

EXPERT REPORT OF MICHAEL JOSEPH CASCIO

- I. Background and Qualifications:** *See* Attachment A, hereto.
- II. Compensation:** My compensation for this project is \$500 per hour plus expenses.
- III. Opinions and Findings:**
1. I was retained by counsel to PHH Corporation for the purpose of evaluating certain reinsurance agreements that were entered into between Atrium Insurance Corporation (“Atrium”) and two providers of private mortgage insurance (“pmi”): AIG United Guaranty Mortgage Insurance Company (“UGI”) and Genworth Mortgage Insurance Company (“Genworth”) (hereinafter collectively referred to as the “Atrium Agreements”). The Atrium Agreements were excess-of-loss arrangements whereby Atrium assumed a layer of pmi risk in exchange for a share of the premium paid to UGI and Genworth.
 2. I have been involved in the insurance and reinsurance business for 35 years. A copy of my curriculum vitae is included as Attachment A to this Report. A listing of the documents I primarily relied upon in formulating my opinions in this matter is Attachment B, hereto.
 3. The purchase of reinsurance is common in the insurance industry. There are many motivations for a ceding company, in this case the pmi companies, to purchase reinsurance.

Below are eight common reasons why a primary insurance company may purchase reinsurance:

- A. surplus relief;
- B. catastrophic exposures retained and accumulated;
- C. withdrawal from a line of business (“LOB”) or territory;
- D. sale or other Merger and Acquisition (“M&A”) activity;
- E. use of the reinsurer’s expertise in a difficult or complex line;
- F. risk sharing or transfer;
- G. cover risks not totally covered by other parties or reinsurers, i.e., to cover an excluded event or risk; and/or
- H. smoothing of financial results.

4. It is reasonable to believe that UGI and Genworth purchased coverage from Atrium for some of the above reasons including surplus relief, catastrophic exposures, utilization of reinsurer's expertise, risk sharing/transfer, and smoothing of financial results. A brief commentary for each motivation follows:

A. Upon the purchase of pmi reinsurance coverage, the reinsurer is required to post adequate security so that the ceding company will not incur a "Schedule P penalty." Each reinsurance contract must ensure that the security is sufficient to satisfy the governing laws. If the security posted is insufficient as to amount and/or quality, then the insurance company (the ceding company) would need to make a liability provision on its balance sheet for the amount of the shortfall, which in effect would reduce the surplus of the ceding company by such amount. In connection with my review of the Atrium Agreements, I saw no evidence that the security posted by Atrium was insufficient as to amount or quality such that UGI and Genworth would have incurred a Schedule P penalty.

B. Based upon my review, the mortgage insurance business has an element of catastrophic exposure. It is common for multiple successive years of profitable underwriting results to be abruptly interrupted, and for future periods to be unprofitable, perhaps for an extended period of time until the market corrects. The cyclical nature of mortgage insurance is well understood and there can be little argument that this is simply the nature and character of mortgage insurance.

The experience of Atrium is emblematic. As demonstrated by the 2008 housing meltdown, years of profitable results were then followed by unprofitable underwriting years due to losses to its layer of reinsurance. Based on the materials I have reviewed, Atrium satisfied all claims for reinsurance that were payable and due under the Atrium Agreements.

It is worth noting and emphasizing that the profitability of a particular underwriting is not immediately known. There exists a significant time lag, or “tail” in insurance vernacular, in which it takes losses to manifest themselves in the way of paid claims. For example, defining the 2004 underwriting year as the time from 1/1/2004 – 12/31/2004 for new and refinanced loan activity, it is quite possible that at 12/31/2004 or even 12/31/2005 for this underwriting year to appear profitable (i.e., for premium to exceed paid losses) yet may ultimately prove to be unprofitable (i.e., losses exceed premium) with the development of losses over time. This is important as the insurer (and reinsurer) will not know at the time of renewal (1/1/2005) if the prior underwriting year (or more) was (were) profitable and may be committed to cover losses on successive years before remedial action can be taken.

C. Utilization of the reinsurer’s expertise is often overlooked as a real positive, but ceding companies view this benefit as extremely valuable. As anecdotal evidence of such reliance, the Atrium Agreements were subsequently amended after the effective date of the original contract. The UGI reinsurance agreement alone was amended roughly 10 times. Although some of the amendments were fairly mundane and innocuous, some of the amendments clearly were directed at the risks being assumed. Modifications of primary risk drivers, such as credit scores, were often reviewed and subsequently adjusted. Such changes are indicative of an insurer and reinsurer trying to ameliorate the risks being collectively assumed.

D. Risk Transfer or Sharing. For the Atrium Agreements, the typical arrangement for coverage was for Atrium to assume a 10% layer of cover in excess of an attachment point of 4% for a reinsurance premium of 40%, or in reinsurance vernacular, 10% XS 4% for 40% of the premium. It is worth noting that the layers and premium ceded were not uniform across

all years, as well as for each contract, but the 4-10-40 structure was the norm and a useful guideline to explain this concept.

a. Under the Atrium Agreements, the insurer, UGI or Genworth, typically retained the first 4% of the layer, likely to avoid what is commonly referred to in the industry as “dollar swapping.” Stated differently, since the reinsurance premium required to cover the first 4% of losses would likely require a premium dollar amount roughly equal to the dollar amount of the primary 4% of coverage, then the insurer is no better off by purchasing reinsurance for expected loss activity. From the insurer’s perspective, excess-of-loss would be a preferred structure for pmi reinsurance agreements, since a quota share (“QS”) arrangement would result in dollar swapping on the lower or primary layer for the majority of the years being considered. As a result, the insurer will typically retain some initial layer of first dollar losses. Continuing with the 4-10-40 structure or example, the ceding company would retain 60% of the premium (plus a ceding commission, if any, from the reinsurer, to cover front end and administrative expenses of the primary or ceding company placing the business on the reinsurer’s books) to cover the layer in excess of 14% plus the primary layer represented by the first 4% of the losses. Since the insurer has 50% more premium than the reinsurer (i.e., $60\% / 40\% = 150\%$), when the reinsurer suffers a full limit loss of 10%, then the total losses of the insurer would need to reach 15% for the loss ratios to be equivalent, or a total loss in the aggregate of 25% (15% for the insurer + 10% for the reinsurer).

b. Separating the 25% into the layers, the first 4% is retained by the insurer, the next 10% is ceded to the reinsurer, and the next 11% is back onto the insurer. This is important, as I observed multiple years where the losses pierced and at times resulted in a

full layer loss to the reinsurer, but I did not see any years where the paid losses actually exceeded 25% in the aggregate. It is possible for this level to be reached with future development in one or two book years. Therefore, in the years where the reinsurer suffered full limit losses, the insurer's loss ratio was lower. This is exactly the type of risk transfer or risk sharing that is typical in the reinsurance industry. In the "good years," the insurer had more than ample premium to cover the first 4% of the losses, thus enjoying an underwriting profit, as well as comfortably knowing that the reinsurer will cover the next 10%.

c. Based on the foregoing analysis, I conclude that the band of Atrium's potential exposure was such that there was a reasonable business justification on the part of UGI and Genworth to motivate a decision by them to reinsure that 10% risk layer. I also believe based on the above, that Atrium was in a more tenuous position than UGI or Genworth. The actual ultimate loss ratios for all book years illustrate this point emphatically, as the Atrium estimated ultimate loss ratio is significantly higher than the ceding company's retained loss ratio. Another way to look at the benefit of the reinsurance provided by Atrium, the retained loss ratio of the ceding companies is projected to be 23% lower with reinsurance, or said differently, the loss ratio for all book years in the aggregate of the ceding companies (UGI & Genworth) is 23% higher without the protection of the reinsurance provided by Atrium. To suggest that Atrium was not assuming risk when it was in a more tenuous risk position than UGI or Genworth defies logic.

E. Another benefit of reinsurance that is often overlooked by the casual observer is the inherent benefit in the real world of stable financial results. As pointed out in the

example above, the insurer or ceding company shows a solid underwriting profit when losses are at or below the attachment point, yet shows better results than the reinsurer when losses are catastrophic in nature, i.e., from 14-25%. This has great value to all ceding companies, but especially those that are publicly-traded or are a part of a publicly-traded organization. The investment community is very focused on consistent quarterly and annual financial results and does not like surprises. To have a reinsurance product in place that dampens the cyclical nature of mortgage insurance is invaluable. The same argument would apply to privately held companies, although there is arguably more of a tolerance for some volatility. That being said, if such a company sought to go public, or be purchased privately, I believe that consistent, more reliable historical underwriting results would likely result in a higher multiple to book value or earnings at the time of sale.

5. For reinsurance arrangements, the governing law is the law of the state of domicile of the ceding company or the insurer. This is to make sure that the ceding company, among other things, is able to obtain the necessary statutory relief for placed reinsurance.

6. The Atrium Agreements provide that they may be amended only with the written consent of both parties and, for the UGI Agreement, the Commissioner of Insurance of North Carolina, UGI's state of domicile. Furthermore, any proposed amendment did not take effect until such consent and/or approval was obtained. This type of provision is not unusual in the industry and reflects the significant control exercised by both the ceding company and the reinsurer, as well as oversight that is exercised by the North Carolina Commissioner of Insurance with respect to the UGI Agreement.

7. The governing law places a number of restrictions on the Trust Agreement that is an integral part of the reinsurance agreement. In essence, the amount in the trust is designed to

provide adequate security for the ceding company for the risks transferred to and assumed by the reinsurer. The various issues related to any Trust Agreement include, for example:

- a. conformity with applicable law;
- b. initial capital contribution;
- c. percentage of the reinsurer's limit;
- d. contingency reserves;
- e. dividend restrictions;
- f. unearned premium ("UEP") provision;
- g. unpaid loss reserve provision, where unpaid losses includes an incurred but not reported ("IBNR") amount;
- h. sufficient assets, so that the ceding company receives financial statement credit;
- i. qualified assets; and
- j. all investment income and gains remain in the trust unless there is approval by the Commissioner of Insurance to allow for the payment of dividends by the reinsurer.

I have reviewed the Atrium Agreements and the accompanying Trust Agreements. The provisions contained in the Trust Agreements are standard provisions that are consistent with those contained in other reinsurance agreements that are used in connection with other LOBs.

8. It is worth noting that under the Atrium Agreements, there are not separate trusts for each policy year, thus excess amounts from prior profitable years of the reinsurer are available to pay losses in current years. The premiums received by the reinsurer for that policy year become the funds or assets of the reinsurer. Accordingly, to the extent those assets are subject to future claims, the reinsurer's balance sheet is at risk. Stated otherwise, to the extent Atrium did not pay losses for book years 1997 to 2003, the premiums earned on those policy years, i.e., Atrium's

funds, were at risk for losses incurred in book years 2004 through 2008 because of the cross-collateralization structure of the trust accounts for the Atrium Agreements.

9. I have reviewed the letter from Nicolas P. Retsinas, Assistant Secretary for Housing-Federal Housing Commissioner, to Sandor Samuels, General Counsel of Countrywide Funding Corporation, dated August 6, 1997 (hereinafter, the “HUD Letter”). The HUD Letter states that the requirement of risk transfer is met in connection with an excess of 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.” HUD Letter, Page 6. In my professional opinion, the Atrium Agreements met the requirements of the HUD Letter regarding risk transfer. As explained above, there are a number of business justifications that would motivate both UGI and Genworth to purchase reinsurance from a captive reinsurer such as Atrium.

10. I have also reviewed several of the Analysis of Excess-of-Loss reports that were prepared by Milliman, Inc. (“Milliman”) for Atrium. For the reports that I reviewed, Milliman concluded that the reinsurance arrangements it reviewed, from an actuarial and financial point of view (A) had “a reasonable probability of a loss to the reinsurer” and (B) had “a net ceded premium which is reasonably related to the ceded risk.” *See, e.g.,* Analysis of Excess-of-Loss Reinsurance Program, Genworth Book Year 2008B.

11. **Protective Order** [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]. The Atrium Agreements clearly state that the reinsurer will continue to be liable, notwithstanding any termination. Both of the agreements allowed the insurer to seek relief if Atrium refused to honor its reinsurance

obligations. Based on my years of experience, I believe that if this issue were to be put before an arbitration panel, the panel would award the ceding company an amount equal to the unpaid liabilities. It is worth noting that the trust contained substantial monies from prior policy years.

12. Milliman utilized Financial Accounting Standards Board Statement No. 113 (“FASB 113”) to perform its risk analysis. The applicability of FASB 113 to mortgage insurance/reinsurance agreements is a question that has created disagreements among those in the business. *See, e.g.*, Proposed Emerging Issues Task Force (EITF) Issue: Risk Transfer in Mortgage Reinsurance Captive Arrangements, identified in Attachment B, hereto. I point this out for two reasons: first, the applicability of FASB 113 to evaluate risk transfer for agreements such as the Atrium Agreements is not settled in the industry; and second, there are other means of evaluating risk transfer.

13. “Risk transfer” is determined at the inception of the contract. It is not performed with the benefit of hindsight and actual loss experience. For reinsurance arrangements similar to the Atrium Agreements, where loans are put into pools or “books” for purposes of reinsurance, each book stands alone for purposes of the risk transfer analysis. The “cross-collateralization” of the book years for purposes of the payment of losses actually enhances the risk transferred in subsequent policy years, thus making the initial year of contract the “least risky.” However, the unencumbered capital available and stipulated by state law in year one provides adequate liquidity to satisfy FASB 113.

14. The risks are transferred and assumed when the agreement is put in effect. The one exception to this rule is amendments. To the extent that an amendment materially changes the risk transferred between the parties, then any prior analysis of risk transfer may not be applicable and a subsequent analysis of risk transfer may be warranted.

15. It is not uncommon in connection with catastrophe excess-of-loss (“XOL”) reinsurance agreements to have long periods with no losses paid by the reinsurer. As noted above, and as noted by the EITF in its consideration of this issue, mortgage reinsurance is catastrophic coverage. It is not uncommon or unexpected for catastrophe XOL reinsurance to have many successive years of loss-free experience. This is the nature of the industry and proves nothing with respect to the risk transfer issue, which again is not a “look back” analysis, but rather performed at contract inception. Stated differently, multiple years of loss-free experience for catastrophe XOL reinsurance exposure is not evidence of a non-risk agreement; rather, it is simply evidence of a non-catastrophic event or trigger, and nothing more.

16. FASB 113 does not require a reinsurer to assume risks where it ultimately believes that it will suffer an economic loss. The issue to satisfy is, at contract inception, does the reinsurer assume ample risk so that there is a reasonable possibility of suffering an economic loss of reasonable proportions. The charges brought against PHH, *et. al.*, also imply that an XOL catastrophe reinsurer needs to satisfy the usual risk transfer criteria. Nothing can be further from the truth, which I will expand upon by the following example. That said, we will demonstrate that PHH can be held to this higher standard despite it being uncertain that such a standard should even be applied in this instance.

17. XOL layers are often designed to cover only those events that are truly of the low frequency variety. Industry people often discuss, underwrite and price covers for the “100 Year Event”. 250 and 500 Year Event Covers are also noted. It would be wrong to apply FASB 113 guidelines to these XOL contracts, as clearly these covers are not expected to be pierced with any regularity, but rather may have a loss trigger very seldomly. Strictly applying the 113 standard to such contracts is not what FASB had in mind. Despite the above exception for our

catastrophic XOL contract, we will apply the 113 standard which is arguably a higher standard than PHH needs to satisfy.

18. In order to ascertain risk transfer under FASB 113, one would need to illustrate that: (1) Atrium may incur a reasonable loss, where the magnitude of such a loss is somewhat accepted in the industry to be at least 10% of the net present value (“NPV”) premium; and (2) the probability of incurring such a loss is not remote, where “remote” is somewhat accepted in the industry to be a probability of at least 10%. This is referred to as the “10/10 Rule,” even though no such rule has been adopted by the Financial Accounting Standards Board. Based upon my review of Milliman’s reports, and with the caveat that I have not performed any independent analysis of Milliman’s calculations, I believe that Milliman properly applied FASB 113 in reaching its conclusion of a reasonable probability of loss to the reinsurer, despite some of the flaws (in my opinion) in portions of its reports, specifically, its statement regarding the limit of liability I noted in paragraph 11, above.

19. I also note that Paragraph 67 of FASB 113 states that the reinsurer “need not be exposed to the reasonable possibility of significant loss for a contract to meet the conditions for reinsurance accounting” if the reinsurer’s exposure to loss is essentially the same as the insurer’s. My initial review indicates that FASB 113 may have been satisfied by this alternative method because the two insurers, Genworth and UGI, were only in a net loss position when losses reached a certain threshold, and Milliman projected that this threshold would likely be reached only with respect to two UGI book years even though the real estate market suffered a complete meltdown. By contrast, Atrium, was in a net loss position for the majority of the book years, i.e., in a worse position than the ceding companies.

20. In connection with my analysis of the Atrium Agreements, I was provided with a copy of the Excess of Loss Policy Reinsurance Agreement entered into by Mortgage Guaranty Insurance Corporation (“MGIC”) as the ceding company, and National City Mortgage Insurance Company, Inc., as the reinsurer (“MGIC Agreement”). The MGIC Agreement was filed in the case captioned *White v. The PNC Financial Services Group*, No. 11-7928 (E.D. Pa.).

21. The MGIC Agreement has a provision providing that if the Trust is underfunded, then future liability of the reinsurer is potentially terminated with no further contractual recourse, except arbitration. Specifically, while section 5.4 of the MGIC Agreement provides that the “Ceding Company [MGIC] and Reinsurer [PNC] shall continue to be liable to each other for Reinsurance Premiums, Losses incurred . . . and all other obligations under this Agreement,” section 5.4 applies “*except as described in Section 5.3 above.*” (emphasis added). Section 5.3 is the provision that applies when the Agreement terminates pursuant to Section 5.2(h) based upon the reinsurer’s failure to make Deficiency Deposits. Thus, in such instances the ceding company, in this case, MGIC, gets 100% of the underfunded Trust, which may be less than the contractual liability assumed by the reinsurer at contract inception.

22. I have reviewed the reinsurance agreements entered into by UGI and Genworth with Atrium and there is no contract provision in those agreements that is similar to the provision in the MGIC Agreement.

23. It is common for the two contractual parties in a reinsurance arrangement to terminate their agreement and agree to commute. This may be arrived at with or without the specific contractual right to do so. The ability to commute an agreement has no effect on whether or not there is risk transferred in connection with the reinsurance agreement, assuming of course that there was no understanding to do so when the contract went into effect. In any business

arrangement, the parties in a contractual relationship have every right to modify prior commitments, assuming there is agreement of the parties involved and it does not violate applicable law.

24. The ability to commute is standard in any reinsurance contract, even if there is no specific contractual provision for commutation. There are arguably an unlimited number of reasons why the parties in a contract decide to commute, but from my roughly 35 years in the industry, I can tell you that the two primary drivers of commutation are:

- A. the desire of one party to exit the business and no longer be on risk, or
- B. the need of one party to improve its cash position (or financial statement in general), and by entering into a commutation, its needs are satisfied.

Condition B above was the likely motivator for UGI and Genworth to commute, as the Atrium Trust would have had a reasonable level of cash, and during the crisis, cash would have been useful to the pmi providers. Having the reinsurance in place was a potential mechanism for having “cash reserves” which may not have been available in the absence of a reinsurance arrangement. It is not difficult to envision the cash from prior profitable years being used by UGI or Genworth for other corporate needs, if the ceding company did not reinsure and retained 100% of the risk for all policy years.

25. There is no requirement under risk transfer analysis to continue to commit to a reinsurance arrangement, even if prior years were profitable. No rational business entity knowingly assumes risks if it believes that it ultimately will suffer economic losses in the long run, and arguably in the short term too, although it is not unusual for reinsurers to take a long term view and write business in the downward portion of the cycles, fully expecting to recoup in the “good times.”

26. Reinsurance arrangements routinely provide the reinsurer the option, in the event losses mount in successive years with no end in sight, to be able to walk away or at the very least renegotiate contract terms, which is likely the position of the insurer too. Mortgage insurance is a very long tailed LOB, and at the inception of any policy year, it would be extremely difficult, if not impossible, to ascertain what the loss experience would be, unless the market had turned downward with no end in sight.

27. As an FCAS and MAAA, I am able to interpret the historical premium and loss data of Atrium and the ceding companies. In order for me to reach the above conclusions, it was necessary for me to perform numerous mathematical calculations. I did perform numerous cross checks and reasonableness checks, as well as balanced to total amounts where applicable, so I am comfortable that my calculations are accurate and my conclusions valid. To the extent that inadvertent errors in calculations or flaws in logic exist, I will promptly issue a revised Expert Report and highlight any differences in the calculations and conclusions that logically follow.

28. There were numerous legitimate business reasons for UGI and Genworth to enter into a contractual reinsurance relationship with Atrium. In addition, my analysis of the Atrium Agreements demonstrates that there was risk transfer even if one utilizes FASB 113, which as I noted above, is not the only test of risk transfer for purposes of analyzing reinsurance agreements.

29. I have reviewed the Notice of Charges that were filed by the Consumer Financial Protection Bureau (“CFPB”) on January 29, 2014, and I note the following:

A. In Paragraph 22, the CFPB asserts that “Atrium conducted no underwriting to price any reinsurance risks that it purportedly assumed.” This assertion makes no sense to me since Atrium, as a captive reinsurer was relying on the underwriting of the loans that was

performed by PHH Mortgage and PHH Home Loans, LLC, when those entities originated the loans. Further, the rates charged for the private mortgage insurance were filed with the various state regulators. The amount charged by Atrium for the reinsurance risk it assumed was the subject of negotiations between Atrium and the pmi provider and Atrium relied upon the actuarial analysis performed by Milliman for purposes of analyzing risk transfer.

B. Paragraph 59 is simply incorrect. The trust account statements I have reviewed indicate that in addition to capital contributions and premiums received from the pmi companies, the trust accounts also contain earnings from the funds maintained in the trusts accounts. Further, once the premiums are paid to Atrium, those funds become the funds of Atrium, subject to its contractual and regulatory obligations to maintain sufficient funds to pay losses on its outstanding reinsurance obligations.

C. Paragraph 60 contains a number of incorrect statements. I am not aware of any reinsurance entities that did not segregate trust accounts by insurer. In addition, the paragraph fails to recognize that when the reinsurance agreements were formed, the initial capital was provided by PHH, which was then at risk for losses in the early years of the reinsurance arrangement.

D. Based upon my review of the UGI and Genworth Agreements, all claims were paid and I saw no evidence that any dividends were not permitted by Atrium's regulator, the New York Department of Insurance, or Atrium Reinsurance Corporation's ("Atrium Re") regulator, the Vermont Department of Insurance.

E. Paragraphs 63 through 70 contain a number of general statements regarding the low probability of risk associated with Atrium's reinsurance arrangements. I note that those statements are with the benefit of hindsight. The risk analysis is performed at the inception

of each year without the benefit of hindsight. Further, as I noted above in Paragraph 4.B, the mortgage insurance business has an element of catastrophic exposure so it is common for multiple successive years of profitable underwriting results to be abruptly interrupted, and for future periods to be unprofitable, perhaps for an extended period of time until the market corrects. Thus, the period of 12 years without losses identified in Paragraph 69 of the Notice of Charges is common in the insurance and reinsurance industries when considering catastrophic coverage. I also note that the statement regarding Atrium's purported non-payment of claims "through the end of 2007" is misleading because in fact Atrium paid claims on reinsurance books starting in 2004. The fact that the payments were not made until 2008 is simply because claims are not paid until a pmi provider liquidates its losses.

30. I reserve the right to express additional opinions, to supplement or amend the opinions in this Report, and to provide additional reasons for these opinions, as new facts and opinions are introduced during this case. I have identified the documents that I primarily considered in preparing my report in Attachment B, hereto. In addition to these documents, I may use other exhibits as a summary or to support my opinions in this case. I further reserve the right to rely on any exhibits introduced in connection with the testimony of any other expert or witness, or any other documents produced in this case.


IV. Publications:

None.

V. Prior testimony as an expert at trial or hearing or by deposition within the past four years:

- Jerry W. Slusser and BCL Capital vs. Wesco Insurance Company
- Legion vs. ALEA

Executed on this 3RD day of March, 2014:


Michael Joseph Cascio, FCAS, MAAA