



**Mortgage  
Insurance  
Companies  
of America**

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October 22, 2012

Office of the Comptroller of the Currency  
250 E Street, S.W., Mail Stop 2-3  
Washington, D.C. 20219  
Docket ID: OCC-2012-0009

Ms. Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System  
20<sup>th</sup> Street and Constitution Avenue, N.W.  
Washington, D.C. 20551  
Docket No.: R-1442  
RIN No.: 7100 AD 87

Mr. Robert E. Feldman, Executive Secretary, Federal Deposit Insurance Corporation  
Attention: Comments/Legal ESS  
550 17th Street, N.W.  
Washington, D.C. 20429  
RIN: 3064-AD97

VIA FEDERAL E-RULEMAKING PORTAL  
<http://www.regulations.gov>

**RE: Comments on Non-Recognition of Private Mortgage Insurance in Basel III**

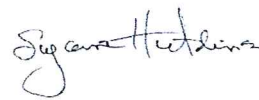
Dear Sir or Madam:

The Mortgage Insurance Companies of America (MICA) offers this response to the proposed **Regulatory Capital Rules: Standardized Approach for Risk-Weighted Assets; Market Discipline and Disclosure Requirements** (Standardized Version) by the respective bank regulatory agencies (Agencies). We address the proposed non-recognition of private mortgage insurance (Private MI) as applied to the residential mortgage credit asset risk weightings also newly proposed in the Standardized Version.<sup>1</sup> In short, we believe the proposed non-recognition of Private MI is based on a misconception that leads to a misapprehension of why Private MI has been successfully serving the

market for decades and should be recognized under the rule. As other responses to the Standardized Version make clear, Private MI enjoys broad market support as a private sector tool to enable responsible low down payment lending to first-time and moderate income homebuyers. Non-recognition of Private MI constitutes an unwarranted departure from existing U.S. bank regulatory and international best practices, is unsupported by any systematic analysis and is likely to have unintended adverse consequences on housing finance and the broader economy. Our response provides a comprehensive picture of Private MI and presents the Agencies with analysis and data that we request be taken into consideration in support of a revision of the rule to provide recognition to Private MI when calculating loan to value ratios (LTVs). We recommend continuing recognition of Private MI provided by insurers qualified by remaining in compliance with applicable state insurance regulation and on the basis of the Private Mortgage Insurance Stress Test for Adequate Resources (PMI-STAR), developed by MICA. The Private MI would be recognized for purposes of calculating the LTV of a residential mortgage loan and consequent risk weighting. We further recommend that credit for the Private MI be determined primarily by the amount of coverage present on the loan insured by a qualified Private MI provider, and offer two coverage options for consideration by the Agencies and lenders.<sup>2</sup>

Attached is a more detailed description of and rationale for our recommendations. Please do not hesitate to contact me with questions or comments.

Sincerely yours,



Suzanne C. Hutchinson

## MICA Summary

### Private MI Serves a Valuable Function in the Housing Market

Private MI enables borrowers with less than 20% down to achieve the dream of homeownership. Over the past 50 years, Private MI has helped over 25 million first-time and moderate income borrowers to purchase homes. Nearly \$900 billion in mortgage loans are currently insured by Private MI -- 9% of outstanding residential mortgages held by financial institutions.<sup>3</sup>

When a borrower places less than 20% down to purchase a home, the lender is required to obtain Private MI in order for that loan to be eligible to be subsequently sold to the GSEs. Lenders are willing to make low down payment loans, and the GSEs are willing to purchase them, because in the event of a homeowner's default on the mortgage, the Private MI company pays the owner of the loan 25-35% of the value of the loan, depending on the borrower's down payment. This amount typically covers costs associated with defaulted loans.

Private MI is the private sector alternative to the Federal Housing Administration (FHA) in that both models insure low down payment loans. However, instead of placing taxpayer dollars at risk in the event of borrower default, Private MI companies place private capital at risk in a "first loss" position after the borrower's equity. This means that both the Private MI provider and the borrower have a vested interest in making home loans that are affordable, not only at the time of purchase, but throughout the years of homeownership.

Despite challenges presented by the worst housing market downturn since the Great Depression, Private MI, a regulated insurance product, continues to provide considerable benefit to residential mortgage lenders.<sup>4</sup> Private MI reduces both the probability of default and loss given default of residential mortgages. Having their own capital at risk also means that Private Mortgage providers have strong incentives to work with lenders, investors, and community groups to help borrowers in default stay in their homes. Consequently, loans insured by private MI cure more frequently than uninsured loans. Private MI providers have paid ~\$28.5 billion in claims since 2007 without receiving direct financial assistance of the sort extended to Fannie Mae and Freddie Mac, the Government-sponsored housing finance entities (GSEs), or banking recipients under the TARP.<sup>5</sup>

Importantly, the private MI industry has attracted billions in new capital throughout the mortgage crisis.<sup>6</sup> The Private MI industry has an important role to play in promoting a vibrant and sustainable housing market by preserving a role for prudently underwritten low down payment loans. Going forward, the Private MI industry is well positioned to play a critical role in the future of housing finance by continuing to safely and soundly enable first-time and lower income families to purchase homes while protecting taxpayers from losses that result from borrower default.

## **Unfounded Concerns Regarding the Private MI Industry’s “Ability” and “Willingness” to Pay, But Constructive Suggestions Offered**

However, like the rest of the residential mortgage lending industry, the downturn has challenged the Private MI industry financially and operationally. Some Private MI providers have ceased insuring loans and started to defer part of claim payments made, which has raised counterparty risk management questions looking forward. Counterparty risk assessment is commonly divided into “ability” (*i.e.*, financial strength) and “willingness” to pay (*i.e.*, the contractual obligation to pay a claim) concerns. To the extent the prolonged housing market downturn has raised questions regarding the financial strength of the Private MI industry, “ability” concerns can be addressed better through regular, transparent assessments of a Private MI provider’s claims paying ability and coordination with state insurance regulatory entities rather than by a simple non-recognition approach. We believe the PMI-STAR tool, along with access to state insurance regulatory financial information, will address financial soundness concerns. Like other recent bank regulatory efforts, PMI-STAR uses loan performance data taken from the recent housing market crisis to establish risk-based claims paying standards for Private MI providers.<sup>7</sup>

The Agencies also will benefit from insurance regulatory efforts to improve prospective measures of insurer solvency. The recent adoption by the National Association of Insurance Commissioners (NAIC) of the Risk Management and Own Risk and Solvency Assessment Model Act (together with the implementing manual, ORSA) underscores the commitment of U.S. insurance regulators to increasing scrutiny of insurer enterprise risk management and capital sufficiency.<sup>8</sup> ORSA will apply to Private MI providers. For purposes of counterparty risk assessment, ORSA strengthens existing substantive standards and enhances a process through which greater coordination between federal and state financial sector regulators might be accomplished.

The proposed PMI-STAR tool and ORSA can be used by federal banking regulators to confirm a Private MI’s financial soundness by incorporating both into supervisory guidance and the ordinary examination process for banks.<sup>9</sup> “Ability” to pay concerns should not be used as a reason to abandon the long standing existing recognition of Private MI in bank regulatory treatment of residential mortgage credit.

The other part of counterparty risk assessment – “willingness” to pay – should not be used as a reason to justify non-recognition of Private MI, either. The assumption that “cancellation or nullification of guarantees was a common occurrence during the recent downturn”<sup>10</sup> is too unqualified to be a fair or accurate statement for three reasons:

- First, the billions of dollars in claims paid (now approaching \$30 billion) belie the notion that Private MI providers are not willing to pay claims. Any financial difficulties experienced by Private MI providers are not the result of investment or operational risk issues, but higher than forecast claims activity that resulted in paid claims. Paid claims

outnumbered rescissions by a greater than 3/1 ratio even at the height of rescission activity, compared with a normal rescission rate of 3-8%.<sup>11</sup> Paying claims, especially in downturns, is the core function of a Private MI provider. That is why Private MI loss ratios vary so dramatically through the mortgage credit cycle.

- Second, the lending context matters greatly in any discussion regarding “willingness” to pay. As evidenced by multiple lawsuits, investigations, new regulation and legislation, fraud, misrepresentation and negligence were more common than they should have been during the housing bubble across the entire mortgage market. For example, one market-leading lender conceded in a recent court filing that ~30% of loans included in its securitizations failed to meet the representations and warranties contained in the accompanying MBS prospectus.<sup>12</sup> More generally, bubble era loans still predominate in “suspicious activity reports” related to mortgage loan fraud.<sup>13</sup> Loans insured by Private MI providers were not immune. Rescission activity by the Private MI industry is not evenly distributed across all lenders and mortgage loan products. For example, at one Private MI provider, 10% of its lender master policyholders provided 45% of loans insured, 65% of the claims paid, and generated 92% of the rescissions activity. No or low documentation mortgage loans have produced 2-2.5 times greater rescission activity than full documentation ones, and non-standard loans have generated 1.5-2 times as much rescission activity as standard ones.<sup>14</sup> Lender surveillance, underwriting process rigor and mortgage product regulation are critical tasks to reduce the amount of loans vulnerable to rescission. Some tasks are harder than others (lender surveillance), but the benefit offered by Private MI is significant. Indeed, the ability to identify poorly performing lenders, contribute additional rigor to the underwriting process and control the diffusion of riskier loan products are reasons to support recognition of Private MI in the Standardized Version. Private MI is part of a feedback mechanism that can be used to monitor the relative health of the residential mortgage market.<sup>15</sup>
- Third, the “willingness” to pay phrase overstates the degree of choice actually given to the Private MI provider under the terms of the contract insuring the credit risk. Private MI does not protect against fraud, misrepresentation or negligence, but otherwise protects broadly against default-related losses. In accordance with law and public policy regarding mortgage insurance, not every submitted housing bubble era claim was paid automatically, which would have been an unwarranted expectation even on an *ex ante* basis: an insurance contract has mutual obligations and conditions of coverage, and policyholders are expected to present information necessary for the insurer to make an underwriting decision as well as documents needed to assert a valid claim. However, every Private MI contract and long established procedures provide the insured with an ability to appeal rescission and claim determinations by providing additional information or documents. The insured is provided ample time to avail itself of this opportunity.

Upon receipt of this additional information from the insured, it is not uncommon for the Private MI to reinstate coverage or pay the claim.

The assumptions regarding “willingness” to pay do not withstand closer scrutiny based on the Private MI industry’s experience. To confirm this as part of the Basel III implementation process, though, we would be pleased to collaborate with the Agencies on a systematic examination of rescission activity on loans retained by banks in portfolio to identify potential areas of concern.

Looking forward within the context of Basel III implementation, “willingness” to pay a claim is likely to diminish in importance as a counterparty risk management issue for several important reasons. In terms of the three rescission drivers (lenders, loan product and underwriting rigor), financial reform has addressed the first two in constructive ways. Participants within the residential mortgage business are subject to tougher qualification standards and ongoing standards of conduct intended to reduce bad or negligent behavior.<sup>16</sup> The Dodd-Frank financial reform legislation contained provisions requiring regulatory definition of a “qualified mortgage” and a “qualified residential mortgage” as part of a larger effort to improve residential mortgage credit risk management practices.<sup>17</sup> Adoption and implementation of those provisions by market participants and regulatory vigilance will lessen significantly the types of actors and mortgage products that generated the most trouble for Private MI providers.

More directly, Private MI providers (and now the GSEs) have initiated significant changes in the way credit risk will be assessed and managed. Historically, as origination and refinancing activity increased to trillions of dollars annually in the period leading to formation of the housing bubble, Private MI providers and the GSEs relied more on “back end” (*i.e.*, claim confirmation) review of loan files than on comprehensive “front end” underwriting and review (*i.e.*, before establishment of a borrower repayment history).<sup>18</sup> Unfortunately, given the deterioration in bubble era market practices, the “back end” review approach yielded abnormally high numbers of rescissions by Private MI providers and “put-backs” (requests to repurchase) by the GSEs and other secondary mortgage market investors because loans did not comply with applicable credit and underwriting guidelines.

Consequently, to address concerns about “willingness” to pay directly, Private MI providers have made material policy and process changes to shift attention more to “front end” review and rely on borrower payment history as evidence of a loan’s claim eligibility, which are expected to reduce the likelihood that a loan’s insurance coverage will be rescinded. In effect, a certain amount of lender operational risk has been assumed to provide greater clarity regarding what is covered. The resulting clarity will be achieved earlier as well. The changes are in the form of contract endorsements or amendments that have been reviewed and approved by state insurance regulators (whose primary responsibility is to protect policyholder interests) and the GSEs (the largest beneficiaries of Private MI coverage).<sup>19</sup> The changes have been introduced into the market and will represent the standard expectation going forward regarding Private MI coverage.

The GSEs recently announced a similar shift, which should become standard market practice even for portfolio lenders and non-GSE private securitization given the outsized importance of the GSEs in the current U.S. residential mortgage market.

Thus, MICA submits that substantive concerns which might have been responsible for the proposed non-recognition of Private MI in the Standardized Version have been identified clearly and substantial progress already has been made.

### **International Best Practices and Domestic Housing Finance Policy Priorities Underscore the Appropriateness of Recognizing Private MI in the Standardized Version**

The proposed non-recognition of Private MI is mistaken from an international financial regulatory policy perspective as well. Much of the debate regarding global financial regulation generally (and Basel III particularly) relates to the difficulty of formulating standards that are universal and easily applied.<sup>20</sup> The subject of residential mortgage credit risk is no exception, which is why we were surprised to see the Standardized Version proposing an approach inconsistent with developing international best practices regarding mortgage insurance. The Financial Stability Board (FSB) earlier this year released “Principles for Sound Residential Mortgage Underwriting Practices” (Principles).<sup>21</sup> Mortgage insurance is not used widely as a means of mortgage credit risk management among FSB member countries, but the Principles nevertheless recommended five practices:

- Effective verification of income and other financial information;
- Reasonable debt service coverage;
- Appropriate loan-to-value (LTV) ratios;
- Effective collateral management; and
- **Prudent use of mortgage insurance** (Emphasis supplied).

The proposed Standardized Version incorporates each of those items except for the “prudent use of mortgage insurance”. The Standardized Version establishes two categories of residential mortgage loans and also prescribes different risk weighting amounts by LTV. However, for mortgage insurance, the Standardized Version continues to assign a zero risk weight to loans with mortgage insurance backed by the Federal Government (Government MI). Private MI is not recognized at all.

As the FSB’s Principles note, the prudent use of mortgage insurance has two important benefits for a housing finance system.<sup>22</sup> For lenders (and secondary market investors), mortgage insurance provides a valuable source of credit support or enhancement for mortgage loans. Mortgage loans credit enhanced by mortgage insurance have lower probabilities of default and lower net losses given default.<sup>23</sup> The FSB’s Principles recognize that Private MI provides a helpful tool for bank regulators and supervisors intent on understanding and controlling higher

LTV mortgage credit risk. It is unclear to us why the Agencies in the Standardized Version interpret international best practices regarding mortgage insurance to exclude Private MI, which has been a feature of the U.S. residential mortgage market since the 1950s. Indeed, except for the explicit sovereign backing for Government MI, the form and substance of the insurance protection and the way in which the protection is offered (via a “mono-line” entity) is indistinguishable.

The proposed non-recognition of Private MI also will affect U.S. housing policy in important ways. Mortgage insurance provides additional financing flexibility for lenders and borrowers. Within the U.S., the world’s largest mortgage insurance market, Private MI meets two distinctive needs. First, Private MI supplies market competition and allows lenders to extend credit prudently to lower down payment borrowers on competitive and consumer-friendly terms. The Private MI product is intended to benefit lenders, but borrowers benefit as consumers from the additional choice offered by the Private MI industry generally and from individual Private MI providers in particular regarding terms of credit criteria, premium rates, payment plans and loss mitigation alternatives.<sup>24</sup>

Second, Private MI capacity allows borrower demand to be met without policymakers relying entirely on Government MI or reducing overall demand through higher minimum down payment requirements. The collapse of the housing bubble resulted in the highest level of Government intervention in the U.S. residential mortgage market since the Great Depression. The Standardized Version must fit within the context of a broader discussion regarding the future of U.S. housing finance, which has emphasized the importance of rebuilding the role of private capital and reducing the importance of Federal Government programs used for emergency stabilization purposes.<sup>25</sup>

Private MI is an important part of the housing finance reform discussion. Non-recognition of Private MI is inconsistent with this emphasis. Private MI is commonly associated with the GSEs, but Private MI was introduced in the 1950s as an insurance product for residential mortgages retained in portfolio – like those contemplated in the Standardized Version.<sup>26</sup> Housing policy supports retaining the current bank regulatory policy of recognizing and supporting the use of Private MI.<sup>27</sup> Regulators risk creating an unwelcome and unnecessary precedent against the use of private capital in housing policy with the proposed non-recognition of Private MI in the Standardized Version.

### **MICA Recommendation to Maintain Current Recognition of Private MI**

If any updating of the Agencies’ current policy toward Private MI is needed, a more sensible path would be to address concerns regarding the insurance financial strength qualifications needed for recognition of individual Private MI providers rather than refusing to recognize Private MI altogether. The PMI-STAR tool can be used by regulators to assess the financial strength/claims paying ability of Private MI providers. The downturn in the U.S. housing market



has exposed the entire housing finance system to a prolonged, real-time “stress test” that avoids the need for extensive reliance on a complex set of subjective assumptions in order to assess a Private MI provider’s future ability to pay claims on the business it is insuring. PMI-STAR provides significant additional assurance that U.S. Private MI providers can meet the standards envisioned for mortgage insurance in the FSB’s Principles. Assurance is also supplied by access to state insurance regulatory resources and materials and the emphasis on prospective solvency assessment envisioned by ORSA. The financial condition of Private MI providers is not a black box, but PMI-STAR and access to state regulatory materials should make it even less so. Similarly, any concerns regarding “willingness” to pay should be examined systematically to determine the actual scope of the problem and whether steps already taken address justified concerns.

In summary, we are mindful of concerns expressed regarding the willingness and ability to pay on the part of Private MI providers, but we are confident both can be addressed during the transition process specified in the Standardized Version. Substantial progress has been made already. We are confident that any changes can be done in a way that minimizes the diligence burden on the Agencies or on lenders, and respects the roles and responsibilities of state and federal regulatory bodies.

**For these reasons, we respectfully recommend the Standardized Version be revised to affirm current bank regulatory policy, recognize the use of Private MI in residential mortgage lending offered by qualified Private MI providers (as determined by PMI-STAR), and determine the benefit of Private MI by the amount of coverage needed to make that insured loan equivalent to an uninsured 80% LTV loan (for a 50% risk weighting) or an uninsured 60% LTV loan (for a 35% risk weighting).**

A more detailed discussion of our views follows. We stand ready to clarify or supplement this response as needed, and look forward to further discussions.

## **MICA Response**

The Standardized Version's proposed departure from its current recognition of Private MI appears to be based on counterparty risk management concerns, particularly the Private MI industry's financial soundness in the wake of the worst housing market downturn experienced in the U.S. since the Great Depression. A review of the state of the Private MI is appropriate, but the proposed non-recognition of Private MI is not. Private MI continues to provide unique value to the U.S. housing finance system, and benefits from a comprehensive system of state insurance regulatory oversight. Functionally, Private MI works quite similarly to Government MI programs but offers a private market alternative which offers product/service innovation and consistent price competition that benefit lenders and borrowers. However, in response to the concerns expressed in the Standardized Version, the Private MI industry has developed the PMI-STAR tool to give the Agencies a straightforward means by which to measure the financial soundness of the industry and individual Private MI providers. Because the PMI-STAR model does not capture the entirety of supervisory, regulatory and individual company efforts to demonstrate "ability" to pay, we also draw attention to tools and information available from the current insurance regulatory environment and significant improvements recently introduced. Additionally, we will discuss concerns related to loan rescissions and efforts made to address those concerns because the PMI-STAR model does not measure "willingness" to pay.

### **How and why mortgage insurance works**

Lenders have been excited about Private MI for a long time: lenders were among the initial investors in the first modern Private MI company.<sup>28</sup> Lender trade association responses to the Standardized Version continue to support the use of Private as a credit risk management and credit enhancement tool. Likewise, housing policymakers and consumer advocates recognize that mortgage insurance exists to provide the additional confidence needed to promote lending in a depressed market or to under-served segments of the market. That is why the Federal Housing Administration's Mutual Mortgage Insurance Fund was established in the 1930s, and Private MI followed in the 1950s in response to borrower and lender requests for an alternative to the FHA. Indeed, robust mortgage insurance volumes are evidence that need has not disappeared. Mortgage insurance – whether of the Private MI or Government MI variety – connects banking with a long-standing public policy favoring widespread individual homeownership in a responsible way.

Current banking regulation suggests the Agencies recognize the important role played by Private MI in reinforcing prudential lending and reducing lender exposure to losses related to residential mortgage defaults.<sup>29</sup> However, publication of the Standardized Version also suggests the rationale for this recognition should be reviewed. Private MI is a process used to supplement and reinforce residential mortgage credit underwriting, servicing and risk management, not

simply a financial product obtained after the fact for credit hedging purposes.<sup>30</sup> Its loan-level approach and broad market use allows Private MI providers to see “the trees” (by interacting with individual lenders on a loan-by-loan basis) and “the forest” (by having thousands of master policyholders) of residential mortgage credit risk through the entire life cycle of a loan. There is no comparable service available in the market.<sup>31</sup> As such, we are unclear why the Agencies seem willing to set aside Private MI in the Standardized Version.

Private MI’s uniqueness and value is achieved in several ways:

- Private MI requires an “insurable interest,” so the insured suffers if an insured loss occurs (offset, of course, by the insurance benefit to be received). The lender is generally the Private MI policyholder and settlement is straightforward because the lender retains the mortgage credit risk on its balance sheet. The Private MI retains the risk exposure, too, even if the credit risk is reinsured. This difference with other forms of credit risk mitigation is important, especially in a portfolio lending context where capital market credit risk transfer products are less prevalent and largely untested for residential mortgage credit risk. The “insurable interest” requirement is intended to give the Private MI and the insured a genuine stake in the risk transfer outcome from beginning to end of the process.
- Private MI does not cover the entire loan amount. Rather, Private MI typically covers only the “first loss” (*i.e.*, 25-30%) to minimize moral hazard risk and give the lender a strong incentive to underwrite and service the insured loan carefully. Additionally, Private MI does not cover all causes of default. Fraud or other acts/omissions that cause the actual risk to be different from the risk presented to the insurer are not covered. Using the Basel Committee’s terms, mortgage insurance covers credit, not operational, risk. Both the amount and scope of Private MI coverage are intended to reinforce process discipline as well as to clarify the risk being transferred – important goals of a well functioning bank regulatory and supervisory system.
- Mortgage insurance indemnifies against actual losses, which are typically paid on a post-foreclosure basis for validly presented claims. Mortgage insurance is not a surety or guarantee of payment intended to provide cash flow protection to a lender (in effect, subjecting all claims to a “pay, then dispute” standard of settlement).<sup>32</sup> Nor are mortgage insurance claims subject to a preset payout formula like many credit derivatives. Instead, like a borrower’s initial down payment (and any subsequent unrealized gains in the borrower’s equity share), mortgage insurance absorbs a lender’s losses remaining after sale of the property.<sup>33</sup> The loan monitoring and claim settlement process encourages maintenance of performing loans, restoration of non-performing loans and least cost resolution of non-performing loans that cannot be cured. In each instance, a borrower’s

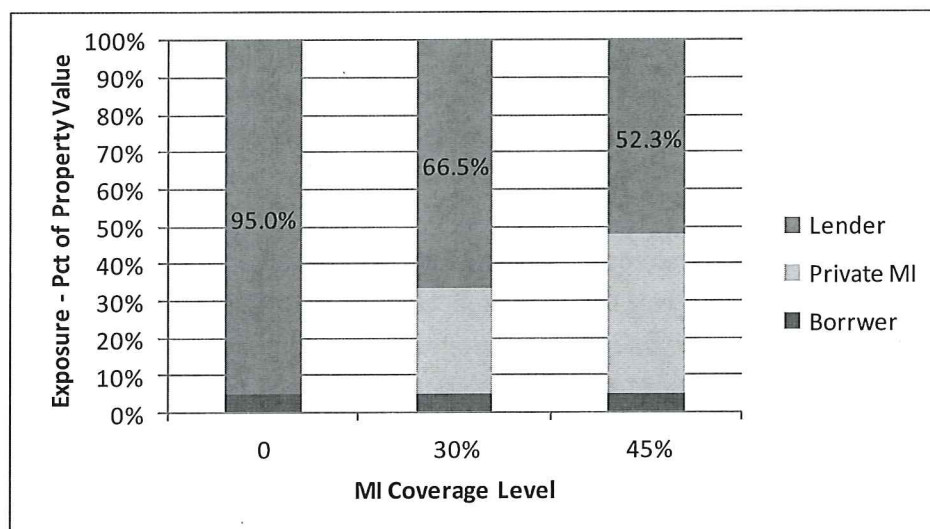
interest is being represented and protected by the insurer’s interest in reducing defaults and minimizing losses.

Thus, mortgage insurance demands substantial interaction between the insurer and the policyholder presenting the risk, with a continuing closeness required to ensure that the characteristics of the risk insured do not change except for the “accidental” reasons against which the insurance is intended to protect.

The benefits of this process are substantial. Taken together, the process discipline imposed by the use of mortgage insurance and the risk transfer offered reduce both the probability of default (PD) and loss given default (LGD) on residential mortgage loans held in portfolio. As MICA explained in a response to federal regulatory efforts to devise and implement standards on credit risk retention (including defining the term “qualified residential mortgage”), independent experts established that mortgage insurance reduces the (PD) on higher (*i.e.*, exceeding 80%) LTV loans by 24-48% based on the additional underwriting scrutiny and the lender’s (or loan servicer’s) obligation to maintain process integrity.<sup>34</sup> Adding a risk management specialist with its own capital at risk makes a positive difference in terms of better risk selection in loan origination and error reduction in loan servicing.

### **MICA Recommendation for Private MI Credit**

As shown in the graphic below, Private MI also reduces a lender’s loss given default (LGD), its traditional justification. Private MI provides that substantial margin of additional security needed for loans with higher expected PDs and LGDs.



Generally, “standard” Private MI coverage is intended to reduce the lender’s exposure to equal that of a ~68% LTV loan. The current use of Private MI in bank capital regulation does not specify a particular coverage level, but the use of LTV ratios in the Standardized Version to

establish residential mortgage asset risk weighting fits well with a depth of cover approach. That is because loans insured with Private MI coverage of different amounts can be calibrated with particular uninsured “benchmark” loans to produce equivalent levels of loss exposure to lenders. To keep things simple, we have used two points of comparison – uninsured 80% and 60% LTV loans – to determine appropriate risk weightings for loans insured with Private MI. An uninsured 80% LTV loan is given a 50% risk weighting under Category 1, the same risk weighting applicable under current bank capital regulation. An uninsured 60% LTV is given a 35% risk weighting under Category 1, reflecting the lower relative risk of the loan. Loss expectations for both were derived using both private data from CoreLogic and publicly available data from FHFA.<sup>35</sup> Combining those loss expectations with the impact of Private MI, we find that loans with LTV >80 and standard levels of Private MI coverage have lower expected losses than uninsured loans with LTV=80, justifying the 50% risk weight for insured loans with LTV > 80%. We further find that deeper levels of coverage bring the expected losses in line with uninsured loans with LTV=60%, justifying a 35% risk weight for loans with >80% LTV and deep Private MI coverage. The following table lists current standard MI coverage levels and proposed deep coverage levels by LTV.

MI Coverage Levels (in percent)		
Initial LTV	Standard	Deep
85	12	30
90	25	41
95	30	45
97	35	46
100	35	48

“Standard” Private MI coverage is sufficient to produce loss exposure equivalent to an uninsured 80% LTV, and “deep” Private MI covered is sufficient to produce loss exposure equivalent to an uninsured 60% LTV. Thus, MICA recommends the following risk weightings for Category 1 loans insured by Private MI in the table below.

Loan-to-value ratio (in percent)	Category 1 residential mortgage exposure (in percent)			Category 2 residential mortgage exposure (in percent)		
	Uninsured	MI - Standard	MI - Deep	Uninsured	MI - Standard	MI - Deep
Less than or equal to 60	35	na	na	100	na	na
Greater than 60 and less than or equal to 80	50	na	35	100	na	na
Greater than 80 and less than or equal to 90	75	50	35	150	100	na
Greater than 90	100	50	35	200	100	na

We have maintained a risk weighting differential between Category 1 and Category 2 loans to preserve the relative risk concept between the two categories.

For lenders willing to submit to the additional process discipline, Private MI offers a responsible means to manage the capital requirements of portfolio lending while continuing to be responsive to market demands. Lenders also receive a liquidity benefit by having a loan capable of being sold in the secondary market without the need to obtain additional credit enhancement. MICA believes the capital credit recommended for Private MI is reasonable and prudent.

Finally, in terms of the Standardized Version's willingness to give credit for the use of Government MI, it is important to state that Private MI and Government MI are functionally indistinguishable in the way they work.<sup>36</sup> The U.S. housing finance system has developed distinct ways to access secondary mortgage markets for historical reasons, but mortgage insurance plays a similar role in private, GSE and Government secondary mortgage market systems.

### **Counterparty risk assessment – “Ability” to pay enforced by state insurance regulation**

If Private MI and Government MI are functionally indistinguishable, both reduce PD and LGD, and both remain widely accepted by the market and housing policy makers as efficient means through which to transfer mortgage credit risk and effect U.S. housing policy favoring homeownership, then the Standardized Version's proposed non-recognition of Private MI must rest on some other basis. The Agencies suggest an inability to distinguish between Private MI providers in terms of relative creditworthiness. Although we offer constructive responses in the form of the PMI-STAR tool and a review of the possibilities offered by ORSA, we believe substantial information already exists to assess the financial soundness of the Private MI industry and individual companies.

Counterparty risk assessment is generally divided into “ability” and “willingness” to pay. The Standardized Version emphasizes the “ability” part – that is, the simple inability to fulfill contractual obligations when needed. No specific support is offered for the assumption of a general inability to pay by the Private MI industry. Certainly the same downturn that resulted in conservatorship for the GSEs in 2008, the failure of many banks and non-banks involved in the mortgage business, and significant intervention by federal authorities to strengthen financial markets and participants has strained the Private MI industry. Several Private MI providers ceased insuring new business and were forced to make partial claim payments to conserve claims paying resources for future claims. The GSEs and state insurance regulators departed from long-standing eligibility and insurance regulatory requirements in a favor of a supervisory approach that relies on waivers to maintain industry capacity as well. However, even without the substantial changes proposed or described in this comment, it would be a mistake to ignore the current judgments of state insurance regulators, the FHFA and the GSEs on the Private MI

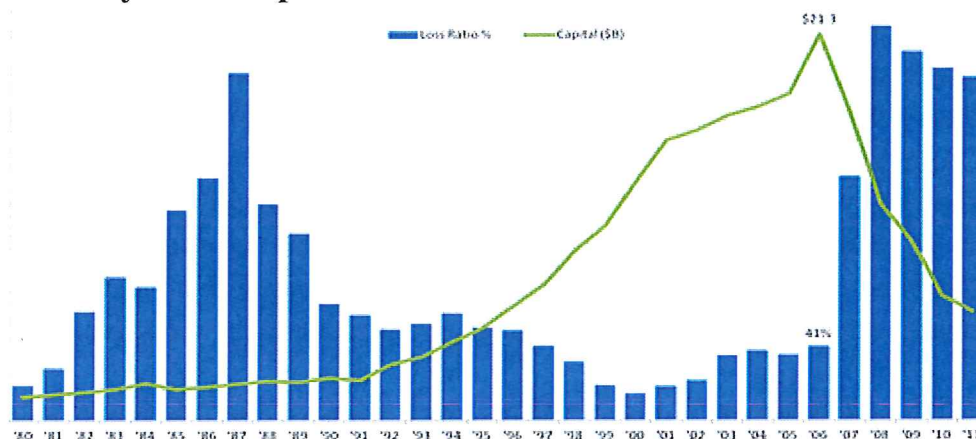
industry. The Private MI industry retains a meaningful “ability” to pay. The strengths of the existing supervisory and regulatory system applied to Private MI have been underestimated.

Private MI sometimes has been referred to as part of the “shadow banking” system,<sup>37</sup> but Private MI is a comprehensively regulated activity similar to other types of insurance. Nor is Private MI a new form of insurance untested by market downturns: Private MI has been a feature in the residential mortgage market (and regulated as such) since the 1950s. Private MI regulation has certain unique attributes, including:

- A mandatory mono-line structure, which restricts an entity established for Private MI activity from underwriting any other kind of insurance risk. Unlike a risk management theory that emphasizes risk dispersion (sometimes at the cost of transparency), Private MI regulation emphasizes risk concentration in entities whose activities are transparent and subject to strict prudential controls. Importantly, the mono-line approach is the same in Government MI and also represents the prevailing regulatory approach in non-U.S. mortgage insurance markets.<sup>38</sup> The FSB does not suggest that the mono-line approach is imprudent in the Principles or any of its prior discussion of mortgage insurance, either.
- Significant prudential controls, which are intended to bolster claims-paying resources. Most prominently, Private MI providers are required to establish contingency reserves equal to 50% of earned premium, which cannot be released for 10 years or until claims exceed a stated loss ratio. Contingency reserves are a recognition of the longer term nature of the residential mortgage credit risk cycle and act counter-cyclically (*i.e.*, reducing capital available via retained earnings to underwrite new business and safeguarding amounts available to pay claims).<sup>39</sup> This is an important reason why Private MI providers did not succumb as quickly as the GSEs and other mortgage market participants did to souring market conditions.
- A 25-1 risk-to-capital ratio, which is 2x the amount required by the FHA (other Government MI programs are simply required to operate on a revenue neutral basis). Historically, Private MI providers’ capital ratios have varied with the credit cycle, as the figure below shows, because capital is depleted in order to pay claims during times of markets stress and then replenished as markets stabilize and mortgage risk diminishes. It is because of this cyclicity that some Private MI providers have sought (and been granted) regulatory waivers allowing risk-to-capital ratios above 25:1. The FHA has shown a similar cyclicity, and has been allowed to operate well below its minimum capital ratio.<sup>40</sup> The Private MI providers seeking waivers are subject to close supervision and have been required to submit regular detailed reports on their financial condition and undergo extensive reviews undertaken by their regulators and independent experts.<sup>41</sup> The reviews are intended to measure and monitor the adequacy of claims paying resources under a variety of scenarios, including stress conditions. The “jump to default” risk

implied by the proposed non-recognition of Private MI in the Standardized Version is exaggerated. Existing financial regulatory requirements applicable to Private MI providers are not taken lightly by the Private MI providers, their regulators or their stakeholders. Private MI companies not meeting the standard expected were not permitted to accept new business and have had severe constraints placed on them to maximize claims paying resources.

### Countercyclical Capital Model



Thus, even without the prudential enhancements described below, the current combination of state regulatory oversight (domiciliary regulator plus each jurisdiction in which a Private MI provider seeks to do business) and ongoing FHFA/GSE counterparty risk assessment offers a basis from which to determine Private MI financial soundness. Moreover, mechanisms already exist to encourage information sharing, so access to the working materials underlying the assessments are available as well. A regulatory system should not be dismissed because some regulated entities faltered under stressful circumstances, particularly when the system can be supplemented or enhanced on a straightforward basis.

### Clarifying the acceptability of mono-line mortgage insurance

The Standardized Version appears to raise two issues with its proposed non-recognition of Private MI – one more easily addressed than the other. Taking the harder issue first, the Agencies appear to disfavor the mono-line approach to credit risk mitigation (in terms of eligible guarantors for credit risk mitigation), but leave the relationship to mortgage insurance unaddressed (because of the proposed non-recognition). Within the section on credit risk mitigation, for example, the Standardized Version’s definition of “eligible guarantor” excludes “insurance compan[ies] engaged predominantly in the business of credit protection (such as a mono-line bond insurer or reinsurer)”.<sup>42</sup> The “eligible guarantor” definition also includes standards on correlated risk.<sup>43</sup>



Mortgage insurance differs materially from financial guaranty insurance in function,<sup>44</sup> but it is undeniable that both types of insurance are required to be conducted through mono-line entities under current insurance regulatory standards in the U.S. It is also undeniable that all Government MI fund entities are mono-line. To be sure, there is material for an interesting regulatory discussion on the respective benefits of diversification and concentration in terms of risk management. However, the simple truth is this: mortgage insurance has been organized as a mono-line activity for many years (in the FHA's case, since the 1930s, and in Private MI's case, since the 1950s). International best practice regarding mortgage insurance, embodied in the Principles and other FSB studies, also relies on the mono-line form. If a different approach for mortgage insurance is favored by U.S. banking regulators, then we suggest initiating a discussion which includes our functional regulators and other important stakeholders with a timeline that is consistent with the significance of the change sought. Use of a mono-line form within which to offer mortgage insurance should not be a basis for not recognizing Private MI in the Standardized Version. We respectfully request the Agencies clarify that mortgage insurance (include Private MI) does not fall within the scope of an "eligible guarantee", and the provisions defining an "eligible guarantor" do not apply to a Private MI provider.

### **An introduction to PMI-STAR – modeling Private MI capital adequacy**

Which brings us to the "easier" issue. The Standardized Version's proposed non-recognition of Private MI suggests that the current regulatory framework does not create sufficient confidence in the financial strength of Private MI providers. We have two suggestions – one based on providing bank regulators with a purpose-built tool intended to gauge relative financial strength of Private MI providers, and the other based on enhancements to the current insurance regulatory system used in the U.S. Our suggestions are complementary: we understand the need to have a simple tool that produces digestible metrics for regulators not empowered to regulate Private MI providers directly and for examiners reviewing individual bank counterparty risk management arrangements. Equally, the data, work product and insights available from supervisors and regulators within the insurance regulatory system are vital to provide context to the stress testing tool proposed.

Private MI capital adequacy in the U.S. currently is assessed by three different groups of authorities – state insurance regulators, the GSEs and nationally recognized statistical rating organizations (rating agencies). There are minor differences within each group, but collectively they produce a substantial amount of information regarding the financial condition of the Private MI industry. Unfortunately, the approaches taken do not fit the particular need of the Agencies.

State insurance regulators determine the adequacy of an MI company's resources using either a risk-to-capital ratio (RTC) or minimum policyholder position (MPP) basis of measurement. The RTC approach measures the ratio of the company's risk in force to its capital. Typically, this ratio is not allowed to exceed 25:1. The MPP approach specifies a minimum amount of resources that the company must have available for its policyholders, based on the loan-to-value

(LTV) ratios of the insured loans, the depth of coverage offered and the type of coverage (*i.e.*, loan-level “primary” or “pool” insurance). Both approaches have been used for many years (and are included in the NAIC Mortgage Guaranty Insurance Model Act), but they are less sensitive to risk factors other than depth of coverage and, in the case of MPP (to a limited extent), the LTV ratio of the insured loan. The RTC and MPP approaches also do not address the issue of future premiums that will be collected on coverage with recurring premium payments.<sup>45</sup> The RTC and MPP approaches are most useful within the context of an overall supervisory relationship where greater familiarity with ongoing management and operations is possible.

The GSEs’ approach has changed as a result of the housing market downturn. Formerly, the GSEs relied on oversight provided by state insurance regulators and the rating agencies as part of their respective Private MI qualification standards, and further required qualified Private MI providers to submit detailed information regarding insurance exposures and financial resources on a regular basis.<sup>46</sup> Currently, the GSEs rely more on information directly submitted by the qualified Private MI providers, which is used within proprietary internal models to determine whether a company is adequately capitalized. The GSEs cross-check these internal assessments by having external actuarial consultants model the performance of insured loans and opine on the adequacy of the companies’ capital to meet a variety of economic stress scenarios. Given the continuing importance of the GSEs to the U.S. residential mortgage market, the long history of Private MI use by the GSEs and the relative importance of Private MI as a source of credit risk mitigation/enhancement to the GSEs, certainly bank regulators should consider coordinating with FHFA and the GSEs. However, each GSE has its own approach, and the details of the approaches are not publicly available or transparent. The longer term status of the GSEs has not been settled, either, so conditioning bank recognition of Private MI or an individual Private MI provider on GSE approval might be problematic.

The rating agencies generally model the sources and uses of capital available to a Private MI company, and they measure the adequacy of that capital through a specified stress. Each rating agency is different, but typically the models are risk sensitive. The rating agency tests also allow for the run-off of the insured loans and the collection of renewal premiums over time. However, Section 939A of Dodd-Frank limits the utility of ratings as a regulatory standard regarding the Private MI industry.<sup>47</sup>

In short, there is a variety of information regarding the financial condition of Private MI providers. As noted, however, each approach has shortcomings for use by federal bank regulators for purposes of Basel III. State insurance RTC and MPP ratios are readily available (and easily supplemented with further materials submitted by Private MI providers as part of their regulatory relationship), but the approaches may be insufficiently risk- and pricing-sensitive for use on a standalone basis. The GSE approaches are promising in their hybrid (internal/external) balance and access to market data, but lack transparency. Rating agency approaches also are more risk-sensitive, but lack transparency and undercut by Dodd-Frank and general financial regulatory de-emphasis of ratings. Another alternative might be the use of

actuarial experts (who already figure in the state regulatory and GSE processes), but the actuarial approach would be complicated to implement and maintain, and also lacks transparency.

Thus, MICA has developed the PMI-STAR tool,<sup>48</sup> which is intended to supplement existing regulatory models with a model that is incremental to the work of state insurance regulators, FHFA and the GSEs); transparent (to address concerns by mortgage market investors and other stakeholders interested in Private MI creditworthiness); risk sensitive (to provide an ongoing measurement that reflects new business and performance of existing business); robust (to measure against stress levels of loss); and verifiable (to enable comparisons to the traditional RTC approaches and a full-scale actuarial review). We have included a technical appendix describing PMI-STAR in greater detail as an attachment.

With those attributes in mind, PMI-STAR uses the following principles:

- A Private MI provider's existing obligations are evaluated on a "run-off" basis, meaning that the model does not rely on premiums from future new business to pay claims on existing obligations. Future premiums from existing coverage are calculated based on applicable renewal rates and include stress period prepayment experience.
- Future losses are based on the actual risk insured, recognizing that risk of loss varies based on loan features, borrower creditworthiness and payment status.
- The assessment is based on an observed, historically severe stress scenario in order to demonstrate claims paying ability in the event of a prolonged material housing market downturn. Stochastic modeling that relates loan performance to projected macroeconomic variables was rejected as overly complex and insufficiently transparent.

PMI-STAR currently uses the period from June 30, 2007 to June 30, 2012 as the observed stress scenario. MICA data provides a comprehensive source of loan performance measures over this five-year period. From this data, we calculated the rates of movement of loans between current, delinquent, foreclosure, canceled, and paid claim status, as well as the severity of losses. Those rates form the basis of calculating expected premium and losses during the stress period.

In order to be credible, PMI-STAR provides for continued runoff of the exposure remaining in force (approximately half of the beginning exposure) at the end of the five year stress. PMI-STAR uses the cash flows from the stress period to calculate the amount of resources (capital and reserves) that will be required at the end of the stress period to endure another five-year period. The end result is a calculation of the resources required to survive a 5-year stress period that matches the experience of 2007-2012 and still be adequately capitalized to continue to meet the stress standard.

Risk sensitivity is achieved by grouping the loans according to:

- payment status (*i.e.*, current, previously delinquent, 60+ days past due, or foreclosure);
- credit quality (three levels determined by loan features and borrower creditworthiness);

- initial loan-to-value (LTV) ratio; and
- loan age.

Measurement of financial resource adequacy is then made relative to the amount of total resources computed in the model. For example, if PMI-STAR estimates \$1 billion of resources are required, and the company has \$1.2 billion available, the adequacy level would be 120%. Counterparty strength assessments could be expressed in terms of the adequacy level. We do not propose a particular gradation of capital sufficiency in this comment because important preconditions like acceptance of PMI-STAR's modeling approach and parameters need to be settled before discussing how PMI-STAR might be used. Generally, though, the intention is to allow the Agencies to develop an appropriate qualifying standard for Private MI providers.

We recommend a thoughtful approach to avoid a "cliff effect" and other unintended consequences such as dramatic market share movements resulting from PMI-STAR measurement results, however. The Private MI industry has been characterized by a small number of providers since its inception, and the historical pattern is unlikely to change soon (based on the amount of capital and expertise required to participate). Volatility based on PMI-STAR measurement results, especially if the Agencies and FHFA remain uncoordinated on regulatory policy regarding Private MI would not be efficient for the U.S. housing finance system. Mortgage insurance is a strongly cyclical business as well, so there is considerable variation in loss and capital levels over the credit cycle. Maintaining high levels of capital sounds prudent, but higher capital standards expose Private MI providers to product substitution and adverse selection. That is why Canada solved the dilemma by requiring mortgage insurance on all higher LTV loans.<sup>49</sup> The U.S. instead uses a bank regulatory capital incentive to encourage the use of mortgage insurance. The Agencies have not chosen to pursue a Canada-style approach regarding Private MI in the Standardized Version, so the issue of setting suitable capital levels for any Private MI qualification standard remains. MICA would prefer a process in which the Agencies first confirm the utility of the PMI-STAR approach, to be followed by an implementation plan based on further discussion and clarification of regulatory objectives regarding the use of Private MI for bank regulatory capital purposes.

PMI-STAR needs to be appropriately incorporated into bank regulatory and supervisory processes as well. We suggest the following, consistent with the usual supervisory practice:

- Include key Private MI soundness criteria, consistent with the approach taken in PMI-STAR, in broad terms into the regulation implementing the Standardized Version;
- Clarify the criteria further in specific supervisory guidance/examination manuals, including PMI-STAR specifications and other terms of use;
- Require banks to document compliance with the criteria and to exercise due diligence in implementing them; and
- Determine compliance in the course of the examination process.

Under this approach, the Private MI providers could run PMI-STAR (as refined by, and reflecting, regulatory, guidance and examination materials) to demonstrate to their bank customers that they meet or exceed the relevant standards. The bank would then conduct appropriate due diligence to satisfy examination standards.

PMI-STAR is a tool that incorporates the best features of existing capital adequacy approaches and allows the Agencies to make basic determinations regarding the financial soundness of individual Private MI providers. We believe the PMI-STAR tool challenges the rationale offered for non-recognition of Private MI in the Standardized Version and reinforces the case for continuing use of Private MI within the U.S. bank regulatory capital framework.<sup>50</sup>

### **The complementary value of ORSA**

We believe the PMI-STAR tool provides a ready means with which to gauge the relative financial strength of Private MI providers. However, relying on PMI-STAR only would be a mistake not just for reasons of regulatory comity but for ignoring the context available from the state insurance regulatory and supervisory system. Perceived statutory barriers have prevented a greater understanding by federal financial regulators of the work done by state insurance regulators and supervisors regarding Private MI. ORSA promises a way for greater coordination between state and federal authorities, particularly on enterprise risk management and capital adequacy matters.

As with bank capital regulation, insurance capital and solvency regulation is being updated. ORSA features as the centerpiece of the NAIC's ongoing "Solvency Modernization Initiative".<sup>51</sup> Intended as a response to the European Union's "Solvency II" insurance regulatory capital effort, ORSA emphasizes the importance of enterprise risk management and – as the acronym suggests – an "own risk and solvency assessment".<sup>52</sup> Rather than managing just to a static external standard, ORSA requires periodic self-assessments of material risk and capital sufficiency. More specifically, the accompanying ORSA Guidance Manual describes expectations regarding risk management policy, quantitative measurements of risk exposure in normal and stressed environments, and group economic capital and prospective solvency assessment. The exercise is intended to be performed annually or more frequently as circumstances dictate, and envisions a process culminating in sign-off by the insurer's chief risk officer, review by the board of directors and filing of a summary report with the appropriate insurance regulator(s).

The substantive expectations included in the ORSA Guidance Manual will generate a useful range of materials likely to be responsive to the Standardized Version's concerns regarding the financial soundness of Private MI providers. Equally important, ORSA contains explicit provisions regarding the sharing of information produced as a result of this exercise. Indeed, ORSA anticipates circumstances in which actions will be taken or analysis will be performed pursuant to federal agency request, so there is a process for specifying and monitoring the criteria considered important by the Agencies regarding Private MI without needing to establish a

separate or extensive regulatory apparatus. The information sharing provisions enhance existing arrangements and underscore the commitment to regulatory and supervisory collaboration.

Thus, we believe the combination of the proposed PMI-STAR tool and the access to information regarding risk management and capital adequacy allowed by ORSA should give the Agencies sufficient confidence to judge the financial soundness of individual Private MI providers and the industry taken as a whole. We strongly urge that the Agencies use the access and information about the Private MI industry generated by the state insurance regulatory process.<sup>53</sup> ORSA's (and other insurance regulatory) information sharing provisions do not extend to private entities, so much of the value resulting from access to information will be lost if the Agencies do not take the initiative to supplement the information resulting from the proposed use of PMI-STAR in the examination process.

### **Counterparty risk assessment – Strengthening “willingness” to pay**

The Standardized Version's proposed non-recognition of Private MI referred to “ability” to pay concerns. However, counterparty risk assessment also considers “willingness” to pay as well. We offer some brief thoughts on Private MI “willingness” to pay to clarify assumptions regarding the historical performance of Private MI.<sup>54</sup> At the outset we wish to point out that, as with “ability” to pay concerns, the Private MI industry has taken important steps to allay “willingness” to pay concerns by working closely with lenders on past coverage rescissions and on clarification of the respective rights and obligations under the master policy contract. Those steps, and broader regulatory and market developments, should diminish “willingness” to pay concerns in the future.

#### Housing market crisis rescission experience – looking back

Assessing the Private MI industry's “willingness” to pay requires some reminders:

- Private MI claims payments have been substantial. The countercyclical capital model graphic above showed the Private MI industry with historically low RTC ratios in 2007, and much higher ones in 2012. The increase in RTC ratios is a result of claim payouts. Claims payments by the Private MI industry already have exceeded \$28 billion since 2007 and will exceed \$30 billion based on existing GSE Private MI receivables alone. Massive claim payouts might raise concerns regarding future “ability” to pay (to which we have responded with PMI-STAR and ORSA), but not generally “willingness”.
- Loss allocation disputes were (and are) common throughout the mortgage finance sector as interested parties assert rights (consistent with shareholder and regulatory duties) so that losses are borne by the entities, that, through commission or omission, created the unprecedented origination market failures. These matters involve a broad spectrum of mortgage market participants (*e.g.*, financial guarantors, private investors and even

federal regulators) and are replete with instances of documented misconduct, errors and omissions. Or, as one well received review of the period put it, “all the devils are here”.<sup>55</sup> The Private MI experience was not different, but the amended title might have been “all the devils are here but not everybody is a devil”. Loan rescission activity is not uniformly distributed across all lenders. Indeed, based on MICA summary industry data (using the top 50 lenders for the period):

- There are 5 lenders that account for 2.0% of our paid claims and 5.7% of our rescissions. Their combined rescission rate (rescissions / (rescissions + claims paid)) is 32%, while for all the rest of lenders combined it is 16%.
- There are 10 lenders that account for 15.3% of our paid claims and 34.2% of our rescissions. Their combined rescission rate is 27%, while for all the rest of the lenders combined it is 13%.
- There are 15 lenders that account for 24.6% of our paid claims and 47.3% of our rescissions. Their combined rescission rate is 24%, while for all the rest of the lenders combined it is 12%.
- One of the 5 largest lenders had a rescission rate of only 3.5%.
- Loan product type and the degree of underwriting rigor undertaken mattered greatly as well. Private MI covers credit, not operational, risk. Fraud, misrepresentation and negligence are varieties of operational risk. Non-traditional mortgage products tend to generate greater amounts of operational risk in the form of misrepresented or missing information, particularly within the context of historically high overall market volumes. The figure below summarizes the influence of documentation and non-traditional product characteristics on MICA’s rescission experience:

Relative Rescission Rates	Documentation	
	Full	Low/No
Product		
Standard	1.00	2.35
Non_Std	1.82	3.60

Documentation and underwriting rigor mattered significantly, especially within the context of other risk factors. As noted above,<sup>56</sup> long term industry rescission rates average 3-8%. Rescission rates for standard, fully documented loans throughout the crisis were around 10%. Even a rate of 3.6 times that amount for low/no documentation loans, within the context of a lender-conceded ~30% error rate,<sup>57</sup> is not compelling evidence that Private MI providers have used rescissions to avoid paying legitimate claims.<sup>58</sup> Instead, the rescission experience is better

understood as one in which some lenders had many more rescissions than average, where some non-standard loan types generated higher rescission activity than current long term, fixed rate “plain vanilla” offerings, and not requiring full documentation without additional underwriting diligence had ruinous consequences.

Two other facts need to be considered as well. First, not all non-performing loans end up as claims: insured loans are more likely to cure than non-insured ones.<sup>59</sup> Second, and more important for those loans which do not cure, there is a claim process in which lender policyholders have a contractual right to challenge claim determinations. The Private MI provider’s initial determination is not final, and reinstatements of insurance coverage or payment of claims after further review are not uncommon. Like the “ability” to pay issue, “willingness” to pay assumptions should be challenged by all available data.

#### Looking forward – learning from the housing market crisis experience

The Private MI industry has been responsive to the market demand for measures beyond simple assurances and historical performance to further clarify our “willingness” to pay. The bubble era was characterized by more than wrongdoing and mistakes; it also was a period of tremendous market volumes that required market participants to adapt their business models to keep pace. For the Private MI industry, this meant efforts to increase “front end” underwriting efficiency to meet customer expectations on reducing “time to close”. Technology and process improvements helped, but the Private MI industry also came to rely on the claim administration process to apply an additional level of scrutiny to individual loan files. Like other arrangements suitable for more benign market environments (like mortgage servicing and much of the mortgage securitization process), the reliance on “back end” review produced more uncertainty and customer dissatisfaction after the fact than intended. As FHFA acknowledged recently, the GSEs produced a similar reaction with their approach to “put backs” (loan repurchase requests), which also relied on a “back end” review.

In response to customer feedback, Private MI providers and the GSEs have made (or, in the case of the GSEs, announced an intention to make) substantial changes intended to provide customers with greater clarity regarding the scope of insurance coverage. Practically, this means relying more on clarifying a loan’s status earlier (whether as a result of initial underwriting, a post-origination quality control review or a demonstrated record of payment) to reduce the number of future “willingness” to pay cases within the claims process. Through these changes, Private MI providers now cover common lender operational risks such as:

- Borrower fraud
- Data entry or data omission errors
- Underwriting errors
- Property value variances.<sup>60</sup>



These coverage enhancements have been reviewed and approved by the GSEs and compare favorably to the recently announced representation and warranty framework for the GSEs. GSE intentions in this regard are related and important. The market reach and standard-setting role of the GSEs, even before FHFA's new secondary market infrastructure initiative,<sup>61</sup> means that even portfolio lenders and investors in private securitizations are likely to expect a similar approach will be taken (at a minimum regarding Private MI).

Origination market failures are likely to diminish further as a result of general mortgage market regulatory reform as well. The Dodd-Frank financial reform legislation contained provisions requiring regulatory definition of a "qualified mortgage" and a "qualified residential mortgage" as part of a larger effort to improve residential mortgage credit risk management practices. Participants within the residential mortgage business also are subject to tougher qualification standards and ongoing standards of conduct intended to reduce bad or negligent behavior.<sup>62</sup> Adoption and implementation of those provisions by market participants and regulatory vigilance will lessen significantly the types of actors and mortgage products that generated the most trouble for Private MI providers.

Thus, we believe that any concerns regarding Private MI "willingness" to pay are overdone and should not be used to defend the proposed non-recognition of Private MI in the Standardized Version. If they exist, the concerns are based on a misunderstanding of the scope of coverage in a typical Private MI insurance contract and the industry's historical claims paying performance in a period characterized by general credit optimism, historically higher loan volumes, more than a few unscrupulous operators and some unsuitable loan products. The Private MI industry has initiated changes to clarify loan status and the claims administration process, and these changes have been followed by the GSEs in their proposed new approach to "put backs". Finally, regulatory efforts to better define mortgage credit underwriting standards and processes are likely to reduce the number of "hard cases" going forward.<sup>63</sup>

### **Public policy – Private MI, international best practices and Basel III implementation**

The U.S. is the largest mortgage insurance market in the world. Historically, the U.S. also has been a proponent and exporter of mortgage insurance best practices. A U.S. Private MI company introduced mortgage insurance to Australia in 1965, and Australia subsequently has become one of the world's largest Private MI markets. U.S. Private MI providers contributed expertise and reinsurance capacity to enable the introduction of mortgage insurance in Hong Kong and Mexico. Recently a U.S. Private MI company participated in the launch of India's first mortgage guarantee firm. U.S. Private MI companies have worked with multilateral development banks to devise mortgage insurance programs suitable for promoting lending in emerging markets. This activity has emphasized the importance of integrating mortgage insurance within the regulatory system applied to housing finance.

The Financial Stability Board (FSB) earlier this year released “Principles for Sound Residential Mortgage Underwriting Practices”. Mortgage insurance is not used widely as a means of mortgage credit risk management among FSB member countries,<sup>64</sup> but the Principles nevertheless recommended five practices:

- Effective verification of income and other financial information;
- Reasonable debt service coverage;
- Appropriate loan-to-value (LTV) ratios;
- Effective collateral management; and
- **Prudent use of mortgage insurance** (Emphasis supplied).

The Agencies have incorporated each of those items into the Standardized Version except for the “prudent use of mortgage insurance”. The Standardized Version establishes two categories of residential mortgage loans and also prescribes different risk weighting amounts by LTV. However, for mortgage insurance, the proposed treatment is more equivocal. The Standardized Version continues to assign a zero risk weight to loans with Government MI, but Private MI is not recognized at all. The Principles, however, do not recommend only the use of Government MI.<sup>65</sup>

The Agencies’ proposed non-recognition of Private MI is mistaken for two important regulatory policy reasons. First, in terms of policy coordination, much of the debate regarding global financial regulation generally (and Basel III particularly) relates to the difficulty of formulating standards that are universal and easily applied. Given the consistent international regulatory support shown for the use of mortgage insurance (and Private MI), we were surprised to see the Standardized Version proposing an approach inconsistent with developing international best practices regarding mortgage insurance.<sup>66</sup>

Second, on substantive grounds, the FSB’s Principles remind us that the prudent use of mortgage insurance has important benefits for a housing finance system.<sup>67</sup> For lenders (and secondary market investors), mortgage insurance provides a valuable source of credit support or enhancement for mortgage loans. Mortgage loans credit enhanced by mortgage insurance have lower probabilities of default and lower net losses given default. The FSB’s Principles recognize that mortgage insurance provides a helpful tool for bank regulators and supervisors intent on understanding and controlling higher LTV mortgage credit risk. It is unclear to us why the Standardized Version interprets international best practices regarding mortgage insurance to exclude Private MI, which has been a feature of the U.S. residential mortgage market since the 1950s. Indeed, except for the explicit sovereign backing for Government MI, the form and substance of the insurance protection and the way in which the protection is offered (via a “mono-line” entity) is indistinguishable. Government and Private MI both should be recognized in the Standardized Version for the U.S. to remain consistent with its international work regarding mortgage insurance.

## Public policy – Private MI, Government MI and Housing Finance Reform

The proposed non-recognition of Private MI in the Standardized Version also could affect U.S. housing policy in important ways. As the figure shows, mortgage insurance (Private and Government MI) has been (and remains) an important part of the U.S. residential mortgage market.

**Mortgage Insurance Share of Originations  
(Private MI, FHA, & VA)**



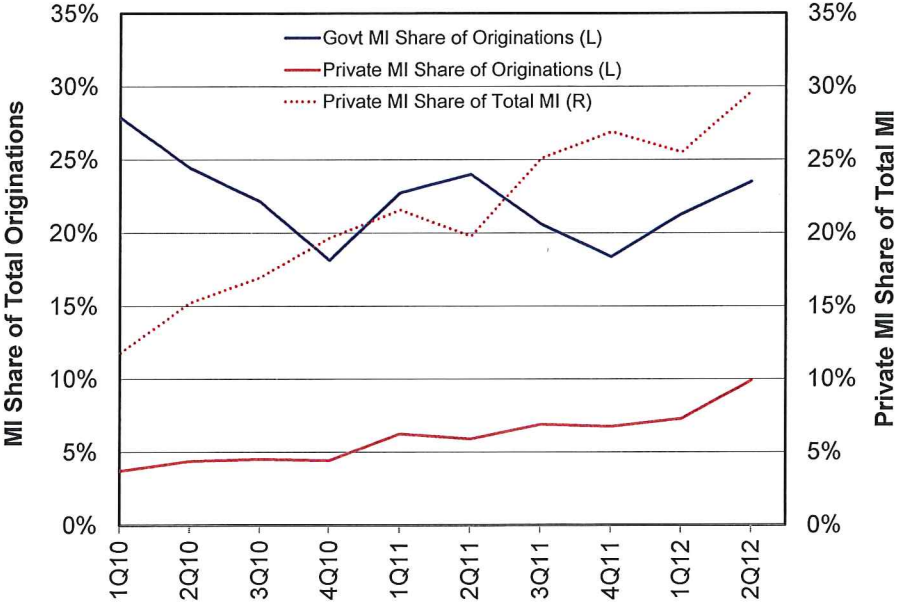
Private MI meets two important needs within the world’s largest mortgage insurance market. First, Private MI offers a consistent source of market competition to Government MI for lenders interested in extending credit prudently to lower down payment borrowers. Indeed, better customer service (than the FHA) was the core value proposition when the Private MI industry was refounded in 1950s.

“Customer service” has two dimensions as well. Although the Private MI product is intended to benefit lenders, borrowers benefit as consumers from the additional choice offered by the Private MI industry generally and from individual Private MI providers in particular regarding terms of credit criteria, premium rates, payment plans and loss mitigation alternatives.<sup>68</sup> Ultimately, too, Private MI as an alternative has proved to be significantly more helpful to bank balance sheets than bubble era “piggyback” junior liens in terms of providing credit enhancement choices to borrowers.<sup>69</sup> Borrowers emerged badly from these “Private MI avoidance” alternatives as well when house prices declined and servicing complexities associated with junior liens became clearer. Lenders have fared poorly as well.

Second, Private MI capacity allows borrower demand to be met without policymakers relying entirely on Government MI or reducing overall demand through higher minimum down payment requirements. Higher minimum down payment requirements ignited a firestorm of protest around what constitutes a “qualified residential mortgage” for Dodd-Frank’s credit risk retention provision.<sup>70</sup> There is no reason to believe non-recognition of Private MI and higher risk weightings for low down payment residential mortgage loans held in portfolio will be received more favorably.

Equally, non-recognition threatens to increase reliance on Government MI at precisely the wrong time. The broader discussion regarding the future of U.S. housing finance repeatedly has emphasized the importance of rebuilding the role of private capital and reducing the importance of Federal Government programs used for emergency stabilization purposes.<sup>71</sup> The Agencies risk creating an unwelcome, unnecessary and easily avoided barrier to the use of private capital in housing policy with the proposed non-recognition of Private MI in the Standardized Version. The HUD Secretary and FHA Commissioner have testified before Congress regarding their interest in reducing the market size and role of the FHA to more traditional expectations.<sup>72</sup> Policymakers also are struggling with mounting losses at the FHA. Materially increasing business volumes by a decision not to recognize Private MI under Basel III increases operational risk for the FHA at precisely the wrong time.<sup>73</sup> Increasingly consumer-unfriendly FHA premium rate increases to cover those losses will prompt consumers to discover that a Private MI alternative is no longer widely available.

**Private MI Regaining Share**



Non-recognition of Private MI even affects a lender’s GSE alternatives. The Standardized Version’s proposed treatment of Private MI relates to portfolio lending, but lenders do not originate a loan without considering multiple options. The GSEs continue to accept Private MI

to credit enhance higher (*i.e.*, greater than 80% LTV) loans. Looking forward, nearly every proposal released for GSE reform also recommends the use of Private MI.<sup>74</sup> Thus, a portfolio loan insured with Private MI also enjoys a liquidity benefit in addition to the default loss protection provided and likely will continue to do so in the future. Insured loans can be sold to the GSEs without the need to retain recourse or obtain other forms of credit enhancement, without the need for a minimum transaction size (common with credit derivative structures), and with insurance protection that applies on a life of loan basis. Eliminating or reducing this liquidity benefit is inconsistent with the broader aims of Basel III and evolving U.S. housing finance policy.

## **Conclusion**

For more than 50 years Private MI has played a valuable role in making homeownership affordable and possible for millions of Americans by preserving a role for prudently underwritten low down payment loans. Failure to recognize the value of MI in the housing market is inconsistent with the consensus that well regulated, private capital is a critical part of the solution to reducing the Government's role in the housing market, avoiding future taxpayer bailouts and re-establishing a vibrant housing market going forward.

We are mindful of concerns expressed regarding the ability and willingness to pay on the part of Private MI providers, but are confident both can be addressed during the transition process specified in the Standardized Version. Substantial progress has been made already. We are confident as well that any changes can be done in a way that minimizes the diligence burden on the Agencies or on lenders, and respects the roles and responsibilities of state and federal regulatory bodies.

**For these reasons, we respectfully recommend the Standardized Version be revised to affirm current bank regulatory policy, recognize the use of Private MI in residential mortgage lending offered by qualified Private MI providers (as determined by PMI-STAR), and determine the benefit of Private MI by the amount of coverage needed to make that insured loan equivalent to an uninsured 80% LTV loan (for a 50% risk weighting) or an uninsured 60% LTV loan (for a 35% risk weighting).**

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<sup>1</sup> Regulatory Capital Rules: Standardized Approach for Risk-weighted Assets; Market Discipline and Disclosure Requirements, at <https://www.federalregister.gov/articles/2012/08/30/2012-17010/regulatory-capital-rules-standardized-approach-for-risk-weighted-assets-market-discipline-and>. Question 6 in the Standardized Version asks for advice on criteria that might be used to ensure that only financially sound Private MI providers are recognized. U.S. bank regulation currently recognizes the use of Private MI as an important element of what constitutes a prudently underwritten residential mortgage loan. See 1992 [Interagency Guidelines for Real Estate Lending](http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=2e40371a67f3fca969cfa787a9b495ec&r=SUBPART&n=12y1.0.1.1.32.4#12:1.0.1.1.32.4.9.3.20), at <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=2e40371a67f3fca969cfa787a9b495ec&r=SUBPART&n=12y1.0.1.1.32.4#12:1.0.1.1.32.4.9.3.20>.

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This recognition was included in U.S. implementation of the original Basel Accord, which also followed a stressful period for the U.S. residential mortgage market and Private MI providers. *See* 2011-2012 MICA Fact Book & Member Directory at 34 (Key Industry Ratios, 1980-2010), at <http://www.privatemi.com/news/factsheets/2011-2012.pdf>.

<sup>2</sup> In practical terms, Private MI coverage sufficient to reduce exposure to the lender to a level equivalent to an uninsured 80% LTV loan would reduce the risk weighting on the insured loan to 50%, and coverage sufficient to reduce exposure to the lender to a level equivalent to an uninsured 60% LTV loan would reduce the risk weighting on the insured loan to 35% for Category 1 loans. We also propose giving credit for Private MI on Category 2 loans, but at a lesser amount to reflect the intention underlying creation of Category 2.

<sup>3</sup> *See* fn 1 (MICA Fact Book at 27).

<sup>4</sup> The use and overall effectiveness of Private MI in bank/thrift portfolio lending appears not to have been examined systematically by federal bank regulators before publication of the Standardized Version. *See, e.g.*, Federal Reserve Frequently Asked Questions: Supervisory Methodologies in CCAR 2012 (Question 21), at <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20120420a1.pdf>. The predominance of secondary mortgage markets (private and Government-sponsored) in the last decade limited the percentage of bank portfolio lending to ~10% of Private MI business. We are not aware of any Private MI provider which has been asked to participate in any data collection or confirmation exercise on the extent or effectiveness of Private MI use. The proposed non-recognition of Private MI rests on unexamined “everybody knows” assumptions, which we address in this response and also offer to take up with the Agencies on a collaborative basis as part of the Basel III implementation process.

<sup>5</sup> The claims paid figure reflects only those amounts paid to the GSEs, and also does not include the ~\$3.5 billion in Private MI receivables reported by the GSEs at the end of 2Q 2012. *See* Fannie Mae. 10-K Annual Report (2008, 2009, 2010, 2011). 10-Q Report (Q2 2012), at <http://www.fanniemae.com/portal/about-us/investor-relations/quarterly-annual-results.html>. Freddie Mac. 10-K Annual Report (2008, 2010, 2011). 10-Q Report (Q2 2012), at <http://www.freddiemac.com/investors/reports.html>.

<sup>6</sup> *See* Statement of Patrick Sinks on behalf of MICA to House Subcommittee on Capital Markets, Insurance and Government-Sponsored Enterprises regarding “The Future of Housing Finance: The Role of Private Mortgage Insurance” (July 29, 2010) (“Not only does the MI industry have ample regulatory capital, but it has attracted capital, even during these difficult times. We have raised \$7.4 billion in capital through new capital raises and asset sales, and a new entrant has raised a further \$600 million since the mortgage crisis began.”), at <http://www.gpo.gov/fdsys/pkg/CHRG-111hrg61853/html/CHRG-111hrg61853.htm>.

<sup>7</sup> *See, e.g.*, FDIC Final Rule on Assessments, Large Bank Pricing at 23-24 (methodology for estimating PDs), at [http://www.fdic.gov/news/board/2012/2012-10-09\\_notice\\_dis-b\\_res.pdf](http://www.fdic.gov/news/board/2012/2012-10-09_notice_dis-b_res.pdf).

<sup>8</sup> *See* [http://www.naic.org/documents/committees\\_e\\_risk\\_management\\_orsa\\_adopted\\_120906.pdf](http://www.naic.org/documents/committees_e_risk_management_orsa_adopted_120906.pdf) (ORSA Model Act), and the accompanying ORSA manual is found at [http://www.naic.org/documents/committees\\_ex\\_isftf\\_group\\_solvncy\\_exposure\\_draft\\_orsa\\_guidance.pdf](http://www.naic.org/documents/committees_ex_isftf_group_solvncy_exposure_draft_orsa_guidance.pdf). ORSA is not a legal requirement until January 2015, but state financial examiners already are being trained as part of the implantation process. Insurers are being advised to begin preparations. *See, e.g.*, Deloitte Forward Focus, “The Own Risk and Solvency Assessment: A regulatory guidepost to the future” at 5 (Fall 2012), at [http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/FSI/US\\_FSI\\_ForwardFocusORSA\\_092112.pdf](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/FSI/US_FSI_ForwardFocusORSA_092112.pdf); Tom Sullivan, “What Does NAIC’s Adoption of RMORSA Mean?” PropertyCasualty 360 (Sept, 14, 2012), at <http://www.propertycasualty360.com/2012/09/14/what-does-naics-adoption-of-rmorsa-model-act-mean?t=regulation-legislation>.

<sup>9</sup> The approach proposed in our comment also might be used to assess the use of Private MI by the GSEs, the non-bank financial institutions regulated by the Consumer Financial Product Bureau (CFPB) and credit unions regulated

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by the National Credit Union Association (NCUA). A consistent analytical approach for Private MI financial soundness would reduce potential systemic risk arising from the use of inconsistent standards.

<sup>10</sup> See fn 4 (Federal Reserve response to Question 21).

<sup>11</sup> MICA has industry rescission data in a summary form, and each MICA member has company-specific rescission data that could be shared appropriately with the Agencies for purposes of the Basel III implementation process. Summary statistics on rescissions in this comment are drawn from the two data sources.

<sup>12</sup> Kerri Ann Panchuk, “BofA uses tortured logic in Countrywide, MBIA lawsuit”, HousingWire (Oct. 8, 2012), at <http://www.housingwire.com/rewired/did-bofa-show-its-cards-schneiderman-mbia-case>. Plaintiff MBIA asserts the accurate percentage is at least 56%. Kerri Ann Panchuk, “BofA claims MBIA dropped the ball on Countrywide mortgage bond insurance”, HousingWire (October 8, 2012), at <http://housingwire.com/news/countrywide-says-mbia-knew-what-it-was-buying>.

<sup>13</sup> See Financial Crimes Enforcement Network, Mortgage Loan Fraud Update at 3 (Oct. 2012) (“This increase in very dated SARs could indicate that filers are still working through the backlog of bad loans originated in the 2006-2007 housing bubble.”), at [http://www.fincen.gov/news\\_room/nr/files/MLFUupdateQ22012\\_FINAL508.pdf](http://www.fincen.gov/news_room/nr/files/MLFUupdateQ22012_FINAL508.pdf).

<sup>14</sup> See fn 11.

<sup>15</sup> The effectiveness of the feedback mechanism depends in part on regulatory and supervisory cooperation. Private MI providers have a singular business purpose (as mono-lines providing residential mortgage credit protection), so it is difficult to respond effectively to troubling market practices without regulatory support. The commercial cost of either withdrawing from the market or becoming progressively less competitive by maintaining sensible credit standards is very high. We drew attention consistently (and unsuccessfully) to problematic credit practices at their inception and throughout the bubble era. See, e.g., fn 6 (Sinks testimony at 5-6) (detailing concerns in communications to the Agencies, beginning in 2002).

<sup>16</sup> Private MI providers have not been passive, either, but have reviewed and reduced existing master policy holders rolls and tightened standards for issuing new ones.

<sup>17</sup> A substantial amount of rulemaking activity already has occurred to implement Title XIV, the Mortgage Reform and Anti-Predatory Lending Act, of the Dodd-Frank Wall Street Reform and Consumer Protection Act. Private MI providers also have reviewed and amended credit criteria to reduce the amount of risk assumed.

<sup>18</sup> FHFA Acting Director DeMarco recently explained the historical practice of the GSEs and the perceived need to adopt a different approach regarding loan “put-back” requests. See Edward DeMarco, The Conservatorships of Fannie Mae and Freddie Mac: An Update on Current and Future Operations at 5-7 (remarks delivered at American Mortgage Conference, Sept. 10, 2012), at <http://www.fhfa.gov/webfiles/24365/2012DeMarcoNCSpeechFinal.pdf>. Subsequently, FHFA and the GSEs announced the launch of a new representation and warranty framework. [http://www.fhfa.gov/webfiles/24366/Reps\\_and\\_Warrants\\_Release\\_and\\_FAQs\\_091112.pdf](http://www.fhfa.gov/webfiles/24366/Reps_and_Warrants_Release_and_FAQs_091112.pdf).

<sup>19</sup> See, e.g., MGIC’s Gold Cert Master Policy Endorsement, at <http://www.mgic.com/gc/index.html>. Other Private MI providers have conceptually similar approaches in process, which are expected to become customary in the U.S. residential mortgage market, especially given GSE efforts to develop a new representation and warranty framework.

<sup>20</sup> See, e.g., Karen Shaw Petrou, Dead Ends on the Road to Global Bank Regulation: What the Barriers to Cross-Border Standards Mean to Global Banks (remarks prepared for the Conference of Counsel, Oct. 4, 2012), at [http://www.fedfin.com/images/stories/press\\_center/speeches/Karen%20Petrou%20Remarks-Conference%20of%20Counsel%20102012\\_speech.pdf](http://www.fedfin.com/images/stories/press_center/speeches/Karen%20Petrou%20Remarks-Conference%20of%20Counsel%20102012_speech.pdf).

<sup>21</sup> The Financial Stability Board, Principles for Sound Residential Mortgage Underwriting Practices (April 2012), at [http://www.financialstabilityboard.org/publications/r\\_120418.pdf](http://www.financialstabilityboard.org/publications/r_120418.pdf). U.S. financial regulators participate in the activities of the Financial Stability Board, which was established to identify issues and promote best practices

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related to financial stability. The Principles represent the culmination of prior investigations by the FSB into residential mortgage lending, beginning with the Joint Forum's Review of the Differentiated Nature and Scope of Finance Regulation (January 2010), at <http://www.bis.org/publ/joint24.pdf>, and continuing with a Thematic Review on Mortgage Underwriting and Origination Practices (March 2011), at [http://www.financialstabilityboard.org/publications/r\\_110318a.pdf](http://www.financialstabilityboard.org/publications/r_110318a.pdf). The potential benefits of mortgage insurance have been a consistent theme. *See* Joint Forum Review at 17 (mortgage insurance as a factor important to an effective underwriting program) and Thematic Review at 21, 23-25 ("Appropriate credit support includes mortgage insurance, readily marketable collateral or other acceptable collateral that reduces the LTV ratio.").

<sup>22</sup> Principles at 7.

<sup>23</sup> *See* MICA Comment on Credit Risk Retention at 16-21 and Appendices (Aug. 1, 2011), at [http://www.federalreserve.gov/SECRS/2011/December/20111213/R-1411/R-1411\\_080111\\_84881\\_360640025894\\_1.pdf](http://www.federalreserve.gov/SECRS/2011/December/20111213/R-1411/R-1411_080111_84881_360640025894_1.pdf). MGIC Comment on Credit Risk Retention (Aug. 1, 2011) (includes full copies of Appendices describing PD reduction studies), at <http://www.sec.gov/comments/s7-14-11/s71411-308.pdf>. The Private MI claims process also offers an important control on operational risk within a bank's mortgage origination or servicing process.

<sup>24</sup> The benefit to consumers of having mortgage insurance alternatives has been emphasized in other contexts, most notably in efforts to define what is a "qualified residential mortgage" for purposes of the credit risk retention provision in Dodd-Frank. *See, e.g.*, <http://www.sec.gov/comments/s7-14-11/s71411-185.pdf>, at 2 ("In addition, many non-QRM borrowers will end up with Federal Housing Administration (FHA) loans, which are more expensive than prime conventional loans and will become more expensive as a result of increasing premiums on FHA loans.")

<sup>25</sup> *See, e.g.*, Reforming America's Housing Finance Market: A Report to Congress at 1 and 14 (Feb. 2011), at <http://www.treasury.gov/initiatives/documents/reforming%20america's%20housing%20finance%20market.pdf>. ("Under our plan, private markets – subject to strong oversight and standards for consumer and investor protection – will be the primary source of mortgage credit and bear the burden for losses."). The report also committed to a reduction in Government MI to pre-crisis market share levels.

<sup>26</sup> *See* Chester Rapkin, *The Private Insurance of Home Mortgages: a study of Mortgage Guaranty Insurance Corporation* (1967). Portfolio lending and secondary market activities cannot be practically separated, either. Lenders generally do not originate residential mortgage loans without preserving an option to sell or transfer the loan in the future. Because Private MI is an acceptable form of credit enhancement for loans delivered to the GSEs, lenders enjoy a liquidity benefit with Private MI that might not exist if Private MI's value is not recognized in the Standardized Version.

<sup>27</sup> Proposals consistently have recommended retention of Private MI for low down payment loans within the context of GSE reform, from the free market-oriented American Enterprise Institute to advocates of a hybrid public/private approach like the Center for American Progress. <http://www.americanprogress.org/wp-content/uploads/issues/2012/08/pdf/gsereformmatrix.pdf> (listing proposals).

<sup>28</sup> Thrift executives supported Max Karl's efforts to form MGIC as a competitor to the FHA. <http://www.mgic.com/about/index.html#history>.

<sup>29</sup> Following the U.S. implementation of the 1988 Basel Accord, each U.S. bank regulator determined the attributes of a single family mortgage loan qualified to receive the concessionary 50% risk-weighting. Prudent and conservative underwriting requirements were required by each regulator, with Private MI noted as a factor in this determination. *See, e.g.*, Department of the Treasury, Office of Thrift Supervision, Notice of Report to Congress pursuant to reporting requirements under Section 1215 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, Federal Register, Volume 56, No. 162, August 21, 1992, p. 41598.



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<sup>30</sup> The Promontory Financial Group offered a recent assessment of the role of Private MI in U.S. housing finance system. See *The Role of Private Mortgage Insurance in the U.S. Housing Finance System* (2011), at <http://www.promontory.com/uploadedFiles/Articles/Insights/622%20Genworth%20Study%20I%20-%20Role%20of%20PMI.pdf>. Quinton Johnstone provides a comprehensive pre-crisis (but still useful) summary of Private MI from a legal perspective. Quinton Johnstone, *Private Mortgage Insurance*, 30 *Wake Forest Law Review* 783 (2004), at <http://digitalcommons.law.yale.edu>.

<sup>31</sup> Government MI programs are not a suitable substitute for monitoring the integrity of the residential mortgage lending system. For example, over 80% of FHA's front end mortgage insurance volume is underwritten by the lenders themselves, and the extremely low rate of indemnification requests (FHA loan rescissions) suggests lesser process diligence on the back end as well. Lawsuits asserting claims for treble damages are not the process control tool needed by an examiner to understand a lender's everyday operations.

<sup>32</sup> The difference is fundamental. A surety or guarantee is underwritten to a "no loss" standard, with the surety or guarantor retaining the right to be reimbursed against any losses. See <http://www.referenceforbusiness.com/industries/Finance-Insurance-Real-Estate/Surety-Insurance.html>. Mortgage insurance provides an indemnity against loss and does not seek any recovery from the lender for claim amounts paid.

<sup>33</sup> Of course, Private MI providers encourage borrower "cures" (restoration to current, from delinquent, payment status) and loss mitigation, each of which might require a financial contribution by the Private MI provider prior to foreclosure.

<sup>34</sup> See fn 23 above.

<sup>35</sup> MICA used two different approaches to examine the relative credit risk for insured and uninsured mortgages. In the first approach, we used data from FHFA Mortgage Market Note 11-02. (see [http://www.fhfa.gov/webfiles/20686/ORM\\_FINAL\\_ALL\\_R41111.pdf](http://www.fhfa.gov/webfiles/20686/ORM_FINAL_ALL_R41111.pdf)) From this data we estimated expected and stress default rates. Using typical foreclosure expense and property recovery rates, we calculated the effect of Private MI coverage on economic capital and implied risk weights. The implied risk weights for uninsured loans corresponded closely to the risk weights proposed in the NPR for Category 1 loans with LTV > 60%. The presence of Private MI with standard coverage reduced the implied risk weights for all LTV > 80% to values well below the 50% level proposed for loans with 60% < LTV <= 80%. MICA also calculated Private MI coverage levels that reduced the economic capital level to equal that of an uninsured 60% LTV loan, for which the Agencies are proposing a 35% risk weight. In the second approach, MICA used data from CoreLogic and our own industry to measure annual default rates for portfolios of Category 1 and Category 2 loans, from the early 1990's through the recent crisis, and to measure loss severity. From this information we calculated expected and stress losses and the impact of mortgage insurance on them. The results confirm that the expected losses for insured loans with LTV > 80% are less than the expected losses on uninsured loans with 60 < LTV <= 80%, justifying a 50% risk weight for the insured loans.

<sup>36</sup> The Promontory and Johnstone pieces referred to in fn 30 make this clear. The risk insured, underwriting process and exclusions are similar. Claim settlement mechanics differ, but recent efforts to strengthen FHA indemnification standards have narrowed the difference. However, the reasoning in the Standardized Version regarding treatment of residential mortgage loans covered by Government MI is unclear to us. The zero risk weight treatment for loans covered by 100% Government MI is understandable based on the U.S. Government's full sovereign commitment, but not all Government MI programs assume the entire risk. The partial (25%) guarantee offered by the Veterans' Administration is substantially less than 100%, so it is unclear why the Standardized Version proposes zero risk weight treatment for VA loans.

<sup>37</sup> See Financial Stability Board, *Shadow Banking: Strengthening Oversight and Regulation* at 21 (Oct. 27, 2011), at [http://www.financialstabilityboard.org/publications/r\\_111027a.pdf](http://www.financialstabilityboard.org/publications/r_111027a.pdf). The FSB's Recommendation 6, which includes mortgage insurance, states that "[r]egulation of other shadow banking entities should be assessed and further enhanced from a prudential point of view (e.g., capital and liquidity regulation)." To that end, MICA (on behalf of the Private MI industry) participated in an April 10, 2012 FSB workstream meeting on shadow banking, initiated

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follow up discussions with the NAIC and would be willing to share the “shadow banking” presentation materials with the Agencies if they would be helpful in the Basel III implementation process.

<sup>38</sup> See Dwight Jaffee, *Monoline Restrictions, With Application to Mortgage Insurance and Title Insurance* at 2 (Jan. 27, 2004), at <http://irm.wharton.upenn.edu/S04-Jaffee.pdf>.

<sup>39</sup> The Promontory study (fn 30 at 50-51) compares Private MI contingency reserves favorably to bank regulatory capital standards such as those being proposed in the Standardized Version. Promontory also discusses other prudential provisions contained in Private MI regulation, many of which were collected in the NAIC Mortgage Guaranty Insurance Model Act. The Model Act has not been adopted by all jurisdictions in the U.S., but compliance with the Model Act’s most important provisions is assured in two ways. First, jurisdictions in which current Private MI providers are domiciled or which are important sources of premium income (and assert jurisdiction on an extraterritorial basis, such as New York) require establishment of contingency reserves and other measures. Second, the GSEs require compliance with (all or a substantial portion of) the Model Act as a condition of maintaining eligibility as a Private MI provider with each entity.

<sup>40</sup> The FHA’s most current reported capital ratio is 0.24, and 0.12 when reverse mortgage risk is removed to permit a comparison of single-family residential mortgage credit default risk. See *Annual Report to Congress: Fiscal Year 2011 Financial Status [of] Mutual Mortgage Insurance Fund*, U.S. Department of Housing and Urban Development (Nov. 15, 2011), at <http://portal.hud.gov/hudportal/documents/huddoc?id=FHAMMIFundAnnRptFY11No2.pdf>.

<sup>41</sup> These reports and reviews are ongoing and involve state and federal (FHFA in its capacity as conservator for Fannie Mae and Freddie Mac) authorities. The FHA faces a different form of scrutiny from Congress, HUD, the HUD Inspector General and the Government Accountability Office, but the capital top up process established by the Federal Credit Reform Act of 1990 means access to adequate resources for claims paying purposes is more a political than financial determination. See *Written Testimony of HUD Secretary Donovan to House Financial Services Committee on Status of FHA Mutual Mortgage Insurance Fund and the FY2011 Actuarial Report* at 8 (Dec. 1, 2011), at <http://portal.hud.gov/hudportal/documents/huddoc?id=SOHUDtestimony1212011.pdf>.

<sup>42</sup> Standardized Version at 52907. The term “eligible guarantor” is defined in the companion *Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Act* at 52850 (Regulatory Capital), at <http://www.gpo.gov/fdsys/pkg/FR-2012-08-30/pdf/2012-16757.pdf>.

<sup>43</sup> *Regulatory Capital* at 52850.

<sup>44</sup> Financial guaranty insurance is similar to a contract of surety and offers a guarantee of payment, not an indemnity, like mortgage insurance. Financial guaranty insurance coverage also attaches at the security level, not the loan level like mortgage insurance. That is why financial regulators have distinguished mortgage insurance and “mono-line” bond insurance in reviews of financial regulation. For example, the Joint Forum’s *Review of the Differentiated Nature and Scope of Finance Regulation* (see fn 20) discusses mortgage insurance and financial guaranty insurance in separate sections, and offers different conclusions regarding their roles within the financial system. Compare *Review* at 51 (“Supervisors ... should take steps to require adequate mortgage insurance in instances of high LTV lending (eg greater than 80% LTV)”) with *Review* at 81 (“Regulators should clarify the position of FG [financial guaranty] insurance in insurance regulation, if this is not already the case, so it is clear that the provision of FG insurance is captured by regulation and is subject to supervision.”).

<sup>45</sup> The RTC and MPP approaches are largely insensitive to credit cycles, but the contingency reserve requirement causes overall MI capital requirements to be counter-cyclical.

<sup>46</sup> See *Fannie Mae Qualified Mortgage Insurer Approval Requirements*, at <https://www.efanniemae.com/is/mis/miapprovalreqs.jsp>; *Freddie Mac Private Mortgage Insurer Eligibility Requirements*, at <http://www.freddiemac.com/singlefamily/pdf/mireqs.pdf>.

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<sup>47</sup> For this reason, too, we urge rejection of any assessment approach for Private MI that relies on ratings as a secondary source, such as the “investment grade” standard included within the definition of “eligible guarantor”. See Regulatory Capital at 52850. The standard refers to debt issuance rather than insurance financial strength (not all insurers issue debt), so is more appropriate when applied to guarantees rather than a comprehensively regulated business activity like insurance. However, a bigger problem is that the term “investment grade” could result in a de facto reintroduction of ratings, particularly if individual lenders are tasked with making the “investment grade” assessment regarding their Private MI providers. Otherwise, the same Private MI provider could be considered “investment grade” by one lender, but not “investment grade” by another. Given that each Private MI provider has thousands of master policyholders (so at a minimum hundreds of policyholders regulated by the Agencies), inconsistency and confusion could develop quickly. Additionally, because lenders generally prefer to use multiple Private MI providers, assigning different values based in part on ratings either would introduce unneeded complexity into the capital reporting process or force changes in a lender’s risk management approach for reasons unrelated to their actual experience. Cumulatively, the result would be at odds with the simplicity and clarity intended for the Standardized Version without even taking into account other standards that might be applied by the GSEs, CFPB, NCUA or state insurance regulators to Private MI providers. That is why we believe use of the PMI-STAR tool would be a better approach.

<sup>48</sup> Technical specifications and additional description have been included as a separate attachment. PMI-STAR represents an adaptation of a capital modeling approach used in Australia for the local equivalent of Private MI providers, but substantial modifications were needed to create a model that reflected U.S. market practices (*e.g.*, where partial, not 100%, Private MI cover is the norm and insurance premiums are not collected up-front, as they are in Australia). The FSB’s Thematic Review notes Australia’s capital requirements favorably in its discussion of the link between the effectiveness of mortgage insurance and the financial strength of the mortgage insurance provider. See fn 21 (Thematic Review at 24).

<sup>49</sup> *See, e.g.*, John Kiff, Canadian Residential Mortgage Markets: Boring but Effective?, IMF Working Paper (June 2009), at <http://www.imf.org/external/pubs/ft/wp/2009/wp09130.pdf>. David Min argues that the Canadian approach (relying on mortgage insurance and strong regulation of bank mortgage lending activity rather than regulatory competition and securitization) helps to explain the absence of a sharp market downturn in Canada compared to the U.S. *See* David Min, True North: The Facts About the Canadian Mortgage Banking System (2010), at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2093609](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2093609).

<sup>50</sup> PMI-STAR’s potential value to the U.S. financial system might be even bigger. Currently, each GSE and state insurance regulator is free to measure Private MI financial strength, as well as the CFPB and NCUA, creating the risk of inconsistent or “weak link” measures. If the GSEs’ regulator, the Federal Housing Finance Agency, state insurance regulators (as part of ORSA), and CFPB/NCUA (in their respective spheres) were to use PMI-STAR, there would be a consistent standard used to measure Private MI financial soundness in the U.S. financial system.

<sup>51</sup> The Solvency Modernization Initiative has multiple components other than ORSA. *See* [http://www.naic.org/index\\_smi.htm](http://www.naic.org/index_smi.htm).

<sup>52</sup> *See* [http://www.naic.org/Releases/2012\\_docs/naic\\_statement\\_adoption\\_rmorsa\\_model\\_act\\_ag38.htm](http://www.naic.org/Releases/2012_docs/naic_statement_adoption_rmorsa_model_act_ag38.htm) and fn 7.

<sup>53</sup> ORSA’s consolidation of substance and process is promising for purposes of analyzing Private MI financial soundness, but authority exists already under state insurance law to obtain needed detail on the financial condition of individual Private MI providers. *See, e.g.*, [http://www.ncga.state.nc.us/EnactedLegislation/Statutes/PDF/BySection/Chapter\\_58/GS\\_58-2-128.pdf](http://www.ncga.state.nc.us/EnactedLegislation/Statutes/PDF/BySection/Chapter_58/GS_58-2-128.pdf) (interagency consultation under North Carolina insurance law); [http://www.ncga.state.nc.us/EnactedLegislation/Statutes/PDF/BySection/Chapter\\_58/GS\\_58-2-132.pdf](http://www.ncga.state.nc.us/EnactedLegislation/Statutes/PDF/BySection/Chapter_58/GS_58-2-132.pdf) (examination report access under North Carolina insurance law).

<sup>54</sup> Because “willingness” to pay was not raised specifically in the Standardized Version, no data were cited by the Agencies regarding the level of rescission activity for insured loans held in portfolio. As we note, rescission activity varied considerably by lender, by origination channel, loan type and other factors. The Private MI industry has taken steps to address the rescission issue broadly, but there is value in understanding the historical performance of

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portfolio loans in terms of rescission activity. As part of the Basel III implementation process, the Private MI industry would be willing to collaborate with the Agencies to determine whether there are factors or circumstances unique to loans held in portfolio that should be addressed as part of the larger Private MI industry response to the rescission issue.

<sup>55</sup> Bethany McLean and Joe Nocera, *All The Devils Are Here: The Hidden History of the Financial Crisis* (2010).

<sup>56</sup> See fn 11.

<sup>57</sup> See fn 12.

<sup>58</sup> As noted, much of the rescission activity related to loans originated and not retained in portfolio.

<sup>59</sup> See File No. DF Title IX - Asset-Backed Securities, Meeting with Genworth Financial – US Mortgage Insurance (Oct. 20, 2010), at <http://www.sec.gov/comments/df-title-ix/asset-backed-securities/assetbackedsecurities-13.pdf>.

<sup>60</sup> See fn 19 for an example.

<sup>61</sup> See [http://www.fhfa.gov/webfiles/24573/InfrastructureWhitePaperRelease\\_100412\\_FINAL.pdf](http://www.fhfa.gov/webfiles/24573/InfrastructureWhitePaperRelease_100412_FINAL.pdf).

<sup>62</sup> See fn 17.

<sup>63</sup> Research by housing finance economists regarding what types of loans lender retain for their portfolios and why continues to evolve, but does not yet reflect the current unique origination environment. See, e.g., [http://www.fdic.gov/bank/analytical/cfr/mortgage\\_future\\_house\\_finance/ppt/Chang.PDF](http://www.fdic.gov/bank/analytical/cfr/mortgage_future_house_finance/ppt/Chang.PDF). It is unclear whether the loan category scheme proposed in the Standardized Version might generate a more conservatively originated set of loans held in portfolio, which might diminish concerns regarding “willingness” to pay further.

<sup>64</sup> The FSB’s Thematic Review (at Annex B.2) included a survey of mortgage insurance use and regulation. See fn 21.

<sup>65</sup> Related documents are more emphatic. The Joint Forum’s Review states (at 51) that “[s]upervisors should explore both public and private options (including creditworthiness and reserve requirements), and should take steps to require adequate mortgage insurance in instances of high LTV lending (eg greater than 80% LTV).” See fn 21.

<sup>66</sup> Roger Blood’s chapter on mortgage insurance in the World Bank’s e-book on housing finance policy in emerging markets discusses the relative benefits of public and public varieties of mortgage insurance, and the potential advantages of combining the two into a hybrid public/private structure. See Roger Blood, “Mortgage Insurance”, in Chiquier and Lea (eds), *Housing Finance Policy in Emerging Markets* (2009), at [http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/HousingFinanceforEMs\\_Ebook.pdf](http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/HousingFinanceforEMs_Ebook.pdf).

<sup>67</sup> Principles at 7.

<sup>68</sup> The benefit to consumers of having mortgage insurance alternatives has been emphasized in other contexts, most notably in efforts to define what is a “qualified residential mortgage” for purposes of the credit risk retention provision in Dodd-Frank. See, e.g., <http://www.sec.gov/comments/s7-14-11/s71411-185.pdf>, at 2 (“In addition, many non-QRM borrowers will end up with Federal Housing Administration (FHA) loans, which are more expensive than prime conventional loans and will become more expensive as a result of increasing premiums on FHA loans.”)

<sup>69</sup> A recent NY Fed staff report provided an overview on second lien loan performance and highlighted the potential concern for lenders with significant holding of second liens (particularly closed-end seconds used to avoid Private MI). See Lee, Mayer and Tracy, *A New Look at Second Liens*, NYFRB Staff Reports (No. 569, August 2012), at [http://www.newyorkfed.org/research/staff\\_reports/sr569.pdf](http://www.newyorkfed.org/research/staff_reports/sr569.pdf). Second lien complexities required a separate “2MP”

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program under the Making Home Affordable initiative, and success to date has been qualified. *See* Making Home Affordable Program Progress Report at 5 (August 2012), at <http://www.treasury.gov/initiatives/financial-stability/reports/Documents/August%202012%20MHA%20Report%20Final.pdf>.

<sup>70</sup> *See, e.g.*, Brian Collins, “QRM Debate Among Many Regulators Drags On And On”, National Mortgage News (Oct. 11, 2012), at [http://www.nationalmortgagenews.com/nmn\\_features/qualified-residential-mortgage-debate-languishes-1032570-1.html](http://www.nationalmortgagenews.com/nmn_features/qualified-residential-mortgage-debate-languishes-1032570-1.html).

<sup>71</sup> *See* fn 25.

<sup>72</sup> *See, e.g.*, Written Testimony of HUD Secretary Donovan to Subcommittee on Transportation, Housing and Urban Development on FY2013 Budget Request (March 1, 2012) (“However, FHA’s expanded role is and should be temporary. FHA’s loan volume has declined 34 percent from its peak in 2009, and its market share is decreasing for the first time since 2006, thereby laying the ground work for private capital to return to the market.”), at <http://portal.hud.gov/hudportal/HUD?src=/press/testimonies/2012/2012-03-01>. Written Testimony of Acting FHA Commissioner Galante to HUD Subcommittee of Senate Transportation Committee on FY2013 Budget Request (March 8, 2012) (“However, FHA’s expanded role is and should be temporary and, to that end, FHA is taking steps in all of its business lines to encourage the return of private capital into the mortgage market while balancing the need to remain a supportive mechanism for all types of housing moving forward.”), at <http://portal.hud.gov/hudportal/HUD?src=/press/testimonies/2012/2012-03-08>.

<sup>73</sup> Non-recognition of Private MI also unintentionally increases the operational risk of banks as well. Lenders using the FHA and other Government MI programs are subject to potential treble damage exposure under the False Claims Act and separate liability under other federal law. Wells Fargo, the largest participant in the various Government MI programs, was sued, and several large settlements of False Claims Act exposure were concluded recently. <http://www.justice.gov/usao/nys/pressreleases/October12/WellsFargoLawsuitPR.html>. There is no comparable legal risk related to use of Private MI.

<sup>74</sup> *See* fn 27.

This document describes the specifications of the MICA Private Mortgage Insurance Stress Test for Adequate Resources (PMI-STAR) model.

The purpose of PMI-STAR is to measure the adequacy of a mortgage insurer's financial resources (capital, reserves, and other capital support) to survive a specified stress period and remain adequately capitalized at the end of the stress period.

Desired attributes of the model are:

- Simplicity – all else equal, simpler is better.
- Transparency – it should be easy to understand the model, its assumptions, and the results.
- Risk Sensitivity – the model should produce greater capital requirements for riskier loans.
- Robustness – the model should not be subject to severe changes in results if there are minor changes to the inputs.
- Credibility – the model should accurately predict the results of the observed stress period.

Clearly, there are trade-offs to be made among these attributes. For example, risk sensitivity can be increased by making the model more complex, which enhances credibility but at the cost of simplicity, transparency, and (possibly) robustness.

The principles underlying the PMI-STAR are as follows.

- A Private MI provider's existing obligations are evaluated on a run-off basis, and the model does not rely on premiums from future new business to pay claims on existing obligations. Future premiums from existing coverage are calculated based on applicable renewal rates and stress-period prepayment experience.
- Future losses are based on the actual risk insured, recognizing that risk of loss varies based on loan features, borrower creditworthiness, and payment status.
- The assessment is based on an observed severe stress scenario in order to demonstrate claims paying ability in the event of a prolonged, material housing market downturn.
- The model calculates total resources required for all exposures, including those for which loss reserves have already been established. The model is not intended to address reserve adequacy. Instead, it is intended to measure the adequacy of total resources available for paying claims, independent of accounting practices.

#### Required Inputs

The model is contained in an electronic spreadsheet. The following input data is required:

- Insurance in force (current unpaid principal balance of insured loans) totals, by:
  - Payment status:
    - In Foreclosure
    - 60+dpd, not yet in foreclosure
    - Previous delinquency that has cured
    - Current with no previous delinquency

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- For loans that are current with no previous delinquency, credit quality (see additional discussion below):
    - Non-Standard – loans with features that substantially increase risk.
    - Standard – loans with features that constitute standard lending risks.
    - Premium – loans with features that substantially reduce risk.
  - Also for loans that are current with no previous delinquency, loan-to-value (LTV) ratio:
    - 80.01-85.00 %
    - 85.01-90.00 %
    - 90.01-95.00%
    - 95.01-97.00%
    - 97.01% +
  - Loan age:
    - 0-<3 years
    - 3-<5 years
    - 5-<10 years
    - 10+ years
  - Average coverage percentage by payment status, credit quality, and LTV groupings (aggregated across loan age groups, weighted by insurance in force amount).
  - Average renewal premium rate (in basis points per year) for each grouping (weighted by insurance in force amount). Coverage with zero renewal premium (for example, single premium) enters as zero.
  - Current statutory capital amount.
  - Current loss reserve amount.
  - Current unearned premium reserve amount.
  - Other Capital Support amount (e.g., reinsurance).
  - Operating expense rate (expressed in annual basis points against insurance in force)
  - Investment income rate (expressed as annual return on investable assets)

Model Parameters

The following parameters in the model are derived from MICA industry data covering the observed stress period, June 30, 2007 – June 30, 2012.

- Probability of Default (PD) – more accurately described as the probability of a paid claim during the 5-year stress period.
- Delinquent Seasoning Factors – the multipliers of PD, based on loan age (seasoning), for delinquent loans (including those in foreclosure).
- Non-Delinquent Seasoning Factors – the multipliers of PD, based on loan age, for non-delinquent loans (including those with previous delinquency that has cured).

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- Loss Severity (Severity) – the average claim payment amount (conditional on a claim being paid) as a percentage of Risk In Force (Insurance In Force \* Avg Covg).
  - Premium Multiple – the average number of years premium received during the 5-year stress period.

In addition, the following parameters are set based on industry and regulatory experience and discretion.

- Capital Floor – the minimum capital level assigned to any category at the end of the 5-year stress period.
- Capital Adequacy Factor – the minimum Claims Paying Adequacy Ratio expected of an insurer at the end of a 5-year stress period.

Details of the derivation of these parameters are given below.

Model Calculations

The following calculations are made by formulas in the spreadsheet.

- Total IIF = the sum of Insurance In Force across the age categories, with a grand total across all the payment status, credit quality, and LTV groups.
- MI Loss = Pct of IIF that is lost, conditional on claim being paid = Avg Covg \* Severity.
- 5 Yr Loss Paid = IIF \* PD \* Seasoning Factor \* MI Loss.
- Total Premium = Annual Premium Rate \* IIF \* Premium Multiple / 10000.
- 5 Yr UW Loss = 5 Yr Loss Paid - Total Premium.
- Original RIF = Total IIF \* Avg Covg.
- Capital % = the greater of Capital Floor or (5 Yr UW Loss / Original RIF).
- End RIF = ending Risk In Force, calculated from transition probabilities described below.
- Remain Loss = amount of capital required at end of 5-year stress period = Capital % \* End RIF \* Capital Adequacy Factor.
- Total 5 Yr UW Loss = the sum of 5 Yr UW Loss across all groupings.
- Total Remaining Loss = the sum of Remain Loss across all groupings.
- Operating Expenses = 5 years \* Total IIF \* expense rate bps/10000.
- Total Required Resources = 5 Yr Loss Paid + Total Remaining Loss + Operating Expenses.
- Investment Income = 5 years \* annual return \* average investable assets.
- Total Available Resources = Total Premium + Loss Reserve + Unearned Premium Reserve + Statutory Capital + Other Capital Support + Investment Income.
- Claims Paying Adequacy Ratio = Total Available Resources / Total Required Resources.
- Surplus (Deficit) = Total Available Resources – Total Required Resources.



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### Credit Quality

MICA has chosen to use three levels of credit quality to allow for sufficient risk sensitivity while maintaining simplicity and robustness. The foundation of determining credit quality is the Standard grouping. This group is intended to represent the level of credit quality that most people would view as traditional, sensible mortgage lending criteria. The other categories represent loans with attributes that significantly increase or decrease the risk compared to the standard criteria. The elements chosen to differentiate quality for our initial model are:

- Amortization type and period (e.g. loans that do not fully amortize over 30 years or less are Non-Standard)
- Documentation and verification (e.g. loans that have not been fully documented and verified are Non-Standard)
- Borrower credit history (e.g. FICO delinquency scores)

In addition, we are examining additional factors that determine credit quality, such as

- Affordability (e.g. debt-to-income ratio)
- Loan purpose
- Occupancy
- Seller contributions

The model also uses loan-to-value (LTV) ratio as a primary determinant of credit risk. The initial model does not alter the credit quality criteria by LTV range, but that could be considered. For example, loans with LTV > 97% could be considered Non-Standard, or Occupancy criteria could vary by LTV.

Loans that are or have been delinquent are not broken out by credit quality or LTV. The MICA experience data provides ample evidence that, once a borrower has experienced a significant delinquency, the other attributes become significantly less predictive of the ultimate outcome of the loan. The additional complexity required to maintain the credit quality and LTV groupings for those loans is not justified by the small incremental improvement in model accuracy.

#### Derivation of Parameters from Stress Period Data

The MICA PMI-STAR is designed to be a static model, in that the stress scenario is derived from the observed worst-case period for private mortgage insurers. As of the development of the model, that period encompasses the national experience from 6/30/2007 to 6/30/2012. The parameters developed from this stress period will be used in the model, going forward, to measure required financial resources given the size and characteristics of an insurer's in force exposures (as described in the model inputs).

To develop the parameters, MICA members aggregated their in force exposure data as of 6/30/07 and the status of those exposures as of 6/30/12. The status of any loan at the beginning of a period is one of: current (no prior delinquency); current (prior delinquency); delinquent (60+ dpd, foreclosure not yet started); or in foreclosure (including claims received but not yet resolved). At the end of the period, loans may be in one of those status groupings, or cancelled (coverage terminated with no claim), or claim paid.

Thus, for any group of loans with coverage in force at the beginning of the period, a transition probability table can be created in the following form.

From: / To:	Current - Never Delq	Current - Prev Delq	Delinquent	Foreclosure	Claim Pd	Cancel
Foreclosure	0.00%	4.96%	2.25%	6.24%	81.53%	5.02%
Delinquent	0.00%	17.36%	7.80%	13.24%	51.26%	10.33%
Current - Prev Delq	0.00%	30.86%	6.90%	10.80%	25.65%	25.79%
Current – Never Delq	16.71%	11.62%	4.24%	8.53%	14.60%	44.30%

These transition probabilities form the basis for calculating the model parameters.

### PD – Probability of Default

The probability of default is, in private mortgage insurance terms, the probability of a paid claim. Thus, the probabilities in the “Claim Pd” column of the table above translate directly to the PD parameters. The probabilities used by MICA are those associated with loans that are in the 0 to <3 years aging category. These PD values are then adjusted in the model by the aging factors

#### *Aging Factors*

MICA data shows a clear effect of loan seasoning on PD. As loans age, principal payments and home price appreciation cause the effective LTV to decline, lowering default risk. In addition, there is a “default burnout” effect, in which borrowers who are most resistant to default stay in the active population while the less resistant exit via default. The stress period we have chosen, 2007-2012, features a population that experienced substantial home price appreciation (HPA) in the years leading to the stress. This is no surprise, as it is widely accepted that the home price bubble leading up to the crisis was a significant cause of the crisis and its severity. In fact, no significant stress period has ever occurred without a significant amount of HPA leading up to the stress. Nevertheless, to offset some of the “optimism” that is created by HPA in the seasoned loan groupings in our observed stress period, and to reflect an appropriate amount of conservatism, we chose to manually assign aging factors to the PD values for newly originated loans.

#### *Ending Risk In Force*

The remaining transition probabilities are used to estimate the Risk In Force (RIF) remaining at the end of the five year period. They are also used to categorize that RIF. For example, in the table above, 16.71% of the original RIF that was current with no previous delinquency remained in that status at the end of the five years. Another 11.62% of those loans had a delinquency that cured and the loans remained active; 4.24% were delinquent at the end of the period; and 8.53% were in foreclosure. The capital required at the end of the five year period is based on the status of the loans. Thus, for example, much more capital will be required for those loans in foreclosure than those that have never been delinquent.

#### *Premium Multiple*

Most private mortgage insurance premiums are paid monthly over the life of the coverage. The model must make a reasonable forecast of how much premium will be received during the stress

period to be available for paying claims. Private MI premium renewal rates are typically expressed in basis points, based on the insured amount. This could be the original loan amount or the unpaid principal balance, depending on the terms of coverage. For simplicity and to be conservative, the model uses Insurance In Force, which is based on the unpaid principal balance at the beginning of the stress, to estimate premium. This slightly overestimates premium during the stress period on loans with premium based on current balance, while it underestimates premium on loans that use the original loan amount. Most premium rates are based on the original loan amount, so the net effect is conservative.

For a group of loans, then, the premium received over the stress period is the annual renewal rate multiplied by the number of years in which premium is paid, i.e. the “premium multiple.”

For simplicity and robustness, MICA chose to model the premium multiple on the assumption of a constant termination rate (CTR) over the five year period.

The number of months, given a percentage of runoff over a period, is:

$$\text{Premium Months} = \left(1 - \frac{1}{(1+r)^t}\right) * \left(\frac{1}{r}\right)$$

where

$$r = \left(\frac{1}{Pm}\right) - 1$$

$$Pm = \text{Persistency Monthly} = (\text{Persistency at } t)^{\frac{1}{t}}$$

$t = \text{time period, in months} = 60$

For example, if the persistency (percentage of original exposure remaining in force) at the end of 5 years is 54.7%, the monthly persistency is  $.547^{(1/60)} = 0.99$  (the SMM=.01, the CTR = 12.7%). Then,  $r=(1/0.99)-1 = .0101$ , and the premium months after 60 months is

$$1/(1 + .0101)^{60} * (1/.0101) = 44.8 \text{ months} = 3.7 \text{ years}$$

To adjust for premium lost from claims, we multiply the claim years by  $(1-.75*PD)$ , which is to say that we expect to receive 25% of the estimated premium on loans that become paid claims.

*Capital Floor*

It is possible for a group of loans to produce a negative amount in the 5-year Stress UW Loss calculation, indicating that the premium generated by the loans is more than enough to pay the claims on those loans, even in the stress scenario. The capital floor sets a minimum capital level that would be required of a group of loans at the end of the stress period.

*Capital Adequacy Factor*

MICA members expect that, under normal circumstances, private MI providers would be expected to operate with a Claims Paying Adequacy Ratio greater than 100%. At the end of a stress, however, it is reasonable to expect that a provider would be less than 100%. This creates a desirable counter-cyclical aspect to the capital requirements. In addition, it compensates for some of the conservative simplifications that have been built in to the model. For example, at the end of the stress period, all loans will have aged by 5 years, but the ending capital requirement is based on their starting age.