MGIC

September 5, 2014

The Federal Housing Finance Agency
Constitution Center
400 7th Street, SW
Washington DC, 20014
Attn: Mortgage Insurance Eligibility Project

Re: <u>2014-N-9: Draft Private Mortgage Insurance Eligibility Requirements</u>

Sir or Madam:

Mortgage Guaranty Insurance Corporation ("MGIC") welcomes the opportunity to comment on the draft Private Mortgage Insurer Eligibility Requirements ("PMIERs") developed by Fannie Mae and Freddie Mac (collectively, the "GSEs") under the oversight of the Federal Housing Finance Agency ("FHFA") as their conservator.

Executive Summary

MGIC supports FHFA's effort to complete and implement the PMIERs in a timely fashion, consistent with FHFA's 2014 Scorecard for Fannie Mae, Freddie Mac and Common Securitization Solutions ("Scorecard").[1] However, we recommend the draft PMIERs be adjusted to balance the GSEs' need for strong counterparties with a number of competing public policy concerns, including those discussed in the Scorecard.

We believe that the adjustments we are recommending would achieve that balance without needlessly delaying the implementation of strengthened counterparty financial requirements. The public policy concerns are three-fold:

- **<u>Preserving market liquidity (the Scorecard's "Maintain" task)</u>.** The Scorecard's "Maintain" task emphasizes credit availability for mortgages to foster liquid, efficient, competitive and resilient national housing finance markets. The PMIERs, if implemented as drafted, will have a detrimental impact on housing finance market liquidity, increasing mortgage financing costs, especially for borrowers with credit scores below 700 and creditworthy borrowers with more limited resources who can only contribute a 3% or 5% down payment. This concern could be addressed by recognizing the contractual benefit of future premiums on business written after 2008 in calculating an Approved Insurer's Minimum Required Assets.

- **<u>Promoting greater use of private capital (the Scorecard's "Reduce" task)</u>.** The Scorecard's "Reduce" task emphasizes the importance of reducing taxpayer risk through increasing the role of private capital in the mortgage market. The PMIERs, if implemented as drafted, will discourage private capital from playing a greater role in bearing mortgage credit risk as investors question the ability of the private mortgage insurance ("MI") industry to insure a broad segment of the low down payment market under reasonable requirements, as it historically has (see Figures 1 and 5). The PMIERs, if implemented as drafted, will also limit the MI industry's ability to expand coverage for investors that want to assume more risk (commonly referred to as front-end risk sharing) on loans with loan-to-value ratios ("LTVs") below 80%. These concerns could be addressed by (i) providing a more transparent process for the application and modification of the PMIERs, (ii) codifying the FHFA's continuing involvement in the development and oversight of the PMIERs, (iii) the GSEs and the FHFA formally and explicitly consulting and collaborating with the state insurance regulators and the Federal Housing Administration ("FHA") to ensure that implementation of the PMIERs and any subsequent changes do not have unintended, material market-shifting consequences, and (iv) expanding factors in Table 3 of Exhibit A of the PMIERs for LTVs from 85% down to 60%.

- **<u>Encouraging financial system resiliency (the Scorecard's "Build" Task)</u>.** The Scorecard's "Build" task, among other things, emphasizes stability, standardization, and uniformity,each of which enhance financial system resiliency. The PMIERs are an example of the emphasis on uniformity, replacing formerly distinct approaches taken by Fannie Mae and Freddie Mac regarding MI counterparty requirements. The recently completed Master Policy is another.

  The PMIERs, if implemented as drafted, will have a negative impact on financial system resiliency because of the (1) pro-cyclical effect of requiring more assets to be held by Approved Insurers in economic downturns, even though the original asset requirements consider a severe economic downturn, (2) the complex and duplicative regulatory environment being created for the MI industry, and (3) the incentives created to use GSE accepted MI alternatives, such as piggyback loans and recourse agreements. These concerns could be addressed by (i) including credit for "seasoning" in the calculation of Minimum Required Assets, so that as loan performance becomes more predictable over time there is a decrease in Minimum Required Assets, which would better align them with the expected lifetime performance of the book, (ii) conforming the PMIERs with the updated Model Act for MI to be published by the National Association of Insurance Commissioners ("NAIC") (provided the financial requirements of the updated Model Act have addressed pro-cyclicality), (iii) developing and implementing a coordinating mechanism among the GSEs, FHFA and state regulators to promote consistency, and (iv) and having the GSEs impose requirements similar to the PMIERs on other accepted forms of credit enhancement.

Thus, rather than constituting one discrete element within the Scorecard, the PMIERs implicate all three categories in important ways. In the remainder of this comment letter, we expand our discussion of the public policy goals that would be negatively affected by the draft PMIERs and we provide detail regarding our proposed solutions to avoid the negative effects. In the Appendix to this comment letter, we provide comprehensive replies to the specific questions posed by the FHFA in its "Overview of the Draft Revised Private Mortgage Insurer Eligibility Requirements" (the "Overview") and recommended modifications to the PMIERs that are not responsive to specific questions posed by the FHFA but that MGIC believes are important. Capitalized terms used but not defined in this comment letter have the meanings given to them in the draft PMIERs.

As the FHFA and the GSEs consider comments on the PMIERs we believe it is important that they reassess what appears to have been a major concern of theirs during the PMIERs drafting process: payment of claims by mortgage insurers with deferred payment obligations (DPOs).

We agree that the relevant regulatory and counterparty standards governing the MI industry should be improved.[2] The draft PMIERs are, however, too blunt a solution to fix a problem that was limited in scope. Since 2007, the MI industry[3] has paid more than $47 billion in claims, to-date meeting 96% of its obligations and exceeding the level of expected recoveries in a severe recession,[4] despite three mortgage insurers[5] entering runoff and not timely paying all of their claims. Given the tremendous impact that the Great Recession has had on the entire economy, in particular the housing sector, we do not believe that the MI industry was uniquely weak or fragile during the financial downturn or in its aftermath.

The regulatory and counterparty forbearance extended to mortgage insurers during the financial downturn (such as the waiver of maximum risk-to-capital ratio/minimum policyholder position limits and continued eligibility under GSE remediation plans) occurred only after state regulators and the GSEs subjected the mortgage insurers to regular, independent stress tests to evaluate their claims paying ability. While three insurers did go into run-off and paid claims in part using DPOs, MGIC and most other mortgage insurers did not fail and did not receive any federal or state monetary support. Indeed, the MI industry attracted $9 billion of new capital, not to meet obligations already written, but rather to allow companies, including three new entrants, to continue to offer mortgage insurance throughout the financial downturn.

The point is not to argue that new MI eligibility requirements are not needed; new requirements are needed to incorporate lessons learned from the downturn, by all participants in the housing finance system. However, resistance to changing important elements of the draft PMIERs should not be based on the false premise that the draft must be maintained to avoid risking a large future problem (or to put in narrative terms, the MI industry was weak), when the facts show the actual problem was in fact limited (the industry did not fail to perform). That premise appears to have led to a requirement that mortgage insurers hold an unnecessarily high level of Minimum Required Assets in order to minimize counterparty risk. This requirements works against public policy goals.

Discussion

Preserving market liquidity

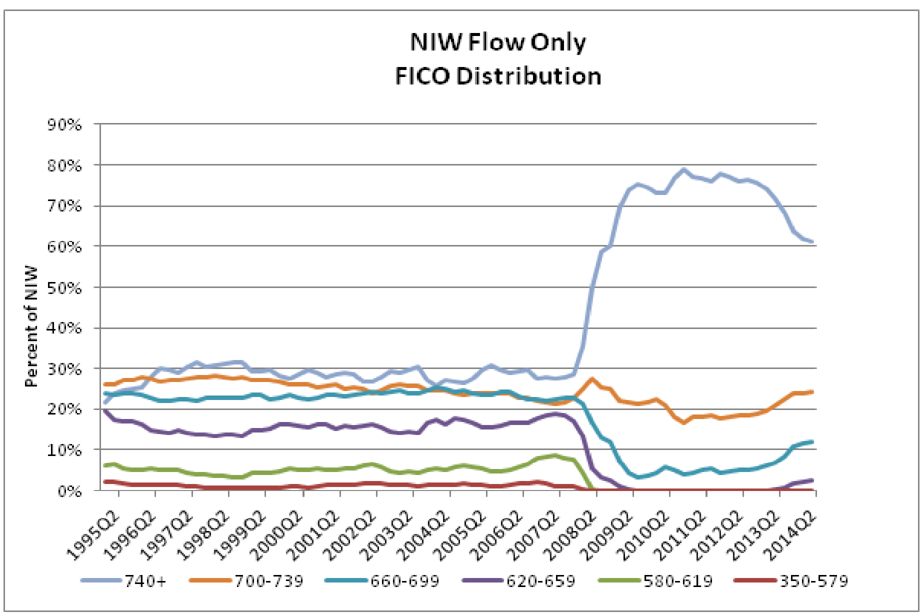
The Scorecard's largest weighting (40%) is given to the "Maintain" task, which acknowledges the GSEs' primary role in the U.S. housing finance system is to promote liquidity in the broad market.[6] MI is critical to sustaining GSE efforts to provide housing access and choice for lower wealth borrowers, particularly those with imperfect credit profiles. The GSE charter provisions requiring loan-level credit enhancement for residential mortgage loans exceeding 80% LTV and the correlative authority given to the GSEs to create and maintain eligibility requirements are strong evidence of Congressional recognition of the importance of the MI industry's role in assuring liquidity in the low down payment lending market.[7]

For this reason, MGIC believes it is appropriate for the FHFA to ask (1) whether the PMIERs as a whole enhance liquidity within the portions of the market traditionally served by MI, and (2) whether particular technical provisions of the draft PMIERs address the GSEs' general market liquidity promotion role appropriately. MGIC suggests that changes to the draft PMIERs are needed for the FHFA to respond "yes" to these questions.

(1) <u>Liquidity within the portions of the market traditionally served by MI - preserving and enhancing borrower choice</u>

The current market already is materially different from (and considerably narrower than) the MI industry's "normal" market – whether as a result of credit cycle overreaction by lenders, Dodd-Frank regulatory requirements, FHA guidelines, or GSE guarantee fees ("gfees") and loan-level price adjustments ("LLPAs"). As Figure 1 shows, MGIC's business written since 2009 is concentrated predominantly in higher credit score ranges, with a median credit score of 759, compared with the 1995 to 2007 period, which had a median credit score of 706.

Figure 1 FICO Score Distribution of MGIC New Insurance Written (Flow Only)



The narrowness of the current GSE market is not limited to credit score distributions. While the MI industry is willing to provide market liquidity for borrowers with very low down payment mortgages (*i.e.*, 97% LTVs), the GSEs have limited the amount of liquidity at a time when the vast majority (more than 70%) of FHA insurance is being placed on >95% LTV loans.

Ordinarily, MGIC would expect – and welcome – a reversion of its business mix to one closer to historical norms, as evidence that it is supporting efforts to provide market liquidity across the broad market. However, the draft PMIERs will make it difficult for the MI industry to support the GSEs' (or other investors') liquidity efforts in the segments of the market typically included in the "normal" MI business mix but missing from the current mix. The draft PMIERs increase the Minimum Required Assets for certain segments of business, which will reduce returns on that business to a level below the requirement for private capital.

In order for a mortgage insurer to maintain the expected rates of return demanded by investors, MI premium rates would have to be increased compared to current (already risk-adjusted) rates. The first two columns of the table in Figure 2 compare an estimate of a borrowers' monthly principal and interest payment, including the cost of mortgage insurance, for a conventional loan with private mortgage insurance to the monthly payment for an FHA insured loan. The third column reflects the monthly payment increase that would be required in order for MGIC to maintain its current rate of return on these segments of its business. An increase in premium rates will result in a substantial increase in borrowers' monthly payments or, if an increase in rates is not feasible, it will result in capacity rationing by the MIs as investors would not accept the resulting substantially lower returns. Neither outcome supports the Scorecard's emphasis on increasing access to credit, a goal reiterated in the FHFA's 2014 Strategic Plan for Enterprise Conservatorships.[8] Additionally, as can be seen in the fourth and fifth columns of the table, for the borrowers that can afford it, the payment increase or capacity rationing is likely to direct more business toward the FHA, which will leave borrowers with fewer and more expensive choices and leave taxpayers with increased exposure. We think it is unlikely that FHFA intended the Scorecard's "Maintain" and "Reduce" tasks to be met by shifting mortgage volumes to another Government-backed mortgage insurance facility, limiting choice or increasing costs for consumers.

Figure 2 Potential Impact of Draft PMIERs on Monthly Mortgage Payments

					Monthly Mortgage Payment with Private MI Better/(Worse) than with FHA Insurance	
	FICO Score	Private MI	FHA	Monthly Increase in Private MI Premium due to PMIERs	Before PMIERs	Post PMIERs
95% LTV	740	$ 1,167	$ 1,271	$ 59	$ 104	$ 44
	720	$ 1,167	$ 1,271	$ 59	$ 104	$ 44
	700	$ 1,230	$ 1,271	$ 70	$ 41	$ (29)
	680	$ 1,230	$ 1,271	$ 70	$ 41	$ (29)
	660	$ 1,306	$ 1,271	$ 126	$ (36)	$ (162)
	640	$ 1,322	$ 1,271	$ 126	$ (51)	$ (178)
	620	$ 1,338	$ 1,271	$ 126	$ (68)	$ (194)
90% LTV	740	$ 1,076	$ 1,204	$ 20	$ 128	$ 108
	720	$ 1,076	$ 1,204	$ 20	$ 128	$ 108
	700	$ 1,112	$ 1,204	$ 26	$ 92	$ 65
	680	$ 1,112	$ 1,204	$ 26	$ 92	$ 65
	660	$ 1,165	$ 1,204	$ 76	$ 39	$ (37)
	640	$ 1,180	$ 1,204	$ 76	$ 24	$ (52)
	620	$ 1,195	$ 1,204	$ 76	$ 9	$ (68)

Subject to change based upon changes to LLPAs, MI and MIP premium rates, and other third party costs. Assumes $220,000 Purchase Price, Owner Occupied, 30 Year FRM Rate of 3.75% for FHA, Conventional rate 3.875 – 4.5%, GSE Adverse Market Fee of 25 basis points, GSE Loan Level Price Adjusters, FHA Upfront Premium is added to loan amount. All other closing costs and third party fees are the same. Values presented may be impacted by rounding.

This potential outcome from the PMIERs will further exacerbate the concern raised by some (and supported by Home Mortgage Disclosure Act data) that the GSEs are not providing needed credit to borrowers with weaker credit profiles, including many minority applicants.[9] To be sure, the subject is a complex one,[10] but MGIC believes that the PMIERs should encourage reversion to a more historically normal business mix, which could be done in part by appropriately adjusting the tilt against lower credit score, lower down payment borrowers. MGIC believes that its recommended changes to the PMIERs, discussed in this letter and the Appendix, are a prudent way to accomplish this.

Of course, MGIC isn't the only MI provider with historical mix data, and we urge the FHFA to compare our experience with other MI providers to target a realistic and appropriate liquidity support expectation. At a minimum, we suggest that FHFA and the GSEs consider fair lending "disparate impact" issues when they review comments to the PMIERs and clarify the underlying reasoning used in finalizing the PMIERs, particularly in connection with the Scorecard goals and the recently released 2015-2017 Proposed Housing Goals for Fannie Mae and Freddie Mac.[11]

We are confident that GSE liquidity for lower credit score and higher LTV borrowers can be restored to historical levels, preserving and enhancing borrower choice if the PMIERs are changed as we propose. This is especially true if, as the FHFA and GSEs explore changes to gfees/LLPAs,[12] the GSE pricing models are modified to allow full credit[13] for MI (due to strengthened counterparty requirements) and the LLPAs on high LTV loans are reduced.

The negative effects on liquidity that would result if the draft PMIERs are implemented without change would not be eliminated by gfee/LLPA adjustments alone. In addition, lower potential gfee/LLPAs, combined with MI premium increases, would introduce potential adverse selection risk against MI compared with other credit enhancement alternatives accepted by the GSEs and not subject to a PMIERs-like level of operational and financial oversight.[14] We believe there should be thorough and robust discussion of any effort to leave the PMIERs unchanged by adjusting gfee/LLPAs only. Otherwise, what seems to be a Scorecard "win/win" (i.e., actions taken in the "Maintain" and "Reduce" categories) instead might be working at cross-purposes.

(2) <u>General market liquidity can be preserved through recognition of future premiums</u>

One important change to the draft PMIERs that would promote general market liquidity would be to recognize in Available Assets the insurer's contractual right to receive future premium income on all business already written. Indeed, two housing policy experts already have proposed this change as a way to mitigate premium rate increases that would result from the draft PMIERs', particularly for lower credit score and higher LTV borrowers.[15]

The draft PMIERs allow future premium income to be included in Available Assets for policies written before 2009 (up to 210% of the *net* premium earned in the prior 12 months on those policies), but exclude future premium income for policies written after 2008. MGIC believes the decision to exclude entirely the future premiums on post-2008 policies represents an inappropriate dismissal of an important source of liquidity when less drastic yet meaningful alternatives to a 100% exclusion could be chosen.

The importance of premium recognition is substantial, as is the potential effect on liquidity. Approximately 90% of MGIC's current writings (and in force portfolio) is in the form of annually and monthly renewable policies that based on historical experience have an average life of 3 to 6 years. To disregard this reality (and not allow credit for the contractual right to receive future premiums) would be to measure counterparty security based on a short-sighted assessment of the business. For example, even for MGIC's worst performing book year of business (2007), premiums earned through June 30, 2014, are equal to approximately 55% of claims paid and approximately 47% of claims incurred (including loss reserves). MGIC is not unique in this regard. A standard measure of MI performance is the loss ratio (claims paid plus losses incurred/premiums earned). A loss ratio of in the ballpark of 200% (claims twice premiums) is anticipated by many mortgage insurers for their 2007 books. *But a 200% loss ratio means that premiums in fact funded 50% of losses*. Thus, our proposed inclusion of future premiums in Available Assets for post-2008 policies as well as pre-2009 policies is not based on a simple request for accommodation but a realistic assessment of how premiums and paid claims are interrelated. Without premium recognition for business written after 2008, more Available Assets will be required than are necessary. Investors will expect a return on those Available Assets similar to historical returns. As illustrated by Figure 2, those return thresholds will require higher premium rates and correspondingly higher borrower payment obligations or, in an absence of higher premium rates, will likely result in a reduction of insurance capacity and shift of business to FHA, with concomitant taxpayer risk.

In addition to reducing liquidity in the housing finance market, the exclusion of premium income from Available Assets is inconsistent with current thinking regarding the stress-testing of financial institutions. One of the primary regulatory lessons learned from the financial downturn was that the Basel II rules provided inadequate protection in a stress scenario. The Basel II framework was built on Value at Risk (VaR), a methodology created for measuring exposure to short-term (day-to-day) fluctuations in the market value of assets held by financial institutions. The Basel II models extended that methodology to a 1-year horizon for credit risk exposures. By ignoring the impact of a stress scenario on the full balance sheet and income statement of a financial institution over a more extended period, the Basel II models failed to alert regulators to the true potential impact of a severe stress scenario. Subsequently, U.S. regulators developed the Comprehensive Capital Analysis and Review, which examines the full impact of a three-year stress scenario on a financial institution's resources, including the revenue it will earn. Failing to properly recognize premiums in Available Assets is a step backward from regulatory best practice. MGIC believes a better and fairer resolution is possible without compromising the GSEs' interests in sound counterparties.

It is unclear why certain future premiums were included and others excluded from the definition of Available Assets, and why other measures short of complete non-recognition of future premium on post-2008 policies would not work. The PMIERs lack a companion explanation describing in detail the rationale for the various provisions contained in them. As a result, there is no meaningful discussion regarding alternatives examined and the relative effect of the PMIERs on credit access, mortgage insurers and their asset requirements, the FHA and the overall mortgage market.

Based on the commentary in the Overview, it appears the GSEs' predominant concern is avoiding the circumstance of a mortgage insurer becoming statutorily insolvent, which can result in partial or deferred claim payments or unpaid claims altogether. Three mortgage insurers (representing approximately 25% of the market at the time they ceased writing new business) were forced to cease writing new business during the economic downturn and were required by their regulators to pay claim payments only partially in cash, with the balance paid in the form of a DPO. Although one of those mortgage insurers, the Republic Mortgage Insurance Company (and its MI affiliates) has since paid the DPOs and committed to pay future claim payments fully in cash,[16] and another increased the percentage of its claims paid in cash (versus a DPO) from 50% to 67%, the GSEs were forced to take a charge for the unpaid amounts, and some DPOs ultimately might not be paid in full. MGIC estimates that from 2008 through 2013, the GSEs received more than $38 billion in cash proceeds for claims submitted to the MI industry, or 96% of total claim proceeds due them.[17]

MGIC recognizes the GSEs' concern regarding statutory insolvency as a legitimate one. However, based upon the high percentage of claim payments received in cash in a housing market downturn worse than the Great Depression, MGIC believes the decision to exclude all premium recognition on all post-2008 policies represents an imbalanced and overly conservative response to a legitimate concern. There are alternative approaches that could make statutory insolvency and the issuance of DPOs unlikely without disallowing premium recognition on post-2008 policies altogether. MGIC views the GSEs' concern as particularly well suited for a focused discussion among the GSEs, FHFA, state insurance regulators, and the MI industry. Such a discussion would address the subject comprehensively with a more complete awareness of the issues and concerns involved, including why (as well as when and how) state insurance regulators treat future premium as they do when assessing the financial strength of a mortgage insurer, and how the issues were addressed during the recent financial downturn. MGIC suggests that the PMIERs recognize future premiums on post-2008 policies, subject to the following prudential limits which are intended to protect against statutory insolvency and maintain a high level of liquidity to pay claims as they come due:

- First, premium recognition should be conditioned on a mortgage insurer having Available Assets equal to the minimum threshold specified in the draft PMIERs ($400 million).

- Second, a sliding scale (shown below as Figure 3) should be used to limit premium recognition for MI counterparties with lower levels of statutory capital.[18]

Figure 3 Proposed Premium Inclusion in Available Assets – Statutory Capital Limitation

Statutory Capital (millions)	# of Annual Renewals
$300 or <	0
$300 - <$400	1
$400 - <$500	2
$500 or >	3

- Third, the premiums included in Available Assets should not exceed 1/3 of the Minimum Required Assets of a mortgage insurer. Although premium recognition is central to a mortgage insurer's business, MGIC believes that a mortgage insurer's Available Assets should include a substantial amount of assets on hand. This limit addresses concerns expressed by some regarding the potential build-up of leverage despite the PMIERs' minimum asset requirement (explained in more detail below).

- Fourth, the premiums from post-2008 policies that are included in Available Assets should be limited to a multiple of 300% (implying three years of renewals). MGIC recognizes that because uncollected premiums depend on future events, the lifetime value of the contractual right is not certain. Historically, premiums earned on the whole portfolio of policies in any given year have a 3-6 multiple – *i.e.*, the policies are expected to generate a further 3 to 6 years of monthly premium payments. MGIC proposes allowing credit at the lower end of historical experience.

The PMIERs already include premium recognition on pre-2009 policies at a multiple of 210%. While applying the same approach to post-2008 policies would have the merit of simplicity, it would not have the same positive market liquidity effects as MGIC's suggested approach and would not respond specifically to issues surrounding statutory insolvency, which MGIC believes are the GSEs' predominant concerns regarding premium recognition. We believe that our suggestions strike an appropriate balance between the need for counterparty soundness and mitigating the effect on liquidity that would result from the approach in the PMIERs.

We conclude this section on the public policy concerns regarding market liquidity with two additional points. First, the Minimum Required Assets (which reduce liquidity in the housing market) will be greater than assumed by the plain text of the PMIERs. For prudential reasons, mortgage insurers are unlikely to operate at the extreme limits of the PMIERs with no margin for error.

We analyzed our policies written in 2013 and the first half of 2014 and calculated the Minimum Required Assets, using Tables 3 and 5 of Exhibit A to the draft PMIERS, at point of origination, and with expected loss development. As displayed in Figure 4, the results show that by adding an operating buffer for expected delinquencies and other uncertainties, the risk-to-capital ratio associated with the PMIERs Minimum Required Assets under which a prudent insurer would likely operate is approximately 12:1. (We use the term risk-to-capital ratio because historically it has been the metric used to measure leverage in the MI industry and many people are familiar with it. However, the statutory ratio and PMIERs are not comparable as the statutory metric counts assets the draft PMIERs do not; if only PMIERs assets were counted, the current statutory ratio maximum of approximately 25:1 would be materially higher). However, if premiums are included in Available Assets as we suggest, the resulting risk-to-capital ratio is 17.9:1 – in line with the 17.8:1 risk to capital ratio implied by the prudential floor outlined in the PMIERs (Minimum Required Assets of 5.6% of risk in force). This should eliminate concern that allowing the premium from post-2008 policies to be included in Available Assets would result in unsafe levels of leverage.

Figure 4 Minimum Required Assets Converted to Risk-to-Capital Ratios

LTV	FICO	RTC implied by Required Asset factors in Table 3 of Appendix A to the draft PMIERs	RTC as Proposed with Adjustment for Expected Delinquencies	RTC with Premium Included Adjusted for Delinquencies
90	650	7.9	6.4	9.5
	700	13.3	11.2	16.7
	750	23.3	20.4	30.3
	800	40.0	34.5	52.6
95	650	5.9	5.0	7.4
	700	9.8	8.5	12.7
	750	16.7	15.2	22.7
	800	27.8	25.0	37.0
in force		14.0	12.0	17.9

Second, as we have emphasized, the Scorecard tasks should work together in a complementary way; the draft PMIERs would not have that result. The greater Minimum Required Assets for lower down payment loans and the denial of recognition of premium in Available Assets might interact in a particularly troubling way. Lower down payment loans require more insurance coverage,[19] resulting in greater Minimum Required Assets. While the mortgage insurer would have an immediate requirement for higher Available Assets, it would not receive an immediate benefit from the correspondingly higher premium rate charged (receiving a benefit only when the premium is received and earned in an accounting sense).

Thus, MGIC cautions the FHFA and the GSEs not to discount the possibility that the effect of the PMIERs might be significantly more conservative than intended when implemented by the MI industry, and this conservatism could frustrate other efforts to increase access to credit and shift risk from taxpayers to private capital

<u>Promoting greater use of private capital</u>.

Proponents of housing finance policy reform across the ideological spectrum support efforts to encourage greater use of private capital within a housing finance system still overwhelmingly reliant on

U.S. Government support. The FHFA's 2014 Strategic Plan for Enterprise Conservatorships includes as one of its three strategic goals: "Reduce taxpayer risk through increasing the role of private capital in the mortgage market." The Scorecard's "Reduce" task has a similar goal. The MI industry represents one of the largest sources of private capital in the mortgage market, one that routinely assumes mortgage credit risk that is in a first loss position ahead of taxpayers and the GSEs. We believe the public policy goals addressed by the PMIERs must be broader than simply maximizing GSE counterparty security on insurance written by MI companies approved by the GSEs. An assessment of performance under the Scorecard should include consideration of (1) how the PMIERs might affect investor interest in the MI industry, (2) whether the PMIERs might encourage shifts in volume away from MI to the FHA and other Government-operated mortgage insurance facilities, GSE accepted MI alternatives such as piggyback loans and recourse agreements, and (3) whether the PMIERs might discourage use of MI in upfront credit risk transfer transactions. We believe that the draft PMIERs will discourage the use of this source of private capital in the mortgage market in several ways, including those discussed below.

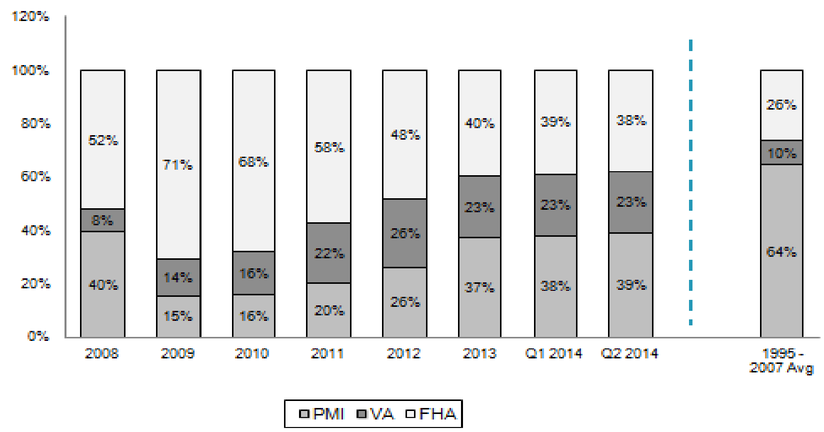
First, investors will be discouraged from investing in mortgage insurers because of the uncertainty arising from the continuing possibility of future changes to the PMIERs. The PMIERs may be changed at any time, for all or individual mortgage insurers, "in the sole discretion of the GSE".[20] Because the PMIERs are counterparty standards, not government regulations, they do not include the due process protection of ordinary notice/comment regulation under the Administrative Procedures Act. The FHFA and the GSEs are not required to address the comments to the draft PMIERs that they receive or to follow any process for subsequent changes to the PMIERs, and they are not subject to articulated standards regarding how the PMIERs might be applied to an individual mortgage insurer. The ability of a GSE to change the PMIERs in its sole discretion is particularly ironic given the process the FHFA implemented to publish and seek input on the draft PMIERs. It does not seem logical that any change reflected in the final PMIERs from the draft could be excised for a particular GSE with no FHFA involvement or oversight (and no requirement to provide notice).

The business risk resulting from the ability of the GSEs to change the PMIERs is substantial to the MI industry without appropriate protections. The MI industry has no other realistic source of material business volumes apart from the conventional conforming market at the moment, so choosing not to submit to the PMIERs is not a realistic option for shareholder-funded MI companies, particularly since state insurance law and regulations require MI business to be conducted in a single purpose, "monoline" entity.

Second, the business risk is increased for investors in mortgage insurers because of the uncertainty arising from the administration of the PMIERs by parties who may be perceived to have conflicting interests. Unlike traditional regulators, the GSEs (and the FHFA to a lesser extent) are "interested" parties. The GSEs are the largest beneficiaries of insurance provided by the MI industry and they are potential competitors to the MI industry (via self insurance or additional capital market structures). The FHFA is also an "interested party," to a lesser extent, as it acts as regulator to, and conservator for, the GSEs. Consequently, even though the PMIERs are given the status of implicit regulation, the PMIERs lack the broader perspective of a more conventional regulatory or supervisory relationship. Further, because loans eligible for purchase by the GSEs comprise substantially all of the current demand for MI, the PMIERs greatly influence the risk of adverse selection to the MI industry. That is, if the PMIERs result in an increase in premiums or capacity rationing, there will be an increased incentive for borrowers to use alternatives to MI such as piggyback loans (which provide the GSEs less credit protection than MI). In Scorecard terms, the adverse selection could create future loss mitigation challenges[21] in the "Maintain" category and undercut efforts to encourage the use of private capital in the "Reduce" category.

Third, the draft PMIERs may shift business volumes away from the GSEs and the private capital represented by the MI industry to the FHA and other Government-operated mortgage insurance programs. A major part of the private capital investment thesis in the MI industry is that it will be able to return to the historic mix of FICOs and LTVs, and accompanying market share. Historically the MI industry has accounted for approximately two-thirds of all high LTV insurance (see Figure 5).

Figure 5 Market Share of Public and Private Mortgage Insurance[22]
($ in billions)



At the onset of the financial downturn, before the passage of Dodd-Frank and other financial reform legislation, the MI industry materially, and appropriately, tightened its underwriting guidelines. The FHA did not change its guidelines materially and not until April 2013 did it raise premiums to the current levels. This inaction or delay prompted a shift among lenders to insure more loans with the FHA. The shift in market share did not result from a loss of faith in the MI industry but rather from the lack of meaningful choice for lenders and borrowers. As the economy recovered, our guidelines reflected that improvement and were normalized and the MI industry's market share began to increase. The FHA and other Government-operated mortgage insurance programs continue to provide substantial capacity to the mortgage market, so one cannot ignore the difference in operating environments between the MI industry and "Government MI" programs. The FHA is allowed to operate at a lower capital ratio than the MI industry, is given credit for premiums in its capital ratio calculation, and effectively has no remediation provisions. Therefore, the risk that different standards between the PMIERs and FHA will generate unintended, material, market-shifting consequences is genuine. PMIERs that ignore the interrelationship between the MI industry and the FHA do not respond adequately to the challenge posed in the "Reduce" category of the Scorecard.

MGIC believes that (1) the investor uncertainty and unease arising from the mix of unfettered authority and particular interests held by the GSEs and the FHFA, and (2) the likelihood of first loss mortgage risk inappropriately shifting from the private sector to taxpayers, could be mitigated by adopting the suggestions discussed below. These suggestions would reduce the likelihood that the PMIERs discourage the use of private capital in the mortgage market.

- First, the FHFA and the GSEs should commit to make changes to the PMIERs only within a clearly articulated process.[23] The number of changes made to the PMIERs once adopted should be minimized and changes should be subject to a reasonable phase-in period. Additionally, any proposed changes should be accompanied by a discussion as to why the change is appropriate. FHFA's request for input on the PMIERs was a good precedent and an action we recommend continue. Finally, we suggest that the FHFA facilitate discussion between the GSEs and the MI industry regarding proposed changes to identify issues and concerns and to avoid unwelcome surprises for publicly traded MI companies and unintended consequences for the broader mortgage market. In the regulatory context, we are suggesting a process similar to "negotiated rulemaking",[24] but one that uses the informality available via the PMIERs to good advantage. FHFA's facilitation of meetings between the GSEs and the MI industry to explore technical issues in the PMIERs is an excellent example of how the process might work.

- Second, the FHFA should have a central continuing role in administration of the PMIERs, including managing the risk of adverse selection to the MI industry through pricing and oversight and balancing public policy. MGIC believes the PMIERs deserve particular attention by the FHFA because the PMIERs occupy an unusual role: the PMIERs represent private counterparty standards for two entities under conservatorship that currently dominate the U.S. housing market.

- Third, because the FHFA is an interested party without direct regulatory authority over the MI industry, we recommend regular and more formal consultation and collaboration among the FHFA, the FHA, and state insurance regulators regarding implementation of, and changes to, the PMIERs, including a joint commitment to measure the probable effects of the PMIERs and any subsequent proposed changes.

- Finally, because the Scorecard encourages development of new credit risk transfer mechanisms such as upfront credit risk-sharing transactions, which already have been proposed by important market stakeholders,[25] we recommend that Table 3 in Exhibit A to the PMIERs be expanded to provide more granularity of LTVs, specifically down to 60% LTV, in order to promote up-front risk sharing transactions.

Clearly there is a threshold question regarding whether the PMIERs will shift business away from the GSEs and the private capital represented by the MI industry to "Government MI" programs or GSE accepted MI alternatives, such as piggyback loans and recourse agreements, but the more important longer term concern is whether the PMIERs discourage the use of private capital in the mortgage market. We believe they may and, as discussed above, we urge the FHFA to include specific process protections for MI counterparties within the PMIERs, and for the FHFA and the FHA to consult and collaborate to measure the probable effects of the PMIERs and any subsequent proposed changes. Otherwise, the widely and strongly held housing policy preference for private capital involvement in the mortgage market risks being undermined.

Encouraging financial system resiliency.

The Scorecard's "Build" task encourages development of an adaptable and standardized securitization infrastructure to replace the GSEs' current systems and processes. We would extend the task and aspiration further. The recent boom and bust of the U.S. residential mortgage market elevated the importance of strengthening the financial (and financial regulatory) system, both in terms of reducing the volatility of credit cycles and encouraging better communication and surveillance efforts by financial regulators. The modernization of supervisory and regulatory requirements complements the effort to create new infrastructure. MGIC believes that with the recommended changes, the PMIERs can contribute to this effort and significantly lower the GSEs' counterparty risk.

One way to reduce volatility of credit cycles and increase financial system resiliency is to anticipate and seek to minimize pro-cyclical behavior at the top and bottom of a credit cycle. Subject to the important liquidity and process concerns noted above, MGIC thinks the PMIERs could do an effective job discouraging pro-cyclical behavior at the top of a credit cycle because the greater Minimum Required Assets for riskier loans discourage the emergence of weaker underwriting discipline by mortgage insurers. This addresses a concern expressed by international financial regulators regarding mortgage insurance.[26]

However, the PMIERs risk worsening downturns at the bottom of credit cycles because of the asymmetrical treatment of the factors proposed in Tables 3 and 5 of Exhibit A of the PMIERs for performing and non-performing loans. The draft PMIERs do not reduce Minimum Required Assets as performing loans age and ultimate performance becomes more predictable, but they increase Minimum Required Assets as loans become non-performing (even though the initial Minimum Required Assets reflect stress loss scenarios). Because the increased Minimum Required Assets for the non-performing loans exceed reserve amounts required under generally accepted accounting principles, the asymmetrical treatment is pro-cyclical. This occurs due to the PMIERs considering the probability of *ultimate* claim over the loan's remaining life, not specifically when the default occurs. This contrasts with GAAP reserves that are based on the likelihood that a particular defaulted loan will result in a claim or will cure, not the ultimate probability of a claim over the life of each loan. This difference fluctuates based upon many factors including general economic and housing market conditions at the time of calculating Minimum Required Assets.

MGIC believes that reducing Minimum Required Assets to reflect credit for loan aging or "seasoning" would have the benefits of addressing the pro-cyclicality risk, maintaining consumer options for high LTV loans, and conforming the PMIERs to other emerging industry standards. For example, other recently proposed financial standards for the MI industry provide credit for seasoning, including those by Standard & Poor's and the NAIC Mortgage Guaranty Insurance Working Group (developed in conjunction with the MI industry and Oliver Wyman, the financial consulting firm).[27]

As discussed in more detail below, we used the factors in Tables 3 and 5 of Exhibit A of the PMIERs to analyze our policies written during 2003 – 2007[28] that were current as of December 31, 2007 to determine whether the Minimum Required Assets calculated based on the factors contained in Table 3 would have been sufficient to withstand the stressed economic environment of 2008-2013, or if additional Minimum Required Assets for non-performing loans would have been needed as envisioned by Table 5.

We concluded that the Minimum Required Assets calculated under Table 3 would have been more than sufficient to meet claim obligations, additional assets should not have been required under Table 5 and the interaction of the Tables would have resulted in a material overcapitalization.

As shown in Figure 6, the policies analyzed would have required $2.7 billion of Available Assets to meet the Minimum Required Assets. As the financial downturn unfolded and loans went into default, the level of Minimum Required Assets would have increased greater than Available Assets as a result of interaction of Tables 3 and 5.

Figure 6 Analysis of Sample Portfolio of Insurance In Force (billions)

Insurance in Force at 12/31/07	Risk in Force at 12/31/07	Minimum Required Assets under draft PMIERs at 12/31/07	Assumed Available Assets at 12/31/07	Additional Minimum Required Assets under draft PMIERs	Paid losses as of 12/31/13	Minimum Required Assets under draft PMIERs at 12/31/13	Assumed Available Assets as of 12/31/13
$75.7	$19.5	$2.7	$2.7	$0.1	$2.6	$1.5	$2.1

During 2008 and 2009, approximately $880 million of premium was collected and $450 million of losses were paid, resulting in Available Assets increasing to $3.1 billion, Minimum Required Assets also increased as loans went into default, to $3.2 billion. At this point the PMIERs, as proposed, would call for an asset infusion of approximately $100 million. However, for the six years ending December 31, 2013, $1.9 billion of premiums were collected and $2.6 billion in losses were paid or, said differently, approximately 73% of the losses paid in this time period were covered by premiums earned during the same period, leaving the remaining $700 million of claim payments to come from the $2.7 billion of assets on hand as December 31, 2007. At the end of 2013, assumed Available Assets decreased to $2.1 billion as a result of claim payments and Minimum Required Assets declined to $1.5 billion as a result of runoff and improved credit performance, resulting in a surplus of $600 million or 40% in excess of the Minimum Required Assets.

This demonstrates that the original Minimum Asset Requirement of $2.7 billion was more than sufficient to withstand the stress environment that took place and in fact resulted in a material overcapitalization of the remaining in force portfolio. The overcapitalization occurs primarily because premium from post 2008 policies is not included as an Available Asset and because no credit is given for seasoning or aging. This is idle capital that cannot be used to further support the housing market. It also demonstrates that the interaction of Tables 3 and 5 is pro-cyclical, as an asset infusion was called for but was not warranted based upon actual performance through the stress environment of 2008-2013.

To address the pro-cyclicality and unnecessary overcapitalization presented by the draft PMIERs, MGIC recommends that the FHFA utilize the methodology that is explained in detail in response to Questions 16-28 and Question 35 that were posed by the FHFA (see Appendix.) If that option is not pursued then a credit must be given for "seasoning" in the calculation of Minimum Required Assets. There are a number of ways that credit for seasoning might be recognized, ranging from the simple to complex, but MGIC favors a simple table approach based on loan aging shown in Figure 7 below.

Figure 7 Recommended Aging/Seasoning Factors

Age of Policy in months	Recommended Factor to Apply to Table 3
0-12	1.0
13-24	.94
25-36	.88
37-48	.81
49-60	.77
> 60	.72

If the aging factors are applied to Table 3 of Exhibit A of the PMIERs and applied to the sample portfolio discussed in Figure 6 above, then the resulting Minimum Required Assets would be $1.3 billion, freeing up an additional $200 million of assets (on top of the $600 million excess assets mentioned above). $200 million of assets would support approximately $3.5 billion of additional risk in force using 5.6% as a Minimum Required Asset factor. At an average insured balance of $200,000 that would equate to approximately 7,100 incremental policies that private capital could assume first loss position on and would expand credit access to borrowers with low down payment needs. Of course, these figures are only for MGIC and the system-wide effect would be a multiple of the result for MGIC.

Another way to increase financial system resiliency is to reduce regulatory complexity. FHFA required the GSEs to adopt a uniform approach to the PMIERs, consistent with the Scorecard emphasis on standardization. The standardization goal should be applied to MI industry as well. Already, MI master policies have been updated and are being implemented on a standardized basis. As noted, the NAIC and several rating agencies also are reviewing and updating their laws, regulations, and criteria for MI. The PMIERs in some instances are directionally similar to the regulatory and supervisory approach that state insurance regulators follow. However, there are differences between the PMIERs' and state regulators' requirements for mortgage insurers. This creates the real risk for conflicting standards (which, together with the rating criteria used by the rating agencies, raises the prospect of even more complexity) that the MI industry would need to address.[29]

MGIC offers the following two suggestions intended to reduce financial regulatory complexity, at least regarding MI:

First, the FHFA and the NAIC should attempt to conform the PMIERs and the Model Act (both existing and proposed) to the maximum extent possible. The intent of the effort would be to identify all points of similarity and difference. Points of similarity could lead to a discussion regarding the need for duplication, any alternatives and the development of a best practice. Points of difference could lead to a discussion of relative merits of the points and how the mortgage insurer (as both regulated entity and counterparty) would be expected to manage the difference, should such a difference need to be maintained. Although proposed legislation like the Johnson-Crapo housing finance reform bill prescribed a different approach to avoiding regulatory duplication and conflict, MGIC believes a consensus-seeking process could work and still result in timely implementation of arguably the most crucial portion of the PMIERs, the financial requirements.

MGIC would urge the FHFA and the GSEs to adopt the Financial Requirements section of the draft PMIERs, with our recommended changes, in place of the financial requirements in the existing mortgage insurer eligibility requirements. This adoption could occur quickly as the changes primarily are contained to the inclusion in Available Assets of premium for all in force policies and the addition of seasoning factors to Table 5 of Exhibit A of the PMIERs. The balance of our recommendations speak to coordinating efforts with state regulators and clarifying process, quality control requirements and other administrative or operational issues. Those recommendations could benefit from a collaborative effort similar to what was achieved earlier this year with the Master Policy. These are complex matters that deserve careful deliberation and we believe that with dedicated efforts the balance of the PMIERs could be updated over the course of the next 6 to 12 months.

The effort to conform the PMIERs to the Model Act could occur section-by-section based on priority (for example start with Quality Control). We are not advocating delay, but we ask for acknowledgement that matters referred to in the PMIERs will also be updated in the NAIC Model Act. Adoption of materially different financial or operational requirements by state insurance regulators or rating agencies could create a complex business challenge that could be avoided with a reasonable effort.

Second, an ongoing coordinating mechanism should be created. Federal and state authorities routinely cooperate in banking, securities regulation, and consumer protection activities, and the MI industry, the GSEs, the FHFA and state regulators should follow a similar path. Coordination would ensure that neither federal nor state authorities neglect or fall behind their counterparts regarding market or industry developments, and also would make subsequent changes to the PMIERs or state insurance regulation more transparent and useful for all stakeholders.

The eligibility requirements for the MI industry evolved over many years in a relatively strong and stable economic and housing environment and generally were not coordinated with state efforts. Other insurance programs involving the interaction of state insurance regulation and federal financial support, such as the federal crop insurance program, rely primarily on state standards to avoid overlap.[30] While we are, of course, not suggesting this approach, we note it to support our point that the PMIERs present a unique opportunity to enhance federal/state regulatory cooperation.

There has been a significant level of financial regulation and legislation that is in the process of being implemented and it is unclear when and what shape future housing finance legislation will take. MGIC urges the FHFA to use the opportunity presented by the PMIERs to constructively address part of the financial regulatory puzzle and (we believe) increase financial system resiliency as a result.

Conclusion

MGIC has welcomed the opportunity to share its views on the PMIERs in this comment letter (including the attached Appendix which contains comprehensive replies to the specific questions posed by the FHFA in its Overview) and during FHFA-facilitated interactions with the GSEs. We continue to support the effort to update the MI Eligibility Requirements, but in a way that recognizes the unique positions occupied by FHFA and the GSEs, the risk of imbalance between the need for strong counterparty standards and public policy issues, and the need to acknowledge important concerns regarding predictability of change. With the adjustments and process improvements suggested in this comment letter, MGIC believes that the MI industry will remain a vital part of the evolving U.S. housing finance system.

Please do not hesitate to contact me with questions or comments.

Sincerely yours,

President and COO

MGIC Investment Corporation

Encl. Appendix

[1] http://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2014Scorecard051314FINAL.pdf
[2] The National Association of Insurance Commissioners ("NAIC") formalized a working group formed during the mortgage market downturn to address mortgage insurance-related issues, and the Mortgage Guaranty Insurance Working Group ("Working Group") has undertaken the task of updating the existing Mortgage Guaranty Insurance Model Act ("Model Act"), including development of a more risk-sensitive capital standard. http://www.naic.org/committees_e_mortgage_guaranty_insurance_wg.htm.
[3] MGIC, Radian, United Guaranty, Genworth, PMI, RMIC and Triad
[4] $47 billion in claim payments is based on statutory filings of mortgage insurers. The existing MI eligibility requirements (which primarily rely on a AA- (or equivalent) rating from a rating agency) never assumed the MI companies would pay 100% of their claims in a stress scenario. The Standard & Poor's rating methodology for a mortgage insurer to be rated AA- (or equivalent) required that it be able to pay 87.5% of its claim obligations in a stress scenario.
[5] Includes Triad, PMI and RMIC.
[6] http://www.fanniemae.com/resources/file/aboutus/pdf/fm-amended-charter.pdf (Section 1716 of Fannie Mae Charter Act); http://www.freddiemac.com/governance/pdf/charter.pdf (Section 1451 of Freddie Mac Charter Act).
[7] Id. (Section 1717(b) of Fannie Mae Charter Act and Section 1454(b) of Freddie Mac Charter Act).
[8] http://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2014StrategicPlan05132014Final.pdf at 6, 9.
[9] http://blog.metrotrends.org/2014/06/gses-serve-minority-borrowers/.
[10] http://www.voxeu.org/article/minority-mortgage-market-experiences-leading-and-during-financial-crisis.
[11] http://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Proposes-2015-2017-Housing-Goals-for-Fannie-Mae-and-Freddie-Mac.aspx.
[12] U.S. Mortgage Insurers, a trade association of which MGIC is a member, recommended full credit for MI in its response to FHFA's Request for Input on Guarantee Fee Pricing. http://usmi.org/wp-content/uploads/2014/08/Final-GFEE-Release.pdf.
[13] http://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/FHFA-MORTGAGE-ANALYTICS-PLATFORM.aspx
[14] http://www.ncsha.org/blog/moody%E2%80%99s-fannie-hfa-preferred-product-credit-positive-hfas.
[15] https://www.economy.com/mark-zandi/documents/2014-08-26-Putting-Mortgage-Insurers-on-Solid-Ground.pdf. One of the authors serves as an Independent Director on MGIC Investment Corporation's Board of Directors.
[16] http://www.rmic.com/ratesguides/releasenotes/Documents/Final%20Order%206-27-14.pdf.
[17] Per Freddie Mac's Securities and Exchange Commission filings, from January 1, 2008 through December 31, 2013, Freddie Mac has received $9.8 billion of claim proceeds (plus has $0.5 billion in receivables) from all mortgage insurers. As of June 30, 2014, an additional $400 million was owed from three mortgage insurers that have issued Deferred Payment Obligations ("DPOs"). The ratio of cash payments to total claims due is 96% for this time period. Fannie Mae does not publicly disclose the amount it is owed under DPOs but if its experience is similar to that of Freddie Mac, that would imply that based on the $28.4 billion of claim proceeds received by Fannie Mae, it is owed approximately $1.1 billion under DPOs.
[18] Statutory capital is the sum of statutory policyholders' surplus plus contingency reserves and is sometimes referred to as statutory policyholders' position.
[19] Standard GSE coverage is 30% for a 95% LTV, 25% for a 90% LTV and 15% for an 85% LTV
[20] Page 3 of Draft PMIERs Amendments and Waivers).
[21] http://www.makinghomeaffordable.gov/programs/lower-payments/Pages/lien_modification.aspx (piggyback and other second lien lending required a separate program to deal with the unique challenges presented).
[22] Inside Mortgage Finance.
[23] MGIC also has discussed a range of specific process concerns in the Appendix responses. The PMIERS are very detailed. MGIC believes process protections should be correspondingly detailed.
[24] http://www.epa.gov/adr/regnegact.pdf.
[25] http://www.mbaa.org/files/Advocacy/2013RiskSharingConceptPaper.pdf (MBA paper on upfront risk sharing).
[26] http://www.bis.org/publ/joint33.pdf; http://www.financialstabilityboard.org/publications/r_120418.pdf.
[27] Standard and Poor's Methodology: Mortgage Insurer Capital Adequacy Request for Comments dated August 13, 2014 states "Accordingly, the approach to evaluating MI capital needs to factor in recurring premiums, persistency, and seasoning. Therefore, we propose to assess portfolio credit risk on the current loan exposure as of the reported date and to calculate capital requirements by estimating default risk based on original loan risk characteristics (including original combined LTV, etc.) adjusted for seasoning along with the estimate of potential loss severity given the current outstanding amount and housing valuations."
[28] Loans in sample were primarily full documentation loans insured through the Flow channel and were believed to be eligible for delivery to the GSEs representing approximately 36% of our total insurance in force at December 31, 2007."
[29] Section 705 of the PMIERs requires all approved insurers to maintain a rating with at least one rating agency.
[30] http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title07/7cfr400_main_02.tpl (Subpart L).

Appendix

Comment Letter by Mortgage Guaranty Insurance Corporation ("MGIC")
to Federal Housing Finance Agency ("FHFA")
regarding draft Private Mortgage Insurer Eligibility Requirements ("PMIERs")

This Appendix contains replies to the specific questions posed by the FHFA in its Overview of Draft Revised Private Mortgage Insurer Eligibility Requirements ("PMIERs") published July 9, 2014 (the "Overview") and recommended modifications to the PMIERs that are not responsive to specific questions posed by the FHFA but that MGIC believes are important. Unless otherwise specified, capitalized terms used but not defined in this Appendix have the meanings given to them in the draft PMIERs or in the Comment Letter.

A. Business Requirements

1. Scope of Business:

a. How can the PMIERs ensure that Approved Insurers have long-term access to staff, services and technology that meet their operational needs for administering their insurance book of business?

The PMIERs should be drafted to: (1) ensure Approved Insurers have sufficient counterparty strength and the ability to pay claims even in adverse economic scenarios (in this regard, see responses to Questions 16-38), and (2) incent private capital to take first loss credit risk positions on low down payment residential mortgages ahead of taxpayers (in this regard, see the section of our Comment Letter titled "Promoting greater use of private capital"). If the PMIERs are so drafted, Approved Insurers would have sufficient resources and funding sources to be able to provide adequate operational and technological resources and attract and maintain a high quality workforce.

b. How can the PMIERs ensure that potential losses from insuring high-risk loan concentrations do not jeopardize an Approved Insurer's financial ability to pay claims on its lower risk portfolio?

Under the financial requirements contained in the draft PMIERs, which are designed to allow an Approved Insurer to withstand a severe economic downturn, an Approved Insurer's Minimum Required Assets would rise commensurately with higher levels of high-risk loan concentrations. This helps to ensure that an Approved Insurer will have sufficient counterparty strength and the ability to pay claims during a severe economic downturn in direct relationship to the risk of the loans it insures. However, see the responses to Questions 16, 19, and 31-34 for recommended adjustments to the financial requirements of the draft PMIERs that would (1) reduce the Minimum Required Assets for seasoned loans and (2) increase Available Assets for a portion of future premium income. These recommended adjustments are not expected to jeopardize an Approved Insurer's financial ability to pay claims on its lower risk portfolio, but would specifically address certain concerns raised in the Comment Letter that the financial requirements of the draft PMIERs conflict with the public policy goal of incenting private capital to take first loss credit risk positions on low down payment residential mortgages.

c. Should Approved Insurers have separately funded affiliates for insuring higher-risk products?

All loan level coverage provided by a mortgage insurer, whether in primary or pool form, should be able to be provided by the same legal entity. This should not be problematic if the calculation of Minimum Required Assets includes factors that vary based on the risk attributes associated with these products (as contemplated by the draft PMIERs).

We believe that an insurance holding company should have the right to operate both an Approved Insurer and separately capitalized mortgage insurer(s) that could be used to meet the needs of non-GSE investors that purchase or securitize residential mortgage loans and seek loan level credit enhancements under different terms and conditions than the GSEs, and non-GSE investors in loans that do not meet the definition of Qualified Mortgage ("QM") or loans that otherwise do not meet GSE purchase standards.

This would require Section 201 of the draft PMIERs to be clarified to allow such practices.

2. Should the adequacy of each Approved Insurer's risk-adjusted rates of return be measured? If so, what would be the appropriate calculation method for this measure?

Adequacy of returns is not a question for policyholders or beneficiaries under policies; rather, it is a question for state insurance regulators and debt and equity investors. The PMIERs should stay focused on counterparty strength, expansion of credit, and shifting risk from taxpayers to private capital.

3. If the Enterprises, in the interest of establishing strong counterparty financial requirements, expect an Approved Insurer to maintain "adequate" risk-adjusted rates of return for New Insurance Written (NIW), what might be benchmarks for the Enterprises to establish a reasonable range of such expected returns? Should the benchmark also be inclusive of the Approved Insurer's entire portfolio of Insurance in Force (IIF), or only a defined portion?

The PMIERs should stay focused on counterparty strength, expansion of credit, and shifting risk from taxpayers to private capital.

If however the Enterprises must consider "adequate" returns, it should be done from a private capital point of view. A mortgage insurer typically seeks to obtain a satisfactory return on statutory capital over the life of policies written in a given year, at the portfolio level, not a business segment level, and state regulation requires that a mortgage insurer generate adequate returns. By design and regulation, mortgage insurance is required to be written out of a monoline insurance company and therefore a mortgage insurer has limited ability to diversify the associated risk with other types of insurance that could be counter-cyclical or otherwise non-correlated. This is precisely the reason that state insurance regulators require a mortgage insurer to hold contingency reserves. This allows assets and capital (claims paying ability) to be built in better economic times. Furthermore, there are limitations on the ability of an insurer to distribute dividends to its parent (typically a publicly traded insurance holding company), and ultimately to the debt and equity investors in the parent enterprise. For these reasons, investors in private mortgage insurers have historically required a 15% after-tax return on statutory capital. The calculation of the after-tax return is simply the tax-effected difference between (1) the sum of the expected lifetime premiums earned and investment income and (2) the sum of the underwriting/operating expenses and paid losses, all measured against employed capital.

4. What counterparty risks might be raised by an Approved Insurer maintaining inadequate risk-adjusted rates of return on capital across its expected business profile?

No counterparty risks are directly raised by inadequate returns. The PMIERs establish the level of Minimum Required Assets (and, as a result, the associated capital) sufficient to withstand stress losses. That should be all that is necessary to determine counterparty strength. However, cash flow is itself a very important source of claims paying ability. As proposed, the PMIERs fail to recognize this important resource properly. An Approved Insurer that charges lower premiums, not only reduces its current cash flow, it also, perhaps more importantly, reduces the resources it will have to pay future claims. The PMIERs should address this issue directly by recognizing future premiums as Available Assets subject to the limits discussed in Questions 31-34.

5. Should an Approved Insurer be required to validate a third-party AUS prior to using the recommendations from these systems? If so, what type of analysis would be appropriate to sufficiently validate that the credit decisions from the AUS are in line with the Approved Insurer's credit underwriting requirements?

Yes, an Approved Insurer should validate the AUS whose recommendations it relies on for streamlined underwriting and documentation, both prior to it being deemed acceptable and on a periodic basis. However, in order to validate third-party AUS, the Approved Insurer would either need to be provided access to the test systems that mirror the decisioning of the production systems or receive regular data exchanges from the AUS provider so that an Approved Insurer can independently validate that the AUS meets its underwriting requirements. The draft PMIERs should be modified to provide that if a mortgage enterprise uses a third-party AUS that has been approved by the Approved Insurer, the Approved Insurer can rely on the mortgage enterprise's written statement of compliance as evidence that the AUS recommendation has been validated.

6. Are there other Approved Insurer Operational Performance Scorecard metrics that should be considered?

We note that there is no explanation provided as to why these metrics were chosen or how the information would be utilized by the GSEs. Additional metrics are not required, given the GSEs receive a loan level data file on a regular basis and are also requiring Portfolio and Financial Supplemental Data (Exhibit D of PMIERs). There are, however, several terms contained on the Operational Performance Scorecard that should be clearly defined in order to make the submitted data comparable among providers (*i.e.*, QC Defect Rate, Rescission Rate, and Denial Rate).

7. How should Operational Performance Scorecard thresholds be determined?

8. How should Approved Insurers be rated under the Operational Performance Scorecard?

9. How would Operational Performance Scorecard thresholds be applied?

The following is responsive to Questions 7, 8 and 9.

Operational performance benchmarking can be a useful tool to identify best practices for monitoring credit performance. MGIC believes the best way to do this is to establish consistent definitions for behavior that will be tracked. There are many reasons that a particular ratio may be materially higher or lower than an industry average, including operational procedures, customer composition and portfolio characteristics. Thresholds established without developing best practices could have the effect of limiting an Approved Insurer's ability to expand credit access. Once appropriate thresholds and consistent definitions are established, the ramifications of exceeding those thresholds can be established.

Although not addressed in the FHFA's specific questions concerning Section 300, Scope of Business, we recommend that the second paragraph of Section 300 be modified to "grandfather" existing relationships between Approved Insurers and subsidiaries and affiliates.

"An *approved insurer* must not provide contract underwriting services, or any other services not directly required for providing *mortgage guaranty insurance*, that create a *material*, direct or contingent liability for the *approved insurer*. Additionally, **<u>except for arrangements in effect upon the effective date of these Requirements,</u>** an *approved insurer* may not incur or assume any *material* obligation from or on behalf of any subsidiary or *affiliate* including, without limitation, an obligation to provide additional insurance, or an insurance service or product or to provide a remedy for a liability incurred, in connection with providing contract underwriting or other non-insurance services by such subsidiary or *affiliate*."

Ownership / Corporate Governance of Approved Insurers

The FHFA did not pose any questions concerning the limitations placed on Approved Insurers insuring mortgages originated by affiliated Mortgage Enterprises (or their affiliates). We agree with the limitations contained in the PMIERs, but suggest that the fourth paragraph of Section 103 be modified as shown below to make the limitations less likely to be circumvented.

"The requirements of 1) and 2) above do not apply if subsequent to the insurance of a mortgage by an *approved insurer* that has met the requirements of 1) or 2) above, a *mortgage enterprise* or an *affiliate of a mortgage enterprise* with whom an *approved insurer* is *affiliated* (a) purchases that insured mortgage or (b) acquires the contractual right to service the mortgage, but in either case or in both cases ~~does not~~ (i) does not re-direct placement of mortgage insurance coverage at renewal to its *affiliated approved insurer*, ~~or~~ (ii) does not service or direct the servicing of the loans insured by its *affiliated approved insurer* in a manner materially different than loans that are not insured by its *affiliated approved insurer*, and (iii) did not direct the originator of the loan to purchase mortgage insurance from the *approved insurer*."

B. Newly Approved Insurer Requirements

10. What would be the impact of the $500 MM requirement for newly Approved Insurers? Should the requirement reflect the start-up costs to scale a competitive mortgage insurance business? Are there other appropriate requirements or controls that should be established to ensure that start-ups are held to more stringent requirements?

Requiring initial capital funding of $500 million is appropriate as it allows a newly Approved Insurer to prepare, develop and implement the appropriate technological systems and operating policies, and acquire and train adequate staff. It also demonstrates a commitment to providing loan level credit enhancement. It is appropriate that in the first few years after becoming an Approved Insurer, additional restrictions as outlined in the PMIERs are set in place. However, any additional restrictions imposed should be limited to the Approved Insurer of GSE loans and its direct subsidiaries and not to other affiliates that are owned by the same holding company parent.

C. Settlements and Changes to Enterprise Rights

11. Section 307 contains requirements relating to the ability of Approved Insurers to enter into agreements with servicers or originators. Should the PMIERs contain provisions relating to agreements entered into between Approved Insurers and originators or servicers? If so, what provisions should be in place?

Clause (iii) of Section307 places restrictions on entering into agreements that "affect" loans. We suggest this be modified to place restrictions on entering into agreements that adversely affect the GSE's benefit associated with the loan. In order to make that modification, we recommend that the following underlined words be inserted where shown: (iii) otherwise ***adversely*** affects ***the GSE's benefits associated with*** one or more loans owned or guaranteed by the GSE. Also, we believe the provision in Section 307 that expressly allows settlement agreements on a single loan in the ordinary course of business should be modified to allow settlement agreements on "a non-material number of loans" using the defined term Material as a guide. This would allow for more efficiency with lenders and servicers.

D. Claims Processing and Loss Mitigation

12. Should the Enterprises impose pricing adjustments for acquired loans where an Approved Insurer does not provide a full delegation of loss mitigation? Does a lack of full delegation unnecessarily expose the Enterprises to foreseeable costs? Should there be exceptions to what constitutes full delegation of loss mitigation?

Generally, delegation of industry accepted loss mitigation activities makes sense for the mortgage insurer and the GSE. However, full delegation should not be required, nor should pricing adjustments be made, when the cost of the loss mitigation activities is not a covered event under the Master Policy. For example, if the GSEs provide a loss mitigation program to servicers for borrowers who sustain Physical Damage (as defined in the Approved Insurer's Master Policy) to their properties as a result of a natural disaster, the Approved Insurer would want an exception to delegation since the additional cost of such a program would be excluded under the Master Policy. Requiring delegation could increase the cost of the claim, above the contractual amount, which in turn could reduce an Approved Insurer's claims paying ability. Provided that an Approved Insurer demonstrates that the loss mitigation program that has been denied delegation to the GSEs would have material adverse impact on the Approved Insurer's average claim payment, then no pricing adjustment should be required, or the GSEs should agree in advance to make the Approved Insurer whole for any incremental losses incurred.

We would recommend the following change to section 310: ~~A*pproved insurer*s should provide a full delegation to the *GSE* for retention and liquidation loss mitigation alternatives. Loans insured by *approved insurer*s that do not provide full loss mitigation delegations may be subject to a pricing adjustment when acquired by the *GSE* to reflect higher potential loss management costs.~~ If an *approved insurer* ~~does~~ provide<u>s</u> for full delegation <u>to the *GSE* for retention and liquidation loss mitigation alternatives,</u> it should make it clear in its servicing guidelines that servicers should follow the loss mitigation protocols and requirements of the *GSE*.

E. Policies of Insurance

13. Should self-insurance be an appropriate method for Approved Insurers to meet the requirements for Fidelity Bond and E&O insurance?

MGIC currently self insures as typically E&O coverage would cover only damages arising from bad faith claims settlements, for which we believe MGIC has no realistic contingent exposure. Based on our experience, a $5 million E&O policy with a deductible of $150,000 (as required by Section 312 of the draft PMIERs) is unavailable. Cost for lower coverage levels and higher deductibles is uneconomic and would produce a far worse result than self-insuring. That is, the deductible coupled with coverage would produce little in the way of actual insurance, and resources would be depleted by the premium. Given the market, self-insurance would result in the same effective coverage with no premium outlay. As a result, this requirement would provide no meaningful increase in protection to the GSEs and in fact would reduce a mortgage insurer's claims paying resources. We recommend that any E&O exposure be allowed to be self-insured.

F. Quality Control

14. What are the relative costs and benefits for Approved Insurers to implement the draft quality control requirements in the PMIERs?

There will be hard costs associated with making system enhancements to facilitate the tracking and reporting prescribed by the PMIERs. In addition, additional personnel may be required to complete the work depending on FHFA's responses to clarifying questions. We do not see any increased benefit for Approved Insurers given existing QC policies and practices are modeled after the GSEs' own published QC guides. However, there would be benefit to establishing consistent definitions of the term "defect." Fannie Mae defines a defect (in its QC guide) as a loan that has an Eligibility Violation, meaning the loan would not have been eligible for sale to Fannie Mae had information determined in the QC process been known, unless there exists strong positive offsetting credit characteristics. MGIC operates using that same definition.

15. Do the draft quality control standards present any unintended consequences?

In addition to the inconsistencies with the NAIC Model Act, the prescriptive nature of Section 500 - Quality Control, may lead Approved Insurers to adopt QC policies and practices to achieve technical compliance rather than to continually evolve and improve their QC work to meet the needs of a dynamic residential mortgage lending market. For example, Section 500 requires that "the approved insurer's post-close QC review of loans sampled through its random selection process must be completed no later than 120 days following the latest insurance coverage effective date of the selected loans." Presumably, this requirement is designed to ensure that the approved insurer is reviewing recently originated loans and completing its QC work timely. Section 500 further states "…there is no one specific QC program that can meet the needs of all approved insurers..." and "...best practices are captured in the GSE's Selling Guide and Quality Control Best Practices documents, which can be found on the GSE's website." Given this, it would be more appropriate and effective for the PMIERs to be less prescriptive to enable more flexibility in the execution by Approved Insurers (which can then evolve with the dynamic residential mortgage lending market) by guiding the Approved Insurers to QC best practices through the GSEs' own published and frequently enhanced Selling Guide and Quality Control Best Practices documents.

G. Financial Requirements

The mortgage insurance industry is currently engaged with the NAIC Mortgage Guaranty Insurance Working Group (MGIWG) in the development of a new Model Act for Mortgage Guaranty Insurance. A substantial portion of that work is the development of new capital standards to replace the frameworks that are currently in place. The responses provided to Questions pertaining to Financial Requirements are submitted based on the recommendation that is contained in response to Question 35.

Grids

16. What comments or suggestions are there related to the grid framework for performing loans in calculating the Financial Requirements?

First, the grids should be established for specific market conditions at the time of origination. For example, there might be four grids corresponding to four types of markets, ranging from home prices near or below trend (suggesting a lower stress level) to home prices significantly above trend (suggesting a maximum stress level). A loan would be assigned to a grid on the basis of where home prices stand relative to trend at the time the loan is originated.

Second, the grids should be populated with claim incidence levels, segmented by LTV and credit score. Claim severity should be calculated in separate grids, based again on market conditions at the time of origination, but segmented by the level of investor exposure instead of LTV and credit score. Total stress losses then should be calculated as the product of claim incidence and claim severity.

Third, the claim incidence grids should be expanded to include additional LTV ranges: <=65, >65 and <=70, >70 and <=75, >75 and <=80, >80 and <=85, to properly reflect the lower risk in those lower LTV ranges. While business in those lower LTV ranges is not a significant portion of MI business today, the rules should not preclude increased use of MI in those ranges.

Fourth, additional grids should be developed for seasoning factors that reduce the Minimum Required Assets for performing loans as they age and assets are transferred to support Non Performing loans (Table 5 of Exhibit A to the PMIERs).. Our specific recommendation for seasoning is shown in the following table.

Age of Policy in months	Recommended Factor to Apply to Table 3 of Exhibit A to the PMIERs
0-12	1.00
13-24	.94
25-36	.88
37-48	.81
49-60	.77
> 60	.72

17. What comments or suggestions are there related to including LTV and credit score as the primary factors in the grid framework for performing loans?

We agree that LTV and credit score at origination are primary determinants of ultimate loss rates. However, the marginal impact of LTV and credit score in the PMIER's grids are greater than they are in our own analysis. As a result, the additional assets required by PMIERs for lower credit scores and higher LTVs is greater than what our own analysis suggests is necessary. This will cause a greater disparity in borrower costs than is warranted, and it will create the potential for regulatory arbitrage and adverse selection. Without having access to the data used to develop the grids, we cannot know why such a difference in additional required assets exists. However, the FHFA maintains a proprietary Mortgage Analytics Platform to support its strategic plan. The FHFA released a white paper (the "Whitepaper") in conjunction with the release of the draft PMIERs to provide interested stakeholders with a detailed description of the platform. Based on a review of the Whitepaper and our experience in this area, we hypothesize that the difference in additional required assets may be the result of an overemphasis on defaults (that is missed payments), rather than ultimate claims. Our experience shows that some loans that are late by 180 days or more resolve without an MI claim for a variety of reasons. LTV and credit scores are excellent predictors of delinquency, but not as strong at predicting how that delinquency will be resolved.

18. What comments or suggestions are there related to the treatment of HARP loans in calculating the Financial Requirements?

The treatment of HARP loans is consistent with our experience, which shows approximately 50% reduction in the ultimate claim experience following modification (refinance).

19. What comments or suggestions are there related to the treatment for non-performing loans in calculating the Financial Requirements?

The treatment of non-performing loans creates the potential for considerable exacerbation of cyclical trends in housing finance. To reduce the magnitude of cycles, financial requirements for long-term exposures should be determined at origination, on the basis of conditions at origination, when credit and pricing decisions are being made. The development of delinquencies occurs well after that time. Requiring a substantial increase in Minimum Required Assets in response to an increase in delinquencies means adding capital just at the time when additional capital, if even available, will be more expensive. Alternatively, mortgage insurers will have to either significantly restrict their guidelines or stop writing new business altogether. Stress-level Minimum Required Assets should anticipate at origination the amount of capital required for the delinquent loans in a stress scenario. The PMIERs in fact have Minimum Required Assets far in excess of what is needed to handle a stress scenario (see Figure 6 in our Comment Letter). If separate grids are maintained for non-performing loans, then seasoning factors (see response to Question 16) must be explicitly applied to performing loans to account for this.

20. Is the segregation of books of business by vintages appropriate?

The answer to this question is, "it depends." Segregation of books by vintage is helpful in explaining the past, but it is not nearly so helpful for managing new risk. The model described in the Whitepaper and used to create the grids in the PMIERs (the "FHFA model" relies on vintage year dummy variables to explain a significant portion of the variance in default risk in GSE data. Those dummy variables help improve the fit of their model on that data, but they cannot be used to predict default rates on new loans. The methodology described in the Whitepaper does not allow new business to be classified until it has aged for approximately four years. We recommend, instead, using variables that directly relate to the risks being proxied by the vintage year dummies. The two factors that are relevant are: (1) current home prices relative to historical trend; and (2) the current level of underwriting risk in mortgage originations. The FHFA has published two excellent papers on counter-cyclical capital in which the authors develop useful ways to measure home prices relative to trend. [1] That work can be readily applied to stress test forecasting for mortgage insurers. With regard to current period underwriting risk, we recommend an index based on a simple count of known risk factors in mortgage lending. The combination of these two factors is highly correlated with the vintage effects the FHFA model attempts to capture through dummy variables, and they may be applied on a prospective basis to new originations.

21. How often should the grids be updated?

The grids should rarely need to be updated if they are modified as we recommend. The country has just been through the most stressful housing conditions recorded. Only a more severe stress will provide useful additional data. A counter-cyclical set of grids that are stable over time will create a predictable, forward-looking set of requirements that will both encourage long-term participation by investors and slow housing cycle acceleration rather than amplify it. . Note that the section of our Comment Letter titled "Promoting greater use of private capital" suggests that any change to PMIERs, which would include a grid update, require a clearly articulated process and be subject to public comment and a reasonable phase-in period.

22. What comments or suggestions are there related to employing a remaining life of coverage loss horizon in calculating the grids?

A life of coverage loss horizon is consistent with how MGIC models mortgage risk, though in practice we use 10 years as a sufficient period of time to develop and resolve a stress scenario. The 9-quarter horizon used in the Comprehensive Capital Analysis and Review ("CCAR") is much too short a period of time to encompass a housing cycle. However, if premium is not included as we recommend, then the timeline is not appropriate and should be limited to the nine quarter time horizon.

23. What comments or suggestions are there related to the use of multipliers for certain loans with certain high risk features?

The multipliers proposed are inconsistent with the underlying FHFA model of defaults in two ways. First, only one of the proposed risk factors (Occupancy at Origination) appears in FHFA's model of default risk. The factors used should relate directly to the analytic support of the model. In the case of Occupancy, the multiplier (3x) used to calculate Minimum Required Assets is substantially greater than what is supported by the FHFA model (relative odds of 1.04 in the GSE_01 Fixed Rate 30yr Performing Loan Equation).

Second, the use of multipliers is inconsistent with the use of a logistic risk model, such as the FHFA model. The proposed calculation of Minimum Required Assets multiplies asset percentages cumulatively, and the architects had to specify that the result should be no more than 100%. The FHFA's logistic risk model underlying their calculations treats risk factors as additive in log-odds (or, equivalently, multiplicative in odds). The correct treatment of loan-level risk features would also be additive in log-odds or multiplicative in odds. The error created by using a multiplier increases with the underlying loss rate and the amount of the multiplier. As a result, lower credit score and lower down payment borrowers will especially be impacted by this error.

An additional problem with Table 3A of Exhibit A to the PMIERs is that a mortgage insurer may not know a loan's eligibility status for the various exemptions (GSE, HFA, etc.). The PMIERs place an extraordinary burden on mortgage insurers to determine that information, which may not be known at the time of the application for insurance. Under the PMIERs, if a mortgage insurer does not have sufficient information to determine whether or not to apply the multiplier, then it must be applied.

24. It is common underwriting practice to consider additional factors that help reduce or offset risks associated with higher DTIs (often described as compensating factors). Should the Enterprises take compensating factors into consideration when determining risk multipliers as described in Exhibit A, table 3a? How should compensating factors be incorporated into table 3a?

The evaluation of compensating factors is a complex underwriting process that is not suitable for incorporation into capital standards. If there are significant interaction effects between factors, they should be incorporated into the underlying risk model.

25. An alternative would be to have several DTI risk multipliers, for example, 43%, 45%, 47% and greater than 50%. What are the merits or drawbacks of this approach?

Additional multipliers would have the benefit of making the impact more gradual, mitigating the potential for cliff effects. The GSEs should provide analytic evidence for the proposed values.

Macroeconomic Scenarios

26. What comments or suggestions are there related to using the house price, interest rate and unemployment rate projections from the CCAR Baseline scenario for calculating the grids for Pre-2009 and delinquent policies?

27. What comments or suggestions are there related to using the house price, interest rate and unemployment rate projections from the CCAR Severely Adverse scenario for calculating the grids for non-HARP Post-2008 policies?

28. What comments or suggestions are there related to using the house price, interest rate and unemployment rate projections from the CCAR Baseline scenario for calculating the grid values for loans refinanced through HARP?

The following is responsive to Questions 26, 27 and 28.

The use of CCAR scenarios for calculating the grids is attractive from the standpoint that it is consistent with other financial company standards. As a means of establishing counter-cyclical long-term capital standards, however, it is less so. There is nothing in principle that prevents the CCAR scenarios from being established to create counter-cyclical requirements. In practice, however, without a specific rules-based formulation it is clear that will not happen. The current Severely Adverse scenario for home prices, a 25% decline, is excessive at this point in the housing cycle.

A better approach has been suggested by the FHFA's own researchers.[2] The appropriate home price path should be determined based on where home prices lie relative to the long-run trend, at origination of the loan. Interest and unemployment rate paths should be consistent with current levels and the projected home price path.

Available Assets

29. What is the appropriate frequency for an Approved Insurer's senior management team to certify compliance with the available and minimum required asset provisions of Section 704?

Certifying compliance on an annual basis is appropriate given the additional information requested on a more frequent basis.

30. What suggested changes are there to the categories either included or excluded from the definition of Available Assets?

In addition to including future premiums, which will be commented on later, the following assets should also be included:

- Premiums Receivable (Line 15.1 of an Approved Insurer's Statutory Statement of Assets) because it is a highly liquid asset as it represents premiums received by a loan servicer and to be remitted to the Approved Insurer in the next reporting period;
- Properties that are acquired as part of the claims settlement process (Line 4.3 of an Approved Insurer's Statutory Statement of Assets) because the properties are typically sold and cash is received within 12 months of acquisition;
- Receivables from investments (such as those currently listed on Lines 9 and 14 of an Approved Insurer's Statutory Statement of Assets); and
- Investments in subsidiaries of an Approved Insurer, subject to an appropriate liquidity haircut.

31. What comments or suggestions are there related to the proposed treatment of premium income in Available Assets?

32. Should the proposed treatment of premium income in Available Assets be aligned with the exclusion of premiums that currently occurs as part of state regulatory calculations?

33. Should premium income for the Post-2009 vintages be included in the calculation of Available Assets, and if so, should the inclusion of this premium income be limited to the transition period, or should it extend beyond the transition period? What would be an appropriate phase-out and/or haircut for premium income credit given during the transition period?

34. Should unearned premium reserves (UPR) be included in the calculation of Available Assets? Should there be different treatment of refundable versus non-refundable premium?

The following is responsive to Questions 31, 32, 33, and 34.

Premiums constitute a significant source of claims paying resources even in the most severe circumstances. Even our 2007 book, our worst ever experienced, has ever-to-date premium received amounts that are more than 50% of ever-to-date claims paid. Ignoring the value of this asset nearly doubles the Minimum Required Assets.

For loans with renewal premiums, continued risk exposure is contractually contingent on receipt of those premiums. Historically, we receive 3-6 years of renewal premiums on the average loan, depending on the LTV and credit score. Importantly, the amount of renewal premiums increases during a stress scenario as borrowers face limited options to refinance or move. From an actuarial standpoint, the amount and timing of premium receipts can be forecast with great certainty.

The GSEs have rightfully identified concerns over the potential timing mismatch between the development of claims and the receipt of premiums. Claim development typically has a more peaked distribution than premiums over time. Consequently, in a stress scenario, premiums are initially earned more rapidly than claims develop, claims then significantly outpace premiums, and finally premiums again exceed claims in the tail period. It is possible to have sufficient future premiums to cover future claims on a net present value basis, but to have insufficient cash to pay current period claims. While this is a theoretical risk, it does not match up with the experience of the MI industry and the GSEs through the financial downturn.

Regulatory decisions to require mortgage insurers in run-off to issue Deferred Payment Obligations ("DPOs") reflected uncertainty over the discounted present value of the future cash flows, not an actual shortfall of liquid assets. That uncertainty arose from the insufficiency of those entities' capital and premiums in the first place, not from a decision to include or exclude premiums from the Available Asset requirements. Excluding premiums from Available Assets constitutes an excessive belt-and-suspenders approach. We believe that future contractual premium can be included in a prudentially sound manner.

- First, premium recognition should be conditioned on a mortgage insurer having Available Assets equal to the minimum threshold specified in the draft PMIERs ($400 million).

- Second, a sliding scale (shown below as Figure 1) should be used to limit premium recognition for MI counterparties with lower levels of statutory capital.[3]

Figure 1 Proposed Premium Inclusion in Available Assets – Statutory Capital Limitation

Statutory Capital (millions)	# of Annual Renewals (Subject to 33% Limit)
< $300	0
$300 - <$400	1
$400 - <$500	2
$500 or >	3

- Third, the premiums included in Available Assets should not exceed 1/3 of the Minimum Required Assets of a mortgage insurer. Although premium recognition is central to a mortgage insurer's business, MGIC believes that a mortgage insurer's Available Assets should include a substantial amount of assets on hand, compared to a source of assets dependent on performance of contractual obligations. This limit also should address concerns expressed by some regarding the potential build-up of leverage despite the PMIERs' minimum asset requirement, (explained in more detail below).

- Fourth, the premiums from post-2008 policies that are included in Available Assets should be limited to a multiple of 300% (implying three years of renewals). MGIC recognizes that because uncollected premiums depend on future events, the lifetime value of the contractual right is not certain. Historically, premiums earned on the whole portfolio of policies in any given year have a 3-6 multiple – *i.e.*, the policies are expected to generate a further 3 to 6 years of monthly premium payments. MGIC proposes allowing credit at the lower end of historical experience.

Specifically regarding Question 32, since the PMIERs and state regulations have differing methods to evaluate the financial strength of mortgage insurers, we recommend that no attempts be made at harmonizing one difference without considering all the differences in the requirements and whether they should exist.

Alternative Approaches

35. Should an alternative approach to determining Minimum Required Assets be considered in the future? If so, please describe the approach.

The mortgage insurance industry is currently engaged with the NAIC Mortgage Guaranty Insurance Working Group (MGIWG) in the development of a new Model Act for Mortgage Guaranty Insurance. A substantial portion of that work is the development of new capital standards to supplant the maximum risk-to-capital and minimum policyholders position frameworks that are currently in place. While final development of the new standards has yet to occur, the blueprint is largely complete. We strongly encourage the FHFA and the GSEs to engage with the MGIWG and the MI industry in the process of finalizing these new standards. A summary of this work is included as an Exhibit to this Appendix.

Similar to the recommendations we have made regarding the financial requirements of the PMIERS, the blueprint for revised regulatory capital standards proposes separate development of claim incidence, claim severity, and premium amounts, using very similar grids to those proposed for the PMIERs. However, also as recommended above, loans are assigned to those grids on the basis of market conditions at origination, not clustered in a backward-looking analysis.

Limitations Triggered by a Minimum Required Assets Shortfall

36. What comments or suggestions are there related to the limitations triggered by an Available Assets shortfall to the Minimum Required Assets Amount described in Section 706 if they were expanded to include:

a. Paying dividends, making any payments, or pledging or transfer asset(s) to any affiliate or investor; and

b. Assuming any obligations or liabilities other than those arising from mortgage guaranty insurance policies.

The PMIERs should not be written in a manner that would require an Approved Insurer to violate state or federal laws or directives, directives or other written requirements.

Investments in and Capital Support for Other Entities

Although not addressed in the FHFA's specific questions concerning Section 700, Financial Requirements, we recommend that Section 707, Investments in and Capital Support for Other

Entities, be modified to "grandfather" existing relationships between Approved Insurers and subsidiaries.

"**Except for arrangements in effect upon the effective date of these Requirements,** an *approved insurer* may not have, incur or assume an obligation or indebtedness, contingent or otherwise, including, without limitation, an obligation to provide additional insurance, or related service or product, or to provide remedy to an obligation of a subsidiary."

Risk Sharing and Reinsurance

Exclusive Affiliated Reinsurance

The FHFA did not pose any questions concerning Exclusive Affiliated Reinsurance, however, we suggest the following modifications:

- Guidance should be provided as to what qualifies as a "strongly capitalized affiliate."

- Modify the second sentence of the first paragraph under the heading "Exclusive Affiliated Reinsurance" in Section 708 as follows to reflect that only "aggregate excess of loss reinsurance arrangements are prohibited:

  "**Aggregate excess** ~~Excess~~ of loss reinsurance arrangements with exclusive affiliated reinsurers are not permitted."

- Approved Insurers are required to monitor the investments of captive trust assets, and to bring direct noncomplying assets into compliance. This is increasingly problematic as the portfolios shrink, e.g., the 5% limitation on a single investment requires diversification in a small portfolio, which increases expense and reduces returns. We request that these requirements be revised to acknowledge the runoff scenario, i.e., permit the insurer to allow deviations if an investment would otherwise be allowed but for the threshold/concentration limitations.

37. Should risk sharing or reinsurance transactions that do not receive full credit for the risk transferred under GAAP or SAP be permitted, and, if so, what limitations should there be on such transactions?

The amount of credit from a risk-sharing transaction that an Approved Insurer can receive, from the PMIERs perspective, is based on a single extreme stress loss scenario versus a weighted average probability of a loss occurring. As a result we believe risk sharing or reinsurance transactions should receive full credit to the extent the risk is transferred under such agreements, regardless of the GAAP or Statutory Accounting Principles ("SAP") treatment.

When determining credit for GAAP or SAP, the relationship between the probability of loss and the potential magnitude of the loss (the lower the probability of loss, the higher the magnitude of possible loss to meet risk transfer) must be considered. This is not the case under the PMIERs, where you could have Minimum Required Assets based upon a stress scenario that is viewed as having a very small probability of occurring. It would seem inconsistent for the GSEs to establish requirements for the amount of Minimum Required Assets to be held for a portfolio of loans, have a risk transfer agreement that would transfer losses on this portfolio of loans under the scenario the GSEs used to develop the asset requirement and then disallow a reduction of the Minimum Required Assets from the risk transfer simply because it did not receive full credit under GAAP or SAP.

Whether or not full credit is achieved under GAAP or SAP, we believe the credit to be recognized by the PMIERs should be based upon the stress scenarios that the PMIERs apply in determining the Minimum Required Assets of an Approved Insurer without limitations. Allowing full credit based on the stress loss scenarios within PMIERs would support consistency in treating the underlying loan characteristics the same throughout PMIERs. We do note that a transaction that does not receive full credit under SAP would be accounted for under a deposit method of accounting which would preclude an Approved Insurer from reducing unearned premium for the ceded portion. The proposed draft of PMIERs reduces available assets by the balance of unearned premium thereby limiting the Available Assets. In an effort to consistently treat risk sharing and reinsurance transactions whether or not full credit is achieved under GAAP or SAP, we propose unearned premium be reduced by an amount equal to the ceded unearned premium under such a transaction for the purpose of determining Available Assets.

38. What would be the impact of the draft Financial Requirements, if any, on Approved Insurers who are considering writing pool level insurance on pools with LTVs below 85 percent?

The Minimum Required Assets for LTVs below 85% are excessive. The LTV grid should be expanded to include additional LTV tranches from 60% to 85%, and loss severity should be made sensitive to depth of coverage. That is, if the mix of business shifts materially to below 85% LTV, then the 5.6% Minimum Asset Requirement will need to be reconsidered to reflect the reality of lower risk.

<u>Third-Party Opinion and Risk Analytics</u>

39. Should the requirements of a third party opinion or analysis in Section 703 be restricted to a particular purpose, triggering event, and/or frequency?

Section 703 should be restricted to only support the determination of claims paying resources. Engaging a third party should only occur when projected Available Assets are less than the Minimum Required Assets as presented in the required capital plan within Section 701. The GSE and the Approved Insurer should mutually agree upon the third party analytics firm to perform the analysis, the purpose of the analysis, and duration of the engagement. To support facilitating such a mutual agreement a preapproved list of analytics firms should also be established.

Overall Impact

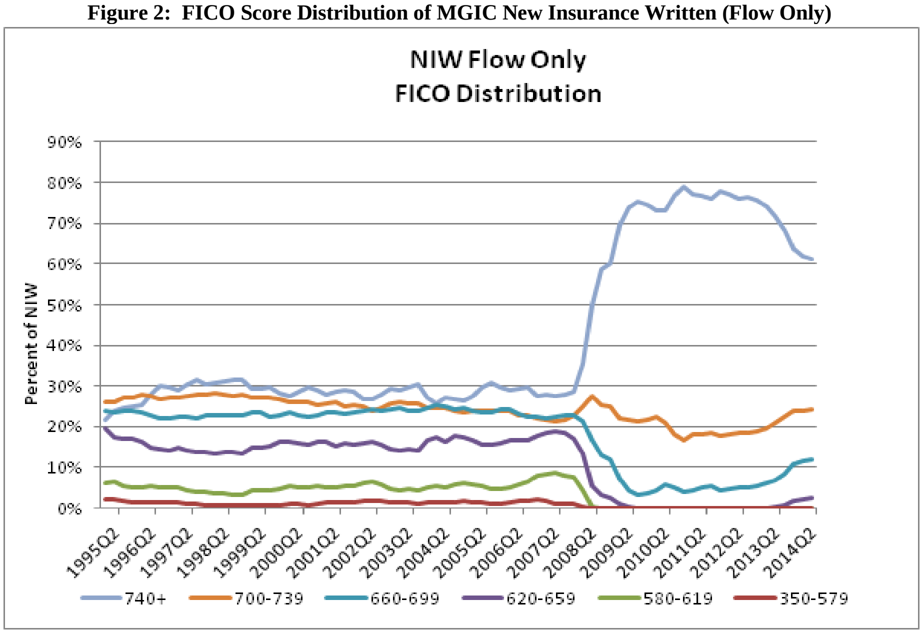
40. What may be the impact, if any, on high LTV borrowers of the draft PMIERs?

41. What may be the impact, if any, on low credit score borrowers of the draft PMIERs?

The following is responsive to Questions 40 and 41.

As shown in the table in Figure 2 below, historically, 35-40% of new insurance written by MGIC has a FICO score between 620 and 699. In 2013 and the first half of 2014, that percentage was 8-15%. The primary reason for the mix shift to higher FICO scores in recent years is due to the monthly cost that results for a borrower when choosing a GSE loan with private MI compared to an FHA insured loan that ends up in a GNMA security. Currently, due to the interaction of GSE Loan Level Price Adjustments, MI premiums, lender gain on sale considerations, and underwriting criteria, most lower credit score, higher LTV loans do not obtain private mortgage insurance even though many high LTV and lower credit score borrowers pay lower premiums with private mortgage insurance versus FHA. For a more robust discussion see the section of our Comment Letter titled "Preserving market liquidity").

Figure 2: FICO Score Distribution of MGIC New Insurance Written (Flow Only)



As shown in Figure 3 below, given the proposed Minimum Required Assets for high LTV and low credit score borrowers, the cost of private mortgage insurance for these borrowers would increase or provide further incentive to purchase FHA insurance (which increases taxpayer exposure). These increased costs are required in order for the Approved Insurer to generate an adequate return for the assets deployed and the risk undertaken.

Figure 3: Potential Impact of Draft PMIERs on Monthly Mortgage Payments

	FICO Score	Private MI	FHA	Monthly Increase in Private MI Premium due to PMIERs	Monthly Mortgage Payment with Private MI Better/(Worse) than with FHA Insurance: Before PMIERs	Post PMIERs
95% LTV	740	$ 1,167	$ 1,271	$ 59	$ 104	$ 44
	720	$ 1,167	$ 1,271	$ 59	$ 104	$ 44
	700	$ 1,230	$ 1,271	$ 70	$ 41	$ (29)
	680	$ 1,230	$ 1,271	$ 70	$ 41	$ (29)
	660	$ 1,306	$ 1,271	$ 126	$ (36)	$ (162)
	640	$ 1,322	$ 1,271	$ 126	$ (51)	$ (178)
	620	$ 1,338	$ 1,271	$ 126	$ (68)	$ (194)
90% LTV	740	$ 1,076	$ 1,204	$ 20	$ 128	$ 108
	720	$ 1,076	$ 1,204	$ 20	$ 128	$ 108
	700	$ 1,112	$ 1,204	$ 26	$ 92	$ 65
	680	$ 1,112	$ 1,204	$ 26	$ 92	$ 65
	660	$ 1,165	$ 1,204	$ 76	$ 39	$ (37)
	640	$ 1,180	$ 1,204	$ 76	$ 24	$ (52)
	620	$ 1,195	$ 1,204	$ 76	$ 9	$ (68)

Subject to change based upon changes to LLPAs, MI and MIP premium rates, and other third party costs. Assumes $220,000 Purchase Price, Owner Occupied, 30 Year FRM Rate of 3.75% for FHA, Conventional rate 3.875 – 4.5%, GSE Adverse Market Fee of 25 basis points, GSE Loan Level Price Adjusters, FHA Upfront Premium is added to loan amount. All other closing costs and third party fees are the same. Values presented may be impacted by rounding.

42. What may be the impact, if any, on Seller/Servicers of the draft PMIERs?

Lenders would be forced to rely more on the FHA or on riskier but less scrutinized structures such as piggyback loans to meet the needs of their first time homebuyer, low and moderate income, and lower wealth customers. An Approved Insurer would also need access to certain information and systems of Seller/Servicers as required to certify compliance with Sections 401, 402, 403, 404, 502, 600, 601 and 602 to the extent that this information is not required under the terms of the Master Policy. Therefore, the GSEs should clarify in their Seller/Serivcer guide that the Seller/Servicer must comply with reasonable requests for information or access from Approved Insurers.

43. What may be the impact, if any, of the draft PMIERs on Approved Insurers who are considering writing forms of insurance that are different from the traditional loan-level, borrower-paid mortgage insurance (BPMI) ?

The substantial majority of Lender Paid Mortgage Insurance is written as single pay premium. Under the draft PMIERSs, an Approved Insurer would not be able to include any unearned premium in its Available Assets. To allow Approved Insurers the ability to write various premium plans, a portion of contractual premium should be included in Available Assets as stated in response to Questions 31-34.

The PMIERs as proposed may result in other forms of credit enhancement, facilitated by non-GSE writing companies, becoming more attractive to deploy private capital.

Notices / Reports / Monitoring

Although the FHFA did not pose any questions concerning the notices required by Section 801, we recommend that the requirement contained in paragraph 1) of Section 801 be removed. That paragraph provides that an Approved Insurer must notify the GSEs within two days of "the occurrence of any event, action or circumstance that would require a notice on SEC Form 8K if the *approved insurer* is subject to such requirement." It would be burdensome for a company to provide the information requested by paragraph 1) within two days and such a requirement is unnecessary given the ability of the GSEs to subscribe to an RSS Feed of all company filings on the website of the Securities and Exchange Commission.

Although the FHFA did not pose any questions concerning the confidentiality of all of the data provided to the GSEs and FHFA, we request that a provision be added to the PMIERs that states that all of the data, information, performance metrics, reports, etc. provided by the Approved Insurer under the PMIERs be recognized as confidential and will not be released by the GSEs, except to the FHFA under exam privilege, without a subpoena or order.

H. Failure to Meet Requirements (Post-Transition Process)

Although the FHFA did not pose any questions concerning the requirements in the PMIERs regarding an Approved Insurer's compliance with laws, we recommend the PMIERs be changed as discussed below.

The treatment of applicable laws in the PMIERs is not consistent. Section 101 requires an Approved Insurer to comply with **<u>all</u>** applicable laws and to notify the GSE upon its determination of **<u>material</u>** noncompliance with any applicable law. However, Section 101 also implies that **<u>material</u>** noncompliance includes any federal or state notice that an Approved Insurer is not in compliance with **<u>any</u>** applicable law.

We recommend that Section 101 be modified as follows to simply require that an Approved Insurer materially comply with all laws: "An *approved insurer* must maintain **<u>material</u>** compliance with all *applicable law*."

We also recommend that paragraph 2) of Section 101 be modified as follows to make clear that only federal and state notices that an Approved Insurer may not be or is not in **<u>material</u>** compliance with laws are considered material noncompliance for purposes of the notification requirements of Section 101: "2) any notice, letter, or order of any state or federal authority asserting jurisdiction over the *approved insurer* indicating that the *approved insurer* may not be, or is not, in **<u>material</u>** compliance with an applicable state or federal law, regulation or order...."

Without the suggested modification, an Approved Insurer would be required to notify the GSEs about even the most insignificant rule infractions.

44. Are the remediation measures sufficiently comprehensive? Should the number of measures be reduced, expanded or refined and, if so, how?

With the exception of Item 18 (the ability of the GSEs to impose compensatory fees), the remediation measures in Sections 900-904 are generally appropriate and sufficiently comprehensive. The PMIERs are eligibility requirements. The remedy for failure to comply with eligibility requirements should ultimately be the loss of eligibility. The PMIERs are not a contract and should not allow the GSEs to impose compensatory damages. We, therefore, request that Item 18 be removed and that the following Section 905 be added:

"Section 905. Sole Remediation Options. Sections 900-904 contain the sole remediation options available to the GSE for failure by the *approved insurer* to meet the PMIERs."

In addition to our comments above, we recommend that before any action is taken to suspend or terminate an Approved Insurer, Senior Management of the GSEs and the FHFA must have provided evidence and rationale for such suspension or termination and have provided a commercially reasonable period of time for the Approved Insurer to correct any instance of noncompliance. Further, any such noncompliance that would result in suspension or termination should directly and with a high degree of certainty, as validated by an outside actuary, threaten an Approved Insurer's safety and soundness.

Similarly, we request the following modification to the bullet point titled "Medium Risk" in Section 802:

"Medium Risk: Implement restrictions on business practices **~~or charge financial penalties~~** for failing to satisfy requirements or agreed-upon remediation actions."

45. Do the remediation measures present any unintended consequences or operational constraints?

46. Are there remediation frameworks that would serve as an alternative to the proposed approach?

47. Should the PMIERs include an appeals process to provide an Approved Insurer with a means to dispute remediation actions taken by the Enterprises? If so, what should that process consist of and should it apply to all remediation actions or to a subset?

The following is responsive to Questions 45, 46 and 47.

Section 901 should be clarified to include the concept of Materiality when considering whether or not PMIERs have not been complied with. Before an Approved Insurer is deemed to be in remediation, the GSE must provide written notice of any incidence of non-compliance and the Approved Insurer should have an opportunity to cure the deficiency. Furthermore once a notification of non-compliance is received by the Approved Insurer, it should have a right to appeal such finding to both the GSE and the FHFA

I. Newly Approved Insurers

48. What financial and business requirements should be placed upon new entrants? How would such requirements affect the market for mortgage insurance? Depending upon experience, capital and plan would determine any restrictions and should ensure that new entrants are not advantaged or disadvantaged

The requirements for Newly Approved Insurers are appropriate as outlined in Section 203 of the PMIERs.

J. Transition Process

49. What would be the appropriate length of time for Approved Insurers to fully comply with the Financial Requirements of the revised PMIERs?

Under the draft PMIERs, an Approved Insurer is required to be fully compliant within 180 days of the publication date with all sections of the PMIERs including the Financial Requirements. However an Approved Insurer would have up to 2 years from the publication date, subject to a GSE approved transition plan, to become compliant with the Financial Requirements. This is effectively a 180 day period after publication to become complaint or be in remediation. A remediation status may put an Approved Insurer at a competitive disadvantage. If the PMIERs are not modified to allow future premiums in the calculation of Available Assets, and as otherwise suggested in this Comment Letter, then Approved Insurers should have a full two years after publication date to comply with the Financial Requirements before having to produce a transition plan. The transition plan should not exceed two years. This timeframe is in line with Basel and other significant capital adequacy revisions permitted by federal regulators.

50. Should the duration of a transition period for full compliance with the Financial Requirements of the revised PMIERs be consistent for all Approved Insurers or varied depending on each company's unique circumstances?

Transition periods should reflect each Approved Insurer's unique circumstances but should not exceed four years from the publication date of the revised PMIERs.

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[1] Working Paper 14-1: Countercyclical Capital Regime Revisited: Test of Robustness and Working Paper 12-2: Countercyclical Capital Regime – A Proposed Design and Empirical Evaluation.
[2] Working Paper 14-1: Countercyclical Capital Regime Revisited: Test of Robustness and Working Paper 12-2: Countercyclical Capital Regime – A Proposed Design and Empirical Evaluation.
[3] Statutory capital is the sum of statutory policyholders' surplus plus contingency reserves and is sometimes referred to as statutory policyholders' position.

Mortgage Guaranty Insurance Capital Model Update

NAIC Summer Meeting

August 18, 2014

Background

- Housing Cycles
  - Oil Patch
  - New England
  - California
  - US 1997-2014
- Lack of risk sensitivity in capital requirements
- Countercyclical impact of contingency reserve

Objectives

- Add risk sensitivity to capital requirements
- Retain countercyclical effect
- Rules based approach
- Simplicity and transparency

Phase 1 Summary

- All MI Companies participated
- Oliver Wyman developed recommendation
- Competing risk framework, loan-level model, sources and uses stress test
- Presentation to Working Group
- Recommendation to add simplified RBC
  - Tier 1 : RBC
  - Tier 2 : Loan Level Stress

Phase 2 Overview

- Develop Loan Level and RBC models
- Participants: Arch MI, Genworth, MGIC, Radian, United Guaranty, and Oliver Wyman
- Collection and standardization of data
- Development and testing of loan-level models
- Development and testing of RBC framework
- Phase 2 close to complete

Loan-Level Sources & Uses Approach

Capital model high level structure

Starting claims-paying resources

- Starting available resources composed of surplus, reserves
- Available assets consolidated across US MI entities (to which loan-level liability portfolio corresponds)

Projected sources and uses of capital

- Losses, income, and expenses projected over a 10 year stress scenario
- Existing portfolio projected on a run-off basis

Solvency metric

- Solvency measured in each period given available resources and projected cash flows
- Model assesses whether starting capital resources are sufficient to survive a given scenario

1. Inputs

Macroeconomic scenario

Loan-level in-force portfolio

MI financials (available claims-paying resources, asset balances)

2. Sources and uses projection engine

Credit loss forecasting module

Probability of default

Probability of prepayment

Probability of claim (given default)

Loss (given claim)

MI structures (pool, reinsurance)

Premium forecast (run off basis)

Investment income forecast

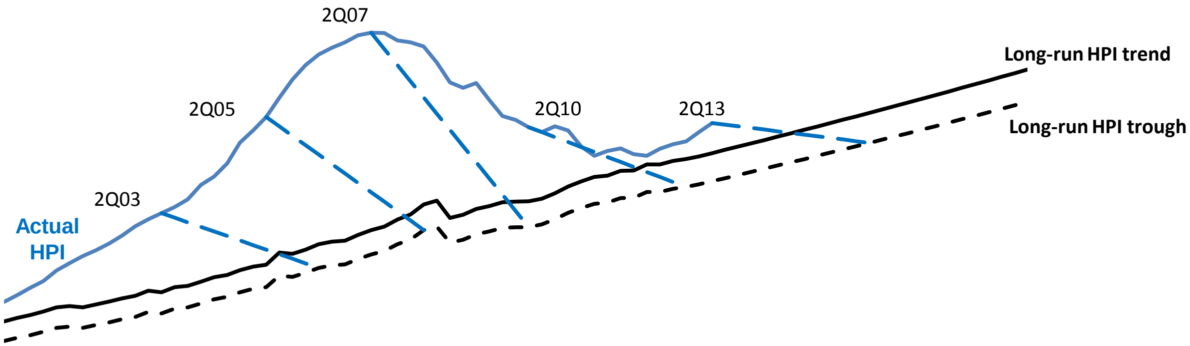
Expense forecast

3. Output measurement

Full projections– measuring solvency under stress over 10 year scenario

Explore simplified factor-based approach for loan-level capital requirement[1]

Countercyclical Model Design



- Approach consistent with FHFA paper on countercyclical capital[1]
- Stress calibrated to long run trend HPI
  - 1975-2001 basis for trend
  - resulting stress more severe than observed 2007 stress at peak
- Subject to minimum stress (floor)

[1]Source: Scott Smith and Jesse Weiher, “Countercyclical Capital Regime: A Proposed Design and Empirical Evaluation”, FHFA Working Paper, April 2012

RBC Framework

Property & Casualty RBC

$$RBC = R_0 + \sqrt{R_1^{\,2} + R_2^{\,2} + R_3^{\,2} + R_4^{\,2} + R_5^{\,2}}$$

Catastrophic Risk Modification

$$RBC = R_0 + \sqrt{R_1^{\,2} + R_2^{\,2} + R_3^{\,2} + R_4^{\,2} + R_5^{\,2} + R_6^{\,2} + R_7^{\,2}}$$

R0 = Asset Risk - Subsidiary Insurance Co
R1 = Asset Risk – Fixed Income
R2 = Asset Risk – Equity
R3 = Asset Risk – Credit
R4 = Underwriting Risk – Reserves
R5 = Underwriting Risk – Premium
R6 = Catastrophic Risk – Earthquake
R7 = Catastrophic Risk - Hurricane

MI RBC Model Overview

- Different from P&C RBC
  - Life of loan commitment
  - Cyclical nature of housing markets
- Adequacy of claims paying resources
  - Use of loan-level model to assign factors
  - Factors applied to Risk In Force to estimate stress loss and premium
- Underwriting Reserve, Premium, and Catastrophic risk modeled together

RBC Test

- Required Capital Calculation

Required Capital = Required Assets - Statutory Reserves

- Development of Required Assets

Required Assets on Performing RIF + Required Assets on Delinquent RIF = Required Assets

RBC Model Components

- Performing Loan tables for Claim Incidence, Seasoning, Risk Multipliers, Loss Severity, and Premiums

Required Assets on Performing RIF

Stress Loss on Performing RIF = Performing RIF x Scenario-Based Claim Factors x Claim Seasoning x Risk Attributes Claim Multipliers x Claim Severity Factor

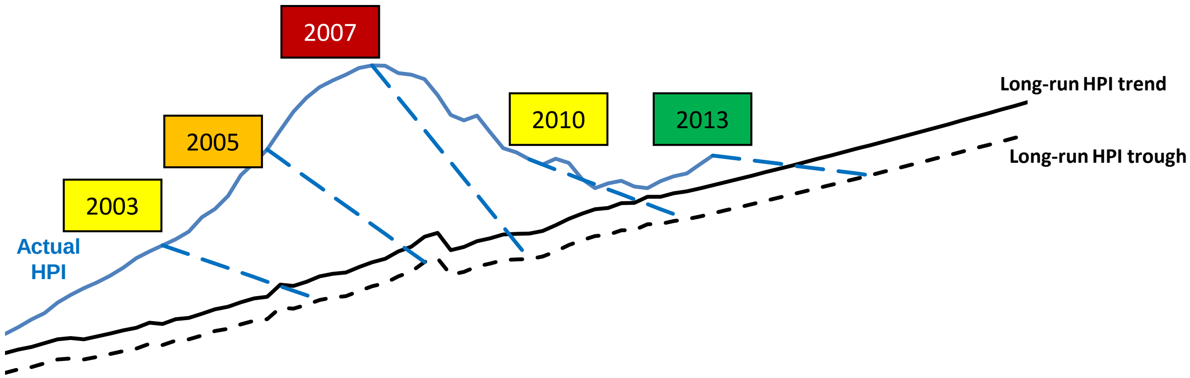
Premium on Performing RIF = Performing IIF x Premium Rate x Scenario-Based Premium Factors x Premium Seasoning

- Non Performing Loan tables for Claim Incidence and Loss Severity

Required Assets on Delinquent RIF

Stress Loss on Delinquent RIF = Delinquent RIF x Delinquent Claim Factors x Claim Severity Factor

Countercyclical Stress



"A" Market
Down 10.0%

"B" Market
Down 17.5%

"C" Market
Down 25.0%

"D" Market
Down 32.5%

- Stress Home Price Scenarios based on HPI relative to long-run trend at origination of loan
- Each market category has separate RBC tables
- Rules Based, Transparent

Note: market assignments are representative and not our actual recommendation at this time

Claim Incidence

Performing Loans:

- Market assignment
- Two primary factors:
  - LTV x Credit Score
- Incidence increases with greater stress

Illustrative Claim Incidence Grids:

"A" Market-- Down 10%

Row Labels	a. <= 619	b. 620-679	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**8%**			
i. (95-100]%					
j. (100-105]%					
k. > 105%					

"D" Market-- Down 33%

Row Labels	a. <= 619	b. 620-679	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**17%**			
i. (95-100]%					
j. (100-105]%					
k. > 105%					

Delinquent loans:

- Market assignment
- Missed Payments
- Pending Claims

Missed payments	1	2	3	4	5	>= 6	Pending Claims
A Market							
B Market							
C Market							
D Market							

Additional Risk Factors

- Multipliers of stress claim incidence
  - Loan-level factors
  - Market-level underwriting risk factor
- Applied only to performing loans

Risk Attribute	Multiplier
Lower term	
Not fully amortizing	
Incomplete docs	
Not primary residence	
Credit union	
No co-borrower	
Risk factor 1.2 - 1.6	
Risk factor 1.6 - 2.0	
Risk factor > 2	**2.3**

Seasoning Factors

- Account for seasoning as policies age
  - Capital moves to reserves for delinquent loans
  - Risk of loss diminishes over time
- Applied only to performing loans

Illustrative Claim Seasoning Factors:

Months on Book	Seasoning Factor
a. < 12	
b. < 24	
c. < 36	87%
d. < 48	
e. < 60	
f. < 72	
g. < 84	
h. < 96	
i. < 108	
j. < 120	
k. > 120	

Loss Severity

- Loss Severity determined by Market and "Coverage Down To" Level
- Investor's exposure reduced by higher coverage
- Deeper MI coverage reduces expected severity (as pct of RIF)

Sample Grid:

Down To	A Market	B Market	C Market	D Market
a. > 70%				
b. <=70%				1.07
c. <=60%				
d. <= 50%				
e. <= 40%				
f. <= 30%				
g. <= 20%				
h. <= 10%				

Premium

- Premium factor: multiple of annual renewal
- Primary factors Market, LTV and Credit Score
- Typical factor in 3-6 range
- Increases in housing stress
- Seasoning factors reduce premium multiple over time
- Applied only to performing loans

Illustrative Premium Multiple Grids

"A" Market-- Down 10%

Row Labels	a. <= 619	**b. 620-679**	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**4.9**			
i. (95-100]%					
j. (100-105]%					
k. > 105%					

"D" Market-- Down 33%

Row Labels	a. <= 619	**b. 620-679**	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**5.6**			
i. (95-100]%					
j. (100-105]%					
k. > 105%					

Illustrative Premium Seasoning Factors:

Months on Book	Seasoning Factor
a. < 12	
b. < 24	
c. < 36	92%
d. < 48	
e. < 60	
f. < 72	
g. < 84	
h. < 96	
i. < 108	
j. < 120	
k. > 120	

RBC Grid Application

Performing Loan Illustration (final grid factors under review)

Example: 95% LTV/620 FICO origination; 36 months seasoned; 30% coverage; "D" Market (Down 33% Stress) ; UW Risk Factor > 2.0

Claim Incidence

Row Labels	a. <= 619	b. 620-679	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**17%**			
i. (95-100]%					
j. > 100%					

Seasoning

Months on Book	Seasoning Factor
a. < 12	
b. < 24	
c. < 36	87%
d. < 48	
e. < 60	
f. < 72	
g. < 84	
h. < 96	
i. < 108	
j. < 120	
k. > 120	

Claim Multipliers

Risk Attribute	Multiplier
Lower term	
Not fully amortizing	
Incomplete docs	
Not primary residence	
Credit union	
No co-borrower	
Risk factor 1.2 - 1.6	
Risk factor 1.6 - 2.0	
Risk factor > 2	**2.3**

Severity Factor

Down To	A Market	B Market	C Market	D Market
a. >= 50% LTV				**1.07**
b. >= 40% LTV				
c. <= 40% LTV				
d. <= 30% LTV				
e. <= 10% LTV				

Premium Multiple

Row Labels	a. <= 619	b. 620-679	c. 680-739	d. 740-779	e. 780-850
a. <= 60%					
b. (60-65]%					
c. (65-70]%					
d. (70-75]%					
e. (75-80]%					
f. (80-85]%					
g. (85-90]%					
h. (90-95]%		**5.6**			
i. (95-100]%					
j. > 100%					

Seasoning

Months on Book	Seasoning Factor
a. < 12	
b. < 24	
c. < 36	92%
d. < 48	
e. < 60	
f. < 72	
g. < 84	
h. < 96	
i. < 108	
j. < 120	
k. > 120	

Required Assets:

Insurance In Force	$100,000
Performing RIF	$30,000
Claim incidence	17%
Seasoning Factor	87%
Claim Multiplier	230%
Severity Factor	107%
Loss On Performing RIF	$10,998
Premium Rate	1.15%
Premium Factor	5.6
Premium Seasoning	92%
Premium on Performing RIF	$5,904
Net Loss On Performing RIF	$5,094

RBC Grid Application

Performing Loan Illustration (final grid factors under review)

Example: 95% LTV/620 FICO origination; 36 months seasoned; 30% coverage; "D" Market (Down 33% Stress) ; UW Risk Factor > 2.0

Required Assets:

Insurance In Force	$100,000
Performing RIF	$30,000
Claim incidence	17%
Seasoning Factor	87%
Claim Multiplier	230%
Severity Factor	107%
Loss On Performing RIF	$10,998
Premium Rate	1.15%
Premium Factor	5.6
Premium Seasoning	92%
Premium on Performing RIF	$5,904
Net Loss On Performing RIF	$5,094

Estimation of Parameters

- Stylized loans run through loan-level model
- Control for other risk factors
- Goal: close approximation of loan-level results

Limitations

- Models only for first-lien, 1-4 family residential loans
- Population mostly >80 LTV, limited coverage
  - Pool insurance provides data for 80 LTV and below, and for deeper coverage

Next Steps

- ✓ Status update to NAIC Working Group
- Preliminary specifications and back testing results to Working Group
- Work with NAIC to Incorporate into Model Act Capital Requirements
  - Meeting plan / timeline
  - Establish Implementation Process and Governance
    - Frequency of compliance
    - Frequency of model test / application

Future NAIC Engagement

In addition to today's meeting, we propose scheduling further conversations to discuss ongoing progress and upcoming milestones

Description	Timing	Proposed agenda	Meeting type
Project introduction	March 2014	• Introduction to project goals and progress to date • Overview of capital model methodology • Overview of loan level model components	Open session
Project update	Today	• Recap loan level model overview • Review RBC framework	Open session
Model refinement, backtesting, and validation	September 2014	• Methodology update – Any revisions to capital modeling components • Model performance - backtested projected solvency vs. actual • Projections of forward solvency under selected scenarios • Overall implications for MI capital levels based on results	Closed session
Finalize recommendations	TBD	• Update on final model methodology • Update on final model performance and backtesting • Proposed design for capital regime – Frequency/approach to setting capital requirements – Role of full capital model – Triggers and regulatory interaction	Closed session
Wrap-up; presentation of end product	TBD	• Share final model methodology • Communicate sanitized final model performance, backtesting results • Proposed design for capital regime	Open session

Appendix: Loan Level Model

Summarized from March 5, 2014 Presentation

Credit Loss Forecasting Model

The credit loss forecasting model estimates probabilities of various outcomes occurring to a loan, over the entire projection horizon

Illustrative: Loan N outcomes forecast over time

Assumes loan is observed as of 2013 year-end snapshot, projected 2014 through 2023

1. Base projection

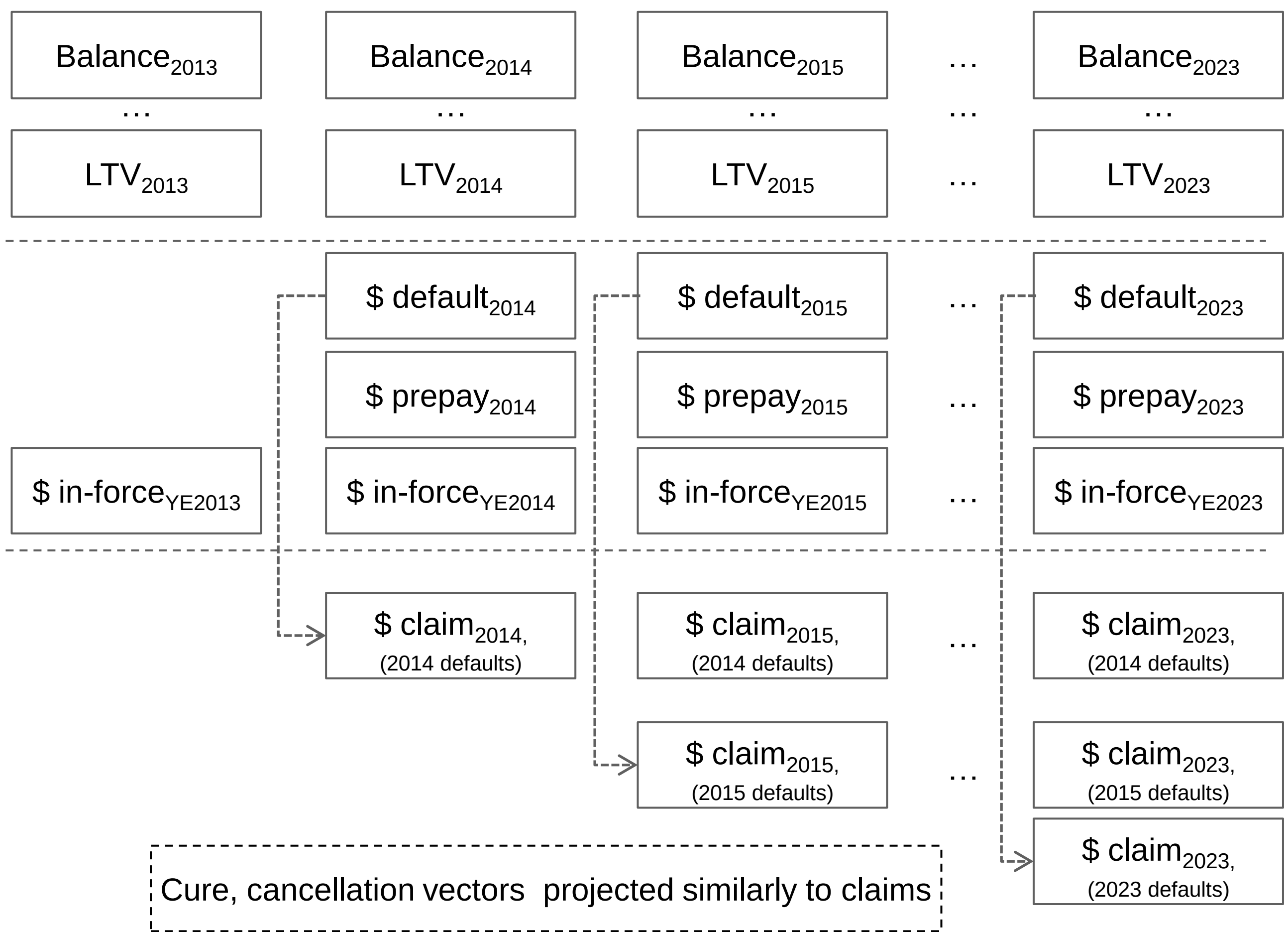
- Loan balance amortized over 10 years
- Risk factors (e.g. LTV) evolve with macro scenario

2. Hazard vector

- Prob. of prepayment
- Prob. of default
- Prob. of remaining in-force by year-end (PIF)

3. Loss given default vector

- Prob. paid claim over time, for defaults in each year
- Prob. of cure…
- Prob. of cancel…



Methodology: Probability of Default

Methodology

- The model estimates probability that a loan observed at t=0 defaults in period t=n (n>0), conditional on remaining in force to period t=n (hazard model)
- Fitted using binary logistic regression
- Data composed of year-end snapshots, 1995-2012
- Default is defined as transitioning to ≥180 days delinquent, or directly to rescission, denial, or claim (from current, or delinquent <180 days)
- Separate PD equations for three segments
  – Unseasoned loans (<12 months age at observation)
  – Seasoned loans, performing at time of observation
  – Seasoned loans, delinquent at time of observation
- Variables include static loan factors (e.g. FICO), dynamic loan factors (e.g. LTV) and macroeconomic factors (HPA, unemployment rate)
- Additional considerations include:
  – Mod and HARP loans cleaned such that loan characteristics reflect pre-mod (origination) state
  – Loans rescinded/denied prior to 180 days delinquent included in dataset, treated as defaults

Key drivers identified

Origination characteristics

- FICO
- Product type (e.g. neg am, interest-only)
- Completeness of loan documentation

Ongoing loan characteristics

- Current LTV
- Previous delinquency or default

Macroeconomic factors

- Change in HPI
- Unemployment rate

Methodology: Loss Given Default

Methodology

- Loss given default is estimated in two stages
  - Estimated probability of a loan that defaulted at t=n having one of several outcomes(claim, cancellation, or cure) in periods t=n, t=n+1…t-n+6 (multi-outcome hazard model)
  - For claims, estimated loss as % of risk-in-force
- Outcome probability model fitted using a multinomial logistic regression
- Loss given claim determined based on historical severity rates for varying LTV and coverage levels
- Data composed of year-end snapshots, 1995-2012
- Additional considerations include:
  - Rescissions and denials are treated as claims in post-default outcome model, i.e. no capital credit is expected for rescissions or denials going forward
  - Increased severity due to treating rescissions/denials as claims is expected to be mitigated by improved underwriting standards reflected in loan-level characteristics used in the PD model

Key drivers identified

Origination characteristics

- Non-standard product (incl. neg am, interest-only)
- Completeness of loan documentation

Ongoing loan characteristics

- Current LTV
- Loan age at default
- Time elapsed since default

Macroeconomic factors

- Change in HPI

Order of loss given default calculations

Expected $ default → Expected probability of claim → Expected severity as % risk-in-force

Methodology: Prepayment

Methodology

- The model estimates probability that a loan observed at t=0 prepays in period t=n (n>0), conditional on remaining in force to period t=n (hazard model)
- Fitted using binary logistic regression
- Data composed of year-end snapshots, 1995-2012
- Prepayment is defined as a policy cancellation occurring at any time except +/- 1 year of scheduled (based on amortization schedule)[2]
- Separate prepayment equations for three segments
  - Fixed-rate loans
  - Hybrid loans (fixed phase)
  - Variable-rate loans (ARMs, variable phase hybrids)
- Variables include static loan factors (e.g. FICO), dynamic loan factors (e.g. LTV, refinancing incentive) and macroeconomic factors (HPA, changes in rates)
- Additional considerations include:
  - Mod and HARP loans cleaned such that loan characteristics reflect pre-mod (origination) state; HARPs not treated as prepayments

Key drivers identified

Origination characteristics

- Mortgage product

Ongoing loan characteristics

- Current LTV
- Current prepayment incentive (difference between contractual rate, current market mortgage rates)

Macroeconomic factors

- Interest rates (which drive prepayment incentive)

2. The model also includes scheduled cancellations, which are projected directly by the forecasting engine

Methodology: Other Sources & Uses

Component	Overview of methodology
Starting available claims-paying resources	• Starting resources (with potential haircuts to be determined at a later date) as of end of period immediately preceding projection (e.g. YE 2013 for 2014-2023 projection) • Available capital resource components include – Surplus as regards policyholders – Unassigned (surplus) funds – Net losses unpaid/loss reserve – Unearned premium reserve – Statutory contingency reserve
Credit risk on assets	• Available assets' credit risk accounted for by asset risk capital multipliers, based on NAIC RBC requirements for P&C asset capital
Premiums	• Premiums estimated on a cash basis, assuming runoff portfolio – Renewing premiums treated as source of capital, consistent with loan's default/prepayment curve – Single premiums do not serve as source of capital, as they are already reflected in asset balances/unearned premium reserve • Treatment of refundable premiums (in relation to prepayment) TBD
Investment income	• Asset balances projected forward over time as function of loss, income, and expense cash flows • Asset maturity forecast to decrease as projected portfolio runs off • Assets assumed to be reinvested at a constant spread, given evolving maturity and rates
Expenses	• Loss adjustment expense (LAE) estimated based on MI industry's historical ratio of LAE to losses • Non-loss expenses estimated based on each firm's recent expense : premium ratio, less acquisition related expenses (which have already been incurred for the runoff portfolio)

Macroeconomic Drivers

Home prices are the primary macroeconomic driver considered for stress scenarios; additional drivers include unemployment and rates

Home Prices

- The primary macroeconomic driver of MI loss levels
- In the chosen scenario, home prices undergo an initial shock, followed by a gradual recovery
- Home price path definition is based on an April 2012 FHFA paper on counter-cyclical capital framework design (setting a target HPI level based on starting level relative to historical trends)

Home prices drive default rates (through LTV and directly), loss severity, and prepayment rates

Unemployment

- Unemployment, will be projected consistently with the HPI path (i.e. material increase, as expected in a severe recession)

Unemployment rate drives default rates and loss severity

Interest rates

- Interest rates are an input into prepayment estimates and investment income forecasts; rates are expected to be low for most of a scenario, consistent with expected Federal Reserve policy response, and to gradually converge on forward rates in recovery

Interest rates are a key driver of prepayment rates