

## CREDIT OPINION

25 February 2022

New Issue

✓ Rate this Research

### Closing date

February 25, 2022

### TABLE OF CONTENTS

Capital structure	1
Summary	1
Credit strengths	2
Credit challenges	2
ESG considerations	2
Key characteristics	4
Asset description	5
Asset analysis	9
Securitization structure overview	15
Securitization structure analysis	18
Methodology and monitoring	20
Moody's related publications	20

### Analyst Contacts

Yusuke Minaki +81.3.5408.4279  
 VP-Senior Analyst  
 Moody's SF Japan K.K.  
 yusuke.minaki@moodys.com

Yusuke Seki +81.3.5408.4152  
 Associate Managing Director  
 Moody's SF Japan K.K.  
 yusuke.seki@moodys.com

» Contacts continued on last page

### CLIENT SERVICES

Americas 1-212-553-1653  
 Asia Pacific 852-3551-3077  
 Japan 81-3-5408-4100  
 EMEA 44-20-7772-5454

## Driver Japan eleven

Securitization backed by auto loans originated by Volkswagen Financial Services Japan Ltd. ABS/Japan

### Capital structure

Exhibit 1

#### Definitive ratings

Class	Amount (¥ Billion)	Dividends/ Interest	Payment Frequency	Subordicaiont Ratio	Rating
Beneficial Interests 2	31.7	Fixed	Monthly	Approximately 6.5%	Aaa (sf)
ABL 2	23.3	Fixed	Monthly	Approximately 6.5%	Aaa (sf)
Total	55				

Source: VWFSJ, Moody's SF Japan K.K.

### Summary

The Driver Japan eleven transaction is a securitization of Japanese auto loan contracts originated by Volkswagen Financial Services Japan Ltd (VWFSJ).

VWFSJ has been a frequent sponsor of auto loan securitizations. Driver Japan eleven is the eleventh securitization transaction in the Driver Japan series.

We base our provisional ratings of the securities on factors that include the steady performance history of VWFSJ-sponsored transactions and the credit quality of the underlying pool. The credit enhancement and structural protections available to investors in the transaction are consistent with the assigned ratings.

Our annualized default rate and cumulative default rate expectations are around 0.28% and 0.55%, respectively. The Aaa credit enhancement is around 5.9%.

This report does not constitute an offer to sell or a solicitation of an offer to buy any securities, and it may not be used or circulated in connection with any such offer or solicitation.

## Credit strengths

- » **Granular portfolio composition:** The initial securitized portfolio consists of large number of loan contracts, and is highly granular. The securitized pool benefits from good geographic diversification.
- » **Stable performance in VWFSJ's entire pool:** The historical data from VWFSJ's entire pool has shown better and more stable performance than that of ordinal auto loan pools.
- » **Dynamic credit enhancement structure:** Subordination on the transaction's liability side will build up over time because of the "target over-collateralization (OC) structure". The transaction also benefits from a dynamic enhancement mechanism when the cumulative default rate of the pool reaches a certain level. This arrangement will protect the transaction to a certain extent from volatility in the performance of the pool.
- » **Securitization experience:** VWFSJ has securitization experience from 2007 onward with well-performing transactions. In our view, the company can act appropriately as an originator and a servicer.

## Credit challenges

In our rating assessment, our committee focused on the following factors:

- » **Revolving structure:** The structure incorporates a one-year revolving period. VWFSJ entrusts additional receivables during the period, which may lead to a change in the characteristics of the underlying pool. To mitigate the uncertainty arising from the replenishment of the pool during the revolving period, the transaction incorporates the "target OC structure" in which the credit enhancement increases to a higher target OC for the ABL 1 (and consequently for the Beneficial Interests 2 and the ABL 2). The structure also sets a limitation on the "used car" and "balloon payment" portions in the pool. We decide the transaction's credit enhancement level after considering the change in the portfolio under a stressed replenishment scenario.
- » **Backup servicer arrangement :** A backup servicer is not appointed at closing. If a servicer replacement event occurs, the trustee 1 may dismiss the servicer and have a backup servicer take over as the servicer. Among the candidates for backup servicer are JACCS Co., Ltd. (Jaccs) and SMBC Finance Service Co., Ltd. (SMBFCFS). Jaccs and SMBFCFS also act as sub-servicers in the transaction, based on the business operations consignment agreement. (Please see page 19 for more information)
- » **Balloon payment auto loan with a "repurchase" option:** an unfulfilled pre-agreement (repurchase option provided by a dealer or an originator) may constitute an "obligors' payment defense" in the case of auto loans under the legislation referred to in short as the Installment Sales Act, in the event that a dealer or originator goes bankrupt. Based on legal opinions provided by legal counsel and our qualitative analyses on (1) the Volkswagen Group's global presence in the automobile industry, (2) dealer diversification, and (3) transaction features, the risks associated with balloon payments with repurchase options are considered sufficiently minimized. (Please see page 10 for more information)

## ESG considerations

We consider environmental, social, and governance (ESG) risks to be low. Environmental risk is low, based on pool diversification and the short tenor of the transaction. Additionally, the settlor or sub-servicer typically reschedules auto loans for obligors affected by disasters and buys back or subrogates for those loans to the trustee, which mitigates many risks from natural disasters. We also consider the risks to vehicles' recovery values from changes in carbon emissions regulations. This risk pertains to balloon loans and can be materialized mainly if the obligors can not exercise the option to sell vehicles. These risks are somewhat mitigated, however, by the short tenor of the transaction. Social risk is moderate, based on the effects of the coronavirus and the likelihood of governmental efforts to alleviate burdens to auto loan borrowers in times of stress. Governance risk is low based on a number of transactional features that support the integrity of the transaction's operations for the benefit of investors. Please refer to our Cross-Sector Rating Methodology: General Principles for Assessing Environmental, Social and Governance Risks (Japanese), which explains our general principles for assessing ESG risks in our credit analysis globally.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

- » **Environmental:** We consider this transaction to have low environmental risk, driven by the pool's geographic diversification, which is likely to mitigate much of the negative effects of future natural disasters. Additionally, the settlor or sub-servicer typically reschedules auto loans for obligors affected by disasters and buys back those loans, which mitigates many risks from natural disasters. We also consider the risks to vehicles' recovery values from changes in carbon emissions regulations. This risk pertains to balloon loans and can be materialized mainly if the obligors can not exercise the option to sell vehicles. These risks are somewhat mitigated by the short tenor of the transaction. (See Asset analysis — ESG - Environmental considerations)
- » **Social:** We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. Our analysis has considered the effect of the coronavirus outbreak on the Japanese economy will have on the performance of auto loans. Specifically, for Japanese auto loan ABS, loan performance will weaken due to the spike in the unemployment rate, which may limit borrowers' income and their ability to service debt. (See Asset analysis — ESG - Social considerations)
- » **Governance:** Governance risks for this transaction are low based on the presence of transaction features such as risk retention, third-party reviews (TPRs), R&W framework and bankruptcy remoteness. (See Securitization structure analysis — ESG - Governance considerations)

## Key characteristics

Exhibit 2

### Transaction summary

Entrustment Date:	22-Feb-22
Beneficial Interests 2 Transfer/ABL 2 Funding Date:	25-Feb-22
Revolving Period:	One-year from February 2022
Final Maturity Date:	28-Jun-30

Source: VWFSJ

Exhibit 3

### Counterparties

Originator/Seller:	Volkswagen Financial Services Japan Ltd. ("VWFSJ")
Servicer:	Volkswagen Financial Services Japan Ltd.
Sub-Servicer:	JACCS Co., Ltd. ("Jaccs") SMBC Finance Service Co., Ltd. ("SMBCFS")
Trustee 1 / Trustee 2:	Sanne Group Japan Trust Company Limited ("Sanne Group Japan Trust")
Trust Account Bank:	MUFG Bank, Ltd. (A1/P-1)
Backup Servicer:	A backup servicer is not appointed at closing. If a Servicer Replacement Event occurs, the Trustee 1 will appoint a back-up servicer.
ABL 1 Lender / Seller 2:	SMBC Nikko Securities Inc.
Underwriter:	BNP Paribas Securities (Japan) Limited
Arranger:	SMBC Nikko Securities Inc. BNP Paribas Securities (Japan) Limited

Source: VWFSJ

Exhibit 4

### Portfolio summary

Underlying Asset:	Auto Loan Receivables
Total Amount of Eligible Receivables:	¥61,955,709,600
Discounted Principal Amount of Eligible Receivables:	¥58,825,424,925
Number of Underlying Eligible Receivables:	23,576
Average Amount of Receivables per Contract (Discounted Principal Amount Base):	Approximately ¥2.50 million

Source: VWFSJ

Exhibit 5

### Our view

Unique Feature:	The underlying auto loan receivables include those with a balloon payment. The transaction structure incorporates a one-year revolving period.
Linkage to Originator:	The originator acts as Seller, Servicer, and Subordinated Beneficiary.
Originator's Securitization History:	The originator has securitized auto loan receivables since 2007.
Portfolio Performance:	According to the historical data on the seller's entire auto loan pool, the default rate has been stable. The pools guaranteed by Jaccs and SMBC Finance Service have shown similar performances.
Moody's Assumption:	Annual default rate at approximately 0.28% (Cumulative default rate: approximately 0.55%)

Source: Moody's SF Japan K.K.

## Asset description

The underlying assets are originated by VWFSJ. The underlying assets consist of auto loan receivables guaranteed and serviced either by Jaccs or SMBCFS. Based on the business operations consignment agreements, Jaccs and SMBCFS are sub-servicers who provide credit screening and servicing of the underlying receivables.

### Asset description at issuance

The eligible underlying pool consists of auto loan receivables originated by VWFSJ and guaranteed by Jaccs or SMBCFS. Auto loan receivables are from the following seven types of auto loan contracts:

- » Owner's plan: A contract with an equal monthly installment, but where additional payment amounts at bonus time are allowed.
- » Twin loan: A contract with an equal monthly installment. This is available when the loan amount exceeds the maximum amount for a low-rate campaign.
- » Solutions and Audi Future Drive ("Solutions, etc"): A contract with an equal monthly installment and a balloon payment, which provides obligors with the option to sell to the dealer vehicles categorized under both the "Volkswagen" and "Audi" brand at an agreed-upon price.
- » S-Loan,etc: A contract with an equal monthly installment and a balloon payment.
- » S-Loan plus: A contract with an equal monthly installment and a balloon payment, which provides obligors with the option to sell to the dealer vehicles categorized under the "Audi" brand only if the obligor purchases a new Audi car at the same dealer.
- » Refinance loan (105): A refinanced contract based on balloon amounts for "Solutions" and "Audi Future Drive" loans.
- » Refinance loan (106): A refinanced contract based on balloon amounts for "S-Loan,etc" or "S-Loan plus".

Exhibit 6

#### Portfolio by loan type as of 10 February 2022

<b>Total discounted principal amount of auto loan receivables:</b>	<b>¥58,825,424,925</b>
Owner's plan:	¥2,279,176,054
Twin loan:	¥0
Solutions,etc:	¥29,235,510,403
S-Loan,etc:	¥25,064,823,611
S-Loan plus:	¥9,161,062
Refinance loan (105):	¥1,155,697,790
Refinance loan (106):	¥1,081,056,005

Source: VWFSJ

The eligible underlying pool is collateralized based on new cars 71.1%, used cars 25.1%, and refinanced cars 3.8%. The auto loan receivables guaranteed by SMBCFS represent 55.8% of the underlying pool, with the remainder (44.2%) guaranteed by Jaccs.

In contrast to VWFSJ's entire pool, the underlying eligible pool has the following features:

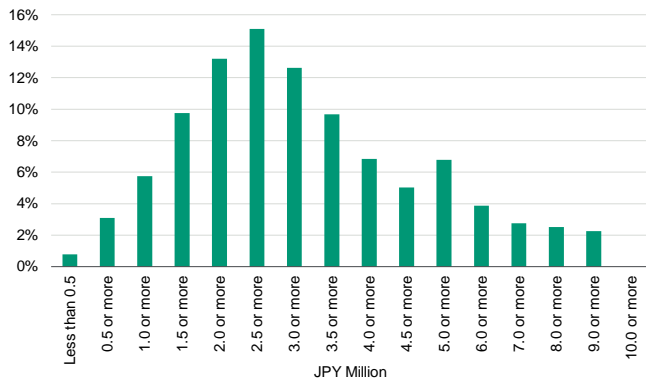
- » The outstanding receivable principal amounts which are more than ¥10 million are not in the pool because of the eligibility criteria.
- » The proportion of Bentley and Lamborghini vehicles in the pool is slightly lower.
- » The proportion of receivables originated in 2020 and 2021 is higher.

The underlying assets will be audited by an accounting firm to verify the existence and eligibility of the assets before entrustment.

Characteristics of underlying assets as of 10 February 2022

Exhibit 7

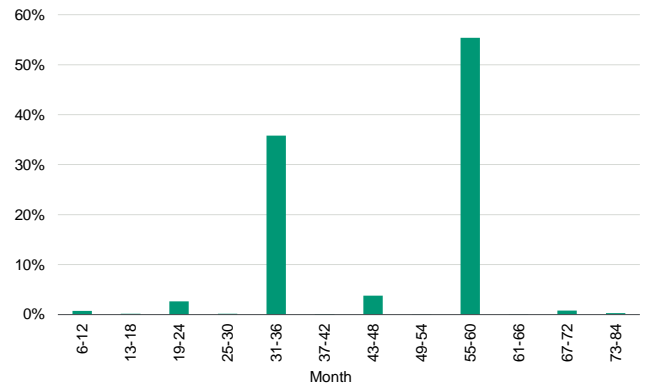
Outstanding discounted principal balance



Source: VWFSJ

Exhibit 8

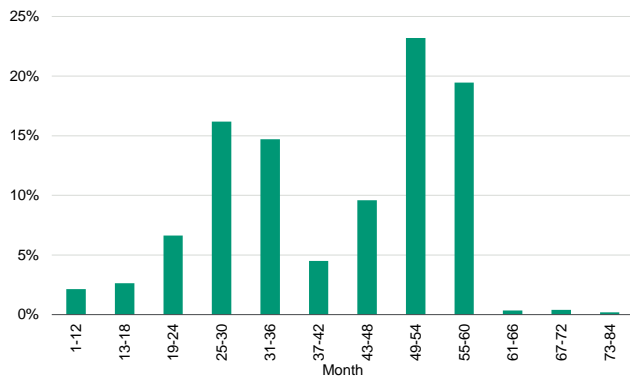
Contractual term



Source: VWFSJ

Exhibit 9

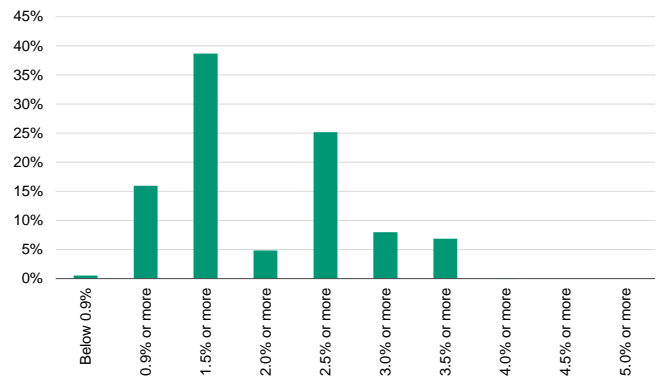
Remaining term



Source: VWFSJ

Exhibit 10

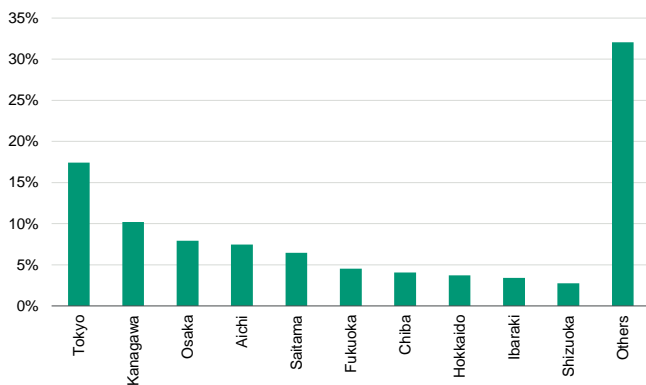
Contract interest rate



Source: VWFSJ

Exhibit 11

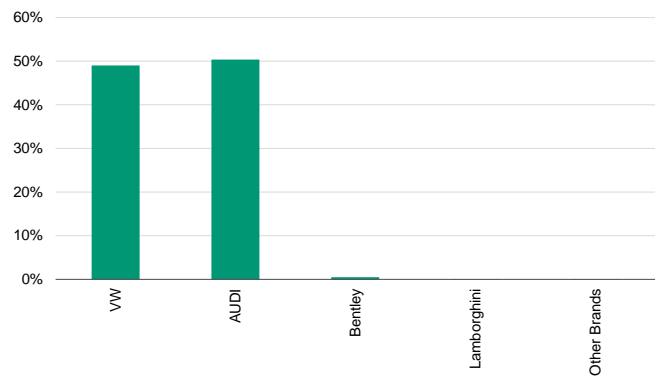
Geographic distribution (prefecture)



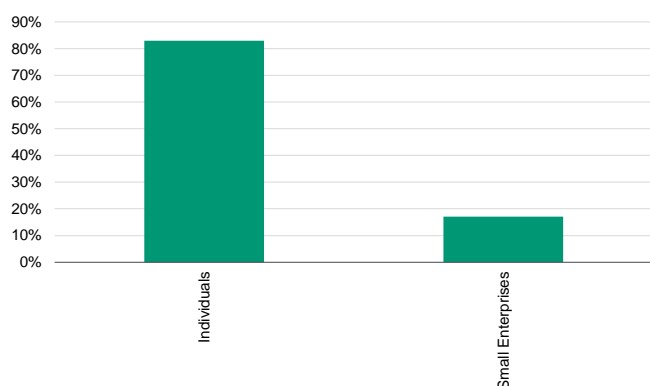
Source: VWFSJ

Exhibit 12

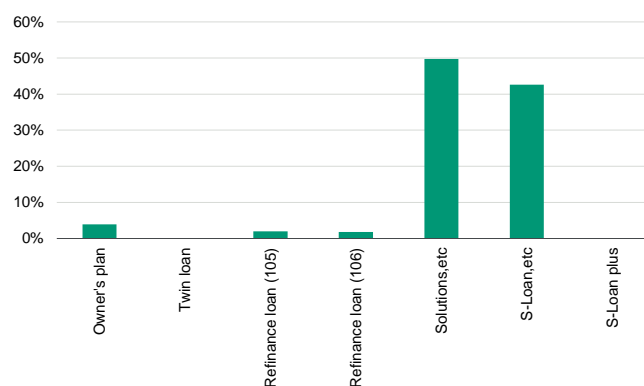
Vehicle brand



Source: VWFSJ

Exhibit 13  
Obligors

Source: VWFSJ

Exhibit 14  
Product type

Source: VWFSJ

### Eligibility criteria

Key eligibility criteria include the following:

- » The receivables are neither delinquent nor in default when selected for the pool.
- » The receivables are guaranteed by Jaccs or SMBCFS.
- » The auto loans do not prohibit the transfer of receivables.
- » The receivables are payable in yen.
- » The interest rate type applicable to each of the receivables is a fixed interest rate.
- » At least two monthly payments for each of the receivables has been made.
- » The current principal outstanding balance of each receivable is greater than ¥50,000 and less than ¥10,000,000.
- » The receivables with respect to "Used car" do not exceed 35% of the auto loan receivables.
- » The concentration limit for the balloon payment amount is less than 50% of the auto loan receivables.
- » The receivables in relation to vehicles categorized under "Other brands" that is, brands other than Volkswagen, Audi, Bentley and Lamborghini, do not exceed 5% of the total auto loan receivables.
- » The number of remaining auto loan payments does not exceed 82.

### Originator and servicer profile

#### Originator background

Volkswagen Financial Services Japan, Ltd., headquartered in Shinagawa-ku, Tokyo, was established in September 1990 as a joint venture between the Volkswagen group and Nippon Shinpan (currently Mitsubishi UFJ NICOS Co., Ltd.). VWFSJ is an indirectly owned subsidiary of Volkswagen Financial Services AG (Germany, A3/P-2), through Volkswagen Finance Overseas B.V..

As of the end of October 2021, VWFSJ had ¥1.01 billion in capital, 72 employees and about ¥386.3 billion in total assets. VWFSJ has entered into business operations and consignment agreements with Jaccs and SMBCFS as sub-servicers.

The duties to be performed by sub-servicers are as follows:

- » Collecting the payments that customers make under the obligation, such as installments for auto loans, and transferring the monies to VWFSJ
- » Receiving the applications for auto loans and making credit decisions

- » Monitoring and tracking the performance of customer contracts
- » Maintaining customer data and giving VWFSJ access to such information
- » Guaranteeing the obligation of customers
- » Providing any other services that are deemed necessary in the auto loan business

#### Sub-servicer background

JACCS Co., Ltd. is the guarantor and sub-servicer in the transaction. The company was established in 1954 and is headquartered in Tokyo. It is one of Japan's major credit companies. It regards financial services, including guarantees of auto loans, as one of its key business segments. It has branch offices in principal cities across Japan. As of the end of March 2021, the company had ¥16.1 billion in capital and an employee headcount of 2,770. The company is an equity-method affiliate of the MUFG Bank, Ltd. (A1/P-1).

SMBC Finance Service Co., Ltd. is the guarantor and sub-servicer in the transaction. The company is headquartered at Nagoya in Aichi Prefecture. It is one of Japan's major credit companies formed through the amalgamation of Central Finance Co., Ltd., OMC Card, Inc. and QUOQ Inc. in April 2009. Its main business lines include credit cards and installment sale loans (shinpan). As of the end of March 2021, the company had ¥82.8 billion in capital and an employee headcount of 3,320. The company is a consolidated subsidiary of Sumitomo Mitsui Card Company, Limited.

#### Operations review

We reviewed the operations of VWFSJ, Jaccs and SMBCFS in November 2021. We consider the companies sufficiently capable of servicing the pool.

### Origination

#### Marketing

As a finance company of the Volkswagen Group in Japan, VWFSJ provides various finance programs to people who have purchased vehicles from Audi, Bentley, Lamborghini and Volkswagen dealers. The Volkswagen Group has a strong franchise, importing vehicles through 393 dealers across Japan (excluding Ducati). Its dealer network in Japan is detailed, as shown below.

Exhibit 15

Volkswagen:	249 Dealers
Audi:	125 Dealers
Bentley:	9 Dealers
Lamborghini:	10 Dealers

Source: VWFSJ as of the end of October 2021

#### Credit screening

VWFSJ delegates credit decisions to Jaccs and SMBCFS. Jaccs and SMBCFS have each set up Volkswagen support or customer centers, manned by a total of 76 employees (42 for Jaccs and 34 for SMBCFS) who conduct credit assessments using their own scoring models, based on VWFSJ's auto loan program.

In the credit screening process, Jaccs and SMBCFS focus both on an obligor's ability and willingness to pay. The same credit screening process is applied to loans with balloon payments and those with amortizing equal payments.

VWFSJ determines the balloon payment amounts based on its projections of resale value. The balloon payment amounts are usually set at 40% of the initial price of the vehicles for three-year loans, 30% for four-year loans and 20% for five-year loans.

The actual resale values are monitored periodically by Jaccs or SMBCFS.

#### IT system

VWFSJ's main IT hardware system is leased, managed and maintained by an external vendor, on a 24-hours-per-day, 7-days-per-week basis.



VWFSJ also has a business application software maintenance contract with another external vendor.

VWFSJ's main IT system is located at an external data centre, which has an emergency in-house electric generator. The power system has passed the seismic qualification test conducted by an independent third party.

A backup IT system is located at a separate data center.

### **Servicing**

The obligors make monthly payments through bank transfers.

If they fail to make auto loan repayments on the agreed due date, the call centers operated by Jaccs or SMBCFS will chase for payment. Older delinquencies are handled by other departments within Jaccs and SMBCFS.

In principal, both servicer and sub-servicers will not allow the rescheduling of auto loan repayments, based on an obligor's inability to pay.

The transaction collection period is from the 11th day of each month to the 10th day of the following month. VWFSJ details the collection status in a servicing report and submit the report either five business days after the end of the collection period, or three business days prior to each trust calculation date, whichever is earlier. VWFSJ then remits the monthly payments to the trustee 1, four business days before the 28th of each month.

### **Asset analysis**

#### **Primary asset analysis**

##### **Performance of VWFSJ's entire pool**

The historical data from VWFSJ's entire pool show better and more stable performance than that of typical Japanese auto loan ABS that we rate.

##### **Data quantity and content**

We conducted our analysis using historical data of VWFSJ's entire pool from September 2002 and performance data of VWFSJ's securitization transactions, in addition to attribution data for VWFSJ's entire pool and the underlying eligible pool. The data was broken down based on the following categories: (1) guarantee companies, (2) product type, and (3) new or used vehicles.

The performance period covers the significantly stressed economic environment in Japan after the financial crisis in 2008. In our view, past performance data are a good indicator of future performance, and the quantity and quality of data received are sufficient to determine the assigned ratings.

##### **Default rate assumptions**

We estimate the transaction's expected overall annualized default rate to be about 0.28%, which is a weighted average of 0.30% for the "New car" pool, 0.35% for the "Used car" pool and 0.25% for the "Solutions, etc" pool, and the cumulative default rate at around 0.55% for the securitized pool.

We apply lower expected annualized default rate for each sub pool to this transaction compared with that of the past transactions, considering (1) stable performance of the VWFSJ's entire auto loan pool including the times over the period of the coronavirus outbreak, and (2) default rates of the underlying assets for the past transactions which have been staying lower than our initial expectations. We believe that strong credit and servicing policy by servicer and sub-servicers will continue to support stable performance in the future. (Please see page 13 for more information)

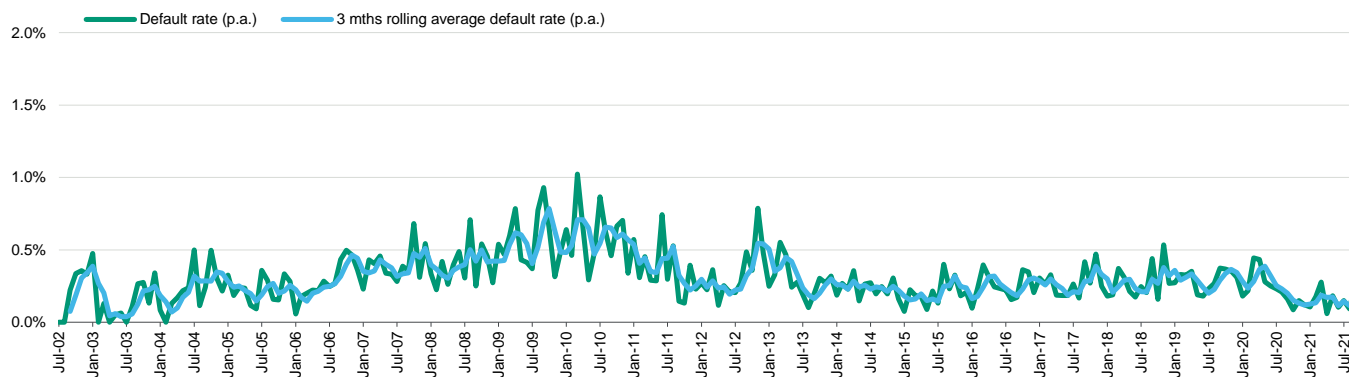
The eligible underlying pool consists of auto loan receivables guaranteed and serviced either by Jaccs or SMBCFS. Based on the business operations consignment agreements, Jaccs and SMBCFS are sub-servicers who provide credit screening and servicing of the underlying receivables.

The pools have performed at a similar level, especially in recent years. We therefore believe they are of a similar quality.

The dynamic data for VWFSJ's entire auto loan pool indicate that average default rate is about 0.27% on an annualized basis for the five years (from April 2015 to March 2020) before the coronavirus outbreak. After the outbreak the default rate has decreased and the average is about 0.16% for the last one year.

Exhibit 16

### Annualized default rate VWFSJ's managed portfolio



Source: VWFSJ

The default rate of the asset pool as a whole have been stable at low level since 2010 including the times over the period of the coronavirus outbreak, partly owing to the higher number of repeat borrowers who have proven track records of payment, with the exception of some certain periods, when a large increase in default rate showed, owing mainly to the insolvency of some large obligors.

Corporate contracts account for about 17.0% of the pool. Since small and medium-sized enterprises are vulnerable to economic shocks, we expect the corporate contracts portion of the pool to result in a degree of volatility in the performance of the pool.

Nevertheless, the negative effect is limited because of factors such as the transaction's eligibility criteria, which exclude, for instance, receivables exceeding ¥10 million.

The following helps stabilize pool performance: (1) the quality of the obligors, (2) the originator's and sub-servicer's accumulated credit screening expertise and consistent credit policy, and (3) the transaction's eligibility criteria.

The historical data provided by VWFSJ doesn't show higher default at balloon payments particularly. While the "Solutions, etc" and "Owner's plan" pools relate to different loan products, historical data shows that the performance of the pools is similar. Dealers can provide borrowers with any type of loan products regardless of their characteristics. In addition, there is no difference in the credit screening process among the products. We therefore believe the type of loan product has no bearing on performance.

The risk arising from a final balloon payment is limited, as mentioned later. The historical data do not show an event involving an originator's default. We have added further stress when estimating the transaction's credit enhancement to take into account the uncertainty related to the balloon payment, especially of auto loans with a "repurchase" option in the event of an originator's default.

#### Legal aspect of balloon payments with "repurchase" options

The legal aspect of securitizations backed by balloon payment auto loans with "repurchase" options refers to whether or not an unfulfilled pre-agreement (repurchase option provided by a dealer or an originator) may constitute an "obligor's payment defense" of an auto loan, under the legislation known in short as the Installment Sales Act, if a dealer or VWFSJ goes bankrupt.

In the preliminary resale contract, the obligor (purchaser of the vehicle) is generally given the option ("Yoyaku-Kanketsu-Ken") of reselling the car to the dealer (including VWFSJ) at the pre-arranged price, which covers the final balloon payment.

In general, an obligor's option to resell the vehicle at the pre-arranged price does not apply where dealers default because the pre-agreement has not been completely executed.

Moreover, a preliminary resale contract may be considered one of the options available to the obligor and therefore separate from a sales contract.

In addition, the payment defense may be treated differently than in instances where a vehicle is defective. In such cases, the Installment Sales Act gives the obligor the right to refuse payment.

Consequently, there is only a limited risk that obligors will use the payment defense to renege on payments.

However, if there is a large difference between the final balloon payment and the actual resale market value, and the dealer's ability to repurchase at a pre-arranged price was a significant consideration for the obligor when entering into the sales contract, it may be possible for the obligor to refuse to make the final balloon payment and also to terminate the contract.

#### **Obligor's willingness to pay**

An analysis of securitizations backed by balloon payment auto loans with "repurchase" options requires consideration not just of the legal risks associated with the bankruptcy of a dealer or originator, but also the obligor's willingness to pay.

While the responsibility for the final balloon payment rests with obligors, obligors may be unwilling to make payment where dealers or originators go bankrupt, if the obligors have relied on dealers or originators to provide payment options.

There are three factors mitigating the risks in such transactions.

First, the risk does not exist in cases where obligors continue using the vehicles and therefore choose the "refinance" or "lump-sum payment" methods. In such cases, an obligor's willingness to pay is not influenced by whether or not dealers or originators go bankrupt.

According to data provided by the originator (VWFSJ), around 33% of obligors in the "Solutions, etc" plan chose "Refinance loans" when balloon payments were due. The ratio has not been changed dramatically.

The obligors of "Refinance loans" are those who apply to refinance balloon payments, which are the final portions of their loans. Such borrowers have a proven track record of payment and their applications for refinancing are screened by originators. These factors support the performance of "Refinance loan" pools.

Second, dealer diversification is likely to minimize the risk of obligors being unwilling to pay because the business of the dealer in bankruptcy is succeeded by other dealers, allowing obligors to execute their repurchase options as they would normally have done. Past cases have shown that obligors were successfully handed over to dealers who had relationships with the automakers or financing companies.

Moreover, because most of the dealers in the transaction had no significant financial links with the Volkswagen group, it is likely that even in the case of a Volkswagen group bankruptcy, obligors would be able to execute their purchase options against the dealers.

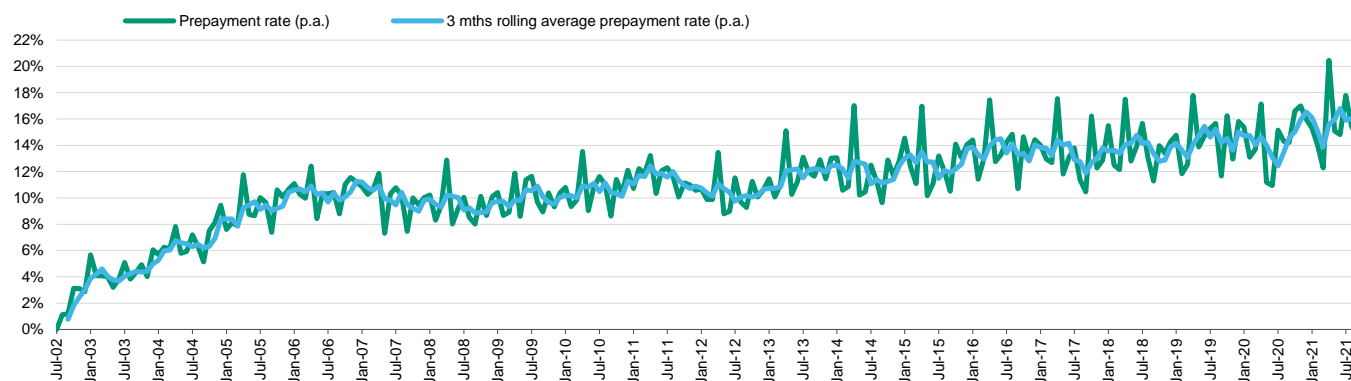
Third, the structure limits the proportion of balloon payments in the pool, and allows the trustee 1 to repossess an obligor's vehicle. We believe that these factors limit the balloon payment risks associated with this transaction, and contribute to the stability of the performance of the pool.

#### **Other assumptions**

The dynamic data indicate that the annualized prepayment rate for the entire pool has been stable over the past few years. The annualized prepayment rate in the VWFSJ's entire auto loan pool is about 15.7% on an annualized basis in last one year.

Exhibit 17

### Prepayment rate VWFSJ's managed portfolio



Source: VWFSJ

We have estimated an annual expected prepayment rate of around 12.8% for the entire pool, which is a weighted average of 17% for the “New car” pool, 12% for the “Used car” pool and 11% for the “Solutions, etc” pool.

We typically develop scenarios in which the prepayment rates are higher or lower than expected, and analyze the impact on credit enhancement.

We have considered a decrease in the portfolio yield during the revolving period. Discount rate applied to each loan in the pool is set to be greater than the predetermined rate to cover the interest rate of ABL 1 and expenses, and the applicable interest rate in the relevant loans.

The weighted-average life (excluding the revolving period) is expected to be about 2.3 years based on the initial scheduled cash flow data. The weighted-average life at the end of the revolving period in all of the past transactions became shorter than the one at the beginning of the revolving period because the seasoning effect on the loans in the pools exceeds the effect of additional entrustment of new loans.

#### Credit enhancement (derivation of the Aaa level)

Credit enhancement has been provided by the senior/subordinated structure, as well as by any available excess spread.

Our analysis is based on:

(A) (A)Subordination addressing default receivables (Aaa CE): about 5.9%

(B) Available excess spread: about 1.7%

(C) Subordination addressing commingling loss: 0%

(D) Adjustment by stressed prepayment rate: about 0.3%

(E) Total subordination ratio: about 4.5%

((E)=(A)-(B)+(C)+(D))

Breakdowns for (A) and (B) are based on the expected scenario of prepayment rate. Required subordination ratio is tested by several prepayment rate scenarios.

The transaction's subordination (excluding that corresponding to a cash reserve) will comprise about 6.5% of the initial discounted principal balance of the underlying assets.

We have developed stress-case scenarios for the default and prepayment rates, and the interest collection to determine the necessary credit enhancement for this transaction.

All the auto loans consist of the underlying pool are guaranteed by Jaccs or SMBCFS. However, we do not guarantee Jaccs's or SMBCFS's credit in a credit valuation of the pool and a rating analysis of the Beneficial Interests 2 and the ABL 2.

The transaction allows the replenishment of the underlying pool during the one-year revolving period. We have considered the risk arising from a change in the portfolio under a stressed replenishment scenario and conclude that such a risk is covered by the "target OC structure" during the revolving period.

We have conducted a cash flow analysis based on a given ABL 1 interest rate and calculated an available excess spread. Excess spread is changed based on the applicable ABL 1 interest rate.

Subordination on the transaction's liability will build up over time because of the dynamic enhancement mechanism ("target OC structure") incorporated in the structure. In our view, this arrangement will, to some extent, protect the transaction from any volatility in the performance of the pool.

We think that the commingling loss is fully covered by VWFSJ's advance payment.

The risk of cancellation is limited because the underlying receivables are well seasoned and the eligibility criteria for the transaction require a scheduled payment of at least two months.

**Comparables**

**Prior transactions**

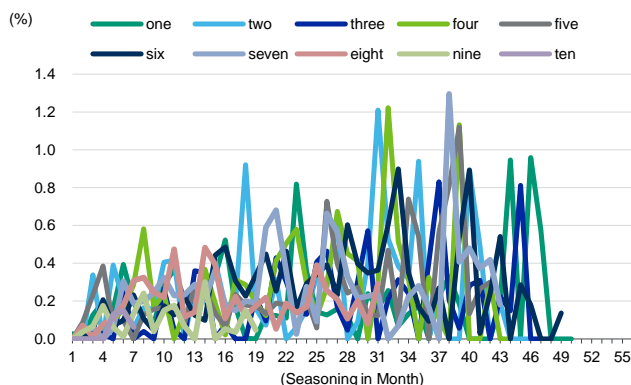
The annualized default rates of the underlying assets for the past transactions have been lower than our expectation.

Our expected annualized default rate for Driver Japan one was around 0.70%. Expected annualized default rates for Driver Japan two, three and four were around 0.49%, one for Driver Japan five was about 0.50%, one for Driver Japan six was about 0.44%, one for Driver Japan seven was about 0.42%, one for Driver Japan eight, nine and ten were about 0.34%.

The underlying assets for Driver Japan one exclude the receivables guaranteed by SMBCFS. The key eligibility criteria of the underlying assets are same among the transactions.

Exhibit 18

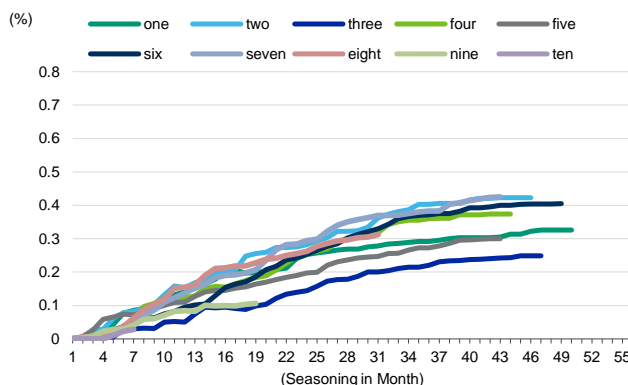
**Annualized default rate - Driver Japan**



Source: Moody's SF Japan K.K.

Exhibit 19

**Cumulative default rate - Driver Japan**



Source: Moody's SF Japan K.K.

**Performance relative to sector**

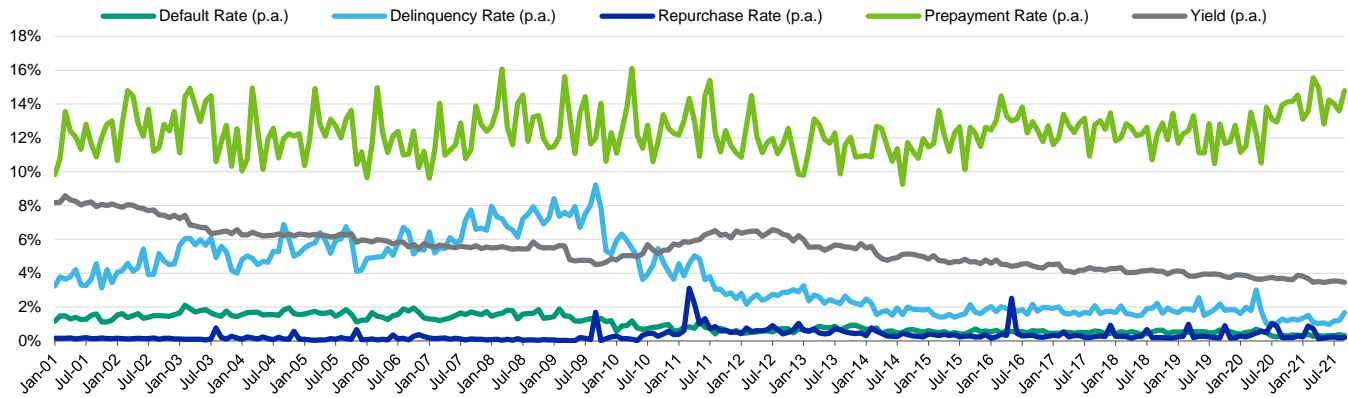
The historical default rate of VWFSJ's entire pool shows lower than that of the receivables for typical auto loans.

The lower default rates for VWFSJ's auto loan receivables are attributable partly to the quality of the obligors and their consistent credit policies.

Exhibits 20-23 detail the performance data for Japanese auto loan ABS that we rate.

Exhibit 20

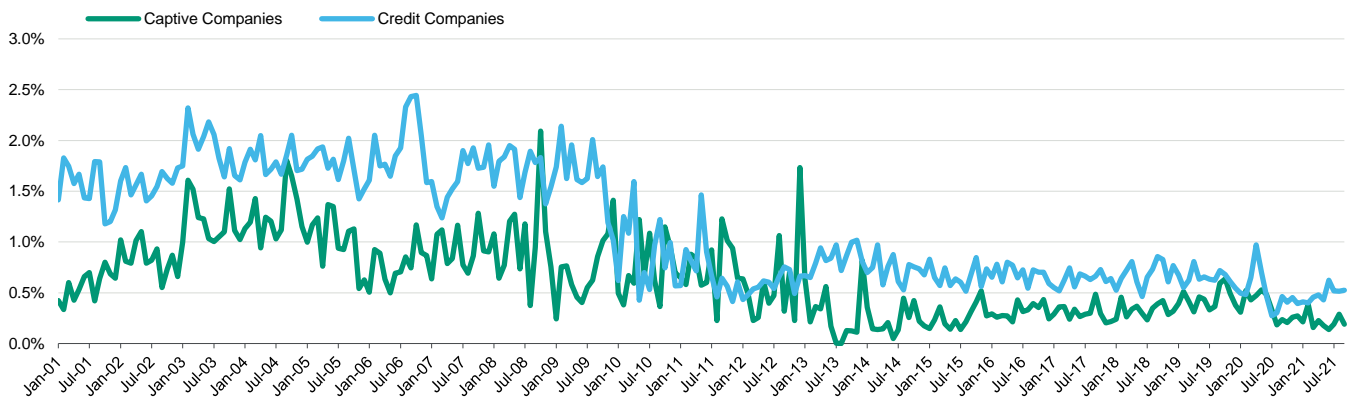
Auto loan performance data (dynamic)



Source: Moody's Japan K.K., Moody's SF Japan K.K.

Exhibit 21

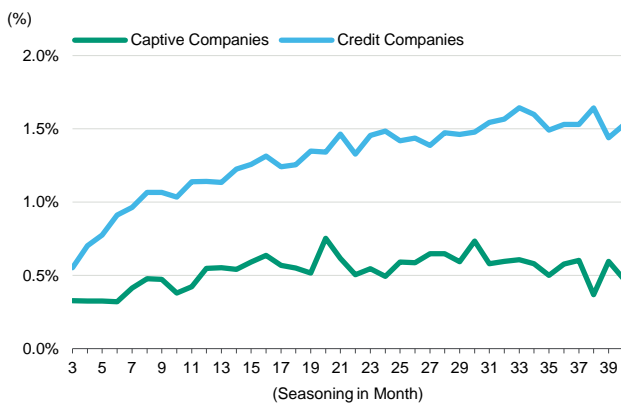
Auto loan performance data (dynamic)  
Annualized default rate by type of originator



Source: Moody's Japan K.K., Moody's SF Japan K.K.

Exhibit 22

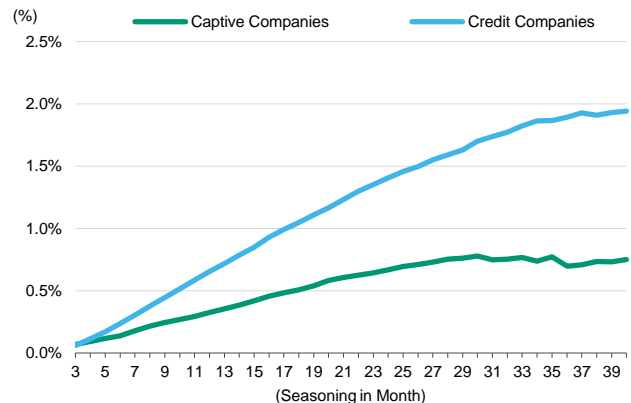
Auto loan performance data (static)  
Annualized default rate by type of originator



Source: Moody's Japan K.K., Moody's SF Japan K.K.

Exhibit 23

Auto loan performance data (static)  
Cumulative default rate by type of originator



Source: Moody's Japan K.K., Moody's SF Japan K.K.

**ESG - Environmental considerations**

Environmental risks to auto loan ABS can arise from natural disasters, such as flooding, earthquakes, or typhoons, which can disrupt borrowers' lives and increase delinquencies or defaults. Pool diversification mitigates the impact of many environmental risks on deals, but regional concentrations can occur. However, in addition to pool diversification, the settlor or sub-servicer typically reschedules auto loans for obligors affected by disaster and buys back or subrogates those loans, which mitigates the negative impact. We also consider the risks to vehicles' recovery values from changes in carbon emissions regulations. This risk pertains to balloon loans and can be materialized mainly if the obligors can not exercise the option to sell vehicles. These risks are somewhat mitigated by the short tenor of the transaction.

**ESG - Social considerations**

Social risks to auto loan ABS can arise from effect of the coronavirus outbreak on the Japanese economy, or from the government measures put in place to contain it. Such risks can arise from governmental efforts to alleviate burdens on obligors from the effects of such phenomena, such as payment forbearance, directives to modify loans to lower payments, or other borrower protection measures.

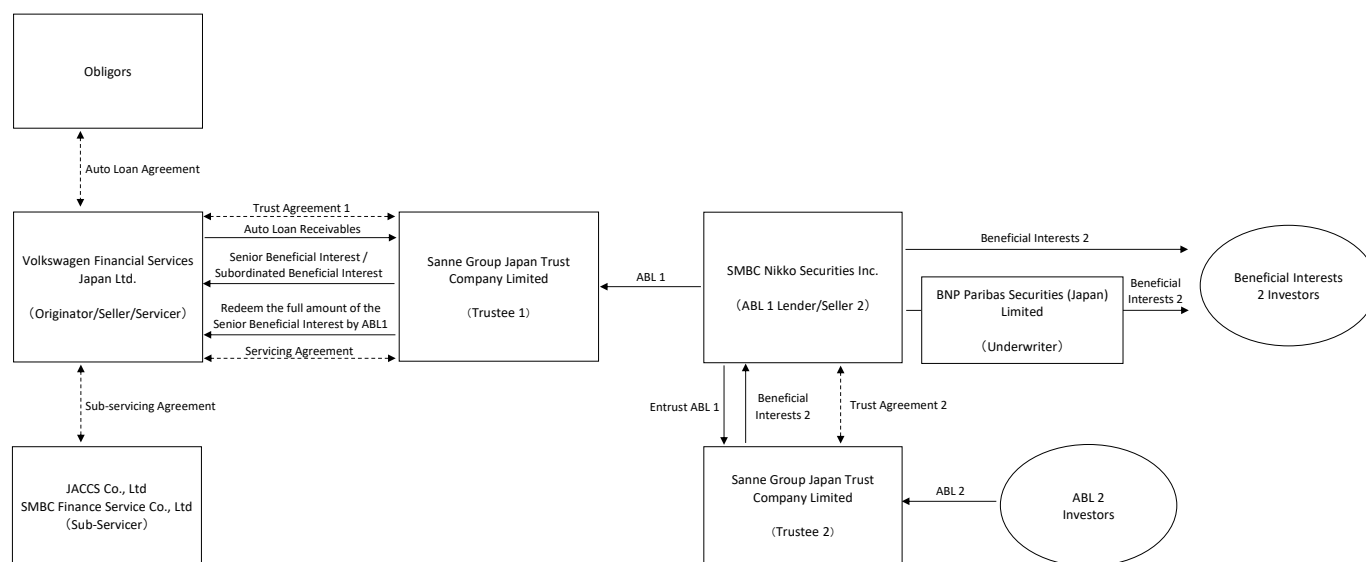
Our analysis has considered the effects that the coronavirus outbreak and the announced government measures to contain the virus are having and will have on the Japanese economy and on the performance of auto loans. Specifically, for Japanese auto loan ABS, loan performance will weaken due to the spike in the unemployment rate, which may limit borrowers' income and their ability to service debt. However, the settlor typically reschedules loans for obligors affected by the coronavirus outbreak and buys back those loans, which mitigates the negative impact.

**Securitization structure overview**

The transaction structure incorporates a one-year revolving period. After the revolving period, the Beneficial Interests 2 and the ABL 2 are redeemed in a pass-through, monthly amortization. The Beneficial Interests 2 and the ABL 2 are structured pari passu in the principal and interest or dividend waterfall.

**Structural diagram**

Exhibit 24  
Structure diagram



Source: VWFSJ, Moody's SF Japan K.K

## Summary of transaction structure

- » The seller entrusts a pool of its auto loan receivables and related rights and title to the trustee 1. In turn, the trustee 1 issues a senior beneficial interest and a subordinated beneficial interest.
- » Entrustment of the receivables is perfected against third parties according to the Perfection Law (the legislation known in short as the Law Prescribing Exceptions to the Civil Code Requirement for Setting Up Against a Third Party to an Assignment of Claims and Chattels [Law No. 104, 1998], as amended). Perfection against relevant obligors is made only when certain events occur.
- » The trustee 1 raises funds by taking out a limited-recourse asset-backed loan (the "ABL 1"), which is extended by ABL 1 lender, and use the proceeds to redeem the senior beneficial interest in full.
- » The seller retains the subordinated beneficial interest for the life of the transaction.
- » ABL 1 lender as seller 2 entrusts the ABL 1 to the trustee 2 and receives the beneficial interests 2.
- » Entrustment of the ABL 1 is perfected against the relevant obligor and third parties by obtaining the trustee 1's dated and certified approval in writing, and pursuant to the rules under Article 467 of the Civil Law.
- » The trustee 2 receives the ABL 2 from the ABL 2 investors. The trustee 2 uses the proceeds to redeem a part of the beneficial interests 2.
- » Arrangers transfer the beneficial interests 2 to investors. The transfer is perfected against trustee and third parties, by obtaining the asset trustee's dated and certified approval in writing pursuant to Article 94 of the trust law.
- » The beneficial interests 2 and the ABL 2 are redeemed in a pass-through, monthly amortization. Dividends on the beneficial interests 2 and interest on the ABL 2 are payable every month. The beneficial interests 2 and the ABL 2 are structured pari passu in the principal and interest-dividend waterfall.
- » If an early amortization event occurs, the monies or cash flows which are supposed to be used to redeem the subordinated beneficial interest instead are used to redeem the beneficial interests 2 and the ABL 2.
- » Commingling risk is fully addressed by the seller's advance payment.
- » A backup servicer is not appointed at closing. If a servicer replacement event occurs, the trustee 1 will appoint one, and enters into the backup servicing agreement with the newly appointed backup servicer.

## Collection account

The collections from the underlying assets are managed in the collections account in the name of the asset trustee. The account is held initially at MUFG Bank, Ltd. According to the contractual restrictions, the account should be held at "eligible financial institutions", which have short-term ratings of P-1. In the case that such financial institutions — where the accounts are held — become ineligible, the accounts will be transferred into the accounts of other eligible financial institutions. The transfer of the collections account should be completed within 30 days.

Exhibit 25

### Credit enhancement and liquidity

Credit Enhancement:	Credit enhancement is provided by the senior/subordinated structure and available excess spread if any. Subordination (excluding that corresponding to a cash reserve) comprises approximately 6.5% of the initial principal balance of receivables.
Liquidity:	Liquidity is provided in the form of a cash reserve to cover the following items.
	a) Four months' dividends on Senior Beneficial Interests 2 and interest payment on the ABL 2
	b) Four months' Trust Fees
	c) Four months' back-up servicer fees
	d) Expenses related to notice to the obligors

Source: VWFSJ, Moody's SF Japan K.K



## Waterfall

The collections of the auto loan receivables and any related security are to be distributed at the trustee 1 level as follows:

### Revolving period and amortization period

1. To pay taxes, trust fees, servicer fees and other expenses
2. To pay interest on the ABL 1
3. To cover any shortfall in the cash reserve for liquidity support
4. To redeem any additional senior beneficial interest during the revolving period (an amount ensuring that the "target OC percentage" for the ABL 1 is reached during the revolving period and once reached, is kept constant)
5. To make a redemption on the ABL 1 for an amount equal to the "asset-backed loan target OC amount" (an amount which is necessary to reduce the outstanding principal amount of the ABL 1 to the targeted ABL 1 balance). The remainder is used to redeem the subordinated beneficial interest

### Early amortization period

1. To pay taxes, trust fees, servicer fees and other expenses
2. To pay interest on the ABL 1
3. To cover any shortfall in the cash reserve for liquidity support
4. To make a redemption on the ABL 1
5. To redeem the subordinated beneficial interest after the ABL 1 has been redeemed in full (trustee 2)

The interest and principal payment to the ABL 1 is distributed as follows:

1. To pay taxes, trust fees and other expenses
2. To pay interest/dividends on the ABL 2 and the beneficial interests 2
3. To make a redemption on the ABL 2 and the beneficial interests 2 in pari passu

### Early amortization events

Any of the following occurrences initiates early amortization:

- » A servicer replacement event
- » A sub-servicer replacement event
- » A Level 2 credit enhancement increase condition being in effect
- » The originator failing to fulfill its obligation to repurchase the receivables under the trust agreement
- » Cash amounts (excluding cash in the cash collateral ledger) held by the trustee 1, exceeding 10% of the discounted principal balance of the receivables on three consecutive payment dates

Exhibit 26

**Dynamic enhancement mechanism**

Conditions for Credit Enhancement	Subordination (%)
Revolving Period:	8.5%
After Revolving Period:	11.5%
Level 1:	17.0%
Level 2:	Sequential Payment

Source: VWFSJ

- » Level 1: if the cumulative default rate exceeds (1) 0.50% for first 6 months, (2) 0.80% up to the 15th month, and (3) 1.15% up to the 24th month
- » Level 2: if the cumulative default rate exceeds 1.60%

**Definition of defaulted receivables**

- » Where the obligor has failed for three consecutive months to make monthly installment payments that are due
- » Where the unpaid balance may be declared immediately due and payable, as a result of any event of default as prescribed in the auto loan contract

**Securitization structure analysis****Legal risk****Bankruptcy-remoteness**

The seller entrusts a pool of its auto loan receivables to the trustee 1, entrustment of which is perfected against third parties under the perfection law.

The senior beneficial interest is redeemed with the proceeds of the ABL 1. The ABL 1 is entrusted to the trustee 2. Entrustment of the ABL 1 is perfected against the relevant obligor and third parties by obtaining the trustee 1's dated and certified approval in writing, and pursuant to the rules under Article 467 of the Civil Law. Thus, the risk of interruption to the assets' cash flow stemming from the seller's bankruptcy proceedings is considered to be sufficiently minimized to achieve the rating assigned.

The trust assets, which is managed apart from the trustee's own assets, are bankruptcy-remote from the trustee, in accordance with Article 25 of the trust law. The trust law allows for bankruptcy proceedings on the trust assets. To secure the bankruptcy remoteness of the trust assets, a non-petition clause, in which creditors agree not to file for bankruptcy on the assets, is obtained.

**ABL to trust**

Although the borrower of the ABL 1 is the trustee, the ABL 1 can be considered a borrowing by a trustee as the asset trustee in a securitization transaction, rather than being the trustee's own debt, because:

1. the loan is made to the trust bank according to the seller's instructions
2. the proceeds of the loan can be used only for the redemption of the senior beneficial interest
3. the ABL 1 has limited recourse to the trust asset, and the relevant contract documents stipulate that the trustee is not obligated to redeem the ABL 1 with its own assets
4. the trust agreement stipulates the principal and interest payments on the ABL 1 in the waterfall

Since the trust assets are separate from the trustee's own assets, the ABL 1 cannot be treated as an asset of the trustee in bankruptcy proceedings. Its status is similar to a senior beneficial interest.

### Interest risk

Interest from the assets, the senior beneficial interests 2 and the ABL 2 is at fixed rates. The transaction therefore has no interest-rate mismatch.

### Cash commingling risk

The obligors make monthly payments to SMBCFS on the 26th of every month and to Jaccs on the 27th, through account transfers. As sub-servicers, Jaccs and SMBCFS then transfer the amounts to VWFSJ on the day they receive the payments.

VWFSJ in turn conducts the servicing pursuant to a servicing agreement with the trustee 1, submitting the servicing report which describes the collection status during the defined collection period, from the 11th day of the previous month to the 10th day of the current month. The report is submitted either on the 5th business day after the end of the collection period, or three business days prior to each trust calculation date, whichever is earlier. VWFSJ pays the estimated collection amount in advance, four business days prior to the 28th day of each month. The commingling risk therefore is covered by VWFSJ's advance payments.

### Backup servicing arrangement

A backup servicer is not appointed at closing. If a servicer replacement event occurs, the trustee 1 will appoint another servicer.

If a servicer replacement event (described below) occurs, the trustee 1 may dismiss the servicer and have a backup servicer take over as servicer, or it may reappoint the servicer after discussions with the servicer or the bankruptcy trustee, if the servicer is in bankruptcy.

Among the candidates for backup servicer are Jaccs and SMBCFS.

Jaccs and SMBCFS also act as sub-servicers in the transactions, based on the business operations consignment agreements.

Key servicer replacement events include the following:

- » The servicer fails to remit collections from the pool to the trustee 1, and the failure is not corrected within a specified period.
- » The servicer fails to fulfill any of its obligations under the relevant agreements, and the failure is not corrected within a specified period.
- » The servicer files for legal bankruptcy proceedings, including insolvency, civil rehabilitation or corporate reorganization; the banks suspend business with the servicer; or the third parties seize the servicer's assets.
- » The trustee 1 deems it necessary to terminate the servicing agreement to protect the rights or interests of trustee 2 or the beneficiaries.

### ESG – Governance considerations

Strong auto loan ABS governance relates to transaction features that promote the integrity of the operations of transaction for the benefit of investors, as well as the data provided to investors. The following are some of the governance considerations related to the transaction:

- » Risk retention — In this transaction, the settlor holds 5% or more of the credit risk in the underlying pool.
- » TPRs — An independent due diligence firm reviews a sample of the loans for compliance and data integrity matters. This increases the likelihood that the data that we and investors rely on is accurate.
- » R&W framework — This transaction includes an obligation of the R&W provider to remedy loans that breach R&Ws.
- » Bankruptcy remoteness — We expect to receive legal opinions to the effect that in the event of a bankruptcy or insolvency proceeding with respect to key transaction parties, the auto loans would not be treated as part of the estate of such party.

## Methodology and monitoring

### Methodology

- » [Moody's Global Approach to Rating Auto Loan- and Lease-Backed ABS, September 2021 \(1264322\)](#)

### Monitoring

We expect to receive a monthly trustee report from the trustee, and a monthly servicing report from VWFSJ. In conducting the post-closing monitoring of the ratings, we will consider macroeconomic and industrial trends.

## Moody's related publications

### Sector report

- » [Structured finance - Japan: Natural disasters pose growing risk for ABS and RMBS, but mitigants exist, May 2019 \(1173133\)](#)
- » [Auto ABS - Japan: Captive company auto ABS will benefit from higher prepayment rates than noncaptive deals, December 2019 \(1201593\)](#)
- » [Structured finance - Japan: Coronavirus fallout increases asset risks in consumer deals, April 2020 \(1220460\)](#)
- » [Auto ABS - Japan: Loan repurchasing and structural strength mitigate coronavirus-related risks, August 2020 \(1238986\)](#)
- » [Installment and auto loan ABS - Japan: Coronavirus fallout heightens risks for deals exposed to high share of corporate borrowers, August 2020 \(1235873\)](#)
- » [Structured finance - Japan: Coronavirus will spur fundamental shifts in loan origination and servicing practices, October 2020 \(1242672\)](#)
- » [Auto ABS - Japan: Imported cars' loan performance holds up strongly amid economic disruptions, March 2021 \(1270614\)](#)
- » [Auto ABS - Japan: Carbon neutral shift will increase car resale value risks, but mitigants exist, September 2021 \(1294821\)](#)
- » [Structured finance - Japan: 2022 Outlook – Ongoing economic recovery will be positive but growing inequalities pose risks, December 2021 \(1303511\)](#)

### Performance update

- » [ABS - Japan: Performance Update - Excel - Sep 21, November 2021 \(1309692\)](#)

### Issuer comment

- » [Driver Japan auto loan ABS: Strong underwriting standards in face of weak VW vehicle sales will underpin good performance, November 2017 \(1094846\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody's.com](http://www.moody's.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1318468

**Contacts**

Natsuko Saito                    +81.3.5408.4283  
Associate Analyst                Moody's SF Japan K.K.  
natsuko.saito@moody.com

**CLIENT SERVICES**

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454