

JHF No.142 Monthly MBS Issue

Strategic Memorandum DSBE003

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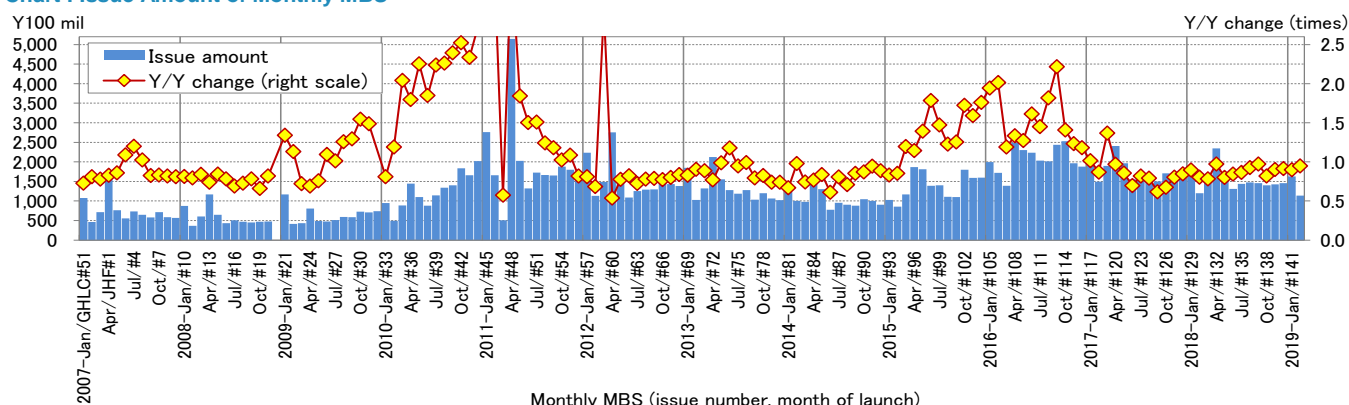
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Daiwa Securities Co. Ltd.

- Issuance amount is likely to be the smallest in FY18, decreasing by 5% y/y and 30% m/m

- The Japan Housing Finance Agency (JHF) plans to issue its No. 142 Monthly MBS.
- The candidate trust assets total Y141.4 bil, almost all of which were Flat 35 loans originated in January. If the credit enhancement ratio is unchanged from that for the previous issue at 19.7%, the issue amount is estimated at Y113.5 bil.
- The Flat 35 interest rate in January declined both m/m and y/y. However, the aggregate amount of Flat 35 loans fell 30% m/m due to seasonality. The amount also decreased by 6% on a y/y basis, reflecting sluggish refinancing loans. Meanwhile, new loans exceeded the year-earlier level for the first time in five months. Purchases of existing homes and condominiums remained favorable, growing about 30%. Loans for custom homes recovered, with the decline narrowing to 3% y/y.
- Based on our prepayment model, we estimate a WAL of 8.50 years (based on 12 February closing prices; same hereinafter). The expected WAL based on the JHF's PSJ Forecast Statistical Data is 8.78 years. Final maturity is estimated at 19.1 years on both our and JHF models.
- The No. 141, launched in January, had a launch spread of 35bps and a coupon of 0.36%. Based on the same launch spread, the No. 142 would have a coupon of 0.34% and an OAS of 17.9bps.
- In the secondary market, the previous issue's risk premium in terms of the OAS is 15.0bps. Based on the same OAS, the No. 142's coupon would be about 0.31% and the launch spread 32bps.
- Based on our demand forecasts for the No. 142 issue, we think it appropriate that supply and demand will meet at the launch spread of around 32-35bps. If so, the coupon would be 0.31-0.34%.

Chart : Issue Amount of Monthly MBS



Source: JHF; compiled by Daiwa Securities.

Note: Estimate for No. 142 issue.

Issuance of JHF MBS and Situations of Flat 35

No. 142 to be launched in February

The Japan Housing Finance Agency (JHF) plans to price (launch) its No. 142 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 (JB353 in this case) at the time of the launch. The launch date is scheduled in mid-February, and the payment date is scheduled on 27 February.

Issuance amount of about Y113.5 bil

Candidate trust assets for the No. 142 totaled Y141.4 bil, almost all of which were Flat 35 loans originated in January. The issue is likely to have the highest ratings from S&P and R&I. The issue amount is to be announced on 14 February. If the credit enhancement ratio is unchanged from that for the previous issue at 19.7%, the issue amount is estimated at Y113.5 bil.

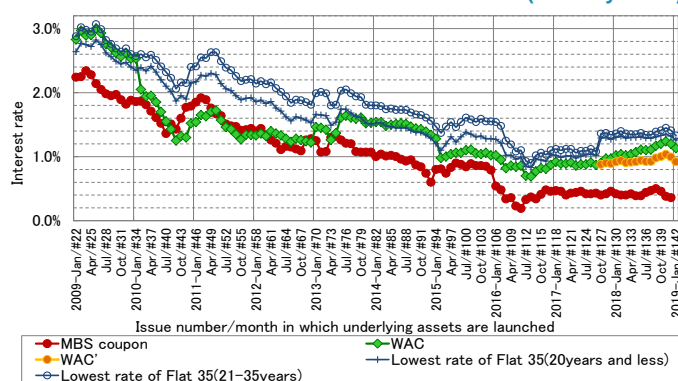
M/m decline in Flat 35 interest rate

The Flat 35 interest rate in January declined m/m. For LTV of 90% or lower, the lowest retail rate in January for 35-year mortgages (incl. premiums for new JHF group credit life insurance) was 1.33%, 0.08 points lower than the rate in December. The lowest retail rate for mortgages of 20 years or less was 1.26%, 0.06 points lower. On a y/y basis as well, the 35-year mortgage rate was 0.03 points lower and the rate for mortgages of 20 years or less was 0.04 points lower. However, the aggregate amount of Flat 35 loans decreased by 6% y/y. While the y/y decline was caused by a 60% plunge in refinancing loans, the m/m decline reflected seasonality. Meanwhile, new loans exceeded the year-earlier level for the first time in five months, posting 2% growth. Although loans for custom homes had continued to post 10-20% drops, the figure recovered with the decline narrowing to 3% y/y. On top of this, purchases of second-hand homes and condominiums remained favorable, growing about 30%. However, loans for new condominiums have been sluggish, falling about 30% for the second month in a row.

88% of new Flat 35 borrowers applied for the new JHF group credit life insurance system

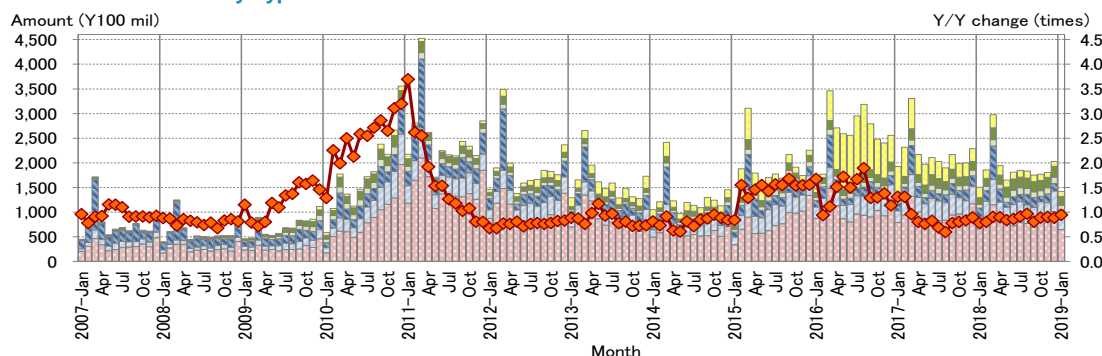
Among candidate trust assets for the No. 142 issue, the ratios of new Flat 35 borrowers (who applied from October 2017 onward) and policyholders in the new JHF group credit life insurance system came to 98.2% and 86.4%, respectively. Among new Flat 35 borrowers, the ratio of new JHF group credit life insurance system policyholders rose for the third straight month to 88.0%.

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



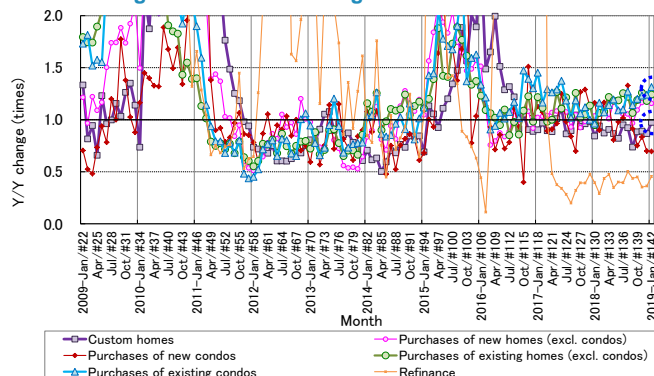
Source: JHF; compiled by Daiwa Securities.

Chart : Flat 35 Loans by Type of Loans



Source: JHF; compiled by Daiwa Securities.

Chart : Change in Flat 35 Loan Originations



Source: JHF; compiled by Daiwa Securities.

Terms for the previous issue

No. 141's launch spread 35bps

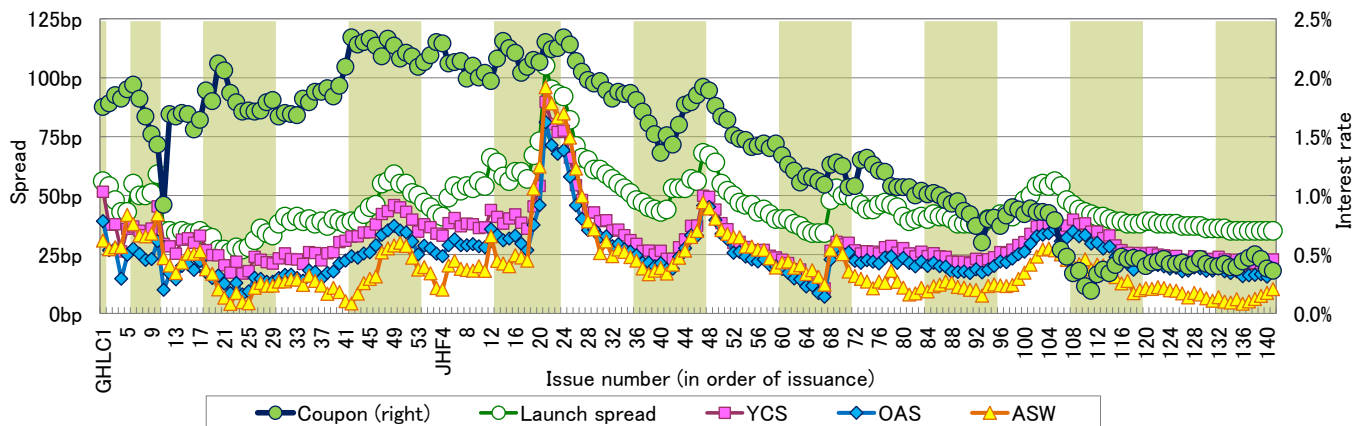
The No. 141 (¥162.5 bil) was launched on 23 January with a coupon of 0.36%, 2bps lower than No. 140. The spread was 35bps (unchanged). The OAS at launch (our estimate; same hereinafter) stood at 17.7bps (2.1bps wider) and the YCS was 22.8bps (2.3bps wider).

Launch spread remained flat and coupon reflected lower benchmark interest rate

The launch spread remained flat at 35bps for eight consecutive months. The decline in the coupon reflected a slight drop in the benchmark interest rate. The 10-year JGB yield, the benchmark for pricing, declined by only 2-3bps partly due to the support in line with the switching of the benchmark issue. The yield was barely in positive territory at the time of launch. Although the issuance amount for the No. 141 issue was relatively large reflecting seasonality, the issue appears to have met sufficient excess demand partly because the decline of the coupon was held down to a marginal level.

In addition, the widening of risk premiums (such as OAS) was influenced by (1) substantial flattening of the yield curve in the 5- to 20-year zone compared to that as of the launch of the previous issue and (2) the benchmark interest rate hovering at a higher level than neighboring issues.

Chart : Issuance Terms for JHF Monthly MBS



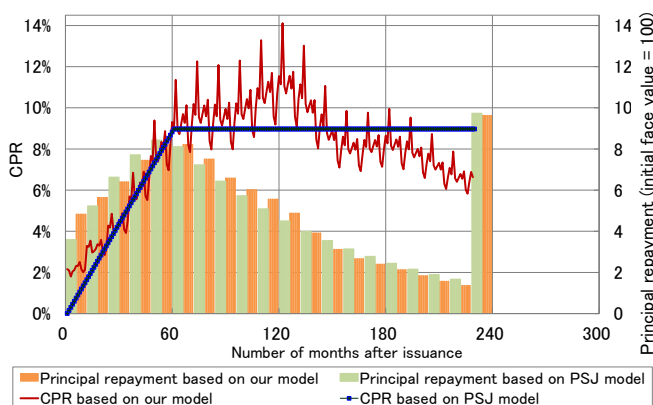
Source: JHF and our estimates.

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. For example, the expected cash flows based on our prepayment model have terms that are somewhat shorter than those based on the PSJ Forecast Statistical Data. As a result, even with the same issuance terms (e.g., the coupon), YCSs based on the PSJ Forecast Statistical Data are slightly lower than those based on our prepayment model.

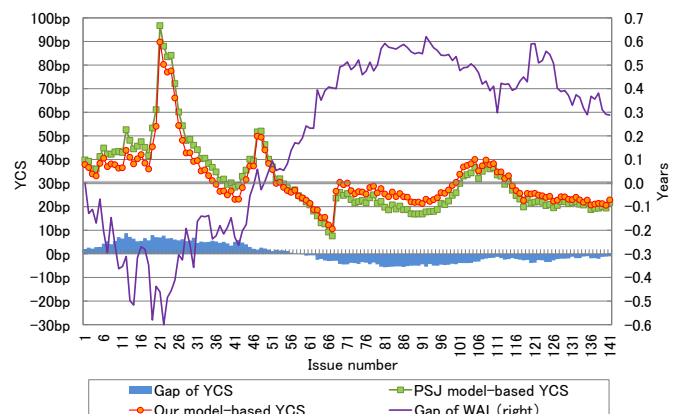
Chart : Expected CPR & Principal Repayment for No. 142 Issue (based on 12 February closing prices)



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 maturities
change little vs. previous
issue**

The expected cash flow distribution for the upcoming issue (the chart on the previous page, based on 12 February closing prices; hereinafter the same unless otherwise noted) is about the same as the previous issue (at the time of its launch; same hereinafter). The expected WAL is about 8.5 years. The length has changed little compared to the previous issue.

- Based on our model, the expected WAL is 8.50 years (8.50 years for the previous issue) and the expected final maturity 19.1 years. The PSJ forecast is 9.60% PSJ (vs. 9.65% PSJ for the previous issue).
- The PSJ Calculation Statistical Value (average) is 8.97% PSJ (vs. 9.01% PSJ for the previous issue). Accordingly, the expected WAL is 8.78 years (vs. 8.79 years for the previous issue) and the expected final maturity 19.1 years.

prepayment projections in the future. Meanwhile, the implied forward rate has declined in the 2- to 20-year zone, in which the longer the maturity, the more the rate declined (left chart). As the decline had the opposite effect of raising prepayment projections, it offset the aforementioned lengthening impact.

As a result, cash flow distribution for the No. 142 issue changed little compared to that of the No. 141 issue, leading to no change in the time span for the outstanding amount becoming 10% or less of the original after issuance. The expected timing for lump-sum redemption due to the exercising of clean-up call options is also unchanged. The expected final maturity has shortened slightly, reflecting the difference in the issuance month.

Maturity (years)	2019/1/22 Yield (%)	2019/2/12 Yield (%)	Change (bp)
1	0.00	-0.10	+1.0
2	0.00	-0.10	+1.0
3	0.00	-0.10	+0.5
4	0.00	-0.10	+0.5
5	0.00	-0.05	+0.5
6	0.05	0.05	+0.5
7	0.20	0.25	+0.5
8	0.40	0.45	+0.5
9	0.65	0.70	+0.5
10	0.85	0.85	+0.5
11	0.95	0.95	+0.5
12	1.05	1.05	+0.5
13	1.10	1.05	+0.5
14	1.15	1.10	+3.5
15	1.15	1.05	+0.5
16	1.10	1.00	-10.0
17	1.05	0.95	-10.0
18	1.00	0.90	-13.0
19	0.95	0.85	-13.0
20	0.95	0.80	-15.0

Chart : Launch Spread Estimates for No. 142 MBS (based on 12 February closing prices)

Valuations of JHF_MBS_#142 Pricing (Simulation)							Base Market Price date : 12-Feb-19 (Tokyo Close)		
Base Yield: JGB(353G) YTM -0.015 %									
Launch Spread	Coupon	Valuations of Cash Flows							Indications of Previous RMBS Issue (#141)
		Daiwa Model				PSJ Model			
		Dynamic	Static			PSJ forecast Statistical Data(Ave)			
		OAS	YCS	ASW	RevDur*	YCS	ASW	RevDur*	
30 bp	0.29 %	12.8	17.9	5.0	8.322	17.0	4.3	8.594	(Issuance Terms)
31 bp	0.30 %	13.8	19.0	6.0	8.317	18.0	5.3	8.589	[Launch Spread=35bp]
32 bp	0.31 %	14.9	20.0	7.0	8.312	19.0	6.2	8.584	[Coupon=0.36%]
33 bp	0.32 %	15.9	21.0	8.0	8.307	20.0	7.2	8.579	(Valuations at the time of launch)
34 bp	0.33 %	16.9	22.0	9.0	8.302	21.0	8.2	8.574	[CF based on Daiwa Model]
35 bp	0.34 %	17.9	23.0	10.0	8.297	22.0	9.2	8.569	OAS=17.7bp, YCS=22.8bp, ASW=10.2bp
36 bp	0.35 %	18.9	24.0	10.9	8.292	23.1	10.2	8.563	[CF based on PSJ Model]
37 bp	0.36 %	20.0	25.1	11.9	8.287	24.1	11.2	8.558	YCS=21.8bp, ASW=9.5bp
38 bp	0.37 %	21.0	26.1	12.9	8.282	25.1	12.2	8.553	(Valuations in the secondary market)
39 bp	0.38 %	22.0	27.1	13.9	8.277	26.1	13.1	8.548	[CF based on Daiwa Model/ Daiwa Price]
40 bp	0.39 %	23.0	28.1	14.9	8.272	27.1	14.1	8.543	OAS=15bp, YCS=20.2bp, ASW=7.3bp
41 bp	0.40 %	24.0	29.1	15.9	8.267	28.1	15.1	8.537	[CF based on PSJ Model/JSDA price]
YCS=20bp, ASW=7.3bp									

< Daiwa Model >

PSJ 9.60 %PSJ

WAL 8.50 years

< PSJ model/ based on PSJ Forecast Statistical Data >

Ave : 8.97 %PSJ (Median : 8.92) %PSJ

8.78 years (8.80) years

*RevDur: Revised Duration

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.

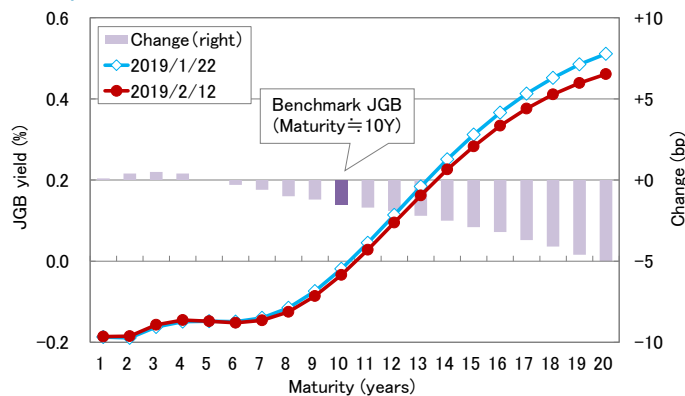
3) Estimated cash flow is based on the assumption that clean-up call options are exercised in initial April or October after the outstanding amount becomes 10% or less of the original.

Launch spread indications

Since the launch of the previous issue, JGB yields have declined in around the 5- to 20-year zone. The longer the maturity, the more the yields declined, thereby leading to flattening of the yield curve. Since the beginning of February, the 10-year JGB yield—the benchmark for pricing—has declined further, clearly falling below zero. Currently, the yield is at around the -0.015% level.

If the launch spread is the same as the previous issue at 35bps, the No. 142 coupon would be 0.34%. If so, the OAS would be at 17.9bps, 0.2bps wider than the previous issue's launch OAS.

Chart : JGB Yield Curve Changes (from the day before launch day of No.141)



Source: Compiled by Daiwa Securities.

The connection with secondary market levels is also of concern. We confirmed spread levels from our offices' prices and JSDA Trading Reference Statistical Data for the previous issue and then looked at the connection with the current issue. For convenience, we used our offices' prices for our model's cash flow analysis and JSDA Trading Reference Statistical Data for the PSJ model-based cash flow estimates (the JSDA's published PSJ Forecast Statistical Data; PSJ values based on the average of the 0bp yield curve scenario).

We did a launch spread case study for the current issue and compared spreads based on cash flow using our model and the PSJ model (based on the average for the JHF's PSJ Forecast Statistical Data).

The connections with the previous issue are shown as follows (secondary market levels and benchmark yield are as of the 12 February close).

(Connection with risk premium of previous issue)

【Pricing using our model's cash flow estimates】

- The No. 141's launch OAS was 17.7bps and the YCS 22.8bps. Based on the similar OAS and YCS, the No. 142's launch spread would be about 34-35bps and the coupon 0.33-0.34%.
- In the secondary market, the No. 141's OAS is 15.0bps and the YCS 20.2bps. In line with these, the No. 142's launch spread would be about 32-33bps and the coupon 0.31-0.32%.

【Pricing using PSJ forecast-based cash flow estimates】

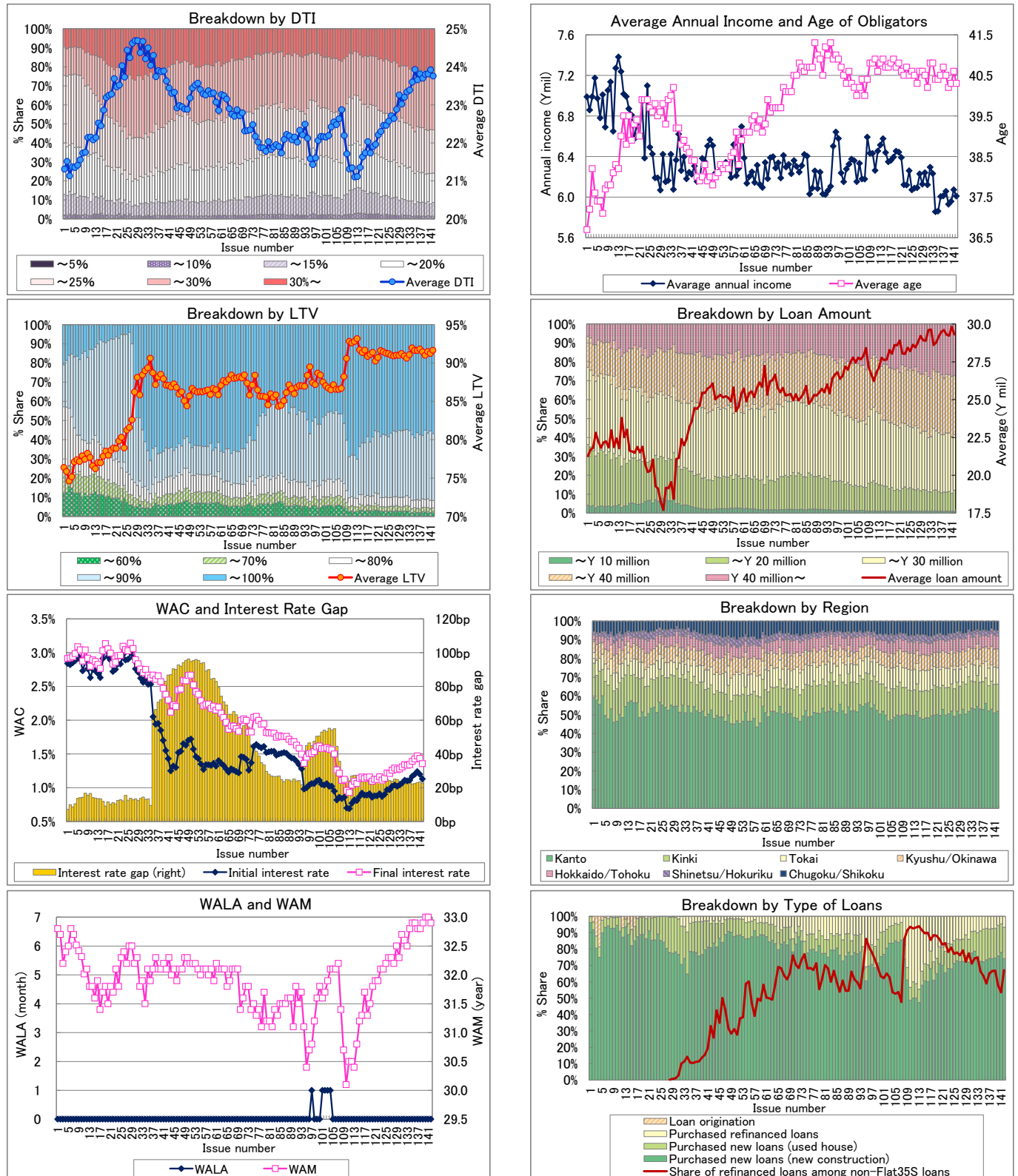
- The No. 141's launch YCS was 21.8bps. Based on the similar YCS, the No. 142's launch spread would be about 34-35bps and the coupon 0.33-0.34%.
- In the secondary market, the No. 141's YCS is 20.0bps. In line with this, the No. 142's launch spread would be about 33bps and the coupon 0.32%.

Demand forecast for No. 142 issue and issuance level

The issuance amount of the No. 142 issue is expected to fall 5% y/y and 30% m/m. Reflecting seasonality in February (i.e., the issuance amount tends to be small), the issuance amount would likely be the smallest in FY18. Among February issues as well, the issuance amount of the No. 142 issue is expected to be the smallest in four years. As the benchmark interest rate is now moving in negative territory, the coupon level of the No. 142 issue may be lower than that of the previous issue. However, we think supply and demand will likely be balanced, given the issuance scale.

For the No. 142 issue, we think it appropriate that supply and demand will meet at the launch spread of around 32-35bps. If so, the coupon would be 0.31-0.34%.

Characteristics of Underlying Loan Pools for All JHF Monthly MBSs



Source: JHF; compiled by Daiwa Securities.
 Note: Candidate pool used for No. 142 issue.

Characteristics of Underlying Loans: No. 142 Monthly MBS and Last Six Issues (No. 136-141)

	JHF #136	JHF #137	JHF #138	JHF #139	JHF #140	JHF #141	JHF #142	Ave. of previous 6 issues	Change from #141
Loan Pool Selected in	Jul-2018	Aug-2018	Sep-2018	Oct-2018	Nov-2018	Dec-2018	Jan-2019		
Loan Application Started in	Jan-2016	Jan-2016	Jan-2016	Mar-2016	Dec-2015	Oct-2016	Oct-2016		
Repayment Started in	Jul-2018	Jun-2018, Aug-2018	Jul-2018, Sep-2018	Aug-2018, Oct-2018	Sep-2018, Nov-2018	Oct-2018, Dec-2018	Nov-2018, Jan-2019		
Initial Outstanding Entrusted Assets (Y mil)	184,472	183,127	174,940	176,651	180,324	202,368	141,427	183,647	-60,941
Issue Size (Y mil)	147,200	145,700	139,900	142,200	145,300	162,500	TBD	147,133	-
Excess Collateral (Y mil)	37,272	37,427	35,040	34,451	35,024	39,868	TBD	36,514	-
Overcollateralization	20.2%	20.4%	20.0%	19.5%	19.4%	19.7%	TBD	19.9%	-
Number of Loans	6,320	6,210	5,908	6,030	6,171	6,785	4,824	6,237	-1,961
Average Outstanding Loan	29.189	29.489	29.611	29.295	29.221	29.826	29.317	29.438	-0.508
Average LTV	91.63%	91.81%	91.44%	91.01%	91.48%	91.25%	91.65%	91.44%	+0.40%
Average DTI	23.66%	23.81%	23.70%	23.80%	23.81%	23.92%	23.76%	23.78%	-0.16%
Average LTV for Refinance	83.49%	85.16%	83.34%	85.21%	82.48%	81.52%	80.80%	83.53%	-0.72%
Average DTI for Refinance	20.34%	20.23%	19.42%	19.96%	19.43%	19.88%	19.96%	19.88%	+0.08%
Average Annual Income of Obligors (Y mil)	6.006	6.012	6.057	5.929	5.957	6.072	6.009	6.006	-0.063
Average Age of Obligors	40.5	40.7	40.5	40.2	40.3	40.6	40.3	40.5	-0.3
WAC (Initial Rate)	1.10%	1.11%	1.17%	1.20%	1.24%	1.20%	1.13%	1.17%	-0.07%
WAC (Final Rate)	1.33%	1.34%	1.39%	1.43%	1.47%	1.44%	1.36%	1.40%	-0.08%
WALA (Weighted Average Loan Age)	0	0	0	0	0	0	0	0	+0
WALA for Refinance	87	92	91	86	93	96	90	91	-6
WAM	395	394	394	395	396	396	395	395	-1
Maturity Structure of Loans at Origination (% share)	Up to 10Y	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	+0.0%
	10-20Y	4.8%	5.0%	4.9%	5.4%	4.5%	5.1%	4.9%	+0.2%
	20-25Y	3.8%	3.8%	3.8%	3.2%	3.8%	3.0%	3.5%	+0.5%
	25-30Y	10.0%	9.5%	10.4%	8.6%	8.6%	8.3%	9.2%	+0.2%
	Over 30Y	81.3%	81.6%	80.8%	82.7%	83.0%	83.5%	82.2%	-1.0%
% share of loans with bonus payments	(in number)	12.6%	13.2%	12.3%	12.9%	12.2%	12.9%	12.7%	-0.1%
	(in value)	14.1%	14.9%	13.7%	14.8%	14.0%	14.4%	14.3%	+0.3%
Type of Loan	new	92.7%	92.3%	92.5%	92.8%	94.6%	95.4%	93.3%	-2.1%
	refinanced	7.3%	7.7%	7.5%	7.2%	5.4%	4.6%	6.7%	+2.1%
Loan Amount at Origination (% share)	Up to Y10 mil	1.0%	0.9%	0.9%	1.0%	0.9%	1.0%	1.0%	+0.0%
	Y10-20 mil	10.4%	9.8%	10.2%	10.1%	10.5%	9.6%	11.1%	+1.5%
	Y20-30 mil	31.1%	30.7%	30.4%	31.3%	30.9%	30.0%	29.5%	-0.5%
	Y30-40 mil	32.1%	31.7%	29.8%	31.0%	31.0%	31.9%	31.3%	-0.9%
	Y40-50 mil	14.0%	15.7%	14.9%	15.7%	15.8%	15.1%	16.5%	+1.4%
	Over Y50 mil	11.4%	11.1%	13.8%	10.9%	10.8%	12.5%	10.9%	-1.6%
Loan Amount by Region (% share)	Hokkaido/Tohoku	6.9%	6.6%	5.9%	6.3%	6.8%	7.3%	6.9%	-0.5%
	Kanto	53.2%	52.7%	56.1%	52.1%	52.9%	51.0%	51.8%	+0.9%
	Shinetsu/Hokuriku	2.9%	2.7%	2.6%	3.0%	2.4%	2.7%	2.8%	+0.1%
	Tokai	8.7%	9.6%	8.8%	9.4%	8.7%	9.2%	8.8%	-0.4%
	Kinki	14.2%	15.0%	13.6%	13.4%	15.0%	15.3%	14.5%	-0.8%
	Chugoku	3.7%	3.3%	3.5%	3.8%	3.1%	3.6%	3.4%	-0.2%
	Shikoku	1.6%	1.7%	1.6%	1.6%	1.1%	1.3%	1.8%	+0.5%
	Kyushu/Okinawa	8.9%	8.5%	7.8%	10.4%	10.0%	9.6%	10.0%	+0.5%

Source: JHF; compiled by Daiwa Securities.

Note: Candidate pool used for No. 142 issue.

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- 1) Duty of good faith.
- 2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
- 3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
- 4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

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The Name of the Credit Rating Agencies group, etc

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How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

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Credit ratings assigned by Standard & Poor's are statements of opinion on the future credit quality of specific issuers or issues as of the date they are expressed and they are not indexes which show the probability of the occurrence of the failure to pay by the issuer or a specific debt and do not guarantee creditworthiness. Credit ratings are not a recommendation to purchase, sell or hold any securities, or a statement of market liquidity or prices in the secondary market of any issues.

Credit ratings may change depending on various factors, including issuers' performance, changes in external environment, performance of underlying assets, creditworthiness of counterparties and others. Standard & Poor's conducts rating analysis based on information it believes to be provided by the reliable source and assigns credit ratings only when it believes there is enough information in terms of quality and quantity to make a conclusion. However, Standard & Poor's does not perform an audit, due diligence or independent verification of any information it receives from the issuer or a third party, or guarantee its accuracy, completeness or timeliness of the results by using the information. Moreover, it needs to be noted that it may incur a potential risk due to the limitation of the historical data that are available for use depending on the rating.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of March 7th, 2017, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of S&P Global Ratings Japan Inc. (<http://www.standardandpoors.co.jp>)

[Moody's]

The Name of the Credit Rating Agencies Group, etc

The name of the Credit Rating Agencies group: Moody's Investors Service ("MIS")

The name and registration number of the Registered Credit Rating Agency in the group: Moody's Japan K.K. (FSA commissioner (Rating) No.2)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Unregistered Rating explanation" in the section on "The use of Ratings of Unregistered Agencies" on the website of Moody's Japan K.K. (The website can be viewed after clicking on "Credit Rating Business" on the Japanese version of Moody's website (https://www.moody.com/pages/default_ja.aspx))

Assumptions, Significance and Limitations of Credit Ratings

Credit ratings are Moody's Investors Service's ("MIS") current opinions of the relative future credit risk of entities, credit commitments, or debt or debt-like securities. MIS 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. Credit ratings do not address any other risk, including but not limited to: liquidity risk, market value risk, or price volatility. Credit ratings do not constitute investment or financial advice, and credit ratings are not recommendations to purchase, sell, or hold particular securities. No warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such rating or other opinion or information, is given or made by MIS in any form or manner whatsoever.

Based on the information received from issuers or from public sources, the credit risks of the issuers or obligations are assessed. MIS adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MIS considers to be reliable. However, MIS is not an auditor and cannot in every instance independently verify or validate information received in the rating process.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of April 16th, 2018, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Moody's Japan K.K. (https://www.moody.com/pages/default_ja.aspx)

[Fitch]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: Fitch Ratings ("Fitch")

The name and registration number of the Registered Credit Rating Agency in the group: Fitch Ratings Japan Limited (FSA commissioner (Rating) No.7)

How to acquire information related to an outline of the rating policies and methods adopted by the person who determines Credit Ratings

The information is posted under "Outline of Rating Policies" in the section of "Regulatory Affairs" on the website of Fitch Ratings Japan Limited (<https://www.fitchratings.co.jp/web/>)

Assumptions, Significance and Limitations of Credit Ratings

Ratings assigned by Fitch are opinions based on established criteria and methodologies. Ratings are not facts, and therefore cannot be described as being "accurate" or "inaccurate". Credit ratings do not directly address any risk other than credit risk. Credit ratings do not comment on the adequacy of market price or market liquidity for rated instruments. Ratings are relative measures of risk; as a result, the assignment of ratings in the same category to entities and obligations may not fully reflect small differences in the degrees of risk. Credit ratings, as opinions on relative ranking of vulnerability to default, do not imply or convey a specific statistical probability of default.

In issuing and maintaining its ratings, Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The assignment of a rating to any issuer or any security should not be viewed as a guarantee of the accuracy, completeness, or timeliness of the information relied on in connection with the rating or the results obtained from the use of such information. If any such information should turn out to contain misrepresentations or to be otherwise misleading, the rating associated with that information may not be appropriate. Despite any verification of current facts, ratings can be affected by future events or conditions that were not anticipated at the time a rating was issued or affirmed.

For the details of assumption, purpose and restriction of credit ratings, please refer to "Definitions of ratings and other forms of opinion" on the website of Fitch Rating Japan Limited.

This information is based on information Daiwa Securities Co. Ltd. has received from sources it believes to be reliable as of May 13th, 2016, but it does not guarantee accuracy or completeness of this information. For details, please refer to the website of Fitch Rating Japan Limited (<https://www.fitchratings.co.jp/web/>)

IMPORTANT

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

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 (including tax) 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