# Presale:

# Japan Housing Finance Agency (Series 203)

March 14, 2024

## ¥55.6 Billion JHF Series 203 Secured Pass-Through Notes Due April 2059

## Preliminary rating as of March 11, 2024\*

Preliminary rating	Preliminary amount (bil. ¥)	Coupon type	Legal final maturity date	Overcollateralization ratio (%)§
AAA (sf)	55.6	Fixed rate	April 10, 2059	22.4

Note: This presale report is based on information as of March 13, 2024. The ratings shown are preliminary. Subsequent information may result in the assignment of final ratings that differ from the preliminary ratings. Accordingly, the preliminary ratings should not be construed as evidence of final ratings. This report does not constitute a recommendation to buy, hold, or sell securities. \*We announced the assignment of our preliminary rating to JHF's series 203 notes on March 11, 2024. This report reflects updated information regarding the receivables pool and the issuance amount of the notes, which have been finalized, SWe define the overcollateralization ratio as: 1-(A+B)/(C-D-E); A: the rated obligations and equally ranked obligations; B: prior obligations to the rated obligations; C: underlying assets (including cash); D: liquidity reserves; E: obligations, except for senior, mezzanine, or subordinate obligations (seller's interest, etc.). The ratio in this report represents the transaction structure's minimum maintenance ratio for the overcollateralization of pro rata pay.

## Profile

Expected closing date	March 25, 2024
Collateral	An entrusted pool of residential mortgage loans
Originator/Servicer	Japan Housing Finance Agency
Collateral trustee	Sumitomo Mitsui Trust Bank Ltd.
Beneficiary representative	Sumitomo Mitsui Banking Corp.
Backup servicer	Sumitomo Mitsui Trust Bank Ltd.

## Rationale

S&P Global Ratings has assigned its preliminary 'AAA (sf)' rating to Japan Housing Finance Agency's (JHF) ¥55.6 billion series 203 fixed-rate residential mortgage-secured pass-through notes and beneficiary certificates (subsequent to a trigger event).

Our preliminary rating reflects our opinion on the likelihood of the full and timely payment of interest, or interest distribution in the case of the beneficiary certificates, allowing for a

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three-month grace period, and the ultimate repayment of principal by the transaction's legal final maturity date.

Our preliminary rating primarily reflects the following:

- We assume a foreclosure frequency for the loan receivables in the notes' underlying asset pool of about 34.2% under a stress level commensurate with our 'AAA' rating and about 3.8% under a stress level commensurate with our 'B' rating. These rates, which reflect our view of the credit quality of the underlying assets, are prior to adjustments we apply to account for the transaction's convertible pro rata pay structure. Meanwhile, we assume a loss severity rate of about 43% for defaulted receivables under our 'AAA' stress scenario.
- We conducted a cash flow analysis based on the foreclosure frequency and loss severity rate assumptions. As a result, under a 'AAA' stress scenario, we concluded that interest payments and principal repayments on the notes and beneficiary certificates (subsequent to a trigger event for issuance of beneficiary certificates) would be made as scheduled (allowing for a three-month grace period with respect to payment of interest, or interest distribution in the case of the beneficiary certificates).
- Prior to a beneficiary certificate trigger event and if receivables in the collateral pool default or are delinquent for four months, JHF will eliminate these receivables from the collateral pool and amortize the notes by the amount of these receivables to maintain the initial level of overcollateralization (the level at the transaction's closing) in the trust. After a beneficiary certificate trigger event, the overcollateralization will mitigate the credit risk of the transaction's underlying mortgage loans and interest rate risk (interest on the mortgage loans less the sum of interest payments on the beneficiary certificates and transaction costs).
- In our view, the transaction has limited exposure to setoff risk. This is because when JHF purchases loans from private-sector financial institutions the agency secures the obligors' consent to the transfer of the loans and the obligors relinquish their rights to use any claims, including their right to offset their mortgage debt against the financial institutions.
- After considering the structural features of this transaction--including the transfer of collections from the collateral receivables, the level of liquidity protection, and the lack of a credit enhancement floor--we believe the rating on the notes depends to an extent on JHF's credit quality.

## Strengths

- Prior to a beneficiary certificate trigger event and if receivables in the collateral pool default (primarily receivables that are at least four months overdue, receivables for which terms and conditions were relaxed, and receivables that are in breach of representations and warranties), JHF will use a "withdrawal scheme" to eliminate these receivables from the collateral pool and amortize the notes by the same amount of these receivables. Specifically, under this scheme, JHF will apply an amount equivalent to the defaulted receivables to the payment of the JHF notes and withdraw the receivables from the trust pool. In effect, this structure provides the transaction with the same benefits as JHF's purchase of the defaulted loans.
- In principle, all mortgages that JHF originated directly or purchased from financial institutions are recorded as first-lien mortgage loans. Accordingly, in conducting our rating analysis, we factored in recoveries from defaulted receivables.
- Interest rate mismatch risk does not exist, because all the mortgage loan receivables carry fixed interest rates throughout their terms (including loans with a step-up interest feature) and

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the notes/beneficiary certificates also bear fixed interest rates.

- Geographical concentration has limited impact on the transaction's overall default risk because the collateral properties backing the mortgage loans are dispersed across Japan.

## Weaknesses and mitigating factors

- Credit risk in JHF's notes depends to an extent on JHF's credit quality. This is because the transaction, unlike typical securitizations, does not involve a true sale structure through the transfer of the collateral assets to the trust at closing.
- The loan-to-value (LTV) ratio of the underlying loan pool (based on the inclusion of non-JHF debt and the weighted average of the loan balances) is higher than the 85% LTV ratio of the archetypical Japanese pool. In addition, about 62% of the pool consists of loans with an LTV ratio (including non-JHF debt) higher than 90%, which has led to an increase in our foreclosure frequency assumptions in our stress scenarios.
- About 47% of the obligors for the loans in the underlying pool are neither corporate employees nor civil servants. This key factor has led to an increase in the foreclosure frequency assumptions in our stress scenarios.
- About 10% of the pool consists of loans for owners' secondary houses and houses that serve as residences for the owners' relatives. (Properties for the purpose of investment or for generating rental income are not eligible.) We took into account differences between these loans and loans extended to finance the construction or purchase of owner-occupied houses in terms of characteristics and then raised our foreclosure frequency assumptions accordingly.
- Prior to a beneficiary certificate trigger event, JHF will maintain the trust's initial level of credit enhancement (the level at the transaction's closing). In conducting our analysis for this transaction, we applied a 1.2x multiple to our foreclosure frequency assumptions, derived in our credit risk analysis, to compensate for the additional back-loaded default risk in convertible pro rata payment structures.

## Environmental, Social, And Governance

Our rating analysis considers a transaction's potential exposure to environmental, social, and governance (ESG) credit factors. For RMBS, we view the exposure to environmental credit factors as average, social credit factors as above average, and governance credit factors as below average (see "ESG Industry Report Card: Residential Mortgage-Backed Securities," published March 31, 2021). In our view, the exposure to ESG credit factors in this transaction is in line with our sector benchmark.

We consider the transaction's exposure to environmental credit factors to be average. Physical climate risks such as floods, storms, wildfires, or earthquakes could severely damage properties and reduce their value, affecting recoveries if borrowers default. In our view, well-diversified portfolios reduce exposure to extreme weather events and other natural disasters. We have factored the geographic diversity of the underlying portfolio into our credit analysis (see "Credit Risk Analysis" section below).

For RMBS, social credit factors are generally considered above average because housing is viewed as one of the most basic human needs and conduct risk presents a direct social exposure for lenders and servicers, particularly because regulators are increasingly focused on ensuring fair

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treatment of borrowers. We review lenders' underwriting practices as part of our operational risk assessment and factor them into our credit analysis (see "Loan origination and underwriting process" section below).

The transaction's exposure to governance credit factors is below average. Given the nature of structured finance transactions, most have relatively strong governance frameworks through, for example, the generally tight restrictions on what activities the special-purpose entity can undertake compared with nonspecial-purpose entities. As part of our operational risk assessment, we review originators' risk management and governance frameworks. We consider the risk management and governance practices in place to be consistent with industry standards and our benchmark expectations.

## **Transaction Overview**

JHF will issue its ¥55.6 billion series 203 fixed-rate residential mortgage-secured pass-through notes pursuant to clearance under the JHF Law. As security for JHF's payment obligations under the issued notes, JHF will entrust 2,233 residential mortgage loan contracts worth about ¥71.8 billion with a trust that Sumitomo Mitsui Trust Bank Ltd. holds. The noteholders will collectively hold all the beneficiary interests from the mortgage loan contracts. The entrusted receivables will include overcollateralization of 22.4% of the total pool, or 28.86% of the note balance. The entrustment of the receivables will be perfected against third-party claims under Japan's Special Perfection Law.

Prior to any trigger event, JHF will use its own funds to pay interest and principal on the notes. Upon payment of the notes, the trustee will release a corresponding amount of receivables to JHF and cancel the relevant proportion of the trust. At no time during this process will the amount of overcollateralization fall below 22.4% of the total remaining entrusted receivables.

If specified trigger events occur and the procedure to confirm the holders of the beneficiary certificates is unimpeded, the investors will acquire the beneficiary certificates in place of the notes and the notes will then lapse.

## Collateral

## Overview of loan pool

The beneficiary certificates will be issued from a trust created with an underlying pool of residential mortgage loans that satisfy certain eligibility criteria. Loans made to obligors that do not meet the eligibility criteria and have low creditworthiness will not be included in the underlying pool. The loan pool backing this transaction consists only of purchased loans that private financial institutions originated. The loan characteristics and main eligibility criteria are outlined below.

Table 1

## Pool characteristics\*

	All loans
Total initial loan amount (¥)	71,760,190,000
Average initial loan amount (¥)	32,136,225
Total loan balance (¥)	71,757,898,750

## Pool characteristics\* (cont.)

	All loans
Average loan balance (¥)	32,135,199
No. of obligors	2,233
No. of loans	2,233
Average initial maturity (years)	31.2
Average period until maturity (years)	31.2
Average age of loans (months)	0
Average initial LTV ratio (%)	90.45
Average initial DTI ratio (%)	25.73
Average annual obligor income at time of loan application (¥)	6,687,356
Average interest rate (%)	1.14
Average obligor age at time of loan application (years)	44.5
Weighted average interest rate (%)	1.11
Weighted average period until maturity (years)	32.2
Weighted average initial maturity (years)	32.2
Weighted average age of loans (months)	0
Average age of loans (refinancing mortgage loans; months)	164
Average LTV ratio (refinancing mortgage loans; %)	66.50
Average DTI ratio (refinancing mortgage loans; %)	20.51
Weighted average age of loans (refinancing mortgage loans; months)	158
Ratio of loans to corporate employees and civil servants (% of total loan balance)	52.5

\*As of the end of February 2024. DTI--Debt to income.

Table 2

## Major eligibility criteria for purchased loans

Originator	Private financial institutions
Applicants' eligibility	To build or purchase a house to live in or for the owners' relatives to live in
	Age under 70
	Without monthly income cap
	Japanese national or permanent resident
Max. loan amount	¥80 million
LTV ratio (new loans)	Up to 100%
LTV ratio (refinancing loans)	Up to 200% for refinancing mortgage loans
DTI ratio	30% or below for annual income of less than ¥4 million
	35% or below for annual income of ¥4 million or more
Interest rate	Fixed (with or without step-up clause)
Initial loan tenor	Between 15 and 35 years

## Major eligibility criteria for purchased loans (cont.)

Obligor's age at final repayment	Under the age of 80

Not required
House construction loan (shinchiku jyutaku kensetsu)
New home purchase loan (shinchiku jyutaku kounyu)
Loan to purchase an existing home (chuko jyutaku kounyu)
Refinancing mortgage loan (karikae)
New and existing homes
First priority on land and building
Contracts entered into between Dec. 1, 2023, and Feb. 29, 2024
At least 0.14%

A comparison of the key attributes of this month's JHF's monthly notes with the previous month's shows the following:

- The percentage of loans with LTV ratios (including non-JHF debt) higher than 90% within the underlying asset pool has risen by about 0.9 percentage point (ppt);
- The percentage of obligors who are neither corporate employees nor civil servants has declined by about 2.0 ppts;
- The percentage of loans with debt-to-income (DTI) ratios (including non-JHF debt) higher than 25% within the underlying asset pool has risen by about 1.1 ppts;
- The percentage of loans for owners' secondary houses and houses that serve as residences for the owners' relatives has declined by about 1.7 ppts; and
- The weighted-average interest rate of underlying loans in the asset pool declined by about 0.48 ppts after an increase in interest rate benefits due to the introduction of a program called "Flat 35 Child-Rearing Plus" in February 2024 to increase such benefits for child-raising households.

The following tables show distributions of the main attributes of the notes' underlying loan pool.

Table 3

## LTV ratios

LTV	LTV Including non-JHF debt (% of total pool) Excluding non-JHF debt (% of total p	
~5%	0.0	0.0
~10%	0.0	0.0
~15%	0.0	0.0
~20%	0.1	0.1
~25%	0.1	0.1
~30%	0.3	0.4
~35%	0.4	0.4
~40%	0.4	0.4
~45%	0.4	0.4

## LTV ratios (cont.)

LTV	Including non-JHF debt (% of total pool)	Excluding non-JHF debt (% of total pool)
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0.4 0.7 1.0 0.8	0.4 0.6 1.0
1.0	
	1.0
0.8	
	0.9
1.0	1.0
2.3	2.5
4.3	4.7
25.0	75.8
5.0	0.7
57.1	9.9
100.0	100.0
-	4.3 25.0 5.0 57.1

Table 4

## **DTI** ratios

DTI	% of total pool
~5%	0.1
~10%	1.2
~15%	4.8
~20%	8.7
~25%	17.6
~30%	28.4
More than 30%	39.2
Total	100.0

Table 5

## **Obligors' employment status**

Employment status at loan application	% of total pool
Either civil servant or corporate employee	52.5
Neither civil servant nor corporate employee	47.5
Total	100.0

Table 6

## Geographic concentrations of properties

Region	Outstanding amount (%)
Hokkaido	3.1

# Geographic concentrations of properties (cont.)

Region	Outstanding amount (%)
Tohoku	5.3
Kanto	45.0
Chubu	14.0
Kinki	19.0
Chugoku	2.2
Shikoku	1.2
Kyushu	10.3
Total	100.0

## Loan origination and underwriting process

JHF's lending policy reflects the economic and housing policies of the Japanese government and thus differentiates JHF from private mortgage lenders.

Furthermore, JHF's current guidelines allow for maximum overall debt-to-income (DTI) ratios, including outside financing, that vary depending on the borrower's income level. The maximum overall DTI ratio for borrowers with an annual income of ¥4 million or more is 35%. For those with an annual income of less than ¥4 million, it is 30%. In addition, JHF's maximum LTV for new loans is 100% of the construction costs or the property's purchase price, and its maximum LTV for refinancing loans is the lower of the following:

- An amount equivalent to the outstanding balance of principal on the loan being refinanced; or
- An amount equivalent to 200% of the appraisal value of the collateral property.

Other key criteria that JHF applies are:

- The borrower must be under the age of 70 at the time of application (does not apply to "parent-child pair loans"); and
- The loan amount is no higher than ¥80 million.

In calculating our foreclosure frequency assumptions, we determined the originator adjustment factor based on:

- The difference between JHF's loans and those that private mortgage lenders offer, reflecting the influence of the Japanese government's economic and housing policies on JHF's lending policy; and
- JHF's current underwriting criteria and the default rates and delinquency rates of the mortgage loans extended under these underwriting criteria.

As a result of the above, and after considering that performance of the loans extended under the current underwriting criteria has been stable at favorable levels, we applied an originator adjustment factor of 1.2x.

## **Credit Risk Analysis**

## Performance outlook for mortgage loan receivables in Japan

The outlook is stable in 2024 for assets underlying RMBS transactions backed by loans for purchasing owner-occupied houses (owner-occupied RMBS).

Performance was solid throughout 2023 for mortgage loans in Japan despite a stressful environment. Real wages have continued to fall because inflation has consistently outpaced increases in wages. This has stressed obligors' debt servicing capabilities. On the other hand, higher land prices nationwide, including in rural areas, have positively affected the credit quality of existing obligors because the value of their properties has risen. In addition, a solid labor market, as illustrated by a consistently low unemployment rate of about 2%-3% throughout the year, has underpinned the performance of mortgage loans.

In our economic forecast as of November 2023, we assume Japan's GDP will continue growing into 2026, albeit slowly at about 1% annually, while the unemployment rate will remain stable between 2% and 3%. This low and stable unemployment rate should underpin the performance of mortgage loans. We consider the unemployment rate to be a convincing indicator of the future performance of mortgage loans.

## Assessment of the credit quality of the underlying assets

**Foreclosure frequency for the archetypical Japanese mortgage loan pool.** The foreclosure frequency for the archetypical pool of Japanese mortgage loans at the 'B' rating level, as defined in our sector and industry variables report "Global Methodology And Assumptions: Assessing Pools Of Residential Loans (Japan)," published Dec 16, 2022, reflects our expectations on medium-term performance. It is based on the observed historical performance and our macroeconomic forecast. We used the assumptions in table 7 in our analysis of the transaction's underlying assets.

Table 7

## Archetypal foreclosure frequency anchors for Japan

Rating level	Archetypal foreclosure frequency (%)
AAA	10.0
AA	7.5
A	5.0
BBB	3.2
BB	2.1
В	1.1

**Foreclosure frequency assumptions.** In analyzing the credit risk of the transaction's underlying asset pool, we calculated the projected foreclosure frequency of the relevant loan receivables pool. We define this as the cumulative amount of defaulted receivables as a percentage of the total initial balance of the receivables at the transaction's outset (see table 8).

Prior to a beneficiary certificate trigger event, this transaction employs a pro rata payment structure from inception without subordination floors. To mitigate unexpected event risk in the tail end, we apply a 1.2x multiple to the foreclosure frequency assumptions, derived in our credit risk analysis, during pro rata. Meanwhile, we think this transaction has unique structure, given default and other certain loans are removed prior to a beneficiary certificate trigger event. This mitigates the tail risk associated with a pro rata structure without subordination floors, in our view.

Most mortgages in this transaction are covered by group credit life insurance. However, given that some mortgages are not, we assume no mortgage in the pool is covered by group credit life insurance under our scenario and apply an adjustment factor of 1.1x to the assumed foreclosure frequency.

In our analysis of this transaction, we assume JHF will provide updated loan-by-loan data during the surveillance process.

Table 8

## Foreclosure frequencies of the pool backing JHF series 203

Rating level	Assumed foreclosure frequency, excluding pro rata payment structure (%)	Assumed foreclosure frequency, including pro rata payment structure (%)		
AAA	34.2	41.0		
AA	25.7	30.8		
A	17.1	20.5		
BBB	11.0	13.1		
BB	7.2	8.6		
В	3.8	4.5		

\*The assumed foreclosure frequency accounting for the pro rata payment structure is derived by applying the 1.2x multiple to the assumed foreclosure frequency that does not account for the pro rata payment structure.

Table 9

## Key adjustment factors of the pool backing JHF series 203

	Adjustment factor (x)
LTV ratio	1.48
DTI ratio	1.04
Employment status	1.49
Interest type	1.10
Geographic concentration	1.00
Originator adjustment	1.20

\*An adjustment factor of 1.0x for a particular attribute indicates that the credit quality of the transaction pool in terms of that attribute equals that of the archetypical pool, while an adjustment factor lower (higher) than 1.0x indicates stronger (weaker) credit quality for the attribute than that of the archetypical pool.

**Loss severity assumptions.** In principle, all mortgages that JHF originated directly or purchased from financial institutions are recorded as first-lien mortgage loans.

We determine loss severity assumptions based on the following:

- The market-value decline of a repossessed property (Repo MVD), and
- Costs related to collateral property sales and legal costs.

Furthermore, we assume the duration from loan default to completion of collection activities is 18 months. Our loss severity assumptions for the loan pool backing the transaction are shown below (see table 10).

Table 10

## Loss severity of the pool backing JHF series 203

Rating level	Loss severity (%)				
AAA	43.2				
AA	40.1				
A	33.5				
BBB	29.7				
BB	27.0				
В	24.4				

## **Cash Flow Analysis**

We conducted a cash flow analysis based on the above foreclosure frequency and loss severity assumptions. Specifically, we analyzed various scenarios based on cash flow under the scheduled payments using variables such as:

- The timing of defaults; and
- The amount and timing of prepayments.

As a result, under the stress level commensurate with our 'AAA' rating, we concluded that interest payments and principal repayments on the notes and beneficiary certificates (subsequent to a beneficiary trigger event) would be made as scheduled (allowing for a three-month grace period with respect to payment of interest, or interest distribution in the case of the beneficiary certificates).

## **Default timings**

We model two default timing scenarios, referred to as "front-loaded" (i.e., concentrated toward a transaction's earlier stage) and "back-loaded" (i.e., concentrated toward the later stage). In both scenarios, the defaults occur over a 20-year period, with each scenario having a different peak timing for defaults (see table 11).

#### Table 11

#### **Default timing curves**

Number of months*	Front-loaded (%)	Back-loaded (%)
1-60	35	5
61-120	45	40

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## Default timing curves (cont.)

Number of months*	Front-loaded (%)	Back-loaded (%)
121-180	15	40
181-240	5	15
Total	100	100

\*Percentage of weighted-average foreclosure frequency applied in each term. For modeling purposes, the percentage in each stage divided by 60 is applied each month.

## **Prepayment rate**

When analyzing the payment structure and cash flow mechanics, we test the transaction's ability to withstand high and low prepayment scenarios. Prepayment scenarios generally start at 3.0% per year at transaction closing and increase on a linear basis for up to five years (see table 12).

Table 12

## **Prepayment rates**

Annual (%)	Low	High	
Start	3	3	
Year five and thereafter	3	12	

## Transaction maintenance fees and expenses

In conducting our cash flow analysis, we considered transaction maintenance expenses. Specifically, we assumed that trustee fees would represent 0.05% and servicing fees 0.35% of the total loan balance.

The transaction's payment waterfall includes insurance premiums for loans with group credit life insurance. However, we did not assume extra costs in connection with group credit life insurance premiums. This is because some mortgages in this transaction are not covered by group credit life insurance, and we could see a time when no mortgage in the pool is covered by group credit life insurance. Also, for the mortgages covered by group credit life insurance policies, we see a possibility that the group credit life insurance policies might not be succeeded to the trustee after the occurrence of a beneficiary certificate trigger event, given the fact that an upper limit was established on the amount of insurance premiums payable from the transaction's payment waterfall. Our foreclosure frequency assumptions take into account risks related to these group credit life insurance policies.

## Interest risk and basis risk

The transaction is not exposed to interest rate mismatch risk or basis risk because all mortgage loan receivables backing the notes carry fixed interest rates throughout their terms (including loans with a step-up interest feature), and the notes/beneficiary certificates also bear fixed interest rates.

## **Scenario Analysis**

Various factors could cause us to downgrade JHF's notes, such as rising foreclosure rates in the underlying pool or changes in the pool composition.

We analyzed the effect of increased foreclosure frequency by testing the transaction's sensitivity to two different levels of severity. Rising levels of foreclosure frequency will likely place more stress on a transaction and would likely contribute to downgrades of the rated notes.

We ran two scenarios. For scenario 1, we assumed an increase in foreclosure frequency to 1.1x. For scenario 2, we assumed an increase to 1.3x.

We determined that the rating would be 'AA+' under scenario 1 and 'AA' under scenario 2. Still, we do not base rating actions on the outcomes of a scenario analysis alone but rather carry them out based on a comprehensive assessment of multiple factors.

In addition, the ratings we determined under this scenario analysis refer to the receivables pool alone. In fact, given JHF's public-policy role and the transaction's structural nature, we deem the long-term rating on the issuer to be, in principle, the lowest possible rating for the notes before a beneficiary certificate trigger event.

Table 13

#### Scenario 1: Foreclosure frequency and loss severity

Rating	Foreclosure frequency (%)*	Loss severity (%)
AAA	37.6	43.2
AA+	32.9	41.6
AA	28.2	40.1

\*Assumptions before we applied a 1.2x multiple to compensate for the additional back-loaded default risk in a pro rata payment structure.

Table 14

#### Scenario 2: Foreclosure frequency and loss severity

Rating	Foreclosure frequency (%)*	Loss severity (%)			
AAA	44.5	43.2			
AA+	38.9	41.6			
AA	33.4	40.1			

\*Assumptions before we applied a 1.2x multiple to compensate for the additional back-loaded default risk in a pro rata payment structure.

## Surveillance

During the surveillance process, we will use the same methodology and assumptions as those we apply for new transactions. Specifically, we analyze updated loan-by-loan attribute data provided periodically.

With respect to the receivables pool, we will analyze regular servicer reports detailing the performance of the underlying collateral, monitor supporting ratings, and make regular contact with the servicer to ensure it maintains servicing standards and that any material changes in its

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operations are communicated and assessed.

The key performance indicators in the surveillance of this transaction are:

- Credit support for the rated notes,
- The delinquency rate,
- The replacement/withdrawal ratio, and
- The prepayment rate.

## JHF Note Structural Continuity And Historical Issuance Data

In this report, we focus on the characteristics of this transaction. See "Overview Of Japan Housing Finance Agency's Structured Notes," published Nov. 19, 2020, for details on the continuity of the transaction structure for all JHF notes.

Table 15

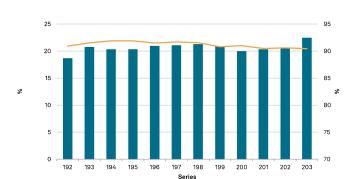
## Series 192 to 203 breakdown and total/average for notes issued in fiscal 2023

	Series 192	Series 193	Series 194	Series 195	Series 196	Series 197	Series 198	Series 199	Series 200	Series 201	Series 202	Series 203	Total/ Average
Issue date	April 27, 2023	May 26, 2023	June 23, 2023	July 28, 2023	Aug. 24, 2023	Sept. 28, 2023	Oct. 27, 2023	Nov. 27, 2023	Dec. 22, 2023	Jan. 26, 2024	Feb. 29, 2024	Mar. 25, 2024	
Issue size (bil. ¥)	118.0	66.9	61.2	71.6	62.8	64.5	61.9	55.1	56.2	63.8	28.6	55.6	766.2
LTV ratio (%)	91.0	91.5	91.9	91.9	91.5	91.7	91.5	90.8	91.0	90.5	90.6	90.5	91.2
DTI ratio (%)	25.6	25.6	25.8	25.7	25.5	25.7	25.4	25.8	25.8	25.6	25.6	25.7	25.7
Average loan term at origination (years)	32.0	31.9	31.9	31.8	31.5	31.6	31.5	31.2	31.1	31.2	30.7	31.2	31.5
Overcollateralization ratio (%)	18.6	20.7	20.3	20.3	20.9	21.0	21.2	20.8	19.9	20.3	20.5	22.4	20.6
Coupon (%)	1.04	0.96	0.94	0.93	1.02	1.08	1.18	1.11	1.05	1.00	1.08	To be determined	1.04
Weighted average interest at issuance (%)	1.70	1.47	1.54	1.47	1.44	1.43	1.51	1.58	1.66	1.59	1.59	1.11	1.51

#### Chart 1

#### Overcollateralization and loan-to-value ratios

Overcollateralization ratio (left scale)

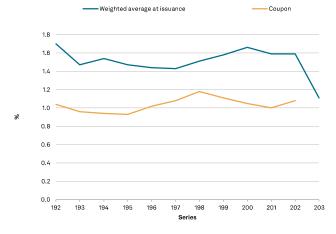


Loan-to-value ratio (right scale)

Source: S&P Global Ratings, based on JHF data. Copyright © 2024 by Standard & Poor's Financial Services LLC. All rights reserved.

#### Chart 3

#### Weighted average interest rates and coupons

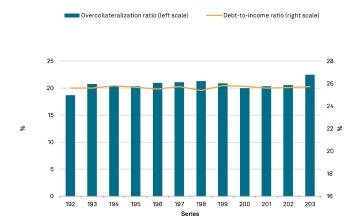


Source: S&P Global Ratings, based on JHF data.

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Chart 2

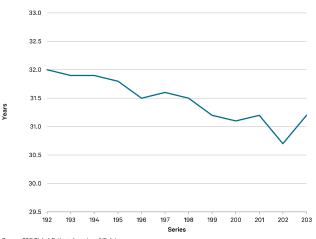
#### Overcollateralization and debt-to-income ratios



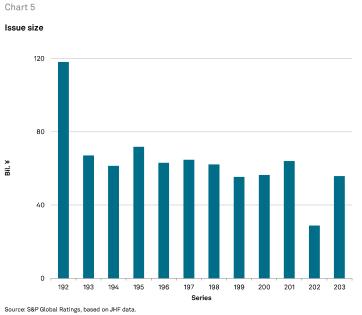
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Chart 4

#### Average loan term at origination



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## **Related Criteria**

- Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Global Methodology And Assumptions: Assessing Pools Of Residential Loans, Jan. 25, 2019
- Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- Principles Of Credit Ratings, Feb. 16, 2011
- Methodology For Servicer Risk Assessment, May 28, 2009

## **Related Research**

- Japan Structured Finance Outlook: Inflation Entrenches? Jan. 11, 2024
- ESG Industry Report Card: Residential Mortgage-Backed Securities, March 31, 2021
- Overview Of Japan Housing Finance Agency's Structured Notes, Nov. 19, 2020
- How Will COVID-19 Affect Japanese Structured Finance? April 8, 2020

- Japanese Structured Finance Scenario And Sensitivity Analysis 2017: The Effects Of The Top Five Macroeconomic Factors, Dec. 26, 2017
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016

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