

# JHF No.173 Monthly MBS Issue

Strategic Memorandum DSBE017

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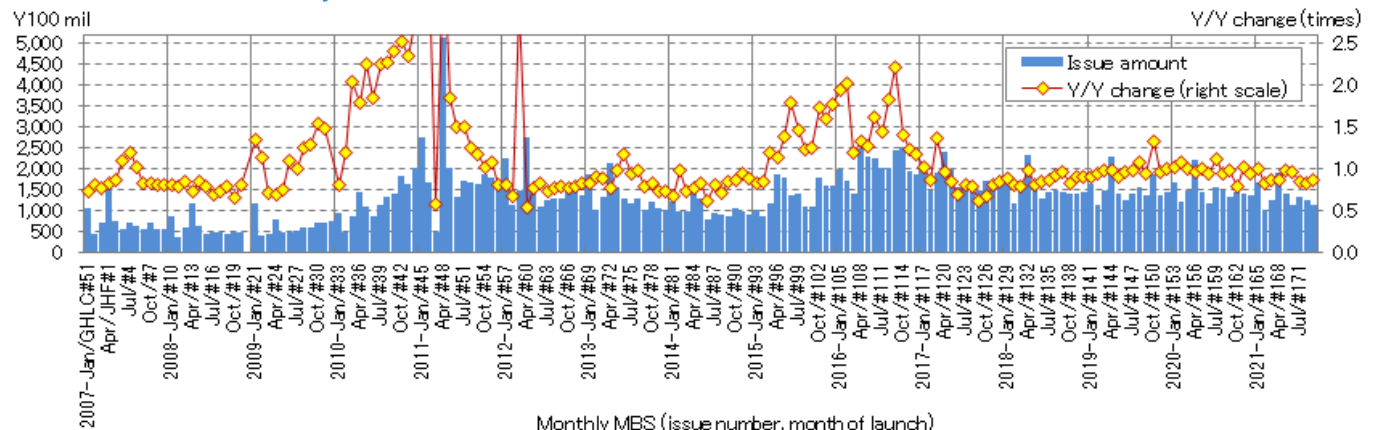
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Daiwa Securities Co. Ltd.

## ➤ Average DTI for Flat 35 loans is rising on more low-income borrowers

- The Japan Housing Finance Agency (JHF) plans to issue its No. 173 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 to be used as collateral for the No. 173 issue are the Y145.3 billion of Flat 35 loans originated in August. Assuming overcollateralization at a credit enhancement ratio of 21.1%, which is what it was the previous issue, the issuance amount will be Y114.6 billion.
- The volume of Flat 35 loans written in August declined 13% in y/y terms. Averages for both loan-to-value (LTV) and debt to income (DTI) remain high, with the latter reaching a new record high. Given Japan's economic environment of stagnating incomes, this is probably evidence that more Flat 35 loans are being written for home purchases by low-income individuals.
- Based on our prepayment model, we estimate a WAL of 9.75 years (based on 9 September closing prices; same hereinafter). The expected WAL based on the JHF's PSJ Forecast Statistical Data is 9.14 years.
- The No. 172, launched in August, had a launch spread of 29bps and a coupon of 0.31%. Based on the same launch spread, the No. 173 would have a coupon of 0.33% and an OAS of 5.8bps, 0.9bps tighter than the previous issue's launch OAS. Based on the No. 172's OAS in the secondary market, the No. 173's coupon is estimated at 0.29-0.30% and the launch spread 25-26bps.
- We think it appropriate that supply and demand will meet at the launch spread of about 29-30bps. If so, the coupon would be about 0.33-0.34%.

Chart: Issue Amount of Monthly MBS



Source: JHF; compiled by Daiwa Securities.

Note: Estimate for No. 173 issue.

## Issuance of JHF MBS and Situations of Flat 35

### No. 173 to be launched in September

The Japan Housing Finance Agency (JHF) plans to price (launch) its No. 173 MBS this month. Issuance terms are determined by the spread-pricing method, in which a new issue's coupon is set on the launch date by adding a launch spread—which is determined based on investor demand—to the compound yield on a benchmark 10Y JGB (JB363 in this case) at the time of the launch. The launch date is scheduled in mid-September, and the payment date is scheduled on 27 September.

### Issuance amount of about Y115 billion

Candidate trust assets for the No. 173 totaled Y145.3 billion, all of which were Flat 35 loans originated in August. The issue is likely to have the highest ratings from S&P and R&I. The issue amount is to be announced on 10 September. If the credit enhancement ratio is unchanged from that for the previous issue at 21.1%, the issue amount is estimated at Y114.6 billion.

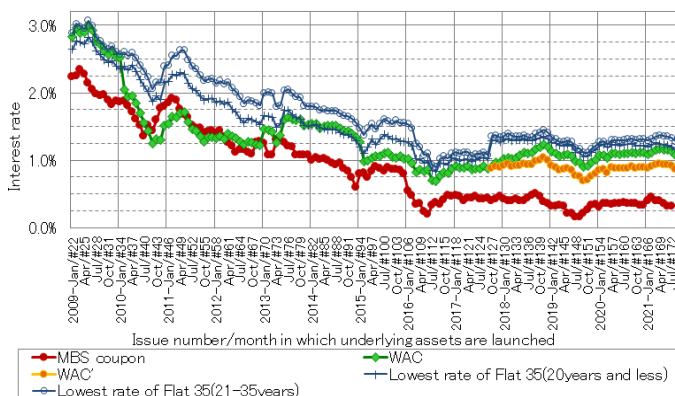
### The amount of Flat 35 loans declined 13% y/y in August

The amount of Flat 35 mortgages originated in July declined 13% Y/Y to Y145.3 billion. The lowest retail rate (for 35-year mortgages, including group credit insurance costs) was 1.28%, down 0.05ppt from August and down 0.03ppt from August 2020. The lowest retail rate for Flat 20 loans was 1.15%, which was also a decline of 0.05ppt m/m and down 0.09ppt y/y.

### Average DTI reaches record-high, average LTV also remains high

The main reason why the volume of loans declined 13% is probably that incomes have failed to keep up with housing prices. Even for Flat 35 loans that meet the minimum debt-to-income (DTI) requirement (30% for annual incomes below Y4 million and 35% for the rest), there may be a growing cohort of people unable to purchase the property they want. The average DTI hit a record high of 25.14% in August and the average loan-to-value (LTV) is also still high (see pages 6-7).

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



Source: JHF; compiled by Daiwa Securities.

Chart: DTI Limit Amendment (Flat 35 Loans)

< October 2003 >

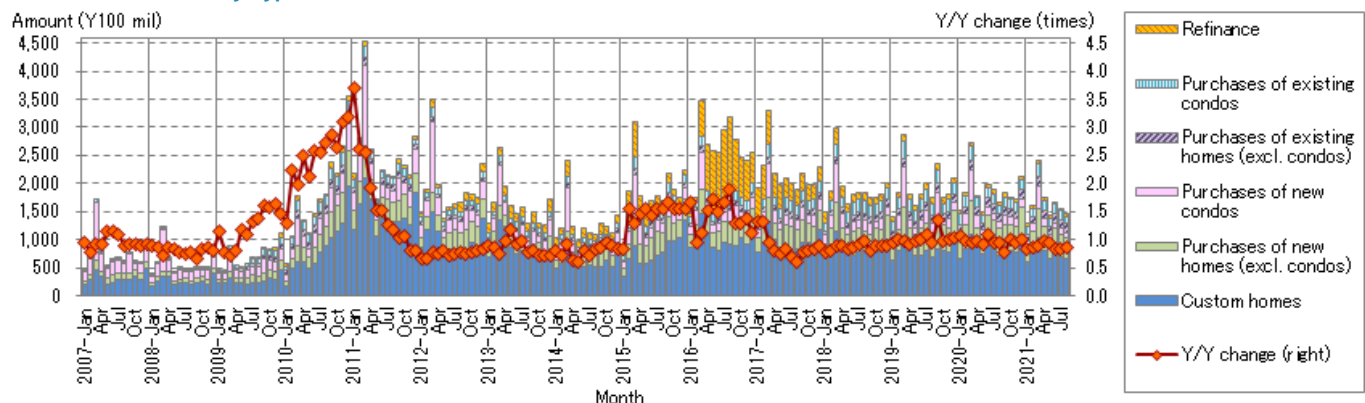
| Annual Income | Upper Limit (DTI) |
|---------------|-------------------|
| ~Y3million    | 25%               |
| ~Y4million    | 30%               |
| ~Y7million    | 35%               |
| Y7million~    | 40%               |

< October 2007 >

| Annual Income | Upper Limit (DTI) |
|---------------|-------------------|
| ~Y4million    | 30%               |
| Y4million~    | 35%               |

Source: JHF; compiled by Daiwa Securities.

Chart: Flat 35 Loans by Type of Loans



Source: JHF; compiled by Daiwa Securities.

## Terms for the previous issue

### Launch spread of 29bps and coupon of 0.31%

The No. 172 (¥123.4 billion) was launched on 20 August with a coupon of 0.31%. The coupon was determined by adding the launch spread of 29bp on the compound yield of benchmark JB363. The OAS at launch (our estimate; same hereinafter) stood at 6.7bps (1.5bps tighter than previous issue) and the YCS was 12.7bps (1.5bps tighter).

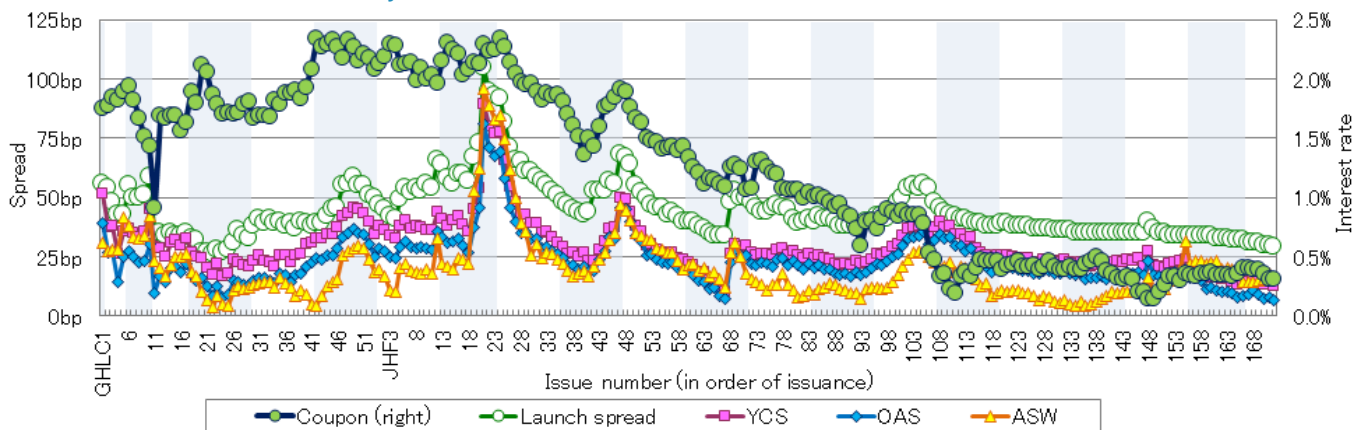
### Reflecting rising JGB yields

Launch spreads narrowed by 1bp m/m but the coupon did not change because that narrowing was offset by a 1bp rise in the benchmark JGB yield. A rise in the 10-year Treasury yield above 1.3% fueled by inflation worries pulled Japan's long-term rates higher, and the on-the-run 10-year JGB yield rose slightly to near 0%. The OAS and YCS narrowed more than the launch spread because the rise in superlong JGB yields outstripped the rise in the benchmark JGB yield.

### Now less attractive relative to the secondary market

Last month, the launch OAS and YCS as well as final yield were more than 5bp higher than the on-the-run bond in the secondary market, and this fueled strong investment demand in the primary market. Although the yield on the No. 172 narrowed less than 5bp, excess demand remained strong.

Chart: Issuance Terms for JHF Monthly MBS



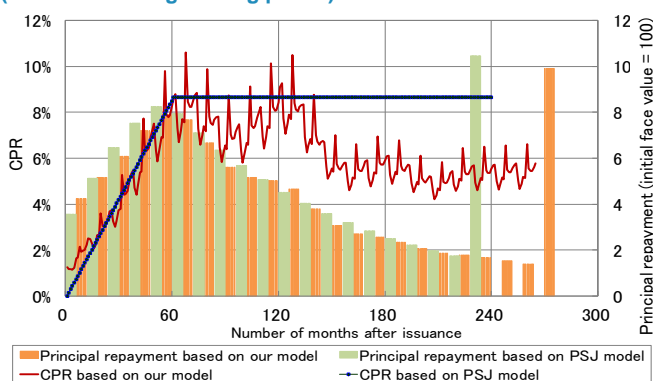
Source: JHF and our estimates.

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. The expected cash flows of JHF MBS No.167 based on our prepayment model have terms that are somewhat longer than those based on the PSJ Forecast Statistical Data. As a result, YCSs based on our prepayment model are several basis points lower than those based on the PSJ Forecast Statistical Data. Since tweaking our model in July 2019, we have updated the model's parameters, and the expected maturity at the time of new issuance has gradually risen since the No. 147. We have recently adjusted this.

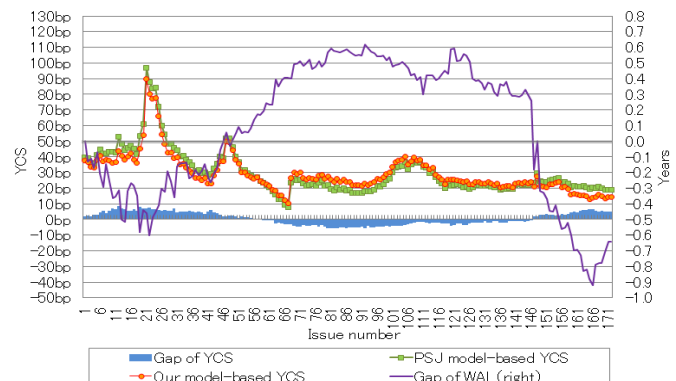
Chart: Expected CPR & Principal Repayment for No. 172 Issue (based on 11 Aug closing prices)



Source: Our estimates.

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

Chart: Difference in YCS for Monthly MBS at Launch



Source: Our estimates.

**Expected maturity of  
around 9 years**

The expected cash flow distribution for the upcoming issue (the chart on the previous page, based on 9 September 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 9.75 years (9.66 years for the previous issue) and the expected final maturity 22.5 years (22.1 years). The PSJ forecast is 7.33% (vs. 7.46% for the previous issue).
- The PSJ Calculation Statistical Value (average) is 8.35% (vs. 8.64% for the previous issue). Accordingly, the expected WAL is 9.14 years (vs. 8.99 years for the previous issue) and the expected final maturity 20.0 years (19.6 years).

*Note: WAC' means the Weight Average Coupon excl. premiums for JFE group credit life insurance*

The underlying loan pool's WAC (weighted average coupon; see pp. 6-7) is 1.08% and the WAC' 0.86%, 0.05ppt lower than the previous issue's.

Valuations of JHF\_MBS #173 Pricing(Simulation)

9-Sep-21  
(Tokyo Close)

| Launch Spread | Coupon | Valuations of Cash Flows |        |   |        |                                    |       |                   |                                       | Indications of Previous RMBS Issue<br>(#172) |
|---------------|--------|--------------------------|--------|---|--------|------------------------------------|-------|-------------------|---------------------------------------|--|
|               |        | Daiwa Model              |        |   |        | PSJ Model                          |       |                   |                                       |  |
|               |        | Dynamic                  | Static |   |        | PSJ forecast Statistical Data(Ave) |       |                   |                                       |  |
|               |        | OAS                      | YCS    | ASW   | ModDur | YCS                                | ASW   | ModDur            |                                       |  |
| 23 bp         | 0.27 % | -0.3                     | 5.2    | 7.8   | 9.552  | 11.0                               | 11.6  | 8.831             | (Issuance Terms)                      |  |
| 24 bp         | 0.28 % | 0.7                      | 6.3    | 8.8   | 9.545  | 12.0                               | 12.6  | 8.825             | Launch Spread=29bp                    |  |
| 25 bp         | 0.29 % | 1.7                      | 7.3    | 9.8   | 9.537  | 13.0                               | 13.6  | 8.819             | Coupon=0.31%                          |  |
| 26 bp         | 0.30 % | 2.8                      | 8.3    | 10.8  | 9.530  | 14.1                               | 14.6  | 8.813             | (Valuations at the time of Launch)    |  |
| 27 bp         | 0.31 % | 3.8                      | 9.3    | 11.8  | 9.523  | 15.1                               | 15.7  | 8.807             | [CF based on Daiwa Model] :           |  |
| 28 bp         | 0.32 % | 4.8                      | 10.4   | 12.8  | 9.515  | 16.1                               | 16.7  | 8.801             | OAS=6.7bp, YCS=12.7bp, ASW=16.2bp     |  |
| 29 bp         | 0.33 % | 5.8                      | 11.4   | 13.8  | 9.508  | 17.1                               | 17.7  | 8.795             | [CF based on PSJ Model] :             |  |
| 30 bp         | 0.34 % | 6.9                      | 12.4   | 14.7  | 9.501  | 18.1                               | 18.7  | 8.789             | YCS=17.9bp, ASW=19.2bp                |  |
| 31 bp         | 0.35 % | 7.9                      | 13.4   | 15.7  | 9.494  | 19.1                               | 19.7  | 8.783             | (Valuations in the secondary market)  |  |
| 32 bp         | 0.36 % | 8.9                      | 14.4   | 16.7  | 9.486  | 20.2                               | 20.7  | 8.777             | [CF based on Daiwa Model/Daiwa Price] |  |
| 33 bp         | 0.37 % | 9.9                      | 15.5   | 17.7  | 9.479  | 21.2                               | 21.8  | 8.771             | OAS=2bp, YCS=7.9bp, ASW=10.1bp        |  |
| 34 bp         | 0.38 % | 11.0                     | 16.5   | 18.7  | 9.472  | 22.2                               | 22.8  | 8.765             | [CF based on PSJ Model/JSDA price] :  |  |
|               |        | < Daiwa Model >          |        | < PSJ Model/ based on PSJ Forecast Statistical Data > |        |                                    |       |                   |                                       | YCS=14.5bp, ASW=14.6bp                       |
| PSJ           |        | 7.33                     | %      |   |        | Ave: 8.35                          | %     | (Median: 8.50 ) % |                                       |  |
| WAL           |        | 9.75                     | years  |   |        | 9.14                               | years | ( 9.07 ) years    |                                       |  |

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.

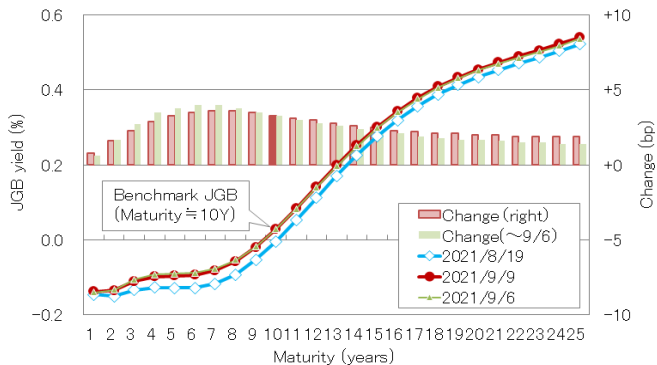


## Launch spread indications

The previous issue (No. 172) was launched at a time when the on-the-run 10-year JGB yield had dropped below 0% and was testing a bottom several basis points into negative territory. Since then, the bottom of its range has risen slightly.

If the launch spread is the same as the previous issue at 29bps, the No. 173 coupon would be 0.33 %. In this case, the OAS would be 5.8bps, down 0.9bps from the previous issue's launch OAS. The OAS narrowing would be in connection with changes in the shape of the yield curve, a technical factor, mainly because of larger increases in superlong yields than the increase in the benchmark JGB's yield.

**Chart: JGB Yield Curve Changes (from the day before launch day of No.172)**



Source: Compiled by Daiwa Securities.

## (Connection with risk premium of previous issue)

### [Pricing using our model's cash flow estimates]

- The No. 172's launch OAS was 6.7bps and the YCS 12.7bps. Based on the similar OAS and YCS, the No. 173's launch spread would be 30bps and the coupon 0.34%.
- In the secondary market, the No. 172's OAS is 2.0bps and the YCS 7.9bps. In line with these, the No. 173's launch spread would be about 25-26bps and the coupon 0.29-0.30%.

### [Pricing using PSJ forecast-based cash flow estimates]

- The No. 172's launch YCS was 17.9bps. Based on the similar YCS, the No. 173's launch spread would be about 30bps and the coupon 0.34%.
- In the secondary market, the No. 172's YCS is 14.5bps. In line with this, the No. 173's launch spread would be about 26bps and the coupon 0.30%.

## (Demand forecast for No. 173 issue and issuance level)

## Status of the pandemic

Japan's fifth wave of COVID-19 infections has begun to moderate. The number of new positive cases nationwide, which peaked at 5,773 on 13 August, has dropped below 2,000 per day. Japan lifted its state of emergency in Miyagi and Okayama prefectures on 12 September but extended it until 30 September for Hokkaido, Ibaraki, Tochigi, Gunma, Saitama, Chiba, Tokyo, Kanagawa, Shizuoka, Aichi, Gifu, Mie, Shiga, Kyoto, Osaka, Hyogo, Hiroshima, Fukuoka, and Okinawa prefectures. Japan's vaccination rate is over 50% for a single dose and 42.9% for a second dose (as of 8 September; from the government's CIO portal).

## Credit enhancement ratio and RMBS issuance volume

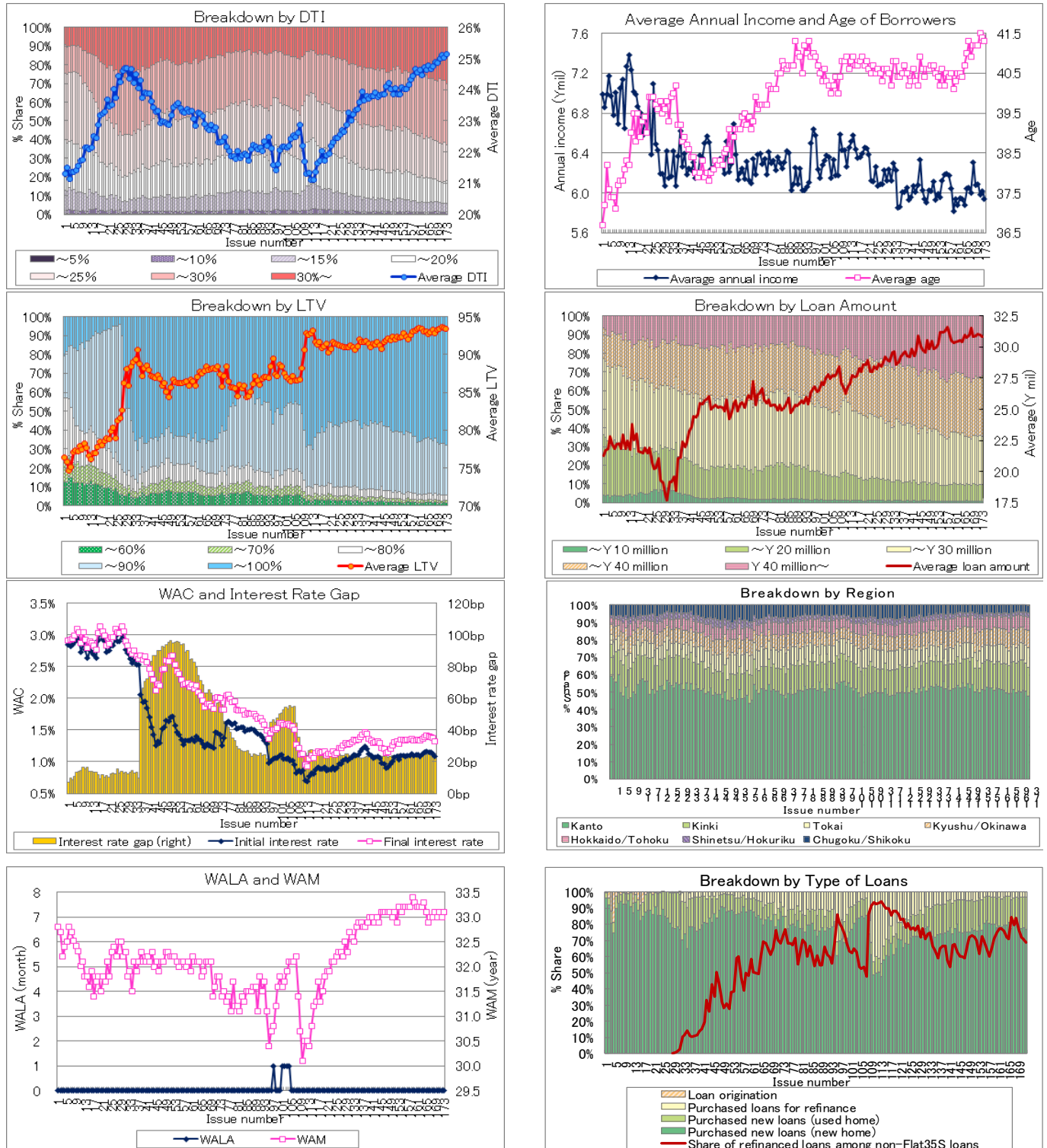
We expect the amount of the upcoming issuance to be about 13% lower than the year-ago issue. Given the loan pool's high averages for both LTV and DTI, we expect more overcollateralization and a high credit enhancement ratio close to the 21.1% of the previous issue. This provides a buffer to ensure investors' ability to collect principal and interest is not threatened even if the beneficiary interests of the RMBS are activated, and the credit enhancement ratio was set at the minimum value allowed for a AAA rating from the rating agencies. A higher credit enhancement ratio results in a lower amount of RMBS issuance.

## Coupon in the lower 0.3% range

The personal opinion of your author is that the launch spread for this issue will confirm sufficient demand and be either 29bp, the same as for the last one, or 30bp, which

would give it the same OAS on issuance as the previous issue. In this case, the coupon would be 0.33-0.34% (based on 9 September closing prices).

## Characteristics of Underlying Loan Pools for All JHF Monthly MBSs



Source: JHF; compiled by Daiwa Securities.

Note: Candidate pool used for No. 173 issue.

## Characteristics of Underlying Loans: No. 173 Monthly MBS and Last Six Issues (No. 167-172)

|  |                   | JHF<br>#167 | JHF<br>#168 | JHF<br>#169 | JHF<br>#170 | JHF<br>#171            | JHF<br>#172 | JHF<br>#173 | Ave. of<br>previous<br>6 issues | Change<br>from #172 |
|--|-------------------|-------------|-------------|-------------|-------------|------------------------|-------------|-------------|---------------------------------|---------------------|
| Loan Pool Selected in                                      |                   | Feb-2021    | Mar-2021    | Apr-2021    | May-2021    | Jun-2021               | Jul-2021    | Aug-2021    |                                 |                     |
| Loan Application Started in                                |                   | Jul-2018    | Jul-2018    | Mar-2019    | Dec-2018    | May-2018               | Mar-2019    | Aug-2018    |                                 |                     |
| Repayment Started in                                       |                   | Feb-2021    | Mar-2021    | Apr-2021    | May-2021    | Apr-2021,<br>June-2021 | Jul-2021    | Aug-2021    |                                 |                     |
| Initial Outstanding Entrusted Assets (Y mil)               |                   | 159,663     | 241,717     | 176,241     | 142,859     | 167,960                | 156,411     | 145,338     | 174,142                         | -11,073             |
| Issue Size (Y mil)   |                   | 127,400     | 192,900     | 140,800     | 113,000     | 132,600                | 123,400     | TBD         | 138,350                         | -                   |
| Excess Collateral (Y mil)                                  |                   | 32,263      | 48,817      | 35,441      | 29,859      | 35,360                 | 33,011      | TBD         | 35,792                          | -                   |
| Overcollateralization                                      |                   | 20.2%       | 20.1%       | 20.1%       | 20.9%       | 21.0%                  | 21.1%       | TBD         | 20.6%                           | -                   |
| Number of Loans  |                   | 5,158       | 7,656       | 5,712       | 4,618       | 5,410                  | 5,055       | 4,708       | 5,602                           | -347                |
| Average Outstanding Loan (Y mil)                           |                   | 30.954      | 31.572      | 30.855      | 30.935      | 31.046                 | 30.942      | 30.871      | 31.051                          | -0.071              |
| Average LTV  |                   | 93.28%      | 92.85%      | 93.32%      | 93.36%      | 93.64%                 | 93.45%      | 93.39%      | 93.32%                          | -0.06%              |
| Average DTI  |                   | 24.74%      | 24.88%      | 24.85%      | 24.99%      | 25.12%                 | 25.04%      | 25.14%      | 24.94%                          | +0.10%              |
| Average LTV for Refinance                                  |                   | 82.48%      | 81.96%      | 81.09%      | 81.34%      | 83.08%                 | 81.14%      | 85.13%      | 81.85%                          | +3.99%              |
| Average DTI for Refinance                                  |                   | 19.31%      | 19.03%      | 19.05%      | 18.73%      | 19.44%                 | 18.76%      | 19.31%      | 19.05%                          | +0.55%              |
| Average Annual Income of Obligors (Y mil)                  |                   | 6.000       | 6.310       | 6.082       | 6.089       | 5.988                  | 6.019       | 5.940       | 6.081                           | -0.079              |
| Average Age of Obligors                                    |                   | 40.9        | 41.2        | 41.2        | 41.2        | 41.5                   | 41.4        | 41.3        | 41.2                            | -0.1                |
| WAC (Initial Rate)   |                   | 1.12%       | 1.15%       | 1.17%       | 1.15%       | 1.15%                  | 1.13%       | 1.08%       | 1.15%                           | -0.05%              |
| WAC (Final Rate)   |                   | 1.36%       | 1.39%       | 1.41%       | 1.40%       | 1.39%                  | 1.37%       | 1.32%       | 1.39%                           | -0.05%              |
| WALA (Weighted Average Loan Age)                           |                   | 0           | 0           | 0           | 0           | 0                      | 0           | 0           | 0                               | +0                  |
| WALA for Refinance   |                   | 115         | 121         | 118         | 123         | 116                    | 126         | 121         | 120                             | -5                  |
| WAM  |                   | 396         | 396         | 397         | 396         | 397                    | 396         | 397         | 396                             | +1                  |
| Maturity Structure of<br>Loans at Origination<br>(% share) | Up to 10Y         | 0.2%        | 0.1%        | 0.1%        | 0.1%        | 0.1%                   | 0.1%        | 0.1%        | 0.1%                            | +0.0%               |
|  | 10-20Y            | 4.4%        | 4.8%        | 4.3%        | 5.0%        | 4.2%                   | 4.4%        | 4.4%        | 4.5%                            | +0.0%               |
|  | 20-25Y            | 4.1%        | 3.7%        | 4.3%        | 4.0%        | 4.3%                   | 4.0%        | 3.6%        | 4.1%                            | -0.4%               |
|  | 25-30Y            | 7.1%        | 6.9%        | 6.7%        | 6.2%        | 6.9%                   | 7.2%        | 7.1%        | 6.8%                            | -0.1%               |
|  | Over 30Y          | 84.2%       | 84.4%       | 84.6%       | 84.7%       | 84.6%                  | 84.3%       | 84.8%       | 84.5%                           | +0.5%               |
| % share of loans with<br>bonus payments                    | (in number)       | 10.8%       | 10.9%       | 9.4%        | 8.7%        | 7.9%                   | 8.2%        | 7.9%        | 9.3%                            | -0.3%               |
|  | (in value)        | 12.4%       | 12.1%       | 10.5%       | 10.0%       | 9.0%                   | 9.3%        | 9.0%        | 10.6%                           | -0.3%               |
| Type of Loan   | new               | 96.3%       | 97.1%       | 96.5%       | 96.8%       | 96.8%                  | 97.0%       | 96.7%       | 96.8%                           | -0.3%               |
|  | refinanced        | 3.7%        | 2.9%        | 3.5%        | 3.2%        | 3.2%                   | 3.0%        | 3.3%        | 3.3%                            | +0.3%               |
| Loan Amount at<br>Origination<br>(% share)                 | Up to Y10 mil     | 0.9%        | 0.8%        | 0.9%        | 0.8%        | 0.8%                   | 0.9%        | 0.9%        | 0.9%                            | +0.0%               |
|  | Y10-20 mil        | 8.8%        | 8.4%        | 9.0%        | 8.8%        | 8.4%                   | 8.7%        | 8.6%        | 8.7%                            | -0.1%               |
|  | Y20-30 mil        | 25.4%       | 24.7%       | 26.1%       | 26.4%       | 26.4%                  | 26.4%       | 26.2%       | 25.9%                           | -0.2%               |
|  | Y30-40 mil        | 31.8%       | 30.5%       | 30.6%       | 31.6%       | 31.4%                  | 31.1%       | 32.1%       | 31.2%                           | +1.0%               |
|  | Y40-50 mil        | 18.2%       | 18.2%       | 18.5%       | 17.6%       | 18.7%                  | 18.0%       | 17.5%       | 18.2%                           | -0.5%               |
|  | Over Y50 mil      | 15.0%       | 17.4%       | 14.9%       | 14.8%       | 14.3%                  | 14.9%       | 14.8%       | 15.2%                           | -0.1%               |
| Loan Amount by<br>Region<br>(% share)                      | Hokkaido/Tohoku   | 6.9%        | 8.1%        | 7.5%        | 6.8%        | 6.4%                   | 7.3%        | 7.7%        | 7.2%                            | +0.4%               |
|  | Kanto             | 51.5%       | 49.4%       | 50.6%       | 49.9%       | 51.2%                  | 50.3%       | 47.5%       | 50.5%                           | -2.8%               |
|  | Shinetsu/Hokuriku | 1.7%        | 1.9%        | 2.1%        | 2.0%        | 2.1%                   | 2.4%        | 2.3%        | 2.0%                            | -0.1%               |
|  | Tokai             | 10.0%       | 9.0%        | 9.8%        | 9.9%        | 9.7%                   | 10.3%       | 11.6%       | 9.8%                            | +1.3%               |
|  | Kinki             | 15.9%       | 17.1%       | 16.9%       | 18.5%       | 17.3%                  | 16.5%       | 16.6%       | 17.0%                           | +0.1%               |
|  | Chugoku           | 2.9%        | 2.9%        | 2.4%        | 2.9%        | 2.8%                   | 2.7%        | 3.2%        | 2.8%                            | +0.5%               |
|  | Shikoku           | 1.7%        | 1.3%        | 1.1%        | 1.0%        | 1.5%                   | 1.4%        | 1.2%        | 1.3%                            | -0.2%               |
|  | Kyushu/Okinawa    | 9.4%        | 10.3%       | 9.7%        | 9.0%        | 9.1%                   | 9.1%        | 9.8%        | 9.4%                            | +0.7%               |

Source: JHF; compiled by Daiwa Securities.

Note: Candidate pool used for No. 173 issue.

## **IMPORTANT**

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Issues are rated 1, 2, 3, 4, or 5 as follows:

- 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.

### **Target Prices**

Daiwa Securities Co. Ltd. sets target prices based on its analysts' earnings estimates for subject companies. Risks to target prices include, but are not limited to, unexpected significant changes in subject companies' earnings trends and the macroeconomic environment.

### **Disclosures related to Daiwa Securities**

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### **Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law**

(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

Memberships: Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association