

JHF No.203 Monthly MBS Issue

Issue size Y55.6bn, reflecting impact of new Flat 35 Child Rearing Plus program

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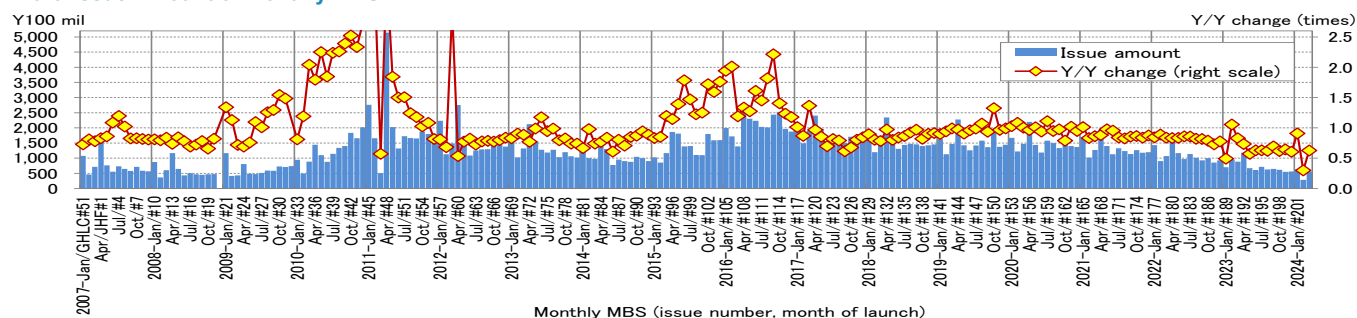
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Daiwa Securities Co. Ltd



- The Japan Housing Finance Agency (JHF) plans to issue its No. 203 Monthly MBS. The coupon will be set by referencing the yield of the on-the-run 10-year JGB.
- JHF RMBS are issued with home loans as the underlying asset. The assets eligible for use as collateral for the No. 203 Monthly MBS, almost all of which consisted of Flat 35 mortgages originated in February, total Y71.7bn. The issue size is Y55.6bn, and the credit enhancement ratio from overcollateralization is 22.4%.
- The latest RMBS issue size is almost 70% of that of the March 2023 issuance. The y/y decline is better than the previous month's (about 30% of the year-ago issue's). Flat 35 usage in February was boosted slightly by the new Flat 35 Child Rearing Plus program, which began mid-month.
- Based on our prepayment model, we estimate a WAL of 11.18 years (based on 11 Mar closing prices; same hereinafter). The average of the PSJ Forecast Statistical Data is 7.30%, and the expected WAL of principal repayment cash flow (CF) based on a PSJ model is 9.67 years.
- Based on a launch spread the same as the previous issue's, 35bp, the upcoming issue's coupon would be 1.11%. The PSJ model YCS (based on estimated cash flows using the PSJ Forecast Statistical Data) is 7.9bp, 2.9bp lower than at the time of the previous issue's launch. The BEY, based on the JSDA's Trading Reference Statistical Data for the previous issue in the secondary market and PSJ model-based CF, is 1.101% and the YCS 11.3bp. The launch spread for the upcoming issue with a PSJ model-based CF YCS close to this would be 38bp.
- We think it appropriate that supply and demand will meet at the launch spread of about 35-40bp. If so, the coupon would be about 1.11-1.16%.

Chart: Issue Amount of Monthly MBS



Source: JHF; compiled by Daiwa. Note: Estimate for No. 203 issue

Issuance of JHF MBS and Situations of Flat 35

No. 203 to be launched in March

The JHF plans to price (launch) the No. 203 MBS this month. Issuance terms are determined by the spread-pricing method based on the compound yield of the benchmark 10-year JGB, the 373G. The launch date is scheduled for mid-March, and the scheduled payment date is 25 March.

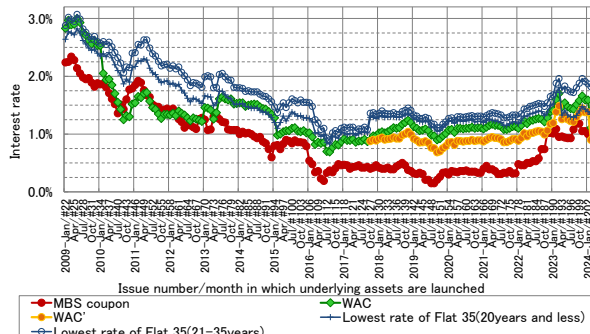
Almost all of the Y71.7bn of Flat 35 mortgages eligible for use as collateral for the No. 203 MBS were originated in February. The RMBS is to be issued with overcollateralization enabling it to have AAA ratings from S&P and R&I. The issue size is Y55.6bn and the credit enhancement ratio 22.4%.

Flat 35 rates and usage trends in February

The lowest retail rate on the mortgages was 1.82% (including group credit life insurance premiums), down 0.05ppt m/m. The lowest rate on Flat 20 mortgages (with terms of 20 years or less) was 1.34%, down 0.05ppt m/m. This reflects the fact that the rate on the RMBS (No. 201 issue) launched in January declined by 0.05ppt vs. the previous issuance (from 1.05% to 1.00%).

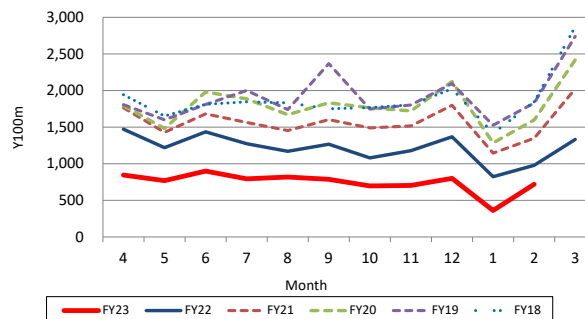
Flat 35 mortgages originated in February account for Y70.5bn of the Y71.7bn noted above. This total figure is down 28% y/y, less of a y/y decline than the January issue's 55% (including Y1.2bn of assets that became eligible assets for this issue), even though Flat 35 usage remains weak. Flat 35 usage in February was boosted slightly by a new preferential-rate program, Flat 35 Child Rearing Plus, which began mid-month. With the WACs and excess spread down, the credit enhancement ratio has risen.

Chart: Interest Rate of Flat 35 Loans and JHF MBS (monthly trend)



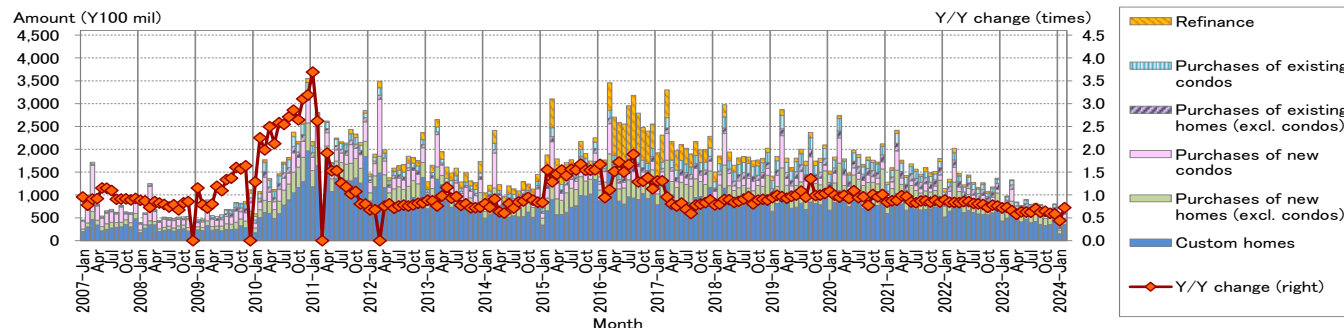
Source: JHF; compiled by Daiwa.

Chart: Seasonality of Amount of Flat 35 Usage



Source: Daiwa, based on JHF data; February 2024 data for candidate mortgages for the latest No. MBS

Chart: Flat 35 Loans by Type of Loans



Source: JHF; compiled by Daiwa.

Terms for the previous issue

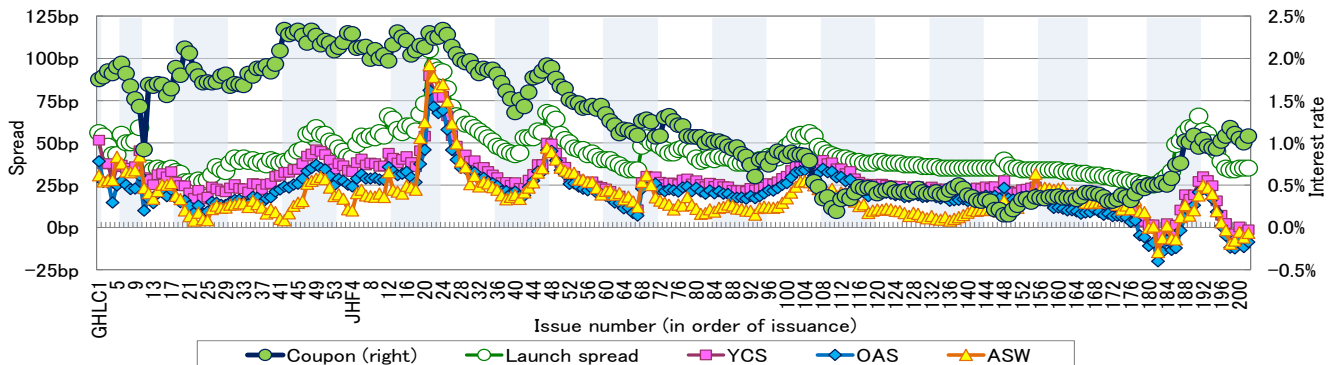
Launch spread of 35bp and coupon of 1.08%

The No. 202 (Y28.6bn) was launched on 21 February. The coupon of 1.08% was determined by adding a (nominal) launch spread of 35bp to the yield of the benchmark JGB, the 373G. The launch OAS (our model estimate; same hereinafter) was -8.7bp, up

2.9bp from the previous issue's. The YCS based on our model was -1.4bp, up 1.7bp. The YCS based on the PSJ Forecast Statistical Data was 10.8bp, up 0.9bp.

The nominal spread is 35bp, unchanged from the one before the previous one. The spread has had difficulty narrowing, as demand for JGBs with more than 10 years to maturity has declined ahead of the BOJ's end to its NIRP. The weak amount of issuance reflects the low amount of Flat 35 mortgages in January, partly because mortgage borrowers held off on borrowing in anticipation of using the Flat 35 Child Rearing Plus program, which started in February.

Chart: Issuance Terms for JHF Monthly MBS

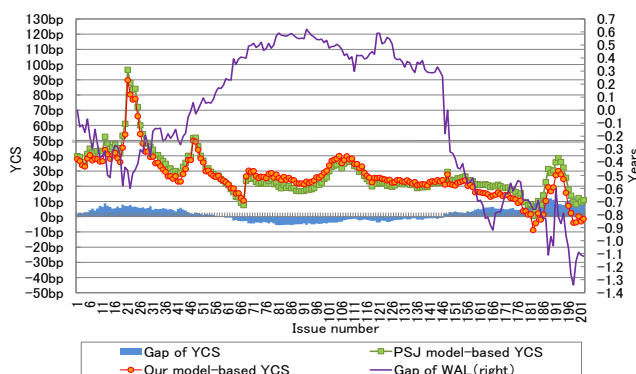


Source: JHF and our estimates. Note: The background colors indicate different fiscal years

Different risk premiums depending on expected cash flow distribution

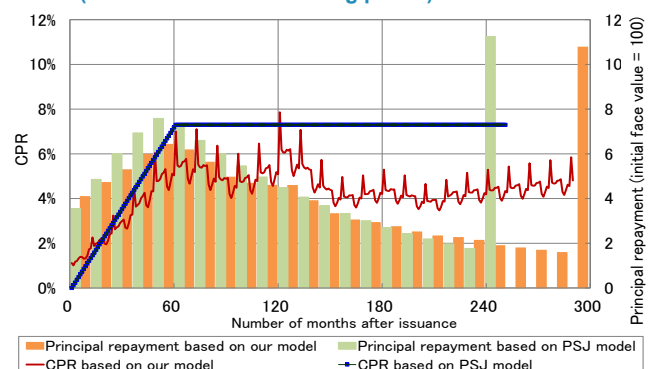
With regard to the pricing of JHF MBS, it should be noted that the risk premium varies depending on the expected cash flow distribution. A recent trend has been for monthly new bond issuance to assume a longer cash flow distribution in our prepayment forecast model than in the PSJ model's view using PSJ forecast statistics. As such, recently the YCS measured at the time of new bond issuance tends to be smaller in our model due to the positive yields.

Chart: Difference in YCS for Monthly MBS at Launch



Source: Our estimates

Chart: Expected CPR & Principal Repayment for No. 203 Issue (based on 11 March closing prices)



Source: Our estimates.

Note: Although principal repayments are made every month, the graph shows annual repayment totals.

Cash flow characteristics and issuance terms for No. 203

We take a look at the issuance terms for the upcoming issue. Based on expected cash flow using our prepayment model and the PSJ model, we estimate the issuance terms (the coupon and launch spread) and the risk premiums.

The expected cash flow distribution for the upcoming issue (the chart on the previous page, based on 11 March closing prices; hereinafter the same unless otherwise noted) is about the same as the previous issue (at the time of its launch; same hereinafter).

- Based on our model, the expected WAL is 11.18 years (10.65 years for the previous issue) and the expected final maturity 25.0 years (24.1 years). The PSJ forecast is 5.18% (vs. 5.88% for the previous issue).
- The PSJ Calculation Statistical Value (average) is 7.30% (vs. 7.53% for the previous issue). Accordingly, the expected WAL is 9.67 years (vs. 9.51 years for the previous issue) and the expected final maturity 21.0 years (20.6 years).

The expected maturity is longer than the previous issue's because the WAC was 1.11% and the WAC' 0.90%, lower than the previous issue's (see pp. 6-7), while forward rates rose about 5bp. Refinancing incentives (= WAC' – refinancing rate) have declined, resulting in lower expected prepayments.

Chart: Launch Spread Estimates for No. 203 MBS (based on 11 March closing prices)

Valuations of JHF_MBS_#203 Pricing(Simulation)							11-Mar-24 (Tokyo Close)		
Base Yield: JGB(373G) YTM 0.754 %									
Launch Spread	Coupon	Valuations of Cash Flows						Indications of Previous RMBS Issue (#201)	
		Daiwa Model				PSJ Model			
		Dynamic	Static			PSJ forecast Statistical Data(Ave)			
			OAS	YCS	ASW	ModDur	YCS		ASW
29 bp	1.05 %	-18.9	-12.8	-7.3	10.199	1.6	2.1	8.946	(Issuance Terms)
30 bp	1.06 %	-17.9	-11.8	-6.4	10.190	2.7	3.1	8.939	Launch Spread=35bp
31 bp	1.07 %	-16.8	-10.7	-5.4	10.181	3.7	4.1	8.932	Coupon=1.08%
32 bp	1.08 %	-15.8	-9.6	-4.4	10.171	4.7	5.0	8.925	(Valuations at the time of Launch)
33 bp	1.09 %	-14.7	-8.6	-3.4	10.162	5.8	6.0	8.918	[CF based on Daiwa Model]:
34 bp	1.10 %	-13.6	-7.5	-2.4	10.153	6.8	7.0	8.912	OAS=-8.7bp, YCS=-1.4bp, ASW=-3.2bp
35 bp	1.11 %	-12.6	-6.5	-1.4	10.143	7.9	8.0	8.905	[CF based on PSJ Model]:
36 bp	1.12 %	-11.5	-5.4	-0.4	10.134	8.9	9.0	8.898	YCS=10.8bp, ASW=4.5bp
37 bp	1.13 %	-10.5	-4.4	0.5	10.125	9.9	10.0	8.891	(Valuations in the secondary market)
38 bp	1.14 %	-9.4	-3.3	1.5	10.115	11.0	11.0	8.884	[CF based on Daiwa Model/Daiwa Price]
39 bp	1.15 %	-8.3	-2.3	2.5	10.106	12.0	11.9	8.877	OAS=-5bp, YCS=2.1bp, ASW=5.7bp
40 bp	1.16 %	-7.3	-1.2	3.5	10.097	13.1	12.9	8.871	[CF based on PSJ Model/JSDA price]:
41 bp	1.17 %	-6.2	-0.2	4.5	10.088	14.1	13.9	8.864	BEY=1.101%, YCS=11.3bp, ASW=10.2bp
42 bp	1.18 %	-5.2	0.9	5.5	10.078	15.2	14.9	8.857	
43 bp	1.19 %	-4.1	1.9	6.5	10.069	16.2	15.9	8.850	
<div><div><Daiwa Model></div><div><PSJ Model/based on PSJ Forecast Statistical Data></div></div>									
PSJ		5.18 %		Ave: 7.30 %		(Median: 7.78) %			
WAL		11.18 years		9.67 years		(9.39) years			

Source: Compiled by Daiwa.

Note: 1) Figures in colored cells show similar indications to those in the previous issue, as indicated in the right section (Indications of Previous MBS Issue) with the same colors. Spreads in the previous issue at launch are based on those at the time of pricing. The spreads in the previous issue in the secondary market used in the Daiwa model are based on Daiwa prices, and the spreads in the previous issue in the secondary market used in the PSJ model are based on the JSDA's Trading Reference Statistical Data.

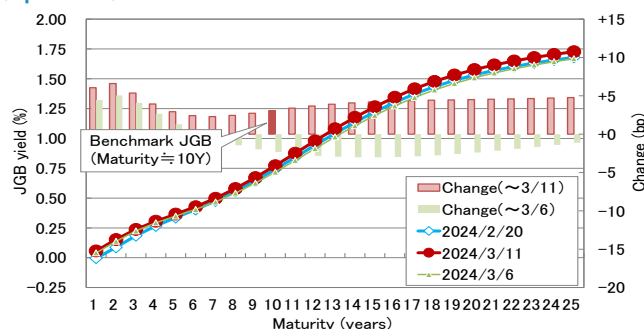
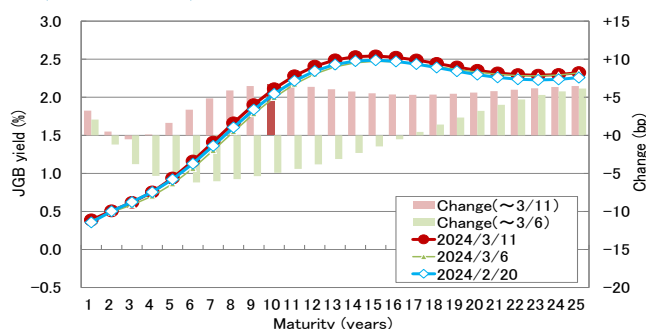
2) Figures for both Trading Reference Statistical Data and PSJ Forecast Statistical Data are average figures.

3) Estimated cash flow is based on the assumption that clean-up call options are exercised in initial April or October after the outstanding amount becomes 10% or less of the original.

Relationship between base rate and issuance terms

The previous issue (the No. 202) launched as the yield to maturity of the on-the-run 10-year JGB fluctuated around 0.70% in February. The 10-year yield has subsequently been about 0.70%.

Based on a launch spread of 35bp, the same as the previous issue's, the No. 203's coupon would be 1.11%, 0.03ppt higher than the previous issue's. Based on estimated cash flows using the average PSJ forecast, the YCS would be 7.9bp, 2.9bp lower than at the time of the previous issue's launch. Based on our model, the OAS would be -12.6bp, 3.9bp lower than the -8.7bp at the time of the previous issue's launch (based on 11 March closing prices).

Chart: JGB Yield Curve Changes (from the day before launch day of No.202)
<Spot Rate>

<Forward Rate>


Source: Daiwa, based on Poet-SB's JGB spot rate curve; forward rate is the 3-year forward rate.

The OAS decline is greater than that of the PSJ model-based YCS using the PSJ Forecast Statistical Data because our model-based cash flows are more heavily distributed among the superlong maturities than the PSJ model cash flows are (even with a neutral forecast, the expected maturity is long). The longer the expected maturity is, the more that the YCS and OAS narrow because the JGB yield curve has been bull flattening.

The relationship with the previous issue

The connections between the previous issue and the upcoming one are as follows (secondary market prices and base rates are as of the 11 March close). For the price of the on-the-run issue in the secondary market, we use the retail mid-rate as well as the risk premium in the JSDA's Reference Statistical Prices [Yields] for OTC Bond Transactions.

【Pricing using our model's cash flow estimates】

- The No. 202's launch OAS was -8.7bp and the YCS -1.4bp. Based on the similar OAS and YCS, the No. 203's launch spread would be 40bp and the coupon 1.16%.
- In the secondary market, the previous issue's BEY (estimated yield to maturity) is 1.157%, OAS is -5.0bp, and YCS is 2.1bp based on our mid-rate (Y99.28). Based on the similar OAS and YCS, the No. 203's launch spread would be 43bp and the coupon would be 1.19%.
- In the secondary market, the previous issue's BEY would be 1.098%, OAS would be -11.3bp, and YCS would be -4.1bp based on the reference statistical price (Y99.84). In line with this, the No. 203's launch spread would be about 37bp and the coupon would be 1.13%.

【Pricing using average PSJ forecast-based cash flow estimates】

- The No. 202's launch YCS was 10.8bp. Based on the similar YCS, the No. 203's launch spread would be about 38bp and the coupon 1.14%.
- In the secondary market, BEY is 1.101% and YCS is 11.3bp based on the reference statistical price (Y99.84). This would mean the upcoming issue will have a coupon of 1.14% and a launch spread of 38bp.

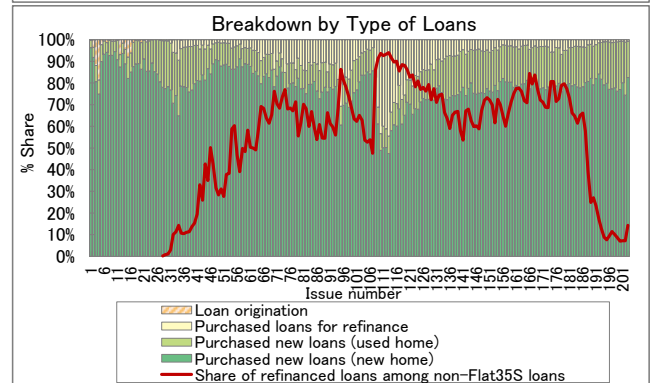
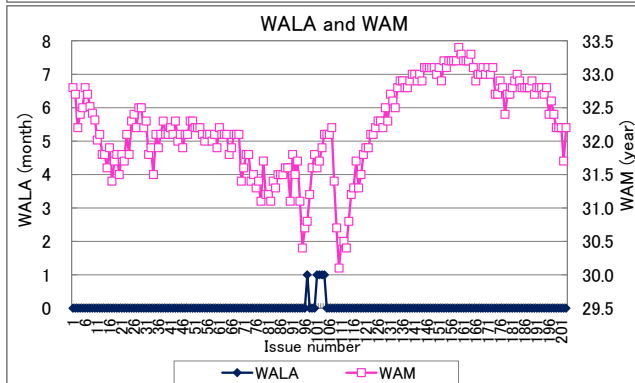
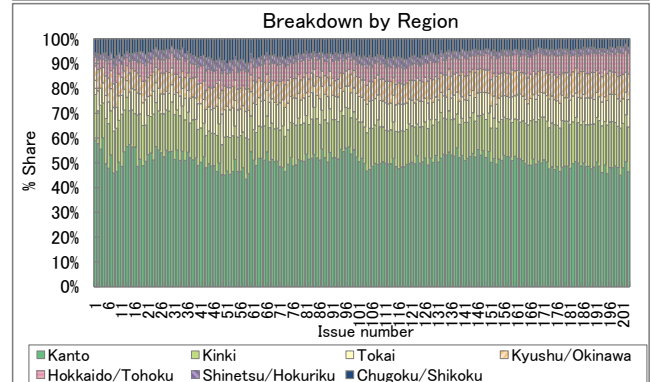
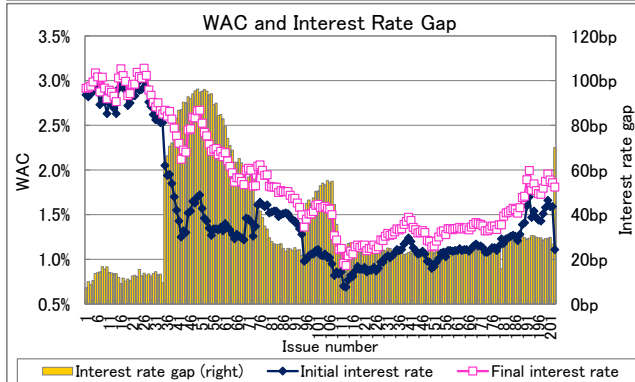
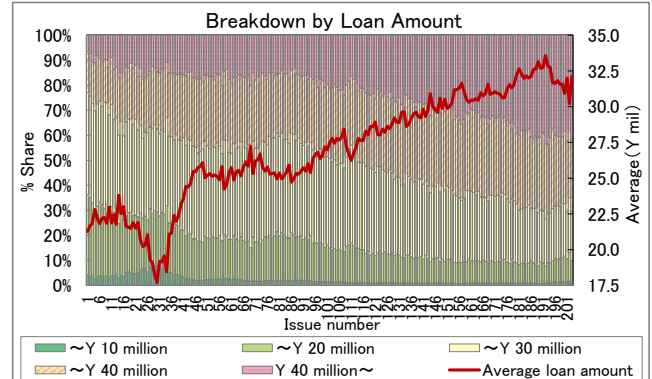
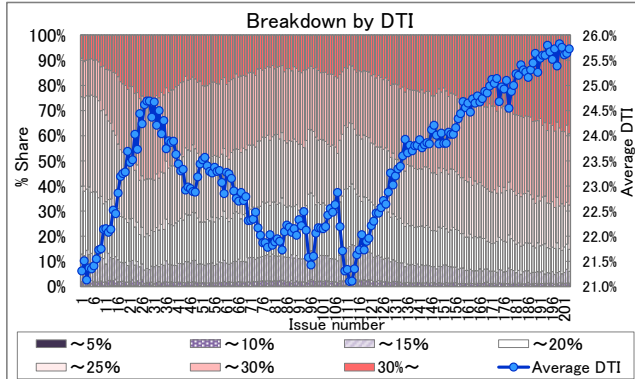
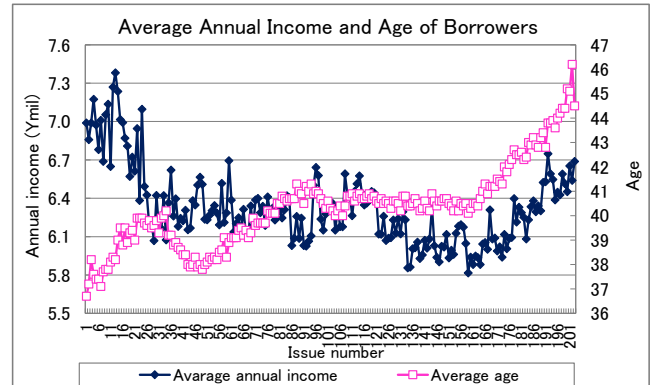
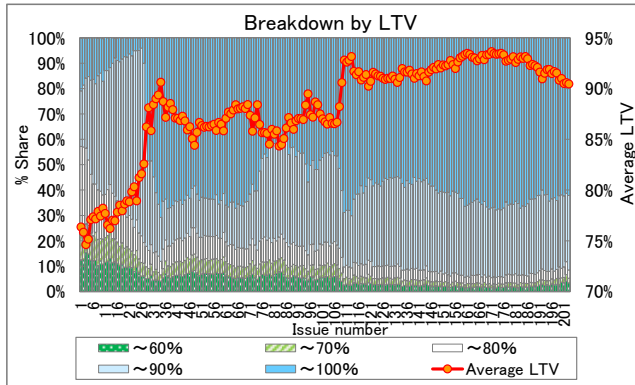
Demand forecast for No. 203 issue and issuance level

Flat 35 Child Rearing Plus, launched in February, should support households with children and young couples (under 40 years old) with preferential rates and enable them to establish living conditions with the foreseeable security of Flat 35 and thereby help address the declining birthrate. First of all, we would like to see the program continue, as much as the budget will allow. It would be nice if the Flat 35 base rate is relatively low as well. Investor demand for JHF MBS remains to be seen, as it will reflect the coupon.

Coupon in the 1.10-1.20% range

We think there will be decent demand at a launch spread of 35-40bp. In this case, the coupon would be 1.11-1.16% (based on 11 March closing prices).

Characteristics of Underlying Loan Pools for All JHF Monthly MBSs



Source: JHF; compiled by Daiwa.

Note: Candidate pool used for No. 203 issue

Characteristics of Underlying Loans: No. 203 Monthly MBS and Last Six Issues (No. 197-202)

		JHF #197	JHF #198	JHF #199	JHF #200	JHF #201	JHF #202	JHF #203	Ave. of previous 6 issues	Change from #202
Loan Pool Selected in		Aug-2023	Sep-2023	Oct-2023	Nov-2023	Dec-2023	Jan-2024	Feb-2024		
Loan Application Started in		Mar-2021	May-2021	Nov-2020	Mar-2021	May-2021	Aug-2021	Sep-2019		
Repayment Started in		Aug-2023	Sep-2023	Oct-2023	Nov-2023	Oct-2023, Dec-2023	Jan-2024	Jan-2024, Feb-2024		
Initial Outstanding Entrusted Assets (Y mil)		81,718	78,608	69,635	70,260	80,085	36,008	71,760	69,386	+35,752
Issue Size (Y mil)		64,500	61,900	55,100	56,200	56,200	28,600	TBD	53,750	-
Excess Collateral (Y mil)		17,218	16,708	14,535	14,060	23,885	7,408	TBD	15,636	-
Overcollateralization		21.0%	21.2%	20.8%	20.0%	29.8%	20.5%	TBD	22.2%	-
Number of Loans		2,568	2,490	2,206	2,272	2,503	1,192	2,233	2,205	+1,041
Average Outstanding Loan (Y mil)		31.822	31.570	31.566	30.924	31.995	30.208	32.136	31.348	+1.928
Average LTV		91.68%	91.54%	90.83%	91.00%	90.49%	90.58%	90.45%	91.02%	-0.13%
Average DTI		25.73%	25.39%	25.83%	25.76%	25.61%	25.64%	25.73%	25.66%	+0.09%
Average LTV for Refinance		66.40%	57.49%	65.63%	64.13%	68.80%	57.39%	66.50%	63.31%	+9.11%
Average DTI for Refinance		17.97%	18.72%	19.62%	19.72%	20.66%	19.23%	20.51%	19.32%	+1.28%
Average Annual Income of Obligor (Y mil)		6.426	6.589	6.515	6.451	6.653	6.540	6.687	6.529	+0.147
Average Age of Obligor		44.2	44.4	44.4	45.2	45.1	46.2	44.5	44.9	-1.7
WAC (Initial Rate)		1.43%	1.51%	1.58%	1.66%	1.59%	1.59%	1.11%	1.56%	-0.48%
WAC (Final Rate)		1.73%	1.80%	1.87%	1.95%	1.89%	1.86%	1.81%	1.85%	-0.05%
WALA (Weighted Average Loan Age)		0	0	0	0	0	0	0	0	+0
WALA for Refinance		148	152	155	171	142	145	158	152	+13
WAM		391	389	386	386	386	380	386	387	+6
Maturity Structure of Loans at Origination (% share)	Up to 10Y	0.1%	0.2%	0.1%	0.4%	0.0%	0.4%	0.1%	0.2%	-0.3%
	10-20Y	7.9%	8.5%	9.5%	9.2%	10.5%	10.8%	9.7%	9.4%	-1.1%
	20-25Y	3.1%	2.9%	3.2%	2.9%	2.5%	3.0%	3.0%	2.9%	-0.0%
	25-30Y	7.2%	7.6%	7.8%	8.3%	7.0%	10.4%	8.1%	8.0%	-2.3%
	Over 30Y	81.7%	80.8%	79.4%	79.2%	79.9%	75.4%	79.1%	79.4%	+3.7%
% share of loans with bonus payments	(in number)	5.6%	6.3%	5.4%	5.2%	5.6%	6.1%	6.2%	5.7%	+0.1%
	(in value)	6.2%	7.0%	6.0%	6.0%	6.4%	7.0%	6.7%	6.4%	-0.3%
Type of Loan	new	98.7%	98.9%	99.0%	99.2%	99.3%	98.9%	99.3%	99.0%	+0.4%
	refinanced	1.3%	1.1%	1.0%	0.8%	0.7%	1.1%	0.7%	1.0%	-0.4%
Loan Amount at Origination (% share)	Up to Y10 mil	1.1%	1.5%	1.3%	1.4%	1.4%	1.7%	1.4%	1.4%	-0.3%
	Y10-20 mil	9.3%	9.1%	9.6%	10.3%	9.3%	11.4%	8.5%	9.8%	-2.9%
	Y20-30 mil	21.6%	21.2%	21.8%	21.1%	18.8%	21.9%	19.9%	21.1%	-2.0%
	Y30-40 mil	27.6%	27.8%	26.8%	28.9%	28.4%	27.3%	28.4%	27.8%	+1.1%
	Y40-50 mil	19.0%	21.2%	20.2%	19.7%	20.7%	15.7%	20.3%	19.4%	+4.6%
	Over Y50 mil	21.3%	19.3%	20.3%	18.6%	21.4%	22.0%	21.6%	20.5%	-0.5%
Loan Amount by Region (% share)	Hokkaido/Tohoku	7.9%	7.3%	9.8%	9.1%	8.3%	8.8%	8.4%	8.5%	-0.4%
	Kanto	48.0%	48.7%	48.1%	45.0%	48.0%	50.4%	46.3%	48.0%	-4.1%
	Shinetsu/Hokuriku	2.0%	2.3%	2.0%	2.5%	2.8%	2.5%	2.5%	2.4%	-0.0%
	Tokai	11.0%	11.4%	11.1%	10.8%	9.9%	9.2%	11.0%	10.5%	+1.9%
	Kinki	18.6%	17.5%	16.6%	19.0%	17.9%	19.0%	18.1%	18.1%	-0.8%
	Chugoku	1.8%	2.7%	1.9%	2.1%	1.9%	1.4%	2.2%	2.0%	+0.8%
	Shikoku	1.6%	1.2%	1.4%	1.2%	1.3%	0.8%	1.2%	1.2%	+0.4%
	Kyushu/Okinawa	9.0%	8.9%	9.1%	10.4%	9.9%	8.0%	10.3%	9.2%	+2.3%

Source: JHF; compiled by Daiwa.

Note: Candidate pool used for No. 203 issue

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- 1: Outperform TOPIX/benchmark index by more than 15% over the next 12 months.
- 2: Outperform TOPIX/benchmark index by 5-15% over the next 12 months.
- 3: Out/underperform TOPIX/benchmark index by less than 5% over the next 12 months.
- 4: Underperform TOPIX/benchmark index by 5-15% over the next 12 months.
- 5: Underperform TOPIX/benchmark index by more than 15% over the next 12 months.

Benchmark index: TOPIX for Japan, S&P 500 for US, STOXX Europe 600 for Europe, HSI for Hong Kong, STI for Singapore, KOSPI for Korea, TWII for Taiwan, and S&P/ASX 200 for Australia.

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(This Notification is only applicable to where report is distributed by Daiwa Securities Co. Ltd.)

If you decide to enter into a business arrangement with our company based on the information described in this report, we ask you to pay close attention to the following items.

- In addition to the purchase price of a financial instrument, our company will collect a trading commission* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥2 million per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
- For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements**.
- There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
- There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
- Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

** The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

Corporate Name: Daiwa Securities Co. Ltd.

Registered: Financial Instruments Business Operator, Chief of Kanto Local Finance Bureau (Kin-sho) No.108

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