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# Automobile Loans

## 1. Characteristics of Auto Loan Receivable

Auto loan receivables are securitized often as receivables with low default rate and high creditworthiness, although they depend on credit policy of originators such as their screening because the receivables are against individuals with their purpose of borrowing being clear.

The characteristics of these receivables and pool of auto loan securitization are the following:

· Their degree of dispersion is high and impairment rate of pool owing to occurrence of default is relatively stable, because auto loans, which are receivables against individuals in many small lots, are the underlying assets.

· As the debtors choose cars to be purchased in the light of their ability to repay, and they have a clear purpose of borrowing, i.e., owning a car, their intention to repay debt is considered high relative to the general unsecured borrowings. As a result, default rate of receivables is relatively low.

· On the other hand, competition among companies engaging in sales finance centering on non-banks is fierce to a certain degree in a situation where domestic car sales in units have been declining due to market saturation. As a result, loan interest rates are relatively low. (Proportion of excess spread that can be used as internal credit enhancement facility is low.)

· There are many cases in which repayments are made combined with bonus payments, because the amount of borrowings (amount of receivables) is relatively large; therefore, these receivables have a characteristic that their cash flows in a specific month (recovery amount in the month of bonus payments) become large. (In securitization scheme, it is necessary to consider an approach to the commingling risk that is different from the commingling risk in securitization of normal money claims with equal monthly payments in many cases.)

JCR outlines whereabouts of risk and points of concern in rating for securitization products of auto loan receivables below.

## 2. Risk of Auto Loan Receivables

(1) Risk from Prepayment

There are always incentives for the debtors to repay their debts in advance, because they repay the outstanding loans in a lump-sum along with replacement with a new car, and amount to become unnecessary for the future interest payments by repayment will become large for them simply owing to the large amount in the claims. Therefore, it is necessary to make a cash flow analysis on the assumption that prepayment may occur to a certain degree. Concerning risk that cash flow (recovery) from the entire pool of auto loan receivable is reduced from the initially assumed amount (dilution) owing to the lump-sum repayment by the debtors, JCR examines and makes an analysis using historical data, etc.

Although the auto loans are shown and executed with fixed interest rates, receivable data after execution themselves are transferred as cash flow with principal and interest payments combined, and at the time of prepayment, the debt is cleared by a certain calculation method, called “shichi-hachibun” method, and only remaining principal is recovered.

As there are also needs for partial prepayments from the debtors, it is necessary to make an analysis, keeping in mind the originator’s approach to these partial prepayments, records in the past and treatment in securitization.

In cash flow analysis of securitization products, reduction in the interest income in the future due to the increasing prepayment and impact of reduction in the principal amount due to the defaults on the receivables during the securitization period as a result of the loan principal recovery in advance by prepayment are considered. JCR studies pattern of occurrence of prepayment including an extreme case scenario (no occurrence or occurrence at an extremely high proportion) on the assumption that creditworthiness of debtors of the securitization pool may becomes worse faster than lapse of time, because good debtors are in a layer in which debtors prepay their debts, referring to historical data, and examines the worst case scenario for the impairment of pool of receivables.

(2) Risk along with Cancellation

Although cancellations by cooling-off system cannot be applied to purchase of passenger vehicles in general, there is a risk that auto loan contract can be cancelled by the debtors’ assertion for defense for suspension of payment if there are flaws in cars purchased by them.

Although repurchase by originator, as a breach of “representation and warranty”, is scheduled to respond to the dilution owing to these cancellations under the scheme, such risk will come to the surface when originator fails and can’t repurchase it. It is necessary to examine whether or not there is any structural problem in cause for the dilution risk owing to these cancellations beforehand.

In case of handling products with a variety of differences in quality for individual products as in the case of used cars, for example, in particular, there are chances that occurrence of dilution risk will be high temporarily, if there is a problem with sales technique at the dealers. The efforts to diversify the dealers by reducing the ratio of the same dealers to the entire pool to below a certain degree and the establishment of seasoning period as an eligibility requirement of loans for securitization are general treatments to deal with such risk under the securitization structure. In the interview with the originator at the time of execution of securitization, the conditions of the originator’s screening and monitoring for the dealers are items to be verified. Even if there is no malicious intention on the part of the dealers, it is necessary to take notice of measures for exclusion of the customers (debtors) who has a purpose of cheat on the cars or borrowed monies because of the large amount of monies. When JCR thinks that there are problems that can have an impact on the future performance in the records of defaults and the accidents in the past anyhow, JCR studies addition of stress.

Even if the originator properly conducts management and screening for the dealers, occurrence of cancellations cannot be avoided because it is difficult to entirely exclude frauds or accidents in the future at such dealers. Given this possibility, JCR considers that little concentration of dealers in the pool of receivables is desirable in order not to affect the pool of receivables even if large-scale cancellations occur under the securitization structure.

In many cases, the cancellations due to the frauds can be discovered in the early stage of the securitization after signing a contract, and records of a certain number of repayments lead to low cancellation rate in general. Taking the records of the number of payments (called seasoning in general) into the eligibility requirements for receivables can be considered effective in reductions of dilution risk of receivables owing to the cancellations in the auto loan receivable securitization.

(3) Points to Consider Concerning Claims for Refund of Overcharged Interest Payments

In case where there have been loan related products with “gray-zone interest rates” in other products provided by the originator to the general individual customers in the past, there is a possibility that some of the auto loan debtors were once users of such products. If such debtors file procedures for claims for refund of overcharged interest payments, it cannot be denied that there will be chances that payments for the auto loan receivable will stop or that such debtors may offset such refund with auto loan receivable in the course of such claims. Although these cases can be dealt with by repurchase by the originator under the securitization structure, the dilution risk due to such claims may come to the surface when the originator goes bankrupt.

JCR considers this risk when determining scaling factor of stress and the base rate in addition to verification of records of claims for refund of overcharged interest payments and content of them in the originator’s default data in the past.

(4) Points to Consider in Case Where There are Special Products

Although full payout method with equal monthly payment combined with bonus payment within the term is general in the auto loan repayment, type of loans, which can reduce monthly amount of repayment by setting residual value of the vehicle after a certain period of time (about three-year period), is popular. There may be a different risk in such cases from the risk in the general loan in terms of recovery of the loan at the termination. JCR studies whether or not there are product types of loans that require assumptions of cash flow and its risk, which are different from the assumptions in general case; and in that case, JCR studies what kind of risk JCR should consider additionally in the stress test, referring to the past data.

## 3. Calculation of Credit Enhancement Level

As the auto loan receivables are in general well diversified in many small lots, expected loss amount owing to defaults on the underlying receivables is calculated by stress test based on approach of many small lots using the law of large numbers.

(1) Analysis of Receivables of the Population and Receivables of the Securitization

(i) Calculation of percentage of credit losses, etc.

Percentage of credit losses, prepayment rate and cancellation rate are calculated using historical data on the receivables of the population. As for the percentage of credit losses in the case of securitization, JCR calculates such percentage of credit losses for each securitization based on definition of default under each securitization structure.

(ii) Analysis of Composition Ratio of Receivables of the Population and Receivables of the Securitization

JCR understands characteristics of the pool of receivables of the population and pool of receivables of the securitization from data by composition ratio on the pool of receivables of the population and on the pool of receivables of the securitization, and also refers to the comparisons between the two when determining scaling factor of stress. The following items of attributions of debtors and receivables are considered factors which may in some cases affect the potential default rate, and it is necessary to make a comparative analysis of the two pools to determine whether or not there exist any differences to be considered in the assumption of the securitization pool's impairment rate.

(a) Sex and Age
(b) Residence of debtors
(c) Dealer
(d) Car Type and Manufacturer
(e) New Car or Used Car
(f) Interest Rate Applied
(g) Amount of Individual Receivable
(h) The Number of Payments Already and the Number of Remaining Payments

(2) Determination of Base Rate

JCR determines a base rate for verification and analysis of movements of each parameter (percentage of credit losses, prepayment rate, and cancellation rate) from historical data of the receivables of the population. With the average value of historical data being a basis, JCR determines a final base rate for each parameter, taking into consideration past trend, outlier, or macro data on the market, and also qualitative factors such as items confirmed by the due diligence meeting (credit policy, billing system, debt collection procedures, transfer to the managed claims or guidelines for write-offs) entirely, and then incorporating these considerations into the analysis.

(3) Stress Test

JCR calculates next required subordination amount for the target rating after generating stressed percentage of credit losses, prepayment rate and cancellation rate for the cash flow expected during the term. There are multiple cases for the levels after the addition of stress, and they include a level of the base rate multiplied by a constant, or the one with the standard deviation of historical data multiplied by a constant being added to the base rate. JCR adopts an appropriate level for each case. JCR determines a scaling factor of stress in consideration of qualitative factors such as attributes of receivables of the population and the receivables of the securitization, taking 3.5 times for AAA rating and 2.5 times for A rating as standard scaling factors for securitization of pool of many small receivables against individuals.

(4) Commingling Risk

JCR deals with the commingling risk in general by setting the required subordination amount to the largest amount to be expected to become uncollectible if the originator as servicer becomes bankrupt at any time after start of the securitization. JCR determines the required subordination amount in accordance with the way of transmitting collection money and collection schedule by confirming scheduled cash flow for the receivable and also paying attention to the amount of prepayment, because auto loans receivable include claims with unequal monthly payments such as payments combined with bonus payments or amount of prepayment.

There are cases in the securitization structures where the commingling risk is dealt with by a provisional payment of collection money by the originator and others. In such cases, JCR examines to what extent the commingling risk is reduced for each securitization product, because each has a different provisional payment date, paying-in date from debtors, schedule for delivery of collection money.

In case where the originator meets certain requirements, JCR allows the originator not to set a subordinated beneficial interest amount for the commingling risk initially required until infringement of trigger by setting up a trigger for the commingling.

(Please refer to "Commingling Risk Pertaining to Securitization Products")

(5) Cash Reserve (Liquidity Facility)

It is necessary to reserve funds as cash reserve to be required in a period till the collection money is credited to the SPV or trust again after the servicer transfers its collection operation to the backup servicer when the servicer goes into a situation where it cannot conduct collection business as usual due to default or some other reasons.

The length of period required to resume crediting of collection money or collection performance in a situation where the servicer needs to be replaced under a securitization structure in general will be affected by the individual factors including stand-by condition (hot, warm or cold) of backup servicer, its capacity to handle, the number of debtors, and whether or not there are any arrangements that can make the inheritance from the originator’s normal management and collection system easy.

Although it is expected that disorder at the time of the taking over the debt collection operation from the originator is small in the auto loan relative to the general unsecured loans to individuals, because the creditworthiness of the claims is high, this does not change JCR’s view that it is necessary to give consideration to the contingency plan from the time of securitization execution.

JCR has a policy as a general rule in rating for the auto loan receivable as in the case of other money claims that backup servicer should be set up from the very beginning of the securitization. As for an originator with a certain level of a rating given, however, JCR admits that a backup servicer is not selected at the beginning.

(Please refer to "Backup Servicer in Securitization")



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