



## Rating Methodology for Repackaged Products

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

Rating and Investment Information, Inc. (R&I) has released its rating methodology for Repackaged Products. This report summarizes the methodology used by R&I for assignment of ratings to Repackaged Products.

### 1 . Repackaged Products

The “Repackaged Product(s)” mentioned in this report refers to products that are structured in order to restructure the cash flow of bonds such as government bonds and corporate bonds (including subordinated bonds, etc.) through swap agreements. Product overview and structure of Repackaged Products are stated below.

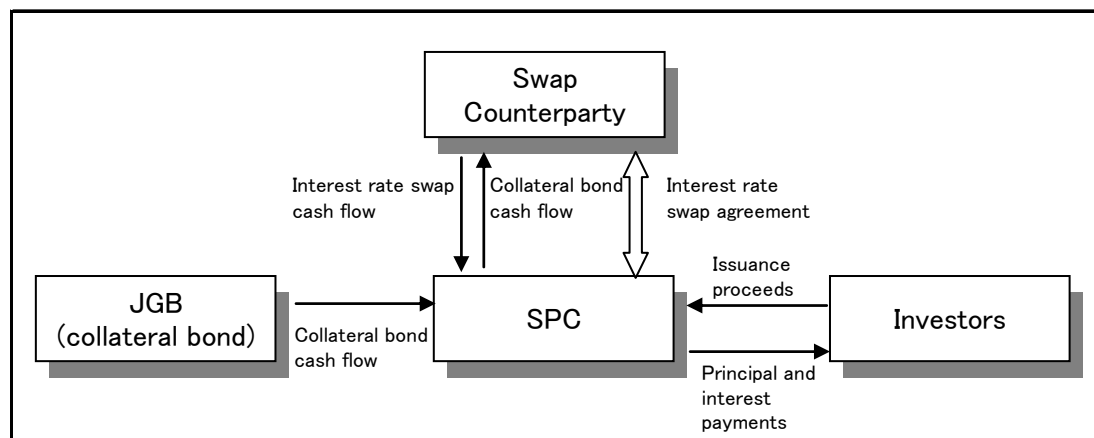
#### 1.1. Product Overview

Repackaged Products refer to products that use newly issued or existing bonds as collateral, and restructure the cash flow of the collateral bond to match the investors’ needs through swap agreements such as interest rate swaps or currency swaps. Bonds used as collateral include government bonds and corporate bonds (including subordinated bonds, etc.). This report describes the methodology used by R&I, taking a yen-denominated product which repackages a Japanese Government Bond as an example.

#### 1.2. Product Structure

Basic structure of Repackaged Products is as indicated in Figure 1.

Figure 1: Product Structure



Basic cash flow for the Repackaged Product is as described in (1) to (3) below:

- (1) The SPC issues a Repackaged Product. The SPC then purchases the same notional amount of Japanese Government Bonds (collateral bond) as the notional amount of the Repackaged Product using the issuance proceeds of the Repackaged Product, and executes an interest rate swap agreement with the swap counterparty to convert the cash flow of the collateral bond to the cash flow of the Repackaged Product.

- (2) During the term of the Repackaged Product, the SPC pays interest for the collateral bond to the swap counterparty, and receives the amount equivalent to the coupon for the Repackaged Product from the swap counterparty, according to the interest rate swap agreement. The SPC pays the interest for the Repackaged Product using the funds thus received.
- (3) On the redemption date of the Repackaged Product, SPC redeems the Repackaged Product using the proceeds of redemption of the collateral bond.

## **2 . R&I's Evaluation**

R&I believes that the certainty of the principal and interest payment for Repackaged Products basically depends on the “creditworthiness of the collateral bond” and the “creditworthiness of the swap counterparty.” The rating assigned to a Repackaged Product will be the rating of the lower of the two.

However, Repackaged Products are products that restructure the cash flow of the collateral asset through the use of swap agreements. In the process of converting the cash flow of the collateral bond to the cash flow of the Repackaged Product, the funds go through the related parties of the Repackaged Product (such as a bank where the SPC has opened a deposit account or a custodian). Therefore, there is a risk that the funds may be accumulated at such related parties. In such instance, the design of the Repackaged Product may be scrutinized, and the creditworthiness of the entity where the fund will be accumulated may be reflected in the evaluation of the Repackaged Product where necessary (refer to “3. Other Notable Points”).

We will summarize the important points with respect to R&I's evaluation focusing on the creditworthiness of the collateral bond and the creditworthiness of the swap counterparty.

### **2.1. Creditworthiness of the Collateral Bond**

Although there is a swap transaction involved, basically the main source of funds for the payment of principal and interest for Repackaged Products is the payment of principal and interest of the collateral bond, held by the SPC, by its issuer. If the issuer of the collateral bond defaults, the SPC is unable to make payments of principal and interest for the Repackaged Products as they become due. In addition, the recovery ratio may differ depending on the status of the obligations of the collateral bond (senior debt, subordinated debt, etc.).

Therefore, the creditworthiness of the collateral bond can be divided into the “default risk of the issuer of the collateral bond” and the “risks related to the status of the obligation of the collateral bond.”

#### **2.1.1. Default Risk of the Collateral Bond Issuer**

In general, if the issuer of the collateral bond defaults, the SPC will redeem the Repackaged Products prior to maturity. In such an instance, the trustee of the Repackaged Products will sell the collateral bond in the market for cash, and sequentially pay the funds to the creditors (investors, swap counterparty, etc.) based on the waterfall provided by the agreement. As the issuer of the collateral bond has defaulted, valuation of the collateral bond is expected to have fallen, and there is a possibility the source of funds for redemption of the Repackaged Product may be insufficient.

#### **2.1.2. Risks related to the Priority of the Obligation of the Collateral Bond**

The agreement concerning the collateral bond establishes the priority of the obligations of the collateral bond in relation to other obligations of the issuer (senior debt, subordinated debt, etc.). Depending on the priority, the amount that can be recovered from the collateral bond will differ in case of default by the issuer. In order to take the difference into consideration, there may be notch differences between the Issuer Rating and the Long-term Issue Rating of the issuer. Therefore, basically, the Long-term Issue Rating of the collateral bond will be used to determine the creditworthiness of the collateral bond.

## **2.2. Creditworthiness of the Swap Counterparty**

Repackaged Products involve swap transactions. Even if the principal and interest payment for the collateral bond is made by the issuer on schedule, the Repackaged Product will default if the swap transaction creating the cash flow of the Repackaged Product is delayed. In such instance, the collateral bond must be converted to cash in the market, triggered by the surfacing of the credit risk of the swap counterparty, which in turn reveals the issues related to the market value of the collateral bond.

Therefore, the creditworthiness of the swap counterparty can be divided into the “default risk of the swap counterparty” and the “risk of actualization of the market value of the collateral bond.”

### **2.2.1. Default Risk of the Swap Counterparty**

Timely repayment of obligations for the Repackaged Products by the SPC to the investors depends on timely repayment of obligations to the SPC by the swap counterparty in accordance with the swap agreement. Therefore, the creditworthiness of the swap counterparty is as important as the creditworthiness of the collateral bond in evaluating Repackaged Products.

### **2.2.2. Risk of Actualization of Market Value of the Collateral Bond**

In general, where the swap agreement is terminated early due to a swap counterparty default, the SPC will redeem the Repackaged Product prior to maturity. In such instance, the trustee must convert the collateral bond to cash in the market, and depending on the market value of the collateral bond, the principal and accrued interest of the Repackaged Product may not be secured. This may seem like a market risk for the collateral bond; however, it can be interpreted as a risk that has actualized due to the need for unintended early redemption triggered by the surfacing of the credit risk of the swap counterparty. Consequently, R&I considers this risk to be credit risk of the swap counterparty for the purpose of evaluation.

Important points related to the creditworthiness of the swap counterparty are as described in 2.2.1 and 2.2.2. above, and there are products that have measures in place in the Repackaged Product agreement to minimize such risks. If such measures can be determined by R&I to be effective in minimizing the impact of the creditworthiness of the swap counterparty on the creditworthiness of the Repackaged Product, the creditworthiness of the swap counterparty may not be reflected on the Repackaged Product (Note 1).

## **3 . Other Notable Points**

Factors described in “2. R&I’s Evaluation” are the basic points for evaluation of Repackaged Products. Let us now discuss some other notable points that require consideration in evaluating Repackaged Products.

### **3.1. Cash Flow Management**

Repackaged Products are products that restructure the cash flow of the collateral bond through the use of swap agreements. In the process of converting the cash flow of the collateral bond to the cash flow of the Repackaged Products, the funds go through the related parties of the Repackaged Products (such as a bank where the SPC has opened a deposit account or a custodian). If there are mismatches between dates such as the interest payment date for the collateral bond and the payment date of the swap agreement, or the redemption date for the collateral bond and the redemption date for the Repackaged Product, credit risk of the entity that manages the funds which should be distributed to the investors becomes an issue. If the entity managing the fund defaults, the SPC may be unable to make payments of principal and interest for the Repackaged Products as they become due. If there are no specific measures taken against such risk, credit risk of such entities may be reflected in the evaluation of the Repackaged Products (Note 2).

### **3.2. Swap Replacement Cost**

Where a swap agreement is terminated early, cash flow in the form of swap replacement cost will occur. If the Repackaged Product is to be redeemed at maturity as scheduled, swap replacement cost will not be incurred based on the role of the swap agreement in the Repackaged Product. On the other hand, swap replacement cost will be incurred if early redemption occurs due to the default of the swap counterparty or default on the collateral bond.

Normally, where early redemption of Repackaged Products occurs, swap counterparty is given priority in cash payment sequence among the secured creditors (investors, swap counterparties, etc.). If the SPC is obliged to pay swap replacement cost at the time of early redemption of the Repackaged Product, the amount obtained by deducting the swap replacement cost from the redemption fund of the Repackaged Product (conversion value of the collateral bond) will be paid to the investors. In evaluating the credit rating of a Repackaged Product, if the creditworthiness of the collateral bond and the creditworthiness of the swap counterparty become lower than certain rating criteria, above stated risk related to swap replacement cost may be reflected in the evaluation of a Repackaged Product.

### 3.3. Single-Name Credit Linked Products

As a derivative of Repackaged Products, there are products with embedded CDS (credit default swap) agreements that refer to a single entity (Single-Name Credit Linked Product). If a credit event occurs to the reference entity prescribed in the CDS agreement, it will trigger early redemption of the single-name credit linked product. Although basic rating methodology for the credit linked bonds is the same as for Repackaged Products, the creditworthiness of the reference entity must be considered in addition to the creditworthiness of the collateral bond and the swap counterparty.

R&I's rating method for Repackaged Products are as stated above; however, the ultimate rating will be determined pursuant to consideration of other factors such as the bankruptcy remoteness of the SPC, and the legal risks related to the structure.

(Note 1) For rating methods on this issue, refer to the "R&I Eligibility Criteria of Counterparties for Credit-Linked Products" and "R&I Eligibility Criteria of Swap Counterparties for Securitized Products" reports.

(Note 2) For rating methods on this issue, refer to the "Eligible Deposit Accounts and Eligible Investment Instruments" report.

Reports mentioned in Notes 1 and 2 above are posted on the below URL:

<http://www.r-i.co.jp/eng/rating/st/methodology.html>

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