



Rating Methodology for Private Financial Institution RMBS (July 2009 revised version)

(This report is an English translation of the original report in Japanese.)

Rating and Investment Information, Inc. (R&I) has revised its rating methodology for Residential Mortgage-Backed Securities (RMBS) issued by private financial institutions. The following points have been newly added to the April 2007 revised version: R&I's view on servicers, and the ability of credit guarantee companies.

1. Points to note in analyzing RMBS

The underlying assets of RMBS are widely varied. The main institutions offering residential mortgages are also varied and include the Japan Housing Finance Agency (JHF), banks, non-bank institutions and mortgage banks. Likewise, credit requirements, income conditions for borrowers, interest and repayment terms, and security conditions are also varied. The uses of residential properties purchased by borrowers are also diverse, ranging from condominiums or single dwellings for residential purposes to apartment units and investment condominiums for tax saving and investment purposes.

The various kinds of loans available also have their own respective conditions and these have an impact on factors such as defaults and prepayments. R&I verifies the originators' and servicers' sales policies and the management and collection framework through onsite investigations (due diligence meetings) to ascertain various aspects of the loan products, such as the credit of the loan pool to be securitized and credit requirement policies. R&I then uses these findings as references for future scenarios.

(1) Ascertaining types of interest

Interest rates on residential mortgages can be divided into three general types: long-term fixed interest rates (for the entire period), variable interest rates, and fixed interest rates with options. Each type of interest rate has positive and negative aspects, and it is important to understand these characteristics. A short-term fixed interest rate mortgage with advantageous interest rate conditions¹, for example, keeps the initial mortgage loan payment amount low, and the obligor feels a very small payment burden. Because of the possibility the payment amount will rise after the fixed interest rate period ends and obligors' sense of the payment burden will grow, however, the affect on defaults and prepayments is surmised to be significant. In addition, caution must be exercised in any analysis, including obligor trends, when considering the interest rate increase phase, because rising rates will greatly affect defaults and prepayments.

(2) Credit standards and sales policy of the originator and attributes of the borrowers

The characteristics of the loan pool to be securitized can be ascertained by confirming the credit standards and sales policy of the originator and the attributes of the borrowers. In this regard, the income level of the borrower, the loan to value² (LTV), the debt to income ratio³ (DTI), the purpose in

¹ In efforts to promote residential mortgages, financial institutions undertake interest rate incentive campaigns where they establish conditions for a limited period and promote residential mortgages which are applicable to certain conditions.

² A value where the outstanding loan balance is divided by the value of the property collateral. Reciprocal numbers in this ratio with 100% as the upper limit become reference values of the recovery rate from the collateral of the default loan.

³ This is calculated by dividing the monthly repayment amount by 1/12 of the borrower's annual income. The amount fluctuates according to major life events such as unemployment that affect the borrower.

borrowing (for example, whether it is a new loan or refinancing of an existing loan) are important factors. Attributes such as the borrower's occupation, the priority of mortgages, and the location of the residential properties are used as a reference in making adjustments in the default curve and in making assumptions about the recovery rate of default loans.

(3) Method of payment of guarantee charges

There are many general residential mortgages which, in place of a requirement for joint surety, carry a guarantee from a credit guarantee company. There are cases where the guarantee charges are paid directly by the borrower as well as cases where financial institutions assume responsibility for the charges. In many cases, when the financial institution assumes such costs, it adds an amount equivalent to the guarantee charges onto the interest payments. It is essential to confirm how the guarantee charges on the loans to be securitized will be paid.

(4) Subscription in group credit insurance, fire insurance and earthquake insurance, methods of payment of insurance premiums and insurance premium levels

In general residential mortgages, the borrower as a rule takes out group credit insurance as protection against the borrower's debts being passed on to the surviving family in the event of the borrower's death. In such cases, the outstanding amount of the mortgage loan becomes the amount insured. R&I confirms the payer of the group credit insurance premium, its level, and the age composition of the borrowers in the securitized loan pool. This is because in cases where financial institutions assume responsibility for the group insurance premiums, there are many securitized loans where an upper limit is set for paying group insurance premiums from the cash flow following the insolvency of the originator.

In the event when servicer changes, the trust bank, which is the trustee for the loan receivables, may choose from three options: (i) take over the existing group credit insurance agreement, (ii) sign a new group credit insurance agreement, or (iii) not sign a new group credit insurance agreement and allow the loan to go into default upon the death of the borrower. When the average age of the borrowers at the time of securitization is relatively low and the borrowers decide to make sequential payments using a repayment method where priority is given to the senior portion, there is a strong likelihood that the credit enhancement will increase with the passage of time, so R&I believes that the risk of insurance premiums increasing more than assumed with the age of the borrowers is limited. On the other hand, when the average age of the borrowers when securitizing is high or the number of borrowers is small, it is considered necessary to especially note risks such as the risk of insurance premiums rising along with an increase in the death rate and the risk borrowers will become unable to continue the group credit insurance.

R&I also confirms whether or not the borrowers have fire and earthquake insurance coverage. Earthquake insurance is a special rider to fire insurance and, since the major Kobe Earthquake in 1995, it seems that there has been an increase in the number of households with a supplemental agreement for earthquake coverage. Nevertheless, the average national level in FY2007 was 21.4%, still a low level. At the time of the rating analysis, R&I confirms the level of insurance premium rates and the method of payment, and following the change of the servicer, R&I confirms whether the scheme provides for measures to ensure that, insofar as possible, the borrowers can obtain the same type of insurance agreement following a changeover in the servicer when the trustee (i) takes over the insurance agreement and (ii) signs a new agreement.

(5) Regional Concentration Risk

Regional concentration risk takes into consideration regional economic conditions and natural disaster risks such as earthquakes. R&I gathers information on the area in question such as the rate

of unemployment, the industrial structure, trends in land prices, and the distribution of the residential locations, and incorporates these into the stress of the credit enhancement estimate. R&I investigates natural disaster risk by examining the distribution of the residential locations and, if the distribution is adequate, R&I believes there is no need to add an excessively high level of stress.

Assistance measures for victims of the Kobe Earthquake who had residential mortgages extended only to providing them with extensions on their repayments or low-interest financing. There were cases where borrowers, to rebuild their residences, ended up with overlapping residential mortgages. With such borrowers, it can be conjectured that the LTV and DTI increased and the capacity to pay decreased.

2. Default ratios and early repayment ratios

The RMBS credit enhancement is calculated through a cash flow analysis. Factors of particular importance here are the default and prepayment rates. Based on the historical data from the originator, a standard scenario is assumed for a default rate curve and prepayment rate curve to take into account the past months. When it is difficult to do an analysis due to insufficient data, for example, when the subject period of the historical data is too short, R&I uses as benchmarks portfolio data, etc. of the JHF which reflects the overall trends of the economy of Japan and, using attributes such as product characteristics, periods during which financing was executed, LTV and DTI, R&I decides on a standard scenario. If the product characteristics differ from those of the JHF's portfolio, R&I establishes a standard scenario using previous securitizations and case studies it has analyzed in the past. If the available data is limited, the analysis will be conservative.

In the cash flow analysis, R&I applies a stress scale factor for the target rating on the standard scenario curve and calculates the credit enhancement amount. In ordinary RMBS loans, there is a large number of borrowers, so R&I decides on a stress scale factor for the default rate curve using the scale factor used in securitized loans (ABS) for individual borrowers as a reference. For general residential mortgage obligations, R&I takes into consideration obligations where the payment sequence is the highest for borrowers and sets the scale factor a little lower than that used for ABS. R&I however may use a stress scale factor used for ABS when the obligor concentration ratio is high. Furthermore, since residential mortgage credit is long-term and prepayment depends on the interest rate conditions and economic trends, the stress scale factor on the prepayment curve takes into consideration trends in fluctuation risk of the prepayment rate in the future and sets it at a conservative level. Prepayment consists of lump sum repayments (generally, refinancing) and partial repayments, and it can be assumed that borrowers for whom other financial institutions accept refinancing are borrowers with relatively high creditworthiness. Borrowers who make partial prepayments are also persons with relatively sound payment capacity. The average outstanding period for the loan pool until maturity becomes shorter with the occurrence of prepayments, but it can be assumed that the ratio of borrowers with high creditworthiness also simultaneously drops and the monthly default rate rises. Conversely, when the prepayment rate is low, the average outstanding period of the loan pool until maturity increases, but it can be assumed that a large number of borrowers with high creditworthiness remain in the remaining loan pool and the monthly default rate falls. In other words, for a loan pool originated according to certain credit standards, R&I believes the cumulative default rate would remain within a certain range regardless of the level of prepayments.

Table 1 Stress Scale Guidelines for Target Ratings for RMBS and ABS Products

| | Default Rate | | Prepayment Rate | |
|-----|--------------|------|-----------------|-------------------|
| | RMBS | ABS | RMBS | ABS ^{注)} |
| AAA | 2.75 | 3 | 0.50 | 0 |
| AA | 2.29 | 2.5 | 0.60 | 0 |
| A | 1.83 | 2 | 0.70 | 0 |
| BBB | 1.60 | 1.75 | 0.75 | 0 |

Note: In view of the characteristics of ABS subject loans and the fact that the term is short, there are cases where the stress for the prepayment rate is conservatively set at "0" times.

3. Interest rate scenarios

Just as residential mortgages are available with fixed interest rates and variable rates, there also are fixed interest rate and variable interest rate RMBS, and the interest rate scenario test is important for calculation of the credit enhancement amount. When the interest on a residential mortgage is fixed and the interest on RMBS payments also is fixed, future interest rate fluctuation risk is limited. However, when the interest rate on either a residential mortgage or the RMBS payments is variable, or when the interest rates on both payments are variable, performing an analysis using differing interest rate scenarios is important because the risk will vary depending on future interest rate fluctuations.

The three risks generally assumed as interest rate risks for RMBS are negative carry risk, mismatch risk and the risk that principal repayment amount will decrease when interest rate rises.

Negative carry risk is the risk the RMBS interest payments and costs associated with securitization will exceed the residential mortgage interest payments. The probability of this risk being actualized is high when the interest rate differential between the initial standard interest rate and the RMBS interest rates cannot be maintained, and basis risk occurs. For ordinary RMBS, payments on the portion subject to negative spread are made from the principal collection portion of the residential mortgage payments, which dilutes the resources available for RMBS principal redemption. Therefore in its rating analysis, for the stress interest rate scenario R&I will calculate the projected amount that will be allocated from the principal collection funds to the RMBS interest and various costs, and incorporate this amount into the credit enhancement.

Mismatch risk refers to the risk that arises whenever there is a difference (mismatch) in timing for determining the standard interest rate on the residential mortgages and the RMBS interest rate. For example, assuming the RMBS interest rate is linked to monthly market interest rates and residential mortgage interest rates are revised twice a year, if a large change occurs in the interest rate environment there is a possibility a mismatch will occur as a result of the time lag in setting the interest rates. Because it uses interest rate scenarios that adequately consider stress when analyzing RMBS structures, R&I believes mismatch risk is limited and is not a problem. R&I will, however, incorporate adequate consideration of mismatch risk in its analyses of negative carry risk.

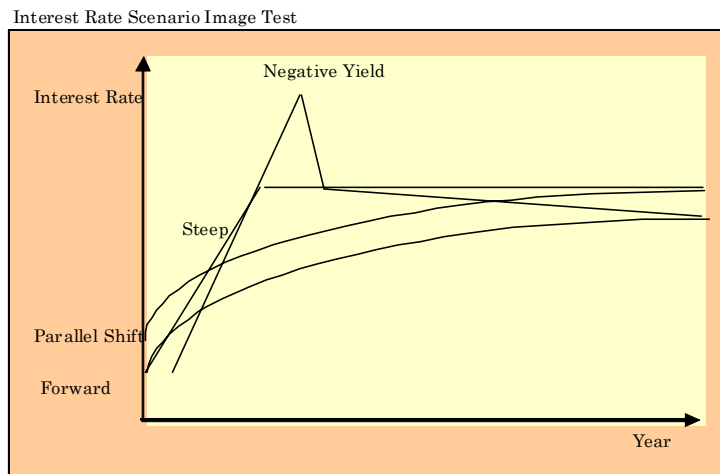
An interest rate scenario is generally prepared by taking into consideration the characteristics of the underlying assets of each loan product. Generally the scenario on which it is based is the implied forward rate of the market interest rate and, if the standard interest rate is long-term prime rate, it is estimated on the basis of an implied forward rate of a 5-year swap rate⁴. For example, if the standard interest rate of a residential mortgage is long-term prime rate and the interest payment for RMBS are based on 1-month yen LIBOR (London Inter-Bank Offered Rate), while the pattern of fluctuation of the standard interest rate of the underlying assets and the RMBS interest payments differs, the following four interest rate scenarios are established taking into consideration the

⁴ Basis risk exists between the long-term premium rate and the 5-year swap rate

structure of the interest rate term making the incomings and outgoings consistent:

- (1) when interest rates are moving in accordance with the forward rate curve
- (2) when interest rates have suddenly risen above the forward rate curve
- (3) when the interest rate is running parallel to the forward rate curve (parallel shift)
- (4) when a negative yield situation occurs

Basically, these four patterns and their combinations are tested and the most conservative credit enhancement amount is adopted⁵.



There is a rationale in each of the above interest rate scenarios in (1) through (4). When both entry interest rate and exit interest rate are variable interest rates, the most severe scenario is (4). In negative yield situations, negative carry⁶ occurs without excess spread⁷. Situations where negative yield continues for a relatively long period occurs in circumstances where in the past there was a shift from a sudden rise to a downward trend in interest rate and the interest rate scenario is prepared taking these circumstances into consideration.

4. Recovery rates from default receivables

When deciding the credit enhancement of RMBS, one factor of importance is the possibility of recovery from default claims. Although losses can be recovered by disposing of the property supplied as security when a residential mortgage is in default, to estimate the final mortgage loan claims loss amount in its analysis of RMBS R&I will assume a recovery rate from default claims. R&I determines the level of the recovery rate for each target rating and the recovery period by taking into consideration factors such as the initial LTV for the loans, the assumed LTV for each time period passed⁸, the originators' actual recovery results from property dispositions in the past, the various costs such as auction fees that are necessary for recovery and trends in past land prices.

General residential mortgage claims of private sector financial institutions frequently come with a joint and several guarantee by a credit guarantee company which sets a right of pledge on the borrower's property as collateral under the company's right to indemnity for guaranteed obligations. The residential mortgage receivables are not secured claims, so they will not be assigned and transferred accompanying the assignment of securitized claims. Therefore, all that can be expected in the recovery of default claims following the insolvency of a credit guarantee company is a basic right

⁵ When the scenario does not result in a stress situation, a stress scenario appropriate for each loan is established.

⁶ Risk where the RMBS interest payments and costs associated with securitization exceed interest income and the source fund redemption of the senior portion becomes diluted.

⁷ The remainder after the interest on the senior portion and relevant costs are subtracted from the interest revenue.

⁸ Calculated by assuming the mortgage loan claims balance for each time period passed and the rate of decline in the property value established for each target rating

of claim for an execution of the guarantee by the company.

However, in view of the continuity of guarantee company operations, the probability of action under an administrator⁹ and past cases of settlement when credit guarantee companies became insolvent, R&I believes that a certain level of recovery can be expected from default claims as well. In its own analyses, R&I calculates the recovery rate using recovery results from the subrogated performance by guarantee companies and recovery results from property sales only as the basis for determining the credit enhancement amount for each target rating.

Table 2. shows examples of disposition undertaken at the time credit guarantee companies became insolvent and where the rights of pledge on the mortgages were established as collateral under the guarantor's right of indemnity.

Table 2 Examples of Disposition in the Insolvency of Credit Guarantee Companies

| Credit Guarantee Company | Period | Insolvency Procedures | Disposition |
|--------------------------|--------|--------------------------|---|
| Eidai Industries | 1978 | Corporate Reorganization | The status and rights of pledge of the collateral under indemnity rights of the credit guarantee company are transferred to a third party with the approval of the borrowers etc. |
| Life | 2000 | Corporate Reorganization | The full amount of the guaranteed claims become common benefit claims (kyoeki saiken) and guarantee business continues. |

At Eidai Industries, which made a declaration of corporate reorganization in 1978, the following three procedures were taken: (1) creditors established direct rights of pledge on the collateral property; (2) the administrator exercised prior rights of indemnity against the obligors and repaid creditors; (3) after obtaining the consent of the obligors, the administrator transferred the status of the credit guarantee company and the collateral with the guarantor's right of indemnity to a third party--Of the above three procedures, it seems that the number of claims which adopted the procedure in (3) was significant¹⁰. This course of action, without establishing new rights of pledge, had some advantages: (i) there was no collateral impairment risk arising from the existence of subsequent mortgagees and (ii) the guarantee obligations of the credit guarantee company became exempt. In the case of major consumer credit company Life, which entered into procedures for corporate reorganization in 2000, the administrator took into consideration that continuing Life's guarantee business, which was its main business, was essential for maintaining the viability of the company under reorganization and that if the approximate 250 billion yen in guarantee obligations became the subject of a lump sum repayment, the recovery rate to general creditors under reorganization would decrease. As a result, the administrator made the full amount of the guarantee claims common benefit claims (kyoeki saiken) which, in comparison with general claims under reorganization, was preferential treatment. It seems that special treatment was also given in disposition cases of other credit guarantee company insolvencies and careful consideration is generally given in the handling of guarantee obligations of credit guarantee companies in insolvency claims^{11,12}. In the above case, R&I surmises that in addition to the problem of lowering the recovery

⁹ The probability of the administrator selecting a procedure that is economically rational, straightforward and quick while continuing to ensure creditor equality is high. Therefore R&I believes that when there is a proposal from a creditor concerning changes pertaining to rights such as the transfer of the guarantee company's right of pledge, for example, there is a strong probability the administrator will approve the proposal provided the economic burden is small, the creditors will not be impaired and the disposition is simple and quick and social disruption will be avoided to the extent possible. (Reference: "Application of a Guarantee Company's Right of Pledge (Parts 1, 2 and 3)", Madoka Hashimoto, Attorney-at-Law, *Kigyō Houmu* 2006.2 No. 2, 2006.3 No. 3, 2006.4 No. 4)

¹⁰ Reference: "Corporate Reorganization Procedures and Housing Loan Guarantee Claims," Parts 1 and 2 by Hidefumi Sakamoto, Attorney-at-Law, NBL Nos. 277, 284

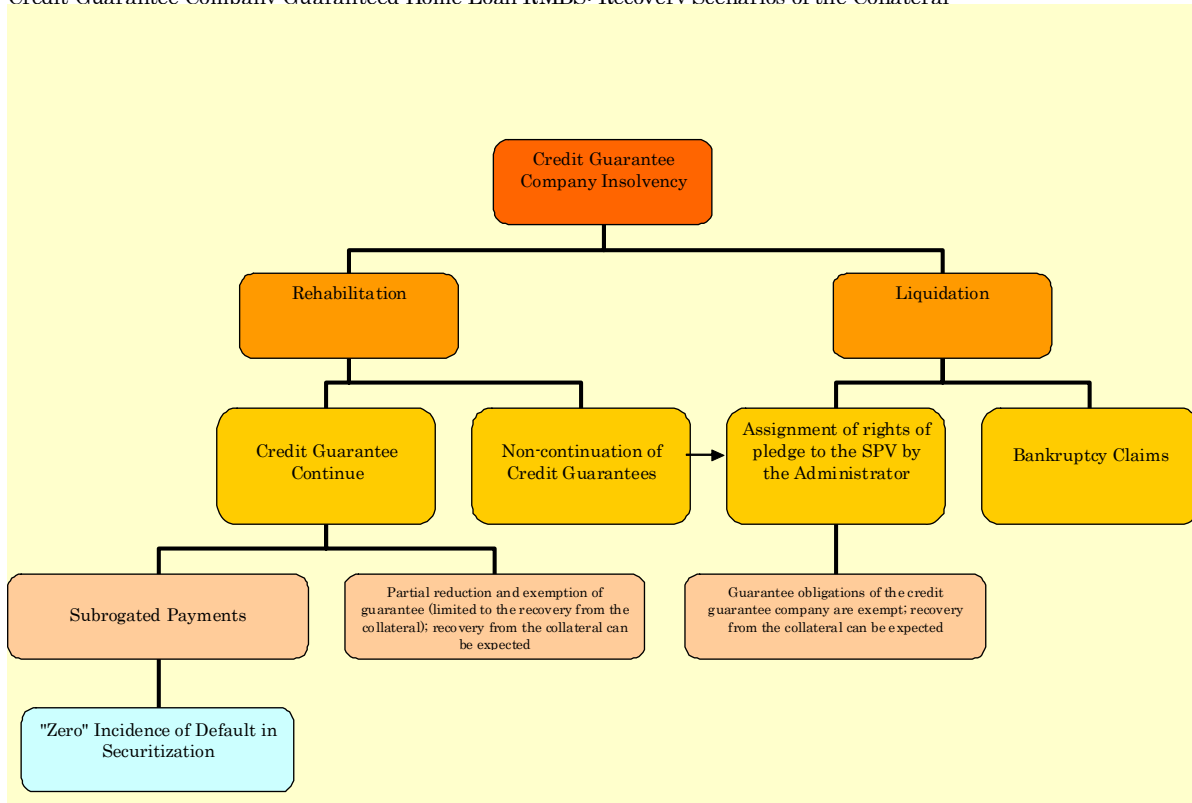
¹¹ R&I believes there is a possibility of loans becoming default claims when the amount of the guarantee claims is small, the number of obligors is small and the remaining guaranteed period is short, because the amount of social disruption and the affect from the decline in the recovery rate for general creditors in default is small.

¹² As a rule, when a credit guarantee company files for reorganization, the credit guarantee company will be unable to perform its loan guarantee obligations prior to approval of the reorganization plan. The incentive for a borrower who is in arrears to again begin making and continue its residential mortgage payments therefore will decrease.

rate of the bankruptcy claims and causing social disorder, the administrator had an awareness of the problem of briefly passing the benefits on to the residential mortgage obligors.

In recovery scenarios of the collateral for each product, R&I makes assumptions and examines bankruptcy disposition scenarios for each credit guarantee company and determines the rate of recovery from the default claims using as a reference recovery results from the subrogated performance by guarantee companies and recovery results from property sales only as the basis for determining the credit enhancement amount for each target rating. In cases where R&I adopts a scheme which sets the transferred right of pledge as the credit guarantee company's right of pledge through a trigger mechanism, R&I believes it acts as a support for the above assumptions because direct recovery can be expected from the right of pledge if the trigger functions effectively.

Credit Guarantee Company Guaranteed Home Loan RMBS: Recovery Scenarios of the Collateral



5. Ability of credit guarantee company

There are many residential mortgages, which are the underlying assets of RMBS, have a joint and several guarantee by credit guarantee companies. R&I makes basic assumptions and analyzes scenarios where the credit guarantee company becomes insolvent right after RMBS has been issued and subrogated payments cannot be received from the credit guarantee company, but in some cases R&I will incorporate the credit guarantee company's ability to perform the guarantee either in full or partially into its analysis. If, after the issue of RMBS, the credit guarantee company's credit guarantee operations proceed in a normal manner, it can appropriate subrogated repayments to redemption of the RMBS principal if defaults by borrowers occur.

6. Commingling loss risk, offset risk and liquidity risk

Commingling loss risk is risk where funds normally collected from the obligors in the course of securitization administration are not delivered to the SPV (Special Purpose Vehicle), which is the assignee of claims on the loan, due to the insolvency of the servicer, and the redemption resources for the securitized principal become impaired by being included as part of the assets of the bankrupt

entity. R&I calculates the amount required to accommodate commingling loss based on the schedule for delivery of the collected funds from the originator and the assumed collection amount. There are many products where this amount is added to the credit enhancement in provisions for avoiding servicer bankruptcy risk. R&I believes that when the servicer's creditworthiness is high, this risk can be accommodated by setting a trigger on the servicer's rating. The way it works is when a conflict with the rating trigger occurs, the servicer at that time makes a prepayment of an amount to accommodate any potential commingling loss. In the analysis of commingling loss risk for RMBS, when a financial institution eligible for deposit insurance is the servicer, withholding of perfection of the transfer of the underlying claims as against any obligor will be a problem. If the transfer is perfected as against the obligors, and the originator administers the collected funds paid by obligors as a separate deposit or suspense receipt, R&I assumes the funds will be treated as payment and settlement deposits or a specific settlement debt that is protected by deposit insurance, and that commingling loss will not occur.

For ordinary RMBS, the transfer is not perfected as against any obligors, and it had been uncertain whether the collected funds will become eligible for deposit insurance if the servicer fails, because the obligors themselves are unaware they are repaying their loans to the substantive creditor (SPV) based on a securitization scheme. The Securitization Forum of Japan's working group concerning securitized product risks and ratings held hearings with the Financial Services Agency, and confirmed that provided certain conditions have been met, the funds collected from borrowers by originators that are financial institutions correspond to "exchange transactions" as settlement debts under the Deposit Insurance Law, and as a rule are protected by the Deposit Insurance System. R&I makes an overall assessment of factors such as the probability of protection of the collected funds, the creditworthiness of the servicer (can it receive government support, etc.), the importance of the residential mortgage operations in the company and the servicer's administrative procedures including classification accounting and the systems support, and examines the necessity of accommodating commingling loss^{13,14}.

In ordinary RMBS, there is generally no notification of the borrowers of the assignment of residential mortgage claims. Even if borrowers were notified, it would be difficult to obtain unanimous approval. If borrowers have claims against the originator, they may offset them against obligations on their residential loans when the originator becomes insolvent. Therefore, it is important to monitor the amount available for offsetting, by examining the deposit amount in excess of the 10 million yen per obligor that is protected under the Deposit Insurance Law. When the creditworthiness of the originator is high, however, R&I believes that such risk can be accommodated by setting a trigger for the originator's rating and addressing the risk from excess earnings or other sources after a trigger event.

Liquidity risk frequently is accommodated by setting aside a reserve to pay the various costs required under the scheme and interest to the investors even if delivery of the collected funds to the SPV is disrupted by some event such as bankruptcy of the originator. Assumptions are made concerning the period until the replacement servicer begins operating normally, taking into consideration the period to replace the servicer, the period for notifying the obligors and other factors, and a cash reserve is established with funds to pay the various necessary costs and interest during this period, as a measure to address liquidity risk. When the servicer's creditworthiness is strong, however, R&I believes such risk can be accommodated by setting a trigger for the servicer's rating

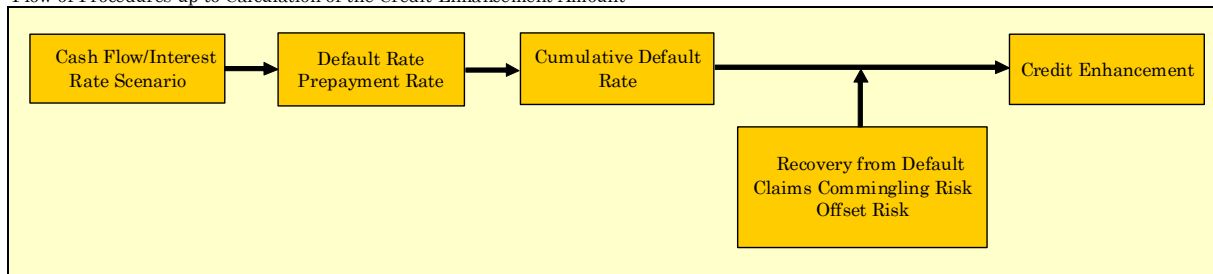
¹³ For an RMBS for which perfection of the transfer as against any obligor is withheld, the fact there is a possibility the mortgage loan claims will be assigned in the future is described in the original residential mortgage agreements, and the fact the banks that are the originators will classify and account for the funds collected from the borrowers as collected funds pertaining to a securitization scheme in its processing and clerical activities for collected funds are thought to be one condition for regarding measures against commingling loss to be unnecessary.

¹⁴ See the March 3, 2005 R&I News Release "R&I View on Commingling Risk of a Servicer that is a Financial Institution covered by

and addressing the risk from excess earnings or other sources after a trigger event.

Taking into consideration the characteristics of the originator's obligations and the structure of RMBS, R&I calculates the risk amount required. Sequential payment is the general redemption method for RMBS, so if there is progress in the redemption of the senior portion, the ratio of the credit enhancement amount increases and the risk of future unforeseen events can be absorbed.⁹²

Flow of Procedures up to Calculation of the Credit Enhancement Amount



7. Servicers

As is the case with the ordinary ABS issues, in many RMBS issues, a trustor concludes a servicer agreement with a trustee and continues collection business as the servicer. Therefore, it is necessary to install structure for collecting claims in case the servicer went bankrupt. R&I basically require RMBS issues to incorporate a backup servicer (hereinafter, BUS) clause.

If the servicer has a high creditworthiness and has an Issuer Rating from R&I, R&I may accept RMBS structure which does not install BUS until the Issuer Rating is downgraded to a certain level. Details on the level of such rating triggers and the timing of setting BUS are shown in R&I Methodology "Incorporation of Rating Triggers (This report is available in Japanese text only)".

Under a certain condition, R&I may also provide a rating to RMBS issues which do not install BUS. Upon securitization, trustee carries a fiduciary responsibility. Mortgage loans and apartment loans which are the underlying assets of RMBS are financial products handled by financial institutions, and in many cases, these are products originated by trust banks that are the trustee. Even if the servicer went bankrupt and the selection of BUS following the trust agreement is disrupted, the trustee can take over the servicing business in accordance with its fiduciary responsibility until the BUS selection finalizes, if the trustee involves in the handling of the product. R&I decides whether the trustee can operate as a BUS when the servicer failed by confirming whether the trustee (the trust bank) is involved in the handling of the product, the size of the trustee, BUS selection clause, necessary liquidity enhancement before the trustee commences collection business. Based on such decisions, R&I may provide a rating to RMBS structure which does not install BUS from the beginning.

R&I basically requires RMBS issues to install BUS from the beginning into their structure. However, depending on the size of trustee and servicer, quality of the product to be transferred, as well as the treatment provided in the scheme, R&I may accept structures without BUS or those that will set BUS based on rating triggers.

8. Characteristics of the structure

RMBS structures have various characteristics. Because the term is long and there are many factors to predict, sequential payment is the method generally adopted for redemption of the principal and in many cases a default trap¹⁵ is established. Due to the very fact that RMBS are

the Deposit Insurance System”

¹⁵ A system where an excess spread is made continuously as an allowance for the default principal amount.

long-term, there are also many cases where the structures have built-in safety precautions.

9. Due Diligence Meetings

The sales policies and credit requirements for private sector residential mortgages differ depending on the respective financial institution and the strategies financial institutions adopt vary according to the times. In its examination, R&I conducts hearings on topics such as what kind of sales policies and credit standards were in place during which period and what kind of products were promoted chiefly, and also confirms matters such as the loan collection stances, the loan agreements used for the eligible loan receivables, the classification accounting procedures for collected funds from the borrowers after securitization and systems support. Due diligence meetings increase R&I's understanding of the administrative system after securitization and the claim pool's unique characteristics, and are used to confirm the company's servicer capabilities and factors required for calculating the level of credit enhancement, including future defaults and prepayments.

10. Monitoring

In RMBS, factors that determine the level of credit enhancement are diverse and the term of the products is long. There is also a likelihood that during the term circumstances may change dramatically from the time of the formation of the product, so monitoring is extremely important.

During the monitoring, to confirm the default rate, prepayments, the level of the credit enhancement accompanying these characteristics and other factors, R&I receives various reports on situations such as collection from the originator and the trust bank and progress in redemption. If the historical data are in conflict with the standard values set at the outset during the pool analysis, R&I makes a general decision as to whether the rating should be reviewed as it studies circumstances during the period.

If parties involved in a RMBS structure, such as the servicer, become insolvent, R&I ascertains whether anticipated procedures for dealing with such situations are executed. The way in which the parties involved in the structure deal with such situations will have a significant impact on the merchantability of the RMBS thereafter, so R&I endeavors to collect accurate and prompt information.

11. Creditworthiness assessment of the home loan pool

For products that are linked to transactions of the loan pool in general, rather than securitized products with a senior-subordinate structure, there are requests for evaluation of the entire loan pool instead of assignment of a rating. The key factors for assessing the creditworthiness of the overall pool taking into consideration the principal to be recovered in the future and the interest rate are the default and prepayment rates which serve as references at the time of the assessment. It is possible for clients requesting assessments to specify certain premises on factors such as recovery rates from default claims, interest rate scenarios, commingling loss risk, offset risk and other factors. After confirming that the premises are appropriate, R&I arrives at assessment results such as, for example, a BBB rating equivalent.

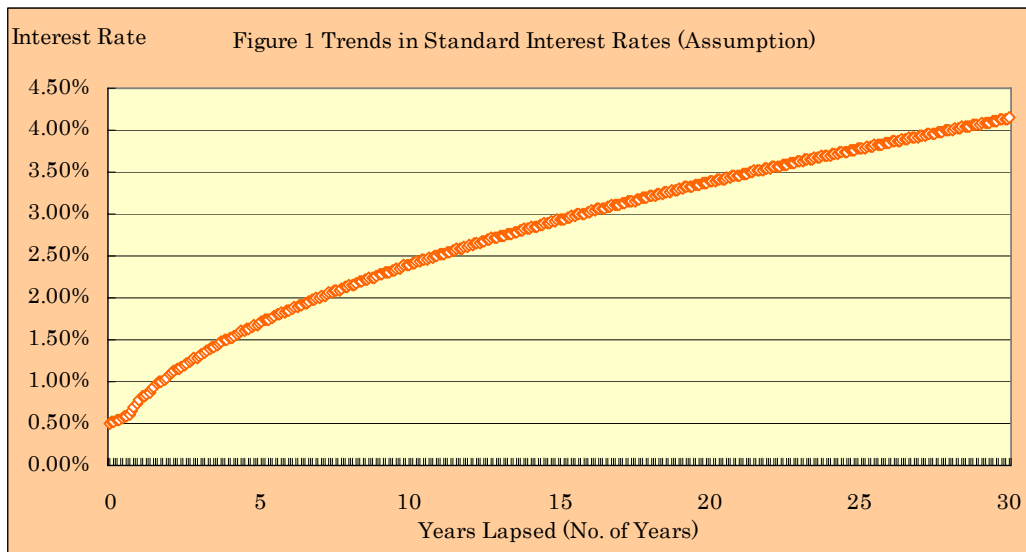
12. References

(1) Risk in variable interest residential mortgages

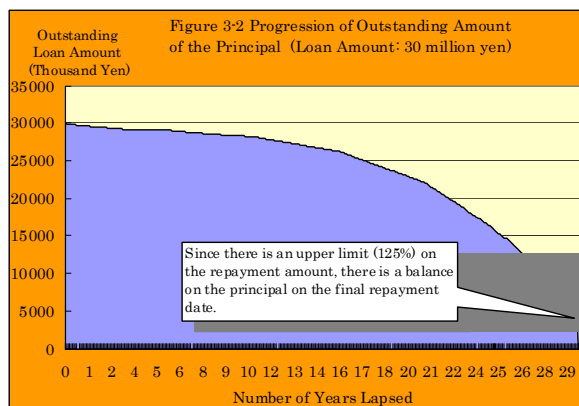
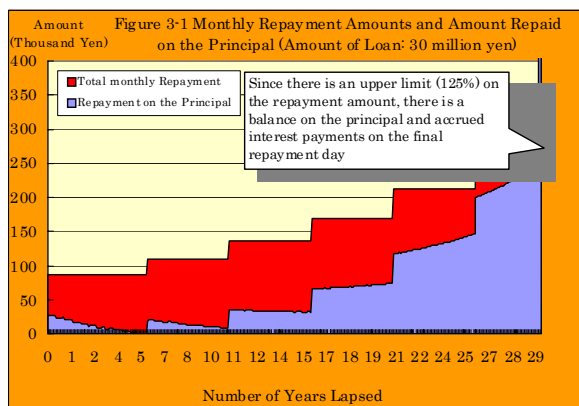
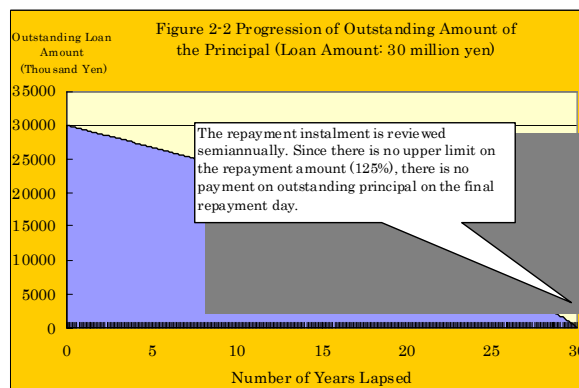
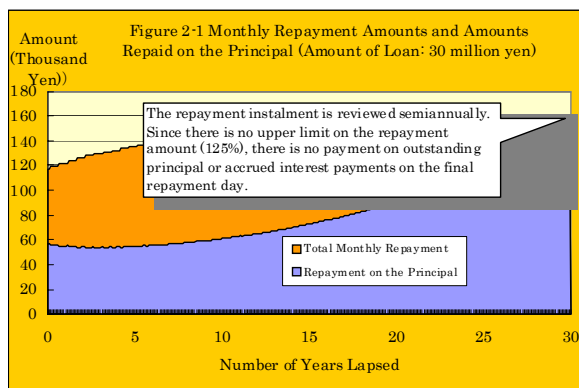
The amount of credit enhancement required for residential mortgages with future variable interest rates varies considerably due to differences in review periods and review methods for interest rates and repayment amounts. For example, making assumptions on rises in standard interest rates, Fig. 1 below compares two cases of residential mortgages where the interest rate is reviewed semiannually. In Case (i) the repayment amount is reviewed every six months and there is

no upper limit on increases in the repayment amount. In Case (ii) repayments are reviewed every five years and the upper limit on repayment increases is 125% of the existing repayment. In both Fig. 2-1 and Fig. 3-1 the vertical axis shows the repayments on a monthly basis and the principal repayment portion on the same scale; the difference of the two is the interest payment portion.

In Case (i), the monthly repayments and the amount repaid on the principal, together with the outstanding principal of the loan can be assumed to progress in the manner shown in Fig. 2-1 and Fig. 2-2. The repayment amount and the principal repayment portion are reviewed semiannually, so they will increase when the interest rate increases. In this case, there is no upper limit when the new repayment amount is reviewed, so there will be no accrual of interest with this loan. As a result, even with interest increases, there will be no large outstanding balance on the principal on the final payment date. Furthermore, since there is little change in the pace of principal repayment, the interest fluctuation has little impact on the credit enhancement amount.



Case (ii) is the pattern for an ordinary variable interest rate residential mortgage. As shown in Fig. 3-1 and 3-2, as the interest rate rises, the amount repaid on the principal decreases temporarily until the period of the repayment review and the pace of the principal repayment slows down. With this loan, in addition to the intervals between review periods being long at five years, the upper limit of the monthly repayment amount following the review is 125% of the amount prior to the review, so if extreme interest rises continue over a long period, there is a likelihood that an accrual of interest will occur. Therefore, with loans that have characteristics such as Case (ii), there is a likelihood that outstanding principal and accrued interest payments will occur on the final payment day. Furthermore, since the pace of repayment of the principal slows down, default risk of the underlying assets increases.



(2) Views on apartment mortgage securitization and investment condominium mortgage securitization

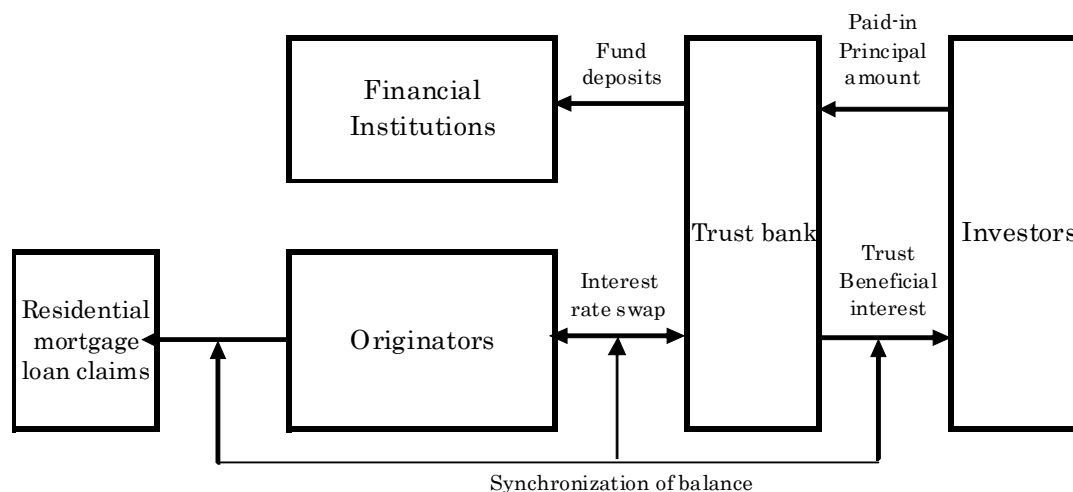
Both securitizations are RMBS whose underlying assets are the loans collateralized by residential real estates. R&I's evaluation on these RMBS are basically in line with this R&I's methodology for private financial institution RMBS. However, the creditor and obligor attributes of these loans differ from mortgage loan claims. For further detail on their attributes, please refer to R&I's reports: "The Apartment Loan Market and Securitization" and "Rating Analysis of the Condominium Investment Market and Loan Securitizations."

(3) Synthetic RMBS

R&I defines synthetic RMBS as securitized products to hedge only interest rate risk, using a swap transaction or other vehicle as a reference claim, without moving mortgage loan claims off-balance sheet through assignment of the claims. Synthetic RMBS provide a mechanism by which the RMBS investors' paid-in principal amounts are invested in deposits at an eligible financial institution corresponding to the target rating, for example, with the RMBS synchronized with the outstanding balance of the reference claims and repaid using the deposits. Furthermore, a condition is set requiring the deposits or other investment to be transferred to a new eligible financial institution within a certain period of time if the rating of the initial eligible financial institution falls below a certain level. Because the RMBS must be fully redeemed from the deposits or other investment following the occurrence of certain events at the originator, RMBS have the characteristic of not affecting the performance of the reference claim after occurrence of the specified events.

R&I has evaluated a number of synthetic RMBS issues. In its rating evaluation, R&I mainly checks the scheme, the various agreements entered into, the eligible financial institution trigger standards and financial institution replacement period following a trigger event, the liquidity enhancement at times when specified events occur, investment procedures for the redemption funds, the servicer's administrative procedures and the system support.

Synthetic RMBS Scheme Diagram



Source: Prepared by R&I based on Fukuoka Bank press releases

References

Yuji Orui and R&I, "All About Mortgage Securitization," Rating and Investment Information, Inc. (2006)

R&I *Rating Methodology*, "The Apartment Loan Market and Securitization" (April 2005)

R&I *Rating Methodology*, "Rating Analysis of the Condominium Investment Market and Loan Securitizations" (September 2005)

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