



January 25, 2005

**Mortgage  
Insurance  
Companies  
of America**

Ms. Jennifer J. Johnson, Secretary  
Board of Governors of the Federal Reserve  
System  
20<sup>th</sup> Street and Constitution Avenue, N.W.  
Washington, DC 20551

Suzanne C. Hutchinson  
*Executive Vice President*

RE: Proposed Supervisory Guidance on  
Internal Ratings Based Approach

Dear Sir or Madam:

The Mortgage Insurance Companies of America (MICA) is pleased to comment on the proposed supervisory guidance for banks, savings associations, and bank holding companies (banking organizations) that would use the internal-ratings-based (IRB) approach to determine their regulatory capital requirements for retail credit exposures under Basel II. MICA understands that the Agencies intend this guidance to provide banking organizations, in anticipation of the Basel proposed rule (NPR), with a description of the current views of the Agencies regarding (and an opportunity for interested persons to comment on) the components and characteristics of a qualifying IRB credit risk measurement, data maintenance, segmentation, and quantification framework for retail exposures. MICA also understands that the Agencies expect to issue an NPR in 2005 that would comprehensively implement the IRB approach and other elements of the Basel II Framework. Throughout this process, MICA will be pleased not only to amplify the comments below, but also to assist in any other way to promote a final regulatory capital scheme for mortgages that aligns regulatory capital as closely as possible to economic capital to avoid regulatory arbitrage and other undesirable consequences.

MICA is the trade association of the private mortgage insurance (MI) industry<sup>1</sup>. Several of the comments noted below also were made in our July 31, 2003 comments to the Basel Committee on the third consultative paper (CP3) and our November 3, 2003 comments to the Agencies on the advanced notice of proposed rulemaking (ANPR) concerning implementation of the new Basel capital accord in the United States. As it has throughout the Basel II process, MICA would like to express its strong support for the goals of the ANPR and CP3: improved alignment of regulatory and economic capital.

MICA Comments on General Points Raised by Agencies

Loss Given Default (LGD) Estimation: When the loss severity of a retail portfolio exhibits significant cyclical variability, the proposed retail IRB guidance states that a bank must estimate an LGD that reflects periods of high credit losses for the particular portfolio (e.g., mortgages). The Agencies invited comment on various issues related to estimating LGD including:

How should "periods of high credit losses" (also referred to as periods when credit losses are "substantially higher than average") for a portfolio be defined?

What methods could be used to estimate an LGD appropriate to such periods?

Should the LGD adjustment for high credit losses reflect the likely LGD when credit losses are high at the product or portfolio level for the particular bank

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<sup>1</sup>Six private mortgage insurers comprise MICA's membership: Genworth Financial, Inc., Mortgage Guaranty Insurance Corporation, PMI Mortgage Insurance Co., Republic Mortgage Insurance Company., Triad Guaranty Insurance Corporation and United Guaranty Corporation.

(legal entity), or for a nationally diversified portfolio?

How will a bank ensure that the LGD will reflect any unique or predictive risk characteristics of individual segments or small groups of segments if the period of high credit losses is defined at an aggregated level?

The mortgage insurance industry has extensive experience with characterizing the loss given default on residential mortgage loans with low initial downpayments. As we noted in our November 3, 2003 comment letter on the ANPR, we have analyzed over 240,000 loans that experienced an insurance claim since 1990 to determine LGD and its relationship to initial loan-to-value (LTV) ratio. We calculated LGD using the long-run average distribution of net salvage ratios (net salvage value divided by home value at origination) taken from foreclosures on insured loans between 1990 and 2003. Using realistic assumptions on the cost of foreclosure and time needed to foreclose, we showed that, as the original LTV goes higher, so does the increase in the LGD. Our data showed LGD ranging from 13.9% on a loan with an initial LTV of 75% to an LGD of 40% on a 100% LTV loan. We also noted the importance of using a full stress period rather than relying on the most recent five years experience. Using 10 years worth of data rather than the most recent five years of data resulted in a 20% increase in the LGD. We also noted that these LGD values closely correspond to the LGD values for the same LTV groups as estimated in a Federal Reserve working paper on asset correlation and residential mortgages<sup>2</sup>. We strongly suggest that U.S. regulators make use of this information and other sources of data that can provide a longer-term perspective of LGD.

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<sup>2</sup> Paul S. Calem and James R. Follain, *The Asset Correlation Parameter in Basel II for Mortgages on Single Family Residences*, Board of Governors of the Federal Reserve System, October 15, 2003.

MICA continues to believe that implementing regulation for the advanced IRB (A-IRB) should place a heavy emphasis on the use of stress-scenario estimates of performance, rather than relying only on an institution's historical experience. If banks utilizing the A-IRB cannot provide historical PD and LGD performance data during an economic downturn for each segment of their mortgage portfolio, then MICA recommends that the appropriate banking regulator, under Pillar 2, make appropriate adjustments to the PD and LGD factors based on the best available data.

To this end, MICA is willing to provide access to its historical performance database for high LTV lending as well as information regarding gross loss given default information on high LTV loans. MICA urges the U.S. regulators to also make use of other national data bases in order to determine appropriate benchmarks for other loans of various risk profiles as part of their Pillar 2 considerations.

MICA noted in its November 3 comment letter that the fact that LGD rises significantly in times of stress should be of particular concern to the setting of risk-based capital. The simulation model developed by the Federal Reserve generates a clear picture of the relationship between LGD and economic downturns, illustrated in the attachment B to our November 3 comment letter. To create that graph, MICA analysts ran the Federal Reserve's simulation over 15,000 iterations, then ranked the iterations by the estimated loss rate and grouped them in bins of 150 observations. Each point represents the average LGD for the 150 observations in the bin, expressed relative to the LGD for the 50<sup>th</sup> percentile (median) loss bin. Not only does LGD increase with the severity of the scenario, but it also increases at an increasing rate. In the MICA simulations, LGD at the high-risk tail for a 90% LTV, 700 FICO loan rose to 175% of the median level. In

other words, at the level of stress used for determining risk-based capital, LGD is 75% higher than at the stress level representing median loss.

As we have noted in previous communications with the Federal Reserve Board staff and in our November 3 comment letter, studies of MICA data have shown that the asset correlation for first liens with LTVs of 80% or more within a geographically diversified portfolio should be above 20%. MICA continues to believe that the 15% asset correlation factor used in the A-IRB model is too low when applied to high risk loans. There may be several ways to remedy the undesirable effects of a fixed correlation factor as it applies to residential mortgages. MICA recommends that the 15% correlation factor be limited to prudently underwritten mortgages (i.e. low initial LTV, including consideration of combined LTV when a first lien is booked at the same time as a second one). Loans outside of prudent underwriting criteria should use a different correlation factor at the discretion of the appropriate regulator, but no less than 15%. The applicable correlation factor would reflect the combined LTV (CLTV) and lien position of the loan. MICA research suggests that correlation factors in the range of 25% to 30% would be appropriate for high LTV lending. The applicable correlation factors for all mortgages held by an institution should also be raised 5-10 percentage points to reflect a lack of geographic diversity in a mortgage portfolio. It would, of course, be inappropriate to set an estimated LGD for high credit loss periods based on a nationally diversified mortgage portfolio when, in fact, the financial institution does not hold on its books a nationally diversified portfolio. In the absence of imposing a higher correlation factor a multiple should be applied to the LGD estimate to account for the lack of geographic dispersion in the portfolio holdings

MICA also recommends the application of ratings agency criteria to the Pillar 2 review of the stress test applied to a financial institution under the A-IRB. The stress test criteria applied by S&P, Moody's and Fitch reflect the realities of depression scenarios for residential mortgage risk as it varies by the initial LTV of the loan and other relevant factors.

### General Treatment of Mortgage Insurance

While MICA agrees with the general approach to the treatment of MI coverage in the proposed supervisory guidance, we have several important exceptions. The most prominent exceptions are the inclusion of MI covered loans within the 10% LGD floor and the use of unsecured debt ratings for assessing risk associated with specific MI coverage. The application of the 10% LGD floor is treated in detail below as a separate discussion. While the use of senior unsecured debt rating may be appropriate when analyzing some corporations, it is not appropriate for mortgage insurers. For MIs, the Claims Payment Ability rating as determined by the ratings agencies is more appropriate for assessing the prospect of recoveries from MI coverage due to the special statutory loss reserve requirements to which private MI providers are subject. MIs are required to maintain three separate reserves to ensure adequate resources to pay claims.<sup>3</sup> The

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<sup>3</sup> First, contingency reserves, required by law, protect policyholders against the type of catastrophic loss that can occur during a depressed economic period. Half of each premium dollar earned goes into the contingency reserve and cannot be touched by the mortgage insurance company for a 10-year period unless losses in a calendar year exceed 35 percent of earned premiums, depending upon the state. Contingency reserves allow insurers to build reserves during the valley of the risk cycle to cover claims during peak years. Second, case-basis loss reserves are established for losses on individual policies when the insurer is notified of defaults and foreclosures. This reserve account also includes a reserve for losses incurred but not reported. Third, premiums received for the term of a policy are placed in

Claims Payment Ability rating is the key risk assessment factor to the financial institutions relying on MI coverage and this should continue under the supervisory guidance.

#### Proposed 10% LGD Floor

In paragraph 133 of the proposed supervisory guidance it is noted that the 10% LGD floor "is based on the view that LGDs, if appropriately estimated, are unlikely to fall below this level during periods of high credit losses. During the initial two-year implementation period of the IRB framework, the LGDs for retail residential mortgages cannot be set below 10 percent. During this transition period, the agencies will review the potential need for continuation of this floor. Mortgages guaranteed by a sovereign government are exempt from this floor." This exemption applies to VA-guaranteed and FHA-insured mortgages.

All banks and other interested parties who chose to comment on the 10% LGD floor as proposed in the ANPR supported excluding from the floor mortgages covered by MI.<sup>4</sup> Many commenters also suggested that mortgages covered by federal mortgage insurance be excluded from the floor. Not one commenter supported having the 10% LGD floor apply to MI-insured loans. However, the supervisory guidance not only fails to reflect the comments of all those who chose to comment on this matter, but it creates a new complication by which only FHA and VA insured loans would be excluded from the 10% LGD floor.

Applying the 10% LGD floor to MI-insured loans will create a disincentive for banks to

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unearned premium reserves. Each state establishes the method by which premiums are earned to match premiums with loss and exposure.

<sup>4</sup> See for example, November 3, 2003 ANPR comments by Citigroup (p.20); JPMorganChase (pp.19-20); Washington Mutual (p.15) and the Mortgage Bankers Association of America (p.6).

acquire third party credit risk mitigation on these high risk loans and unnecessarily limits the capital relief benefit available to a bank seeking to manage its mortgage credit risk exposures. It seems to MICA that this result runs directly counter to the goals of implementing Basel II.

As we noted in our November 3 comment letter, the 10% LGD floor was meant to address the QIS3 results which showed a very wide distribution for retail mortgage LGDs and PDs that U.S. financial regulators must address when setting the parameters for determining LGDs and PDs. While differences in default trigger events may account for a small part of the wide discrepancy, it is imperative that a longer time period that reflects the long-term cyclical nature of mortgage risk be incorporated in the A-IRB approach. This strategy of setting a 10% LGD floor not only fails to adequately address the issue, but it also has the perverse effect of discouraging use of private insurance which can bring the LGD down well below 10%.

In Table 4 of our November 3 comment letter, MICA presented data that estimated the average LGD after benefit of MI payments. That data reflected the distributions of net salvage values incurred over the 1990-2003 period assuming standard MI coverage levels. Except for 85% LTV loans that generally carry only 12% coverage, the average net LGD after MI ranged between 4.6% and 7.6%. The problem with proposing any LGD floor on MI loans is that it would discourage lenders from utilizing deeper MI coverage that could have the effect of bringing lender's net LGDs to zero.

Excluding only FHA and VA insured loans from the 10% LGD floor will mean that almost all whole loans kept in portfolio by A-IRB banks will be subject to the LGD floor. The Agencies should consider the fact that almost all FHA and VA-insured loans are placed in Ginnie Mae guaranteed mortgage backed



securities<sup>5</sup>. Although many conventional conforming privately-insured loans are included in MBS guaranteed by the housing GSEs, MICA believes the percentage is far smaller than the percentage of FHA and VA insured loans included in Ginnie Mae securities.<sup>6</sup> Moreover, many non-conforming insured mortgages may be retained in portfolio by banks. Of course, under Basel II, the capital treatment of mortgage backed securities is covered by the structured financing rules, not by the retail credit risk formula that is the subject of this proposed guidance and comment. Consequently, it appears that excluding only FHA and VA insured loans from the 10% LGD floor effectively subjects all retained residential whole mortgages to the LGD floor.

#### Treatment of Second Lien Mortgages

In our November 3 comment letter, MICA noted that second lien loans with CLTV greater than 80% possess risks that are inconsistent with prudent underwriting criteria and therefore deserve more conservative risk based capital treatment. We set forth the results of our analysis of loan performance histories for 456,114 second-lien loans sold into the

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<sup>5</sup> See Ginnie Mae Annual Report for 2003, p.9. "In Fiscal Year 2003, securities guaranteed by Ginnie Mae financed 92.6 percent of all eligible loans insured or guaranteed by the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA)."

<sup>6</sup> See for example, "Federal Subsidies and the Housing GSEs", May, 2001, a Congressional Budget Office document that estimates on page 34 (Table A-1) that Fannie Mae and Freddie Mac together held or securitized 71% of the fixed-rate conforming mortgages at year-end of 2000. The study notes that Fannie Mae and Freddie Mac have determined their share of the applicable mortgage market to be far lower. Using the CBO analysis, 29% of fixed rate mortgage loans eligible for purchase by the GSEs would remain with lenders or be privately securitized. Other mortgages ineligible for GSE purchase or adjustable rate mortgages would also either remain with the originating lender or become part of a private securitization.

secondary markets in asset-backed securities. Controlling for FICO score, original term to maturity, and age of the loan, MICA found that second-lien loan performance varied significantly based on combined loan to value. Second lien loans with CLTVs between 81% and 90% performed 26.7% worse than second liens with CLTVs of 80% or less. As CLTVs went higher the relative performance worsened exponentially.

Using MICA's net salvage distribution data (noted in detail in the comment letter) as a means of estimating LGDs between first and second liens with various CLTVs, MICA found that LGD varies significantly with CLTV. Second liens with CLTVs of 90 in the data set suffered LGDs that were more than twice that of second liens with CLTV of 80% while second liens with CLTVs over 100% or greater suffered LGDs that were more than three times that of 80% CLTV second lien loans.

Using historical performance taken from securitized second-lien mortgages, and utilizing relationships between recent high LTV loan performance and long-run average high LTV performance, MICA estimated long-run average life of loan PDs for second liens of various CLTVs. Employing the 15% correlation factor for all estimates, we find that the current Basel formula estimate of capital required for second liens with CLTV of 80% would be 2.72%, very close to the 2.8% required by the standardized approach adopted in Basel II for use outside the United States. However for loans of 85% CLTV and higher, the capital requirements were more than twice that of 80% CLTV seconds. Second liens with CLTVs of 95% and higher reached four to five times the second lien CLTV 80% charge. Capital for second liens with CLTV of 80% or less would remain consistent with standardized approach capital requirements.

## Other Points Raised in the Proposed Supervisory Guidance

The following additional MICA comments reference the paragraph numbers as set forth in the request for comments as they appeared in the Federal Register notice.

*Paragraph 34:* MICA agrees that banks should consider both borrower risk (credit score) and loan-related risk (LTV) when determining segmentation. As noted above and in our previous comment letters, loans with initial high LTVs perform quite differently than loans with low initial LTVs. It is therefore important for banks subject to the A-IRB to segment their loans accordingly.

*Paragraph 35:* The guidance notes that "each retail risk segment will typically be associated with a separate PD, LGD, and EAD but in cases where it may be reasonable to use the same LGD estimate for multiple segments the bank must demonstrate that there are no material differences in LGD among those segments. Over time, supervisors expect banks to develop more precise data and methodologies for determining LGDs." MICA supports the segmentation of retail risk expressed in this and other parts of the guidance. We note here, and explain in more detail below, the importance of segregating the risk associated with first lien mortgages from that associated with second liens, especially those second liens that are originated at the same time as the first. These so-called piggyback mortgages pose significant risks to holders of both the first and second liens. It is also important that the combined LTV of both loans be considered when segmenting risk. MICA also agrees that it is important for banks to develop more precise methods for LGD calculation.

*Paragraph 41:* "Banks may incorporate the variables from a statistical model into their risk segmentation processes... Banks may combine

expert judgment with statistical analysis in determining appropriate segmentation criteria. However, expert judgment of this type must be well documented and supported by empirical evidence demonstrating that the chosen risk factors are reliable predictors of risk." MICA notes that, with respect to residential mortgage first liens, the risk factors of LTV, geographic dispersion, product type and underwriting criteria have been well established and regulators should be very careful in analyzing judgments that would substitute new factors for these established ones.

*Paragraph 49:* "Retail exposures may have guarantees or insurance, such as private mortgage insurance (MI) and government guarantees for residential mortgages... A bank's risk segmentation system may reflect such guarantees, as may its risk parameter estimates. For example, loans with similar risk characteristics, including the same type of guarantee, could be pooled together." MICA agrees that proven guarantees and insurance should be reflected in risk parameter estimates. However, unproven forms of credit risk mitigation should not be pooled with proven forms of credit risk mitigation, so further guidance on what constitutes "same type" should be indicated.

*Paragraphs 89-91:* "In general, the bank should use all relevant historical data available, though the bank may weight some periods more heavily if it can demonstrate that the weighted data are likely to produce more accurate risk parameter estimates... If the reference data include data from beyond five years (to capture a period of stress or for other valid reasons), the reference data need not cover all of the intervening years. Example: During the 2001 to 2003 period of highly elevated mortgage prepayments owing to record low interest rates, losses may have been deferred in mortgage portfolios because of readily available refinancing options. Also,

losses on foreclosures during this period were limited because housing prices generally increased throughout the United States despite a recession. A similar (though not as substantial) drop in interest rates occurred in the early 1990s. That recession, however, was characterized by a sharp drop in property values in many parts of the country. In a case like this, where the recent period has been atypical, a bank may choose to weight the older data (perhaps from external sources) more heavily than the recent data. When a bank does not have sufficient historical data to encompass a period of stress for a particular portfolio, other sources of data covering stressed periods will be required. The bank may be able to select sub-samples of its internal portfolio that experienced stressed periods (for example, particular MSAs or geographic regions); see example 1 of appendix B. The bank may also use external data from industry sources." While MICA agrees with the goal of this approach we question whether, with regard to a portfolio of residential liens, selecting "subsamples" that experienced stressed periods will be as useful as using established external data sources. There is an established database of loss criteria for residential mortgage loans (see for example the OFHEO benchmark loss scenarios used in setting the risk-based capital test for Fannie Mae and Freddie Mac).

*Paragraphs 109-110:* Seasoning poses a challenge for banks quantifying the default rate for retail exposures when the default rate follows a characteristic account age profile, typically rising for the first several periods following origination and then falling. Seasoning is an issue for longer-maturity consumer products such as residential mortgages, but it may also be important for shorter-lived portfolios. In addition, accounting for seasoning is particularly significant for portfolios that are growing rapidly through new originations or for banks that systematically sell or securitize loans before they reach the peak of the seasoning

curve. In both cases, banks should factor seasoning into their quantification to provide adequate capital to cover future needs...For segments containing unseasoned loans, a bank should assign a higher PD estimate that reflects the annualized cumulative default rate over the segments' expected remaining life.\8\ For seasoned loans, the bank should use the long-run average of one-year PDs." MICA agrees that seasoning is an important part of assessing PDs on residential mortgages. Our experience has been that residential loans with initial LTVs greater than 80% have followed an established pattern for reaching peak loss periods, usually three to seven years after origination. Bank regulators should consider the interrelationship between the seasoning and the initial LTV of the loan. The close relationship between variations over time in housing market prices and borrower equity accounts for much of the observed "peaking" PD behavior, the variation of the intensity and magnitude of the peak by original LTV, and the high correlation of LGD and PD noted in geographically concentrated portfolios of loans. In periods of housing market distress over wide regions, or even nationwide, similar high correlation between PD and LGD would be expected because of this connection. See further comments tied to paragraph 127.

*Paragraph 119:* "The same minimum history of five years for the LGD reference data set is required, or longer to include a period of portfolio stress. Although a bank may use internal or external data, most banks will eventually be expected to collect and maintain sufficient internal data." As MICA has noted, a five-year period is not adequate for assessing residential mortgage portfolio stress. We again urge that regulators consider datasets from established sources to cover the shortfall's in a bank's proprietary data sources.

*Paragraph 127:* "A bank must estimate an LGD for each segment that reflects economic downturn conditions where necessary to capture

the relevant risks. The LGD cannot be less than the long-run default-weighted average LGD calculated on the basis of the average economic loss of all observed defaults within the data source for that retail segment. In addition, a bank must take into account the potential for the LGD to be higher than the default-weighted average during a period when credit losses for a particular portfolio (e.g., mortgages) are substantially higher than average. For certain types of exposures, loss severities may not exhibit such cyclical variability, and LGD estimates may not differ materially (or possibly at all) from the long-run default-weighted average. However, for other exposures, this cyclical variability in loss severities may be significant, and banks will need to incorporate it into their LGD estimates. For this purpose, banks may use averages of loss severities observed during periods of high credit losses for that product, forecasts based on appropriately conservative assumptions, or other similar methods." In the case of residential mortgage loans, the relationship between borrower equity, PD and LGD, and the behavior of regional housing market prices has been widely studied in the context of viewing mortgage borrower behavior as analogous to holders of bonds with embedded call and put options. Stress LGD estimation methods should reflect the understanding gained from these studies, many of which are readily available in publicly disseminated research reports and (since loan behavior only resembles, but does not exactly mimic the behavior of bond holder option exercise) should also be calibrated to be consistent with historical experience in stressed housing markets.

*Paragraphs 134-136:* "In calculating losses for LGD estimation, the amount of expected MI benefits would be deducted from the losses otherwise incurred by the bank on defaulted mortgages. Banks may choose to incorporate loan-level MI coverage into their risk segmentation. For example, loans with similar risk characteristics, including the same type

of MI coverage, could be placed in a single segment. In any case, banks will need accurate MI coverage data in both the reference and existing-portfolio data sets. This would generally require loan-by-loan tracking of MI over the life of the loan, since loans on which the lender requires MI coverage at origination (generally because of LTVs greater than 80 percent) often drop coverage when current LTV falls below 80 percent. Pool-level mortgage insurance is treated under the IRB securitization framework or under the general IRB credit risk mitigation rules. Banks with substantial MI-covered residential mortgages should monitor the senior unsecured debt ratings of the MI companies. If the rating of any MI company falls below AA, banks should accordingly adjust the LGD to take into account the elevated counterparty risk for all mortgages insured by that company." MICA agrees with this general approach to MI coverage but, as noted above, believes that the Claims Payment Ability rating, not Senior Unsecured Debt rating, is more appropriate for assessing the prospect of recoveries from MI coverage, due to the special statutory loss reserve requirements to which private MI providers are subject.

### Conclusion

MICA trusts that our comments have been helpful and we stand ready to provide the Agencies with additional information that may be of help. We understand the importance of implementing Basel II in a way which accurately reflects the wide range of risk inherent in residential mortgage products and we hope that our industry's experience with regard to high risk, low-downpayment mortgages can be useful to you.

Sincerely,

Suzanne C. Hutchinson