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General Methodology

1. Introduction

The following is a general methodology for structured finance rating, which replaces and updates "Outline and Rating Points of Structured Finance Products (or Underlying Assets) (General)" (date of last update: March 29, 2007; available only in Japanese).

2. Classification of Structured Finance Products

Structured finance is a financial transaction involving use of a "structure" such as an SPV (special purpose vehicle) or credit enhancement measures, a broad concept that includes securitization transactions. Whereas the definition of securitization transactions under Basel II regulations is characterized by the following two: (1) senior-subordinated structure and (2) transfer of credit risk to a third-party, structured finance is considered to cover a wider range of financial transactions.

JCR broadly classifies the structured finance products into the following two groups.

(1) Asset Securitization Products (according to the definition by the Cabinet Office Ordinance on Financial Instruments Business, etc. (Ordinance No. 52 of 2007) related to the Financial Instruments and Exchange Act)

- Securitization products backed by leases, automobile loans, shopping receivables, or loan receivables (narrowly defined ABS)
- Securitization products backed by housing loans (RMBS)
- Securitization products backed by real estates (CMBS)
- Synthetic CDOs
- Short-term securitization products backed by notes and accounts receivables, or medical remuneration receivables
- Other instruments similar to the above

(2) Other Structured Finance Products

- ABCP programs (bank full support type)
- Repackaged instruments (single-credit financial instruments where the credit status of the underlying assets is the same in effect as that of the financial instruments in question)
- Financial instruments for project finance
- Ship finance
- Other instruments similar to the above

When determining a rating, JCR studies the structure and characteristics of each structured finance

product from the viewpoint of whether the product can be deemed in effect a single-credit financial instrument and classifies it into either "Asset Securitization Products" or "Other Structured Finance Products."

3. Symbols of Structured Finance Rating and Their Definition

The rating symbols and their definition of structured finance products conform to those for corporate and other credit ratings. More specifically, structured finance ratings are gradings that enable comparisons to be made of probability of the obligations in respect of a particular structured finance product performing as contracted.

Instead of attaching an additional symbol to the credit rating of an asset securitization product, such as "AAA-sf", to indicate that it is a structured finance rating, JCR explains the difference between such credit rating and corporate and other credit ratings in its press releases or reports on its website. JCR also assigns ratings to all types of asset securitization products in a consistent manner.

4. Structured Finance Rating Methodology

(1) Rating Methodology and Periodic Review

Structured finance rating methodology is established in accordance with JCR's rating policies and methodologies. JCR assigns individual structured finance ratings based on a thorough analysis of all information known to it, as is relevant to such analysis according to its structured finance rating methodology. JCR then implements objective validation of the resultant credit ratings based on historical experience.

JCR periodically reviews the structured finance rating methodology and assesses whether the existing rating policies and methodologies as well as their significant detailed rules (including models employed) for assigning credit ratings of asset securitization products are appropriate when the risk characteristics of the assets underlying the asset securitization products change materially.

When assigning a credit rating for an asset securitization product, JCR discloses sufficient information regarding analysis of loss, cash flow and sensitivity for changes in assumptions for credit rating on such asset securitization product so that investors intending to purchase the product can learn the grounds for the credit rating. However, short-term asset securitization products (less than one year) are not subject to the sensitivity analysis unless such analysis is deemed appropriate.

(2) Basic Analytical Methodology

While designs of structured finance products differ from product to product, points to be considered in assessment of structured finance products can be summed up in three key concepts: "Bankruptcy Remoteness," "Cash Flow Analysis," and "Operational Risk of Transaction Parties." It is necessary to look at quantitative and qualitative aspects in order to assess these three key concepts comprehensively, and the structured finance rating is determined through analysis of quantitative and

qualitative assessment. Therefore, even when a structured finance product is considered to deserve a AAA rating from a quantitative perspective only, the rating may become lower as a result of the qualitative assessment.

JCR's rating represents a comprehensive decision on an assessment of the probability of default with respect to a debt being rated and the likelihood of recovery after default, but is basically an assessment of the probability of falling into debt default. Although structured finance rating also indicates basically the probability of debt default, when assigning a rating that takes into account the likelihood of recovery after debt default under certain conditions, JCR includes an explanation for investors to understand the fact.

Rating methodology for each of the following underlying assets or products has been released individually.

- Leases
- Automobile leases
- Automobile loans
- Notes and accounts receivables
- Medical remuneration receivables
- Housing loans
- Synthetic CDOs
- Real estates
- Whole business securitization
- Repackaged financial instruments
- Project finance
- J-REIT

[Key Analytical Points]

(i) Bankruptcy Remoteness

Under a structured finance where an originator assigns assets to an SPV, legal structure that separates assets or receivables from the credit risk of the originator is necessary. Such SPV is required to be isolated from parties to the scheme so that it is unlikely to become the subject of bankruptcy proceedings owing to factors except for factors of its owning receivables and assets securitized. These arrangements, called Bankruptcy Remoteness, are prerequisites for cash flow analysis.

(a) True Sale

One of the requisite for bankruptcy remoteness is separation of receivables or assets securitized from the originator in economic and legal terms. The assignment should be structured so that the transaction is not recharacterized as a secured financing and so that the

validity of the assignment is denied in the event of an originator's bankruptcy under any bankruptcy law ('true sale'). As principal and interest payments of structured finance products rely on cash flows generated from assets or receivables or their values, denial of true sale or change in schedules for principal and interest payments would adversely affect the transaction. Therefore, it is essential to structure the transaction so that the assignment is a true sale and not a transfer that serves merely as collateral security. A judgment on whether the transaction is a true sale or not is made by taking a look at the content of receivables or assets securitized and the entire structure in a comprehensive manner. Another point to keep in mind is that the transfer of receivables or assets should not be subject to fraudulent act, preference or repudiation.

(b) Perfection

In the event of an originator's bankruptcy, creditors such as banks or suppliers would claim their rights to preserve or collect their claims and take various steps (which are not limited to legal measures). In bankruptcy proceedings, the court may impose significant restrictions on exercise of the owner's rights. For this reason, the assignment needs to be perfected against third parties so that the owner of these receivables or assets securitized can claim that he or she is an owner legally and so that the transfer of such receivables or assets to an SPV is not affected by the originator's bankruptcy in addition to the requirement that assets or receivables are validly transferred to the SPV.

(c) Structure of SPV

In the event of an originator's bankruptcy, an SPV itself needs to be unlikely to become the subject of bankruptcy proceedings and the transfer of assets or receivables to the SPV needs to be unlikely to be affected by the bankruptcy proceedings. JCR considers the following the criteria for structuring a bankruptcy remote SPC.

- Restriction on business
- Neutral and independent director(s)
- Separation of capital relationship with the originator (avoidance of unjust exercise of shareholders' rights)
  - In the case of an SPC incorporated in the Cayman Islands, it is necessary to establish a charitable trust with the SPC's voting shares as a trust property estate and a local charitable organization as a beneficiary. In the case of an SPC incorporated in Japan, it is necessary for parties to the transaction not to have voting rights in the SPC by way of the entire capital contribution being held by a Cayman SPC, *Ippan Shadan Houjin* (general corporate judicial person) or *Tokutei Mokuteki Shintaku* (specified equity trust).
- Prohibition of bankruptcy petition by creditors

(ii) Cash Flow Analysis

Levels of credit enhancement and liquidity support are examined based on legal risk analysis of a structure, performance evaluation of assets or receivables or asset valuation, and other considerations. These levels are primarily determined in light of the following:

- Characteristics of assets or receivables (level of excess spread, treatment of cancellation and prepayment, marketability)
- Historical Performance (default rate, delinquency rate, and eligibility criteria for securitized receivables)
- Cash flow generation capacity and stability of project or business (feasibility of business and operator's capability)
- Cash flow distribution method (sequential pay, fast pay, etc.)
- Redemption method of structured products (pass through or bullet redemption)
- Other (substitution of servicer, interest rate movements, operational cost during period)

<Example of the Case of Securitization of Monetary Assets>

(a) Credit Risk of Obligors

First, underlying asset or reference entity can be classified as "single-obligor" or "multi-obligor". They are then classified into whether they are subject to "law of large numbers approach" or "CDO approach" depending on the number of obligors. As a general rule, when the number of obligors who constitute the receivables pool is more than 300 and ratio of each obligor's amount to the overall amount (obligor concentration) is below a certain level, JCR adopts law of large numbers approach and makes analysis based on this approach and adopts CDO approach in other cases. In the case of multi-obligor assets, analysis focuses on how the risk of obligor default and delinquency can be quantitatively figured out and then how such risk can be absorbed or avoided. Credit enhancements such as overcollateralization or senior-subordinated structure are often taken against these risks.

Law of large numbers approach assumes that all of the small obligors who constitute the receivables pool have the same attributes. JCR then estimates attributes of the receivables pool from the historical data, securitization period, etc. and calculates the required subordination ratio.

In law of large numbers approach, the base case default rate for obligors in the pool of receivables is determined by examining the historical data. Next, JCR conducts stress testing by applying stress scenarios with respect to the rates of default, delinquency and prepayment to the expected cash flows during period, and calculates a subordination amount required to obtain a target rating.

In cases where the number of obligors in the pool of receivables to be securitized is small, or in cases where obligor concentration is high, JCR adopts CDO approach. In CDO

approach, JCR allocates a default probability to each obligor unlike in the case of law of large numbers approach, and carries out Monte Carlo simulations based on this probability in order to calculate a subordination level.

(b) Commingling Risk

Funds collected from the securitized receivables are remitted to the SPV after staying at the servicer for a certain period. Should the servicer go into bankrupt, there could be a risk of commingling of the collected money with assets of the servicer and consequently failing to remit the money as scheduled. As a general rule, JCR sets the largest amount to be expected to become uncollectible due to the servicer default at any time after commencement of securitization as a required credit enhancement amount for commingling risk.

(c) Cash Reserve (Liquidity Support)

It is necessary in light of rating to reserve funds as cash reserve as required during the period until the servicer hands over the collection operations to the backup servicer and collected proceeds are credited again to the SPV when the servicer falls into such situations that disable implementation of normal collection operations due to bankruptcy and any other reasons.

<Example of the Case of Securitization of Real Estates>

(a) Valuation of Real Estates

In the case of real estate securitization, as sale of the real property is vital for redemption (exit strategy), it is important to assess the values (the present values and future values) of real estates to be securitized.

JCR determines real estate values after making analyses on general and individual factors for the real estates based on the following points:

- Market Analysis
- Quality of Real Estates
- Property Management Capability
- Tenant Statuses (Quality of Tenants and Degree of Their Diversification)

(b) LTV

LTV (Loan To Value) is a rate of “principal amount of bonds or loans” to “asset value” of the securitized real estate. LTV is a means to make a judgment on how much can the bonds or loans withstand the risk of changes in asset value through maturity. For this reason, LTV becomes a significantly important index in assigning credit rating corresponding to the probability of the payment of principal and interest of bonds or loans. JCR therefore assigns ratings taking into consideration various risks assumed to arise for the securitized real estate (fall of land price, decline in rent income, deterioration of buildings, etc.), and the possibility that “net operating income” and “future sales price” will fluctuate (decrease) before maturity

date.

(iii) Operational Risk of Transaction Parties

Under securitization of granular monetary receivables, the originator usually serves as a servicer to whom collection services are entrusted from the SPV. In majority of such securitization transactions, an originator's continuation of its services of collection from obligors is better than other ways for the reasons that the originator has know-how and experiences in collection fit for nature of the receivables and that it can maintain relations with its customers. Therefore, it is general that an originator serves as an initial servicer. However, it is necessary to appoint a backup servicer beforehand or define clearly procedures and framework to be required for servicer substitution in preparation for a situation where the servicer can no longer conduct collection services owing to bankruptcy and any other reasons.

(3) Structured Finance Products with Market Risk

Concerning a structured finance product with market risks whose interest or principal payments are determined by a certain calculation formula depending on market prices or indexes such as stock price, interest rates, exchange rates, JCR analyzes in what way the market risk varies the interest and principal amounts and determines a rating based on the probability of the obligations in respect of such structured finance products performing as contracted. In the case where the market risk affects such probability, JCR determines a rating, factoring in the effects of the market risk. In the meantime, rating may become lower or may not be assigned at all as to a structured finance product if the market risk can cause a substantial principal loss.