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Criteria | Structured Finance | RMBS:

Methodology For Assessing Mortgage Insurance And Similar Guarantees And Supports In Structured And Public Sector Finance And Covered Bonds

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*(**Editor's Note:** We originally published this criteria article on Dec. 7, 2014. We've republished it following our periodic review completed on Dec. 7, 2016. As a result of our review, we updated the contact information, criteria references, moved the information in paragraph 4 to Appendix 2, deleted paragraph 5 as it related to internal publication of the criteria and was therefore no longer relevant, and made other minor editorial updates.)*

1. Standard & Poor's Ratings Services has revised its methodology for assessing lenders' mortgage insurance (LMI) as a form of credit enhancement in global residential mortgage-backed securities (RMBS), global covered bonds, and debt ratings in the U.S. municipal housing sector. While references are made to LMI, the revised criteria also apply to asset guarantees in Japanese RMBS as well as government guarantees and support at a loan level in certain structured finance and public finance ratings. The revision has taken into consideration the recent experience of mortgage insurance pay-out adjustments in certain markets under stressful economic conditions. This article is related to our criteria article "Principles Of Credit Ratings," which we published on Feb. 16, 2011.

2. For the purpose of these criteria, LMI is a contractual and legally binding obligation. If the terms of the contract are met, the LMI provider agrees to pay to the insured all or part of an insured loss experienced by the insured when a housing-loan borrower defaults and the lender incurs a loss on the realization of the security property. However, LMI policies are not a guarantee of payment because payments are subject to the insured meeting the terms and conditions of the policy, and an inability to comply with and prove compliance with the terms and conditions can result in claims adjustments. The insured is typically the lender of a housing loan, though the insurance premium may be paid by the borrower of a loan or the lender. In most instances, the beneficial interests in LMI policies are transferred with the relevant loans when they are securitized. For such loans in RMBS, covered bonds, or public-sector securities, the LMI is typically the first point of call to absorb losses arising after the realization of the security property.

SCOPE OF THE CRITERIA

3. These criteria apply to LMI, asset guarantees, and credit insurance, as well as to government guarantees and supports in instances where they are on a per loan basis and the exposure to these supports is well diversified. For a pool of assets that is well diversified across a large number of loans, individual obligor defaults are more likely to occur at different points in time before the LMI provider exhausts its capacity to pay, thereby increasing the likelihood of honored claims under the LMI policy, even under stress scenarios greater than reflected by the LMI provider's issuer credit rating (ICR). Additionally, the criteria only apply if the insurance, guarantee, or government support is transferrable when necessary for the benefit of securities holders. For example, these criteria apply to the assessment of LMI as a form of credit enhancement in RMBS and covered bonds globally, and the U.S. municipal housing sector of

U.S. public finance securities. These criteria also apply to loan-level asset guarantees in Japanese RMBS transactions and to asset credit insurance in some trade receivables securitizations.

4. This paragraph has been deleted; for information about superseded criteria, please see Appendix 2.

5. This paragraph has been deleted.

6. This paragraph has been deleted. Please see Appendix 2.

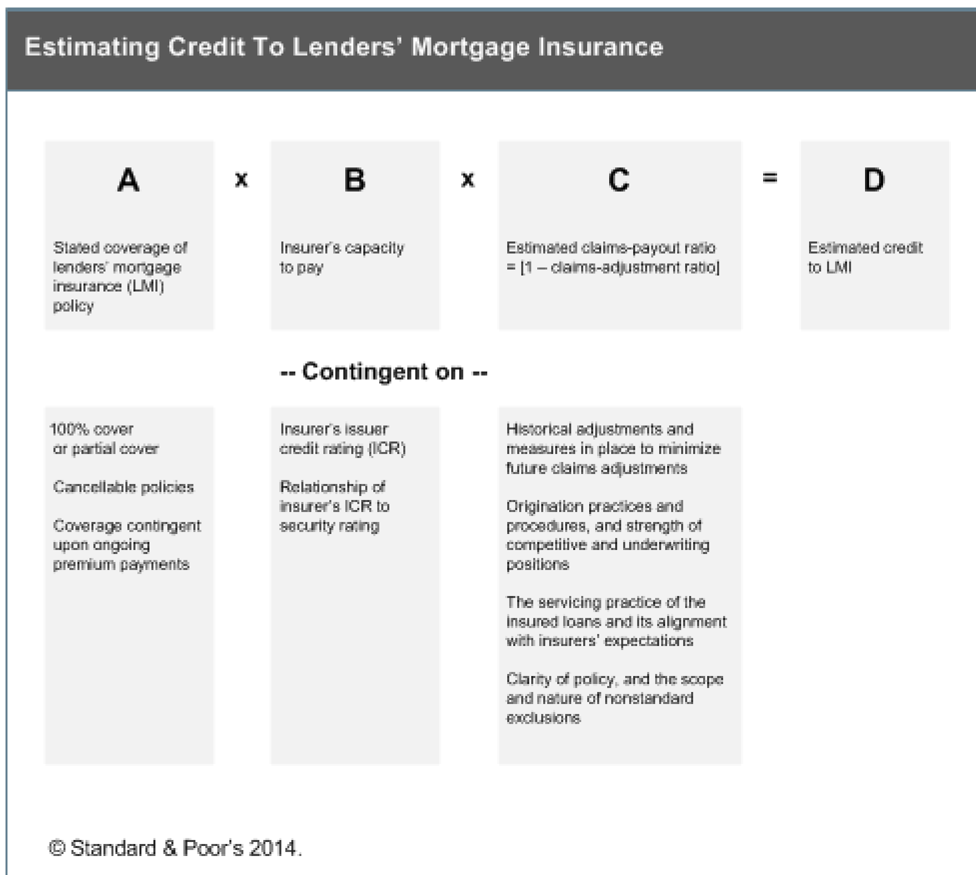
SUMMARY OF THE CRITERIA

7. In determining the amount of credit applied to LMI or the value of LMI as a form of credit enhancement in the rating analysis of rated securities, these criteria consider:

- The stated coverage of the LMI policy or policies. For instance, does the policy cover 100% of any loss, inclusive of principal, accrued interest, and certain costs? Or does it cover principal loss above a certain loan-to-value ratio or pre-agreed percentage of the original loan balance? Are the policies cancellable in certain circumstances? Is ongoing coverage contingent upon receipt of ongoing premium payments, and are these payments assured to a level consistent with the rating on the rated securities (paragraph 12)?
- An estimation of a lenders' mortgage insurer's capacity to pay is based on the relationship between the insurer's ICR and the rating of the securities, and on the assumption that a lower-rated insurer will perform only part way through a higher rating-stress scenario (table 2, paragraphs 15-18).
- The estimated claims pay-out ratio, which equals (1 – the claims-adjustment ratio). LMI policies are not unconditional guarantees; they are insurance contracts that contain certain conditions and performance obligations. The payment of claims with respect to losses arising from mortgage loan defaults may be contingent upon whether the origination and servicing of the mortgage loans are undertaken in accordance with the terms of the LMI policy, along with what constitutes a "valid" claim under the policy and any exclusions or limitations that may apply under the policy. The estimated claims pay-out ratio for asset guarantees is 100% if the guarantor does not have any right or ability to make adjustments to a claim made under a guarantee. This is similar for government guarantees, supports, or insurance that does not have the ability to make adjustments. Some guarantees may not be entirely unconditional. In these instances, claims-adjustment considerations may apply if not already factored into our credit analysis.

8. Under these criteria, the overall amount of credit to LMI for in-scope rated securities is the product of the stated coverage, the insurer's estimated capacity to pay for a given rating scenario and the estimated claims pay-out ratio for a given issuer. The estimated credit to LMI is then applied against the estimated losses of the defaulted loan (see chart 1 and the Appendix for worked examples, including the treatment of pool policies).

Chart 1



9. This paragraph has been deleted.

10. This paragraph has been deleted. For information on the effective date, please see Appendix 2.

METHODOLOGY

A. Lenders' mortgage insurance as a form of credit protection

11. Under these criteria, the overall amount of credit that would be assigned to LMI as a form of credit enhancement in the rating analysis of in-scope rated securities is expressed as follows:

Credit to LMI = Stated coverage x estimated insurer capacity to pay x estimated claims pay-out ratio*

*The claims pay-out ratio equals (1 – claims adjustment rate).

1. Stated coverage

12. The LMI coverage offered by insurers can vary. Some might offer 100% coverage of losses and accrued interest as well as the upkeep and selling expenses of security properties, while others may only cover part of the loss. In most instances, the insurers calculate the coverage based on the loan balance. The amount of credit given reflects the stated coverage of the LMI contract and is based on the calculation method stated in the LMI contract. To assign ratings to

securities, we look at what losses are supported by a combination of LMI and other types of available credit support or risk mitigants. Typically, the greater the effective LMI coverage available, the lower the other credit support provided. When assessing effective LMI coverage, we take into consideration whether a policy is cancelable, because cancelation of a policy at a later date gives rise to the risk that other, non-LMI credit support will not be sufficient to cover rating-scenario specific estimated losses. However, a cancelable policy usually can be canceled only when a loan balance has been reduced and the loan-to-value (LTV) ratio is at a lower level, such as 78% (as per the statutory cancelation under the Homeowners Protection Act in the U.S.).

13. For cancelable policies, additional analysis is done to consider what the expected loss would be if the policy were canceled. Our analysis considers whether the initial credit support provided is sufficient to cover rating scenario expected losses irrespective of the policy being in place. In other words, we assess whether the credit support provided is sufficient to cover the greater of (1) the rating scenario expected losses assuming both the LMI is in place and the LTV ratio for the loan is at the current LTV ratio at the time of assessment, and (2) the rating scenario expected losses assuming both no LMI is in place and the LTV ratio for the loan is equal to the trigger LTV ratio for policy cancellation. (see the example in "Appendix").

14. We estimate that the potential losses would be no higher than the re-estimated loss under the trigger LTV ratio, assuming the related policy is canceled, and the estimated loss under the LTV ratio when reviewed, assuming the policy is not canceled. The estimated loss resulting from the higher of the two scenarios applies because of the uncertainty of default timing in relation to LMI policy cancelation timing.

2. Capacity to pay

15. Under these criteria, an insurer's capacity to pay is determined by the insurer's credit rating and how that relates to the rating on the securities (table 2). The amount of credit proposed to be given to LMI would be based on the ICR of each LMI provider. These criteria would apply where insurance coverage is on a per loan basis and the pool of assets is diversified across a large number of loans. For pools of assets that are well diversified across a large number of loans, we believe individual obligor defaults are more likely to occur at different points in time before the LMI provider exhausts its capacity to pay, thereby increasing the likelihood of honored claims under the LMI policy, even under stress scenarios greater than reflected by the LMI provider's ICR.

16. In determining the applicable ICR for table 2, other criteria may apply. For example, a joint support approach--when more than one entity is involved--or guarantee criteria may be applicable, depending on the facts surrounding the supporting entities and whether the facts are in the scope of the criteria addressing joint support or the guarantee criteria. In some markets a government or other entity may cover shortfalls in unpaid claims if the primary LMI provider fails to do so. We expect to give more credit to LMI coverage if the implied ICR under a joint support approach is above the ICR for each of the insurers.

17. A key principle in deriving the capacity to pay in table 2 is that full credit will be given to an insurer's capacity to pay if the insurer's ICRs are the same as or higher than the rating on the security. However, only partial credit will be given if an LMI provider's ICR is lower than the rating on the security, to reflect our expectation that the insurer would only perform part of the way through a rating stress that is higher than the insurer's own rating. The lower the ICR of an LMI provider relative to the rating, the lower the capacity to pay. For example, LMI from a 'AA-' rated provider would

be allocated credit of 65% at 'AAA', or a haircut of 35%. For insurers with an ICR below 'BBB-' and securities rated in the 'A' category or below, we propose to apply a larger reduction in credit for each notch reduction in the insurer's ICR than we would apply at higher rating levels (see table 2).

18. A greater haircut applies when securities are rated 'AAA' compared with other rating levels, and a greater haircut applies when securities are rated at an investment-grade level compared with a noninvestment grade level. Noninvestment-grade insurers are not given credit for LMI coverage in the analysis of any securities rated 'AA-' or higher.

Table 2

Credit Given To Capacity To Pay Based On The ICR Of Providers Of Insurance, Asset Guarantees, And Supports (%)

	Issuer Credit Rating Of Providers Of Insurance, Asset Guarantees, And Supports															
Ratings on Securities	**AAA**	**AA+**	**AA**	**AA-**	**A+**	**A**	**A-**	**BBB+**	**BBB**	**BBB-**	**BB+**	**BB**	**BB-**	**B+**	**B**	**B-**
AAA	100	85	75	65	55	45	35	25	15	5	-	-	-	-	-	-
AA+	100	100	90	80	70	60	50	40	30	20	-	-	-	-	-	-
AA	100	100	100	90	80	70	60	50	40	30	-	-	-	-	-	-
AA-	100	100	100	100	90	80	70	60	50	40	-	-	-	-	-	-
A+	100	100	100	100	100	90	80	70	60	50	30	10	-	-	-	-
A	100	100	100	100	100	100	90	80	70	60	40	20	-	-	-	-
A-	100	100	100	100	100	100	100	90	80	70	50	30	10	-	-	-
BBB+	100	100	100	100	100	100	100	100	90	80	60	40	20	-	-	-
BBB	100	100	100	100	100	100	100	100	100	90	70	50	30	10	-	-
BBB-	100	100	100	100	100	100	100	100	100	100	80	60	40	20	-	-
BB+	100	100	100	100	100	100	100	100	100	100	100	80	60	40	20	-
BB	100	100	100	100	100	100	100	100	100	100	100	100	80	60	40	20
BB-	100	100	100	100	100	100	100	100	100	100	100	100	100	80	60	40
B+	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80	60
B	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	80
B-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

3. Estimated claims payout ratio: Not all loss claims constitute a "valid" claim

19. While LMI may entitle the insured to claim losses on a defaulted loan up to the LMI coverage amount, not all claims are paid in full. This is due to the ability of the insurer to adjust a loss claim to reflect the policy coverage as well as shortcomings in the underwriting and servicing standards of the originator and/or servicer relative to the insured's servicing and underwriting obligations under the respective LMI policies. From an insurer's perspective, all valid claims will be paid unless an insurer no longer has the financial capacity to meet its payment obligations, because an insurance policy is a legally binding contract. However, the determination of what constitutes a "valid" claim can be challenged due to ambiguity in a policy or because the insured may not have met the terms and conditions of the policy.

20. A claims adjustment is the difference between a claim made and the claim payout. Claims adjustments can arise because a claim is not explicitly covered under the LMI contract, or because the terms and conditions in relation to

expected underwriting, servicing, and record-keeping standards may not have been fully met. Claims adjustments can be a reduction to the claim amount, a full denial of a claim, or a rescission, in which the contract is voided. The form and frequency of adjustments may also be influenced by local legal and regulatory regimes.

21. In some cases, a mortgage pool may reflect different claims-adjustment experiences. Based on the outcome of a qualitative assessment, we segment a mortgage pool's potential experiences into up to five risk categories--claims adjustment 1 to 5, or CA1 to CA5--and assume a claims-adjustment rate ranging from 10% to 40%.

B. Considerations for estimating claims pay-out ratio

22. Claims adjustments vary across markets and tend to increase as an economy experiences stress, in our experience. A claims adjustment can be a total rescission or partial adjustment for small fixed costs and for a few contracts, which can make comparative analysis and forecasting challenging. Any increase in claims adjustments will reduce the claims payout compared with claims made.

23. The magnitude of claims adjustments often reflects the practices of the insurer and the lender, as well as the alignment of ongoing servicing to insurers' expectations. Our estimate of the future claims-payout ratio considers four qualitative factors that we believe drive claims-adjustment levels, by capturing the effects of an insurer and a lender's operational and underwriting practices. The overall outcome of our analysis of these factors is the classification of potential claims adjustments into one of five categories.

24. The following four qualitative factors are part of the considerations in this assessment:

- Historical claims-adjustment experience, the nature of adjustments, the variability and actions taken to minimize future claims adjustments;
- Origination practices and procedures of a lender and its competitive market position and degree of market influence;
- The servicing practice of insured loans and its alignment to insurers' expectations, and the degree of ongoing communication with insurers; and
- The clarity of the LMI policy and the extent of policy exclusions.

25. We calculate the claims payout ratio as (1 – claims-adjustment rate). Table 3 sets out the application of claims-adjustment rates to the amount of credit to LMI, which vary, based on an assessment of the nature of the products in a pool of housing loans; the practices of lenders and mortgage insurers, which may differ by jurisdiction; and historical claims payout experience.

Table 3

Guidelines For Categorizations Of Insurer And Lender Practices					
CATEGORY	**CA1**	**CA2**	**CA3**	**CA4**	**CA5**
Claims Adjustment Rate	**10%**	**15%**	**20%**	**30%**	**40%**
1. Claims adjustment experience.	Minimal claims adjustment or low level of claims adjustment but made process improvements that is likely to lead to lower levels of claims adjustment.	Low level or moderate level of claims adjustment but made process improvements that is likely to lead to lower levels of claims adjustment.	Moderate level of claims adjustment, or mitigating measures have been implemented to improve high claims adjustment outcomes, with recent experience in relevant vintages showing meaningful improvement in claims adjustment outcomes.	High level of claims adjustment and limited mitigating measures have been implemented to improve claims adjustment outcomes, with recent experience in relevant vintages showing moderate improvement in claims adjustment outcomes.	Very high level of claims adjustment. None or limited mitigating measures have been implemented to improve claims adjustment outcomes.
2. Origination practices and procedures. Strength of competitive position and underwriting.	History of successful underwriting for a long period, typically about 20 years, through economic downturns. Typically have market-leading position. Influential underwriting position.	History of successful underwriting for a long period, typically about 10 years, through slowing economic activities. Typically have midmarket competitive position and influence.	Operating for a medium time period, typically about 5-10 years. Consistent product and underwriting approach. Typically have moderate market position and influence, or contributes to meaningful market competition to market leaders.	Short operating history, typically 3-5 years. Inconsistent product and underwriting approach. Very small market position with limited influence.	Underwriting guidelines and practices are not documented, not clear to the originator/servicer, ambiguous, or unclear. Small or near startup operation that may be facing a high level of competition or is a market follower.
3. Servicing practices and alignment with Insurer requirements. Checks, compliance. Experience in managing LMI claims.	Clearly documented servicing guidelines. Detailed and frequent procedures and systems in place to review the servicer's adherence to the LMI policies and procedures.	Moderate level of documentation of servicing guidelines. High level procedures and systems, or infrequent review of servicer adherence to the LMI policies and procedures.	Documentation of servicing guidelines may be minimal. Infrequent and irregular review processes are in place to assess compliance with LMI policies and procedures.	Servicing guidelines and practices are ambiguous or not clear, and there are only limited/superficial reviews in place to assess compliance with LMI policies and procedures.	Servicing guidelines and practices are not documented, not clear to the originator/servicer, ambiguous, or unclear. There is no regular review in place of the servicer's practices or the servicing function is delegated to third parties without clear guidelines or oversight.
4. Clarity of policy and limited nonstandard exclusions.	The policy wording is clear and there are no nonstandard policy exclusions.	The policy wording is clear, and there are minimal nonstandard policy exclusions.	The policy wording is clear and there is a moderate level of nonstandard policy exclusions.	The policy wording is clear; however, there is a high level of nonstandard policy exclusions.	The policy wording is unclear or there is a very high level of exclusions, which could lead to uncertainty of claims payment.

26. The claims-adjustment rate refers to the potential rate assumed during stressed economic conditions. Table 3 shows the stressed claims-adjustment rate for 'AAA' rated securities. The assumption for the 'AA' and lower-rated categories is a percentage of the 'AAA' claims. The percentages are 80% for the 'AA' category, 65% for the 'A' category, 50% for the 'BBB' category, and 35% for below the 'BBB' category. The claims-adjustment rate assumed would be based on the best fit of the practices of an insurer and lender into the factors of each of the CA1 to CA5 categories. The practices of an insurer and lender should meet a majority of the four variables outlined in table 3 to be placed in a particular category. However, if the claims-adjustment experience indicates an assumed claims-adjustment rate category that is higher than the other variables in table 3, then we would likely apply a higher risk category to reflect the observed

claims-adjustment experience. For situations in which explicit measures have been entered into between insurers and the insured to limit claims adjustments, such measures will be assessed for their merits and may result in a lower adjustment-rate assumption. We classify government insurers into CA1, and apply a claims-adjustment rate of 10%--unless the nature of the insurance precludes claims adjustments or warrants lesser amounts--to reflect our observation of very low claims adjustments from such entities during periods of stress. These lower claims adjustments reflect the fact that government insurers typically have a strong social policy focus. Table 3 applies if actual claims-adjustment rates for a government insurer began to demonstrate the attributes of the private sector insurers.

C. Qualitative assessment of drivers of claims adjustments

27. As described in paragraph 20, we give consideration in our methodology to qualitative factors that we believe drive claims adjustment levels. We do this to set a floor for potential claims adjustments that are based on our classification of mortgage insurer and lender practices.

28. We base our claims-adjustment assumptions on the results of this assessment. The claims-adjustment rate that we apply would reflect our classification of each lender and mortgage insurer in accordance with table 3. When our observations indicate that the claims adjustment implied by table 3 is not a sufficient haircut, we adjust the assumptions in table 3 to reflect those observations.

29. Although Table 3 includes the key factors that we consider when classifying each transaction, other factors may influence the categorization, such as whether the LMI is underwritten as a pool policy or under a delegated underwriting authority--and the controls and checks around those underwriting approaches--rather than on a loan-by-loan basis, and the income-verification underwriting process undertaken.

1. Historical claims-adjustment experience

30. An originator's historical track record is often an important consideration when we estimate future potential claims adjustments. We therefore assess the average historical claims-adjustment level experienced by a lender securitizing assets and the measures that have been put in place to mitigate future claims adjustments.

31. When we analyze historical performance, we consider the history, significance of the observations, the nature of claims, and any significant positive or negative changes to practices. For example, we believe a low level of claims with adjustments during a period of a number of years for a very large portfolio of loans combined with clearly documented servicing guidelines could qualify for CA1 in the historical performance assessment. However, significant claims-adjustment experience or ambiguous guidelines could suggest a severe impact for future performance and, absent strong mitigating measures, we would likely assess such observations as warranting a higher claims-adjustment category.

32. We consider the frequency and severity of claims adjustments. For example, loan portfolio A may have a higher frequency of claims adjustments than loan portfolio B, but a significantly lower severity of adjustments, resulting in lower net claims-adjustment amounts. Portfolio A would be more likely to qualify for a higher claims-adjustment categorization than portfolio B, based on historical experience.

33. We give less weight to the historical claims-adjustment performance when we believe significant changes or measures implemented mitigate past performance. For example, while an increase in claims adjustments was most pronounced

in the U.S. during its housing market downturn in 2007-2009, particularly in regards to rescission rates, the experience triggered many changes in market practices that are likely to result in lower levels of claims adjustments in the future. Even in countries such as Australia, where claims payouts have been high, there were ambiguities in claims processes. Policies and practices have been clarified to minimize such issues. Where such changes have taken place and we believe they would mitigate the future claims adjustment, we give greater qualitative consideration to such changes than the historical experience.

34. In the case of startup businesses, for which historical data are limited, we are more likely to classify the transaction into CA5 until data are available to justify a different classification.

2. Origination and underwriting practice

35. When assessing origination and underwriting practices, we consider factors such as the regulatory framework in a jurisdiction, industry practices in relation to LMI, the nature of the loan product, the risk appetite of lenders, the length of their experience and market influence, income-verification standards, LMI underwriting approach, and the overall risk tolerance of a lender. For example, a history of successful underwriting that would qualify for CA1 or CA2 may be a result of a combination of good practices, including the following:

- A strong jurisdictional regulatory framework, such as mortgage lending being regulated by the Office of the Superintendent of Insurance and underwriting best practices by the Australian Prudential Regulation Authority;
- A highly integrated LMI practice, such as the prevalence of LMI in Australia setting a strong, consistent industry-wide underwriting practice;
- LMI providers are monoline insurers that are more involved in underwriting processes and have strong oversight to promote best practice to mitigate risks;
- Loan products are plain vanilla-style full-documentation loans that give very little room for missing information; and
- Lenders have clear underwriting guidelines with practices clearly aligned to the terms and conditions expected of LMI policy terms and conditions.

36. Some of the above positions are reinforced by the market position of the lenders and their ability to influence underwriting standards.

37. Certain jurisdictions, such as in the U.S., may possess multiple originators within securitizations, as well as previous loan transfers among aggregators that provide second-level underwriting. As a result, we consider the strength of an insurer's originator/aggregator approval process when considering the assessment of the origination and underwriting practice. The extent that the insurer performed its own loan underwriting (nondelegated) can also influence our assessment.

3. Servicing practice

38. The servicing practice of insured loans and its alignment to insurers' expectations, along with the degree of ongoing communication with insurers, can affect the amount of claims paid, particularly during the foreclosure period. However, few complete claims denials or rescissions are related to servicing practices, in our experience.

39. To qualify for CA1 in the servicing category, we expect to see clearly articulated servicing guidelines and detailed and frequent procedures and systems in place to review the servicer's adherence to the LMI policies and procedures. However, there are circumstances in which the detailed level of information may not be feasible or practically

available in every jurisdiction, and we might adopt a different approach to incorporate the assessment of servicers. For example, in the U.S., multiple servicers may exist in securitizations, as well as multiple servicing transfers. Therefore, the insurer's practices and procedures for interacting with servicers, such as oversight and participation in default management, would be the driving factor when assessing servicing practices.

4. The clarity of the LMI policy

40. The clarity of an LMI policy and the extent of policy exclusions are critical considerations in claims adjustment. Policies with ambiguous terms and conditions can give rise to conflict and disputes in the determination of the validity of a claim. The more stressful the economic and housing market downturn, the more parties may be incentivized to maximise their outcome according to the policy. A clearly written policy, combined with strong underwriting practices by the originator or the insurer with strong insurer oversight, in some cases, and servicing standards consistent with the expectations of terms and conditions in LMI policies should help to minimize grounds for claims adjustments or significant increases in claims adjustments during periods of deteriorating economic conditions. Claims adjustments could still arise due to the failure of the insured to meet the terms and conditions of the policy.

5. A forward-looking approach

41. When applying these criteria, we base our final claims-adjustment assessment on our forward-looking view. We would usually lower the categorization of an insurer's practices in table 3 to a worse category if any of the following were to occur and claim adjustments in relation to insured securitized mortgage loans are likely to be affected as a result:

- We observe changes in the stated coverage terms of an insurer's policies that reduce policy clarity;
- We project an increased claims-adjustment rate, based on current trends in claims-adjustment rates, a change in LMI claims practices, underwriting, a change in LMI risk-management practices, or concerns about existing practices that we believe would ultimately lead to a higher claims-adjustment rate; or
- We project a more stressed macroeconomic outlook in combination with insurer practices or credit conditions that we believe would ultimately lead to a higher claims-adjustment rate.

42. To assess the credit stability of the ratings to be assigned, we may incorporate current trends into our forward-looking cash-flow projections during the outlook period. Relevant asset characteristics may include current portfolio performance, repayment and prepayment speeds, and the resulting expected weighted-average life of the mortgage loans. Relevant structural characteristics may include the remaining substitution/reinvestment period (if any), and whether the payment structure supports retention or accumulation of credit enhancement for the applicable security, such as sequential rather than pro-rata pay structures.

43. In the case of a security rating in excess of the sovereign rating, we would apply stresses outlined in the then-current criteria regarding ratings above the sovereign for structured finance (refer to "Ratings Above The Sovereign - Structured Finance: Methodology And Assumptions," published Aug. 8, 2016).

6. Market relevance in criteria application

44. The application and use of mortgage insurance varies globally. As such, the guidelines provided in table 3 may have different relevance, depending on the country-specific application and use of mortgage insurance. Claims adjustments have been most pronounced in the U.S. since the downturn in the real-estate market, but this experience has also resulted in changes to market practices. For instance, while many claim denials/rescissions in the U.S. were based on fraud at the origination of the mortgage loan, many changes have been implemented in that country to strengthen loan

underwriting quality, such as qualified mortgages and the "ability to repay" rule. We believe such measures should help to decrease denial/rescission activity for loans originated after the implementation of these changes. The quality of mortgage providers and the type of insurance provided may also affect insurers' claims payout ratios. Consequently, the use of historical claims experience should be considered in the context of changing market practice.

45. Additionally, potential changes in underwriting practice of both lenders and insurers could impact future claims practice. Consequently, we may observe and use elements of our insurance ratings enterprise risk-management (ERM) score to supplement the guidelines outlined in table 3 for particular insurers. We also might consider loan-level due diligence, loan-originator representation and warranties, and servicer experience with mortgage insurance when deciding on the appropriate category, as outlined in table 3. For example, where a very poor ERM score exists, we may follow up with the LMI provider to determine if an adjustment to its category ranking is necessary.

APPENDIX 1

46. The estimated credit to LMI is applied against the estimated losses of the defaulted loan. In calculating the amount of credit to LMI, where the coverage is stated as a percentage of the insured loan balance plus accrued interest and certain costs, the amount of LMI coverage is calculated from the insured loan (insured loan balance plus accrued interest and certain costs). For example, a A$100,000 insured loan with a policy that states loss coverage of up to 20% of the insured loan plus accrued interest and expenses would benefit from coverage for losses of up to A$23,000. This amount of LMI coverage is then applied--subject to other haircuts--against the estimated loss on the loan.

47. LMI policies can sometimes state coverage as a total dollar of loss from the portfolio (i.e. "pool policies"). For example, the insurer will pay all valid claims up to a predetermined amount, which is an option defined as a percentage of the total loan balance. In these cases, the estimated credit to LMI is applied as if each loan has 100% loss coverage, subject to the stop-loss percentage. The Appendix includes some examples of typical applications of credit to LMI. It is important to note that contractual terms can vary and the credit to LMI will be applied in accordance to the terms of the policy.

A. Example calculation of credit to LMI

48. A pool of residential mortgages assessed under Standard & Poor's "Australian RMBS Rating Methodology And Assumptions," published on Sept. 1, 2011, generates a credit enhancement number of 10%. This pool benefits from lenders' mortgage insurance on all loans that covers 100% of any loss on the loans. The insurance is provided by an 'AA' rated lenders' mortgage insurer, and the class A note is rated 'AAA'. In assessing the credit to LMI, we apply the following formula, outlined in paragraph 11.

Credit to LMI = Stated coverage x estimated insurer capacity to pay x estimated claims pay-out ratio*

*Estimated claims pay-out ratio equals (1 – claims-adjustment rate)

49. The stated coverage in this example is 100%. The estimated insurer capacity to pay based on an 'AA' rated insurer, and 'AAA' rated security, from table 2 is 75%. The estimated claims pay-out ratio reflects the categorization of the lender and insurer combination under table 3 into CA2 due to a low level of claims adjustments, the lender's successful

history of underwriting for the past 12 years, and its midmarket competitive position. The servicer has clearly documented servicing practices and detailed procedures to review adherence to LMI policies and procedures.

50. Based on this classification, the claims-adjustment rate for CA2 is 15%. In this example:

    Credit to LMI = 100% x 75% x (1 – 15%)

    Credit enhancement after credit to LMI = 10% x (1 – 63.75%) = 3.63%

51. This example also applies to pool policies for which the insured pool benefits from LMI on all loans covering 100% of any loss on the loans and there is no stop-loss trigger as a percentage of the pool balance, or that if such a trigger was part of the contract, then it would be above the estimated credit enhancement number.

B. Example calculation of credit to LMI for a pool policy with a stop-loss trigger of 5%.

52. In this example, we assume that the same portfolio illustrated in "A. Example calculation of credit to LMI" has a pool policy in which the insurer will pay 100% of the losses on individual loans until the total losses covered reach 5% of the pool balance. Despite our estimated credit to LMI being 6.37%, we will be giving credit to a maximum of 5% because the stop-loss trigger is at 5%. Consequently, additional credit enhancement after LMI would be 5% (10% - 5%).

Table 4

Example Calculation Of Credit To LMI For A Pool Policy With A Stop-Loss Trigger Of 5%

		(%)
(1)	Estimated portfolio credit enhancement (CE)	10.00
(2)	Estimated capacity to pay	75.00
(3)	Estimated claims pay-out ratio	85.00
(4)	Credit to LMI (%) = (2) X (3)	63.75
(5)	Estimated loss payout by LMI = (1) X (4)	6.37
(6)	Estimated CE after giving credit to LMI (%) = (1) - (5)	3.63
(7)	Pool policy stop loss trigger: 5% of pool balance	5.00
(8)	Estimated loss payout by LM after stop-loss trigger = (Min ((5), (7))	5.00
(9)	Estimated CE after taking into account of stop loss trigger = (1) - (8)	5.00
(10)	Incremental CE due to stop loss trigger = (9) - (6)	1.38

53. Continuing the example, if the stop-loss trigger were revised to 8% and our estimated credit to LMI were 6.37%, as per our calculation, then the additional credit enhancement would be 3.63% because the stop-loss trigger would be higher than the credit we would give to LMI.

C. Example of cancelable policy

54. As an example, we could assume a loan has an LTV ratio of 95% and a cancellable LMI policy. Based on our assessment of all factors, our rating scenario of expected losses is 40% for the loan and we have assessed effective credit to LMI to be 20%, so we expect a net of 20% of estimated losses to be covered by other forms of support. We assume this policy is cancelable at an LTV ratio of 78%, and that at this LTV ratio the rating scenario of expected losses is 25% and there is no policy coverage available because it is canceled. To withstand the specified rating scenario, we would thus expect credit support of 25%, which is the higher of estimated losses with the policy still in place (20% in this case) and estimated losses with the policy canceled (25% in this case).

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APPENDIX 2

These criteria were published and became effective on Feb. 2, 2015, except in markets that required prior notification to, or registration by, the local regulator. In these markets, the criteria became effective when so notified by Standard & Poor's or registered by the regulator.
These revised criteria supersede the LMI-related assumptions and methodologies referenced in the following articles:

- "Methodology for Assessing The Support From The NHG Guarantee in Dutch RMBS Transactions," published Feb. 12, 2014
- "New Discounts Reflect Changes To Mortgage Insurer Rating Assumptions In The Municipal Housing sector (as of Sept. 2, 2010)," published Sept. 15, 2010.
- "Methodology And Assumptions For Primary Mortgage Insurance In Mexican RMBS," published June 17, 2010.
- "Standard & Poor's Revises Methodology And Assumptions For Primary Mortgage Insurance In U.S. RMBS," published Feb. 6, 2009.
- "Australia And New Zealand RMBS: Analyzing Credit Quality," published Feb. 21, 2007.
- "Canadian Residential Mortgage-Backed Securities Criteria," published Oct. 23, 2006.
- "Joint Support Benefits For Japanese Banking Group RMBS Transactions," published May 17, 2006.

Changes introduced after the original publication

RELATED CRITERIA AND RESEARCH

Related Criteria

- Ratings Above The Sovereign - Structured Finance: Methodology And Assumptions, Aug. 8, 2016
- Dutch RMBS Methodology And Assumptions, Dec. 24, 2015
- U.S. Government Support In structured Finance and Public Finance Ratings, Sept. 19, 2011
- New Zealand RMBS Rating Methodology And Assumptions, Sept. 14, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Canadian Residential Mortgage-Backed Securities Criteria, Oct. 23, 2006

Related Research

- As The U.S. Economy Recovers, Mortgage Insurers Are Having A Tougher Time Bouncing Back, March 2, 2011
- What Mortgage Insurers Are Doing To Curb Losses Until The Housing Recovery, Oct. 20, 2009

BIBLIOGRAPHY

- Mortgage Insurance: Market Structure, Underwriting Cycle and Policy Implications, Consultative Document, Basel Committee on Banking Supervision, BIS, Aug. 2013
- Financial Stability Review, Reserve Bank of Australia, September 2013
- Growing Trend of Mortgage Insurance Claim Denials Are Costing Servicers, Austin Kilgore, Feb. 26, HousingWire, 2010
- Mortgage Default Insurance: Credit Enhancement for Homeownership, Roger Blood, Housing Finance International, September, pp. 49-59
- Regulation of Mortgage Default Insurance: Principles and Issues, Blood Roger, 2009a, Housing Finance International, March, pp. 20-29

- Mortgage Insurance, Roger Blood, 2009b, Housing Finance Policy in Emerging Markets, Chapter 13, pp. 325-360 World Bank.
- Monoline Restrictions, with Applications to Mortgage Insurance and Title Insurance, review of Industrial Organisation, Vol. 28, pp. 83-108

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