EXHIBIT F

The PMI Group, Inc.

Analysis of Deep Cede Excess-of-Loss Captive Reinsurance Programs

Cautionary Statement

Cautionary Statement: Statements in this presentation that are not historical facts or that relate to future plans, events or performance are "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include our discussion of The PMI Group, Inc.'s (PMI or the Company) deep-cede captive reinsurance structures and the assumptions, rationales and conclusions of Milliman, Inc. described in this presentation with respect to PMI's deep-cede captives and their financial impact on PMI. When a forward-looking statement includes an underlying assumption, we caution that assumptions are inherently uncertain. Assumed facts almost always vary from actual results and the difference between assumed facts and actual results can be material. Forward-looking statements are subject to a number of economic risks and uncertainties including, but not limited to, changes in economic conditions, economic slowdowns, adverse changes in consumer confidence, declining housing values, higher unemployment, deteriorating borrower credit and changes in interest rates. Forward-looking statements are also subject to legislative and regulatory developments, and regulatory investigations relating to the insurance industry, including captive reinsurance arrangements. We cannot predict the scope, timing or outcome of legislative or regulatory developments or investigations. Other risk and uncertainties are discussed in the Company's filings with the Securities and Exchange Commission, including our report on Form 10-K for the year ended December 31, 2004 and Form 10-Q for the quarter ended March 31, 2005.

PMI

Milliman Analysis Qualifications and Limitations

In performing this analysis, Milliman relied on loss data, PMI's standard reinsurance agreements, insured loan volume, and other information provided and represented to us by PMI. Milliman has not audited, verified, or reviewed this data and other information for reasonableness and consistency. Such a review is beyond the scope of Milliman's assignment. If the underlying data or information is inaccurate or incomplete, the analysis may likewise be inaccurate or incomplete.

Any study of future operating results involves estimates of future contingencies. While Milliman's 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, Milliman assumed the average nationwide claim experience provided by PMI is appropriate. This experience has substantial geographical and lender diversification. To the extent that a lender's insured loan volume, 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, Milliman assumed that PMI's current primary mortgage insurance rates are reasonable relative to their risk, although we have not conducted an independent review of primary rates.

Milliman analyzes structures using standard actuarial methods. A Monte Carlo simulation generating forecast values consistent with the selected probability distributions and random variable correlation was used to project the distributions of outcomes at various confidence levels. Milliman selected this kind of simulation since it illustrates the variability inherent in our forecasts. A simulation model illustrates the projected impact of actual results varying from projected results due to estimated variability inherent in the insurance process. This variability is referred to as process risk. The simulation does not reflect the variation of actual results from projections due to parameter risk or specification risk. Parameter risk refers to the risk or uncertainty associated with the selection of the parameters underlying the applicable projection model. Specification risk refers to the risk or uncertainty surrounding the selection of the type of model used for the forecast. Milliman did not attempt to quantify the impact of parameter or specification risk.

Milliman expresses no opinion as to the accounting treatment of programs by PMI or others, as this is outside the scope of our expertise. Also, Milliman is not opining on the capital adequacy or financial condition of PMI or any of its reinsurers. Furthermore, Milliman's analysis should not be construed as a legal review of any prospectus, contract, materials or agreements, as this is beyond Milliman's area of expertise.

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 mortgage insurers. As a neutral party providing our opinion, Milliman does not determine whether a particular reinsurance structure 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 PMI's ultimate decision as to whether or not they enter into any particular reinsurance agreement.

PMI

Agenda

Analysis of Deep Cede Excess-of-Loss Captive Reinsurance Programs

PMI

The PMI Group, Inc.

- International provider of credit enhancement products that promote homeownership and facilitate mortgage transactions in the capital markets.

  Financial strength at March 31, 2005:

  - Combined[1] Insurance in Force $267 billion
  - Combined[1] Risk in Force $140 billion

- Consolidated financial results for the First Quarter of 2005:

  - Total Revenues $274.8 million
  - Net Income $101.2 million
  - Diluted EPS $1.00
  - Cash and Investments $3.6 billion
  - Total Assets $5.2 billion
  - Shareholders' Equity $3.2 billion

- Headquartered in the San Francisco Bay Area with offices in Australia, New Zealand, Hong Kong, Ireland, England and Italy.

[1] "Combined" includes results from U.S. Mortgage Insurance Operations, CMG and subsidiaries, PMI Australia and PMI Europe

PMI

2. Summary of the Study

Executive Summary

- **PMI's beliefs about captive reinsurance agreements:**
  - Captives align the interests of PMI and the lenders on origination quality, servicing and loss mitigation.
  - Captives create operational efficiencies, enabling PMI to lower its expense ratio.
  - Captives serve as an important source of reinsurance to protect against market downturns.
  - Captives are a source of capital due to the trust account structure within the agreements.

- **PMI contracted with consulting actuaries, Milliman, Inc. (Milliman) under the supervision of the Chief Financial Officer, to conduct an independent actuarial study of deep-cede captives to examine the following two issues:**
  - Whether deep-cede captives meet the requirements for risk transfer as defined below;
  - Whether the premium ceded is reasonable in relation to the ceded risk;
  - Whether the returns are reasonable on a risk adjusted basis.

- ***Statement of Financial Accounting Standards No. 113 Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts* (SFAS 113), outlines the following condition that must be met for risk transfer:**
  - It must be reasonably possible that the reinsurer realize a significant loss (Para. 9B)

- **PMI believes that the widely recognized industry guidance of a 110% present value loss ratio (at a 10% probability level) is the generally accepted test to meet the transfer of risk criteria.**

PMI

2. Summary of the Study

Executive Summary

- **Milliman reached several conclusions in the study:**
  - PMI's deep cede reinsurance programs satisfy the transfer of risk requirement of SFAS 113 since the probability of significant loss to the reinsurer is more than remote.
  - PMI's deep cede reinsurance structures offer ceded premium levels that are reasonable in relation to ceded risk.
  - PMI's deep cede reinsurance structures offer reasonable risk adjusted returns and reduce PMI's volatility of returns.

PMI

2. Summary of the Study

Executive Summary

- **Milliman is one of the largest consulting and actuarial firms in the United States:**
  - Milliman is a firm of consultants and actuaries serving the full spectrum of business, governmental, and financial organizations.
  - Founded in 1947, the firm has 32 offices in the United States as well as offices in Bermuda, Hong Kong, London, Madrid, México City, Milan, São Paulo, Seoul, and Tokyo.
  - Milliman is a founding member of Milliman Global, a global organization of consulting and actuarial firms.
  - Within Milliman's property and casualty division it maintains actuarial, mortgage, financial guaranty, risk management, claims, rating agency, and economics consulting practices.
  - Milliman's dedicated Mortgage Practice is a member of the Mortgage Banker's Association, as well as the American Bankers Insurance Association, and has participated in and presented at many of their events.
  - Milliman's mortgage insurance clients include many of the nation's largest private mortgage insurers and mortgage originators.

2. Summary of the Study

Milliman's Report

- Milliman's Report is a detailed, technical analysis of certain PMI reinsurance programs.
- Milliman's Report was prepared for the use of PMI, and not intended to benefit or create a legal duty to any third party.
- Participants on this call should be advised by actuaries or other professionals to properly interpret the results herein.
- Milliman is a firm of actuaries and consultants, and not accountants or auditors. Milliman's work, therefore, does not assure compliance with accounting standards, as only accountants or auditors may do that.

PMI

2. Summary of the Study

Analysis Outline

- **Milliman was retained by PMI to independently evaluate the financial impact of two deep-cede captive mortgage reinsurance structures:**
  - PMI Deep Cede Excess of Loss (XOL) Contract - A reinsurance contract defined by a net ceded premium equal to **38.2%,** a reinsured layer beginning at **3.7%** of original risk insured and a maximum risk layer of **9.1**% of the original risk insured.
  - 4-10-40 XOL Contract - A typical deep cede reinsurance contract with a net ceded premium equal to **40%** of the primary mortgage insurance premium, a reinsured layer beginning at **4%** of original risk insured and a maximum risk layer of **10%** of the original risk insured.
  - ***The PMI Deep Cede XOL Structure will be the focus of this presentation; similar results were obtained for the 4-10-40 structure.***

- **Milliman analyzed the captives under the following tests:**
  - **Transfer of Risk** - Whether the defined captive mortgage reinsurance structures would meet the transfer of risk requirements of SFAS 113.
  - **Price Relative to Risk** - Whether the specific captive mortgage reinsurance structures would likely meet the test specified by HUD that the compensation paid to the captive reinsurer must not exceed the value of such services.
  - **Risk Adjusted Return** -Whether the specific captive mortgage reinsurance structures would offer reasonable rates of return after reinsurance relative to rates of return before reinsurance.

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3. Description of a Typical Reinsurance Structure

Example of a Captive Reinsurance Structure

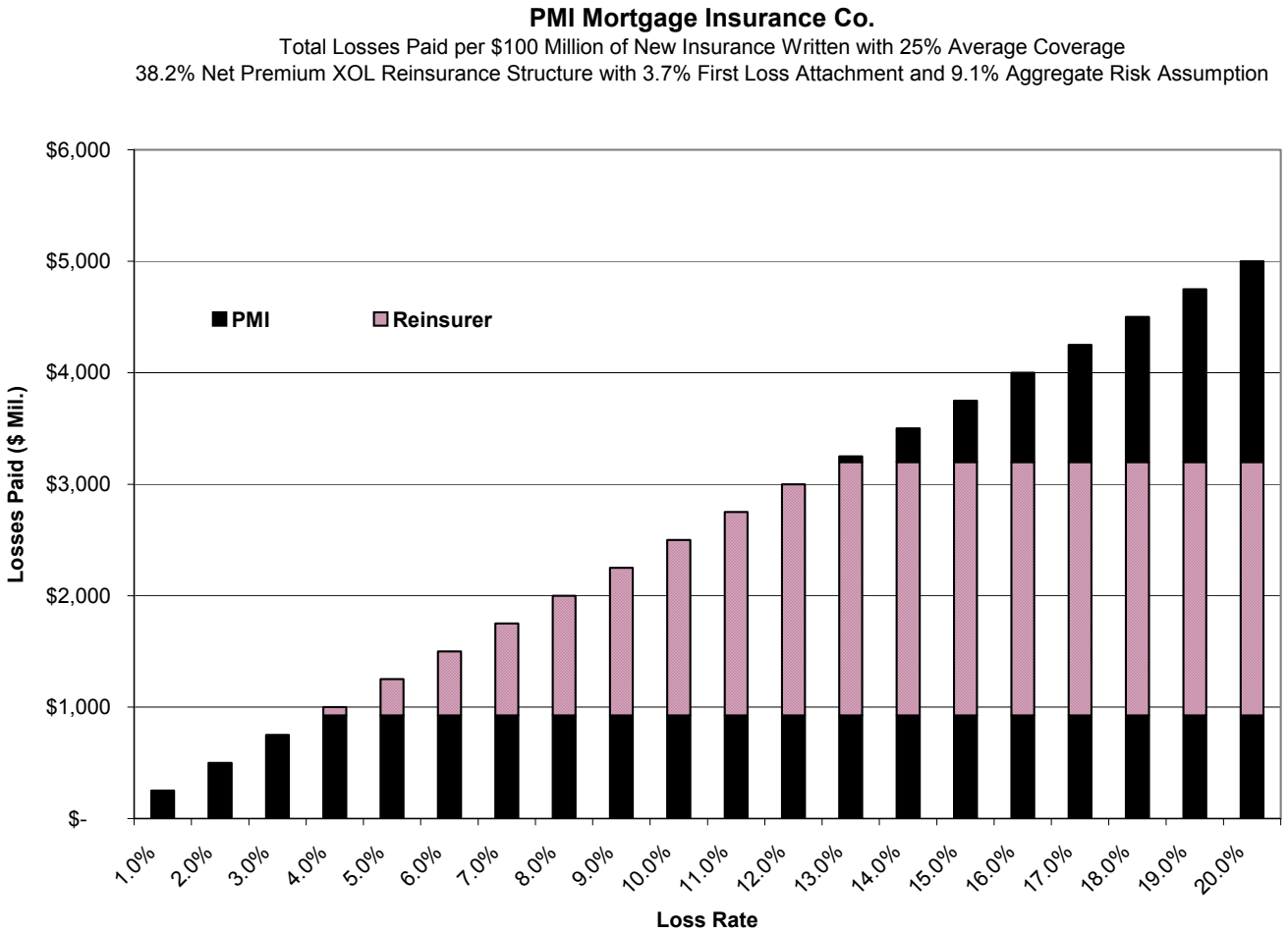
- **PMI's Captive Reinsurance Structures**
  - PMI cedes to the captive reinsurer a percentage of the gross written premium to reinsure a percentage of the original risk insured for a given book year of business.
  - In return for the premium, the captive reinsurer assumes a second-loss position (after PMI pays losses up to a first-loss position) consisting of a specified percentage of the original risk insured for each book year of business.

- **Example of a PMI Deep Cede XOL Contract reinsurance structure**
  - A sample portfolio of insured mortgage loans total $100 million with an average mortgage insurance coverage rate of 25%. PMI, the primary mortgage insurer, would insure $25 million in gross risk.
  - PMI will cede 38.2% of the gross written premium to the reinsurer to reinsure a percentage of the original risk insured.
  - PMI would pay losses up to the first loss attachment layer of 3.7% of gross risk, or $925,000 (i.e. 3.7% x $25MM).
  - The reinsurer will pay losses in excess of $925,000 up to $3.2 million for a maximum exposure of $2.275 million (i.e. 9.1% x $25MM).
  - All losses in excess of $3.2 million are the responsibility of PMI.

PMI

3. Description of a Typical Reinsurance Structure

Example of a Captive Reinsurance Structure



PMI

3. Description of a Typical Reinsurance Structure

Description of Reinsurance Structure

- **Important considerations of PMI's captive reinsurance agreements:**
  - All captive trust accounts are regulated by Arizona and New York State insurance regulations, as well as GSE guidelines.
  - OCC/OTS/Federal Reserve oversee the activities of captive reinsurance subsidiaries of banks they regulate. PMI continues to comply with procedures specified in the now-expired Baynham settlement.
  - The reinsurer supports the reinsurance with contributed capital and the ceded net premium is deposited into a trust. The initial capital contribution required is 10% of the first year's reinsured risk (i.e., a risk to capital ratio of 10:1).
  - Trust accounts are established for multiple book years. Therefore, the reinsurer has the ability to utilize capital and retained earnings from profitable book years to satisfy losses of unprofitable book years (i.e., cross collateralization).
  - A trust account is established at an independent trustee bank with PMI as the named beneficiary.
  - Trust account disbursements are subject to PMI's formal written consent and are monitored and administered by PMI.
  - Dividends to the reinsurer may be released only if capital exceeds the greater of 20% of reinsured risk and 102% of required reserves.
  - Trust assets must be invested in eligible securities.

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Historical Performance Data

- **Milliman collected 24 years of default and prepayment data from PMI and used the data to develop a Monte-Carlo simulation resulting in 10,000 scenarios of a mortgage insurer's book of business.**
  - Milliman used the simulation model to quantify the impact of deep-cede captives on loss ratios, internal rates of return, and returns on equity for both the captive and PMI.
  - Milliman looked at both the expected results and volatility of the results before and after the use of deep-cede captives.

- **Using the supplied data and its analysis of the ultimate book year performance, Milliman estimated probability distribution functions for each book year's ultimate loss and prepayment rates.**
  - The probability distribution function for loss rates (losses paid divided by original risk) that Milliman selected is a lognormal distribution with a mean of approximately 5.6% and a median of 4.1%.
    - **The resulting mean of 5.6% implies that, over time, deep-cede captives are reinsuring a portion of expected losses as well as catastrophic losses.**
    - **The resulting median of 4.1% suggests that over half of the scenarios in the distribution may lead to a loss to the captive.**

- **Milliman estimated that loss rates and prepayment rates are negatively correlated.**
  - The longer on average the mortgage insurance policies remain on the books, the more likely that the book will have higher cumulative ultimate loss rates.

5. Analysis of Risk Transfer

Description of Analysis

- **SFAS 113 states that a contract must meet the following two conditions to receive short-duration reinsurance accounting treatment:**
  1. The reinsurer must assume significant insurance risk under the reinsured portions of the underlying contract; and
  2. It must be reasonably possible ("more than remote") that the reinsurer realize a significant loss**.**

- **PMI believes that the widely recognized industry guidance of a 110% present value loss ratio (at a 10% probability level) is the generally accepted test to meet the transfer of risk criteria.**

- **Milliman simulated pro-forma financial statements for the reinsurer for a single book year under various performance scenarios. Next, they calculated the net present value of the reinsurer's cash flows under each of the defined contracts and calculated a discounted loss ratio.**
  - The present value loss ratio is defined as the ratio of the present value of paid losses to the present value of premiums received recognizing that both cash flows may be discontinued if the reinsurer's assets are depleted**.**
  - The single book year analysis assumes no cross-collateralization between book years.

- **Milliman simulated pro-forma financial statements for over 10,000 scenarios and derived the scenario for which 10% of the outcomes resulted in a higher loss ratio**
  - Milliman used this 10% probability scenario as the basis for the net present value analysis shown on the following page.
  - In the 10% probability scenarios, the losses satisfied by the reinsurer were less than the losses submitted to the reinsurer since the contract is discontinued once the reinsurer's assets are depleted.

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5. Analysis of Risk Transfer

Model Results

- **Under the PMI Deep Cede XOL Contract, for the 10% probability scenario, the captive's net present value loss ratio is 124%:**

Using the most conservative assumption, by year 7 the reinsurer's assets have been depleted. Therefore, the primary insurer discontinues ceding premiums to the reinsurer.

PMI Mortgage Insurance Co.
PMI Deep Cede XOL Contract – Single Book
FASB Premium and Loss Analysis ($000)

Calendar	Losses	Losses Satisfied	Losses Not Satisfied by	Premiums Due	Premiums Withheld Due to	Net Premiums to Reinsurer
1	$0 $0	$0		$1,196 $0		$1,196
2	0	0	0	2,192	0	2192
3	0	0	0	1,831	0	1831
4	2,568	2,568	0	1,434	0	1434
5	5,683	5,683	0	1,099	0	1099
6	4,766	3,236	1,530	835	0	835
7	2,927	0	2,927	635	635	0
8	2,018	0	2,018	488	488	0
9	1,120	0	1,120	378	378	0
10	785	0	785	295	295	0
11	547	0	547	231	231	0
12	416	0	416	0	0	0
Total	**$20,831**	**$11,488 $9,**	**343**	**$10,614 $2,**	**027 $8,**	**588**
Present Value		**$9,611 $7,**				**744**
Present Value Loss Ratio						**124%**

Conclusions

- **Milliman concluded that the reinsurance program satisfies the transfer of risk requirements of SFAS 113 since the probability of a significant loss to the reinsurer is more than remote under the PMI Deep Cede XOL Contract structure.**
  - Approximately 10% of the scenarios generated a loss outcome which resulted in a 124% present value loss ratio. This loss ratio assumes the contract is discontinued if the reinsurer's assets are depleted.
  - Milliman believes that the 24% loss in excess of premiums under the reinsurance structure demonstrates a substantial loss under a reasonably possible scenario.
    - PMI believes a 110% present value loss ratio (at a 10% probability level) is the generally accepted test to meet the transfer of risk criteria.

- **Importantly, Milliman's analysis also noted that the SFAS 113 analysis conservatively focused on the performance of a single book year.**
  - In a multiple book year scenario (with additional capital from contingency reserves, unassigned surplus and potential capital contributions from previous and subsequent book years) it is more likely that all (or a greater portion) of the reinsured losses would be satisfied under the stress scenario due to *cross-collateralization.*
  - If all the captive's losses are satisfied through cross-collateralization, Milliman concluded that at the 10% probability level, the present value loss ratio is 180%.

Description of Analysis

- **Milliman also analyzed whether the captive mortgage reinsurance structure would likely meet the test specified by Department of Housing and Urban Development (HUD) that the compensation paid for the reinsurance does not exceed the value of the reinsurance.**
  - The specific test is identified in the August 6, 1997 letter of the Department of Housing and Urban Development ("HUD") with respect to compliance of captive mortgage reinsurance arrangements with the Real Estate Settlement Procedures Act (HUD Test).
- **Milliman formulated their opinion by analyzing whether:**
  - The average reinsurance underwriting results, as measured by loss ratios, are reasonable in relation to those of primary mortgage insurers.
  - The cumulative return on capital for the reinsurer is reasonable relative to returns on capital for primary mortgage insurers.
  - Any decrease in PMI's return as a result of the captive reinsurance is offset by a corresponding decrease in volatility as measured by the Sharpe Ratio.

6. Analysis of Price Relative to Risk

Loss Ratio Analysis

- **Milliman concluded that the reinsurance coverage provides the primary company with significant reinsurance protection attaching at projected profitable levels for the primary company and reducing volatility in the years with above-average losses.**
  - The following table demonstrates the reinsurer's more volatile performance by showing the loss ratios at various probability levels for the PMI Deep Cede XOL Contract. (Captive reinsurance projected loss ratios are in the column marked "ceded").

PMI Mortgage Insurance Co. Loss Ratio Comparison at Probability Levels PMI Deep Cede XOL		
Probability Level	**Net Primary Insurer**	**Ceded**
50% 50%		7%
60% 51		26
70% 53		53
80% 54		95
90% 57		180
95% 99		218

This means there is a 80% chance that the Reinsurer's loss ratio is 95% or less. Therefore, there is a 20% chance that the Reinsurer's loss ratio will be higher than 95%.

- **The probability levels above represent the probability that a single book year has a projected loss ratio at or below the indicated level.**
  - The table shows that the reinsurance provides significant protection to PMI and also significantly reduces the volatility of the loss ratio.

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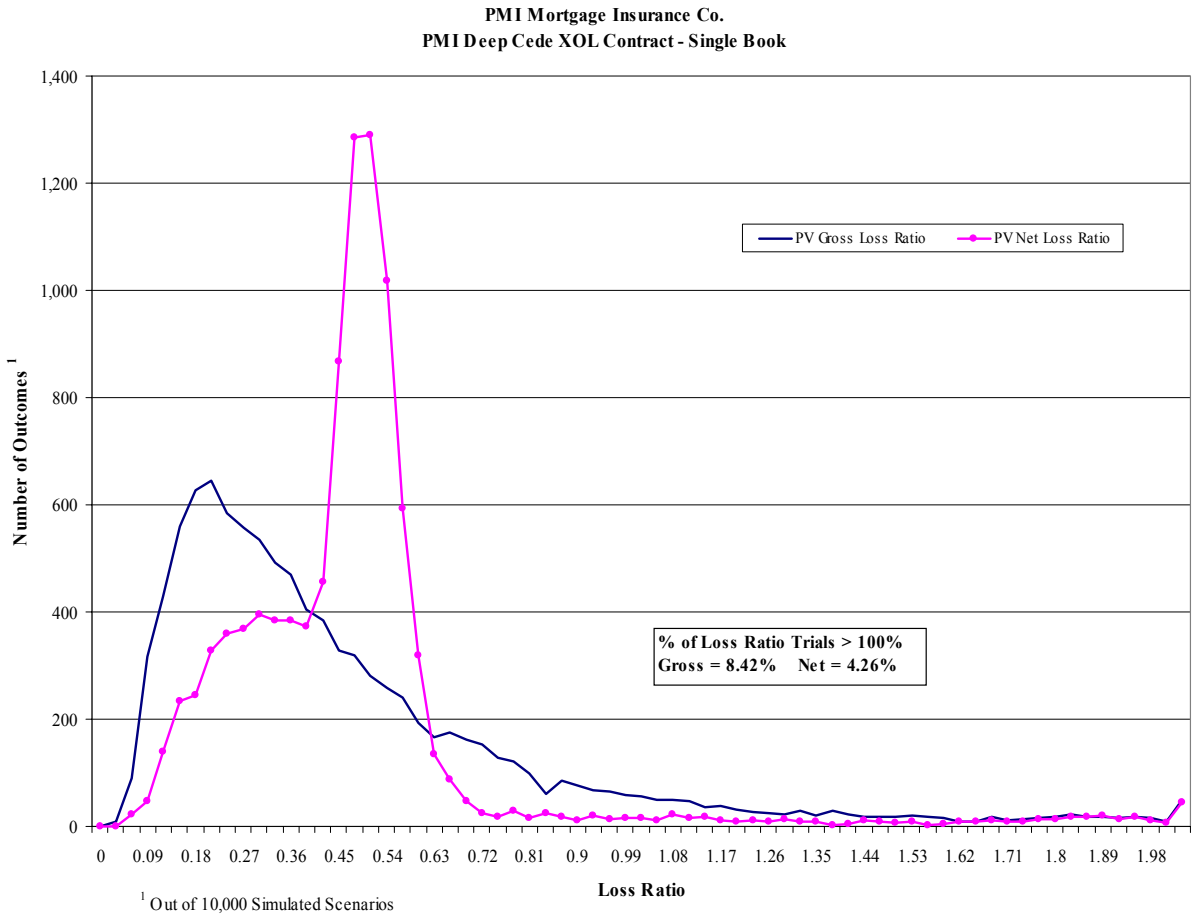
6. Analysis of Price Relative to Risk

Loss Ratio Analysis

- **Milliman further examined the volatility of loss ratios by segmenting the simulation results by the number of outcomes by present value loss ratios as shown in the graph below:**



- Prior to reinsurance, PMI's present value loss ratio distribution was consistent with the general lognormal distribution of ultimate loss rate performance. Subsequent to reinsurance, a greater percentage of outcomes are grouped around the expected mean loss ratio.

Conclusions

- **Milliman cited these results as evidence that the PMI Deep Cede XOL Contract ceded premium levels are reasonable in relation to the ceded risk:**

  - The average reinsurance underwriting results, as measured by loss ratios, are reasonable in relation to those of the primary mortgage insurance company.

  - There is significant reinsurance protection attaching at profitable levels for PMI.

Rate of Return Analysis

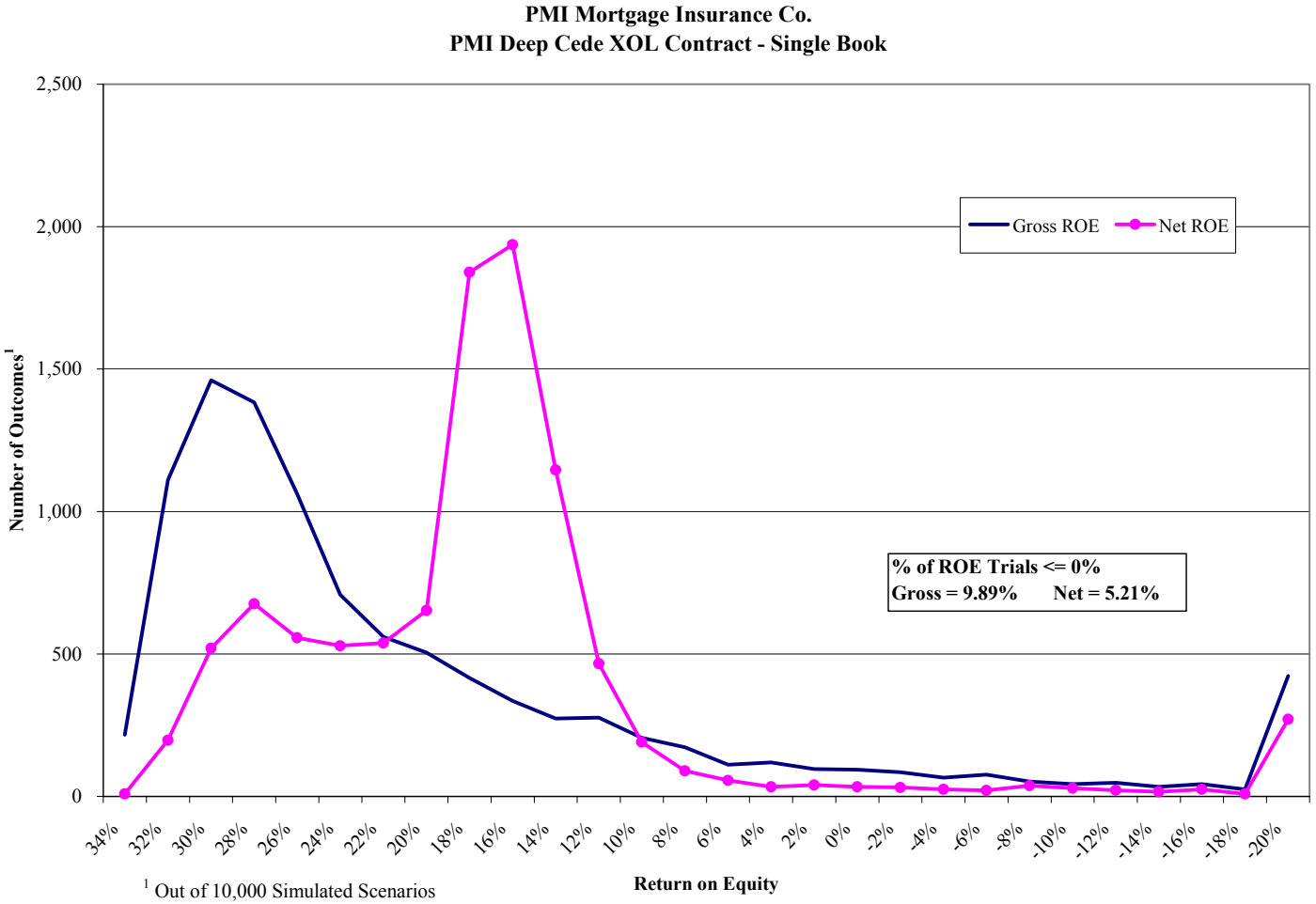
- **Continuing the price relative to risk analysis, the reinsurer's return for the defined reinsurance structure was compared to the primary company's returns on two basis**:
  1. The internal rate of return of dividends to the owner of the captive reinsurer, and
  2. The cumulative average return on statutory capital of the captive reinsurer.

- **Milliman studied the return on capital for the active mortgage insurance industry for the past twenty-seven years and concluded the average industry return is 15.8%.**

7. Analysis of Return-on-Equity

Reduction of Volatility of Returns

- **As in the loss ratio volatility analysis, Milliman segmented the simulation results by the number of outcomes by return-on-equity classes.**
  - The results of the Monte Carlo simulations are shown on the graph below.
  - The distribution of returns after captive reinsurance are more tightly grouped, with both upside and downside outcomes reduced, meaning that PMI's volatility of return has been reduced.



7. Analysis of Return-on-Equity

Reduction of Volatility of Returns

- **Milliman quantified the volatility of returns in the following table:**

PMI Mortgage Insurance Co. Reinsurance Structures Analysis Comparative Financial Results -- Return-on-Equity PMI Deep Cede XOL Program		
	Gross PMI	**Net PMI**
Mean	**18.8%**	**16.1%**
Standard Deviation	15.6%	11.1%
Coefficient of Variation	0.83	0.69
Median	24.6%	16.4%
% Outcomes <= 0% ROE	9.9%	5.2%

Mean ROE is slightly reduced

Volatility is reduced

Outcomes with ROE equal to or less than 0% are reduced

- **PMI's return-on-equity (prior to any reinsurance impact) is 18.8%. Subsequent to reinsurance, PMI's return-on-equity is reduced slightly to 16.1%.**
  - Although PMI's resulting return-on-equity under the captive reinsurance contract is lower, the benefits of the reinsurance are demonstrated in the transfer of risk under adverse scenarios and by the overall reduction in volatility of PMI's return-on-equity expectations.
  - The number of outcomes with return-on-equity less than 0% (a point at which cumulative net income is less than or equal to 0% cumulative average capital) is reduced from 9.9% to 5.2%.

PMI

7. Analysis of Return-on-Equity

Sharpe Ratio Analysis

- **Milliman was able to compare the trade-off between the reduction in return on equity and the reduction in volatility by calculating the Sharpe Ratio.**
  - The Sharpe Ratio is often used by portfolio managers to examine the trade-off between risk and return. The higher the Sharpe Ratio, the more attractive the investment on a risk-adjusted basis, all else held equal.
  - The Sharpe Ratio is calculated by subtracting the risk-free rate of return from the expected return and dividing the result by the standard deviation of the return.
  - The risk-free rate of return was assumed to be 4% based on long-term Treasury securities.

PMI Mortgage Insurance Co.
Reinsurance Structures Analysis
Comparative Financial Results -- Return-on-Equity
PMI Deep Cede XOL Program

	Gross PMI	Net PMI
Mean	18.8%	16.1%
Standard Deviation	15.6%	11.1%
Sharpe Ratio	**0.95**	**1.09**

- **PMI's Sharpe Ratio, and thus PMI's risk-adjusted return, is improved with the use of the captive structure.**
  - While the risk-adjusted return is better after captive reinsurance, absolute returns are reduced as less capital is utilized.
  - The increase in the Sharpe Ratio supports the assertion that the premium relative to the ceded risk is appropriate.

PMI

Conclusions

- **Milliman concluded that net risk adjusted return on equity to PMI after deep-cede reinsurance is reasonable compared to the risk adjusted return prior to reinsurance.**

  - PMI's mean return on equity with the Deep Cede XOL Contract is 16.1% and when viewed in conjunction with the transfer of risk and the reduced volatility of returns, offers a reasonable return when compared to the average return for the industry.

  - PMI's Sharpe Ratio is improved with the use of the captive reinsurance structure, which supports the conclusion that reinsurance premiums are reasonable relative to the ceded risk.

  - PMI's returns are enhanced in above average loss years.

Summary of Conclusions

- **PMI's deep-cede captives satisfy the transfer of risk requirements of SFAS 113.**
  - Milliman concluded that the probability of a significant loss to the reinsurer is more than remote under the PMI Deep Cede Structure.
- **PMI's deep-cede captives offer reasonable price relative to risk.**
  - Milliman concluded that ceded premium levels are reasonable in relation to the ceded risk.
- **PMI's risk-adjusted return is improved with deep-cede captive reinsurance.**
  - Milliman's study shows how risk-adjusted return, as measured by the Sharpe Ratio, improves with the use of captives.
- **Milliman's study shows that the net risk adjusted return on equity to PMI after deep-cede reinsurance remains reasonable to the risk adjusted return prior to reinsurance.**

Appendix

Appendix – Exhibit A

Captive Reinsurance Regulatory Requirements

- **Captive reinsurance in the mortgage insurance industry is highly regulated:**
  - **State Departments of Insurance:**
    - Arizona – Captive reinsurance agreements must meet certain statutory and regulatory requirements for PMI to receive credit for reinsurance. This includes the requirement for the captive insurer to hold contingency, loss and unearned premium reserves in investment restricted trust accounts of which a mortgage insurer is the sole beneficiary.
    - NY, CA – Impose their regulations on credit for reinsurance to both domestic and foreign insurers.
    - Reinsurer's state of domicile – Financial statements, actuarial opinions on loss reserves must be filed annually.
  - **HUD:** HUD has, by letter, set certain standards that are used to evaluate whether captive reinsurance programs may violate the Real Estate Settlement Procedures Act (RESPA).
  - **OCC/OTS/Federal Reserve:** Oversee the activities of captive reinsurance subsidiaries of banks they regulate.
  - **Captive Review:** Each captive program structure is reviewed by an independent auditor or consultant and the transfer of risk requirements in accordance with SFAS 113 are verified before PMI enters into the program structure.
  - **Freddie Mac and Fannie Mae (GSEs):** In an effort to control counterparty risk, GSEs have issued MI Eligibility/Qualified Requirements. These requirements set strict standards around captive reinsurance arrangements with lenders, including:
    - Reinsurance agreements must be eligible for reinsurance accounting and must constitute a risk transfer as defined by SFAS 113.
    - The imposition of minimum and dividend capital levels (10:1 and 5:1, etc.).
    - Requiring a minimum restricted asset balance not less than $35 million in aggregate for all in force agreements in order for a captive reinsurer to assume a premium cede greater than 25%.

PMI

Appendix – Exhibit B

Contractual and Capital Requirements

- **A Reinsurance Agreement and related Trust Agreement must be negotiated and executed by all parties.**
- **Captive trust accounts are regulated by Arizona and New York State insurance regulations, as well as GSE guidelines.**
- **Trust assets must be invested in eligible securities to ensure the security of the trust assets, including:**
  - Conservative investment standards as defined by New York statute.
  - Assets must be readily marketable and investment-grade securities.
- **A trust account is established at an independent trustee bank with PMI as the named beneficiary.**
  - Beneficiary (PMI) shall have right to withdraw trust assets at any time without notice to Grantor (lender).
- **The lender must fund the trust account with a minimum 10% of first year's risk ceded irrespective of any premiums ceded into the trust**
  - Failure to contribute initial capital or any portion thereof results in reinsurance agreement termination.
  - Reinsurer loses these deposits and any other trust balances if it fails to make any subsequent required deposits.
- **100% of ceded premiums are deposited into the trust account**
  - At all times, the minimum trust balance must be the greater of 10% of reinsured risk and 102% of required reserves.
  - Failure to maintain minimum capital levels results in reinsurance agreement termination.
  - Terminations result in all trust assets being transferred to PMI, reassumption of all ceded business and cancellation of rights and obligations under reinsurance agreement.

PMI

Appendix – Exhibit C

Key Assumptions

- **Milliman's analysis is based on these modeling assumptions as represented to Milliman by PMI:**
  - Single book of business with $1 billion in new insurance written.
  - A corporate effective tax rate of 35%.
  - An average rating agency required risk-to-capital ratio of 19.5 (dollars of risk in force) to 1 (dollars of required rating agency capital) prior to reinsurance.
  - An average pre-tax investment yield of 5.0% to the primary insurer and 4.0% to the reinsurer.
  - An expense ratio of 20% for PMI related to servicing lenders with excess-of-loss (XOL) reinsurance contracts**.**
  - The mix of business by product type and loan-to-value ratio (shown in the following table) was selected to represent PMI's average distribution of borrower-paid MI at the time of the analysis.

PMI Mortgage Insurance Co.
Key Modeling Assumptions
Mix of Business Distribution

Product	LTV	Percent	Coverage	Premium
Fixed Rate:	97%	10.2%	35.0%	0.96%
95%		26.2%	30.0%	0.78%
90%		34.1%	25.0%	0.52%
85%		14.4%	12.0%	0.32%
Adjustable Rate:	97%	1.8%	35.0%	1.21%
95%		4.6%	30.0%	0.92%
90%		6.0%	25.0%	0.65%
85%		2.5%	12.0%	0.37%
Total / Average		100.0%	25.5%	0.64%

PMI

Appendix – Exhibit D

Key Assumptions

Milliman made the following additional assumptions in the analysis of return on equity:

- **An average risk-to-capital ratio of 19.5:1 for the primary mortgage insurer prior to reinsurance.**
  - Viewed in the context of an MI capital model, Milliman concluded that the 19.5:1 ratio appeared to be conservative and reasonable when applied each year in a 10-year model.
  - The assumption is consistent with PMI's long-term pricing assumptions and below the statutory limit of 25:1.
- **PMI receives capital credit for the trust account assets maintained on its behalf by its captive reinsurance partners.**
  - PMI represented that two rating agencies recognize the trust assets in their capital models.
- **The amount of funds held in trust by the captives (and thus credited to PMI in its net capital calculations) could be estimated using a 7.5:1 risk-to-capital ratio.**
  - It is the mid-point between the reinsurers' minimum (10:1) and dividend-eligible (5:1) risk-to-capital requirements.
  - *PMI's current deep-cede captive reinsurers have an average ratio of 5.4:1.*
- **All reinsured losses are satisfied through sufficient capital and cross-collateralization.**

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