



# Presale:

# FWD Securitization Trust 2020-INV1

### February 11, 2020

# **Preliminary Ratings**

Class	Preliminary rating(i)	Class type	Initial interest rate (%)(ii)	Preliminary amount (\$)	Credit enhancement (%)
A-1	AAA (sf)	Senior	Fixed	201,670,000	29.25
A-2	AA (sf)	Senior	Fixed	17,960,000	22.95
A-3	A (sf)	Senior	Fixed	30,930,000	12.10
M-1	BBB (sf)	Mezzanine	Fixed	14,110,000	7.15
B-1	BB (sf)	Subordinate	Fixed	10,260,000	3.55
B-2	B (sf)	Subordinate	Net WAC	6,410,000	1.30
B-3	NR	Subordinate	Net WAC	3,713,458	0.00
A-10-S	NR	Excess servicing	(iii)	285,053,558(iv)	N/A
XS	NR	Monthly excess cashflow	(v)	285,053,558(iv)	N/A
P	NR	Prepayment premium	(vi)	100	N/A
R	NR	REMIC residual	N/A	N/A	N/A

Note: This presale report is based on information as of Feb. 11, 2020. 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. (i) The collateral and structural information in this report reflect the preliminary private placement memorandum dated Feb. 7, 2020; the preliminary ratings assigned to the classes address the ultimate payment of interest and principal. (ii)Interest can be deferred on the classes. Coupons are subject to the pool's  $net \ WAC \ rate. \ (iii) Excess \ servicing \ strip \ plus \ the \ excess \ prepayment \ strip \ minus \ compensating \ interest. \ (iv) Notional \ amount \ equals \ the \ loans' \ prepayment \ strip \ minus \ compensating \ interest.$  $stated\ principal\ balance.\ (vi) Certain\ excess\ amounts\ per\ the\ pooling\ and\ servicing\ agreement.\ (vi) Prepayment\ premiums\ during\ the\ related$ prepayment period. WAC--Weighted average coupon. REMIC--Real estate mortgage investment conduit. N/A--Not applicable. NR--Not rated.

## **Profile**

Expected closing date	Feb. 14, 2020.
Cut-off date	Dec. 31, 2019.
Distribution date	The 25th of each month, or the next business day, beginning Feb. 25, 2020.
Stated maturity date	Jan. 25, 2050.

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# Profile (cont.)

Certificate balance, including unrated classes	\$285.05 million in aggregate.
Collateral types	First-lien fixed- and adjustable-rate, fully amortizing residential mortgage loans secured by non-owner-occupied, single-family residential, investment properties, condominiums, townhouses, planned-unit developments, manufactured housing, and two- to four-family residential properties to both prime and nonprime borrowers. The pool consists of investor loans underwritten to a borrower's debt-to-income ratio and mortgage loans that were underwritten based on a property's debt service coverage ratio, which are exempt from qualified mortgage/ability-to-repay rules.
Collateral	U.S. residential mortgage loans.
Credit enhancement	For each class of preliminary rated certificates, subordination in the form of certificates that are lower in payment priority as well as excess spread that preserves subordination.

# **Participants**

Issuer	FWD Securitization Trust 2020-INV1.					
Sponsor	Blackstone Residential Operating Partnership L.P.					
Depositor	FWD Depositor LLC.					
Trustee, securities administrator, and custodian	U.S. Bank N.A.					
Servicers	Fay Servicing LLC.					
Originators	Finance of America Mortgage contributing 47.6%, Lending One contributing 19%, Finance of America Commercial contributing 15.9%, RCN Capital contributing 10.8%, and the remaining 6.7% of the pool by balance was originated by a single mortgage lending institution.					

# Primary Originators/Loan Sellers Making Up More Than 10% Of The Collateral

Entity	By balance (%)	Due diligence (%)	Originator ranking
Finance of America Mortgage	47.6	100.0	N/A
Lending One	19.0	100.0	N/A
Finance of America Commercial	15.9	100.0	N/A
RCN Capital	10.8	100.0	N/A

N/A--Not applicable.

## **Servicers**

	By balance (%)	S&P Global Ratings' select servicer	Operation
Fay Servicing LLC.	100	Yes	Primary servicer

# Rationale

The preliminary ratings assigned to FWD Securitization Trust 2020-INV1's (FWD 2020-INV1) \$285.05 million mortgage pass-through certificates reflect our view of:

- The pool's collateral composition (see the Collateral Summary section below);
- The credit enhancement provided for the transaction;
- The transaction's associated structural mechanics;
- The representation and warranty (R&W) framework; and
- The primary originators, Finance of America Mortgage (FAM), Lending One, Finance of America Commercial (FACo), and RCN Capital.

#### Overview

FWD 2020-INV1 is Blackstone Residential Operating Partnership L.P.'s (Blackstone's) second residential mortgage-backed securities (RMBS) transaction. Securitizations with 100% investment properties have existed for the last several years in the "single-family rental" RMBS sub-sector; however, the FWD 2020-INV1 securitization is more analogous to a residential mortgage securitization given the diversity of individual underlying loans, multiple property operators, and focus on borrower FICO scores and loan-to-value (LTV) ratios, notwithstanding the 100% investor property collateral. Furthermore, the transaction does not include the same provisions and characteristics that may be more common to single-family rental securitizations, such as the substitution of properties and commercial mortgage-backed securities-like features.

Due to the uniqueness of FWD 2020-INV1's collateral (in particular the underwriting method and investor property concentration), we considered various elements of our criteria that include methodologies for analyzing these loans, which we describe below.

# **Collateral Summary**

All of the mortgage loans in FWD 2020-INV1 were originated under programs for mortgagors that intend to use the related mortgage property for business or commercial purposes (e.g., business purpose loans). The loans in the pool are primarily underwritten using FICO and LTV ratios. About 52.4% of the loans, as described more below, are underwritten to actual or estimated rental incomes. Approximately 47.6% of the loans were underwritten to a borrower's debt-to-income (DTI) ratio.

As of the cut-off date, the \$285.05 million mortgage pool consists of 1,298 primarily fixed-rate, fully-amortizing, residential mortgage loans (1387 by property count). 55.3% of the mortgages are backed by single-family residences, 10.0% are backed by planned-unit developments, 6.2% are backed by condominiums, 28.5% are backed by two- to four-family homes, and .02% are backed by manufactured housing.

The mortgage pool has a weighted average current combined LTV of 67.85%.

The weighted average current FICO score for the collateral pool is 733. There are nine loans made to nonpermanent resident aliens (NPRAs) or foreign national borrowers (0.3% by balance) in the pool.

S&P Global Ratings views this mortgage pool as weaker than its archetypal pool, but stronger than recently rated nonprime residential mortgage pools that are backed by 100% investor properties. The 'AAA' loss coverage requirement for the pool was determined to be 24.65%.

From a credit perspective, the following highlight certain characteristics of the transaction (which are discussed in more detail in the Strengths and Weaknesses section):

- 100% are business-purpose investor loans, of which 52.4% are underwritten to a debt service coverage ratio (DSCR) based upon the rental income on the property. The remaining 47.6% non-DSCR program investor loans were primarily qualified using DTI, FICO, and LTV, and are agency eligible because they have been underwritten to Freddie Mac or Fannie Mae guidelines;
- Significant percentage of cash-out loans (50.4%);
- A high percentage of loans to multiple borrowers (32.7%); and
- Higher exposure to two- to four-family housing (28.5%);
- While this is the second transaction issued under the FWD shelf, while collateral characteristics are similar, we do notice an increase in the pool's original CLTV to 68.3% from 65.7% in the FWD 2019-INV1 transaction.
- The transaction includes 16 Cross-Collateralized loan which include 105 properties. During our analysis we assessed the credit risk associated with these loans at the property level while, for our large loan and tail risk analysis we took into account the combined property balance for each loan.

Table 1 **Collateral Characteristics** 

	FWD 2020-INV1	FWD 2019-INV1(i)	VISIO 2019-2	VISI0 2019-1	VERUS 2019-INV3	VERUS 2019- INV2	S&P Global Ratings' archetypical prime pool(ii)
Closing pool balance (mil. \$)	285.05	264.5	202.7	172.8	533.5	368.9	N/A
Closing loan count (no.)	1298(vi)	1724	1188(vii)	879(viii)	1564(ix)	1042(x)	N/A
Avg. loan balance (\$)	205,518	153,401	170,583	196,621	341,137	345,773	N/A
WA original CLTV ratio (%)	68.3	65.7	69.8	69.0	65.9	63.5	75
WA current CLTV ratio (%)	67.8	64.7	69.1	68.8	65.7	63.3	75
WA FICO(ii)	733(iv)	731(iii)	732(iii)	728(iii)	717(iv)	721(iv)	725
WA current rate (%)	5.8	6.2	7.0	7.2	6.9	7.1	N/A
WA seasoning (mos.)	5	13	7	2	3	3	0-6
WA debt-to-income (%)	35.86	37.60	N/A	N/A	N/A	N/A	36
WA DSCR (non-zero)	1.39	1.50	1.36	1.36	1.24	1.18	N/A
Investor (%)	100	100	100	100	100	100	0
Single-family (including planned-unit development) (%)	65.3	67.9	56.4	58.2	60.9	58.7	100
Fixed rate (%)	99.7	100.0	38.2	38.4	27.1	26.5	
ARM (%)	0.3	0.0	61.8	61.6	72.9	73.5	N/A
Cash-out refinancing (%)(v)	50.4	61.0	67.0	67.0	41.7	53	N/A
Loans with two or more borrowers (%)	32.7	27.6	0.2	0.0	17.3	17.4	0
Current (%)	99.0	99.0	100.0	100.0	98.3	100.0	100

Table 1

## Collateral Characteristics (cont.)

	FWD 2020-INV1	FWD 2019-INV1(i)	VISI0 2019-2	VISI0 2019-1	VERUS 2019-INV3	VERUS 2019- INV2	S&P Global Ratings' archetypical prime pool(ii)
Pool-level adjustments (mul	tiplicative fact	ors)					
Geographic concentration	1.00	1.00	1.03	1.03	1.03	1.04	1
Mortgage operational assessment	1.08	1.05	1.05	1.05	1.00	1.00	1
Representations and warranties	1.10	1.10	1.05	1.05	1.10	1.10	1
Other (i.e., loan modification/PCE/due diligence)	1.01	1.01	1.00	1.01	1.00	1.00	1
Combined pool-level adjustments	1.20	1.17	1.14	1.15	1.13	1.14	1
Loss estimates							
'AAA' loss coverage (%)	24.65	21.85	33.90	34.65	37.80	34.05	7.5
'AAA' foreclosure frequency (%)	47.88	47.42	71.58	73.82	80.00	77.62	15
'AAA' loss severity (%)	51.48	46.08	47.36	46.94	47.25	43.87	50
'BBB' loss coverage (%)	7.40	5.95	9.70	9.70	12.1	10.00	1.5
'BBB' foreclosure frequency (%)	25.49	24.71	38.59	39.71	45.26	43.08	5
'BBB' loss severity (%)	29.03	24.08	25.14	24.43	26.73	23.21	30
Closing pool balance (mil. \$)	285.05	264.5	202.7	172.8	533.5	368.9	N/A

Note: All percentages displayed are calculated using current balances. (i) As of presale publishing date. (ii) As defined in our criteria, "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018. (iii)WA FICO reflects the most recent scores obtained and assumes the lower of primary and co-borrower FICOs. (iv)For borrowers who are missing FICO scores, we assumed a score that is one standard deviation below the pool mean. (v) Does not include limited cash-out refinancing loans.  $\tilde{(v)}$  1298 loans secured by 1387 properties. (vii) 1188 loans secured by 1307 properties. (viii) 879 loans secured by 996 properties. (ix) 1564 loans secured by 1584 properties. (xi) 1042 loans secured by 1067 properties. WA--Weighted average. LTV--Loan-to-value. CLTV--Combined LTV. IO--Interest-only. ARM--Adjustable-rate mortgage. N/A--Not applicable. DSCR--debt service coverage ratio. PCE--Prior credit event.

Table 2 **Updated Credit Score Statistics** 

FICO score	Current balance (%)	No. of properties	Average used CLTV
>= 750	45.5	512	66.1
725 - 749	17.0	243	70.3
700 - 724	13.5	226	69.6
675 – 699	9.9	165	68.7
650 - 674	6.7	111	69.4
625 - 649	3.6	69	68.2
600 - 624	1.6	23	72.3

Table 2

# **Updated Credit Score Statistics (cont.)**

FICO score	Current balance (%)	No. of properties	Average used CLTV
575 - 599	1.3	20	63.3
550 - 574	0.2	3	70.8
< 550	0.8	15	72.0
Total	100	1387(i)	68.0

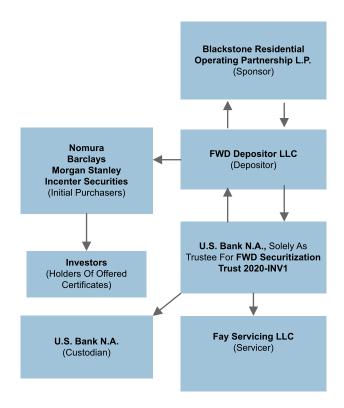
CLTV--Combined loan-to-value. (i)property count

# **Transaction Structure**

Chart 1 shows an overview of the transaction's structure.

Chart 1

# **Transaction Structure**



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The transaction is structured as a double true sale of the receivables from the sponsor to the

depositor and from the depositor to the issuing entity. The issuing trust transfers the certificates to the depositor. The depositor sells them to the initial purchasers, who sell them to third-party investors. The non-offered certificates, as well as the certificates required to be held to satisfy the risk retention rules, are held by the sponsor.

In rating this transaction, S&P Global Ratings will review the legal matters that it believes are relevant to its analysis, as outlined in its criteria.

# **Strengths And Weaknesses**

We believe the following characteristics strengthen the FWD 2020-INV1 transaction:

- The mortgage pool generally consists of loans to borrowers with significant home equity, as demonstrated by the pool's weighted average original combined LTV ratio of 68.3%.
- The mortgage pool consists of 47.6% agency-eligible investor loans.
- The mortgage pool consists of 99.7% fixed-rate, first-lien mortgage loans.
- The pool has a used weighted average FICO of 733, which is higher than our archetypal prime pool FICO score of 725.
- Third-party due diligence providers, which appear on our published list of reviewed providers, performed due diligence on 100% of the pool's loans. Their review encompassed regulatory compliance, credit (underwriting) compliance, and property valuations.
- The class A-1, A-2, and A-3 certificates (the senior classes) benefit from a credit support floor where no principal is paid to the subordinate classes until the class A certificates are retired. Additionally, principal is paid sequentially among the senior classes in periods when either the cumulative loss or delinquency trigger has failed, further protecting the more-senior classes.

We believe the following factors weaken the FWD 2020-INV1 transaction:

- Nine hundred and six loans (52.4% by balance, 995 property count) are non-agency investor loans that were underwritten to an investment property business-purpose program that did not consider the borrower(s)' income or employment in the underwriting process. For these loans, market rent or lease income was used to calculate a DSCR. To mitigate risk, the non-agency investor loans have a lower weighted average original combined LTV ratio of 70.42%, compared to our archetypical pool, which was taken into account by our Loan Evaluation and Estimate of Loss System (LEVELS) model when determining the foreclosure frequencies. In addition, the average DSCR for these loans was 1.39, which is in line with comparable transactions. Our loss model applied an adjustment ranging from 3.15x to 5.33x for the DSCR loans.
- The loan purpose for 713 loans (50.4% by balance, 793 loans by property count) is a cash-out refinance with an average cash-out amount of \$101,831. Seventy-seven loans have cash-out amounts greater than \$200,000.
- Three hundred and seventy-two mortgage loans (24% of the pool by balance) were made to borrowers with current used FICO scores below 700. The mortgage pool's loss estimate has been increased to account for these loans' increased default risk.
- The R&W framework is weak because the sponsor, Blackstone, an unrated entity, makes the R&W, and the framework does not provide for a backstop/guarantor. Also, although it has the option, the controlling holder (initially, the sponsor, as the majority holder of the most subordinate outstanding class of subordinate certificates) is not required to test for breaches and it may have conflicting interests from the certificate holders. This is partially offset by the

ability of a senior quorum (holders of more than 50.0% of the outstanding balance of senior certificates) to force a breach review. In addition, the transaction does not contain an early payment default (EPD) provision from the R&W provider to repurchase mortgage loans for which the borrower fails to submit any of the first three payments due after loan origination. The sponsor intends to hold classes B-1, B-2, and B-3, and retain risk via a 5.0% vertical slice of the capital structure, which somewhat mitigates the risks and concerns with the framework. Consequently, we applied an R&W adjustment that increased our loss expectations at all rating categories by a 1.10x factor.

# **Credit Analysis And Assumptions**

Our analysis of the FWD 2020-INV1 collateral pool considered a number of factors, including certain loan-level characteristics detailed below.

# Investor property concentration

We considered whether there were any additional risks related to foreclosure and liquidation timelines for investor properties compared to owner-occupied properties because the pool was backed by 100% business purpose-investor properties. We considered the variance in foreclosure/liquidation timelines and determined that the delta of the timelines between investor and non-investor properties did not pose an additional risk to the pool. In particular, the foreclosure/liquidation timelines used in our analysis are based upon historical data that include investor properties. Our servicer evaluation group indicated that there have not been material differences in the timelines historically. Moreover, investor properties in the transaction may actually provide additional or more stable cash flows to the trust given the assignment/attornment of leases on certain properties and the corresponding cash flow from such properties during the real estate-owned period.

# Property cash flow underwriting

We also considered the underwriting methods employed for the DSCR loans given that the qualifying metrics do not use traditional borrower characteristics, such as personal income and liabilities, but rather rely, in certain cases, on the property's propensity to generate cash flow from tenants. The DSCR loans, which make up 52.4% of the pool, are underwritten using a ratio of rents compared to mortgage payment liability (including taxes and insurance), which is commonly referred to as the DSCR.

We consider the strength of the DSCR and apply adjustment factors to the foreclosure frequency with higher factors applied to lower DSCRs and lower factors to higher DSCRs. This factor ranges from 3.15x to 6.00x. The low end of the range (3.15x) was calibrated so that a DSCR loan with a high DSCR (i.e., greater than or equal to 1.27x) is treated similarly to a weak traditionally underwritten investor property (i.e., underwritten to the borrower's income) with less than 12 months of income verification and poor DTI attributes (i.e., where the maximum adjustment factors for full-income documentation and DTI are assumed), all else being equal, given the limited performance history of DSCR loans through an economic cycle.

The weighted average DSCR adjustment factor for this pool was 2.20, which we believe adequately addresses the additional risk of DSCR loans that rely on the property cash more than personal income and liabilities.

#### Documentation type

As mentioned above, 52.4% of the loans in the pool are secured by non-agency investor loans underwritten to DSCR. These loans factor in the property's value, the property's cash flow, as well as consider factors, such as borrower experience as an investment property operator, borrower equity in the property, and documentation of reserves, among other factors (see table 3).

Table 3

# Sponsor's Loan Program

	Loan count (no.by property count)		S&P Global Ratings' documentation type	Documentation type foreclosure frequency adjustment
Non-agency investor loans (DSCR loans)	995	52.4	Other	3.15x-6.00x
Agency-eligible investor loans (DTI loans)	392	47.6	Full	1.0x

DSCR--Debt service coverage ratio. DTI--Debt-to-income.

We classified the DSCR loans as "Other" documentation type. Because the DSCR loans are underwritten to the underlying rental cash flows from a property, instead of by the borrowers' personal income and employment, we applied a 3.15x-6.00x adjustment (depending on the DSCR) to the foreclosure frequencies in our LEVELS loss model. The minimum loss adjustment of 3.15x is applied to any DSCR exceeding 1.27, and the maximum loss adjustment of 6.00x is applied to a DSCR of 0.66 or lower.

Sixteen DSCR loans were cross-collateralized. Cross-collateralized loans aggregate multiple properties under one loan and are typically made to experienced investors. The properties within a loan generally share homogenous features, such as loan purpose (rate/cash refinance), property type, geographical location, etc. The DSCR for these loans is calculated by aggregating the qualifying rental income and expenses for all properties securing the loan. The cross-collateralized loans allow the borrower to release the lien on any of the underlying properties by paying 120.00% of the original loan amount allocated to the specific property. We split out these sixteen loans into 105 property-level constituents where appropriate for our analysis. In general, these loans are better than the typical DSCR loans (see table 4 for the average 'AAA' and 'B' foreclosure frequencies for the DSCR and cross-collateralized DSCR loans). Ninety of the 105 properties already had a lease in place.

Table 4

### Average 'AAA' And 'B' FFs For The DSCR And Cross-Collateralized DSCR Loans

	Loan count (no.)	% of balance	Weighted average DSCR	Weighted average FF (%) ('AAA')	Weighted average FF (%) ('B')
DSCR					
DSCR					
DSCR < 1	10	0.81	0.9	78.6	18.3
1 <= DSCR <= 1.25	263	17.36	1.2	65.8	13.0
DSCR > 1.25	617	29.88	1.5	68.8	16.5
Total (excluding cross-collateralized)	890	48.06	1.4	67.9	15.6

Table 4

## Average 'AAA' And 'B' FFs For The DSCR And Cross-Collateralized DSCR Loans (cont.)

	Loan count (no.)	% of balance	Weighted average DSCR	Weighted average FF (%) ('AAA')	Weighted average FF (%) ('B')
Cross-collateral DSCR					
DSCR < 1	0	0	0	0	0
1 <= DSCR <= 1.25	21	1.16	1.2	43.5	7.2
DSCR > 1.25	84	3.19	1.5	50.8	9.0

FF--Foreclosure frequency. DSCR—Debt service coverage ratio.

Table 5 shows the distribution of properties with either leases in place or lease estimates derived from a Form 1007 Single-Family Comparable Rent Schedule.

Table 5

# Distribution Of Properties With Either Leases In Place Or Lease Estimates Derived From A Form 1007 Single-Family Comparable Rent Schedule

Program	Loan count (no.by property count)	% of pool balance		
Non-agency DSCR investor loan				
Lease in place	821	43.24		
No lease in place; estimated rents	174	9.17		
Total	995	52.4		

DSCR--Debt service coverage ratio.

# Prior credit event (PCE) classification and analysis

The pool contains no recent PCE loans as defined by our criteria. We applied a pool-level PCE-related loss coverage adjustment factor of 1.00x.

# Qualified mortgage (QM) and ability-to-repay (ATR) standards

All loans are exempt from the QM/ATR rule because they are related to business-purpose investment properties.

# Servicer advancing obligations

The servicer, Fay Servicing LLC (Fay), must advance delinquent principal and interest (P&I) payments on any delinquent mortgage loan until it is either greater than 120 days delinquent (limited P&I advancing) or the P&I advance is deemed unrecoverable. Unlike P&I advances, the servicers must make advances of delinquent taxes and insurance (and other property preservation advances) on any delinquent mortgage loan until the related property is liquidated or the servicers deem the advance to be unrecoverable. We adjust the loss severities downward in our model to account for this limited P&I advancing.

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# Borrowers with multiple loans

One Hundred Sixty-seven borrowers (29.82% by balance) have multiple loans in which they are listed as the primary borrower in the current pool. We accounted for these loans in our large loan analysis. No additional adjustment was made to the loss coverage.

#### Structural Features

FWD 2020-INV1 is a mix of pro rata and sequential structures; principal is paid pro rata among the senior classes (subject to passing cumulative loss and delinquency trigger tests) and then sequentially to the mezzanine and subordinate classes. In the periods when the cumulative loss or delinquency trigger fails, principal is paid sequentially to the class A-1, A-2, A-3, M-1, B-1, B-2, and B-3 certificates.

Since the class A-1, A-2, and A-3 certificates can receive principal pro rata, the amount of protection to the class A-1 and A-2 certificates can decline over time. The cumulative loss and delinquency triggers in the FWD 2020-INV1 transaction help protect the more senior classes in our analysis by allowing the payment mechanism to switch to sequential earlier and thus preserve subordination and require less upfront credit enhancement.

The transaction also uses excess monthly cash flow to cover the current period's realized losses and to reimburse any previously applied realized loss amounts.

The securities administrator will make monthly distributions of interest from the interest remittances and principal from principal remittances (see tables 6, 7, and 8).

The interest remittance amount includes the interest collected from or advanced on behalf of borrowers (including interest payments that accompany prepayments, any compensating interest and interest portions of liquidation proceeds [minus expenses], subsequent recoveries, termination prices, and repurchase amounts) minus servicing, securities administrator, trustee, and custodial fees, as well as the servicer advance reimbursements permitted under the pooling and servicing agreement, reimbursable expenses incurred by the controlling holder, and extraordinary expenses, which are generally capped at \$350,000 annually. Although the extraordinary expenses are passed through as reduced contractual interest due to certificateholders, we ran these expenses at their capped amounts, as described further in the Interest Stresses section below. We also considered the extraordinary expenses when analyzing projected interest reduction amounts, as described further in the Imputed Promises Analysis section below.

Principal remittance amounts include the principal collected from or advanced on behalf of borrowers (including prepayments, principal portions of liquidation proceeds [minus expenses], subsequent recoveries, termination prices, and repurchase amounts) minus all fees, reimbursed advances, and extraordinary trust expenses that could not be paid from interest collections.

#### Table 6

## **Interest Payment Waterfall**

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Priority	Payment
1	Interest and interest carryforward amounts(i), sequentially, to the class A-1, A-2, A-3, M-1, B-1, B-2, and B-3 certificates.

Table 6

# **Interest Payment Waterfall (cont.)**

Priority	Payment
2	Any remaining amounts paid as part of monthly excess cash flows.

(i)Interest carryforward amounts are deferred interest payments that accrue interest at the lower of the coupon rate and the net WAC rate, subject to Net WAC rate. Our ratings address the full payment of all interest and interest carryforward amounts by the final maturity date. WAC--Weighted average coupon.

Table 7

# **Principal Payment Waterfall**

Priority	Payment
If delinquency and	cumulative loss trigger tests pass
1	\$100 to the class P certificates in January 2025.
2	Interest and interest carryforward amounts, sequentially, to the class A-1, A-2, and A-3 certificates.
3	Principal, pro rata, to the class A-1, A-2, and A-3 certificates until reduced to zero.
4	Interest and interest carryforward amounts to the class M-1 certificates.
5	Principal to the class M-1 certificates until reduced to zero.
6	Interest and interest carryforward amounts to the class B-1 certificates.
7	Principal to the class B-1 certificates until reduced to zero.
8	Interest and interest carryforward amounts to the class B-2 certificates.
9	Principal to the class B-2 certificates until reduced to zero.
10	Interest and interest carryforward amounts to the class B-3 certificates.
11	Principal to the class B-3 certificates until reduced to zero.
12	Any remaining amounts paid as part of monthly excess cash flows.
If delinquency or o	umulative loss trigger tests fail
1	\$100 to the class P certificates in January 2025.
2	Interest and interest carry-forward amounts to the class A-1 certificates.
3	Principal to the class A-1 certificates until reduced to zero.
4	Interest and interest carry-forward amounts to the class A-2 certificates.
5	Principal to the class A-2 certificates until reduced to zero.
6	Interest and interest carry-forward amounts to the class A-3 certificates.
7	Principal to the class A-3 certificates until reduced to zero.
8	Interest and interest carry-forward amounts to the class M-1 certificates.
9	Principal to the class M-1 certificates until reduced to zero.
10	Interest and interest carry-forward amounts to the class B-1 certificates.
11	Principal to the class B-1 certificates until reduced to zero.
12	Interest and interest carry-forward amounts to the class B-2 certificates.
13	Principal to the class B-2 certificates until reduced to zero.
14	Interest and interest carry-forward amounts to the class B-3 certificates.

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Table 7

## Principal Payment Waterfall (cont.)

Priority	Priority Payment		
15	Principal to the class B-3 certificates until reduced to zero.		
16	Any remaining amounts paid as part of monthly excess cash flows.		

Table 8

## Monthly Excess Cash Flow Waterfall

Priority	Payment			
1	Sequentially to the class A-1, A-2, A-3, M-1, B-1, B-2, and B-3 certificates up to the realized loss amount for the current period until their respective class certificates are reduced to zero.			
2	Sequentially, up to the aggregate applied realized losses to the class A-1, A-2, A-3, M-1, B-1, B-2, and B-3 certificates up to the aggregate applied realized losses until their respective certificate amounts are reduced to zero.			
3	To the cap carryover reserve account, from monthly excess amounts otherwise distributable to the class XS certificates, the aggregate cap carryover amount for class A-1, A-2, A-3, M-1, and B-1 certificates for such distribution date; from the cap carryover reserve account, any unpaid cap carryover amounts(i), sequentially, to the class A-1, A-2, A-3, M-1, and B-1 certificates.			
4	Sequentially, any amounts due to the class XS certificates; reimburse ETE amounts that exceed annual caps to the relevant transaction parties; and to the class R certificates, any remaining amounts.			

(i)The cap carryover amount is the positive difference between the interest that would have accrued at the coupon rate (without regard to the net WAC rate) and what was actually due based upon the net WAC rate. Any prior unpaid cap carryover amounts also accrue at the coupon rate without regard to the net WAC rate. Our preliminary ratings do not address the payment of cap carryover amounts. PSA--Pooling and servicing agreement. WAC--Weighted average coupon. ETE--Extraordinary trust expenses.

Interest on classes A-1, A-2, A-3, M-1, and B-1, is based on the lower of the coupon rate on the certificates and the net weighted average coupon (WAC) rate. Interest on classes B-2 and B-3 is based on the net WAC rate. The net WAC rate is defined as the weighted average of the mortgage interest rates of the loans, net of fees, and extraordinary expenses weighted based on the loans' principal balances. In line with our imputed promises criteria, our ratings address the lower of these two rates (see "Principles For Rating Debt Issues Based On Imputed Promises," published on Dec. 19, 2014).

Under the transaction documents, the issuer can defer interest payments on these securities. A failure to pay the interest amounts due on the securities will result in the interest being deferred. Deferred interest (interest carryforward amounts) accrues interest at the lower of the coupon rate and net WAC rate for each class. Our preliminary ratings on the classes address the P&I payments (including interest carryforward amounts) by the certificates' final maturity date.

However, our preliminary ratings do not address the payment of the cap carryover amounts (i.e., the difference between the coupon and the net WAC cap where the coupon exceeds the net WAC cap). These amounts are subordinated in the payment priority. In our view, neither the initial coupons on the certificates nor the initial net WAC rates are de minimis, and nonpayment of the cap carryover amounts is not considered an event of default under the transaction documents. Therefore, we do not need to consider whether these cap carryover amounts are paid in our cash flow analysis, in line with our criteria for imputed promises.

In FWD 2020-INV1, the subordinate certificates are paid principal sequentially after all senior certificates have been paid. Unlike the credit enhancement seen in shifting-interest RMBS structures, which may deplete due to scheduled and prepaid principal paid to the subordinate

classes, the credit enhancement in FWD 2020-INV1 does not deplete because no principal payments are made on the subordinate certificates while the senior classes are outstanding.

Although principal is paid pro rata among the senior classes from the start, and there is no specific credit enhancement floor that would switch the payment priority of the senior classes to sequential, we believe that the transaction is adequately enhanced for the assigned preliminary ratings (taking into account any tail risk considerations [see the Large Loan And Tail Risk Considerations section]) given that the transaction starts with 12.10% enhancement for the senior classes, which then grows as a percentage of the current balance as they are paid down. Additionally, the cumulative loss trigger (see table 9) protects the more-senior classes in tail risk situations if defaults increased much later in the transaction's life (a back-ended default curve) by switching the payment priority among the senior classes to sequential. In addition to the cumulative loss trigger, the FWD 2020-INV1 transaction features a delinquency trigger that protects the more-senior classes if delinquencies, which are leading indicators of adverse pool performance, breach certain levels (see table 9).

Table 9

# **Cumulative Loss Trigger Event**

Distribution date occurring in the following periods	Applied realized loss amounts since closing date as a % of the cut-off date pool balance
February 2020 through January 2023	2.00
February 2023 through January 2024	2.75
February 2024 through January 2025	5.00
February 2025 and thereafter	7.00

Table 10

# **Delinquency Trigger Event**

Distribution date occurring in the following periods	Six-month average of 60+ day delinquent plus loans modified in past 12 months as a % of the current pool balance		
February 2020 through January 2023	10.5		
February 2023 through January 2024	15.0		
February 2024 and thereafter	20.0		

If the certificates' aggregate class balance exceeds the pool balance, the resulting excess (the applied realized loss amount) is applied reverse sequentially to the class B-3, B-2, B-1, M-1, A-3, A-2, and A-1 certificates until each class' principal balance has been reduced to zero.

If the certificates' pool balance exceeds the aggregate class balance (after the allocation of principal payments and monthly excess cash flows to pay down the certificates), the certificates' class balances will be increased with the "write-ups" allocated sequentially to the class A-1, A-2, A-3, M-1, B-1, B-2, and B-3 certificates, up to the aggregate amount of applied realized losses.

The unrated class P certificates are entitled to all prepayment premiums received on the loans and receive a principal distribution of \$100 to pay off the class on the distribution date in January 2025.

# **Geographic Concentration**

S&P Global Ratings analyzes the pool's geographic concentration risk based on the concentrations of loans in each of the core-based statistical areas (CBSAs) defined by the U.S. Office of Management and Budget (see Appendix II of "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018). In this transaction, the top five CBSAs account for nearly 24.67% of the aggregate pool. We applied a neutral geographic concentration adjustment factor of 1.00x to our base loss coverage estimate as the pool was geographically diversified.

Table 11

# **Geographic Concentration**

CBSA code(i)	CBSA	State	% by balance
31084	Los Angeles-Long Beach-Glendale	California	9.90
35614	New York-Jersey City-White Plains	New York, New Jersey	4.70
12060	Atlanta-Sandy Springs-Roswell	Georgia	3.62
40900	SacramentoRosevilleArden-Arcade	California	3.40
36084	Oakland-Hayward-Berkeley	California	3.05
Top five			24.67

(i)CBSA code refers to the metropolitan division code, if available. It includes metropolitan statistical areas and metropolitan divisions where defined, as well as micropolitan statistical areas. CBSA--Core-based statistical area.

# Large Loans And Tail Risk Considerations

As the number of loans in the transaction decreases, the effect of a single loan's losses becomes greater. If conditional prepayment rates are slow and collateral pool losses are not realized until later in a transaction's life (back-loaded losses), pro rata pay mechanisms can leave the senior certificates exposed to event risk later in the transaction's life (for more information on tail risk in RMBS transactions, see "Older RMBS Transactions Face Increased Tail Risk As Their Pools Shrink," published Aug. 9, 2012). To mitigate this risk, the transaction documents typically provide for a credit enhancement floor, specifying principal payments not be made to subordinate classes if the credit support available to the senior classes falls below a threshold. FWD 2020-INV1 does not explicitly provide a credit enhancement floor; however, due to the sequential payment mechanism to the subordinate classes, which make up 12.10% of the capital structure, the 'AAA (sf)', 'AA (sf)', and 'A (sf)' preliminary rated classes effectively have a floor of 12.10% initially. Although, over time, subordination can be depleted due to realized losses, the effective floor to the more-senior classes can increase when losses or delinquencies go over certain thresholds and trip the cumulative loss or the delinquency triggers, making the payment priority sequential.

To analyze the appropriateness of this effective credit enhancement floor, we use an approach outlined in "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018. Per this approach, instead of focusing on the largest loans by balance at issuance, we risk-weight the loans in the transaction by focusing on those loans with the largest expected loss exposure assuming default.

After considering the enhancement provided in the transaction in conjunction with the cumulative loss and delinquency trigger definitions and the expected pay down of the certificates, we believe

the rated senior certificates are sufficiently protected from tail risk as the transaction seasons.

# Mortgage Operational Assessment (MOA)

We conducted a transaction specific mortgage operational assessment of the originators in FWD 2020-INV1 securitization. The transaction pool is comprised of 63.5% of loans originated by Finance of America lending institutions: 47.6% with FAM, which are agency eligible loans, and 15.9% with FACo, which are DSCR loans. The remaining 36.5% of the loans (which are also DSCR loans similar to those originated by FACo) consist of 19.0% originated by LendingOne, 10.8% originated by RCN Capital, and 6.7% originated by another single mortgage lending institution. The loans in this pool were acquired by the sponsor, Blackstone. We received due diligence results from an S&P Global Ratings' reviewed third-party due diligence firm on every loan.

To determine an appropriate MOA adjustment factor for the transaction, we reviewed the performance history of the FAM, Lending One, and FACo orginated loans acquired by Blackstone in 2019 since loan acquisition. In addition, we looked at Blackstone's aggregate portfolio excluding the above originators. FAM was formed through the combination of three mortgage companies: Gateway Mortgage (acquired May 31, 2015), Pinnacle Capital Mortgage (acquired on June 30, 2015), and PMAC (certain assets acquired on July 31, 2015), and is 100% owned by Finance of America Holdings LLC. FACo was formed through the acquisition of B2R Finance in 2017, and is 75.00% owned by Finance of America Holdings LLC. LendingOne was founded in 2014 and, similar to FACo, focuses on investor property loans. Therefore, FAM, FACo, and LendingOne have limited loan performance history, and have not yet experienced a housing or economic downturn.

The 2019 performance data included total aggregation volume, loan characteristics, delinquencies, EPDs, and repurchases.

The performance of FAM's loan productions appeared consistent with industry performance trends, with very few EPDs and repurchases. One loan acquired by Blackstone in 2019 had an EPD. Based on the limited loan performance history, and not having performed through an economic downturn, a 1.05x adjustment factor was applied to these loans. The DSCR loans originated by RCN Capital (10.8%) and one additional mortgage originator (6.7%) were in line with the performance of Blackstone's overall portfolio – we applied a 1.05x adjustment factor to these loans as well.

The observed delinquency and foreclosure numbers for the FACo and LendingOne's loan production were higher than the FAM loans and overall Blackstone aggregation excluding the FACo, FAM, and LendingOne loans. Consequently, we applied a 1.10x adjustment factor to the portion of the pool consisting of FACo and LendingOne loans, given the limited loan performance history and the absence of performance data through an economic downcycle.

Overall, this resulted in a MOA loss coverage adjustment factor of 1.08x for this pool.

# Third-Party Due Diligence Review

AMC performed third-party due diligence on 100% of the loans in the transaction. The scope of their review of the loans encompassed credit (underwriting), compliance (agency eligible investor loans only), property valuations, and data quality. According to our published third-party due-diligence criteria, we adjust our loss expectations based on our view of the firms' findings (see Appendix III of "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Jan. 30, 2020). Nineteen loans received a credit grade of C, primarily due to missing information in the closing documents, while the majority of loans tested received a final credit

grade of A or B. Twelve loans received a final grade of C for valuation due to either a broker price opinion (BPO) being provided without a secondary valuation to validate the original appraisal value or the related property having a collateral desktop analyzer (CDA) value that was less than the original appraisal value of the property by at least 10%. The remaining loans, received final valuation grade of A or B. No compliance grade C's were observed in the pool.

We applied an adjustment of 1.01x to the loss coverage to account for the credit and property valuation grade C's observed in the pool.

# TILA-RESPA Integrated Disclosure (TRID) Loans

All business purpose loans are exempt from Regulation Z and the Real Estate Settlement Procedures Act (RESPA), including the TRID rule.

#### R&Ws

Our review of the R&Ws for FWD 2020-INV1 focused on whether the representations made by the R&W provider, which is the sponsor, were substantially consistent with the set of representations we published as part of our criteria (see Appendix IV of "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018). We evaluated the strength of these R&Ws and considered whether any breach could have a materially adverse impact to the certificateholders. If the R&Ws in the transaction documents do not address the issues in our published R&W framework, we will determine whether we believe it is appropriate to assess additional credit enhancement. Lastly, we will consider the R&W providers' ability to fulfill their obligations in the event of a breach.

The 1,298 loans in this transaction were acquired from five originators by the sponsor, Blackstone. The sponsor provides the representations in this transaction, and there is no backstop or guarantor. While well-capitalized, it is an unrated entity with limited repurchase history and may have limited repurchasing capability. Also, although it has the option, the controlling holder (initially, the sponsor, as the majority holder of the most subordinate outstanding class of subordinate certificates) is not required to test for breaches and it may have conflicting interests from the certificateholders. This is partially offset by the ability of a senior quorum (holders of more than 50% of the outstanding balance of senior certificates) to force a breach review. In addition, less than 100% due diligence was conducted. The sponsor intends to hold classes B-1, B-2, and B-3, and retain risk via a 5.0% vertical slice of the capital structure, which somewhat mitigates the risks and concerns with the framework. Because of the lack of a guarantor/backstop, and the controlling holder option to test for breaches, we consider the R&W framework to be weaker than the R&W framework seen in recently rated transactions.

This transaction does not include an EPD provision from the R&W provider to repurchase any mortgage loans for which the borrower fails to submit any of the first three payments due after loan origination. This is not consistent with other non-QM and prime transactions that we have rated, which do include an early payment default provision. For this pool, roughly 30% of the loans are still less than three payments seasoned. The remaining R&W's are generally consistent with our published criteria. The R&Ws will remain in effect for the transaction's life. However, given that the statute of limitations for R&W claims under New York law is generally six years from the date a representation is made, there is effectively an expiration date on the R&Ws.

The sponsor is required to remedy a breach of any of the R&Ws if the breach materially and adversely affects the value of the mortgage loans by curing the breach or repurchasing the

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mortgage loan at the repurchase price. The enforcement mechanism for R&W breaches includes provisions for a breach review at the option of the controlling holder by an independent reviewer for any loan that experiences a realized loss. In the event that the sponsor disputes the independent reviewer's findings of a material breach, the controlling holder will be required to commence a binding arbitration to resolve the dispute. Dispute resolutions are ultimately subject to arbitration proceedings, if necessary, to determine if a breach occurred. The non-prevailing party will bear all the costs and expenses of arbitration, and reimburse the prevailing party for all related costs and expenses incurred with the arbitration proceeding. For successful repurchase claims, reasonably incurred costs and expenses related to the breach enforcement framework will be incorporated into the repurchase price. For unsuccessful repurchase claims, reasonably incurred costs and expenses, including an equal share of the arbitration costs, will ultimately be borne to the trust in the form of extraordinary trust expenses subject to the annual cap.

We applied a 1.10x loss coverage adjustment to compensate for the risk associated with the financial capacities of and the lack of repurchase history from the sponsor in addition to our evaluation of the overall R&W framework compared to our other rated transactions. We believe this adjustment is appropriate in the context of the due diligence performed on the loans and the credit quality of the collateral.

# Cash Flow And Scenario Analysis

We reviewed the transaction structure and performed a cash flow analysis to simulate various rating stress scenarios (see table 12) to determine the preliminary ratings for each class consistent with our criteria, accounting for the available credit enhancement (see table 13). We analyzed a variety of scenarios for each rating category, including combinations of:

- Front- and back-loaded default timing curves;
- Two-year recovery lag assumptions;
- Fast and slow prepayment assumptions;
- High, low, and forward interest rate curve assumptions;
- WAC deterioration stress assumptions; and
- Extraordinary expense assumptions.

Table 12

# **Cash Flow Assumptions**

	Scenario					
	AAA	AA	Α	ввв	ВВ	В
Recovery lag (mos.)	24	24	24	24	24	24
Prepayments (%)(i)						
Low CPR	1	2	3	4	5	6
High CPR	20	20	20	20	20	20
Foreclosure frequency (%)	47.88	41.89	33.61	25.49	17.78	10.24
Loss severity (%)	51.48	45.83	35.26	29.03	24.18	20.02
Loss coverage (%)	24.65	19.20	11.85	7.40	4.30	2.05

(i) Using a standard prepayment convention. CPR--Conditional prepayment rate.

For further detail on our cash flow stresses, please refer to our criteria "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018.

Notwithstanding the use of excess interest within the transaction structure, we applied front- and back-loaded rather than bulleted (e.g. semiannual or annual lump sum) default timing curves in our analysis. This reflects our view of the potential volatility of cash flows given the loans are newly originated by reviewed originators or aggregators, subject to third-party due diligence and include structural considerations such as pro-rata principal allocations amongst the A-1, A-2, and A-3 classes and partial P&I advancing by the servicer.

Table 13

#### Structural Assessment

Class	Rating	Initial class size (%)	Initial credit enhancement (%)	Loss coverage (%)	Percentage point difference between credit enhancement and loss coverage
A-1	AAA (sf)	70.75	29.25	24.65	4.60
A-2	AA (sf)	6.30	22.95	19.20	3.75
A-3	A (sf)	10.85	12.10	11.85	.25
M-1	BBB (sf)	4.95	7.15	7.40	(0.25)
B-1	BB (sf)	3.60	3.55	4.30	(0.75)
B-2	B (sf)	2.25	1.30	2.05	(0.75)
B-3	NR	1.30	0.00	N/A	N/A

NR--Not rated. N/A--Not applicable.

We applied the foreclosure frequencies, loss severities, and combinations of the stresses noted above in our cash flow runs, and observed some periodic missed interest due to the liquidity stress associated with no advancing. To pass our applicable rating-specific stresses, the interest deferrals (or interest carry-forward amounts) resulting from any missed interest payments on the securities have to be paid in full by the maturity date. All deferred interest was paid back with interest under the applicable rating-specific stresses in our cash flow projections. The results show that each preliminary rated class in the transaction is enhanced to a degree consistent with the assigned preliminary ratings.

# Servicer stop advance stresses

Although the transaction documents provide for up to four months of P&I advance obligation, we assumed that no P&I advances were being made in our cash flow projections. This assumption results in no projected monthly cash flows on defaulted loans that have not yet been liquidated (we assume a 24-month lag between default and liquidation). Our cash flow projections take into account this additional liquidity stress and the transaction's ability to make monthly interest payments and, if necessary, deferred interest payments (interest carryforward amounts) by the final maturity date on the preliminary rated classes. We also modeled a delinquency curve per our criteria solely for the purpose of testing the delinquency trigger. We did not apply servicer stop advance stresses to these additional delinquencies. In our view, the stressed assumption of no advances on the defaulted loans in the lag period adequately captures the liquidity risk associated with the delinquencies.

## **WAC** deterioration stress

The transaction structure allows excess spread to provide some of the credit enhancement. We applied a WAC deterioration stress that steps up linearly from zero basis points (bps) to 117 bps over 10 years, and remains at that level going forward to address the potential for the pool's WAC to decline as higher coupon loans prepay or default and thus stress the excess spread.

#### Interest stresses

All of the certificates have coupons subject to the net WAC rate cap. Extraordinary trust expense payments reduce the net WAC rate, which effectively allocates the extraordinary trust expenses pro rata across all senior and subordinate certificateholders by reducing their interest payments by the amount of the extraordinary trust expenses paid (subject to the annual cap). Although the extraordinary expenses are passed through as reduced contractual interest due to certificateholders, we ran these expenses at their capped amounts, to test any impact on the securities due to the dependence on excess spread as a form of credit enhancement and the presence of certain structural features such as limited P&I advancing. We also took this approach because interest payments on the securities are deferrable.

# Imputed Promises Analysis

When rating U.S. RMBS transactions where credit-related events can reduce interest owed to the tranches across the capital structure rather than an allocation of such credit-related loss to the available credit support, we impute the interest owed to the security holders. WAC deterioration that occurs because of defaults, repurchases, or prepayments is not considered credit-related; therefore, it is not considered as part of this analysis.

Because this transaction provides for credit-related loan modifications and extraordinary trust expenses to reduce the net WAC, at which the transaction's bond coupons are capped, we applied the approach outlined in the criteria to assess the maximum potential rating (MPR) that could apply based on our projected interest reduction amount (PIRA). As this is a new issue transaction, we did not account for any cumulative interest reduction amount.

Consistent with our criteria, we assumed that 50.0% of the loans projected to default would be modified, which, when added to the extraordinary trust expenses, resulted in a maximum PIRA on the preliminary rated certificates that is significantly below the 4.5% threshold. We stressed extraordinary trust expenses by the relevant extraordinary expense application factor for four years, from period 13 through 60. Based on the results of our analysis, there was no impact on the securities' MPR.

Historically, we have observed that extraordinary trust expenses have been minimal when they occur and have been extremely limited in pre-2009 RMBS transactions. We continue to expect their actual occurrence in post-2009 transactions to be rare.

### Operational risk assessment

Our criteria "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published Oct. 9, 2014, present our methodology and assumptions for assessing certain operational risks (severity, portability, and disruption risks) associated with asset types and key transaction parties (KTPs) that provide an essential service to a structured finance issuer.

According to the criteria, we cap the ratings on a transaction if we believe operational risk could lead to credit instability and affect the ratings.

As provided in the operational risk criteria, for severity risk and portability risk, there are three possible rankings: high, moderate, or low. For disruption risk, there are four possible rankings: very high, high, moderate, or low. The rankings for each of the risks determine the maximum potential rating that can be assigned to a structured finance security for a given KTP before giving consideration to any provisions for a backup KTP, such as a securities administrator.

According to our criteria, we rank severity and portability risk for nonprime residential mortgage collateral as moderate and low, respectively. For FWD 2020 INV-1, the servicer, Fay, is the KTP. We consider the disruption risk for Fay as low. Given these risk assessments, our criteria does not cap the ratings on the transaction.

# **Related Criteria**

- Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019
- Criteria | Structured Finance | Legal: U.S. Structured Finance Asset Isolation And Special-Purpose Entity Criteria, May 15, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Criteria | Structured Finance | RMBS: U.S. Residential Mortgage Operational Assessment Ranking Criteria, Feb. 22, 2018
- Criteria Structured Finance RMBS: Assumptions Supplement For Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later, Feb. 22, 2018
- Criteria | Structured Finance | RMBS: Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later, Feb. 22, 2018
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria | Structured Finance | General: Structured Finance Temporary Interest Shortfall Methodology, Dec. 15, 2015
- General Criteria: Principles For Rating Debt Issues Based On Imputed Promises, Dec. 19, 2014
- Criteria Structured Finance General: Global Framework For Cash Flow Analysis Of Structured Finance Securities, Oct. 9, 2014
- Criteria Structured Finance General: Criteria Methodology Applied To Fees, Expenses, And Indemnifications, July 12, 2012
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28, 2009

## **Related Research**

- S&P Global Ratings Definitions, Sept. 18, 2019
- Select Servicer List, Dec. 11, 2019
- Will Trade Be The Fumble That Ends The U.S.'s Record Run?, Sept. 27, 2019
- S&P Global Ratings Publishes List Of Third-Party Due Diligence Firms Reviewed For U.S. RMBS As Of Aug. 5, 2019, Aug. 5, 2019
- Credit Rating Model: LEVELS Model For U.S. Residential Mortgage Loans, Aug. 5, 2019
- Servicer Evaluation: Wells Fargo Bank N.A.--Residential Master Servicer, Oct. 10, 2019
- U.S. Residential Mortgage Input File Format For LEVELS, March 30, 2018
- Servicer Evaluation: Fay Servicing LLC, June 20, 2018
- Credit Rating Model: Intex RMBS Cash Flow Model, April 7, 2017
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- Cox Ingersoll Ross (CIR) For U.S. RMBS And ABS, Dec. 13, 2016
- Standard & Poor's Comfortable With SFIG Draft Proposal Regarding TRID Due Diligence, April 25, 2016
- Older RMBS Transactions Face Increased Tail Risk As Their Pools Shrink, Aug. 9, 2012

In addition to the criteria specific to this type of security (listed above), the following criteria articles, which are generally applicable to all ratings, may have affected this rating action: "Counterparty Risk Framework: Methodology And Assumptions," March 8, 2019; "Post-Default Ratings Methodology: When Does Standard & Poor's Raise A Rating From 'D' Or 'SD'?," March 23, 2015; "Global Framework For Assessing Operational Risk In Structured Finance Transactions," Oct. 9, 2014; "Methodology: Timeliness of Payments: Grace Periods, Guarantees, And Use of 'D' And 'SD' Ratings," Oct. 24, 2013; "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," Oct. 1, 2012; "Methodology: Credit Stability Criteria," May 3, 2010; and "Use of CreditWatch And Outlooks," Sept. 14, 2009.

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