI  
18 company and then share in the risks and rewards of the  
19 performance of these loans over time.

20 **Q. And the current Atrium entity is Atrium  
21 Reinsurance Company; is that right?**

22 A. That's my understanding.

23 **Q. Is it, does it have a physical address  
24 somewhere, Atrium Re?**

25 A. I am not certain.

33

1 **Q. Do you know if there's an office maintained**  
 2 **for Atrium Re?**  
 3 A. I am not certain.  
 4 **Q. Do you know if Atrium Re has any employees?**  
 5 A. I am not certain. I am not an employee.  
 6 **Q. Do you know anyone who is?**  
 7 A. I'm not certain.  
 8 **Q. Okay. And I understand that there came a**  
 9 **time when around the time that the name of the company**  
 10 **changed its domicile also changed; is that right?**  
 11 A. That's my understanding.  
 12 **Q. And that was from New York State to Vermont;**  
 13 **is that right?**  
 14 A. That's my understanding, correct.  
 15 **Q. Do you have an understanding of why that**  
 16 **change was made?**  
 17 A. Yes. The change was made because Vermont  
 18 has a lot more of these captive reinsurance mechanisms  
 19 or vehicles for the mortgage industry, so they have  
 20 more expertise at the regulator level than New York  
 21 did, so that was one reason to make the change.  
 22 Another reason to make the change was at PHH  
 23 we had to do a lot of the work for Atrium through,  
 24 prior to the change and there is an outsource service  
 25 provider, I'll try to remember the name.

34

1 **Q. Is it by any chance Chartis, C-H-A-R-T-I-S?**  
 2 A. Chartis, I think that's right, and they  
 3 provided us, they were able to provide us a lot of the  
 4 outsource work we needed to maintain all of the books  
 5 and records that were necessary as opposed to having  
 6 that expertise and talent in-house at PHH.  
 7 And thirdly, the capital required to be  
 8 maintained in Atrium in New York was higher than the  
 9 capital required to be maintained in Vermont.  
 10 **Q. Do you know what the difference was?**  
 11 A. I'm not certain, but it, it, I believe it  
 12 enabled Atrium to release some capital to PHH in  
 13 dividends, in the form of dividends.  
 14 **Q. And pardon me, I think I know what the**  
 15 **answer is, but I just, I didn't ask it this way**  
 16 **before, but is it correct that you've never been a**  
 17 **director, an officer or an employee of Atrium?**  
 18 A. That is correct.  
 19 **Q. Do you see Board of Directors minutes from**  
 20 **Atrium?**  
 21 A. I have not seen Board of Directors minutes  
 22 from Atrium.  
 23 **Q. Have you ever discussed Board of Directors**  
 24 **meetings with any of the participants?**  
 25 A. People have come out of Board of Directors

35

1 meetings and have asked me questions or asked me to  
 2 perform work, but I don't know if that was discussed  
 3 at the Board meeting or not because I'm not, they're  
 4 not sharing the notes and everything else with me what  
 5 went on.  
 6 **Q. Do you remember who made such a request of**  
 7 **you?**  
 8 A. People that have asked me questions about  
 9 Atrium through time have -- there have been many. I  
 10 do not know if these people were or were not on the  
 11 Board, but I'll, generally the people that have made  
 12 the requests are Mark Danahy, Mike Bogansky, Joe  
 13 Suter, Dave Bricker, Rob Crowl. I'm not certain which  
 14 of them, if any of them, are on the Board of Atrium.  
 15 **Q. But these were all requests to you to do**  
 16 **some kind of analysis or get some kind of information**  
 17 **pertaining to Atrium?**  
 18 A. Right, so there would be a decision that  
 19 needed to be made around Atrium and they'd ask some  
 20 questions and then I would go either work with the MIs  
 21 or work with our outsource consultant, Ken Bjurstrom  
 22 from Milliman, or try to look at data in our systems  
 23 and try to extract an answer, you know, to answer the  
 24 question.  
 25 **Q. Do you know someone named James Clemons?**

36

1 A. Vaguely rings a bell, but I cannot -- no, I  
 2 don't know him.  
 3 **Q. So offhand you don't know who he is?**  
 4 A. I don't know who he is.  
 5 **Q. Okay. So you described for me Atrium's**  
 6 **business.**  
 7 **How would you characterize Atrium's business**  
 8 **strategy?**  
 9 A. Atrium's business strategy was to reinsure  
 10 loans that were properly priced at the loan level. So  
 11 if the MI premium was proper for the risk inherent in  
 12 the loan, that would be a loan that we'd want to go  
 13 into Atrium.  
 14 We, Atrium's strategy was also to make sure  
 15 that the construct of the reinsurance agreement was a  
 16 properly priced and legal and binding contract so that  
 17 the exchange of premium for the acceptance of the  
 18 corridor risk was priced to achieve the transference  
 19 opinions and also was done in such a way that Atrium  
 20 was not accepting too much risk because you could take  
 21 a ton of risk and that would pass risk transference,  
 22 you want to take just enough risk to pass risk  
 23 transference and then to invest its capital wisely and  
 24 then make loans as necessary.  
 25 **Q. With respect to, I'll ask you a little bit**



37

1 **more about this later, but the risk transference**  
 2 **opinions you're talking about are written opinions**  
 3 **issued by somebody else?**

4 A. Yes.

5 **Q. So you mentioned pricing being proper.**

6 **How did or does Atrium price its**  
 7 **reinsurance?**

8 A. Are you asking about the reinsurance  
 9 corridors and the cede it's receiving or are you  
 10 asking about the loans that Atrium is reinsuring?

11 **Q. I'm asking about the former, the structure**  
 12 **of the reinsurance.**

13 A. Okay. What Atrium would look at, you would  
 14 engage Milliman to look at the loans that were going  
 15 in, provide us an actuarial opinion, does it pass risk  
 16 transference and what, what corridors would pass risk  
 17 transference. So it was the attachment point and  
 18 detachment point proper for that premium cede Atrium  
 19 was earning and is that as good of a deal as we could  
 20 get and still pass risk transference.

21 So the strategy was to, you know, of course,  
 22 you know, business people, you want to minimize the  
 23 risk you're taking but you want to be compliant to all  
 24 the regulations to make sure that you would achieve  
 25 the passing of risk transference, that you took enough

38

1 risk for the mechanism to be viable.

2 **Q. You used some terminology which I was going**  
 3 **to ask you about later but we might as well talk about**  
 4 **it now. You talked I think about attachment points.**

5 A. Yes.

6 **Q. So that's referring to an excess-of-loss**  
 7 **reinsurance structure?**

8 A. Yes.

9 **Q. And what's the attachment point?**

10 A. The, what does the attachment mean?

11 **Q. What does that mean?**

12 A. Mean, okay. The attachment point means a  
 13 book of business is developed and let's just say it's  
 14 a course of one year. So all the loans that PHH  
 15 insured with a specific MI would be aggregated  
 16 together for a book year, say 2007. And it would then  
 17 say great, when, go figure out how much insurance  
 18 coverage was provided and how much risk the MI company  
 19 was exposed to by that grouping of loans.

20 And then that, let's say that's a million  
 21 dollars, okay. What you would then do is say, okay,  
 22 the attachment point we agreed to contractually is,  
 23 let's say it's 4 percent. So you would multiply  
 24 4 percent by the one million dollars and you'd come up  
 25 with 40,000 dollars.

39

1 When losses exceeded 40,000 dollars for that  
 2 specific grouping of loans, that's when Atrium would  
 3 begin to have to pay claims. But up and to  
 4 40,000 dollars of loss on that grouping of loans, the  
 5 MI would cover all claims.

6 **Q. And then I understand there's also a**  
 7 **detachment point?**

8 A. Correct.

9 **Q. And what's that?**

10 A. The same situation I described in the prior  
 11 commentary to develop the attachment point, if the  
 12 detachment point was, the attachment point is called  
 13 4 percent, the detachment point is called 14 percent.  
 14 That's when Atrium stops paying claims.

15 So the attachment point in our previous  
 16 example was when losses exceeded 40,000 dollars on  
 17 that group of loans, so the MI pays all losses up to  
 18 40,000 dollars. Then Atrium pays all losses between  
 19 the attachment and detachment point so when losses are  
 20 between 40,000 and 140,000 in this example, Atrium  
 21 pays all claims, the MI pays no claims.

22 And then when losses exceed the detachment  
 23 point, the MI takes back over all the claim  
 24 obligation, so Atrium is paying a corridor of claims.

25 **Q. Is there always just one corridor?**

40

1 A. In all of the agreements we have negotiated  
 2 at Atrium, there's been one corridor. And a corridor  
 3 can change year to year or between agreement and  
 4 agreement, but there's only one attachment and one  
 5 detachment. I'm unaware of any other deals.

6 May I get a break shortly?

7 **Q. Absolutely. I was just going to offer one,**  
 8 **actually, so why don't we take a 10-minute break.**

9 A. Great. Thank you.

10 (Recessed 9:56 a.m.)

11 (Reconvened 10:11 a.m.)

12 BY MR. GORDON:

13 **Q. Back on the record. And, Mr. Rosenthal, you**  
 14 **understand that you're still under oath?**

15 A. Yes.

16 **Q. I wanted to pick up where we left off. We**  
 17 **were talking about Atrium and about the reinsurance**  
 18 **business there and I wanted to ask you, has Atrium in**  
 19 **your experience done its own underwriting?**

20 A. Can you explain that a little more, please.

21 **Q. Has it done any underwriting on the**  
 22 **underlying loans that it was reinsuring?**

23 A. It's my understanding Atrium does not  
 24 underwrite loans.

25 **Q. And when was the first captive deal or**

41

1 **arrangement that Atrium entered into?**

2 A. It was before my time, I believe it was  
3 1997, 1996 time zone.

4 **Q. And do you recall when Atrium paid its first  
5 claim on any reinsurance policy?**

6 A. I believe it was around 20 -- probably 2008  
7 or 2009 it paid its first claim. I think it had some  
8 reserves built up to -- loans were defaulting, it just  
9 hadn't had to make a payment yet earlier.

10 **Q. And I asked you a little bit, we talked  
11 about the excess-of-loss structure and some of the  
12 other aspects, attachment points and detachment  
13 points; do you remember that?**

14 A. Yes.

15 **Q. Has Atrium ever had quota share reinsurance  
16 deals?**

17 A. No.

18 **Q. Do you know why not?**

19 A. We analyzed a quota share deal back in  
20 approximately 2007, 2006, 2007. We, the economics of  
21 the quota share deal were not as attractive to us as  
22 the excess-of-loss deals, so we chose to stick with  
23 the excess-of-loss deals.

24 **Q. Did you do that analysis?**

25 A. I looked at the analysis that our actuary

42

1 Milliman performed for us.

2 **Q. And do you recall why it was not as  
3 attractive as the excess-of-loss?**

4 A. I believe it required more capital, that was  
5 one reason to make it less attractive because it would  
6 have taken more capital infusions. That was pretty  
7 much the main driver.

8 **Q. So excess-of-loss requires less capital than  
9 quota share, at least the deals you were looking at?**

10 A. The deals I was looking at required less  
11 capital.

12 **Q. And with respect to Atrium's liability under  
13 the policies, is that limited to the funds in the  
14 particular captive trust as you understand it?**

15 A. So my understanding of Atrium is the -- yes,  
16 so there's a trust for each mortgage insurance captive  
17 reinsurance arrangement and the books are  
18 cross-collateralized.

19 **Q. And books are?**

20 A. Book years.

21 **Q. And my question was is it your understanding  
22 that that trust or what's in that trust constitutes  
23 all of Atrium's liability under the applicable  
24 reinsurance policy?**

25 A. That's my understanding, all the premiums

43

1 and all the capital that's in, in that trust is the  
2 exposure to which Atrium is exposed.

3 **Q. Okay. So hypothetically if a trust were  
4 exhausted by claims, Atrium's liability would be  
5 extinguished?**

6 A. If, if the capital is, if the capital falls  
7 below a certain minimum threshold, this is my  
8 understanding, if the capital falls below a certain  
9 minimum threshold, then Atrium is no longer permitted  
10 to receive its portion of the ceded premium and it  
11 could choose to put a capital infusion in to the  
12 trust, but it's not a contractual obligation that it  
13 must put a capital infusion in to the trust. But if  
14 it doesn't, it's no longer going to earn the premiums  
15 that were as part of the deal.

16 So if you chose not to put any more money in  
17 to the trust, the most it could lose was the money,  
18 all the premiums and all the capital it initially put  
19 in to the trust and all the, all the re, too.

20 **Q. And that as far as you know describes all of  
21 Atrium's captive earnings arrangements?**

22 A. Yes, that's my understanding of all similar  
23 in that fashion.

24 **Q. Who would you say are Atrium's competitors?**

25 A. I'm not sure if I classify as Atrium having

44

1 a competitor. I mean to me Atrium needs to, the way I  
2 think about a competitor is a competitor is bidding  
3 for business and Atrium is only acquiring business  
4 from PHH.

5 **Q. From PHH?**

6 A. Well, they are PHH mortgages that are being  
7 placed in, mortgage insurance is being acquired and  
8 then those loans are being placed in to the captive  
9 reinsurance. So it's not like Atrium's out there  
10 bidding on any other collateral from any other  
11 companies.

12 **Q. And they're being placed into the  
13 reinsurance by the mortgage insurance companies?**

14 A. I think that's, yes, I think that's the way  
15 it works, is the mortgage insurance -- PHH buys  
16 mortgage insurance from the mortgage insurance company  
17 and I think the mortgage insurance company puts the,  
18 does the ceding deal and the transaction with Atrium.  
19 I don't think, I'd have, I'm not certain. I don't  
20 think PHH is a partner to that deal.

21 **Q. Are you familiar with third party or  
22 non-captive reinsurance in the mortgage space?**

23 A. No, sir.

24 **Q. So you couldn't name anybody who provides  
25 that?**

45

- 1 A. Can you describe what third party or  
2 non-captive reinsurance is?
- 3 **Q. Well if a mortgage guaranty company were to  
4 go out in the market and say well I don't want to get  
5 captive or I don't want to just get captive, I want to  
6 find a reinsurance company that will reinsure some of  
7 my mortgage guaranty risk, are you familiar with that  
8 market?**
- 9 A. Not really, but I see what you're saying, is  
10 if another entity was out there willing to purchase  
11 mortgage reinsurance from an MI and they could lay off  
12 some of the risk, I'm not familiar with that.
- 13 **Q. I wanted to ask you about a couple of your  
14 colleagues. Some of them you've named already.  
15 You said with respect to Mr. Bradfield  
16 you've reported to him for about seven years --**
- 17 A. That's correct.
- 18 **Q. -- is that right?**
- 19 **And what has Mr. Bradfield's role been at  
20 PHH during that time?**
- 21 A. He's been senior vice president capital  
22 markets and he has recently been appointed treasurer  
23 at PHH.
- 24 **Q. And he is still with PHH?**
- 25 A. Yes.

46

- 1 **Q. What about Mr. Danahy, what has, what was  
2 Mr. Danahy's role at PHH?**
- 3 A. When Mark Danahy left PHH he was president  
4 of the PHH Mortgage Company. He had held different  
5 roles earlier in his career.
- 6 **Q. Do you remember roughly how long he was  
7 president of PHH Mortgage?**
- 8 A. I'm going to estimate two to three years.
- 9 **Q. And do you remember roughly when he left  
10 PHH?**
- 11 A. I'm going to estimate three years ago.
- 12 **Q. So around 2010?**
- 13 A. 2010 I'll estimate, yeah.
- 14 **Q. Okay. Have you worked with a Jeff Levine at  
15 PHH?**
- 16 A. Yes, I have.
- 17 **Q. And what, what has his role been when you've  
18 worked with him?**
- 19 A. Jeff's in charge of our pricing area, so  
20 Jeff's role is to establish the pricing that, our rate  
21 sheets that borrowers or correspondents see and sell  
22 loans to PHH under it.
- 23 **Q. Is Jeff involved at all in pricing with  
24 respect to Atrium or Reinsurance?**
- 25 A. I don't know that there's really any pricing

47

- 1 with respect to Atrium or Atrium Reinsurance. It's a,  
2 Jeff sets all prices, so whatever price is done at PHH  
3 to buy loans or close loans, Jeff's in charge of it.
- 4 **Q. Okay. Well let me ask it a bit different  
5 way then.**
- 6 **Have you worked with Mr. Levine on anything  
7 having to do with Atrium or Reinsurance?**
- 8 A. I've had conversations with Mr. Levine in  
9 respect to Atrium and Reinsurance, yes.
- 10 **Q. And he's still with PHH?**
- 11 A. Yes, he is.
- 12 **Q. Have you worked with Janice Vorndran?**
- 13 A. The name is definitely familiar. I think  
14 she's in our accounting division, but I'm not certain.
- 15 **Q. Okay.**
- 16 A. Though I know I recognize the name.
- 17 **Q. What about Mike Bogansky?**
- 18 A. Yes.
- 19 **Q. And what has Mr. Bogansky's role been when  
20 you've worked with him?**
- 21 A. Mike, Mike is now our controller and that's  
22 probably been for about the last six months and prior  
23 to that, he was in our finance division and he was a  
24 vice president in our finance division.
- 25 **Q. And what did you work with him on?**

48

- 1 A. I've come into contact with him on many  
2 topics. One of them is Atrium and discussions around  
3 the computations and the transactions and the  
4 amendments of Atrium. I've also worked with him on  
5 establishing loss reserves. We've worked together on  
6 the MSR committee, what is the value of our mortgage  
7 servicing rights. We've worked together on whenever  
8 we do a deal that requires PHH to take recourse or  
9 some sort of esoteric risk, we'll work together to  
10 make sure that, because the different type of trade  
11 and it's a little bit out of the norm, we make sure  
12 that the accounting for it is right and it's reported  
13 properly and accurately on our financial statements  
14 and in our books.
- 15 **Q. And I take it from what you said  
16 Mr. Bogansky is still with PHH?**
- 17 A. Yes, he's still there.
- 18 **Q. Okay. Have you worked with Liz Rudolph?**
- 19 A. Yes.
- 20 **Q. And what was her role when you were working  
21 with her?**
- 22 A. I still work with her. She is still with  
23 the company. Her role is now, she no longer works in  
24 product management, so from -- until about six months  
25 or a year ago she worked in product management



49

1 developing our products, communicating with our  
2 correspondents, you know, setting our products up in  
3 our system. Her team would have been the ones to work  
4 on adding new participants to the dialer.

5 She has a new role at PHH and it's a role of  
6 control and organization, so making sure that any  
7 changes in the company go through a very tight  
8 protocol to make sure that there are no unforeseen  
9 events that happen around, you know, if I push this  
10 glass one inch that way, what did it do to that cup  
11 (indicating).

12 Her job is now making sure that everything,  
13 when every change in the system anywhere, it's all  
14 known and signed off on. So we stay compliant in  
15 respects to, you know, all the mortgage rules.

16 **Q. And you mentioned the dialer which we were**  
17 **discussing before.**

18 **Is it fair to say that the dialer is how PHH**  
19 **distributes the market share among MIs?**

20 A. Yes.

21 **Q. And that MIs knew in their dealings with you**  
22 **that to get more at least borrower paid MI business**  
23 **from PHH they had to be programmed in to the dialer?**

24 A. The mortgage companies knew that for me to  
25 send them retail loans, they had, yeah, or

50

1 correspondent loans they had to be in the dialer  
2 because I had no manual method. You know, it had to  
3 be systemic with us.

4 **Q. And that was through the dialer?**

5 A. Through the dialer, right.

6 **Q. And I think you were talking about the costs**  
7 **of adding an MI to the dialer.**

8 A. Yes.

9 **Q. And those were non-trivial; is that right?**

10 A. Correct. I believe that the cost to add  
11 someone to the dialer was in the neighborhood of  
12 100,000 dollars or more.

13 **Q. Did any MI ever pay a part of those costs?**

14 A. I don't know. I am not certain. I know  
15 there was talk if it were permissible to have them pay  
16 it, but I don't ever know if it was, ended up being  
17 permissible or if anyone paid.

18 **Q. Do you remember any communications with any**  
19 **MIs about that possibility?**

20 A. Yes.

21 **Q. And who was that with?**

22 A. I can remember having conversations with I  
23 believe MGIC, perhaps RMIC on that topic. I don't  
24 think we ever, I don't think we took money from them  
25 to pay for those. I'm not certain. I did not take

51

1 money.

2 **Q. Do you recall roughly the time frame of**  
3 **those discussions?**

4 A. I'll estimate it was 2006, 2007.

5 **Q. I wanted to ask you now just turning to some**  
6 **more terminology so that I can understand it, I've**  
7 **seen the terms EA 2s and EA 3s, capital EA and a**  
8 **numeral.**

9 **Do you know what those mean?**

10 A. Yes.

11 **Q. What do they mean?**

12 A. Fannie Mae and Freddie Mac in the early  
13 2000s started classifying the quality of loans, the  
14 riskiness of borrowers based upon a wider scale.

15 So a prime loan to them might have received  
16 an approved eligible and a loan that was a little bit  
17 sketchier, either a higher LTV, a lower credit score,  
18 a high DTI, maybe the borrower had some delinquent  
19 payments in their history, Fannie Mae would classify  
20 them as EA 1, expanded approval 1, or EA 2, expanded  
21 approval 2 or EA 3 or caution.

22 So they kept going further and further down  
23 the quality grade, quality from a probability the  
24 borrower would default. And they classified those as  
25 different levels of EA and Freddie had their own

52

1 terminology for that, which was slightly different.

2 **Q. So this is Fannie Mae terminology?**

3 A. Yes. You would receive that message from  
4 the D.U. machine.

5 **Q. The which?**

6 A. D.U., delegated underwriter, designated  
7 underwriter -- desktop underwriter. Sorry. Desktop  
8 underwriter. But, yeah, Fannie Mae's engine, what you  
9 would pass to Fannie Mae's engine would be D.U. I  
10 only know it as D.U.

11 You would pass all the parameters and  
12 characteristics of the loan and it would render a  
13 decision and it would tell you these are the documents  
14 you need to collect to close the loan and sell us that  
15 loan.

16 **Q. Just so I'm clear, an EA 1 would be of**  
17 **higher quality than a EA 2 or 3; is that how it**  
18 **worked?**

19 A. In Fannie Mae's opinion, that's correct.

20 **Q. Do you know what the designation capital O,**  
21 **capital R stands for within PHH?**

22 A. I think it probably means operational  
23 reporting.

24 **Q. And I can give you a little more context, I**  
25 **can show you a document, too, if it helps, but my**

53

1 **understanding from the documents is that OR produced a**  
2 **daily dialer report?**

3 A. That would be operational reporting.

4 **Q. Okay. And did you see the daily dialer**  
5 **report or do you?**

6 A. I do not see it. I'm not a recipient of it.  
7 I would be the individual or in the group of  
8 individuals who would determine what percentage of the  
9 dialer would go to what entity.

10 From time to time if there was trouble with  
11 the dialer, maybe somebody would send me a report  
12 saying, you know, we tried to have it at 25 percent to  
13 this company and it's at 27 percent, then we have to  
14 go resolve why.

15 **Q. So would you --**

16 A. I wasn't looking at it each day, no.

17 **Q. But you'd see it from time to time?**

18 A. Only when there was a problem that needed to  
19 be resolved.

20 **Q. Just a couple of other terms. I've seen the**  
21 **term landscape applied to loans.**

22 **What does that refer to?**

23 A. Fannie Mae and PHH entered into a  
24 transaction in I'll estimate 1999 and we built the,  
25 what was called the dedicated channel for a lot of our

54

1 retail business. And so Fannie Mae built a special  
2 engine with a similar DU, desktop underwriter, and it  
3 was applied to these loans. In the -- and it was  
4 called landscape, that was the name, changing the  
5 landscape of mortgages, that was the, you know, why.

6 And then loans would go through that engine  
7 and be documented to that engine as opposed to DU.  
8 Fannie Mae would buy them from PHH directly.

9 **Q. I've seen in some spreadsheets the company**  
10 **or entity was listed as Big House Productions.**

11 **Do you know what that is?**

12 A. Yes. There was a guy named Dave Giancoli  
13 who worked in our shop who had a sense of humor and  
14 wrote some models for us and he, instead of his user  
15 name being Dave Giancoli, he listed himself as Big  
16 House Productions and I see that every now and then  
17 that are still in use. He's actually back at the  
18 company now, so.

19 **Q. I wasn't prescribing any particular**  
20 **significance to that, I was just --**

21 A. No, it's just humorous, that's all.

22 **Q. What about the term jump ball report?**

23 A. The jump ball report is, it's a report of  
24 the MI that PHH can control, so when a correspondent  
25 sent us loans and they were selecting the MI, we

55

1 couldn't control to which MI those went. So they were  
2 not jump ball. And then if it, if it came to us where  
3 we could control it, it was jump ball and those loans  
4 could be placed into the dialer to the random  
5 selection.

6 **Q. So do jump ball loans equal retail loans?**

7 A. There's another, I'm sorry, just to make  
8 absolutely sure, there's also a jump ball, and I'm not  
9 sure the document to which you're referring, but  
10 there's also a jump ball to -- as to can a loan be  
11 sold to Fannie Mae only, Freddie Mac only or either.  
12 That, too, could be named jump ball, so, depends upon  
13 which document we're looking at.

14 **Q. Let me show you something so we can clarify**  
15 **that.**

16 **So, Mr. Rosenthal, I'm passing you a**  
17 **document which has been pre-marked as Exhibit 221.**  
18 **This is a two-page document, front and back.**

19 **And I'll just note for the record this**  
20 **appears to be an E-mail thread around August of 2007,**  
21 **and why don't you go ahead and review the document in**  
22 **your own time and let me know when you've had a chance**  
23 **to do so.**

24 A. Yes, this jump ball report would have been  
25 in reference to which MI is being selected.

56

1 **Q. So the first category you were talking**  
2 **about?**

3 A. Yes.

4 **Q. Okay. You can put that aside.**

5 **What was the significance to PHH of whether**  
6 **something was jump ball or not? Did it matter?**

7 A. Yes. We would measure the quantity of loans  
8 that we could send to one MI or another and that would  
9 help drive the market share and the happiness of the  
10 MI company with us.

11 **Q. Was that the only way that mattered to you?**

12 A. Pretty much. I mean we were trying to, the  
13 MIs, their sales coverage would give us a call and  
14 say, you know, may I get more, I want more volume and  
15 we see you did X dollars of, make it up, 100 million  
16 dollars of MI last month and we only received  
17 20 million, so that's a 20 percent share and I'd say  
18 but I only could control 50 million.

19 You received 40 percent share of what I  
20 could control, I'm sorry you didn't get any of the  
21 other volume that I couldn't control, but the  
22 correspondents aren't selecting you. I don't control  
23 who the correspondents select. You should go out and  
24 market to correspondents so they pick you and then  
25 when it comes through, it goes to you.

57

1 **Q. One last term, do you know what the term**  
2 **forced business means?**

3 A. Can you give me some context around that,  
4 please.

5 **Q. Actually if you can take another look at**  
6 **Exhibit 221, that last one.**

7 A. Okay.

8 **Q. And again, take time to review it if you**  
9 **want, on the front page, 01, Ms. Rudolph's message to**  
10 **yourself and two others, the third paragraph down she**  
11 **says, and I quote, a drill should occur to analyze the**  
12 **jump ball report logic, parenthesis, as this captures**  
13 **forced business as well, unquote.**

14 **Do you have a sense of what she's referring**  
15 **to when she says forced business?**

16 A. I would think that the forced business are  
17 the ones that were selected by the correspondent  
18 because that would be forced. So in this context,  
19 it's forced to GE. I don't have a choice. The  
20 correspondent delivered it to me with GE insurance on  
21 it, so it's forced to go to GE.

22 **Q. So in that sense it was forced upon you and**  
23 **you didn't have a choice?**

24 A. It's not my choice, so when I'm responding  
25 to the quantity of loans to say UGI is getting what

58

1 percentage, I couldn't control those because it came  
2 to me with Genworth insurance.

3 **Q. So jump ball and forced business are**  
4 **mutually exclusive things?**

5 A. Yes. Yes. And they're complete, it is  
6 either jumped or it is forced.

7 **Q. Okay.**

8 A. Now you, but you also see on here, just so I  
9 want to, is the landscape.

10 **Q. This is on the back page?**

11 A. On the back page, the LDPR, LDPRF, those  
12 didn't have MI on them, so on column four and column  
13 five on this back page of the document on the bottom,  
14 LDPR and LDPRF did not have MI.

15 **Q. Was that because they were below 80 percent**  
16 **LTV?**

17 A. They were above 80 and Fannie Mae was doing,  
18 I was taking some recourse on the loans and I was not  
19 putting MI on the loans and then I'm not sure what  
20 Fannie Mae was doing with them after that.

21 **Q. What does it mean to take recourse?**

22 A. If a loan missed a payment in the first  
23 18 months and went 120 days delinquent, after it  
24 missed that payment, then I would have to buy the loan  
25 back at full value. So 100,000 dollar UPB, I would

59

1 have to buy the loan back for 100,000 dollars.

2 **Q. And because of that commitment on your part,**  
3 **you weren't required to get mortgage insurance?**

4 A. That's correct.

5 So I only say that because forced, it would  
6 be part of the force -- we didn't acquire MI on it so  
7 it was not.

8 **Q. Are you familiar with what I believe are**  
9 **called cession statements?**

10 A. Yes.

11 **Q. And what are cession statements?**

12 A. The MI companies calculate each quarter, I  
13 believe, the quantity of money that should be ceded to  
14 the mortgage reinsurer and it goes through the  
15 accounting of what loans are in the book of business,  
16 what losses have been incurred, what premiums have  
17 been received, what expenses have been incurred and it  
18 calculates out and then it compares the amounts that  
19 could or should be divided to different contractual  
20 levels and then it determines, okay, this is the  
21 payment that PHA -- sorry, I misspoke, the payment  
22 Atrium should make to the MI or the payment the MI  
23 should make to Atrium.

24 **Q. Okay. And just to be clear, this is under**  
25 **the captive reinsurance arrangements?**

60

1 A. Yes. Yes.

2 **Q. Okay. Do you see cession statements**  
3 **regularly?**

4 A. I receive them on a quarterly basis from  
5 Genworth and from UGI. I do not spend any time  
6 looking at them. I'm a recipient, but I don't look at  
7 them.

8 **Q. Why just Genworth and UGI?**

9 A. Well actually I no longer receive them from  
10 Genworth and I probably just received my last one from  
11 UGI, given that the transactions were commuted. Those  
12 are in the top of my memory.

13 I more than likely received cession  
14 statements from Radian and CMGMI multiple years ago  
15 when we still had captives, active captives with them.

16 **Q. Do you know if cession statements are**  
17 **submitted to anybody other than Atrium or PHH, like to**  
18 **regulators?**

19 A. I do not know.

20 **Q. I wanted to ask you now about, do you recall**  
21 **an RFP or an RFI that was sent by PHH to seven MI**  
22 **companies in 2006?**

23 A. Yes.

24 **Q. By the way, what does RFP mean?**

25 A. Request for proposal.

61

1 **Q. Okay. And that proposal, that request I**  
 2 **should say in 2006, were you responsible for that?**  
 3 A. Yes.  
 4 **Q. Tell me what all of your responsibilities**  
 5 **were with respect to that RFP.**  
 6 A. I was the, Rich Bradfield and the leadership  
 7 team requested that I go out and expand the MI  
 8 providers with whom we did business and arrange  
 9 captive reinsurance transactions with them if it made  
 10 sense.  
 11 So my responsibilities were to, amongst  
 12 others, you know, work with IT in the business to  
 13 expand the dialer, if necessary, negotiate the best  
 14 captive reinsurance arrangement terms, evaluate XOL or  
 15 quota share utilizing Milliman as our actuary, make  
 16 sure that anything that we did passed risk  
 17 transference and set up and establish relationships  
 18 with the, you know, best MIs to add to our dialers so  
 19 we could expand the breadth of our product offering  
 20 and optimize the business value of all the  
 21 arrangements.  
 22 **Q. And did you prepare and send written**  
 23 **requests that was actually sent to the MIs?**  
 24 A. Yes, I believe I did.  
 25 **Q. And were you the point of contact for the**

62

1 **MIs during the whole RFP process?**  
 2 A. I was the main point of contact.  
 3 **Q. Were there others that you remember from**  
 4 **PHH?**  
 5 A. I am sure that others at PHH came in touch,  
 6 communication with them, but I was the main point of  
 7 contact.  
 8 **Q. And after the RFP was complete, did you make**  
 9 **recommendations as to, for instance, how PHH should**  
 10 **direct its business to the MIs?**  
 11 A. We talked as a team and we made the  
 12 determination of which partners we wanted to pursue  
 13 at.  
 14 **Q. And who was the team?**  
 15 A. The team was, to the best of my  
 16 recollection, Rich Bradfield, Mark Danahy, Terry  
 17 Edwards, and then on a lesser extent from an  
 18 operational perspective Liz Rudolph. Those were the  
 19 main participants.  
 20 **Q. And during the period when you were engaging**  
 21 **in this RFP, were you reporting to Mr. Bradfield?**  
 22 A. Yes.  
 23 **Q. Mr. Rosenthal, I'm going to hand you a**  
 24 **document that has been pre-marked as Exhibit 205.**  
 25 **This is a two-page document, front and back, and I**

63

1 **would ask you to review the document, let me know when**  
 2 **you've had a chance to look it over.**  
 3 A. (Witness examining document).  
 4 I've reviewed it.  
 5 **Q. Okay. Do you know what this document is?**  
 6 A. I don't remember it exactly from seven years  
 7 ago, but it looks like something I would have put  
 8 together to share with the management team the  
 9 strategy that I was pursuing as I did this RFP.  
 10 **Q. So roughly when do you think this document**  
 11 **was prepared?**  
 12 A. I would estimate it was prepared in December  
 13 or early Fall of 2006.  
 14 **Q. And just to call your attention to a couple**  
 15 **of things.**  
 16 **As you look down, there's a major bullet**  
 17 **that says topics of RFP and then a bunch of sub**  
 18 **bullets --**  
 19 A. Yes.  
 20 **Q. -- do you see that?**  
 21 **There's a sub bullet, says goals, and then**  
 22 **sub to that a couple of more bullets, one of which**  
 23 **starts capital efficient; do you see where that is?**  
 24 A. Yes.  
 25 **Q. And in parenthesis it says, original risk in**

64

1 **force no longer there, how to free up capital; do you**  
 2 **see that?**  
 3 A. Yes.  
 4 **Q. Do you know what that refers to?**  
 5 A. I am guessing it refers to the following, as  
 6 loans pay off and the, pre pay, so the risk of a loan  
 7 is no longer there because either the loan is paid off  
 8 or the MI has been dropped, because MI was no longer  
 9 required once you hit a 78 LTV and the borrower had a  
 10 certain payment history, then the risk was no longer  
 11 in the book, yet we have to in, underneath these  
 12 contracts you can't dividend out the earned premiums  
 13 until a number of years have gone by.  
 14 **Q. And when you say in the book, you're**  
 15 **referring to the reinsurance book year?**  
 16 A. Yes, I am. The reinsurance book year. So a  
 17 certain quantity of time needs to pass by and other  
 18 hurdles need to be met in order to dividend out the  
 19 moneys.  
 20 So however it is possible to make it as  
 21 efficient as possible to minimize the quantity of  
 22 capital required in the reinsurance contract while  
 23 still being viable for risk transference was the goal  
 24 and objective, just to write it in such a way that it  
 25 allowed Atrium to dividend out capital as, as



65

1 optimally as possible.  
 2 **Q. Right under that do you see there's another**  
 3 **sub bullet that says accelerate dividends; do you see**  
 4 **that?**  
 5 A. Yes.  
 6 **Q. Can you explain what that means?**  
 7 A. Similar topic, more than likely repetitive  
 8 as I look at this today.  
 9 **Q. And the following bullet says stands the**  
 10 **test of time, in parentheses, self-adjusting, closed**  
 11 **parentheses; do you know what that means?**  
 12 A. Yes, that's a, that's an interesting one in  
 13 that as you put riskier loans in to a captive, the  
 14 risk transference opinion can be -- the riskier a loan  
 15 is, the higher the expected loss is on the loan, the  
 16 more times the borrower is going to come into trouble.  
 17 So the more frequently a borrower comes in trouble,  
 18 your expected losses are higher.  
 19 So if you put in a book of really rough  
 20 loans, poorer quality loans, not from an underwriting  
 21 perspective, but riskier loans, you can achieve risk  
 22 transference per Milliman, you buy taking a, either a  
 23 smaller corridor or a higher attachment point, so what  
 24 it wanted to do is make sure that as the loans were  
 25 entering the book, we couldn't control the riskiness

66

1 of loans coming in to the book, we kind of, we receive  
 2 at PHH what the market is bringing so if the loans  
 3 start being riskier, we wanted the captive to adjust  
 4 to be a riskier -- a captive based upon a riskier set  
 5 of loans. And if the loans were less risky, we wanted  
 6 the captive to adjust to be based on a less riskier  
 7 set of loans, so the attachment and detachment points  
 8 were self-adjusting so we would always be risk  
 9 transference and always be an optimal set of terms.  
 10 **Q. So that was the goal?**  
 11 A. That was the goal.  
 12 **Q. If you look a little farther down, one of**  
 13 **the hollow bullets it says thoughts on freeing up**  
 14 **capital in existing structures; do you see where that**  
 15 **is?**  
 16 A. Yes.  
 17 **Q. Does that mean existing captive structures**  
 18 **as far as you can tell?**  
 19 A. Yes.  
 20 **Q. So at this time would that have been just**  
 21 **Genworth and UGI?**  
 22 A. Yes.  
 23 **Q. And on the sub bullet to that, there's five**  
 24 **of them, but the fourth one says petition insurance**  
 25 **companies to release early; do you see that?**

67

1 A. Yes.  
 2 **Q. Do you know what that refers to?**  
 3 A. That meant contacting UGI or Genworth and  
 4 requesting from them permission to dividend early.  
 5 **Q. And finally, the third from the bottom**  
 6 **bullet in parenthesis, somebody named Marty Foster is**  
 7 **named.**  
 8 **Do you know who Marty Foster is?**  
 9 A. Yes.  
 10 **Q. And who is that?**  
 11 A. He runs our servicing division.  
 12 **Q. You can put that one aside.**  
 13 **Was there a particular precipitating**  
 14 **decision or event which caused you to put out this RFP**  
 15 **at this time?**  
 16 A. Not that I recall, other than the loans were  
 17 changing in their risk characteristics and we wanted  
 18 to make sure that the structures were adjusting and  
 19 there were some new structures in the market.  
 20 **Q. Captive structures?**  
 21 A. There were, yes, I'm sorry, there were new  
 22 captive structures being offered by the MIs in the  
 23 market that we became aware of and we wanted to make  
 24 sure we explored that.  
 25 We also wanted to add people to our dialer,

68

1 so we increased the number of MI companies with whom  
 2 we were dealing.  
 3 **Q. So add new MIs to the dialer?**  
 4 A. Correct.  
 5 **Q. Okay. Mr. Rosenthal, I'm going to hand you**  
 6 **what has been pre-marked as Exhibit 138. And if you**  
 7 **would review that document, let me know when you've**  
 8 **had a chance to review it.**  
 9 A. In depth, all the way through?  
 10 **Q. I'm going to ask you sort of generally about**  
 11 **categories in, particularly about a couple of matters**  
 12 **on the second page.**  
 13 A. Very good.  
 14 (Witness examining document).  
 15 Okay.  
 16 **Q. All right. Do you recognize this document?**  
 17 A. It looks like a document that I would have  
 18 sent to, for the request for proposal for the captive  
 19 reinsurance in addition to my providers.  
 20 **Q. And this one is addressed to Mr. Nichole?**  
 21 A. Yes.  
 22 **Q. And he, although it doesn't say, I believe**  
 23 **he's at UGI or was at that time; is that right?**  
 24 A. Yes.  
 25 **Q. If you recollect, yeah.**

17 (Pages 65 to 68)

1 **If you'd turn to the second page, under PHH**  
 2 **strategic plan, the third paragraph reads as follows,**  
 3 **currently approximately 50 percent of our retail**  
 4 **originations greater than 80 percent LTV are**  
 5 **self-insured. We currently acquire borrower paid**  
 6 **mortgage insurance on the remaining 50 percent of our**  
 7 **retail originations and all of our wholesale and**  
 8 **correspondent originations. As part of this RFP, we**  
 9 **are considering acquiring borrower paid mortgage**  
 10 **insurance on our self-insured collateral. We are also**  
 11 **open to expanding our lender funded mortgage insurance**  
 12 **product.**

13 **Did I read that correctly?**

14 A. That is accurate.

15 **Q. Does this refresh your memory about part of**  
 16 **the impetus for doing the RFP at this time?**

17 A. Yes. We were contemplating in this time  
 18 period eliminating the landscape low down-payment  
 19 premium program and possibly insuring those landscape  
 20 loans with MI.

21 **Q. And were those landscape low down-payment**  
 22 **loans that you're describing --**

23 A. It was the self-insured, I'm sorry.

24 **Q. That's what self-insured refers to?**

25 A. I didn't mean to, yes, yes, that's what

1 self-insured refers to.

2 **Q. Okay. Great.**

3 **And just briefly sort of reviewing through**  
 4 **the remainder of the document, under the requests for**  
 5 **information starting on the third page there are a**  
 6 **series of headers, corporate strength and company**  
 7 **overview, products and services, risk sharing and**  
 8 **credit enhancement alternatives, policy servicing,**  
 9 **economic and market analysis and other capabilities**  
 10 **and ancillary services.**

11 **So as far as you can recall, are those the**  
 12 **categories that you asked all of the MIs about?**

13 A. Yes.

14 **Q. Okay. And then on the last page, bates**  
 15 **number ending 2594, under time frame you request that**  
 16 **responses be sent both to PHH and to Milliman, and Ken**  
 17 **Bjurstrom in particular at Milliman.**

18 **Did you work with Mr. Bjurstrom on the RFP?**

19 A. Yes, he was doing a lot of the evaluation of  
 20 the different captive reinsurance structures for us.

21 **Q. You can put that one aside.**

22 **So half of your retail originations were**  
 23 **what you were calling self-insured at that time or up**  
 24 **to that time; is that right?**

25 A. That's what the document says.

1 **Q. Do you have any reason to believe it's**  
 2 **incorrect?**

3 A. No, I would imagine it's correct.

4 **Q. And you were potentially putting that half**  
 5 **out there for borrower paid MI?**

6 A. Yes. We had been selling, when landscape  
 7 was designed, the goal and objective of Fannie Mae was  
 8 to have it be the low down-payment premium, which is  
 9 self-insured, under this document, and Fannie Mae had  
 10 agreed to let that be borrower paid MI, which was more  
 11 industry standard from the borrower perspective.

12 We, we were always selling uphill.

13 Borrower, for a loan above 80, borrower MI was the  
 14 natural talked about thing at a, you know, with all  
 15 your neighbors, it was a normal thing. And a, you  
 16 know, any other structure was unique.

17 **Q. So consumers anticipated it?**

18 A. Right. Borrower paid MI was the expected  
 19 norm and then we would start talking about this low  
 20 down-payment premium adjustment and it wasn't the norm  
 21 in the market so you'd have to sell through it, around  
 22 it, as opposed to, you know, what, let's just go do  
 23 our typical cookie-cutter loan just like everybody  
 24 else in the industry. It's easier. There's one less  
 25 piece of information that you have to sell to the

1 borrower.

2 **Q. So through this RFP, it was potentially a**  
 3 **very large increase coming in the amount of PHH**  
 4 **business that was going to MIs, correct?**

5 A. Yes, it would have been a significant  
 6 increase.

7 **Q. And as a result of the RFP, do you recall**  
 8 **how much of this volume actually was moved to the MIs?**

9 A. I don't recall. May I look at the report  
 10 again?

11 **Q. Oh, absolutely.**

12 A. On the second page of the report it shows  
 13 that there was 2.5 billion dollars of retail. If half  
 14 of that was borrower pay, that's a billion 250, so the  
 15 lender -- or the LDPR self-insured would have been a  
 16 billion 250. So assuming that same concentration  
 17 moved forward, it would have been about a billion 250.

18 **Q. And I just want to make sure you understand**  
 19 **my question is, and if you recall, is whether that**  
 20 **actually happened in due course after the RFP?**

21 A. I, yes, I believe that we, we were permitted  
 22 by Fannie Mae to use borrower paid MI under the  
 23 landscape engine. We were also permitted to continue  
 24 with the self-insured portion of it and it would just  
 25 be whatever the salesperson sold.

73

1 But the mortgage insurance aspect of that  
2 grew and then the landscape program even offering that  
3 by 20 -- I'm guessing, 2009, went away entirely and it  
4 went all to borrower paid MI.

5 **Q. So between the time that you instituted  
6 whatever changes you made as a result of the RFP and  
7 2009, do you have an order of magnitude sense of how  
8 much moved to MI from landscape?**

9 A. I would guess half of it, but I don't, I  
10 don't remember the number. But I would guess half of  
11 it. And then by mid-2009 I believe was the year all  
12 of it went to borrower paid or mortgage insurance as  
13 opposed to landscape.

14 **Q. So that would include FHA and other things?**

15 A. Oh, we, we are still doing FHA, we continue  
16 doing FHA. No change to the Government programs. I  
17 was speaking merely of the conforming conventional  
18 business.

19 **Q. So we talked a little bit, you had mentioned  
20 Milliman and the RFP responses were directed to, both  
21 to you at PHH and to Milliman.**

22 **Can you tell me more about what Milliman's  
23 role was in the RFP process?**

24 A. We were using Milliman to perform actuarial  
25 services and estimates of what is the value of the

74

1 transaction to PHH, given the expected claims and  
2 losses that would occur and also to make sure that the  
3 price PHH was receiving for the risk PHH was accepting  
4 was fair and that it would pass risk transference.

5 So we were using Milliman for, you know,  
6 what would the results of, is it, is it permissible,  
7 does it pass risk transference and what are the  
8 expected results.

9 **Q. So I'm clear, when you say making sure that  
10 it was fair, is that the same thing as passing risk  
11 transference or is that a different consideration?**

12 A. It, let me try to explain this a different  
13 way.

14 If I said to you I'll absorb all losses and  
15 you can pay me 10 percent of the premium, that would  
16 pass risk transference. That wouldn't be fair to  
17 Atrium or PHH. We took all the risk, we're only  
18 getting a little bit of the premium. So to be fair,  
19 we wanted to make sure that what PHH was being paid  
20 was consistent with the risk PHH was accepting.

21 Passing risk transference is another similar  
22 question, but it's a different question in that we  
23 took enough risk, there is a possibility of loss and  
24 it passes risk transference. It doesn't, it can be  
25 unfair and pass risk transference. It can't be too

75

1 good and pass risk transference. For example, if I  
2 said I'll take 10 percent of the premium but I can  
3 never pay any losses, that wouldn't pass risk  
4 transference to me because I took no risk.

5 **Q. And so when you say part of their function  
6 was to make sure the transaction was fair, in some  
7 sense it was to insure that you were getting a good  
8 deal?**

9 A. Yes, and so, in two ways, the captive was  
10 structured and priced and valued properly for the risk  
11 we were taking and the loans that were entering the  
12 captive were priced fairly. So if the loan is priced  
13 fairly and the captive is priced fairly, then it was a  
14 fair transaction.

15 **Q. Did Milliman examine anything in response to  
16 the RFP, other than the captive deals that were being  
17 proposed?**

18 A. I don't remember. Most of our content was  
19 around, with Milliman was around the captive deals  
20 which were posed and the possible structures that  
21 could occur.

22 **Q. Do you have an understanding, and I want to  
23 make clear I'm just asking about your understanding,  
24 not where it may have come from, do you have an  
25 understanding of why these arrangements would have to**

76

1 **pass risk transference?**

2 A. Yes, I believe so.

3 **Q. And what's your understanding?**

4 A. My understanding is you don't want to create  
5 a fraudulent transaction whereby we would be receiving  
6 money for steering business somewhere as a kickback.

7 If we're actually taking risk in return for  
8 a premium, then it's not just guiding business because  
9 we're looking for a kickback.

10 **Q. And, Mr. Rosenthal, I'm going to pass you  
11 what has been pre-marked as Exhibit 213 and if you  
12 would take a moment to review it, let me know when  
13 you've had a chance to do so.**

14 A. (Witness examining document).

15 Okay.

16 **Q. And this appears to be an E-mail you sent to  
17 Mr. Bjurstrom on December 20th, 2006, and the subject  
18 is Genworth captive indication.**

19 **Do you know what this document is?**

20 A. It appears to be an E-mail I sent to Ken  
21 Bjurstrom looking for an opinion about a captive that  
22 Genworth not firmly offered to me but he was talking  
23 about this structure might work.

24 **Q. And do you recall at this time period,  
25 December of '06, was there a lot of back and forth**



77

1 **with the MIs about how the captive structures would**  
 2 **look or might look?**  
 3 A. Yes, yes, there was a lot of conversation  
 4 with the MIs. It was right during our request for  
 5 proposal.  
 6 **Q. And down at the bottom the next to last**  
 7 **sentence says, as you are aware, both of these options**  
 8 **are subject to outside actuarial/risk transfer**  
 9 **opinion.**  
 10 **Do you see that?**  
 11 A. Yes.  
 12 **Q. And those are the written opinions we've**  
 13 **been discussing that you're referring to there?**  
 14 A. Yes.  
 15 **Q. Have you seen those risk transfer opinions**  
 16 **or any of them?**  
 17 A. I don't recall.  
 18 **Q. Do you know who prepares them?**  
 19 A. It would be Ken Bjurstrom from Milliman.  
 20 **Q. Have you ever, have you ever heard of any**  
 21 **prepared by anybody else?**  
 22 A. Ken has a partner at Milliman and his name  
 23 is Michael Schmitz, I believe, he probably also  
 24 prepares them, but I think he prepares them for the  
 25 mortgage insurance companies. There are other

78

1 actuaries I'm sure in the industry that prepare them  
 2 as well.  
 3 I'm forgetting the name of the other company  
 4 that offered their service to me once or twice through  
 5 time but I never engaged them.  
 6 **Q. You can put that one aside.**  
 7 A. Can we get a break soon, doesn't have to be  
 8 right at this minute.  
 9 MR. GORDON: Absolutely. Right now is a  
 10 good time.  
 11 THE WITNESS: Okay. Thank you.  
 12 MR. GORDON: Take 10?  
 13 MR. SOUDERS: Yeah.  
 14 (Recessed 11:09 a.m.)  
 15 (Reconvened 11:23 a.m.)  
 16 MR. GORDON: Just one housekeeping thing,  
 17 Mr. Souders, I forget to ask you at the beginning,  
 18 you're entitled to have the entire transcript marked  
 19 as confidential if you wish to do so.  
 20 Do you wish to do so?  
 21 MR. SOUDERS: Yes.  
 22 MR. GORDON: Okay.  
 23 BY MR. GORDON:  
 24 **Q. Mr. Rosenthal, you understand you're still**  
 25 **under oath?**

79

1 A. Yes.  
 2 **Q. Okay. I'm going to hand you what has been**  
 3 **pre-marked as Exhibit 204, and if you would take a**  
 4 **moment to review that and let me know when you've had**  
 5 **a chance to do so?**  
 6 A. Okay, sir.  
 7 **Q. Do you know what this document is?**  
 8 A. This appears to be another document that I  
 9 put together to talk about the strategy that I was  
 10 going to, you know, deploy as I was going through the  
 11 RFP.  
 12 **Q. And so you, do you assume that this was**  
 13 **prepared at some point during the RFP?**  
 14 A. Can I go back and refer to that other  
 15 document we've seen?  
 16 **Q. Certainly.**  
 17 A. It's not a closed book test.  
 18 **Q. Please just let me know which one you're**  
 19 **referring to so the record is clear.**  
 20 A. I'm referring to this document, the  
 21 2011-002402 extension 205, Exhibit 205.  
 22 **Q. Okay. Exhibit 205, thank you.**  
 23 A. I'm sorry. Okay. So this was October 2006  
 24 and this is shortly there, I'm guessing shortly  
 25 thereafter, okay.

80

1 **Q. Okay. And I just wanted to ask you about a**  
 2 **couple of particular items on here.**  
 3 **The second major bullet says use leverage to**  
 4 **renegotiate captives with MIs; do you see that?**  
 5 A. Yes.  
 6 **Q. What does leverage mean there?**  
 7 A. It would mean to try to get the best deal  
 8 possible that passes the risk transference opinion.  
 9 **Q. But what is the leverage in that sense?**  
 10 A. The leverage would be we'll send you  
 11 mortgage insurance and you give us as good of a deal  
 12 as is possible.  
 13 **Q. And the second major bullet says, excuse me,**  
 14 **that was the second major bullet, the third one says**  
 15 **engage Milliman, and there's a sub bullet under there,**  
 16 **the third one says risk transference/optimization; do**  
 17 **you see that?**  
 18 A. Yes.  
 19 **Q. Do you know what optimization means there?**  
 20 A. I am going to guess that that means make  
 21 sure that the captive is structured in such a way that  
 22 it is optimal. And going back to the conversation we  
 23 had a few moments ago, if the loans became more risky,  
 24 the attachment point should increase and if the loans  
 25 became less risky, the attachment point should

81

1 decrease, but it should be the optimal  
2 attachment/detachment point for that cede that was,  
3 would pass risk transference.

4 **Q. And the major heading above that is engage  
5 Milliman, so how did Milliman fit into that analysis?**

6 A. We would ask Milliman what passes risk  
7 transference, because I don't have the ability to  
8 model that. We, we were using, utilizing Milliman for  
9 opinions of what, what structures will and won't pass  
10 transference.

11 **Q. And so we were talking a few moments ago,  
12 you said there was some back and forth about captive  
13 structures or potential captive structures with the  
14 MIs that you had during the RFP process; do you  
15 remember that?**

16 A. Yes.

17 **Q. So captive was Atrium's product, so why  
18 didn't you structure it instead of soliciting the MIs  
19 to come up with structures and then bring them to you?**

20 A. The MIs are more savvy and have done many  
21 more of these deals and know what will and won't pass  
22 risk transference and that's what they do all day  
23 long, that's their business model.

24 They had individuals at the MIs who were  
25 solely responsible for structuring captives and

82

1 determining what, not that we're relying on them for  
2 what passes risk transference, but they had a belief  
3 of what passed risk transference, so since they had  
4 the expertise, leverage their expertise to provide  
5 this to us. What are you willing to offer us, you  
6 know, what, what are you guys willing to offer us to  
7 do the deal, to do the business.

8 **Q. Did you, in dealing with the MIs, did you  
9 give them general guidelines for what you were looking  
10 for?**

11 A. We wanted to minimize the quantity of  
12 capital we were putting in to the transaction and we  
13 wanted to get the best, we wanted to pass risk  
14 transference, we wanted it to adjust based upon the  
15 characteristics of the loans as they evolve through  
16 time and change through time. So we wanted the  
17 captive to be self-adjusting. We wanted it to be  
18 simple and understandable because if it gets too  
19 esoteric and I don't really understand the models, I  
20 can't make a judgment on that's a good deal or a bad  
21 deal. So wanted to keep it simple.

22 **Q. Can you think of examples of arrangements  
23 that were, you considered to be too esoteric?**

24 A. Yes. The Triad arrangement, I didn't follow  
25 it.

83

1 **Q. That was in response to this RFP?**

2 A. Yes, so they had, as I recall, a black box  
3 that would calculate up the risk and they would say,  
4 and maybe even PMI had even a similar kind of thing,  
5 they would say our model says it was this much risk  
6 and then it would calculate and I couldn't follow how  
7 their models were calculating it.

8 So if it's not transparent and simple, I try  
9 to avoid it, and one of the reasons we've been pretty  
10 successful at PHH is we've always been pretty  
11 transparent and simple and we didn't follow and go  
12 crazy on all those products that some of the others  
13 did that made no sense and structures.

14 Done?

15 **Q. We're done with that for you now.**

16 **And I'm going to hand you what's been  
17 pre-marked as Exhibit 209.**

18 **Please take a moment to review that and let  
19 me know when you've had a chance to do so.**

20 A. (Witness examining document).

21 Okay, sir.

22 **Q. And this appears to be a three-page E-mail  
23 thread from October of 2006 between you and a couple  
24 of folks at the PMI group; is that correct?**

25 A. Yes, it appears that way.

84

1 **Q. And I want to direct your attention to,  
2 first to the first page toward the bottom, your  
3 message to Mr. Beagles, down at the very bottom it  
4 says I have also listed some additional answers in the  
5 body of the E-mail below and then if you turn the page  
6 to the message from Mr. Beagles to you, the exhibit is  
7 reproduced in color and down at the bottom if you see  
8 there are some bold red remarks. Are those your  
9 responses to Mr. Beagles?**

10 A. It appears that they would be.

11 **Q. If you look at the very bottom of that  
12 second page, Mr. Beagles' message reads there, I think  
13 that will be a good start. What we will do in the  
14 meantime is develop some thinking and methodology  
15 around the actual risk-based entry point and layer for  
16 further discussion.**

17 **Did I read that accurately?**

18 A. Yes.

19 **Q. And then in red afterwards it says,  
20 immediately after that, I think high cede, late  
21 attachment, short corridor, low capital, fast  
22 dividend.**

23 **Can you walk me through what each of those  
24 terms mean?**

25 A. Yes. I can.

109

1 **Q. And in the fourth bullet do you see, it says**  
 2 **UGI, begin to work the current capital return book**  
 3 **commutation angle with them.**  
 4 **Do you see that?**  
 5 A. Yes, I do.  
 6 **Q. So just to be clear, the UGI captive was not**  
 7 **commuted around this time frame, right?**  
 8 A. No, it was not.  
 9 **Q. Do you have a sense of what the current**  
 10 **capital return angle was?**  
 11 A. Yes. We wanted to negotiate with them that  
 12 there were many years, many book years, cohorts, if  
 13 you will, that had paid down and had experienced  
 14 minimal losses and we wanted them to return the  
 15 capital supporting those book years because there was  
 16 low chance of loss in those years.  
 17 Well we're not saying there's low chance of  
 18 loss in all the captives, those happened to be good  
 19 book years that performed well and we wanted to have  
 20 the capital, as much of the capital as possible  
 21 returned and dividended to Atrium so they could send  
 22 it to the parent company.  
 23 **Q. And what about the book commutation angle?**  
 24 A. I don't remember the book commutation angle.  
 25 I am guessing what it meant is maybe you could commute

110

1 a couple of books as opposed to the entire structure  
 2 and I don't think that that ended up being permissible  
 3 because the books are all cross-collateralized. I  
 4 think that's what that was.  
 5 **Q. Okay. You can put that one aside.**  
 6 **So with respect to capital return on those**  
 7 **early book years, over the next weeks and months you**  
 8 **actually did pursue that with UGI; isn't that right?**  
 9 A. We did. I don't recollect if it was the  
 10 next weeks and months but we did pursue that with UGI  
 11 and we were able to get some capital return from those  
 12 early book years.  
 13 I just want the record to note that at  
 14 5:17 a.m. I was working. Tell my boss.  
 15 **Q. Duly noted.**  
 16 **Again, I'm going to hand you what's been**  
 17 **pre-marked as Exhibit 149. Please let me know when**  
 18 **you've had a chance to review it.**  
 19 A. Okay, sir.  
 20 **Q. So this is a message from you to I take it**  
 21 **Dan Walker and Nick Nichole at UGI --**  
 22 A. Yes.  
 23 **Q. -- January 10th, 2007.**  
 24 **Now that you look at this, does this appear**  
 25 **to be the, related to the capital return issue we were**

111

1 **discussing in the previous document?**  
 2 A. Yes, it does.  
 3 **Q. Okay. And the second paragraph, the last**  
 4 **sentence reads, I just wanted to let you know that we**  
 5 **were on board with your suggestion and wanted to begin**  
 6 **the process.**  
 7 **Do you have any memory of what their**  
 8 **suggestion was?**  
 9 A. I'm sorry, I don't.  
 10 **Q. Okay. You can put that one aside.**  
 11 A. It was probably likely capital return or  
 12 dividend as opposed to a commutation, giving the other  
 13 doc.  
 14 **Q. So, and I apologize, let's go back to that**  
 15 **document for just one sec. That same paragraph we**  
 16 **were looking at that starts when you return, it reads**  
 17 **at the beginning, when you return, we would like to**  
 18 **begin the process of amending the Atrium contracts to**  
 19 **return the 44 million dollars of capital.**  
 20 **Do you know which contracts you were**  
 21 **referring to?**  
 22 A. I would think I would be referring to the  
 23 Atrium contracts between UGI and Atrium setting up the  
 24 captive reinsurance structure.  
 25 **Q. So I take it it was not possible for PHH to**

112

1 **just unilaterally pull the money out in a dividend?**  
 2 A. No, the contract specified that there's a  
 3 custodian or a trustee that holds the money and you  
 4 need to gain releases and permissions to move the  
 5 money.  
 6 **Q. And apparently according to this message you**  
 7 **had to amend the contracts?**  
 8 A. It looks like we had to amend the contracts  
 9 in order to have this money dividended and we  
 10 negotiated with UGI to get that accomplished because  
 11 they agreed in these book years the capital was no  
 12 longer required.  
 13 **Q. Do you remember any of the back and forth**  
 14 **that followed between UGI and PHH over this capital**  
 15 **return issue?**  
 16 A. After this time?  
 17 **Q. Following that last message.**  
 18 A. I don't specifically remember it.  
 19 **Q. Okay, Mr. Rosenthal, I'm going to hand you**  
 20 **what's been pre-marked as Exhibit 239. This is a**  
 21 **one-page document. Let me know when you've had a**  
 22 **chance to review it.**  
 23 A. (Witness examining document).  
 24 Okay.  
 25 **Q. And does this refresh your memory about some**

28 (Pages 109 to 112)

113

1 **of the discussions between you and UGI about capital**  
 2 **return?**  
 3 A. A little bit in that Dan and myself and, are  
 4 talking about, I kind of remember a spreadsheet that  
 5 walked through what was the required capital to remain  
 6 adequate in, within the reinsurance structure and what  
 7 they could release to us.  
 8 **Q. And it sounds like, if I'm reading the third**  
 9 **paragraph right, in December, that would be December**  
 10 **of 2006, I assume UGI had discussed a figure of**  
 11 **34 million but now according to the second paragraph**  
 12 **it's up to 44.9 million?**  
 13 A. Okay. That's what the document shows. Is  
 14 there a question?  
 15 **Q. There is not. If you'll indulge me for a**  
 16 **moment.**  
 17 A. Absolutely. I'm sorry.  
 18 **Q. Okay. You can put that one aside.**  
 19 **You don't recall, do you, how much PHH**  
 20 **responded with in terms of a figure, an appropriate**  
 21 **figure for the dividend, do you?**  
 22 A. I don't specifically recall. I would have  
 23 wanted as much as possible because always was looking  
 24 out for the interests of Atrium to, you know, extract  
 25 as much capital as possible from the structure and

114

1 still be within the, you know, agreement and  
 2 acceptability of the contracts to pass risk  
 3 transference and to support what was necessary for the  
 4 agencies and the MIs.  
 5 **Q. Now I'm going to hand you what's been**  
 6 **pre-marked as Exhibit 237. This is a two-page**  
 7 **document.**  
 8 **Let me know when you've had a chance to**  
 9 **review it.**  
 10 A. (Witness examining document).  
 11 Okay.  
 12 **Q. So this is your response to Mr. Walker's**  
 13 **message on top?**  
 14 A. It appears it is.  
 15 **Q. And does this message, I direct your**  
 16 **attention to your third paragraph, does it refresh**  
 17 **your memory about what PHH's position was about the**  
 18 **appropriate dividend?**  
 19 A. Yes. I do have memory now of looking at the  
 20 analytics they performed and then noticing that the  
 21 book years prior to 1997 were now finished. And my  
 22 understanding was there is no more risk on those  
 23 because Atrium, I believe it was a 10-year term and  
 24 then after the 10 years Atrium steps out of the way  
 25 and no longer receives premiums and no longer has

115

1 risk. So there's a little bit of discrepancy as to  
 2 when -- not discrepancy, wrong word.  
 3 When a claim begins, I think if a claim  
 4 begins in the ninth year, tenth month and goes  
 5 delinquent, it can bleed longer than 10, but in  
 6 general at the 10 year point you stop earning the  
 7 premiums, you stop having the risk and then the  
 8 capital should be returned. So I don't know that, as  
 9 I looked at it, it looked like capital was still being  
 10 held.  
 11 My review of the spreadsheet they shared was  
 12 we shouldn't have to hold that capital and when I  
 13 walked through his analytics, I think I noticed that  
 14 maybe he missed a little bit and we were possibly  
 15 entitled to a little more.  
 16 **Q. So when you say the capital should be**  
 17 **returned for those older book years?**  
 18 A. It was.  
 19 **Q. That's not the way the current, the**  
 20 **contract, the agreement as you understand it with UGI**  
 21 **provided for at that time; isn't that right?**  
 22 A. No, I think that the contract did provide  
 23 for that and perhaps the analysts who were doing it  
 24 just didn't return it, this calculated spreadsheet. I  
 25 believe the contract permitted that return at that

116

1 time and I just think that the calculation that was  
 2 performed omitted this fact that it should have  
 3 returned it.  
 4 **Q. Okay. You can put that one aside.**  
 5 A. I don't think I was trying to amend the  
 6 contract on that piece.  
 7 **Q. By the way, when you were talking about**  
 8 **returning capital, can you just explain to me what you**  
 9 **mean by that?**  
 10 **What you mean by capital, in other words,**  
 11 **that's being returned?**  
 12 A. Okay. The trust has money held in it. The  
 13 trust cannot dividend any money out of it unless it's  
 14 granted authority by the MI. So the trustee needs to  
 15 be given the direction from UGI to send to Atrium  
 16 money that would not be encumbered by the trust.  
 17 So the return of capital could be just a  
 18 release saying, yeah, you can sell the securities that  
 19 are in there or you can release the cash in there  
 20 Mr. or Mrs. Trustee and give that back to Atrium and  
 21 take it out of our trust that we hold to our benefit,  
 22 and our benefit being UGI.  
 23 **Q. And when you're, you're talking about**  
 24 **getting authority from the MI for a dividend, that's**  
 25 **your understanding of all Atrium's captive**



117

1 arrangements, or are you specifically talking about  
 2 UGI?  
 3 A. Yes, there is a separate trust for each of  
 4 the captive arrangements and then each MI would have  
 5 to grant permission and authority to remove or  
 6 dividend any moneys out of it so the trustee hangs on  
 7 to all the capital and money until they get the, that  
 8 express written consent, guidance that it's okay to be  
 9 extracted.  
 10 **Q. And I think when you were referring to**  
 11 **taking capital out of the trust, you referred to it as**  
 12 **PHH's capital?**  
 13 A. It would have been Atrium's capital and then  
 14 Atrium, so Atrium has many trusts and the trusts have  
 15 encumbered capital, or money or securities. And then  
 16 if they're released to an Atrium parent, now they're  
 17 unincumbered and you just need to get the permission  
 18 of the regulator, the insurance regulator to have that  
 19 dividend back to the parent PHH.  
 20 So once the money is out of the trust and in  
 21 Atrium, then you petition the insurance regulator to  
 22 permit PHH to extract that unincumbered capital out of  
 23 Atrium.  
 24 **Q. Okay. And with respect to the capital**  
 25 **return issue that you were dealing with Mr. Walker and**

118

1 **Mr. Nichole on, during this same period in January of,**  
 2 **what was it, 2007, you were also negotiating with UGI**  
 3 **regarding the terms of their captive or perspective**  
 4 **captive; is that right?**  
 5 A. I believe that's consistent with the dates  
 6 you've shown me.  
 7 **Q. I'm going to hand you what's been pre-marked**  
 8 **as Exhibit 238. This is a multi-page document.**  
 9 **Please let me know when you've had a chance to review**  
 10 **it.**  
 11 A. (Witness examining document).  
 12 Okay, I've reviewed the document.  
 13 **Q. And this appears to be an E-mail thread that**  
 14 **started I think in December of 2006 and then concludes**  
 15 **with some messages on January 16th, 2007. And I just**  
 16 **wanted to ask you about your message to Mr. Nichole in**  
 17 **the middle of the first page, 9:54 a.m. on the 16th.**  
 18 **At the top of that message it says the**  
 19 **request would be to add 50 BPS to every number if you**  
 20 **can. That would make you competitive against some of**  
 21 **the other levels that I am seeing.**  
 22 **First of all, what's 50 BPS?**  
 23 A. One half of one percent.  
 24 **Q. So that's basis points?**  
 25 A. 50 basis points.

119

1 **Q. Can you explain to me what that would make**  
 2 **you competitive is referring to?**  
 3 A. So this is in the time frame when we were  
 4 evaluating the other captive reinsurance alternatives  
 5 some of the other providers were offering and they had  
 6 come up with a variable captive structure which  
 7 varied, the attachment point would vary based upon the  
 8 riskiness of the loans.  
 9 The offers that the others had made to me  
 10 must, and I don't see it here, but must have had some  
 11 higher attachment points for the construct we were  
 12 talking about in the reinsurance transaction and this  
 13 is my telling Nick that his offer to us was less  
 14 competitive, less compelling. The attachment point  
 15 was lower for the same cede than what some of his  
 16 competitors were sharing with us.  
 17 **Q. So you're --**  
 18 A. So Atrium would be taking, Atrium would be  
 19 accepting risk earlier than the competitors were  
 20 having Atrium accept risk.  
 21 **Q. So in a sense you're asking him to sharpen**  
 22 **his pencil?**  
 23 A. Exactly, said much more simply.  
 24 **Q. You can put that one aside.**  
 25 **So returning to the capital return issue, do**

120

1 **you recall whether you did, in fact, take a capital**  
 2 **dividend from UGI in 2007?**  
 3 A. I don't recall the date, but I do know that  
 4 we were able to get a dividend from UGI.  
 5 **Q. Do you remember roughly how much that**  
 6 **dividend was?**  
 7 A. It was in the ball park of the 40 to  
 8 50 million dollar range, but it, but again, that's not  
 9 a number that's sticking in my head.  
 10 **Q. And, Mr. Rosenthal, I'm going to hand you**  
 11 **what's been pre-marked as Exhibit 240, this is a**  
 12 **three-page document. Please let me know when you've**  
 13 **had a chance to review it.**  
 14 A. (Witness examining document).  
 15 I have reviewed this document.  
 16 **Q. Okay. And this is an E-mail thread from**  
 17 **March of, March 2nd of 2007.**  
 18 **Does this refresh your memory about what the**  
 19 **exact amount of the dividend was?**  
 20 A. It appears as though it was 52,125,000 and  
 21 change.  
 22 **Q. Now we talked before about the way the trust**  
 23 **functions in the captive arrangements and I just**  
 24 **wanted to get clear, it's your understanding that once**  
 25 **that figure, that amount, the 52 million dollars and**

121

1 **change was removed from the trust, it was no longer**  
 2 **available to pay Atrium's claims to UGI?**  
 3 A. That's my understanding.  
 4 MR. GORDON: Okay. You can put that aside  
 5 and why don't we break for lunch now.  
 6 MR. SOUDERS: Good.  
 7 MR. GORDON: Off the record.  
 8 (Lunch Recess 12:34 p.m.)  
 9 (Reconvened 1:28 p.m.)  
 10 BY MR. GORDON:  
 11 **Q. Back on the record and, Mr. Rosenthal, just**  
 12 **reminding you that you're under oath?**  
 13 A. Yes.  
 14 **Q. We talked earlier about credit scores in**  
 15 **relation to mortgages.**  
 16 **Do you recall a time in 2006 when PHH**  
 17 **decided it would like to stop reinsuring loans with**  
 18 **borrower credit scores under 600?**  
 19 A. Yes, I remember.  
 20 **Q. Tell me the reasons why PHH wanted to make**  
 21 **that change.**  
 22 A. We wanted, PHH wanted to make that change  
 23 because we did not believe that the mortgage insurance  
 24 companies were pricing those borrowers correctly. In  
 25 order for a reinsurance vehicle, or an MI insurer to

122

1 expect to make money and make, have a good trade  
 2 within their structure, the price to the borrower has  
 3 to be proper for the risk in the borrower.  
 4 And we thought that Fannie and Freddie were  
 5 making decisions on borrowers which were too  
 6 permissive, too much risk and the mortgage insurers  
 7 were not pricing those borrowers correctly, so we  
 8 chose to try to eliminate those customers from the  
 9 reinsurance transaction by putting a threshold of  
 10 less -- wanted to keep it simple, we didn't want to  
 11 get very layered with the risk or anything like that  
 12 and make very hard rules, but we basically said less  
 13 than a certain credit score, eliminate them from the  
 14 reinsurance transactions so we don't accept the risk.  
 15 Because in order for a reinsurance structure to be  
 16 properly priced and good business going in and, you  
 17 know, we hope it will be profitable, you'd have to  
 18 have a borrower priced properly and the reinsurance  
 19 vehicle itself priced properly.  
 20 **Q. Were there any other reasons that you**  
 21 **recall?**  
 22 A. No, that was it. We continued doing those  
 23 loans at PHH, we just didn't do them in the  
 24 reinsurance structure.  
 25 **Q. And when you sought to make this change in**

123

1 **2006, that involved both UGI and Genworth; is that**  
 2 **right?**  
 3 A. It involved both. I remember it involved  
 4 both UGI and Genworth and I think Radian, too.  
 5 **Q. And once you decided that, okay, we don't**  
 6 **want to reinsure these sub 600 loans anymore, could**  
 7 **you just stop doing it?**  
 8 A. We had to negotiate with the mortgage  
 9 insurance companies to say here are all the loans  
 10 we're doing and we want to carve these loans out of  
 11 the transaction but still do them with you. So we had  
 12 to negotiate that and then we also had to go and talk  
 13 to our actuarial consultant to make sure when those  
 14 loans will remove that the remaining loans in the  
 15 reinsurance deal would still pass risk transference.  
 16 **Q. And was that Milliman?**  
 17 A. Yes.  
 18 **Q. And in the event as things turned out, in**  
 19 **other words, did both you, Genworth and UGI agree to**  
 20 **modify the deals in this way?**  
 21 A. Yes, they both agreed to eliminate those  
 22 loans from entering the reinsurance structure and  
 23 continue to provide captive reinsurance for the -- or  
 24 continue to allow us to provide captive reinsurance  
 25 for the residual.

124

1 **Q. And did they both amend their agreements in**  
 2 **order to do that?**  
 3 A. I think that there was both an amendment  
 4 done to permit that at that time, yes. They both --  
 5 yes.  
 6 **Q. So you sought to remove the sub 600 loans**  
 7 **from the captive, right?**  
 8 A. Yes.  
 9 **Q. What did Genworth and UGI get in return?**  
 10 A. They continued to get Atrium to reinsure the  
 11 residual loans with the captive and they continued to  
 12 get business from PHH, but, no, that would be all the  
 13 economics that happened.  
 14 **Q. And did there come a time in early 2008 when**  
 15 **PHH sought not to reinsure some other loans, those**  
 16 **with FICO scores between 600 and 640?**  
 17 A. I don't remember that.  
 18 **Q. Mr. Rosenthal, I'm going to hand you what's**  
 19 **been pre-marked as Exhibit 224. Let me know when**  
 20 **you've had a chance to review it.**  
 21 A. (Witness examining document).  
 22 Okay, I've read it.  
 23 **Q. And this is an E-mail from you to**  
 24 **Mr. Bradfield and Mr. Danahy on February 22nd, 2008.**  
 25 **The first line is per our conversation**

125

1 yesterday, UGI won't let us kill the A minus  
2 loans/less than 600 -- excuse me, greater than 600,  
3 less than 640 loans out of our captive.

4 First of all, am I reading that right, that  
5 that's referring to FICO scores or credit scores  
6 between 600 and 640?

7 A. That's correct.

8 Q. Does this refresh your memory about this  
9 issue?

10 A. I don't remember it, but it appears that I  
11 wrote this E-mail to them to talk about this group of  
12 loans.

13 Q. Do you remember with UGI or anyone else  
14 eliminating loans in this category from the captive?

15 A. Apparently, I'm sorry, apparently I tried to  
16 eliminate these loans and it doesn't appear that we  
17 were able to do so from the captives. I don't  
18 recollect eliminating them with anyone else, either.

19 Q. Okay. And you have two scenarios with  
20 headers in this message, the first one is MI provider  
21 addition, parenthesis, dialer addition, closed  
22 parenthesis, thought and three bullets, added MI  
23 provider to the dialers, right rules that move all of  
24 this business to them and don't open up a captive with  
25 them.

126

1 Reading this now, do you have a sense of why  
2 you proposed that that way?

3 A. Yeah. If the objective was to eliminate the  
4 A minus loans between 600 and 640 from our captive  
5 reinsurance transaction, a method of doing so as  
6 opposed to having continuing to write them with UGI  
7 and just not reinsuring them, that would be one method  
8 which is the top discussed. The second method could  
9 be the creative method which would be if we added an  
10 MI provider to the dialer and we steered the 600 to  
11 640 business via a rule in the dialer to them and we  
12 don't sign up a captive with them, we would have  
13 achieved our objective of not having this type of  
14 collateral in the UGI captive because UGI wasn't  
15 insuring these loans.

16 So I can see how that would have creatively  
17 gotten us to accomplish the objective.

18 Q. You can put that one aside.

19 And I wanted just for a moment to go back to  
20 the subject we were discussing before lunch about the  
21 capital return in dividend with UGI.

22 A. Okay.

23 Q. Do you remember that discussion?

24 A. It was the 52 million dollar return?

25 Q. That's the one. You remember that

127

1 discussion?

2 A. Yes.

3 Q. Okay.

4 A. I'm sorry, yes.

5 Q. So is it, is it your understanding that in  
6 order to get that 52 million dollar return in early  
7 2007, you and, PHH and -- or rather Atrium and UGI  
8 modified their reinsurance agreement?

9 A. We needed to agree that they would return  
10 that and yes, we would have needed to modify our  
11 insurance agreement to permit us to dividend out that  
12 money if it was a change in the agreement.

13 Q. So you got the dividend more or less that  
14 you were looking for?

15 A. Yes.

16 Q. And what did UGI get?

17 A. UGI agreed that the capital within the  
18 structure was sufficient to support the remaining risk  
19 in the transaction and permitted us to withdraw it. I  
20 don't know that UGI got anything else.

21 Q. We've looked at a couple of documents from  
22 2008 and I just wanted to ask you some questions about  
23 the financial crisis and the period leading up to it.

24 Generally how would you characterize the  
25 state of PHH's mortgage business in 2006?

128

1 A. I don't have in front of me, the volumes by  
2 year and vintage. I recollect, I mean, and dates kind  
3 of blur, but I recollect that 2006 was pre-crisis.  
4 That was my recollection, that the crisis began in  
5 2007.

6 Am I accurate with that assessment, or  
7 you're looking for me to respond to this, I'm sorry?

8 I think then the crisis began, there was a  
9 period of time in 2006 or 2007 when the MIs began  
10 constricting their underwriting guidelines and they  
11 began not honoring some of their pipeline locks. If I  
12 can look at a document or two, that would help refresh  
13 my timeline.

14 Q. By all means, take your time.

15 A. Okay.

16 Okay. So 2006 was the time of a purchase  
17 focus I sort of remember. The crisis had not yet hit  
18 in 2006, from some of these documents. It looks like  
19 it hit in 2007.

20 So in 2006 it was moving to a purchase  
21 market and, you know, PHH was looking to do as much  
22 business and volume as possible, always looking to  
23 grow and looking to grow in our Realogy business and  
24 our private label business and expand in our retail  
25 presence.



129

1 **Q. What was the first term you used, Realogy?**

2 A. Realogy, yes. Realogy is a, when Cendant  
3 spun off PHH Mortgage, it also spun off a company  
4 called Realogy and Realogy contained, it's NRT,  
5 Century 21 and ERA, Coldwell-Banker, those, it's all  
6 the franchise locations and the company-owned stores  
7 and there's an agreement between those company-owned  
8 stores and PHH Mortgage to, there's a partnership  
9 where PHH Mortgage I believe owns 50.1 or 51 percent  
10 of this partnership and Realogy owns the other  
11 49 percent.

12 And loans are, you know, loans are  
13 originated and closed in that entity and sold, some of  
14 those loans are sold to PHH and some are sold to the  
15 market.

16 **Q. And a moment ago you used the phrase**  
17 **purchase business to characterize your business in**  
18 **2006.**

19 **Can you define what that is?**

20 A. Purchase money mortgages, it's loans where  
21 borrowers are buying houses as opposed to refinancing  
22 their existing loan.

23 **Q. So in other words, that was a predominant**  
24 **kind of mortgage you were dealing with?**

25 A. I believe so.

130

1 **Q. And I'm not trying to, you know, test the**  
2 **details of your memory, but I assume at some point you**  
3 **started to see different patterns with respect to**  
4 **defaults and things of that sort? Did that happen?**

5 A. We started seeing patterns where the market  
6 was being more and more permissive with what was  
7 willing to be closed.

8 So the guidelines of what could alone be, it  
9 was becoming more and more permissive, led by Fannie  
10 and Freddie, also led by a lot of the structures  
11 available in the marketplace and some of the alt A and  
12 sub prime business. So underwriting was getting a  
13 little looser, quality was going down. I don't know  
14 if defaults had begun occurring yet.

15 **Q. In what time frame?**

16 A. 2006.

17 **Q. Okay.**

18 A. But the book was becoming riskier.

19 **Q. Your book?**

20 A. Our book and the market in general.

21 **Q. Do you recall how that changed in 2007,**  
22 **directionally?**

23 A. I don't recollect if the crisis and  
24 meltdown, sub prime meltdown occurred in 2007 or 2008.  
25 It all blends together when you're having fun, but I

131

1 think it was 2008, so I think it just continued being  
2 more and more permissive and you started to see some  
3 delinquencies, but it had not yet reached epic  
4 proportions.

5 **Q. And what would you say the effect of the**  
6 **crisis was on the reinsurance business on Atrium?**

7 A. When the, like in 2008 or 9 when the  
8 defaults -- okay.

9 Clearly Atrium, you know, it began to  
10 experience higher and higher delinquencies and higher  
11 and higher defaults and began reserving for losses  
12 that were going to be forthcoming in the future.

13 About every, I've been in this business  
14 since 1991, I believe, and I think I've seen like  
15 three crises now. About every ten years it seems that  
16 another crisis comes through. In the '80s it was the  
17 Houston, Dallas, crisis. Then there was the Citi  
18 Group, alt A crisis in the early '90s I believe. And  
19 the late '90s you had long-term capital crises and  
20 now, about every 10 years there's another crises that  
21 seems to come along and now this crises comes along.

22 And you just saw a lot of borrowers unable  
23 to make their payments and begin defaulting, going  
24 delinquent on their loans and where in the past they  
25 had always protected their home and no matter what

132

1 they always made that mortgage payment; what you  
2 started seeing was people stopped paying on their  
3 credit cards or cars and -- I'm sorry, they stopped  
4 making their mortgage payment and they kept paying on  
5 their credit cards or cars, so they kind of switched  
6 their prioritization of which debt do I pay, which is  
7 very interesting.

8 Did I get your question?

9 **Q. I think so.**

10 A. Okay.

11 **Q. There's a term also I don't think we've used**  
12 **it today and I wanted to see if you could define it**  
13 **for me, are you familiar with the term deep cede in**  
14 **the reinsurance context?**

15 A. My understanding of a deep cede captive is  
16 the 4, 10, 40 structure which PHH has, had.

17 **Q. And 4, 10, 40 refers to the attachment**  
18 **point, the size of the risk band and 40 would be the**  
19 **cede level?**

20 A. Correct.

21 **Q. So a keep cede would be around 40 percent**  
22 **net?**

23 A. Correct.

24 **Q. Do you recall Freddie Mac deciding in early**  
25 **2008 that it was going to stop accepting deep cede**

133

1 loans?  
 2 A. Yes.  
 3 **Q. And it's my understanding that Freddie**  
 4 **wouldn't accept loans with more than 25 percent**  
 5 **captive ceding?**  
 6 A. That's my, I remember that, too.  
 7 **Q. What affect did have on the market?**  
 8 A. Which market?  
 9 **Q. On the mortgage market or on the captive**  
 10 **market?**  
 11 A. Okay. So on the mortgage market, I'm not --  
 12 well on the mortgage market I don't know that it had  
 13 any affect. I know mortgage insurance companies  
 14 decided they would not offer deep cede arrangements  
 15 anymore, even if the lender wanted to sell all their  
 16 loans to Fannie Mae because Freddie Mac made the claim  
 17 that if the mortgage insurance company offered deep  
 18 cede, they weren't buying any business from the  
 19 mortgage insurer, period.  
 20 So the mortgage insurers weren't willing to  
 21 offer any longer even for a company who didn't care to  
 22 sell loans to Freddie Mac. So the deep cede died  
 23 almost immediately, or as soon as announced.  
 24 **Q. And do you understand what Freddie's reasons**  
 25 **were when they put this cap on of 25 percent?**

134

1 A. I can speculate if you'd like me to, but I  
 2 don't know what was going on in Freddie's mind.  
 3 **Q. You don't recall reading publications or**  
 4 **other things from Freddie about this or statements?**  
 5 A. I read statements. I read statements. I  
 6 don't know if they were Freddie's statements, but I  
 7 read statements from people in the industry talking  
 8 about how Freddie Mac wanted to make sure that the  
 9 mortgage insurance companies became healthy. They  
 10 wanted to, you know, make all the premiums of new  
 11 business go to them so they could pay their old  
 12 claims.  
 13 But I don't know if that was industry banter  
 14 or Freddie articles or I don't remember who wrote that  
 15 kind of stuff.  
 16 **Q. Mr. Rosenthal, I'm handing you what's been**  
 17 **pre-marked as Exhibit 154. This is a two-page**  
 18 **document. Please let me know when you've had a chance**  
 19 **to review it.**  
 20 A. (Witness examining document).  
 21 Okay, I've read it.  
 22 **Q. And this appears to be your message to Mr.**  
 23 **Walker on February 14th, 2008, and his response. The**  
 24 **subject is deep cedes.**  
 25 **In Mr. Walker's response on the first page,**

135

1 **the last paragraph starts, I think some MI companies**  
 2 **argued with Freddie to preserve at least a 25 percent**  
 3 **cede for captives.**  
 4 **Was that your impression as well; in other**  
 5 **words, before you got this message?**  
 6 A. My impression's always been that the  
 7 mortgage insurers like the captives because they took  
 8 some of the risk off of the -- I'm sorry, mortgage  
 9 insurers, yeah, because they took some of the risk off  
 10 a mortgage insurer. So it doesn't surprise me to see  
 11 them wanting to keep a 25 percent captive to help  
 12 provide capital to the mortgage insurer.  
 13 **Q. What about at this particular moment, do you**  
 14 **see any particular rationale in February of 2008?**  
 15 A. Sure, because in a crisis, and as is  
 16 evidenced by the next few years, the industry needs  
 17 capital, so reinsurance mechanisms provide exactly  
 18 that, they provide more capital to the mortgage  
 19 insurers.  
 20 So it's not surprising to me that the  
 21 industry wants more capital, which they're getting via  
 22 these, you know, reinsurance structures.  
 23 **Q. Do you think they wanted also to off load**  
 24 **risk at this point?**  
 25 A. Sure. I think so. It doesn't surprise me

136

1 to want more capital and the industry over the past  
 2 few years has continued to try to raise more capital  
 3 so that I think that's all consistent.  
 4 **Q. You've talked a little bit about the effect**  
 5 **of the financial crisis on the MIs and maybe you've**  
 6 **alluded to this before, but wasn't one effect a big**  
 7 **change in the kind of loans that the MIs would insure?**  
 8 A. The, before the crisis the MIs were becoming  
 9 more and more permissive and then after the crisis the  
 10 MIs became more and more constrictive, constrained.  
 11 **Q. With respect to the kinds of loans they**  
 12 **would accept?**  
 13 A. Yes. Yes. With the loan characteristics.  
 14 The higher credit scores, lower LTVs, they varied it  
 15 by State, you know, lower DTIs. Anything that has  
 16 risk. They were trying to eliminate some of the risk.  
 17 **Q. What's DTIs?**  
 18 A. Debt to income ratio, so taking the  
 19 borrower's monthly payment of all their debt and  
 20 dividing it by their monthly income and calculating a  
 21 ratio and if that number gets too high, then a  
 22 borrower is less likely to be able to meet other  
 23 obligations and eventually default.  
 24 **Q. You can put that one aside.**  
 25 **Now it's my understanding and I think you**

# EXHIBIT 6

**ATRIUM INSURANCE CORPORATION**  
**ANALYSIS OF EXCESS-OF-LOSS**  
**REINSURANCE PROGRAM - 40% NET PREMIUM FOR**  
**UNITED GUARANTY RESIDENTIAL INSURANCE COMPANY**

Prepared By: Kenneth A. Bjurstrom  
Financial Consultant

Michael C. Schmitz, F.C.A.S., M.A.A.A.  
Consulting Actuary

Milliman, Inc.  
Brookfield, Wisconsin  
(262) 784-2250

September 21, 2005

MILLIMAN

CONFIDENTIAL  
PHH BOGANSKY CFPB 019335  
CFPB-PHH-00112442

**ATRIUM INSURANCE CORPORATION**  
**ANALYSIS OF EXCESS-OF-LOSS**  
**REINSURANCE PROGRAM - 40% NET PREMIUM FOR**  
**UNITED GUARANTY RESIDENTIAL INSURANCE COMPANY**

**TABLE OF CONTENTS**

<i>Section</i>	<i>Page</i>
INTRODUCTION .....	1
PERMISSIBILITY OF LENDER CAPTIVE REINSURANCE ARRANGEMENTS.....	2
DESCRIPTION OF THE REINSURANCE STRUCTURE .....	7
SUMMARY AND CONCLUSIONS.....	10
TRANSFER OF RISK ANALYSIS .....	11
COMPENSATION COMMENSURATE WITH THE RISK ANALYSIS.....	15
QUALIFICATIONS AND LIMITATIONS.....	20
LIMITED DISTRIBUTION OF RESULTS.....	22

MILLIMAN

## ATRIUM INSURANCE CORPORATION

### ANALYSIS OF EXCESS-OF-LOSS REINSURANCE PROGRAM - 40% NET PREMIUM FOR UNITED GUARANTY RESIDENTIAL INSURANCE COMPANY

#### INTRODUCTION

Mortgage insurance protects an investor holding a mortgage loan against default by the mortgagor. Banks and mortgage lenders such as PHH Corporation (PHH) generally require that borrowers obtain mortgage insurance from third-party mortgage insurers on low down payment loans. These same banks and mortgage lenders reinsure mortgage insurance risk by operating insurance companies and assuming reinsurance business from a primary insurer. Under the proposed structure, Atrium Insurance Corporation (Atrium) will enter into an excess- of-loss reinsurance agreement with United Guaranty Residential Insurance Company (UGRIC). UGRIC issues mortgage insurance on mortgage loans originated or purchased by affiliate lenders of Atrium. Atrium is therefore agreeing to accept from UGRIC a portion of the risk of default in return for a share of the premium paid.

Milliman, Inc. (Milliman) has been retained by PHH to independently assess the likelihood that a particular mortgage reinsurance structure with UGRIC would meet two tests specified in the August 6, 1997 letter of the Department of Housing and Urban Development with respect to compliance of captive mortgage reinsurance arrangements with the Real Estate Settlement Procedures Act. Although Atrium is not a captive insurance company, its relationship to PHH as an insurance company subsidiary lends itself to be held to the same captive requirements set forth by the Department of Housing and Urban Development. It is on the basis of this structural similarity that Milliman develops its opinion.

MILLIMAN

- 2 -

**PERMISSIBILITY OF LENDER CAPTIVE REINSURANCE ARRANGEMENTS**

On August 6, 1997 the Department of Housing and Urban Development (the "Department") issued a letter (the "HUD Letter") detailing the facts concerning captive reinsurance programs, relevant law, and how the Department will scrutinize lender captive reinsurance arrangements to determine whether any specific captive reinsurance program is permissible under the Real Estate Settlement Procedures Act ("RESPA"), specifically paragraph 8 (c) (2) of RESPA, 12 U.S.C. & 2607 (c) (2). For reasons set forth in the HUD Letter, the Department concluded that, so long as payments for reinsurance arrangements are solely "payments for goods or services actually performed," these arrangements are permissible under RESPA. We understand that you are familiar with the HUD Letter, and we have attached a copy of the letter to this report (Attachment A).

For reasons set forth in the HUD Letter, the Department's view of captive reinsurance is that the arrangements are permissible under RESPA if the payments to the reinsurer: (1) are for reinsurance services actually furnished or for services performed and (2) are bona fide compensation that does not exceed the value of such services. Where the Department scrutinizes a captive reinsurance arrangement, the letter states that the Department will apply the following two-part test to determine if the arrangement complies with RESPA:

- 1) Determine whether reinsurance is actually being provided in return for the compensation (Section II (B) (1) of the HUD Letter); and
- 2) Determine whether the compensation exceeds the value of the reinsurance (Section II (B) (2) of the HUD Letter).

MILLIMAN



- 3 -

To facilitate its analysis, the Department may use information obtained from the lender, the primary insurer, the captive reinsurer, or other sources, including data on the rate, magnitude, and timing of the default losses and mortgage insurance payments and any other information to undertake the analysis.

### *Transfer of Risk*

To determine that a real service, or reinsurance is actually being performed by the reinsurer for which it may legally be compensated (the first test, Section II (B) (1)) the Department states that there must be a real transfer of risk. The Department specifically indicates that the requirement for a real transfer of risk would be clearly satisfied by a quota share arrangement, under which the reinsurer is bound to participate pro rata in every claim. The Department also states that the requirement for a real transfer of risk could also be met by excess loss arrangements, if the band of the reinsurer's potential exposure is such that a reasonable business justification would motivate a decision to reinsure that band. Milliman, in the course of providing its opinion addresses this requirement and the results for this test are found in the Transfer of Risk section of the report.

As part of the first test described above, the Department details additional requirements that must be satisfied which are **not** addressed in Milliman's opinion and are as follows:

- There must be a legally binding contract for the reinsurance with terms and conditions conforming to industry standards; and
- The reinsurer must post capital and reserves satisfying the laws of the state in which it is chartered and the reinsurance contract between the primary insurer and the reinsurer must

MILLIMAN

- 4 -

provide for the establishment of adequate reserves to ensure that, when a claim against the reinsurer is made, funds will exist to satisfy the claim.

*Compensation Commensurate with the Risk*

If the requirements in Section II (B) (1) for determining that reinsurance is actually being provided in return for the compensation are met, the Department will then determine whether the compensation paid for the reinsurance does not exceed the value of the reinsurance (Section II (B) (2)). The Department will evaluate whether the compensation is commensurate with the risk and, where warranted, administration costs. The specific points within the Department's evaluation requirements which are addressed in the Compensation Commensurate with the Risk section of Milliman's opinion include the following:

- Compare, using relevant mathematical models, the risk borne by the captive reinsurer with payments provided by the primary insurer;
- Analyze the likelihood of losses occurring, the magnitude and volatility of possible losses, the amount of payments received, the timing of the payments and potential losses, current market discount rates, and other relevant factors; and
- Take into account the relative risk exposure of the primary lender (Milliman interprets this as referring to the primary insurer) and the captive reinsurer.

MILLIMAN

- 5 -

As part of the second test described above, the Department details additional requirements that may be evaluated which are **not** addressed in Milliman's opinion and are as follows:

- Consider the extent to which the lender of the firm controlling the captive reinsurer is shielded from potential losses by inadequate reserves and a corporate structure that segregates risk;
- Examine other financial transactions between the lender, primary insurer, and captive reinsurer to determine whether they are related to the reinsurance agreement; and
- Examine whether the ceding commission (if applicable) is commensurate with administrative costs assumed by the primary insurer.

#### *Milliman's Analysis*

It is our understanding that the tests, requirements and areas of evaluation are the Department's interpretation of various federal laws and regulations. Furthermore, the Department may consider items not specifically addressed in our tests in determining the permissibility of a particular captive reinsurance arrangement. We are not lawyers, and nothing in this report is intended to provide legal assurance that the requirements of these laws are met. We are also not accountants or auditors. We therefore do not offer opinions as to whether there is compliance with any applicable accounting or auditing standards. The tests addressed by Milliman involve financial and actuarial analysis and judgment. Our opinions are from those perspectives.

MILLIMAN

- 6 -

Specifically, in analyzing whether the transfer of risk test is satisfied, Milliman reviews whether there is a reasonable probability (at least 10%) of a loss (present value loss ratio in excess of 100%) to the reinsurer under the agreement. Milliman's analysis compares the reinsurers' present value loss ratio at a 10% probability level to a 110% loss ratio in order to assess whether this test is met. The 10% probability level is the outcome at which 10% of the simulated scenarios generate higher loss levels.

In analyzing whether the second pricing test is satisfied, Milliman reviews whether the premium ceded by UGRIC to Atrium is reasonable in relation to the reinsured risk. Milliman formulates its opinion by analyzing whether:

- The average reinsurance underwriting results as measured by loss ratios are reasonable in relation to those of primary mortgage insurers; and
- The cumulative return on capital for the reinsurer is reasonable relative to returns on capital for primary mortgage insurers.

This report presents the results of our analysis.

MILLIMAN

- 7 -

### **DESCRIPTION OF THE REINSURANCE STRUCTURE**

Under the excess layer reinsurance agreement for book year 2004 reviewed by Milliman, UGRIC will cede to Atrium 45% of the gross written premium to reinsure 10.0% of the original risk insured for a given book year of business. In return, for underwriting, loss mitigation and other operational services, Atrium will provide UGRIC 11.1% of its premium as a ceding commission. The resulting net written premium percentage for Atrium will be 40.0%.

In return for the premium, Atrium under the defined excess-of-loss structure will reinsure a second loss position of 10.0% of the original book risk for each book year of business. The reinsured second loss position will begin after UGRIC pays the first loss position of 4.0% of the aggregate book risk for each book year of business.

For example, the following table illustrates Atrium's excess-of-loss reinsurance program terms based on assumed loan volume of \$2.9 billion and average mortgage insurance coverage of 29.55% for a hypothetical book year:

<b>Atrium Insurance Corporation</b> <b>Excess-of-Loss Reinsurance Program Terms</b> <b>Hypothetical Book Year</b> <b>(\$ Thousands)</b>	
A) Loan Volume	\$2,854,289
B) Mortgage Insurance Coverage	29.55%
C) Gross Mortgage Insurance Risk (A x B)	\$843,442
D) First Loss Position - UGRIC (C x .04)	\$33,738
E) Second Loss Position - Atrium (C x .10)	\$84,344

MILLIMAN

- 8 -

Based on the example above, UGRIC covers approximately the first \$33.7 million of losses arising from the book year of loans. If losses exceed \$33.7 million, Atrium covers the next \$84.3 million of losses. Atrium's policy limit of \$84.3 million is exhausted once direct losses exceed approximately \$118.1 million (i.e., \$33.7 million + \$84.3 million, difference due to rounding). All subsequent losses are then the responsibility of UGRIC.

The reinsurance period for each individual loan in each book year of business is 10 years. Atrium supports the reinsurance with capital and the ceded net written premium deposited into a trust. If trust funds are depleted such that Atrium's capital is below the required capital, Atrium can infuse additional funds in order to continue reinsuring business [Atrium must maintain total capital of at least 10% of reinsured risk (i.e., a risk to capital ratio of 10 to 1)]. However, Atrium has no liability beyond the funds available in the trust. The trust associated with this structure also supports previous books of business with UGRIC. The previous books of business will run-off under their existing terms. The capital in the trust may be used for all reinsurance structures, but must meet the 10% capital maintenance requirements referred to above for all book years.

MILLIMAN

- 9 -

Releases of capital from the trust to Atrium are allowed beginning January 1, 2005, but only if the capital (trust assets less loss reserve and unearned premium reserve) in the trust exceeds 102% of the sum of the loss reserve and unearned premium reserve plus the greater of:

- 20% of the reinsured risk (i.e., a risk to capital ratio of 5 to 1); or
- The contingency reserve.

In our analysis, we have assumed that annual administrative expenses paid with trust funds will be limited to \$100,000. Additionally, we have assumed a 35% federal income tax will be paid with trust funds and that Atrium does not pay a premium tax with trust funds.

Our review is based on an assumption that Atrium assumes risks of a national lender with average loss experience and a risk profile similar to that provided to Milliman by PHH. Furthermore, we have assumed that annual insured loan volume will be consistent with the level reflected in our analysis which was also provided to Milliman by PHH. To the extent that Atrium's annual insured loan volume, trust account balance, risk profile or claims experience differs from our assumptions, the results of our analysis may not be appropriate.

MILLIMAN



## **SUMMARY AND CONCLUSIONS**

---

Based on representations by PHH as referred to below and our review of UGRIC's reinsurance program for book year 2004 as defined by:

- A net ceded premium equal to 40.0% of the primary mortgage insurance premium (based on a 45% gross premium with a 11.1% ceding commission);
- A risk layer beginning at 4.0% of original risk insured;
- Annual insured loan volume, a distribution of insurance by loan to value and instrument type generally similar to that represented to Milliman by PHH;
- A maximum risk layer of 10.0% of the original risk insured; and
- Minimum capital requirements, expense and tax provisions, and restrictions on the release of trust assets as outlined above,

*Milliman is of the opinion that, from an actuarial and financial point of view, this reinsurance agreement likely:*

- (A) Satisfies the transfer of risk test in the HUD Letter in that there is a reasonable probability of a loss to the reinsurer; and*
- (B) Satisfies the test in the HUD Letter that the compensation paid does not exceed the value of the reinsurance in that the net ceded premium is reasonably related to the ceded risk as measured by Milliman's test.*

Milliman has also concluded that the reinsurance program provides a way of increasing the management of risk by providing the lender with an incentive for better loan originations.

MILLIMAN

- 11 -

**TRANSFER OF RISK ANALYSIS**

To determine that a real service, or reinsurance is actually being performed by the reinsurer for which it may legally be compensated (the first test, Section II (B) (1)), the Department states that there must be a real transfer of risk. The Department specifically indicates that the requirement for a real transfer of risk would be clearly satisfied by a quota share arrangement, under which the reinsurer is bound to participate pro rata in every claim. The Department also states that the requirement for a real transfer of risk could also be met by excess loss arrangements, if the band of the reinsurer's potential exposure is such that a reasonable business justification would motivate a decision to reinsure that band.

Specifically, in analyzing whether the transfer of risk test is satisfied, Milliman reviews whether there is a reasonable probability (at least 10%) of a loss (present value loss ratio in excess of 100%) to the reinsurer under the agreement. Milliman's analysis compares the reinsurers' present value loss ratio at a 10% probability level to a 110% loss ratio in order to assess whether this test is met. The 10% probability level is the outcome at which 10% of the simulated scenarios generate higher loss levels.

Based on our analysis of the projected financial performance under the reinsurance contract, Milliman believes that the proposed reinsurance agreement likely satisfies the transfer of risk in the HUD Letter in that there is a reasonable probability of a loss to the reinsurer.

MILLIMAN

- 12 -

In reaching this conclusion, we simulated the pro-forma financial statements for Atrium for all in force book years (under the existing structures) as well as the 2004 book year (under the current structure) under various performance scenarios. We then compared the net present value of Atrium's cash flows for the 2004 book year and calculated a discounted loss ratio. The present value loss ratio is defined for the 2004 book year as the ratio of the present value of paid losses to the present value of premiums received recognizing that both cash flows may be cut-off if Atrium's assets are depleted.

As a note, our transfer of risk test focuses on the premium and losses for the 2004 book year (under the proposed terms). However, we have also projected the performance for the previous book years due to the trust fund providing cross-collateralized security for both the previous and the prospective book years. The performance of previous book years affects the ability of the trust to meet reinsured obligations for the 2004 book year and thus affects risk transfer on the 2004 book year. Our projections reflect the loss rate correlation between consecutive book years.

Atrium incurs significant losses in many of the scenarios. Furthermore, approximately 10% of the scenarios generated a loss outcome at or above the stress scenario illustrated on Exhibit 1, which results in a 226% present value loss ratio. As a technical note, this stress scenario assumes an ultimate loss rate (i.e., reflecting frequency and severity) of approximately 15.0% of original risk insured for the 2004 book year and loss rates as displayed on Exhibit 2 for prior book years. The loss rates for recent book years are projected to be consistent with the stressed 2004 book year (due to the correlation referenced above).

MILLIMAN

- 13 -

We believe that this 126% loss in excess of premiums demonstrates a loss under a reasonably possible scenario. The net premiums and losses to Atrium are displayed on Exhibit 1. Premiums and losses in Exhibit 1 are adjusted to recognize that the contract is cut-off if Atrium's assets are depleted (i.e., no future premiums are ceded to Atrium subsequent to cut-off). The premiums received through cut-off and reinsured losses satisfied by Atrium for the 2004 book year are discounted to their present value at the beginning of the book year based on a 4.0% assumed yield. Due to the strong cross-collateralization of Atrium's trust fund, our scenario does not result in a cut-off of premium and losses.

As mentioned above, our analysis has conservatively focused on the performance of the 2004 book year and prior book years since the contract may be put into run-off after the 2004 book year (i.e., each individual loan in the 2004 book year would continue to be reinsured for its 10-year term, but no subsequent book years would be reinsured). However, in a scenario with more book years and additional capital from contingency reserves, retained earnings, and potential capital contributions for subsequent book years, it is more likely that all (or a greater portion) of the reinsured losses will be satisfied under the stress scenario due to cross-collateralization. Cross-collateralization refers to the ability to utilize capital and retained earnings from profitable book years to satisfy losses of unprofitable book years. Therefore, a multiple book year scenario, with additional book years, increases the likelihood of all or a greater portion of the reinsured losses being satisfied.

MILLIMAN

- 14 -

The projected financial statements used to derive the cash flow analysis on Exhibit 1 are displayed on Exhibits 2 through 5. The exhibits contain the following:

- Exhibit 2 – The assumptions underlying the stress scenario;
- Exhibit 3 – The pro-forma statutory balance sheet for the stress scenario;
- Exhibit 4 – The pro-forma statutory statement of income for the stress scenario; and
- Exhibit 5 – The pro-forma change in assets/cash flow statement for the stress scenario.

MILLIMAN

**COMPENSATION COMMENSURATE WITH THE RISK ANALYSIS**

In analyzing whether the second pricing test is satisfied, Milliman reviews whether the premium ceded by UGRIC to Atrium is reasonable in relation to the reinsured risk. Milliman formulates its opinion by analyzing whether:

- The average reinsurance underwriting results as measured by loss ratios are reasonable in relation to those of primary mortgage insurers; and
- The cumulative return on capital for the reinsurer is reasonable relative to returns on capital for primary mortgage insurers.

Our analysis of the reasonableness of the price in relation to the reinsured risk also relies on our simulation of projected financial results for Atrium. However, the analysis focuses exclusively on the 2004 book year. We estimated the expected financial performance under the contract based on the average penetration of losses into the reinsured layer under the projected scenarios. The pro-forma financial statements for the expected performance are displayed on Exhibits 6 through 9 (which are similar in format to Exhibits 2 through 5).

We have concluded that the 40% net ceded premium is reasonable in relation to the ceded risk given the following:

- The internal rate of return (IRR) of the dividend stream of 11% and the cumulative return on capital of 6% over the term of the run-off are reasonable relative to returns on capital for primary mortgage insurers; and

MILLIMAN

- 16 -

- The average reinsurance underwriting results as measured by loss ratios (on both a nominal and present value basis) are reasonable in relation to those of the primary company on a gross and net basis (i.e., before and after the reinsurance contract).

As a technical note, our analysis assumes that the gross mortgage insurance rates are reasonable relative to the risk of the primary insurer. However, we have not conducted an independent review of the primary rates.

#### *Rate of Return Comparison*

Atrium's returns were measured on two bases to compare the primary company's returns:

- The internal rate of return of dividends was measured; and
- The cumulative average return on capital was measured.

The internal rate of return of the expected dividend stream is 11% as displayed on Exhibit 7. The internal rate of return is the rate of return which equates the present value of the contributed capital to the flow of dividends. A final dividend at the end of the run-off (year 11) is calculated to liquidate the trust. This final dividend is equal to the remaining investable assets less the unearned premium and loss reserve.

The cumulative return on average capital of 6% is also displayed at the bottom of Exhibit 7. The return on capital for a calendar year is calculated by dividing net income by the average capital during the year (including the contingency reserve). A cumulative return on capital is then calculated over the term of the contract for one book year.

MILLIMAN



- 17 -

The 11% IRR and 6% return on capital can be compared to the return on capital for the active primary mortgage insurance industry. The returns on average capital for the last twenty-eight years are displayed on Exhibit 10. The returns are calculated in a manner similar to the return on average capital calculation described above and are based on several industry sources.

We believe that the projected returns under the reinsurance structure are reasonable given that they are consistent with those experienced by the industry.

***Loss Ratio Comparison***

The expected underwriting performance under the reinsurance contract was compared to that of the primary insurer as an additional test of the reasonableness of the ceded premium relative to the risk. The expected loss ratio was projected from our simulation of financial performance separately on a gross basis (i.e., the direct experience of the primary company) and on a ceded basis (i.e., the reinsurer's share of losses) over the term of the reinsurance contract for one book year. Expected net results were then calculated by subtraction. Present value loss ratios were also projected due to the later payout of reinsured losses.

MILLIMAN

The following table shows the results of our loss ratio analysis which is also outlined on Exhibit 11:

<b>Atrium Insurance Corporation Expected Loss Ratio Comparison 45% Gross Premium with 11.1% Ceding Commission – 40% Net Premium</b>		
	<b>Nominal</b>	<b>Present Value<sup>1</sup></b>
Gross (UGRIC)	63%	58%
Ceded (Atrium)	63%	57%
Net (UGRIC)	62%	60%

<sup>1</sup> Based on 4.0% yield

We believe that the reinsurance premium is reasonable in relation to the reinsured risk since the projected expected loss ratios for Atrium are reasonable in relation to the loss ratios for the primary insurer. We believe that it is reasonable for the reinsurer's loss ratio to be similar to the primary company's loss ratio since the 2004 book year loan characteristics warrant a higher expected loss rate (i.e., higher loan-to-value loans have a greater propensity to result in a loss to both the reinsurer and primary company, although the reinsurer is still covering the more volatile excess layer). The reinsurance coverage provides the primary company with significant reinsurance protection attaching at profitable levels for the primary company and reducing volatility in the years with above average losses.

- 19 -

The table below demonstrates the reinsurer's more volatile performance by showing the loss ratios at various probability levels:

<b>Atrium Insurance Corporation Loss Ratio Comparison at Probability Levels 40% Net Ceded Premium</b>		
<b>Probability Level</b>	<b>Net Primary Insurer</b>	<b>Ceded<sup>1</sup></b>
50%	60%	25%
60	62	54
70	64	92
80	65	145
90	83	226
95	144	241

<sup>1</sup> Net of ceding commission

The interpretation of the probability levels above is that they represent the probability that a single book year has a projected loss ratio at or below the indicated level. For example, the primary insurer's net loss ratio is 144% at the 95% probability level while the reinsurer's loss ratio is 241%. There is a 95% chance that the reinsurer will have a loss ratio at or below 241%. Therefore, there is a 5% chance (i.e., 1.0 – 95%) that the reinsurer's loss ratio will be higher than 241%. As demonstrated above, the reinsurance provides significant protection above the 60% probability level, which significantly reduces the volatility of the primary insurer's loss ratio. As a technical note, the table above assumes that all reinsured losses are satisfied through sufficient capital and cross-collateralization.

MILLIMAN

- 20 -

## QUALIFICATIONS AND LIMITATIONS

It is our understanding that the tests, requirements and areas of evaluation outlined in the HUD Letter are the Department's interpretation of various federal laws and regulations. Furthermore, the Department may consider items not specifically addressed in our tests in determining the permissibility of a particular captive reinsurance arrangement. We are not lawyers, and nothing in this report is intended to provide legal assurance that the requirements of these laws are met. We are also not accountants or auditors. We therefore do not offer opinions as to whether there is compliance with any applicable accounting or auditing standards. The tests addressed by Milliman involve financial and actuarial analysis and judgment. Our opinions are from those perspectives. Also, we are not opining on the capital adequacy or financial condition of Atrium.

In performing this analysis, we have relied on data and other information provided and represented to us by or on behalf of PHH. We have not audited, verified, or reviewed this data and other information for reasonableness and consistency. Such a review is beyond the scope of our assignment. If the underlying data or information is inaccurate or incomplete, our analysis may likewise be inaccurate or incomplete.

Any study of future operating results involves estimates of future contingencies. While our analysis represents our best professional judgment, arrived at after careful analysis of the available information, it is important to note that a significant degree of variation from our projections is not only possible, but is in fact probable. The sources of this variation are numerous: future national or regional economic conditions, mortgage prepayment speeds, and legislative changes affecting the program are examples. Furthermore, we have assumed average

MILLIMAN

- 21 -

nationwide claim experience provided by PHH is appropriate. This experience has substantial geographical and lender diversification. To the extent that Atrium's insured loan volume, trust account balance, risk profile or claims experience differs significantly from our assumptions, the results of our analysis may not be appropriate (in general, we believe that risk and variability increases as a lender's operations get more regionally concentrated than inherently diverse national experience, and high variability makes it easier to satisfy the tests described herein). Also, we have assumed that UGRIC's current primary mortgage insurance rates are reasonable relative to their risk, although we have not conducted an independent review of primary rates.

In evaluating whether the ceded premium is reasonable relative to the ceded risk, Milliman determines whether the ceded premium is within a range of reasonable prices based on a simulation of projected financial results for the reinsurer. Milliman estimates the expected financial performance under the contract based on the average penetration of losses into the reinsured layer under the projected scenarios and compares the underwriting performance and returns to those of the primary insurers. As a neutral party providing our opinion, Milliman does not determine whether a particular deal is more advantageous for the ceding company or the reinsurer. Many factors affect a company's decision to enter into particular reinsurance contracts (e.g., risk appetite, capital, earnings volatility, and risk management considerations are several examples). It is Atrium's and UGRIC's ultimate decision as to whether or not they enter into any particular reinsurance agreement.

MILLIMAN

- 22 -

**LIMITED DISTRIBUTION OF RESULTS**

This report has been prepared for the use of and is only to be relied upon by the management of PHH. No portion of this report may be provided to any other party without Milliman's prior written consent. In the event such consent is provided, the report must be provided in its entirety. This report may not be filed with the SEC or other securities regulatory bodies. In the event Milliman's work is distributed to other parties due to statute or regulations, or by agreement of Milliman and PHH, Milliman requires that its work be distributed in its entirety, and that any recipient be advised to have their own actuary review the work. Milliman does not intend to benefit any third party recipient of its work product or create any legal duty from Milliman to a third party even if Milliman consents to the release of its work product to such third party.

Milliman understands that PHH intends to distribute this report to its auditors in connection with the preparation of the financial statements of PHH. We will consent to such distribution as long as each work product is distributed in its entirety. The auditor may want to have its own actuary review the work. Milliman does not intend to benefit any third party recipient of its work product including the auditor, and does not intend to create any legal duty from Milliman to the auditor even if Milliman consents to the release of its work product. In the event that any audit reveals any error or inaccuracy in the data underlying this report, Milliman requests that the auditor notify Milliman as soon as possible.

MILLIMAN

Any reader of this report must possess a certain level of expertise in areas relevant to this analysis to appreciate the significance of the assumptions and the impact of these assumptions on the illustrated results. The reader should be advised by, among other experts, actuaries or other professionals competent in the area of actuarial projections of the type in this report, so as to properly interpret the projection results.

◆ ◆ ◆ ◆ ◆

If you should have any questions with regard to this analysis or would like to have us consider additional information, please do not hesitate to contact us. We appreciate the opportunity to work with PHH Corporation on this assignment.

Respectfully submitted,



Kenneth A. Bjurstrom  
Financial Consultant



Michael C. Schmitz, F.C.A.S., M.A.A.A.  
Consulting Actuary

KAB/MCS/bas

September 21, 2005

U:\CLIENT\106-CEN\2005-Sep 05 Report-UGREC-40% Net Premium.doc

MILLIMAN



Exhibit 1

**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceding Company)  
 Premium and Loss Analysis - For All Book Years

	Present Value Loss Ratio	Present Value Premiums / Losses <sup>1</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Total Premium / Losses
Net Premiums		141,285	0	0	0	0	7,486	17,846	27,185	33,469	32,061	24,035	19,656	19,489	15,686	12,203	9,195	6,664	4,795	3,354	2,096	1,132	337	0	236,689
Net Premiums Received		141,285	0	0	0	0	7,486	17,846	27,185	33,469	32,061	24,035	19,656	19,489	15,686	12,203	9,195	6,664	4,795	3,354	2,096	1,132	337	0	236,689
Paid Losses		51,342	0	0	0	0	0	0	0	0	0	0	0	0	0	8,817	28,371	25,724	20,027	14,575	10,903	2,955	425	0	111,797
Paid Losses Satisfied	36%	51,342	0	0	0	0	0	0	0	0	0	0	0	0	0	8,817	28,371	25,724	20,027	14,575	10,903	2,955	425	0	111,797

<sup>1</sup> Based on 10 year treasury yield for previous calendar years and a 4% assumed yield for prospective calendar years. Present valued to the beginning of the contract.

Premium and Loss Analysis - For Prospective Year																									
	Present Value Loss Ratio	Present Value Premiums / Losses <sup>1</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Total Premium / Losses
Net Premiums		29,655	0	0	0	0	0	0	0	0	0	0	1,721	7,826	6,539	5,112	3,901	2,929	2,173	1,607	1,192	892	337	0	34,229
Net Premiums Received		29,655	0	0	0	0	0	0	0	0	0	0	1,721	7,826	6,539	5,112	3,901	2,929	2,173	1,607	1,192	892	337	0	34,229
Paid Losses		67,075	0	0	0	0	0	0	0	0	0	0	0	0	0	6,838	21,064	19,955	15,755	11,666	7,945	1,133	0	0	84,355
Paid Losses Satisfied	22%	67,075	0	0	0	0	0	0	0	0	0	0	0	0	0	6,838	21,064	19,955	15,755	11,666	7,945	1,133	0	0	84,355

<sup>1</sup> Based on a 4% assumed yield  
 Note: Amounts discounted to beginning of prospective calendar year.

Exhibit 2

ATRIUM INSURANCE CORPORATION  
(United Guaranty Residential Insurance Company – Ceiling Company)

		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
		Book Year 1	Book Year 2	Book Year 3	Book Year 4	Book Year 5	Book Year 6	Book Year 7	Book Year 8	Book Year 9	Book Year 10	Book Year 11
<b>Assumed Reinsurance Structure</b>												
Premium	Gross Premium	25.0%	25.0%	25.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
	Ceding Commission 1st Year	0.0%	0.0%	0.0%	19.0%	19.0%	19.0%	11.1%	11.1%	11.1%	11.1%	11.1%
	Renewal	0.0%	0.0%	0.0%	19.0%	19.0%	19.0%	11.1%	11.1%	11.1%	11.1%	11.1%
	Net Premium 1st Year	25.0%	25.0%	25.0%	36.5%	36.5%	36.5%	40.0%	40.0%	40.0%	40.0%	40.0%
	Net Premium Renewal	25.0%	25.0%	25.0%	36.5%	36.5%	36.5%	40.0%	40.0%	40.0%	40.0%	40.0%
1st Reinsured Risk Layer	Start (% of Original Risk)	6.5%	6.5%	6.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	End (% of Original Risk)	12.5%	12.5%	12.5%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
	Percentage of Layer Assumed	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Term of Contract (Years of run-off for each Reinsured Loan)		10	10	10	10	10	10	10	10	10	10	10

Business Mix

		Percentage of Business											Coverage	Premium
		97 LTV	95 LTV	90 LTV	85 LTV	Total or Wid Avg	97 LTV	95 LTV	90 LTV	85 LTV	Total or Wid Avg	97 LTV		
Fixed Rate	97 LTV	0.0%	1.5%	0.6%	0.5%	2.4%	3.7%	5.1%	10.3%	18.8%	26.2%	39.2%	35.0%	0.960%
	95 LTV	21.0%	37.3%	36.1%	40.9%	41.4%	45.4%	43.4%	40.6%	35.7%	27.4%	22.2%	10.0%	0.780%
	90 LTV	52.6%	47.9%	46.1%	45.5%	45.4%	38.4%	35.4%	36.3%	30.4%	28.4%	24.1%	25.0%	0.520%
	85 LTV	7.7%	5.8%	7.8%	7.5%	9.6%	8.0%	7.0%	11.0%	8.4%	9.7%	5.0%	12.0%	0.320%
	Total or Wid Avg	81.1%	92.5%	90.7%	94.5%	98.8%	95.5%	90.8%	98.2%	93.3%	91.6%	90.4%		
Adj Rate	97 LTV	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.000%
	95 LTV	1.1%	3.0%	3.4%	2.4%	0.4%	1.8%	4.0%	0.7%	3.7%	4.3%	4.8%	10.0%	0.920%
	90 LTV	14.1%	4.1%	5.1%	2.7%	0.7%	2.2%	4.4%	0.9%	2.6%	3.4%	4.3%	25.0%	0.650%
	85 LTV	1.4%	0.4%	0.8%	0.5%	0.1%	0.4%	0.8%	0.2%	0.4%	0.6%	0.5%	12.0%	0.370%
	Total or Wid Avg	16.7%	7.5%	9.3%	5.5%	1.2%	4.5%	9.2%	1.8%	6.7%	8.4%	9.6%		
Total Fixed & Adj. Rate		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Assumptions

Claim Severity incl. loss adjustment (% of coverage)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Approximate Average Rate	0.585%	0.629%	0.620%	0.626%	0.621%	0.648%	0.662%	0.652%	0.696%	0.708%	0.764%	
Approximate Average Coverage	25.02%	26.35%	25.92%	26.18%	26.06%	26.63%	26.87%	26.63%	27.70%	27.87%	29.55%	
PSA	325%	325%	325%	325%	325%	325%	325%	325%	325%	325%	325%	
Loan Volume (\$000's)	1,265,497	1,180,530	1,838,244	1,859,079	4,690,432	5,911,462	5,622,493	4,444,007	3,362,719	1,847,058	2,854,289	
Average Loan (\$000's)	124	127	134	141	137	136	138	138	139	143	144	
Loan Counts	10,229	9,271	13,702	13,146	34,240	43,580	40,850	32,239	24,156	12,911	19,775	
Ultimate Loss Rate	0.89%	0.85%	0.55%	0.80%	0.90%	1.15%	0.90%	1.60%	4.18%	9.01%	15.02%	

	Calendar Year-End											
	Initial Value	1	2	3	4	5	6	7	8	9	10	11
Other Expenses	0	0	0	0	0	0	0	0	0	0	0	100,000
Capital Contributions	0	0	0	0	460,000	0	17,000,000	11,510,000	0	15,500,000	0	0
Investment Yield	5.31%	5.75%	7.78%	5.65%	6.58%	5.54%	4.72%	6.69%	5.16%	5.04%	4.05%	4.00%
Other Expenses	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Capital Contributions	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Investment Yield	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	

Statutory Capital Contribution (Also Minimum Statutory Surplus)	0
Dividend Year	11
Tax Rate	35%
Premium Tax Rate	0.0000%
Statutory/Partner Risk To Capital Ratio - Cash	10 to 1
Statutory/Partner Risk To Capital Ratio - Cash for Dividend	5 to 1

MILLIMAN

CONFIDENTIAL  
PHH BOGANSKY CFPB 019361  
CFPB-PHH-00112468

Exhibit 3

ATRIUM INSURANCE CORPORATION  
 (United Guaranty Residential Insurance Company – Ceiling Company)  
 Pro Forma Statutory Balance Sheet  
 Multiple Book  
 (Dollars in 000's)

	Year-End 0	Year-End 1	Year-End 2	Year-End 3	Year-End 4	Year-End 5	Year-End 6	Year-End 7	Year-End 8	Year-End 9	Year-End 10	Year-End 11	Year-End 12	Year-End 13	Year-End 14	Year-End 15	Year-End 16	Year-End 17	Year-End 18	Year-End 19	Year-End 20	Year-End 21	
<b>Assets</b>																							
Investable Assets	0	0	0	0	460	8,228	44,163	86,859	123,930	141,058	156,291	173,594	176,172	187,789	201,652	186,499	142,654	100,681	76,678	59,591	55,072	47,617	
Tax and Loss Bonds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total Assets</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>460</b>	<b>8,228</b>	<b>44,163</b>	<b>86,859</b>	<b>123,930</b>	<b>141,058</b>	<b>156,291</b>	<b>173,594</b>	<b>176,172</b>	<b>187,789</b>	<b>201,652</b>	<b>186,499</b>	<b>142,654</b>	<b>100,681</b>	<b>76,678</b>	<b>59,591</b>	<b>55,072</b>	<b>47,617</b>	
<b>Liabilities</b>																							
Unearned Premium Reserve	0	0	0	0	0	539	1,462	2,885	4,607	6,235	7,441	8,419	832	653	503	369	261	190	127	73	36	0	
Loss Reserve	0	0	0	0	0	0	0	0	0	0	0	0	0	8,817	28,371	25,724	20,027	14,575	10,903	2,955	425	0	
Contingency Reserve	0	0	0	0	0	6,193	16,818	33,176	52,977	71,702	85,572	96,819	111,664	117,651	101,193	84,446	70,903	60,973	53,330	52,425	53,080	46,683	
<b>Total Liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,731</b>	<b>18,280</b>	<b>36,061</b>	<b>57,584</b>	<b>77,937</b>	<b>93,013</b>	<b>105,239</b>	<b>112,496</b>	<b>127,121</b>	<b>130,067</b>	<b>110,539</b>	<b>91,191</b>	<b>75,738</b>	<b>64,360</b>	<b>55,453</b>	<b>53,541</b>	<b>46,683</b>	
Surplus (Before Capital Contribution)	0	0	0	0	0	1,497	8,883	39,288	66,346	47,621	63,278	68,355	76,342	67,001	71,585	82,613	83,225	56,984	28,801	15,206	6,472	10,400	
Capital (Surplus + Cont. Rsv.)		0	0	0	0	7,689	25,701	72,464	119,323	119,323	148,850	165,175	188,006	184,651	172,778	167,059	154,129	117,957	82,131	67,631	59,552	57,081	
Reinsured Risk		19,000	37,667	66,259	134,925	237,170	394,615	545,682	664,031	757,179	808,662	874,017	855,350	826,757	778,091	655,846	498,401	347,334	228,985	135,837	84,355	0	
Risk-to-Capital Ratio		NA	NA	NA	NA	30.8	15.4	7.5	5.6	6.3	5.4	5.3	4.5	4.5	4.5	3.9	3.2	2.9	2.8	2.0	1.4	0.0	
<b>Capital Constraints</b>																							
Required Risk-to-Capital Ratio		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
Required Risk Capital		1,900	3,767	6,626	11,493	23,717	39,462	54,568	66,403	75,718	80,866	87,402	85,535	82,676	77,809	65,585	49,840	34,733	22,899	13,584	8,435	0	
Statutory Capital Requirement (including Contingency Reserve)		0	0	0	0	6,193	16,818	33,176	52,977	71,702	85,572	96,819	111,664	117,651	101,193	84,446	70,903	60,973	53,330	52,425	53,080	46,683	
Capital "Deficiency (Excess)"		1,900	3,767	6,626	11,493	16,028	13,761	(17,896)	(52,920)	(43,605)	(63,278)	(68,356)	(76,342)	(67,000)	(71,585)	(82,613)	(83,226)	(56,984)	(28,801)	(15,206)	(6,472)	(10,400)	
Dividend Required Risk-to-Capital		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
102% of the Dividend Required Risk Capital Requirement		3,876	7,684	13,517	23,445	48,932	81,993	114,262	140,161	160,824	172,557	186,887	175,340	178,318	188,182	160,407	122,367	85,916	57,964	30,800	17,678	0	
102% of the Contingency Reserve Capital Requirement		0	0	0	0	6,866	18,646	36,782	58,735	79,495	94,873	107,343	114,746	129,663	132,668	112,749	93,015	77,253	65,647	56,563	54,612	47,617	
<b>Cash Capital Support / (Dividend)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>460</b>	<b>0</b>	<b>17,000</b>	<b>11,510</b>	<b>0</b>	<b>15,500</b>	<b>0</b>	<b>0</b>	<b>(12,666)</b>	<b>(6,333)</b>	<b>0</b>	<b>(6,652)</b>	<b>(31,762)</b>	<b>(32,041)</b>	<b>(16,484)</b>	<b>(11,068)</b>	<b>(4,940)</b>	<b>(9,466)</b>	
<b>Surplus After Capital Contribution / Dividend</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>460</b>	<b>1,497</b>	<b>25,883</b>	<b>50,798</b>	<b>66,346</b>	<b>63,121</b>	<b>63,278</b>	<b>68,355</b>	<b>63,676</b>	<b>60,668</b>	<b>71,585</b>	<b>75,961</b>	<b>51,463</b>	<b>24,943</b>	<b>12,317</b>	<b>4,138</b>	<b>1,531</b>	<b>934</b>	
<b>Cumulative 21 Year Capital Contributions</b>							(86,941)																

Note: Actual numbers used for certain items to reflect trust account transactions

**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceding Company)  
 Pro Forma Statutory Income Statement  
 Multiple Book  
 (Dollars in 000's)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Total
Gross Written Premiums (Gross of Ceding Com.)	0	0	0	0	8,818	22,174	34,138	41,324	39,078	28,946	23,477	22,138	17,821	13,865	10,427	7,520	5,393	3,773	2,358	1,273	379	282,903
Ceded Written Premium (Gross of Ceding Com.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Written Premium (Gross of Ceding Com.)	0	0	0	0	8,818	22,174	34,138	41,324	39,078	28,946	23,477	22,138	17,821	13,865	10,427	7,520	5,393	3,773	2,358	1,273	379	282,903
Earned Premiums (Gross of Ceding Com.)	0	0	0	0	8,279	21,250	32,715	39,603	37,450	27,739	22,499	29,725	18,000	14,016	10,561	7,628	5,464	3,836	2,412	1,310	415	282,903
Incurred Losses <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0	0	8,817	28,371	25,724	20,027	14,575	10,903	2,955	425	0	111,797
Ceding Commission	0	0	0	0	1,331	4,328	6,953	7,856	7,017	4,910	3,822	2,649	2,136	1,662	1,232	856	599	419	262	141	42	46,213
Premium Tax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Expenses	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	100	100	100	100	100	100	1,100
Total Underwriting Expenses	0	0	0	0	1,331	4,328	6,953	7,856	7,017	4,910	3,922	2,749	2,236	1,762	1,332	956	699	519	362	241	142	47,313
Underwriting Income	0	0	0	0	6,948	16,922	25,762	31,747	30,433	22,829	18,577	26,976	6,948	(16,117)	(16,494)	(13,355)	(9,809)	(7,586)	(905)	644	273	123,792
Investment Income	0	0	0	0	282	1,090	4,001	3,602	2,366	1,698	6,643	7,332	7,359	7,577	7,681	7,077	5,400	3,801	2,889	2,345	2,199	73,340
Other Income (Expenses)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-Tax Net Income	0	0	0	0	7,229	18,012	29,763	35,349	32,799	24,527	25,220	34,308	14,306	(8,540)	(8,814)	(6,278)	(4,410)	(3,785)	1,984	2,989	2,472	197,132
Pre-Tax NI After Net Contingency Reserve Contribution	0	0	0	0	1,037	7,386	13,405	15,548	14,075	10,658	13,972	19,463	8,320	7,918	7,933	7,265	5,521	3,857	2,889	2,334	8,869	150,449
Calculated Federal Income Tax <sup>2</sup>	0	0	0	0	0	0	0	0	32,800	10,500	8,895	11,477	4,995	(2,999)	(3,094)	(2,205)	(1,548)	(1,329)	691	1,043	863	60,087
Cumulative Tax Credit Carry-back Available	0	0	0	0	0	0	0	0	0	32,800	43,300	19,395	20,372	16,471	4,995	0	0	0	0	0	0	0
Cumulative Tax Credit Carry-forward Available	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,205	3,753	5,083	4,392	3,349	0
Calendar Year Tax Credit Utilized	0	0	0	0	0	0	0	0	0	0	0	0	0	2,999	3,094	0	0	0	691	1,043	863	0
Federal Tax Incurred	0	0	0	0	0	0	0	0	32,800	10,500	8,895	11,477	4,995	(2,999)	(3,094)	0	0	0	0	0	0	62,573
Net Income	0	0	0	0	7,229	18,012	29,763	35,349	(1)	14,027	16,325	22,831	9,312	(5,540)	(5,720)	(6,278)	(4,410)	(3,785)	1,984	2,989	2,472	134,559
Cumulative Net Income <sup>3</sup>	0	0	0	0	7,229	25,241	55,004	90,353	90,353	104,380	120,705	143,536	152,847	147,307	141,588	135,309	130,899	127,114	129,098	132,087	134,559	0
Increase in Contingency Reserve	0	0	0	0	6,193	10,625	16,358	19,801	18,725	13,870	11,248	14,845	5,986	(16,457)	(16,747)	(13,543)	(9,930)	(7,643)	(905)	655	(6,397)	0
Increase in Surplus (Excluding Capital Contribution)	0	0	0	0	1,037	7,386	13,405	15,548	(18,725)	158	5,077	7,985	3,325	10,917	11,027	7,265	5,521	3,857	2,889	2,334	8,869	87,875

<sup>1</sup> Based on the assumed ultimate loss rates displayed on the assumptions sheet  
<sup>2</sup> Without recognizing the tax deductibility of contingency reserve contributions. Recognizing the taxation of 20% of the increase in the unearned premium reserve  
<sup>3</sup> This does not reflect a deduction for contributions to the contingency reserve.  
 Note: Actual numbers used for certain items to reflect trust account transactions

Exhibit 5

**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceiling Company)  
 Pro Forma Projections (Statutory)  
 Cash Flows, Changes in Assets and Investment Income  
 Multiple Book  
 (Dollars in 000's)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21
A Beginning Assets	0	0	0	0	460	8,228	44,163	86,859	123,930	141,058	156,291	173,594	176,172	187,789	201,652	186,499	142,654	100,681	76,678	59,591	55,072
B Net Written Premium	0	0	0	0	8,818	22,174	34,138	41,324	39,078	28,946	23,477	22,138	17,821	13,865	10,427	7,520	5,393	3,773	2,358	1,273	379
C Paid Losses	0	0	0	0	0	0	0	0	0	0	0	0	0	8,817	28,371	25,724	20,027	14,575	10,903	2,955	425
D Underwriting Expenses	0	0	0	0	1,331	4,328	6,953	7,856	7,017	4,910	3,922	2,749	2,216	1,762	1,332	956	699	519	362	241	142
E Net Underwriting Cash Flow (B - C - D)	0	0	0	0	7,486	17,846	27,185	33,469	32,061	24,035	19,556	19,389	15,586	3,286	(19,275)	(19,160)	(15,332)	(11,321)	(8,907)	(1,924)	(188)
Non-Investable Assets																					
F Initial Tax and Loss Bond Asset (Beg. Contingency Rsv x Tax Rate)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G Tax and Loss Bonds Purchased in Year (Annual Contrib. to Cont. Rsv x Tax Rate)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H Other Income (Expenses)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I Weighted Average Investable Assets = A + 0.5 x (E + H) - F - (0.5 x G)	0	0	0	0	4,203	17,151	57,756	103,593	139,961	153,075	166,069	183,288	183,965	189,432	192,014	176,919	134,988	95,021	72,224	58,629	54,978
J Assumed Yield	5.75%	7.78%	5.65%	6.58%	5.54%	4.72%	6.66%	5.16%	5.04%	4.05%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
K Investment Income (I x J)	0	0	0	0	282	1,090	4,001	3,602	2,366	1,698	6,643	7,332	7,359	7,577	7,681	7,077	5,400	3,801	2,889	2,345	2,199
L Federal Income Tax Incurred	0	0	0	0	0	0	0	0	32,800	10,500	8,895	11,477	4,995	(2,999)	(3,094)	0	0	0	0	0	0
M Cash Capital Contribution	0	0	0	460	0	17,000	11,510	0	15,500	0	0	(12,666)	(6,333)	0	(6,652)	(31,762)	(32,041)	(16,484)	(11,068)	(4,940)	(9,466)
N Ending Assets (A + E + H + K - L + M)	0	0	0	460	8,228	44,163	86,859	123,930	141,058	156,291	173,594	176,172	187,789	201,652	186,499	142,654	100,681	76,678	59,591	55,072	47,617

Note: Actual numbers used for certain items to reflect trust account transactions

MILLIMAN

10/31/2014 10:26:26 AM

**ATRIUM INSURANCE CORPORATION**  
(United Guaranty Residential Insurance Company -- Ceding Company)

*Assumed Reinsurance Structure*

		Net Premium	
Premium	Gross Premium	45.0%	
	Ceding Commission 1st Year	11.1%	40.0%
	Renewal	11.1%	40.0%
Losses	Start (% of Original Risk)	4.0%	
	End (% of Original Risk)	14.0%	
	Percentage of Layer Assumed	100.0%	

Assumptions

Claim Severity incl. loss adjustment (% of coverage)	100%
Approximate Average Rate	0.764%
Approximate Average Coverage	29.55%
PSA	325%
Loan Volume (\$000's)	2,854,289
Average Loan (\$000's)	144
Loan Counts	19,775
Ultimate Loss Rate	7.10%
Other Expenses 1st Year	100,000
Other Expenses Subsequent Years	100,000
Initial Capital Contribution	8,435,464
Capital Contribution - Year 1	0
Capital Contribution - Year 2	0
Investment Yield	4.0%
Statutory Capital Contribution (Also Minimum Statutory Surplus)	0
Dividend Year	1
Tax Rate	35%
Premium Tax Rate	0.000%
Statutory/Partner Risk To Capital Ratio - Cash	10 to 1
Statutory/Partner Risk To Capital Ratio - Cash for Dividend	5 to 1
Term of Contract	10 (Years of run-off for each Reinsured Loan)

Business Mix

		Percentage of Business	Coverage	Premium
Fixed Rate	97 LTV	39.2%	35.0%	0.960%
	95 LTV	22.2%	30.0%	0.780%
	90 LTV	24.1%	25.0%	0.520%
	85 LTV	5.0%	12.0%	0.320%
Total or Wtd Avg		90.4%	27.0%	0.690%
		Percentage of Business	Coverage	Premium
Adj. Rate	97 LTV	0.0%	0.0%	0.000%
	95 LTV	4.8%	30.0%	0.920%
	90 LTV	4.3%	25.0%	0.650%
	85 LTV	0.5%	12.0%	0.370%
Total or Wtd Avg		9.6%	2.6%	0.074%
Total Fixed & Adj. Rate		100.0%	29.55%	0.764%

**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceding Company)  
 Pro Forma Statutory Balance Sheet  
 Single Book  
 (Dollars in 000's)

	Year-End 0	Year-End 1	Year-End 2	Year-End 3	Year-End 4	Year-End 5	Year-End 6	Year-End 7	Year-End 8	Year-End 9	Year-End 10	Year-End 11
<b>Assets</b>												
Investable Assets	8,435	9,753	15,214	17,768	17,650	19,908	23,765	21,114	17,456	15,192	13,163	1,788
Tax and Loss Bonds	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Assets</b>	<b>8,435</b>	<b>9,753</b>	<b>15,214</b>	<b>17,768</b>	<b>17,650</b>	<b>19,908</b>	<b>23,765</b>	<b>21,114</b>	<b>17,456</b>	<b>15,192</b>	<b>13,163</b>	<b>1,788</b>
<b>Liabilities</b>												
Unearned Premium Reserve	0	84	344	277	218	171	133	104	81	63	49	0
Loss Reserve	0	0	0	0	0	1,165	6,981	6,283	4,335	3,676	2,809	885
Contingency Reserve	0	968	5,250	9,009	12,010	14,371	10,527	6,690	4,257	2,060	402	0
<b>Total Liabilities</b>	<b>0</b>	<b>1,052</b>	<b>5,594</b>	<b>9,286</b>	<b>12,229</b>	<b>15,707</b>	<b>17,642</b>	<b>13,077</b>	<b>8,673</b>	<b>5,799</b>	<b>3,259</b>	<b>885</b>
<b>Surplus (Before Capital Contribution)</b>	<b>8,435</b>	<b>8,701</b>	<b>9,620</b>	<b>10,630</b>	<b>9,422</b>	<b>5,484</b>	<b>6,123</b>	<b>8,037</b>	<b>8,783</b>	<b>9,393</b>	<b>9,903</b>	<b>10,309</b>
<b>Capital (Surplus + Cont. Rsv.)</b>		<b>9,669</b>	<b>14,871</b>	<b>19,639</b>	<b>21,432</b>	<b>19,855</b>	<b>16,650</b>	<b>14,727</b>	<b>13,040</b>	<b>11,453</b>	<b>10,305</b>	<b>10,309</b>
Reinsured Risk		84,355	84,355	84,355	84,355	84,355	84,355	84,355	84,355	84,355	84,355	0
Risk-to-Capital Ratio		8.7	5.7	4.3	3.9	4.2	5.1	5.7	6.5	7.4	8.2	0.0
<b>Capital Constraints</b>												
Required Risk-to-Capital Ratio		10	10	10	10	10	10	10	10	10	10	10
Required Risk Capital		8,435	8,435	8,435	8,435	8,435	8,435	8,435	8,435	8,435	8,435	0
Statutory Capital Requirement (including Contingency Reserve)		968	5,250	9,009	12,010	14,371	10,527	6,690	4,257	2,060	402	0
Capital "Deficiency (Excess)"		(1,233)	(6,435)	(10,630)	(9,422)	(5,484)	(6,123)	(6,291)	(4,605)	(3,018)	(1,869)	(10,309)
Dividend Required Risk-to-Capital		5	5	5	5	5	5	5	5	5	5	5
102% of the Dividend Required Risk Capital Requirement		17,294	17,559	17,491	17,431	18,571	24,465	23,723	21,713	21,021	20,123	903
102% of the Contingency Reserve Capital Requirement		1,073	5,706	9,472	12,473	16,022	17,995	13,339	8,847	5,915	3,325	903
<b>Cash Capital Support / (Dividend)</b>		<b>0</b>	<b>0</b>	<b>(2,148)</b>	<b>(4,001)</b>	<b>(1,284)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(9,406)</b>
<b>Surplus After Capital Contribution / Dividend</b>	<b>8,435</b>	<b>8,701</b>	<b>9,620</b>	<b>8,482</b>	<b>5,421</b>	<b>4,200</b>	<b>6,123</b>	<b>8,037</b>	<b>8,783</b>	<b>9,393</b>	<b>9,903</b>	<b>903</b>
<b>Cumulative 11 Year Capital Contributions</b>		<b>(8,404)</b>										
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>IRR Equity Flows</b>	<b>(8,435)</b>	<b>0</b>	<b>0</b>	<b>2,148</b>	<b>4,001</b>	<b>1,284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,309</b>
<b>IRR</b>	<b>11%</b>											
<b>Average Capital</b>	<b>9,052</b>	<b>12,270</b>	<b>16,181</b>	<b>17,461</b>	<b>18,001</b>	<b>17,611</b>	<b>15,689</b>	<b>13,884</b>	<b>12,247</b>	<b>10,879</b>	<b>5,604</b>	
<b>Cumulative Average Capital</b>	<b>9,052</b>	<b>21,322</b>	<b>37,503</b>	<b>54,964</b>	<b>72,965</b>	<b>90,576</b>	<b>106,264</b>	<b>120,148</b>	<b>132,395</b>	<b>143,274</b>	<b>148,878</b>	
<b>Net Income Before Contingency Reserve Contribution</b>	<b>1,233</b>	<b>5,202</b>	<b>4,768</b>	<b>3,942</b>	<b>2,424</b>	<b>(1,921)</b>	<b>(1,924)</b>	<b>(1,686)</b>	<b>(1,587)</b>	<b>(1,148)</b>	<b>4</b>	
<b>Cumulative Net Income (before cont. reserve contrib.)</b>	<b>1,233</b>	<b>6,435</b>	<b>11,204</b>	<b>15,145</b>	<b>17,569</b>	<b>15,648</b>	<b>13,725</b>	<b>12,038</b>	<b>10,451</b>	<b>9,303</b>	<b>9,307</b>	
<b>Cumulative Return on Capital</b>	<b>14%</b>	<b>30%</b>	<b>30%</b>	<b>28%</b>	<b>24%</b>	<b>17%</b>	<b>13%</b>	<b>10%</b>	<b>8%</b>	<b>6%</b>	<b>6%</b>	

MILLIMAN

11/13/2014 10:29



**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceding Company)  
**Pro Forma Statutory Income Statement**  
 Single Book  
 (Dollars in 000's)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total
Gross Written Premiums (Gross of Ceding Com.)	2,020	8,825	7,450	5,945	4,674	3,654	2,848	2,215	1,722	1,339	520	41,211
Ceded Written Premium (Gross of Ceding Com.)	0	0	0	0	0	0	0	0	0	0	0	0
Net Written Premium (Gross of Ceding Com.)	2,020	8,825	7,450	5,945	4,674	3,654	2,848	2,215	1,722	1,339	520	41,211
Earned Premiums (Gross of Ceding Com.)	1,936	8,565	7,517	6,003	4,721	3,691	2,877	2,239	1,739	1,353	569	41,211
Incurred Losses <sup>1</sup>	0	0	0	0	1,165	6,981	6,283	4,335	3,676	2,809	885	26,135
Ceding Commission	299	980	827	660	519	406	316	246	191	149	58	4,649
Premium Tax	0	0	0	0	0	0	0	0	0	0	0	0
Other Expenses	100	100	100	100	100	100	100	100	100	100	100	1,100
Total Underwriting Expenses	399	1,080	927	760	619	506	416	346	291	249	158	5,749
Underwriting Income	1,537	7,486	6,590	5,243	2,937	(3,796)	(3,822)	(2,443)	(2,227)	(1,704)	(474)	9,327
Investment Income	370	545	739	814	787	836	860	756	640	556	478	7,381
Other Income (Expenses)	0	0	0	0	0	0	0	0	0	0	0	0
Pre-Tax Net Income	1,907	8,031	7,329	6,058	3,724	(2,960)	(2,962)	(1,686)	(1,587)	(1,148)	4	16,708
Pre-Tax NI After Contingency Reserve Contribution	939	3,748	3,570	3,056	1,364	884	875	746	610	510	405	16,708
Calculated Federal Income Tax <sup>2</sup>	673	2,829	2,560	2,116	1,300	(1,039)	(1,039)	(592)	(557)	(403)	(2)	5,848
Cumulative Tax Credit Carry-back Available	0	673	3,502	5,389	4,677	3,416	1,300	0	0	0	0	0
Cumulative Tax Credit Carry-forward Available	0	0	0	0	0	0	0	0	592	1,149	1,552	0
Calendar Year Tax Credit Utilized	0	0	0	0	0	1,039	1,039	0	0	0	0	0
Federal Tax Incurred	673	2,829	2,560	2,116	1,300	(1,039)	(1,039)	0	0	0	0	7,401
Net Income	1,233	5,202	4,768	3,942	2,424	(1,921)	(1,924)	(1,686)	(1,587)	(1,148)	4	9,307
Cumulative Net Income <sup>3</sup>	1,233	6,435	11,204	15,145	17,569	15,648	13,725	12,038	10,451	9,303	9,307	0
Increase in Contingency Reserve	968	4,283	3,758	3,002	2,361	(3,844)	(3,838)	(2,433)	(2,197)	(1,659)	(401)	0
Increase In Surplus (Excluding Capital Contribution)	265	919	1,010	940	63	1,923	1,914	746	610	510	405	9,307

<sup>1</sup> Based on the assumed ultimate loss rates displayed on the assumptions sheet

<sup>2</sup> Without recognizing the tax deductibility of contingency reserve contributions. Recognizing the taxation of 20% of the increase in the unearned premium reserve

<sup>3</sup> This does not reflect a deduction for contributions to the contingency reserve.

Exhibit 9

**ATRIUM INSURANCE CORPORATION**  
 (United Guaranty Residential Insurance Company – Ceding Company)  
 Pro Forma Projections (Statutory)  
 Cash Flows, Changes in Assets and Investment Income  
 Single Book  
 (Dollars in 000's)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
A Beginning Assets	8,435	9,753	15,214	17,768	17,650	19,908	23,765	21,114	17,456	15,192	13,163
B Net Written Premium	2,020	8,825	7,450	5,945	4,674	3,654	2,848	2,215	1,722	1,339	520
C Paid Losses	0	0	0	0	0	1,165	6,981	6,283	4,335	3,676	2,809
D Underwriting Expenses	399	1,080	927	760	619	506	416	346	291	249	158
E Net Underwriting Cash Flow (B - C - D)	1,621	7,745	6,523	5,185	4,055	1,983	(4,550)	(4,414)	(2,905)	(2,585)	(2,447)
<b>Non-Investable Assets</b>											
F Initial Tax and Loss Bond Asset (Beg. Contingency Rsv x Tax Rate)	0	0	0	0	0	0	0	0	0	0	0
G Tax and Loss Bonds Purchased in Year (Annual Contrib. to Cont. Rsv x Tax Rate)	0	0	0	0	0	0	0	0	0	0	0
H Other Income (Expenses)	0	0	0	0	0	0	0	0	0	0	0
I Weighted Average Investable Assots = A + 0.5 x (E + H) - F - (0.5 x G)	9,246	13,626	18,476	20,360	19,677	20,899	21,490	18,907	16,004	13,899	11,940
J Assumed Yield	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
K Investment Income (I x J)	370	545	739	814	787	836	860	756	640	556	478
L Federal Income Tax Incurred	673	2,829	2,560	2,116	1,300	(1,039)	(1,039)	0	0	0	0
M Cash Capital Contribution	0	0	(2,148)	(4,001)	(1,284)	0	0	0	0	0	(9,406)
N Ending Assets (A + E + H + K - L + M)	9,753	15,214	17,768	17,650	19,908	23,765	21,114	17,456	15,192	13,163	1,788

MILLIMAN

10/31/2014 10:09 AM

**Active Mortgage Insurance Industry Net Income as Percent of Average Capital**

	<u>Net Income % Average Capital</u>	<u>Source</u>
1977	26.4%	UGRIC filing
1978	21.6%	UGRIC filing
1979	29.0%	UGRIC filing
1980	27.4%	UGRIC filing
1981	25.5%	UGRIC filing
1982	13.1%	UGRIC filing
1983	13.7%	UGRIC filing
1984	2.6%	S&P
1985	0.7%	S&P
1986	9.2%	S&P
1987	3.0%	S&P
1988	1.9%	Moody's
1989	13.8%	Moody's
1990	16.4%	Moody's
1991	17.5%	Moody's
1992	22.5%	Moody's
1993	16.9%	Moody's
1994	17.6%	Moody's
1995	21.3%	Moody's
1996	21.1%	Moody's
1997	22.2%	Moody's
1998	17.1%	Milliman <sup>1</sup>
1999	14.7%	Milliman <sup>1</sup>
2000	17.5%	Milliman <sup>1</sup>
2001	15.4%	Milliman <sup>1</sup>
2002	10.2%	Milliman <sup>1</sup>
2003	8.4%	Milliman <sup>1</sup>
2004	8.4%	Milliman <sup>1</sup>
28 year average:	15.5%	

<sup>1</sup> Based on annual statements filed by the carriers within the industry.

**ATRIUM INSURANCE CORPORATION**  
**(United Guaranty Residential Insurance Company -- Ceding Company)**  
**Expected Loss Ratio Comparison**  
**45% Gross Premium with 11.1% Ceding Commission - 40% Net Premium**

	Gross	Ceded <sup>1</sup>	Net
Premium - Nominal	\$91,581	\$41,211	\$50,370
Premium - Present Value <sup>2</sup>	\$78,797	\$35,459	\$43,339
Expected Losses - Nominal	57,514	26,135	31,379
Expected Losses - Present Value <sup>2</sup>	46,059	20,063	25,995
Expected Loss Ratio - Nominal	63%	63%	62%
Expected Loss Ratio - Present Value <sup>2</sup>	58%	57%	60%

<sup>1</sup> Ceded premium is gross of ceding commission

<sup>2</sup> Based on a 4% assumed yield



August 6, 1997

Attachment A

OFFICE OF THE ASSISTANT SECRETARY  
FOR HOUSING-FEDERAL HOUSING COMMISSIONER

Mr. Sandor Samuels  
General Counsel  
Countrywide Funding Corporation  
155 N. Lake Avenue  
Pasadena, California 91109

Dear Mr. Samuels:

Last year the Department of Housing and Urban Development (the Department) sought from you information on the captive reinsurance program of Amerin Guaranty Corporation (Amerin) with Countrywide Home Loans (Countrywide) and its affiliated reinsurer, Charter Reinsurance (Charter). You then requested that the Department clarify the applicability of Section 8 of the Real Estate Settlement Procedures Act (RESPA) to captive reinsurance programs. For the reasons set forth below, we have concluded that, so long as payments for reinsurance under captive reinsurance arrangements are solely "payment for goods or facilities actually furnished or for services actually performed," these arrangements are permissible under RESPA. See paragraph 8(c)(2) of RESPA, 12 U.S.C. § 2607(c)(2). The following details the facts concerning captive reinsurance programs as we understand them, relevant law, and how the Department will scrutinize these arrangements to determine whether any specific captive reinsurance program is permissible under RESPA.

#### I. BACKGROUND

A typical captive reinsurance arrangement involves a mortgage lender acting in concert with a fully licensed reinsurance affiliate of the mortgage lender and an unaffiliated primary mortgage insurer. The sole purpose of the reinsurance affiliate is to reinsure loans which the affiliated mortgage lender originates and which the unaffiliated, primary mortgage insurance company insures. The primary mortgage insurer and the reinsurer enter into a contract under which the primary insurer agrees to pay the reinsurer an agreed upon portion of the mortgage insurance premiums for loans originated by the lender and insured by the primary insurer. The lender, therefore, has a financial interest in having the primary insurer in the captive reinsurance program selected to provide the mortgage insurance.

Premiums paid for the reinsurance may be net of an agreed upon "ceding commission," which represents the reinsurer's share of the costs of administering the book of insured business.

Under the contract between the primary insurer and the reinsurer, the reinsurer posts capital and reserves satisfying the laws of the state in which it is chartered and may also establish an additional security fund to ensure that, when a claim against the reinsurer is made, funds will exist to satisfy the claim. In exchange for a portion of mortgage insurance premiums (minus a ceding commission, if applicable) to be paid by the primary insurer, the reinsurer obligates itself to reimburse the primary insurer for an agreed portion of claims that may require payment under the contract. Under different reinsurance arrangements, the reinsurance obligations generally take one of two forms. The first is an "excess loss" arrangement, under which the primary insurer pays, and is solely responsible for, claims arising out of a given book of business up to a predetermined amount, after which the reinsurer is obligated to reimburse the primary insurer's claims up to another predetermined amount. Thereafter, the primary insurer is solely responsible for claims in excess of the reinsurer's tier of losses on a given book. A second type of contract is the "quota share" contract, under which the reinsurer would bear a portion of all insured losses.

Under captive arrangements of which the Department is aware, some degree of disclosure is provided to the consumer about the arrangement and some opportunity is accorded to the consumer to choose whether or not to have the loan insured through a captive reinsurance program.

## II. LEGAL ANALYSIS

Subsection 8(a) of RESPA provides that "[n]o person shall give and no person shall accept any fee, kickback, or thing of value pursuant to any agreement or understanding, oral or otherwise, that business incident to or a part of a real estate settlement service involving a federally related mortgage loan shall be referred to any person." 12 U.S.C. § 2607(a). "Thing of value" is further described in the Department's regulations as including "without limitation, monies, things, discounts, salaries, commissions, fees, duplicate payments of a charge, stock, dividends, distributions of partnership profits, franchise royalties, credits representing monies that may be paid at a

future date, the opportunity to participate in a money-making program...." 24 C.F.R. § 3500.14(d). In addition, subsection 8(b) prohibits the giving or receipt of any portion, split or percentage of any charge made or received for the rendering of a real estate settlement service "other than for services actually performed." 12 U.S.C. § 2607(b). These prohibitions against paying for referrals and against splitting fees are very broad and cover a variety of activities.

Subsection 8(c) of RESPA sets forth various exemptions from these prohibitions. It provides, in relevant part, that nothing in section 8 shall be construed as prohibiting "(2) the payment to any person of a bona fide salary or compensation or other payment for goods or facilities actually furnished or for services actually performed." 12 U.S.C. § 2607(c)(2).

The Department's view of captive reinsurance is that the arrangements are permissible under RESPA if the payments to the reinsurer: (1) are for reinsurance services "actually furnished or for services performed" and (2) are bona fide compensation that does not exceed the value of such services.

The rationale behind this two-step analysis is that in instances in which a lender selects the mortgage insurer, including under a captive reinsurance arrangement, the lender's actions would constitute a referral of loans to a mortgage insurer, by influencing the borrower's selection of his or her mortgage insurer. See 24 C.F.R. § 3500.14(f) (definition of "referral"). If the lender or its reinsurance affiliate is merely given a thing of value by the primary insurer in return for this referral, in monies or the opportunity to participate in a money-making program, then section 8 would be violated; the payment would be regarded as payment for the referral of business or a split of fees for settlement services. If, however, the lender's reinsurance affiliate actually performs reinsurance services and compensation from the primary insurer is bona fide and does not exceed the value of the reinsurance, then such payments would be permissible under subsection 8(c). Conversely, any captive reinsurance arrangement in which reinsurance services are not actually performed or in which the payments to the reinsurer are not bona fide and exceed the value of the reinsurance would violate section 8 as an impermissible referral fee.



A. Analysis of Specific Captive Reinsurance Arrangements

The Department will analyze captive reinsurance arrangements to determine if the arrangements comply with RESPA. Factors which may cause the Department to give particular scrutiny to an arrangement and cause it to apply the test set forth in Part II(B) of this analysis include, but are not limited to, the following:

1. The amount charged directly or indirectly to the consumer for mortgage insurance in a captive program is greater than the amount charged to the consumer for mortgage insurance not involving reinsurance for a similar risk.
2. The costs (premiums minus a ceding commission, if applicable) paid to the captive reinsurer are greater than the cost for comparable non-captive reinsurance available in the market.
3. The lender restricts its mortgage insurance business in whole or to a large extent to a primary mortgage insurer that has a reinsurance agreement with the lender's captive reinsurer.
4. Any major secondary market institution refuses to purchase mortgages insured under a particular captive reinsurance agreement or places special conditions on such purchases.
5. Any credit rating agency reduces the rating of the primary mortgage insurer in whole or in part because of agreements with captive reinsurers.
6. Any State regulatory body questions the adequacy of the reserves maintained by the primary mortgage insurer or the captive reinsurer.
7. The primary insurer's agreement to reinsure is conditioned on the affiliated lender's agreement to refer all of or a predetermined volume of its mortgage insurance business to the primary insurer, or the terms of the agreement (such as the percentage of the premium per loan reinsured that is paid to the reinsurer by the primary insurer) fluctuate depending on the volume of the primary insurance business referred by the lender to the primary insurer. The presence of either of these conditions makes it more likely that at least a portion of the compensation paid to the reinsurer is for the referral of mortgage insurance business.

8. Adequate consumer disclosure is not provided. The Department believes that consumers would be well served by a meaningful disclosure<sup>1</sup> and a meaningful choice<sup>2</sup> for consumers about having their loans included in a captive reinsurance program. A demonstrated willingness to provide such a disclosure may indicate that the arrangement is designed to provide real reinsurance.

The Department does not consider any of these eight factors to be determinative of whether an arrangement merits scrutiny by the Department, nor does it regard the absence of any of these factors to be determinative that further scrutiny is not merited. In addition, as noted in Part II(B), the Department may consider these eight factors in applying the test in Part II(B), to the extent applicable.

B. Test for Whether a Captive Reinsurance Arrangement Violates RESPA

Where the Department scrutinizes a captive reinsurance arrangement, it will apply a two-part test for determining whether the arrangement violates RESPA. The Department will first determine whether the reinsurance arrangement meets three requirements that establish that reinsurance is actually being provided in return for the compensation. If one or more of the requirements is not met, the inquiry will end, and the arrangement will be regarded as an impermissible captive reinsurance arrangement under RESPA. If all of the requirements are met, the Department will determine whether the compensation exceeds the value of the reinsurance. To facilitate its analysis, the Department may use information obtained from the lender, the primary insurer, the captive reinsurer, or other sources, including data on the rate, magnitude, and timing of default losses and mortgage insurance payments and any other

<sup>1</sup> A meaningful disclosure would reveal that the captive reinsurance arrangement exists, that the lender stands to gain financially under the arrangement, and that the consumer may choose not to have his or her insurance provided by an insurer in such an arrangement.

<sup>2</sup> A meaningful choice whether to participate would provide the consumer an easy, non-burdensome opportunity to opt out by, for example, indicating a preference one way or the other on a form.

information necessary to undertake the analysis and may exercise its subpoena authority pursuant to 24 C.F.R. part 3800 to obtain such information.

1. Determining that Reinsurance is Actually Being Provided in Return for the Compensation

To determine that a real service--reinsurance--is performed by the reinsurer for which it may legally be compensated, the following requirements must be satisfied:

a. There must be a legally binding contract for reinsurance with terms and conditions conforming to industry standards.

b. The reinsurer must post capital and reserves satisfying the laws of the state in which it is chartered and the reinsurance contract between the primary insurer and the reinsurer must provide for the establishment of adequate reserves to ensure that, when a claim against the reinsurer is made, funds will exist to satisfy the claim. Unless the reinsurer is adequately capitalized and adequate reserves (which may include letters of credit or guarantee arrangements) and funds are available to pay claims, real services are not being provided.

c. There must be a real transfer of risk. The reinsurance transaction cannot be a sham under which premium payments (minus a ceding commission, if applicable) are given to the reinsurer even though there is no reasonable expectation that the reinsurer will ever have to pay claims. This requirement for a real transfer of risk would clearly be satisfied by a quota share arrangement, under which the reinsurer is bound to participate pro rata in every claim. The requirement could also be met by excess loss arrangements, if the band of the reinsurer's potential exposure is such that a reasonable business justification would motivate a decision to reinsure that band. Unless there is a real transfer of risk, no real reinsurance services are actually being provided. In either case, the premiums paid (minus a ceding commission, if applicable) must be commensurate to the risk, as discussed in Part II(B)(2).

In evaluating these requirements, the Department may also consider the factors in Part II(A), to the extent relevant. If any of the requirements in this Part II(B)(1) is not met, the arrangement will be regarded as an impermissible reinsurance arrangement under RESPA. If any of the requirements is not met, the "service" being compensated would appear to be the lender's referral of business to the mortgage insurer, which RESPA prohibits.

2. Determining that the Compensation Paid for Reinsurance Does Not Exceed the Value of the Reinsurance

If the requirements in Part II(B)(1) for determining that reinsurance is actually being provided in return for the compensation are met, the Department will then determine whether the compensation paid for reinsurance does not exceed the value of the reinsurance. The Department will evaluate whether the compensation is commensurate with the risk and, where warranted, administrative costs. The Department's evaluation of this requirement may:

-- Compare, using relevant mathematical models, the risk borne by the captive reinsurer with the payments provided by the primary insurer.

-- Analyze the likelihood of losses occurring, the magnitude and volatility of possible losses, the amount of payments received, the timing of the payments and potential losses, current market discount rates, and other relevant factors.

-- Take into account the relative risk exposure of the primary lender and the captive reinsurer.

-- Consider the extent to which the lender or the firm controlling the captive reinsurer is shielded from potential losses by inadequate reserves and a corporate structure that segregates risks.

-- Examine other financial transactions between the lender, primary insurer, and captive reinsurer to determine whether they are related to the reinsurance agreement.

-- Examine whether the ceding commission is commensurate with the administrative costs assumed by the primary insurer.

In making this evaluation, the Department may also consider the factors in Part II(A), to the extent relevant. If the Department concludes that the compensation paid for the reinsurance exceeds the value of the reinsurance pursuant to the analysis in this Part II(B)(2), the arrangement will be regarded as an impermissible reinsurance arrangement under RESPA and the payments exceeding the value of the reinsurance will be considered a referral fee or unearned fee.

III. CONCLUSION

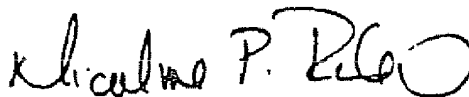
In setting forth this analysis, the Department notes the trend in the mortgage market toward increased diversification of risk. The Department welcomes such trends to the extent that

such arrangements increase the availability of mortgage credit. Where RESPA would not preclude such arrangements, the Department would generally support them.

The Department believes the system of mortgage insurance and reinsurance is not necessarily comparable to other types of settlement services. Thus, the Department could analyze other settlement service programs differently, depending on the facts of the particular program.

I trust that this guidance will assist you to conduct your business in accordance with RESPA.

Sincerely,



Nicolas P. Retsinas  
Assistant Secretary for  
Housing-Federal Housing  
Commissioner

cc: Mr. Randolph C. Sailer II  
Senior Vice President and General Counsel  
Amerin Guaranty Corporation  
200 East Randolph Drive, 49th Floor  
Chicago, IL 60601-7125

# EXHIBIT 7

**ATRIUM INSURANCE CORPORATION**  
**ANALYSIS OF EXCESS-OF-LOSS**  
**REINSURANCE PROGRAM - 40% NET PREMIUM FOR**  
**GENWORTH FINANCIAL, INC.**

Prepared By: Kenneth A. Bjurstrom  
Financial Consultant

Michael C. Schmitz, F.C.A.S., M.A.A.A.  
Consulting Actuary

Milliman, Inc.  
Brookfield, Wisconsin  
(262) 784-2250

September 21, 2005



































































































# EXHIBIT 8











































































































# EXHIBIT 9

# CRITICAL ISSUES IN HEALTH REFORM

## Risk Pooling

July 2009

AMERICAN ACADEMY of ACTUARIES

Risk pooling and the implementation of new risk pooling mechanisms are a major focus of the health reform proposals currently being considered. To understand the impact of these various types of proposals, it is important to understand the fundamentals of risk pooling.

**P**olicymakers are exploring alternative risk pooling mechanisms as part of their efforts to expand the availability and affordability of health insurance coverage. From proposals that would create health insurance exchanges to those that would include an individual mandate, these alternatives have the potential to significantly affect the composition of health insurance risk pools and subsequently affect premiums.

**For a risk pool to remain viable, it must be of sufficient size and comprised of a broad cross section of risks.**

Health insurance risk pools are large groups of individual entities (either individuals or employers) whose medical costs are combined in order to calculate premiums. The pooling of risk is fundamental to insurance. Large pools of similar risks exhibit stable and measurable characteristics that enable actuaries to estimate future costs with an acceptable degree of accuracy. This, in turn, enables actuaries to determine premium levels that will be stable over time, relative to overall trends.

Pooling risks together allows the costs of those at higher risk of high medical costs to be subsidized by those at lower risk. Creating a large risk pool, however, does not necessarily translate into lower premiums. Just as a pool with more low-risk individuals can result in lower premiums, a large pool with a disproportionate share of high-risk individuals will have higher premiums. When healthier individuals perceive no economic benefit to purchasing coverage, the insurance pool becomes increasingly skewed to those with

**Creating a large risk pool, however, does not necessarily translate into lower premiums. Just as a pool with more low-risk individuals can result in lower premiums, a large pool with a disproportionate share of high-risk individuals will have higher premiums.**

higher expected claims. This is commonly known as adverse selection.

Pools created as a by-product of membership in a group that is formed for other reasons, rather than a group that is formed for the specific purpose of obtaining health insurance, tend to be less subject to adverse selection. For instance, a large employer often creates its own pool to provide coverage to its workers, who automatically join the pool as an incidental benefit of employment. This limits an individual's ability to select against a plan. In contrast, people purchasing health insurance coverage in the individual market do so for the express purpose of obtaining coverage, not as an incidental by-product of being part of a group. Therefore, risk pools made up of those in the individual market are much more subject to adverse selection. In between these two extremes are small and medium-sized employers. They are not large enough to form their own pools, so insurers will combine many of these groups together

### ADDITIONAL RESOURCES

Market Reform Principles  
[http://www.actuary.org/pdf/health/market\\_reform\\_may09.pdf](http://www.actuary.org/pdf/health/market_reform_may09.pdf)

Wading Through Medical Insurance Pools: A Primer  
[http://actuary.org/pdf/health/pools\\_sep06.pdf](http://actuary.org/pdf/health/pools_sep06.pdf)

Frequently Asked Questions on Association Health Plans  
[http://actuary.org/pdf/health/ahp\\_mar05.pdf](http://actuary.org/pdf/health/ahp_mar05.pdf)



AMERICAN ACADEMY of ACTUARIES

to form a larger pool. Although there is less potential for adverse selection than in the individual market, employers can still select against insurers by moving into and out of the insurance market and from carrier to carrier.

### **Issue and rating rules can affect the extent of adverse selection.**

Issue and rating rules, which vary by state, can have an impact on adverse selection, and therefore also on premium levels and the viability of a health insurance risk pool. For instance, guaranteed issue and community rating rules can increase the access to insurance among high-risk individuals and at the same premium charged to everyone else. However, these regulations tend to increase adverse selection, by providing people an incentive to delay purchasing coverage until they have health care needs. As a result, average premiums can be higher under these types of market rules. In contrast, allowing insurers to deny coverage and to charge higher premiums to those with higher than average expected health spending could reduce adverse selection by reducing premiums for lower risks. However, high-risk individuals could be denied coverage or face unaffordable premiums.

Risk pooling is essential for a viable insurance program, but it does not by itself guarantee a viable insurance program. It is important to understand the advantages of pooling, but also the dangers that can occur if pools are disrupted by market reforms. If all pools have to abide by the same rules, such as those that do not encourage adverse selection, then adverse selection could be minimized. Allowing different rules within the same market,

however, will threaten a pool that has the more stringent requirements, and will result in market disruption. In other words, rules governing health insurance attempt to balance the tradeoffs between access to coverage and premium affordability. Proposals to implement alternative risk pooling arrangements need to maximize the enrollment of healthy risks, while not pricing the unhealthy risks out of that market.

### **An individual mandate can reduce adverse selection by increasing participation.**

Increasing overall participation in health insurance plans could be an effective way to minimize adverse selection. Requiring individuals to have insurance coverage is one way to increase participation rates, especially among low-risk individuals, and to create a pool with a broad cross section of risks, thereby reducing adverse selection risk. Other types of incentives to increase participation include: limiting open enrollment periods with penalties for delayed enrollment, subsidizing premiums, and instituting automatic enrollment. Medicare Parts B and D include some of these incentives. Nevertheless, an effective and enforceable individual mandate would likely achieve even higher participation rates than these types of voluntary incentives.

The American Academy of Actuaries is a professional association with over 16,000 members. The Academy's mission is to assist policymakers by providing leadership, objective expertise and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice and professionalism standards for actuaries in the United States.

Members of the Health Practice Council and Federal Health Committee include: Alfred A. Bingham Jr., MAAA, FSA, FCA, vice president of the Health Practice Council; Patrick L. Collins, MAAA, FSA, vice-chairperson of the Health Practice Council; David A. Shea Jr., MAAA, FSA, chairperson of the Federal Health Committee; David V. Axene, MAAA, FSA, FCA; Rowen B. Bell, MAAA, FSA; Karen Bender, MAAA, ASA, FCA; Ian G. Duncan, MAAA, FSA, FIA, FCIA; Paul Fleischacker, MAAA, FSA; Donato Gasparro, MAAA, FSA, FCA; Warren R. Jones, MAAA, ASA; Darrell D. Knapp, MAAA, FSA; Laura Beth Lieberman, MAAA, FSA; Timothy J. Luedtke, MAAA, FSA, FCA; Karl Madrecki, MAAA, ASA; Mark E. McGuire, MAAA, FSA; Catherine M. Murphy-Barron, MAAA, FSA; Geoffrey C. Sandler, MAAA, FSA; John J. Schubert, MAAA, ASA, FCA; Sudha Shenoy, MAAA, FSA, CERA; P.J. Eric Stallard, MAAA, ASA, FCA; Sara C. Teppema, MAAA, FSA, FCA; Michael J. Thompson, MAAA, FSA; Thomas S. Tomczyk, MAAA, ASA, FCA; Rod Turner, MAAA, FSA; Cori E. Uccello, MAAA, FSA, FCA; Shari A. Westerfield, MAAA, FSA; Thomas F. Wildsmith, MAAA, FSA; and Dale H. Yamamoto, MAAA, FSA, FCA, EA.

# EXHIBIT 10



**MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF  
MGIC INVESTMENT CORPORATION**

A regular meeting of the Board of Directors of MGIC Investment Corporation was held at approximately 8:00 a.m. on January 22, 1998 in the offices of the Corporation at 250 East Kilbourn Avenue, Milwaukee, Wisconsin.

Present and representing all of the members of the Board of Directors were James A. Abbott, Mary K. Bush, Karl E. Case, David S. Engelman, James D. Ericson, Daniel Gross, Kenneth M. Jastrow, II, William H. Lacy, Sheldon B. Lubar, William A. McIntosh, Leslie M. Muma, Peter J. Wallison and Edward J. Zore. Also present at this time were Curt S. Culver, President of Mortgage Guaranty Insurance Corporation ("MGIC") and an Executive Vice President of the Corporation; J. Michael Lauer, Executive Vice President and Chief Financial Officer of the Corporation; Lawrence J. Pierzchalski, Executive Vice President-Risk Management of MGIC; Gordon H. Steinbach, Executive Vice President-Credit Policy of MGIC; Jeffrey H. Lane, Senior Vice President, General Counsel and Secretary of the Corporation; James S. MacLeod, Senior Vice President-Field Operations of MGIC; Lou T. Zellner, Senior Vice President-Corporate Planning of MGIC; John D. Ludwick, Vice President-Human Resources of MGIC; and James A. McGinnis, Treasurer of the Corporation. Mr. Lacy acted as Chairman of the meeting and Mr. Lane acted as Secretary of the meeting.

**Redacted**

# Redacted

Mr. Culver presented his report on operations. Among other topics, he discussed the recent increase in mortgage insurance application volume in response to the decline in mortgage interest rates; and contract underwriting services, including the productivity of the underwriters, competitive pressures that have lead to increases in underwriter compensation, the revenues generated by this activity, new pilot pricing initiatives and the importance of contract underwriting services in preserving and strengthening relationships with lenders. Messrs. Lee

## Privileged

Mr. Culver next discussed pool insurance to reduce guaranty fees on deliveries of loans to the GSEs ("GSE pool"). Mr. Culver covered pricing on 1998 GSE deliveries; pricing and terms of coverage being offered by MGIC's competitors, including that competitors were covering 80-10-10 loans, which MGIC excludes from coverage; MGIC's expectations for new GSE pool transactions in 1998; and the financial effect of writing GSE pool versus a captive mortgage reinsurance relationship. The Board then held a discussion of various matters relating to GSE pool.

Mr. Culver continued his report by discussing MGIC's captive mortgage reinsurance program. Among other subjects, Mr. Culver covered the number of active captive relationships and the terms of the related agreements, including the percentages of premium and risk ceded. He commented on MGIC's application market share and on the continuing consolidation among larger lenders and the potential effect on MGIC of several recent transactions. Mr. Culver also discussed the quality of MGIC's business, including the delinquency rate at December 31, 1997 as compared to the delinquency rates of those competitors of MGIC which were subsidiaries of publicly-traded companies, and a comparison of MGIC's recent writings with those of its competitors' on Freddie Mac deliveries segmented by FICO credit score. On both of these measures, MGIC continued to outperform its competitors. Mr. Culver concluded his report by briefing the Board on MGIC's pilot program to insure A- mortgages and the program of MGIC's affiliates to insure second mortgages, including home equity loans.

Mr. Lacy then held a discussion with the Board of various issues facing the mortgage insurance industry. These included increased penetration by the FHA into the low down payment segment of the market; increased authority granted by regulators to depository institutions to engage in insurance activities; and increased competition, through structured products and other means, among mortgage insurers, including the proposal by Bank One for a high quota share captive mortgage reinsurance arrangement to which two mortgage insurers had affirmatively responded. Mr. Lacy described the initiative by the Mortgage Insurance Companies of America ("MICA") to develop a policy statement, as requested by and directed to insurance regulators, which would define the terms on which risk sharing arrangements with lenders could be implemented consistent with sound insurance regulation. Representatives of three mortgage insurers, including MGIC, were meeting today on behalf of MICA with the Arizona Department of Insurance to discuss the policy statement; meetings had previously been held with insurance regulators in other states. Mr. Lacy distributed to the Board the materials prepared for the Arizona meeting and an article from the January 12, 1998 edition of BestWeek reporting on the MICA risk sharing initiative, both of which are attached to these minutes.

**Redacted**



**Redacted**

**Redacted**

**Redacted**

Mr. Case said that because inclement weather had delayed his arrival at the Committee meeting, Mr. Engelman would report on the portion of the meeting occurring prior to Mr. Case's arrival. Mr. Engelman told the Board that the Committee had, among other topics, reviewed the GSE pool and captive mortgage reinsurance business;

**Redacted Redacted**

**Redacted**

**Redacted**

**Redacted**



**Redacted**

**Redacted**

**Redacted**

# Redacted

After the adoption of these resolutions, Messrs. Lacy, Lane and Ludwick left the meeting at approximately 11:35 a.m. and the Board continued to meet in executive session.

  
\_\_\_\_\_  
Jeffrey H. Lane, Secretary

cam-m:\w\board\minutes\inv\98-01-22.doc

**Captive Reinsurance  
and  
Other Risk Sharing Arrangements**

**ARIZONA DEPARTMENT OF INSURANCE**

**January 22, 1998**

JAN 16 '98 10:23AM GEMICO RALEIGH NC

P.2

## INTRODUCTION

There has recently been a proliferation of new risk-sharing arrangements by a mortgage insurer or an affiliate thereof with a lender or an affiliate thereof, pursuant to which the payments or rate of return are, directly or indirectly, a function of the performance of an underlying book of business insured by the mortgage insurer. These arrangements include, but are not limited to, captive mortgage reinsurance, "performance notes," and other arrangements characterized as debt securities or other, so-called "derivative" instruments.

All of these risk-sharing arrangements might offer potential benefits. However, if not properly controlled, they also present a threat to the overall strength and claims-paying ability of the private mortgage insurance industry. It is to address these risks that we are recommending that the Arizona Insurance Department adopt a regulation or other binding directive to impose appropriate conditions on all such arrangements irrespective of whether they are characterized as captive mortgage reinsurance or some form of security. Fundamentally, all of these arrangements involve the transfer of premium relative to risk, and should therefore be subject to the jurisdiction and supervision of the Department.

In order to simplify the discussion of the general issues relating to risk-sharing arrangements, this presentation focuses on captive mortgage reinsurance. It must be reiterated, however, that any form of regulation which does not cover the entire gamut of potential risk-sharing arrangements will be ineffective. It would be a fundamental error to permit unregulated risk-sharing arrangements merely because they are structured so as to not take the form of traditional reinsurance risk transfer.



P.4

## Mortgage Insurance Principles

- A fundamental tenet of all insurance is risk dispersion. This is particularly critical for PMI companies because significant losses are driven by catastrophic events that typically occur on a regional basis, not events that can be actuarially predicted.
- Mortgage guaranty insurers insure nationally dispersed books of business from both a geographic and lender base.
- Mortgage guaranty insurance is a long-cycle business that builds reserves during strong economic times as a shock absorber during economic downturns.

## Industry Position . . .

- The mortgage insurance industry supports captive reinsurance structures that transfer risk under a proper regulatory framework that assures the financial strength of our industry to protect the ultimate policyholders.
- Such structures create an alliance between lender and insurer to control and manage risk better.

## Lending Industry Trends . . .

- Mortgage lending has become commoditized and very efficient, forcing lenders to look for other opportunities to generate income. Captive reinsurance is one manner in which lenders may participate, on a limited basis, in the mortgage insurance business, subject to compliance with applicable state and federal law.

JAN 16 '58 05:22PM GEMICO RALEIGH NC

P.5

## **Mortgage Insurers, Lenders, Investors and Consumers . . .**

- **Over last 30 years, the mortgage industry and consumers have benefited from the spreading of risk through well-capitalized and supported mortgage insurance. The strong claims-paying ability of the industry gave investors the confidence to support the growth of the secondary market.**
- **Primary mortgage insurers are able to achieve broad and consistent geographic dispersion of risk by providing insurance to numerous lenders in all regions of the United States. Even the largest lender has only a 6% share of the origination market and thus cannot consistently match the broader diversification of risk by the average MI. In fact, only 14 lenders can claim as much as a 1% share of originations.**

## **Risk Factors Associated With Captive Reinsurance**

- **Captive reinsurance structures raise some key issues for both the mortgage insurance companies and regulators. These include:**
  - **Segmentation**
  - **Compromised Risk Evaluation**
  - **Capital Adequacy**

JAN 16 '98 05:23PM GENI00 RALEIGH NC



### ***Segmentation***

**Captive reinsurance results in the segregation of premiums pledged to support losses on limited segments of a primary mortgage insurer's overall insured portfolio. Such segregation runs counter to the basis insurance principle that an insurer's liabilities should be supported by all of its assets. If mortgage insurers are permitted to reinsure more than 25% of their business in captive reinsurance structures, locking up those premiums, this degree of segmentation will be financially detrimental to the mortgage finance industry.**

### ***Compromised Risk Evaluation***

**Mortgage insurance is unique, in that the "creator" of the risk is the lender, who, as an affiliate of the captive, also has an interest in the insurance. This makes a true arms-length independent judgment of risk more difficult to obtain.**

### ***Capital Adequacy***

**Depending on the nature and level of risk assumed, captive reinsurers should be subject to risk-to-capital requirements which are more stringent than those applicable to primary mortgage insurers.**

### ***Inducements to Insure***

**The nature of the relationship between the mortgage insurer and the lender is such that, absent clear regulatory guidelines, reinsurance transactions will inevitably become more and more generous to the lender until, ultimately, they are no more than revenue-sharing arrangements, under which no risk is transferred.**

P. 9

FOIA Confidential Treatment Requested -  
Please contact Jay Varon  
Foley Lardner, LLP  
3000 K Street N.W.  
Washington, DC 20007-5109

20141031 09:22 AM MGI-C-CFPB001900649

MGI-C-CFPB001900649

**Recommended Actions--Adopt a regulation or other binding directive, under which mortgage insurers licensed in Arizona would be prohibited from entering into captive reinsurance and other risk- and revenue-sharing arrangements unless the following conditions were satisfied:**

- There must be a legitimate transfer of risk of loss from the primary insurer to the captive.
- Reinsurance premiums must be:
  - commensurate with the risk transferred, and
  - not materially greater than the cost of comparable coverage with an unrelated reinsurer
- The requirements of FASB 113 must be satisfied
- An independent actuary or reinsurance broker must provide an opinion to all parties and to the Commissioner of Insurance of the primary insurer's state of domicile concerning transfer of risk and reasonableness of premiums ceded
- Premiums and risk ceded to the captive must not exceed 25% of premiums (less a reasonable ceding commission) and risk relating to mortgage insurance business written by the primary insurer on loans originated by any affiliate (or group of affiliates) of the captive
- The captive's risk-to-capital ratios and reserves, including its contingency reserves, must:
  - satisfy the requirements of its state of domicile;
  - not be less than what is required by the NAIC Model Mortgage Guaranty Insurance Act;
  - be segregated and dedicated solely to the reinsurance obligations of the captive;
  - consist of cash, cash equivalents or marketable, nonaffiliated, investment-grade securities;
  - be adequate to pay projected claims
- Dividends and other payments by the captive must be restricted to ensure the availability of funds to pay claims
- Ceding commissions must be reasonable
- Some geographic risk dispersion requirements should be imposed (e.g., no more than 20% of the reinsurer's book in any single SMSA)
- The captive must be monoline

*WFOA is providing this draft regulation for the Department's consideration.*

2 P

FOIA Confidential Treatment Requested -  
Please contact Jay Varon  
Foley Lardner, LLP  
3000 K Street N.W.  
Washington, DC 20007-5109

20141031 10:28:59 AM

MGIC-CFPB00190650



Property/Casualty  
Edition

# BESTWEEK

Insurance News and Analysis

January 12, 1998

Release 2

## Mortgage Insurers, Regulators Unite To Urge Curbs on New Bank Ventures

The eight companies that comprise the U.S. mortgage insurance industry and two key insurance commissioners agree that bank-owned reinsurance subsidiaries shouldn't be allowed to accept more than a 25% share of risk and premium income on private mortgage insurance policies.

The stance of the mortgage insurers and regulators is the most aggressive challenge yet to what they see as an especially risky example of banks' entry into the insurance business—made with the backing of Comptroller of the Currency Eugene Ludwig.

The Mortgage Insurance Association of America, the trade group of primary insurers, has called on all state insurance regulators to "act swiftly" to impose the 25% ceiling. The limitation would apply to quota-share and excess-of-loss arrangements between bank captive reinsurers and any primary mortgage insurer that is a partner.

MICA's position, outlined in a Dec. 4 letter to state regulators, is in line with the position of Vermont Insurance Commissioner Elizabeth

Costle, whose state is the domicile for most national bank captive reinsurance subsidiaries.

Costle has said that based on solvency and capital-adequacy concerns, she wouldn't approve a captive reinsurance arrangement involving mortgage insurance in which a bank assumes more than 25% of the risk.

She took that position when Banc One Insurance Group, a subsidiary of Columbus, Ohio-based Bank One, approached the Vermont department last year about a license for its new captive mortgage reinsurer. (*BestWeek*, Oct. 27, 1997)

North Carolina Commissioner Jim Long, whose state is the domicile for three of the primary mortgage insurers, agrees

*(continued on page 3)*

### Mortgage (cont'd)

by former Wisconsin Commissioner Josephine Musser, who at the time was president of the National Association of Insurance Commissioners. Long strongly urged all of his fellow commissioners to adopt the 25% limitation in their states.

"Treaties that exceed more than 25 percent begin to look less like reinsurance and more like primary mortgage guaranty insurance underwriting," said the letter.

Since national banks don't comply with the same safety and soundness requirements as primary mortgage insurers, the letter added, "this is a dangerous precedent to set."

Costle said in an interview last week that the issue and the letters were discussed as part of the agenda of a closed commissioners' session at the December NAIC meeting in Seattle.

"We would welcome Bank One, as would anyone else who wants to form a captive reinsurer," she said of Vermont. "But we have established our standards."

The result of all the activity and letter-writing over the past two months has been to complicate Bank One's effort to get a captive license.

Bank One received approval last year from the Office of the Comptroller of the Currency to form a captive that could assume 50%, perhaps as much as 75%, of the risk in a quota-share deal with a primary mortgage insurer.

Six national banks have received the green light from the OCC to form mortgage reinsurance captives. But Bank One has been the most aggressive in pursuing a quota-share arrangement.

The Bank One plan drew criticism not only from MICA and others in the insurance industry, but more importantly from a key congressman, Rep. John Dingell, D-Mich., the ranking member of the House Banking Committee.

Glen Milesko, president of Banc One Insurance Group, said in an interview last week that his company has been talking to several states since Vermont turned him down. He expressed confidence that Bank One will get a captive license "very soon."

But Milesko is clearly angry about what he termed MICA's "lobbying" to keep Bank One from capturing a competitive share of the mortgage insurance market. "Every state we talk to, MICA comes in and tries to put pressure on the department not to give us a license," he said.

More pointedly, he said he viewed

the Long-Musser letter of two months ago as evidence of "collusion" with MICA to frustrate Bank One's efforts.

"I don't know how he (Long) can comment on what we are planning to do when he has never even talked to us about it," said Milesko.

For instance, he said, Bank One is ready to capitalize its reinsurance captive to the tune of \$8 million, far beyond the minimum required of incorporated primary mortgage insurers.

"That letter wasn't a responsible thing for a regulator to do," Milesko said. He said that he and others from Banc One Insurance Group are planning to meet with Long in North Carolina.

Long was away on business last week and couldn't be reached for comment.

The situation is all the more complicated because, according to various sources, some of the eight primary mortgage insurers would like to do business with Bank One. Although they signed the joint letter issued by MICA, which is their trade group, these smaller primary mortgage insurers see partnerships with national banks as a way to gain market share, even if it means ceding significant premium income and risk to a bank.

The Long-Musser letter addressed this issue directly. "In their eagerness to gain market share and short-term revenue increases," they wrote, some mortgage insurers "may be willing to give up half or more of their premium income to earn new business. We need to be vigilant to ensure that such partnerships do not result in instability in the mortgage guaranty insurance industry and in the mortgage financing system generally."

The eight companies that signed the Dec. 4 MICA letter were Amerin Guaranty Corp., Commonwealth Mortgage Assurance Co., GE Capital Mortgage Insurance Corp., Mortgage Guaranty Insurance Corp., PMI Mortgage



Insurance Co., Republic Mortgage Insurance Co., Triad Guaranty Insurance Corp. and United Guaranty Corp.

"The big companies in MICA are trying to use their clout to protect their turf," said Milesko. He did not mention names, but GE Capital and MGIC are thought to be the leading opponents of Bank One's quota-share plan.

"I can tell you that if we don't end up being able to do what we want to do," Milesko said, "we have gathered plenty of evidence to make the case that they (MICA) have wrongfully interfered with our business."

Ellen Schweppe, MICA's director of communications, said the trade group wants "a level playing field" in the marketplace. "That is what we have been trying to express to the insurance commissioners."

She said the Dec. 4 letter "represents the industry position as a whole. I can't speak for what the individual companies might do."

The eight companies wrote in their joint letter that they are "not opposed to bank entry into captive mortgage reinsurance per se." They added that "under the right conditions," captive arrangements "can have the same economic benefits as other reinsurance products."

The "prerequisites" that would need to exist to set the right conditions, MICA said, include the 25% limit, proper capitalization of the reinsurance subsidiary, adequate reserves to ensure payment of claims, and "appropriate dividend restrictions" that would preserve the safety and soundness of the mortgage guaranty industry.

In their Nov. 24 letter, Long and Musser went into greater detail about their concerns.

They listed five areas in which allowing more than a 25% share to a mortgage reinsurer owned by a bank lender would be "imprudent." They included:

- Capitalization. Captives can be

incorporated with much less capital than primary insurers, and thus the captive may not be able to meet its reinsurance obligations "in a period of stress," the letter said. This, in turn, puts more pressure on the primary insurer to hold additional capital.

- Underwriting. "Lenders under pressure to increase origination volume, could be tempted to bring extra pressure to bear on mortgage guaranty insurance companies to approve loans for insurance," the letter argued.

- Diversification. Segmentation of the market by lenders "would segregate premiums shared with good lenders from being used to offset excess losses," said the letter. If 10 or more of the 25-largest lenders set up 50% quota-share deals with the four-largest mortgage guaranty insurers, the letter added, the current "stability of the primary insurance industry could be undermined seriously."

- Geographic Dispersion. Captives of lenders do business on a regional basis. This diminishes the benefits of geographic dispersion and thus undermines the "actuarial soundness" of the industry.

- Dividends. "Funds available from a poorly performing captive to pay benefits may be less than the premiums previously ceded plus investment income if the structure permits too liberal dividending policies or investment practices," the letter said.

"Whether you are a domicile for a mortgage guaranty insurance company or about to be approached as prospective domicile for a captive company, we are writing to ask you to follow Vermont's lead," Long and Musser said to their fellow regulators.

—Robert H. Gettlin

# Redacted

# Redacted

# Redacted



# Redacted

# Redacted

# Redacted

# EXHIBIT 11

**UNITED STATES OF AMERICA  
CONSUMER FINANCIAL PROTECTION BUREAU**

\_\_\_\_\_  
IN THE MATTER OF )  
PHH CORPORATION )  
\_\_\_\_\_ )

Case No.: 2011-0024-02

**DECLARATION OF MICHAEL BOGANSKY  
IN SUPPORT OF PHH CORPORATION'S NORA SUBMISSION**

I, Michael Bogansky, pursuant to 28 U.S.C. § 1746, declare:

1. I am the Vice President, Controller for PHH Corporation ("PHH").
2. The facts set forth herein are based on my personal knowledge, the books and records of PHH, and information provided to me in the course of my official duties. If called upon to testify, I could and would testify competently thereto. I am submitting this declaration in support of PHH Corporation's NORA Submission to the Consumer Financial Protection Bureau.
3. Atrium Insurance Corporation ("Atrium") is a New York corporation and a wholly-owned subsidiary of PHH. Atrium's business is to provide reinsurance on private mortgage insurance ("pmi") issued in connection with loans originated or acquired by PHH Mortgage Corporation and PHH Home Loans, LLC.
4. At various times during the period from 1997 to 2010, Atrium had reinsurance agreements with the following four pmi providers: CMG Mortgage Insurance Company ("CMG"), Genworth Mortgage Insurance Company ("Genworth"), Radian Guaranty, Inc. ("Radian"), and AIG United Guaranty Mortgage Insurance Company ("UGI").
5. At various times Atrium utilized the services of Milliman, Inc. ("Milliman"), a third-party actuarial firm, to provide opinions for specific book years related to the reinsurance agreements, which state that the reinsurance agreements have a reasonable probability of loss to the reinsurer and the net ceded premium is reasonable related to the ceded risk.

**CONFIDENTIAL**

6. On November 12, 2009, PHH Corporation formed Atrium Reinsurance Corporation (“Atrium Re”), a Vermont corporation that is a wholly-owned subsidiary of PHH Corporation.

7. On January 25, 2010, the New York Insurance Department issued its non-disapproval of the reinsurance assumption agreements between Atrium and Atrium Re, thereby allowing Atrium Re to assume the existing reinsurance agreements with Genworth and UGI.

8. Atrium’s reinsurance agreement with Radian commenced on July 26, 2004. Effective July 22, 2009, by mutual decision and pursuant to the terms of their agreement, Atrium and Radian commuted the agreement. As part of the commutation, Atrium forfeited to Radian capital contributions in the amount of \$452,349, in addition to all premiums previously ceded as well as any earnings.

9. Atrium’s reinsurance agreement with CMG commenced on December 1, 2006. Effective August 31, 2009, by mutual decision and pursuant to the terms of their agreement, Atrium and CMG commuted the agreement. As part of the commutation, Atrium forfeited to CMG capital contributions in the amount of \$440,634, in addition to all premiums previously ceded as well as any earnings.

10. Atrium’s reinsurance agreement with Genworth commenced on October 9, 2000. Since January 1, 2009, this agreement had been in “run-off,” which means that no new business is reinsured, but that all obligations continue for both parties on existing books of business. Effective April 1, 2012, by mutual decision and pursuant to the terms of their agreement, Atrium and Genworth terminated the agreement. Protective Order

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Protective Order

11. Atrium's reinsurance agreement with UGI commenced on January 1, 1997. This agreement has been in run-off since January 1, 2010. Effective May 31, 2013, by mutual decision and pursuant to the terms of their Commutation Agreement and Mutual Release, Atrium and UGI terminated the agreement. As a result of the termination, Atrium paid UGI \$48,592,201 and UGI agreed to assume all future risks in connection with loans for which it provided mortgage insurance. \$69,169,499 of restricted funds was released to Atrium from the trust account and Atrium recognized a pre-tax loss of \$20,918,142 in connection with the commutation of the agreement.

12. To the best of my knowledge, Atrium always met its contractual funding obligations with respect to the four trusts that were created in connection with its reinsurance arrangements.

13. Atrium paid a total of \$156,307,798 in reinsurance claims: \$127,731,812 in claims paid to UGI; \$28,571,236 in claims paid to Genworth; and \$4,750 in claims paid to Radian. As described in the chart below, for certain book years, Atrium paid claims to UGI that consumed the entire risk band and in fact exceeded the amount of reinsurance premiums that Atrium would collect over the entire life of the reinsurance agreement for those particular book years.

Book Year	Atrium payments to UGI/% of Risk Band	Atrium payments to Genworth/% of Risk Band
2004	\$19,431,000 / 23%	\$0.00 / 0%
2005	\$37,279,038 / 81%	\$6,190,694 / 41%




Book Year	Atrium payments to UGI/% of Risk Band	Atrium payments to Genworth/% of Risk Band
2006	\$21,902,380 / 100%	\$9,334,550 / 81%
2007	\$37,351,659 / 100%	\$6,966,585 / 60%
2008 (UGI)	\$11,767,735 / 49%	N/A
2008A (Genworth)	N/A	\$6,079,407 / 27%
2008 B (Genworth)	N/A	\$0.00 / 0%
2009	\$0.00 / 0%	N/A

14. Attached hereto as Exhibit A is a chart I prepared showing, for each reinsurance agreement, the capital contributions that were made and the dividends that were earned by Atrium, as well as the distributions made when each of the reinsurance agreements was commuted. Among other things, this chart reflects total capital contributions of \$53,172,832 in connection with the four reinsurance agreements. The chart also presents capital contributions and trust distributions for each reinsurance agreement and reflects Atrium's cash return on invested capital of 5% in connection with its reinsurance agreements over the entire 16-year period the UGI agreement was in place and the 12-year period the Genworth agreement was in place. The chart also reflects the fact that Atrium's net earnings were positive in the early years of the agreements, but that the net earnings were negative beginning in 2008, which corresponds to the meltdown of the residential real estate mortgage market.

I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this ~~5<sup>th</sup>~~ day of September, 2013.

  
Michael Bogansky



# Exhibit A

**CONFIDENTIAL**

Quarter	Year	Cash Return on Invested Capital By Trust			
		UGI	GEMICO	Radian	CMG
Q4	1997	(460,000)			
Q1	1998	-			
Q2	1998	-			
Q3	1998	-			
Q4	1998	-			
Q1	1999	-			
Q2	1999	-			
Q3	1999	-			
Q4	1999	-			
Q1	2000	-			
Q2	2000	(17,000,000)			
Q3	2000	-			
Q4	2000	-			
Q1	2001	-	(2,500,000)		
Q2	2001	(11,510,000)	(1,250,000)		
Q3	2001	-	(1,250,000)		
Q4	2001	-	-		
Q1	2002	-	-		
Q2	2002	-	-		
Q3	2002	-	-		
Q4	2002	(15,500,000)	(500,000)		
Q1	2003	-	-		
Q2	2003	-	-		
Q3	2003	-	-		
Q4	2003	-	-		
Q1	2004	-	-		
Q2	2004	-	-		
Q3	2004	-	-	(16,120)	
Q4	2004	-	-	-	
Q1	2005	-	-	-	
Q2	2005	-	-	-	
Q3	2005	7,000,000	-	-	
Q4	2005	4,000,000	-	-	
Q1	2006	5,800,000	-	-	
Q2	2006	-	-	-	
Q3	2006	-	-	-	
Q4	2006	11,000,000	-	-	
Q1	2007	66,563,805	-	-	(380,350)
Q2	2007	-	-	-	-
Q3	2007	-	-	-	(59,465)
Q4	2007	-	-	-	-
Q1	2008	-	-	-	-
Q2	2008	-	-	(308,211)	(527)
Q3	2008	-	-	-	(292)
Q4	2008	-	-	(128,018)	-
Q1	2009	-	-	-	-
Q2	2009	-	-	-	-
Q3	2009	-	-	-	-
Q4	2009	-	-	-	-
Q1	2010	-	5,000,000	-	-
Q2	2010	-	-	-	-
Q3	2010	-	-	-	-
Q4	2010	-	-	-	-
Q1	2011	-	-	-	-
Q2	2011	-	-	-	-
Q3	2011	-	-	-	-
Q4	2011	-	8,900,000	-	-
Q1	2012	-	-	-	-
Q2	2012	6,800,000	24,100,000	-	-
Q3	2012	-	-	-	-
Q4	2012	-	-	-	-
Q1	2013	1,500,000	-	-	-
Q2	2013	69,169,499	-	-	-
Total		127,363,304	32,500,000	(452,349)	(440,634)
Cash Return		5%	5%	N/A	N/A

Summary of Certain Trust Activity				
Description	UGI	GEMICO	Radian	CMG
Capital Contributions	46,779,849	5,500,000	452,349	440,634
Premiums Collected	304,729,028	136,312,066	3,845,554	2,766,097
Losses Paid	(127,731,812)	(28,571,236)	(4,750)	-
Commutation Payments	(48,592,201)	(37,149,869)	(4,447,105)	(3,233,079)

Year Ending December 31,	Consolidated Net Income (Atrium/Atrium Re)
1997	1,838,900
1998	6,510,059
1999	12,936,992
2000	18,628,087
2001	24,985,300
2002	24,429,170
2003	29,689,385
2004	24,148,344
2005	25,329,699
2006	26,998,578
2007	18,016,793
2008	(10,088,502)
2009	(9,926,291)
2010	(13,875,917)
2011	(3,590,851)
2012	(7,512,630)
2013	(12,387,576)

# EXHIBIT 12

Investigating captive mortgage reinsurance.

## Investigating captive mortgage reinsurance.

*Mortgage Banking* - February 1, 1998

Michael C. Schmitz

Word count: 3550.

citation details

---

Lenders should do their homework before diving into reinsurance.

Banks and other mortgage lenders have recently begun participating more in the insurance of default risk on their originations. This interest can be attributed to several factors that relate to developments in both mortgage lending as well as the mortgage insurance business.

Among the specific factors driving the trend are:

- \* Consolidation in banking and mortgage lending producing fewer and larger competitors that are more diverse and thus better suited to retain default risk and negotiate risk-sharing contracts with mortgage insurers;
- \* Mortgage insurance has recently been a profitable line of business; and
- \* Such arrangements move lenders further into the insurance industry in a coverage that is incidental to lending activities.

Captive reinsurance arrangements are becoming a popular vehicle for lenders to self-insure mortgage-insurance (MI) risk on mortgages they originate. In such an arrangement, the lender establishes a reinsurance company subsidiary (captive). The captive assumes MI risk written by a direct mortgage insurance company (direct writer) on loans originated by the lender. As consideration for the risk transfer, the direct writer cedes a portion of the MI premium to the captive.

As of late 1997, at least six national banks have received federal approval from the Office of the Comptroller of the Currency (OCC) to form a mortgage reinsurance subsidiary. Additional reinsurance subsidiaries have been established by mortgage lenders that are not subject to OCC oversight. As many as 50 or more of these companies may ultimately be formed by lenders and direct writers, according to Standard & Poor's (S&P), an agency responsible for rating the claims-paying ability of insurance companies.

If you are a sizable player in the mortgage lending market, the chances are good that these opportunities have attracted your attention. However, given the complexity of such arrangements and the variety of options available, the captive mortgage reinsurance arena should not be pursued without a carefully constructed strategy. Attention to the following eight considerations can help chart a course appropriate for a particular lender.

- \* Volatility of MI losses;
- \* Lender's appetite for risk;
- \* Performance of lender's loan portfolio;
- \* Risk profile of lender's loan portfolio;
- \* Reinsurance structures;

4



## Investigating captive mortgage reinsurance.

- \* Capital required;
- \* HUD compliance; and
- \* Reinsurance protection for the captive.

Each of these considerations is briefly discussed below.

### Volatility of MI losses

During the 1990s, fueled by low losses and a strong economy, mortgage insurers' profits have soared. The five-year return on equity for the industry from 1992 to 1996 was 18.4 percent, according to S&P. During the same five-year period, the annual return on revenue for the industry peaked at 51 percent in 1996 and never fell below 25 percent.

However, the losses experienced by the MI industry during the 1980s are just as noteworthy as were its profits in the 1990s. Loss ratios represent a key measure of insurance underwriting results and are calculated by dividing incurred losses by earned premiums. Figure 1 displays a graph of the MI industry's calendar-year loss ratio for the 15-year period from 1980 to 1995. The industry saw losses rise sharply in the mid-1980s, peaking at a loss ratio of 192 percent in 1987. In other words, the industry incurred \$1.92 of losses for every \$1.00 of premium revenue in 1987. This period of heavy MI losses was largely a result of the boom and bust residential real estate market in the south central "oil patch" region of the United States.

Providing MI coverage is clearly a risky venture. Insurers set fixed premiums up front for coverage that frequently extends for seven to 10 years or more. Economic factors have a marked effect on mortgage default rates and therefore on MI losses. Lenders must be prepared for this risk if they intend to pursue a captive mortgage reinsurance arrangement.

### Appetite for risk

Given the volatility associated with MI losses, it is critical that lenders assess their own appetite for risk before entering into a captive mortgage reinsurance arrangement. The large profits enjoyed by insurers in recent years will not continue indefinitely. MI margins compensate insurers for the risk associated with the coverage and allow for the accumulation of capital during the profitable cycles to establish a cushion for the high loss levels that can accompany adverse economic conditions. Lenders must be sure they are prepared to make a long-term commitment to the venture before spending the time it takes to establish the reinsurance subsidiary and negotiate the contract terms.

Many lenders have established subsidiaries to manage their expanding insurance services. Some already participate in the underwriting risk of other insurance coverages incidental to banking, such as credit life insurance and credit card unemployment coverage. MI reinsurance should be considered within the context of other insurance ventures being undertaken to determine the organization's appetite for the risk of reinsuring MI coverage. Lenders with a strong appetite for risk will welcome the opportunity to reinsure MI coverage and will prefer structures with larger reinsurance premium levels and correspondingly greater risk.

### Performance of lender's loan portfolio

A lender should examine the past performance of its portfolio of high loan-to-value ratio (LTV) loans when considering a reinsurance arrangement. Lenders whose mortgage underwriting quality has exceeded that of their peers will likely be more eager to participate in insuring their future loan performance. Furthermore, these lenders will find the MI companies enthusiastic about discussing reinsurance arrangements with their valued customers.

## Investigating captive mortgage reinsurance.

The lender's mortgages can be compared against benchmarks such as the performance of the average loans insured by the MI companies currently guaranteeing the lender's portfolio. Lenders can request reports from their current insurers that examine the lender's delinquency and claim rates by year of loan origination relative to the insurer's aggregate results.

Claim rates represent the percentage of loan originations for a book-year that have resulted in a claim as of a certain evaluation date. Likewise, delinquency rates represent the percentage of book-year loan originations that are currently delinquent. Both statistics are routinely monitored by insurers. Generally, claim rates are the more accurate measure of the actual performance of each book-year of insured loans. However, the claim rate for recent book-years will typically offer little value because the majority of MI claims usually occur from three to seven years after loan origination.

Therefore, delinquency rates are used as a barometer of future claim activity because some of the loans that are currently delinquent will eventually result in a claim. The relationship between origination-year age and the typical pattern of claim activity makes it critical that comparisons be made at comparable stages of maturity (i.e., on a book-year basis with a common evaluation date).

Generally, the lower a lender's delinquency and claim rates relative to the insurer's averages, the more profitable that business is to the insurer. Before drawing any definite conclusions about the quality of its insured loans based on a delinquency and claim rate comparison, a lender must also consider other characteristics of the loans in its portfolio of originations. For example, a lender insuring a disproportionate share of 85 percent LTV loans relative to the insurer's total book will likely have a lower claim rate since higher LTV loans are riskier. However, this lender will not necessarily be a more profitable customer to the insurer because the premium rates charged for 85 percent LTV loans are lower than for higher LTV loans. This highlights the need to examine the risk profile of a lender's loan portfolio.

#### Risk profile of lender's loan portfolio

As a lender's mortgage origination volume increases, the portfolio becomes more diverse and the risk of insuring (and reinsuring) the portfolio decreases. MI companies insure the loans of many lenders in order to reduce risk through diversification. However, a lender's captive is restricted to reinsuring only the lender's mortgages. Therefore, lenders with larger and more diverse origination volume are better suited to accept a larger piece of the risk pie.

Lenders should examine their loan distribution by LTV and loan type to assess the diversity of this risk. Lenders with higher concentrations than the industry of adjustable rate mortgages (ARMs) or loans with LTVs greater than 95 percent represent a greater risk than a more balanced portfolio.

However, there is probably no factor more important to the diversification of a lender's MI risk than the geographical distribution of the lender's originations. Geographical diversification is so critical that regulators have placed limitations on insurers' concentrations within a given Standard Metropolitan Statistical Area (SMSA). The National Association of Insurance Commissioners' (NAIC) Mortgage Guaranty Insurance Model Act limits an insurer's concentration to 20 percent of its insurance in force in any single SMSA.

The MI industry took a beating in the 1980s largely as a result of a regional economic event (the residential real estate depression of the oil patch states). Insurers' ability to withstand the losses of this period depended on their national diversification because the profitability of business in other regions partially diluted the catastrophic losses in the south central region. Likewise, larger and more geographically diverse lenders will be better suited to assume higher levels of risk.

#### Reinsurance structures

Myriad different reinsurance arrangements can be structured to meet a lender's particular appetite for risk. Contracts are typically structured to include mortgages originated by the lender during a three-to-



## Investigating captive mortgage reinsurance.

five-year origination period. The reinsurer receives premium revenue and is responsible for reinsured losses for a runoff period typically lasting 10 years for each origination year. The reinsurer may also be responsible for a ceding commission to the direct insurer. Ceding commissions are typically used in reinsurance contracts to compensate the direct insurer for its expenses associated with the underwriting and administration of coverage as well as claim settlement costs. While some captive mortgage reinsurance contracts specify a separate ceding commission, others include a reinsurance premium quote on a net of ceding commission basis.

Generally, reinsurance structures can be broadly classified into the following two varieties: quota share and excess of loss.

In a quota-share arrangement, the primary insurer and reinsurer share all losses and premium on a pro-rata basis according to the specified quota-share percentage. In an excess-of-loss arrangement, the reinsurer is responsible for all losses once the primary insurer's losses reach a specified level referred to as the attachment point. The reinsurer pays the primary insurer for all losses in excess of the attachment point up to the reinsurer's overall policy limit. No losses are reimbursed by the reinsurer if losses do not exceed the attachment point. As of late 97, most captive mortgage reinsurance arrangements have been on an excess-of-loss basis.

The corridor of losses reinsured by a lender can be defined in several ways. The primary insurer's direct loss ratio for loans subject to the contract can provide the basis for the reinsurer's layer. For instance, the reinsurer might cover losses exceeding 75 percent of the direct insurer's premium up to 110 percent of direct premium; (i.e., between direct loss ratios of 75 percent and 110 percent). Alternatively, the reinsured layer can be specified based on the direct risk insured by the primary insurer.

Regardless of how the reinsurer's layer of risk is specified, it is typically set at a level sufficiently higher than expected losses so that the reinsurer is expected to incur no losses in the majority of years. For example, the reinsurer may be expected to be loss-free for three out of four years of mortgage originations. However, the reinsurer's losses may be expected to consume the entire reinsured layer roughly 1 out of every four years. The one adverse origination year may produce losses up to four or five times as large as the reinsurance premium. In other words, the reinsurer is typically participating in a loss layer penetrated only in adverse loss cycles.

By contrast, a quota-share arrangement provides a reinsurer with a pro-rata share of risk that basically behaves identically to the direct risk insured by the mortgage insurer. The exposure covered by the direct insurer and reinsurer have the same risk profile just in different sizes reflecting the quota-share percentage. Unlike excess-of-loss participation, the reinsurer participates in all insured layers, including those associated with adverse underwriting cycles and layers of expected loss levels.

This feature may be particularly appealing if the lender believes average loss levels can be managed through mortgage lending underwriting standards but that catastrophic loss levels are virtually uncontrollable due to economic forces outside the lender's control. Such a lender would likely want to participate in the more manageable layers of loss included in a quota-share agreement, and possibly purchase aggregate excess insurance for the captive's exposure in the catastrophic claim layers. Quota-share arrangements are relatively new and less common than excess-of-loss arrangements. The appropriate maximum allowable quota-share level reinsured by lenders is a hot topic of debate by regulators. Vermont, which regulates many captives including several mortgage reinsurers domiciled in the state, has recently indicated that it may permit arrangements where the quota share is 25 percent or lower. The insurance commissioners for the states of North Carolina and Wisconsin have recently taken a similar view. However, the OCC has given banks approval to reinsure up to quota share levels of 50 percent. The OCC has indicated it would separately consider any banks seeking quota-share arrangements of more than that percent.

Capital required

Investigating captive mortgage reinsurance.

Lenders must be prepared to contribute capital to the captive to support the risk of reinsuring a coverage as volatile as mortgage insurance. The capital must be committed to the reinsurer on a long-term basis due to the lengthy runoff period associated with the exposure. While minimum capital levels vary by state of domicile, statutory minimum capitalization for a Vermont captive is \$250,000. However, lenders must be willing to contribute additional capital to provide a cushion for adverse years when losses exceed premiums.

At a minimum, the NAIC model act specifies that mortgage insurers are required to maintain capital so that aggregate insured liability (i.e., risk) does not exceed a factor of 25 times the insurer's capital. Risk is defined as coverage on all insured mortgages currently in force. For example, required capital associated with \$1 billion of insured loans in force would be approximately \$10 million. A lender with a 25 percent quota-share reinsurance contract on these loans would need at least \$2.5 million to support this risk (i.e., 25 percent of \$10 million).

Capital requirements for captive mortgage reinsurers tend to be more strict than the 25-to-1 standard for the following reasons:

- \* Lender captives are reinsuring a less geographically diverse portfolio than the aggregate insurance written by primary insurers. The additional risk associated with reinsuring this portfolio requires additional capital;
- \* Mortgage insurers are typically capitalized above the minimum level (i.e., at a ratio at or below 20 to 1). Additional capital is required to maintain a sufficient financial strength rating to be acceptable primary insurance providers on mortgages pooled by Fannie Mae and Freddie Mac. Primary insurers may similarly require their reinsurers to be sufficiently capitalized so that their rating is not jeopardized by potential insecurity of reinsurance collectibility;
- \* Lender captives typically reinsure on an excess-of-loss basis. As mentioned earlier, the reinsured layer tends to be above expected losses in the more volatile excess layers. The additional risk associated with such layers of coverage may require additional capital.

Mortgage insurance is a capital-intensive business. However, a portion of the capital required of the reinsurer may be met through sources other than cash, such as a letter of credit. Furthermore, during profitable years, capital will be generated from the reinsurance operations through the accumulation of retained earnings and a contingency reserve.

Mortgage insurers are required to establish a contingency reserve to cover potential loss. This reserve is also required of captive reinsurers. When computing an insurer's capital for purposes of required risk-to-capital thresholds, both the insurer's statutory surplus and its contingency reserve are included.

Under statutory insurance accounting, 50 cents of every mortgage insurance premium dollar must be set aside for 10 years in a contingency reserve. Reserve contributions cannot be released before the 11th year unless the insurer's losses exceed a threshold loss ratio of 35 percent (with state insurance commissioner approval). Net annual contributions to the contingency reserve are tax deductible as long as the deferred tax (which will be earned as revenue upon release in year eleven) is funded with noninterest-bearing tax and loss bonds.

The contingency reserve and capital requirements emphasize the long-term commitment required to reinsure mortgage insurance risk.

HUD compliance

A lender will want to be comfortable that its reinsurance arrangement does not violate section 8 of the Real Estate Settlement Procedures Act (RESPA). On August 6, 1997, the U.S. Department of Housing and Urban Development (HUD) issued a letter clarifying the applicability of RESPA to captive



## Investigating captive mortgage reinsurance.

reinsurance arrangements. HUD concluded that these arrangements are permissible "so long as payments for reinsurance... are solely payment for goods or facilities actually furnished or for services actually performed."

HUD outlines several factors which will cause additional scrutiny to be given to a captive-reinsurance arrangement and HUD presents the following two-part test to determine if a violation exists.

Test 1. The arrangement meets three requirements that establish that reinsurance is actually being provided; and

Test 2. The compensation paid for the reinsurance shall not exceed the value of the reinsurance.

The factors leading to additional scrutiny and HUD's two-part test are both discussed in detail in the December 1997 Mortgage Banking article "Being Held Captive by HUD." As noted in that article, the most difficult criteria that must be satisfied to establish that reinsurance is being provided (Test 1) is that there must be real transfer of risk.

HUD acknowledges that the transfer of risk requirement is clearly satisfied by a quota-share arrangement but states that the transfer of risk requirement can be met in the case of an excess-loss arrangement "if the band of the reinsurer's potential exposure is such that a reasonable business justification would motivate a decision to reinsure that band." Therefore, excess arrangements must be scrutinized more closely to ensure that no RESPA violation exists.

Based on the guidelines outlined by HUD, lenders must be comfortable that their captive reinsurance arrangements do not violate RESPA.

### Reinsurance protection for the lender captive

While the notion of a reinsurer purchasing reinsurance of its own may initially seem strange, it is a common practice in other lines of insurance. Known as retrocessions, such coverage allows the reinsurer to assume more risk for a given level of capital.

Lenders may want to consider purchasing reinsurance protection to limit the risk reinsured by its captive, particularly if the lender is pursuing a quota-share arrangement. For example, a lender may favor a quota-share arrangement due to:

- \* Its definite transfer of risk and the correspondingly stronger case against a RESPA violation; and
- \* The inclusion of the more predictable and manageable loss layer in the risk reinsured by the lender.

However, the reinsurer may desire reinsurance protection in order to:

- \* Protect the lender against catastrophic loss scenarios that present a greater risk to lenders with less geographic diversification;
- \* Reduce the volatility of the financial performance of the captive; and
- \* Reduce the amount of capital required to support the risk reinsured by the captive.

There are several reinsurers based in the United States and elsewhere (some of whom have served primary mortgage insurers in the past), that represent a third-party option for retrocessional protection to a lender captive. As an unrelated third party to the transactions between the lender and the primary insurer, such a reinsurer could provide protection to the captive while preserving the clean RESPA status afforded by HUD to quota-share arrangements.

Investigating captive mortgage reinsurance.

As mergers and acquisitions in banking and mortgage lending create larger and more diverse lenders, and as banks continue to increase their insurance operations, captive mortgage reinsurance is an idea whose time has come. However, given the nature of the risk, the complexity of the arrangements and the options available, lenders will want to do their homework before they plunge into the captive mortgage reinsurance waters.

Michael C. Schmitz is an associate actuary in the Milwaukee office of Milliman & Robertson. His areas of expertise include consulting to mortgage insurance companies and to lenders exploring captive mortgage reinsurance.

---

### Citation Details

**Title:** Investigating captive mortgage reinsurance.  
**Author:** Michael C. Schmitz  
**Publication:** *Mortgage Banking* (Magazine/Journal)  
**Date:** February 1, 1998  
**Publisher:** Mortgage Bankers Association of America  
**Volume:** v58 **Issue:** n5 **Page:** p85(5)

