S&P Global Ratings

Research

Presale:

Freddie Mac STACR REMIC Trust 2022-DNA7

September 22, 2022

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Preliminary Ratings

Class	Preliminary ratings	Preliminary amount ($)	Initial credit enhancement (%)	Interest rate (%)	Class type
A-H(i)	NR	19,040,346,431	4.75	N/A	Senior
M-1A	BBB+	237,000,000	3.50	SOFR + TBD	Mezzanine
M-1AH(i)	NR	12,873,312	3.50	N/A	Mezzanine
M-1B	BBB-	180,000,000	2.55	SOFR + TBD	Mezzanine
M-1BH(i)	NR	9,903,717	2.55	N/A	Mezzanine
M-2	BB-	199,000,000	1.50	SOFR + TBD	MACR
M-2A	BB+	99,500,000	2.03	SOFR + TBD	Mezzanine/initial exchangeable
M-2AH(i)	NR	5,446,791	2.03	N/A	Mezzanine
M-2B	BB-	99,500,000	1.50	SOFR + TBD	Mezzanine/initial exchangeable
M-2BH(i)	NR	5,446,791	1.50	N/A	Mezzanine
M-2R	BB-	199,000,000	1.50	SOFR + TBD	MACR
M-2S	BB-	199,000,000	1.50	SOFR + TBD	MACR
M-2T	BB-	199,000,000	1.50	SOFR + TBD	MACR
M-2U	BB-	199,000,000	1.50	SOFR + TBD	MACR
M-2I	BB-	199,000,000	--	TBD	MACR IO
M-2AR	BB+	99,500,00	2.03	SOFR + TBD	MACR
M-2AS	BB+	99,500,00	2.03	SOFR + TBD	MACR
M-2AT	BB+	99,500,00	2.03	SOFR + TBD	MACR
M-2AU	BB+	99,500,00	2.03	SOFR + TBD	MACR
M-2AI	BB+	99,500,00	--	TBD	MACR IO
M-2BR	BB-	99,500,00	1.50	SOFR + TBD	MACR
M-2BS	BB-	99,500,00	1.50	SOFR + TBD	MACR
M-2BT	BB-	99,500,00	1.50	SOFR + TBD	MACR
M-2BU	BB-	99,500,00	1.50	SOFR + TBD	MACR

Preliminary Ratings (cont.)

Class	Preliminary ratings	Preliminary amount ($)	Initial credit enhancement (%)	Interest rate (%)	Class type
M-2BI	BB-	99,500,00	--	TBD	MACR IO
M-2RB	BB-	99,500,00	1.50	TBD	MACR
M-2SB	BB-	99,500,00	1.50	TBD	MACR
M-2TB	BB-	99,500,00	1.50	TBD	MACR
M-2UB	BB-	99,500,00	1.50	TBD	MACR
B-1H(i)(ii)	NR	149,923,989	0.75	SOFR + 7.50	Junior
B-2H(i)(ii)	NR	99,949,325	0.25	SOFR + 11.00	Junior
B-3H(i)	NR	49,974,663	0.00	N/A	Junior

Note: This presale report is based on information as of Sept. 22, 2022. 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)Reference tranche only and will not have corresponding notes. Freddie Mac retains the risk of these tranches. (ii)For the purposes of calculating modification gain or modification loss amounts, class B-1H is deemed to bear interest at SOFR plus 7.50% and class B-2H is deemed to bear interest at SOFR plus 11.00%. NR--Not rated. N/A--Not applicable. SOFR--Secured overnight financing rate. TBD--To be determined. MACR--Modifiable and combinable real estate mortgage investment conduit. IO--Interest only.

Profile

Expected closing date	Sept. 30, 2022.
Cutoff date	Aug. 31, 2022.
First payment date	Oct. 25, 2022.
Scheduled maturity date	Sept. 25, 2042.
Offered note amount (including offered unrated notes)	$616 million
Reference pool amount	$19.99 billion.
Reference obligation type	Fully amortizing, first-lien, fixed-rate residential mortgage loans secured by one- to four-family residences, planned-unit developments, condominiums, cooperatives, and manufactured housing to mostly prime borrowers.
Reference obligations	Residential mortgage loans, deeds of trust, or similar security instruments encumbering mortgaged properties acquired by Freddie Mac.
Credit enhancement	For each class of rated notes, subordination of the reference tranches that are lower in the payment priority.

Participants

Issuer	Freddie Mac STACR REMIC Trust 2022-DNA7.
Reference pool aggregator, master servicer, and sponsor	Freddie Mac.
Owner trustee	Wilmington Trust N.A.
Custodian	U.S. Bank Trust Co. N.A.
Indenture trustee and exchange administrator	U.S. Bank Trust Co. N.A.
Investment manager	U.S. Bancorp Asset Management Inc.

Top Sellers In The Reference Pool

Seller	By balance (%)
United Wholesale Mortgage LLC	8.87
Rocket Mortgage LLC	8.14
Wells Fargo Bank N.A.	6.57
JPMorgan Chase Bank N.A.	4.10
Loandepot.com LLC	3.60
Top five sellers	31.29
Remaining sellers	68.71

Top Servicers Of The Reference Pool

Servicer	By balance (%)	On S&P Global Ratings' select servicer list?
United Wholesale Mortgage LLC	8.87	No
JPMorgan Chase Bank N.A.	6.73	Yes
Wells Fargo Bank N.A.	6.57	Yes
Rocket Mortgage LLC	5.69	No
Nationstar Mortgage LLC d/b/a MR. Cooper	4.27	Yes
Top five sellers	32.13	N/A
Remaining sellers	67.87	N/A

D/b/a--Doing business as. N/A--Not applicable.

Highlights

Similarly to other recent structured agency credit risk (STACR) issuances, Freddie Mac STACR REMIC Trust 2022-DNA7 (STACR 2022-DNA7) is structured as a real estate mortgage investment conduit (REMIC). This structure better protects investors from potential future counterparty risk exposure to Freddie Mac. The trust's assets are intended to fund interest and principal payments on the notes, although investors still have the benefit of a Freddie Mac backstop in the case of any shortfalls. From a cash flow perspective, in prior STACR credit-linked note structures, investment gains on the note proceeds were the sole source of funds to make note interest payments, with a dependency on the sponsor to fund any excess amounts of interest due. However, in the current REMIC structure, the interest-only (IO) Q-REMIC interest is intended to fund any excess amounts of interest due.

The structure provides for minimum credit enhancement equal to 4.75% of the current balance. Below this threshold, all scheduled and unscheduled principal is paid to the senior class, unless the supplemental subordinate reduction amount threshold is breached, which will force payment to junior classes even when a trigger is in effect. In this transaction, the senior class starts out with a credit enhancement of 4.75%, which is equal to the minimum credit enhancement level and allows for the subordinate classes to immediately receive their subordinate percentage of principal as long as all performance tests are satisfied.

As in recent STACR transactions issued in 2022, starting and minimum credit enhancement levels for STACR 2022-DNA7's senior class are higher than issuances in prior years due to a larger M-1 issuance that is split into M-1A and M-1B classes. This could lead to extended weighted average lives of the rated notes compared to 2021 and earlier issuances.

STACR 2022-DNA7 will use the secured overnight financing rate (SOFR) as the reference rate to calculate class coupons on its notes. The class coupons of notes with coupons based on SOFR will initially be based on compounded SOFR (a 30-day average SOFR) then may transition to term SOFR (a forward-looking one-month SOFR) at the discretion of Freddie Mac.

S&P Global Ratings did not review the SOFR index as it relates to this transaction and does not view the reference index change as material from a credit risk perspective as interest payment shortfalls, if any, still remain unsecured general obligations of Freddie Mac. The subsequent transition to a term SOFR from compounded SOFR can only occur once a term SOFR is operationally, administratively, and technically feasible. Further, the reference rate can revert if a term SOFR ceases to be administratively feasible. Any shortfalls to meet the SOFR portion of interest and the spread over SOFR on the rated notes are paid by Freddie Mac via the capital contribution agreement and collateral administration agreement, respectively.

In this transaction, the B-1H and B-2H reference tranches do not have corresponding classes of offered notes. The class B-1H an B-2H reference tranches are deemed to bear interest at SOFR plus 7.50% and 11.00%, respectively, solely for purposes of calculating allocations of any modification gain amounts or modification loss amounts.

No loans in active forbearance

To differentiate the credit quality of securitization pools with varying percentages of loans in active forbearance at the time of issuance given the additional information available, we may increase loss coverage levels to account for the potential incremental risk. None of the loans in the pool are currently in forbearance. In this pool, Freddie Mac has removed all loans that have been reported to them as being in a forbearance plan or have become contractually delinquent as of the Aug. 31, 2022, cutoff date. The reference pool consists of mortgage loans that Freddie Mac securitized between Feb. 1, 2022, and Feb. 28, 2022, all of which were originated on or after Feb. 1, 2021. All of the mortgage loans in this transaction were originated on or after March 23, 2020, when the government-sponsored enterprises tightened some of their underwriting standards. We believe the loans originated after this date are less likely to enter forbearance. We believe that a neutral adjustment (1.00x factor) to the loss coverage estimate is commensurate with the overall risk related to the forbearance after accounting for the factors above.

We will continue to monitor the credit behavior related to temporary forbearance as the situation evolves and more performance information becomes available, and we will adjust our loss coverage levels if we deem it appropriate, which could affect the ratings. We will also continue to monitor macroeconomic and housing conditions, and update our mortgage market outlook and associated archetypal foreclosure frequencies as applicable.

Loans assessed using automated collateral evaluation

Approximately 21.53% of the loans in this transaction were assessed using an automated collateral evaluation (ACE), a proprietary algorithm that uses historical data and public records. The ACE assesses whether the estimated value or sales price of a mortgaged property, as submitted by the seller, is acceptable for the underwriting of the mortgage loan. Under the ACE, the seller may receive representation and warranty (R&W) relief related to the value of the mortgage property. Based on our view of the ACE program, considering the eligibility parameters, data and tools that inform the process (such as Home Value Explorer and Collateral Condition Evaluator), and their governance and oversight--as well as the performance of ACE loans--we did not make any adjustments to the valuations in our analysis, although these loans were not underwritten to full appraisals. We will monitor relevant changes in the ACE program as part of our mortgage operational assessment of Freddie Mac as an aggregator and adjust our analysis as we deem appropriate.

Rationale

The preliminary ratings assigned to STACR 2022-DNA7's notes reflect our view of:

- The credit enhancement provided by the subordinated reference tranches, as well as the associated structural deal mechanics;
- The REMIC structure that reduces the counterparty exposure to Freddie Mac for periodic principal and interest payments, but, at the same time, pledges the support of Freddie Mac (a highly rated counterparty) to cover shortfalls, if any, on interest payments and to make up for any investment losses;
- The issuer's aggregation experience and the alignment of interests between the issuer and noteholders in the transaction's performance, which, in our view, enhances the notes' strength;
- The enhanced credit risk management and quality control (QC) processes Freddie Mac uses in conjunction with the underlying R&W framework; and
- The potential impact current and near-term macroeconomic conditions may have on the performance of the mortgage borrowers in the pool. On April 17, 2020, we updated our mortgage outlook and corresponding archetypal foreclosure frequency levels(see "Guidance: Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later") to account for the potential impact the COVID-19 pandemic may have on the overall credit quality of collateralized pools. While COVID-19 pandemic-related performance concerns have waned, given our current outlook for the U.S. economy considering the impact of the Russia-Ukraine military conflict, supply-chain disruptions, and rising inflation and interest rates (see "Economic Outlook U.S. Q3 2022: The Summer of Our Discontent," published June 27, 2022), we continue to maintain our updated 'B' foreclosure frequency for the archetypal pool at 3.25%.

Environmental, Social, And Governance (ESG) Factors

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

In our view, the subject transaction's exposure to environmental credit factors is in line with the sector benchmark. The subject transaction is backed by a static pool of geographically diverse obligors, as shown by the dispersion among core-based statistical areas. In our view, well-diversified portfolios reduce exposure to extreme weather events, such as floods, storms, and wildfires, which could severely damage properties, reduce their value, and hurt recoveries if borrowers default. In addition, certain other features, such as requirements for homeowners to have flood insurance, also provide mitigants to the transaction's environmental exposure.

In our view, the subject transaction's exposure to social credit factors is in line with the sector benchmark. We generally consider social credit factors as above average because housing is viewed as one of the most basic human needs and conduct risk presents a direct social exposure for lenders and servicers because regulators are increasingly focused on ensuring fair treatment of borrowers. Social risk is generally factored into our RMBS transactions through our assessment of the overall credit quality of the securitized pool, consideration of the origination platform, the R&W framework, and the third-party due diligence that informs our view of credit underwriting and compliance with applicable consumer protections.

In our view, the subject transaction's exposure to governance credit factors is in line with the sector benchmark. The aggregator has an established track record of performance, and R&Ws are consistent with our benchmark for governance credit factors.

Transaction Overview

Freddie Mac is issuing this transaction to transfer part of the risk in its mortgage asset portfolio to private investors. This type of risk transfer has been mandated as one of several goals by Freddie Mac's regulator, the Federal Housing Finance Agency (FHFA). Similarly to Freddie Mac's more recent transactions under the STACR shelf, STACR 2022-DNA7 uses a REMIC structure and SOFR as the reference rate to calculate class coupons on its notes.

The notes are issued from a trust with assets primarily consisting of the note proceeds (held in a custodian account), earnings on investments of those proceeds, and the IO Q-REMIC interest. Funds held in the custodian account are used to pay principal on the securities and to make return payments to Freddie Mac for mortgage loans in the underlying reference pool that experience certain credit and modification events.

Interest on the notes is paid from earnings on eligible investments and from amounts received through the IO Q-REMIC interest on certain designated loans acquired during the eligible acquisition period. Although the note proceeds can only be invested in eligible investments (short-term investments with high credit ratings), our analysis also relies on Freddie Mac's credit rating to make the trust whole for any investment losses and shortfalls.

The class M-1A, M-1B, M-2A, and M-2B notes are structurally aligned with corresponding reference tranches (classes M-1AH, M-1BH, M-2AH, and M-2BH, respectively). Because the trust is not issuing notes that correspond to the class B-1H, B-2H, and B-3H reference tranches, Freddie Mac effectively retains all of the credit risk in the reference pool associated with the retained reference tranches' position in the transaction structure. At a minimum, Freddie Mac will retain at least 5.00% of the vertical slice at each tranche level. As of the date of the presale, the class M-1AH, M-1BH, M-2AH, and M-2BH retained reference tranches correspond to a vertical slice of at least 5.15% of the corresponding class notes. Initially, Freddie Mac retains all of the class B-3H, B-2H, and B-1H reference tranches and the senior class A-H reference tranche.

The monthly interest payments on the notes are not related to the underlying interest generated on the reference obligations (besides certain loan modifications described below). The amount of monthly principal payments made to the notes will be determined by actual principal payments of the mortgage loans in the reference pool. Those payments are mirrored in the related hypothetical structure. The class M-1A, M-1B, M-2A, and M-2B notes are structurally aligned with corresponding reference tranches (classes M-1AH, M-1BH, M-2AH, and M-2BH, respectively). This way, the notes' payments and loss allocation will be determined solely based on the reference obligations' credit performance and behave as if they are secured by a pool of mortgage assets; however, the transaction is synthetic in nature.

The index component of the interest payments on the notes are made from the investment proceeds on funds held in the custodian account. The margin due on the notes in excess of the index will be made from amounts received through the IO Q-REMIC interest. To the extent that these sources are insufficient to pay interest on the notes, Freddie Mac will pay the difference.

Principal payments to the noteholders are made by liquidating investments in the custodian account and, when applicable, from payments by Freddie Mac via capital contribution amounts. Freddie Mac's obligations to make these payments under the collateral administration agreement and the capital contribution agreement are unsecured contractual obligations of Freddie Mac.

We believe that the transaction's features, including the payment priority and credit support, are commensurate with the notes' preliminary ratings. The structural lockout of principal payments (until the various trigger tests are met) to all but the most-senior subordinate notes, together with the reference obligations' high-quality collateral characteristics, increases the likelihood of ultimate principal payments on the notes. Similarly, it is highly likely that timely interest will be paid because Freddie Mac will backstop the shortfall to the extent that interest amounts from investment earnings and IO Q-REMIC interest are less than the aggregate interest payment due.

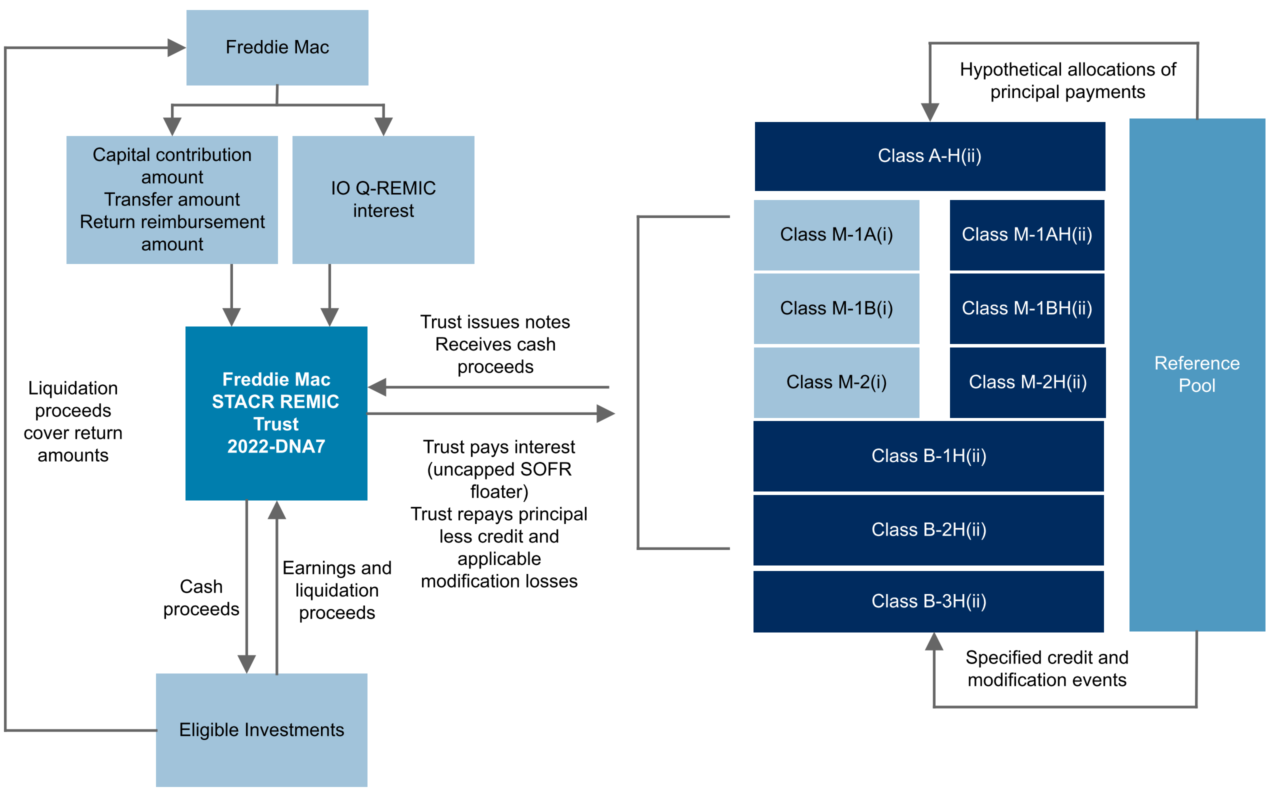
We expect the preliminary ratings to correspond to each tranche's weakest link (see "Assessing Credit Quality By The Weakest Link," published Feb. 13, 2012). That is, the preliminary ratings on the class M-1A, M-1B, M-2A, and M-2B notes will be the lower of 'BBB+ (sf)', 'BBB- (sf)', 'BB+ (sf)', 'BB- (sf)', respectively, and our current rating on Freddie Mac senior unsecured debt, 'AA+/Stable' (see "Freddie Mac," published April 4, 2022).

Subject to certain conditions, Freddie Mac may assign its obligations under the collateral administration agreement and the capital contribution agreement to a successor. Upon any such assignment, noteholders would be exposed to the credit risk of such a successor. Although the preliminary ratings assigned to the notes are lower than our current rating on Freddie Mac's senior unsecured debt, we consider Freddie Mac's backstop in our analysis to pay timely interest and principal on the notes.

If a successor were to be named, we would assess its financial capacity and ability to perform the obligations under the transaction agreements. If a default in the payment of principal or interest were to occur, there are provisions in the transaction that would trigger an indenture event of default, which, if uncured for 30 days, would result in the liquidation of eligible investments and an early acceleration of payment on the outstanding notes' principal balance and any accrued and unpaid interest.

Transaction Structure

Transaction Structure



(i)Note and corresponding reference tranche. (ii)Reference tranche only. IO--Interest-only. SOFR--Secured overnight financing rate. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Strengths And Weaknesses

Strengths

- The mortgage pool generally consists of loans to high credit quality borrowers, as evidenced by the pool's weighted average FICO score of 739.
- The REMIC structure, wherein the note proceeds and the IO Q-REMIC interest are owned by the trust for the noteholders' benefit, limits the dependency on Freddie Mac to make payments on the notes.
- Freddie Mac provides a backstop in the case of any investment losses or if the proceeds on those investments, along with the IO Q-REMIC interest, are insufficient to make the interest payments due on the notes.
- Freddie Mac's senior unsecured debt is rated 'AA+', which is higher than the rated classes and

reflects our assumption of an almost-certain likelihood of continued extraordinary support from the U.S. government.

- The note interest payments are, except for certain loan modification-related interest reductions (typically borne by the lowest-priority tranches), not related to the underlying interest generated on the reference obligations, which eliminates the possibility of interest shortfalls on the notes absent a Freddie Mac default.
- The sequential payment priority to the subordinate tranches does not allow for depletion, via principal payments, of the respective tranches providing credit support to each rated class.
- Because Freddie Mac is retaining risk in the transaction by retaining all or a portion of each subordinate tranche, as well as the entire senior tranche and the bottom-most junior tranche, Freddie Mac's and investors' interests are aligned with the reference pool's performance.
- The overall default and loss experiences for loans that Freddie Mac has purchased, with characteristics similar to those in the reference pool, have historically been lower than comparable non-agency loans.

Weaknesses

- Approximately 45.27% of the loans in the reference pool are cash-out loans, while about 10.56% are investment properties and 4.17% are two- to four-property loans. We increased the reference pool's loss estimate to account for these loans' increased default risk.
- R&Ws are not technically pledged to the STACR 2022-DNA7 noteholders. The R&Ws that the sellers provide to Freddie Mac substantively address the risks outlined in our criteria. On about 52.10% of the pool, the sponsor, and thus the trust, may not have recourse to the sellers because these loans qualified for day-one collateral R&W relief under programs instituted by the sponsor. However, this risk is mitigated because this R&W relief applies mainly to property value, condition, and marketability on properties identified as low-risk appraisals by Freddie Mac's robust data-driven analytics. In addition, a number of R&Ws related to underwriting generally sunset (end) after three years, subject to certain conditions. We believe this risk is mitigated by Freddie Mac's QC and credit risk management processes.
- Third-party due diligence is limited. A random post-purchase review was completed on 498 loans from a pool of loans securitized in Freddie Mac participation certificates in February 2022. Of these loans, 297 were included in the initial cohort pool created for this transaction and were assessed for credit and property valuation and/or regulatory compliance issues, specifically predatory lending. Based on the results of the due diligence review and Freddie Mac's historical sampling error rate and post-purchase QC, we believe this risk is sufficiently mitigated.

Collateral Summary

The STACR 2022-DNA7 reference pool consists of conforming residential mortgage loans. Approximately 84.43% of the loans are backed by primary homes, 10.56% by investment properties, and 5.00% by secondary homes. The non-zero weighted average FICO score of the pool is 739, and the average loan balance is roughly $289,105.

We have observed a slightly weaker credit profile than that of the most recent STACR DNA transaction rated by S&P Global Ratings (2022-DNA6). In particular, the cash-out refinance loans percentage is higher (45.27% versus 38.83%) and the percentage of loans to investor-occupied properties is higher (10.56% compared to 9.03%). As a result, projected losses for this transaction are slightly higher than 2022-DNA6's.

The performance of the reference pool's mortgage loans will determine the amount of principal payments that the trust will be obligated to pay to the noteholders. The reference pool is primarily a subset of mortgage loans that Freddie Mac securitized into its participation certificates between Feb. 1, 2022, and Feb. 28, 2022, and that were originated on or after Feb. 1, 2021. All the loans in the reference pool are fully amortizing, fixed-rate, first-lien mortgages that have not been 30-plus-days delinquent since acquisition.

Compared to the borrowers in our archetypal prime pool, the borrowers in the reference pool have higher credit scores. In addition, approximately 46.60% of the loans in the pool have more than one borrower; however, after factoring in adjustments relating to loan purpose, occupancy, and property type, the STACR 2022-DNA7 pool has a higher 'BBB' loss coverage (see table 1) than our archetypal prime pool.

Table 1

Collateral Characteristics

	STACR 2022-DNA7	STACR 2022-DNA6	STACR 2022-DNA5	STACR 2022-DNA4	STACR 2022-DNA3	STACR 2022-DNA2	STACR 2022-DNA1	Archetypal prime
Closing pool balance (mil. $)(i)	19,990	35,583	33,157	35,369	42,886	44,962	33,574	--
Closing loan count	69,144	112,865	109,786	118,055	140,950	143,889	109,774	--
Avg. loan balance ($000s)	289.1	315.3	302.0	299.6	304.3	312.5	305.8	--
WA orig. LTV ratio (%)	74.5	74.4	74.1	74.1	74.1	74.5	74.6	75.0
WA orig. CLTV ratio (%)	74.7	74.6	74.3	74.3	74.3	74.7	74.9	75.0
WA FICO score (non-zero) (ii)	739	745	746	746	747	748	752	725
WA current rate (%)	3.5	3.3	3.2	3.1	3.1	3.2	3.1	--
WA DTI ratio (%) (ii)	36.4	36.1	35.7	35.5	35.2	35.0	34.5	36.0
Owner-occupied (%)	84.4	86.7	87.9	89.7	90.4	94.0	94.5	100.0
Single family and PUD (%)(iii)	87.7	88.3	89.0	89.8	89.5	90.0	90.0	100.0
Purchase loan (%)	38.7	41.5	38.7	37.5	37.7	42.1	45.1	100.0
Cash-out refinance (%)	45.3	38.8	38.8	38.0	35.4	30.6	26.4	--
Rate-term refinance (%)	16.0	19.6	22.5	24.5	26.9	27.3	28.5	--
Investor loan (%)	10.6	9.0	8.2	6.3	5.3	2.7	2.2	--

Table 1

Collateral Characteristics (cont.)

	STACR 2022-DNA7	STACR 2022-DNA6	STACR 2022-DNA5	STACR 2022-DNA4	STACR 2022-DNA3	STACR 2022-DNA2	STACR 2022-DNA1	Archetypal prime
ACE (%)	21.5	26.8	35.3	37.6	39.5	37.5	35.3	--
Top three states (%)	32.4	33.9	30.4	28.3	30.4	32.3	29.5	--
Pool-level adjustments (multiplicative factors)								
Geographic concentration factor (x)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
R&Ws factor (x)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Third-party due diligence factor (x)	1.01	1.01	1.01	1.02	1.02	1.01	1.02	1.00
Mortgage operational assessment factor (x)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00
Loss estimation(iv)								
'A' loss coverage (%)	4.60	4.00	3.80	3.55	3.35	3.20	3.05	3.38
'A' foreclosure frequency (%)	10.57	9.54	9.16	8.71	8.92	8.52	8.07	9.29
'A' loss severity (%)	43.52	41.93	41.48	40.76	37.56	37.56	37.79	36.36
'BBB' loss coverage (%)	2.85	2.40	2.30	2.10	2.00	1.90	1.80	1.92
'BBB' foreclosure frequency (%)	7.73	6.92	6.62	6.26	6.42	6.10	5.75	6.41
'BBB' loss severity (%)	36.87	34.68	34.74	33.55	31.15	31.15	31.30	30.00
'B' loss coverage (%)	0.85	0.75	0.70	0.65	0.65	0.60	0.60	0.65
'B' foreclosure frequency (%)	3.44	3.14	3.03	2.90	2.97	2.84	2.72	3.25
'B' loss severity (%)	24.71	23.89	23.10	22.41	21.89	21.13	22.06	20.00

(i)There may be minor differences from the preliminary prospectus due to rounding. (ii)The weighted average values displayed reflect adjustments for missing data as outlined below. (iii)Single-family excludes two- to four-family properties. (iv)Loss coverage, foreclosure frequency, and loss severity values reflect our updated base-case scenario based on our guidance report published on April 17, 2020. All values are as of respective deal closing. STACR--Structured Agency Credit Risk. LTV--Loan-to-value. CLTV--Combined LTV. R&W--Representations and warranties. PUD--Planned-unit developments. ACE--Automated collateral evaluation.

The reference pool is geographically diversified across the U.S. and sufficiently large enough to withstand the impact of any unexpected credit events by a small number of the highest-balance loans. Therefore, no adjustments were made to the expected credit events estimate from our credit model based on geographic or loan concentration.

Analytical Overlays Applied On The Reference Pool

Loan documentation

We analyzed the loans by using a neutral documentation adjustment factor (1.0x) given that they met Freddie Mac's eligibility requirements.

Debt-to-income (DTI) ratios

The weighted average DTI ratio of the reference pool is 36.45%, including an assumption of 36.00% for 14 loans for which the DTI ratio was not provided.

Self-employed borrowers

Self-employed borrower data was not provided by Freddie Mac for the pool. We typically apply a loss coverage adjustment factor of 1.1x for self-employed borrowers. We estimated 20.00% of borrowers in similar pools to be self-employed based on analyzing data published by the Bureau of Labor Statistics in conjunction with observations from previous prime transactions. This estimate resulted in a 1.02x pool-level adjustment to account for the risk of potential self-employed borrowers.

Credit score

There are 136 loans in the reference pool that do not have a FICO score. Freddie Mac requires that any borrower lacking a traditional credit history be manually underwritten. When a borrower has no established credit history, their credit reputation may be determined by reviewing payment patterns of utilities and rent or other alternative credit references. We analyzed these loans using the reference pool's average observed FICO score reduced by one standard deviation of the FICO scores. With the adjustment, the weighted average FICO score of the pool was 739 and did not have a material impact on our analysis.

Original loan-to-value (LTV) and combined LTV (CLTV) ratios

The mortgage pool consists of loans to borrowers with original CLTV ratios ranging from 61.00% to 95.00%. The weighted average original CLTV ratio of 74.65% is lower than S&P Global Ratings' archetypal pool CLTV ratio of 75.00%.

Loans with junior liens

No loans were flagged as having second-lien mortgage exposure. For calculating the current combined balance, we assumed the second-lien mortgage balance does not decline from the implied original second-lien mortgage balance since origination.

Foreign nationals

No foreign national borrowers were identified in the reference pool. Historically, there has been no indication that a reference pool's exposure to foreign national borrowers would be different than the historical dataset of loans purchased by Freddie Mac, which have performed better than comparable non-agency loans. Therefore, we believe a risk of foreign national borrowers would be sufficiently addressed by our loss coverage numbers at each rating level. As such, we did not make any adjustments to the loss coverage based on foreign national borrowers.

Qualified mortgages

Qualified mortgage (QM) loans may be classified as safe harbor or, in the case of higher priced mortgage loans (HPMLs), rebuttable presumption. While our criteria apply a loss severity adjustment to rebuttable presumptions loans, unlike typical RMBS transactions, STACR 2022-DNA7 is unique in that it benefits from a highly creditworthy backstop (to which the ratings on the notes are also weakly linked) to the R&W covering successful challenges to the ability-to-repay (ATR) rule. A loan seller's violation of the QM/ATR regulation or HPML requirements gives rise to Freddie Mac's right to require the seller to repurchase the loan. Therefore, the risk to noteholders is predominantly mitigated. In the event that a borrower's challenge to ATR is ultimately unsuccessful but has extended the foreclosure process/timeline, the loan's loss severity may be higher than otherwise projected (to account for additional accruals of interest, taxes, and homeowners insurance amounts). However, we believe this increase would be immaterial to the losses on the reference pool, so no further adjustments were applied. This conclusion was based on our analysis of a sample of our portfolio of rated credit risk transfer transactions to determine the potential exposure to QM/HPML loans. Historically, we have observed the concentrations of QM/HPML loans in reference pools to be less than 1.00%. To the extent concentrations exceeded approximately 25.00% of the pool balance, the incremental losses could be roughly a basis point or more.

Credit Events And Expected Loss

Credit events

Losses to the issued notes occur when tranche write-downs exceed the available subordination. Write-down amounts occur when there are credit event losses exceeding recovery amounts. The reference tranches (and any related notes) will be written down in reverse sequential order if a credit event occurs for the reference obligations.

A credit event for a loan occurs if:

- A short sale is settled;
- A seriously delinquent mortgage note is sold prior to foreclosure;
- The mortgaged property that secured the related mortgage note is sold to a third party at a foreclosure sale;
- A real estate-owned (REO) disposition occurs; or
- The mortgage note is charged off.

We believe that tranche write-down amounts will primarily result from credit event loss amounts, after netting against recoveries, but could also be caused by court-approved principal reductions (bankruptcy cramdowns) and reduced interest on modified mortgage loans. See the Imputed Promises Analysis section for more detail on the allocation of modified mortgage loans' interest reductions.

Analyzing Historical Performance

In an effort to increase transparency and help return private capital to the mortgage markets, Freddie Mac has made its loan-level historical performance data available to the public. The data contains detailed information, including borrower characteristics, credit metrics, property attributes, unpaid principal balances, and loan status.

We analyzed this historical loan-level performance data to provide insight into the historical default frequency of agency loans. We then compared the historical default experiences of agency and non-agency pools to understand their relative performance and evaluate the extent to which certain borrower and loan characteristics would drive the credit event and/or foreclosure frequency of agency loans. We found that agency loans performed substantially better than non-agency loans and that, after controlling for collateral characteristics, agency and non-agency loans tend to have similar credit event sensitivity to changes in FICO score, DTI ratios, and LTV ratios. (Collateral characteristics typically associated with borrower credit risk are more fully described in "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018. Additionally, for more information on the historical performance study, see "Historical Data Show That Agency Mortgage Loans Are Likely To Perform Significantly Better Than Comparable Non-Agency Loans," published Oct. 20, 2015.) We expect that these relationships will continue given that the reference pool is, in many ways, similar to the agency loans examined in the historical performance dataset. Therefore, we use our LEVELS credit model as a base for determining credit event percentages before adjusting those expectations for the results of our qualitative reviews.

Table 2 shows the expected loss (loss coverage, rounded to the nearest five basis points), foreclosure frequency, and loss severity at the applicable rating categories from our credit analysis.

Table 2

Loss Coverage Comparisons

Class	Preliminary rating	Credit enhancement (%)	Loss coverage (%)	Foreclosure frequency (%)	Loss severity (%)
M-1A	BBB+ (sf)	3.50	3.20	8.70	36.78
M-1B	BBB- (sf)	2.55	2.55	7.04	36.22
M-2A	BB+ (sf)	2.03	2.00	6.40	31.25
M-2B	BB- (sf)	1.50	1.50	4.90	30.61

Mortgage Operational Assessment (MOA)

Freddie Mac is the mortgage loan aggregator for the transaction's reference pool. To address the operations of the transaction's aggregator, we conducted an MOA of Freddie Mac and assigned an overall ranking of ABOVE AVERAGE to the company. An MOA typically consists of two components: a qualitative review (loan acquisition and review process) and a quantitative analysis (historical loan performance). For these components, we assigned a qualitative subranking of ABOVE AVERAGE and a quantitative subranking of ABOVE AVERAGE.

The qualitative review is broken down into three key areas: management and organization, loan purchase and aggregation, and internal controls. For the quantitative review, we conducted a comprehensive analysis of Freddie Mac's loan-level performance data for 1999-2008 loan vintages.

Based on the results of our MOA, we applied an adjustment factor of 0.80x to the loss coverage estimate at each rating level for the reference pool.

Key assessment factors

Our ranking reflects our view of certain strengths, which include:

- Ongoing financial support from the U.S. Treasury, and oversight and operational involvement from the FHFA as Freddie Mac's regulator and conservator;
- A thorough review process for new sellers and thorough monitoring of existing sellers;
- Freddie Mac's leading role in establishing market standards through transparency, and the development of new analytical tools and lender training opportunities;
- Continuous system and control improvements of the QC processes, which take a proactive approach to reviewing loans early in their lifecycle rather than post-mortem on delinquent loans;
- A comprehensive training program for sellers and extensive seller guidelines;
- The strong asset quality of loans purchased after the 2008 housing crisis; and
- Freddie Mac's better-than-average mortgage loan performance versus non-agency loans.

These strengths are partially offset by the company's potential weaknesses, which include:

- The uncertainties regarding the impact of future potential legislative changes;
- The reliance on sellers' R&Ws and delegated underwriting for all sellers, which is partly mitigated by Freddie Mac's rigorous risk management and oversight of its sellers;
- The reliance on sellers to perform all pre-purchase QC processes. Freddie Mac does not complete a pre-purchase QC review on any loan files. However, this is partly offset by initial automated, data-driven checks of all loans delivered to Freddie Mac; and
- That all sellers are not reviewed annually because of the logistical challenge of reviewing a large number of sellers.

Qualitative review

Our qualitative review focused on Freddie Mac's acquisition and risk management processes with a particular focus on its operational reviews of sellers and loan quality processes and procedures. Specifically, we considered the company's:

- Continuous effort to set market standards through promoting transparency and developing new analytical tools;
- Comprehensive seller and post-purchase QC processes;

- Long operational track record; and
- Reliance on its sellers' QC processes and pre-purchase QC results (Freddie Mac delegates underwriting for all of its sellers and performs electronic pre-purchase QC reviews on all loan files).

We also considered the company's ongoing financial support from the U.S. Treasury and the FHFA's oversight and operational involvement.

Freddie Mac has implemented several policies focused on preventing predatory lending. These include purchase eligibility requirements and the requirement that Freddie Mac's approved sellers and servicers develop and implement policies designed to identify and prevent predatory lending practices. Freddie Mac's regulatory compliance review's scope is currently limited to anti-predatory lending that could result in assignee liability, and the company relies on its sellers to verify that the loans comply with all applicable federal, state, and local laws and regulations. This smaller scope is mitigated by an R&W framework in which the sellers attest compliance with all applicable laws and regulations. Freddie Mac also conducts a thorough review of the sellers' effectiveness of controls over mortgage operations and compliance with all of its requirements.

Quantitative review

We based our detailed quantitative analysis on the historical loan-level credit performance data Freddie Mac has made publicly available. We concluded that for all vintages in both pre-crisis and crisis-era originations (1999-2008), the default rate for non-agency loans was materially higher at all times than for Freddie Mac loans (see "Historical Data Show That Agency Mortgage Loans Are Likely To Perform Significantly Better Than Comparable Non-Agency Loans," published Oct. 20, 2015). We selected loans from Freddie Mac and non-agency pools that had comparable characteristics (e.g., loan terms, documentation types, liens, seasoning, FICO scores, DTI ratios, etc.) for our analysis. We concluded that Freddie Mac's better-than-average loan performance was primarily driven by its thorough risk management, operational seller reviews, and QC processes--a conclusion also reached in our qualitative analysis.

The asset quality for Freddie Mac's single-family portfolio has been strong for loans originated since 2009. Its new funding asset quality remains strong as of 2020, with an average FICO score of approximately 759 and average original LTV ratio of about 71.00% as of fourth-quarter 2020. The serious delinquency rate on Freddie Mac's single-family loans fell continuously from 2010 through 2016, reaching 1.00% as of December 2016. It increased slightly to 1.08% in December 2017 due to the impacts of hurricane events in 2017 before dropping to 0.69% in December 2018 and 0.63% in December 2019.

This decline reflects the continued shift in the single-family credit guarantee portfolio mix as the legacy and relief refinance loan portfolio runs off and is supplanted with higher credit quality loans. The serious delinquency rate increased to 2.64% in fourth-quarter 2020 due to the impact of the COVID-19 pandemic. Freddie Mac's new single-family portfolio, which comprises loans funded from 2009 through 2020 and excludes the Home Affordable Refinance Program and other refinance-plus loans, had a serious delinquency rate of 2.04%.

Third-Party Due Diligence Review

A third-party due diligence firm, Adfitech, performed an independent third-party loan-level review on a portion of the loans in the pool. Adfitech has been deemed to have adequate processes, procedures, and systems to carry out the review. A random post-purchase review was completed on 498 loans from a pool of loans securitized in Freddie Mac participation certificates in February 2022, which make up the initial cohort pool from which the reference pool was selected.

Loans that do not meet certain eligibility criteria were subsequently removed from the pool. The remaining loans consist of two types:

- Loans that Freddie Mac completed a post-purchase QC review of and determined to not have an underwriting defect; and
- Loans that were not removed from the reference pool for other reasons (payoffs, delinquencies, removal from the Freddie Mac participation certificate pools, borrower bankruptcy filings, data reconciliation removals, etc.).

Of the 498 loans from the due diligence sample, 297 loans were included in the initial cohort pool for this transaction, while 281 were included in the initial reference pool reviewed for this transaction. Of the loans in the initial reference pool, the compliance review was limited to 50 mortgage loans to determine whether the mortgage loans comply with certain laws that may result in assignee liability and/or comply with certain laws restricting points and fees.

There were no compliance discrepancy findings. Of the 236 loans reviewed for credit and valuation (including five loans from the aforementioned set also reviewed for compliance), one loan was found to have a credit exception and received a 'C' grade due to an AUS loan type discrepancy exception. In addition, six loans received 'C' grades because of property valuation discrepancies. All seven loans were excluded from the final reference pool. We extrapolated and appropriately adjusted for the occurrence of similar issues to the untested portion of the reference pool.

Of the 69,144-loan final reference pool, 269 loans from the aforementioned review were assessed for credit and property valuation (225 loans) and/or regulatory compliance issues (49 loans, including five loans from the aforementioned set). We believe Freddie Mac's strong seller approval and ongoing review process, robust post-purchase QC functions, and enhanced R&W framework adequately help mitigate the risk posed. We also view the sample size selected as adequate, considering Freddie Mac's historical sampling error rate.

After reviewing the third-party due diligence results, we deemed the adjustments related to the due diligence findings to be slightly higher than neutral, resulting in an adjustment factor of 1.01x to the loss coverage at all rating categories.

R&Ws

While R&Ws are not pledged to the transaction, the STACR 2022-DNA7 noteholders will benefit from the R&Ws made by the mortgage loan sellers or servicers to Freddie Mac on the mortgage loans in the reference pool. The benefits accrue from the potential removal of those loans from the reference pool before a credit event has occurred or a potential reversal of a credit event after one has occurred, to the extent certain conditions are met. To be removed, the loan would have to be classified as having an underwriting defect or major servicing defect.

R&W effective dates

The R&Ws are made by each lender as of the date the mortgage loan transfers to Freddie Mac and will survive (subject to certain sunset provisions) unless Freddie Mac expressly releases the lender from them. Freddie Mac may remove loans from the reference pool that are found to not meet certain eligibility criteria during limited post-purchase loan reviews.

Discovery

In January 2013, Freddie Mac enhanced its credit risk management processes and deployed processes in conjunction with R&Ws to catch loan defects early. Freddie Mac has increased the focus of its post-purchase QC process to review a random and a targeted sample of loans shortly after delivery (about four months) and before the sunset of certain underwriting R&Ws. The automated process refers approximately 4% of all loans for manual review for potential defects. This review process has resulted in many more loan errors and defects being identified than the previous QC process, in which loans were only reviewed at the time of default.

Repurchase and remedies

Freddie Mac actively enforces its contractual rights when a loan defect is uncovered. The remedies, determined at Freddie Mac's sole discretion, are based on the defect's significance and impact on loan eligibility and include loan repurchase, indemnification, and pricing adjustments.

The sellers or servicers are the only parties making the R&Ws for each loan to Freddie Mac. Funds will be allocated to the noteholders when underwriting and major servicing defects are confirmed. Through its nonperforming loan QC process, Freddie Mac will examine every credit event reference obligation, provided the applicable R&Ws are still in effect. A reference obligation will be reclassified as having an underwriting defect, a major servicing defect from an unconfirmed underwriting defect, or an unconfirmed servicing defect if:

- The loan is repurchased by the related seller or servicer during the related reporting period;
- In lieu of repurchase, an alternative remedy (such as indemnification) is mutually agreed upon by both Freddie Mac and the related seller or servicer during the related reporting period;
- Freddie Mac, in its sole discretion during the related reporting period, determines the reference obligation is no longer acceptable to Freddie Mac; or
- The party responsible for the R&Ws and/or servicing obligations or liabilities for the loan becomes subject to a bankruptcy, an insolvency proceeding, or a receivership.

If the seller or servicer fails to come to an agreement on an alternative remedy or refuses to or is unable to repurchase the identified loan, a reference obligation's reclassification could be delayed. This in turn could delay return reimbursement amount payments and consequently delay the allocation of a tranche write-up for reference obligations previously subject to a credit event write-down. Freddie Mac may audit credit event obligations through its QC process provided the R&Ws are still in effect.

Sunsetting

For loans purchased by Freddie Mac on or after July 1, 2014, the R&W framework provides lenders with relief of their obligation to repurchase mortgage loans that breach certain underwriting and eligibility R&Ws if a loan meets any of a number of conditions following the settlement date:

- The loan has no more than two 30-day delinquencies and no 60-day delinquencies for the first 36 months and is current at 36 months.
- The loan was not 30 or more days delinquent with respect to the 36th monthly payment, provided, however, that any of the first 36 monthly payments that are not made by a mortgagor

during a forbearance period granted by Freddie Mac in connection with a natural disaster will not be considered delinquent. In this case, Freddie Mac will continue to have recourse for a breach of such R&Ws until the later of the payment of the 36th monthly payment or when the mortgage loan is made current at the expiration of the forbearance period.

- The loan was previously reviewed and subjected to Freddie Mac's QC after settlement and was found satisfactory.
- The loan became subject to an agreement wherein claims were settled between Freddie Mac and the related seller.

In addition, collateral R&W relief is provided for a subset of the loans approved via Freddie Mac's loan advisor scores. For approximately 52.10% of the pool, the sponsor, and thus the trust, may not have recourse to the sellers. However, this risk is mitigated to a certain extent because this R&W relief applies mainly to property value, condition, and marketability on properties identified as low-risk appraisals by Freddie Mac's robust data-driven analytics.

Notwithstanding the above, there is no relief for breaches of certain "life-of-loan" R&Ws, including situations related to charter matters, fraud, misrepresentation, omissions, data inaccuracies, clear title/first-lien priority, legal compliance, and mortgage product eligibility.

Enforcement

Upon written notice of the discovery of a material breach, Freddie Mac will be the only party responsible for enforcing a remedy.

R&W scope

The R&Ws that the sellers provide to Freddie Mac substantively address the general risks outlined in Appendix IV of our criteria (see "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018). We believe that a neutral adjustment (1.00x factor) to the loss coverage estimate is commensurate with the overall risk related to the R&Ws after accounting for mitigating factors, such as Freddie Mac's QC procedures, results of the third-party due diligence reviews, the collateral's overall credit quality and underwriting standards, and the provision that the trust allocates funds to the noteholders when underwriting defects in the reference pool are confirmed.

Payment Structure And Cash Flow Mechanics

The trust will use investment proceeds and funds from the IO Q-REMIC interest to make monthly interest payments on the notes, while periodic principal payments will be made by liquidating investments held in the custodian account in the priority specified below in tables 3 and 4. Principal amounts due will be based on the principal that is actually collected on the reference obligations. Interest amounts will be paid based on the stated coupon and the principal balance of the notes.

Interest

For each outstanding class of notes and any payment date, interest will accrue at the note rate on the outstanding class' principal balance. Interest due on a class may be adjusted based on modifications to the reference obligations and allocated per the modification loss amount and gain amount waterfalls. To the extent that funds from the IO Q-REMIC interest and earnings on eligible investments are insufficient, Freddie Mac will pay the difference.

Principal

The principal payment amounts are defined and allocated in tables 3 and 4.

Table 3

Principal Payment Allocation

Stated (scheduled and unscheduled) principal	If each trigger is satisfied, pro rata allocation between the senior and subordinate tranches (sequential within the subordinated tranches). Otherwise, 100% allocation to the senior tranche and then to the subordinate tranches.
Recovery principal	100% allocation to the senior tranche and then to the subordinate tranches.

All funds allocated to the subordinate tranches are allocated according to table 4.

Table 4

Subordinate Payment Waterfall

Priority Payment	Payment
1	Pro rata, to the related class M-1A note and the related class M-1AH tranche until they have been reduced to zero.
2	Pro rata, to the related class M-1B note and the related class M-1BH tranche until they have been reduced to zero.
3	Pro rata, to the related class M-2A note and the related class M-2AH tranche until they have been reduced to zero.
4	Pro rata, to the class M-2B note and the related class M-2BH tranche until they have been reduced to zero.
5	To the class B-1H tranche until they have been reduced to zero.
6	To the class B-2H tranche until they have been reduced to zero.
7	To the class B-3H note until reduced to zero.
8	To the class A-H tranche until reduced to zero.

A pro rata portion of the principal amounts shown in table 3, not including recovery principal, will be allocated to the subordinate tranches if certain triggers are satisfied. However, if the triggers fail, the subordinate allocation of principal amounts will be reduced to zero.

Purportedly, this feature, which was first introduced in STACR 2018-DNA2, was made to increase the weighted average life of the subordinate notes, thus enhancing the structure's risk-sharing capabilities.

On any distribution date, the triggers are satisfied if:

- The principal balance of all mortgage loans 60-plus-days delinquent; in foreclosure, bankruptcy, or REO status; or modified within the previous 12 months, averaged over the previous six months, is less than 50.00% of the amount by which the principal balance of the subordinate tranches (as of the prior payment date) exceeds the principal losses for the current payment date.
- The aggregate class balance of the subordinate tranches is not less than 4.75% of the current

pool balance.

- Cumulative realized losses on the reference pool do not exceed the levels listed in table 5.

Table 5

Cumulative Realized Losses Test

Period in which the distribution date occurs	Cumulative realized losses (% of the reference pool amount as of the cutoff date)
October 2022 to September 2023	0.1
October 2023 to September 2024	0.2
October 2024 to September 2025	0.3
October 2025 to September 2026	0.4
October 2026 to September 2027	0.5
October 2027 to September 2028	0.6
October 2028 to September 2029	0.7
October 2029 to September 2030	0.8
October 2030 to September 2031	0.9
October 2031 to September 2032	1.0
October 2032 to September 2033	1.1
October 2033 to September 2034	1.2
October 2034 and thereafter	1.3

The mezzanine and junior notes comprise the class M-1A, M-1B, M-2A, M-2B, B-1H, and B-2H tranches and the B-3H reference tranche. Class M-2A and class M-2B serve as initial exchangeable notes. Holders of these classes can exchange them for several combinations of exchangeable notes, some of which are IO classes, and vice versa as specified in the offering documents. If an exchange is made, the exchanged notes will receive a proportionate share of the interest and principal payments otherwise allocable to the classes of initial exchangeable notes.

Traditional prime jumbo transactions, including post-2008 issuances, have shifting interest structures that experience some pro rata credit erosion. Those transactions typically require credit enhancement through subordination that are above the expected losses to compensate for the subordination erosion. They also include credit enhancement floors that lock out more subordinate classes from principal. This structure has a sequential payment mechanism within the subordinate classes, which prevents the erosion of credit enhancement. The structure also provides for a minimum credit enhancement equal to 4.75% of the current balance. Below this threshold, all principal is paid to the senior tranche, unless the supplemental subordinate reduction amount threshold is breached, which will force payment to junior classes even when a trigger is in effect. Because the senior class starts out with a credit enhancement of 4.75%, all principal is paid to the senior class, as well as junior classes as long as the senior class maintains 4.75% credit enhancement.

The subordinate notes' sequential-pay mechanism allows class M-1A to be repaid faster because the entirety of principal allocated to the subordinate notes is directed to class M-1A before any other subordinate class.

Tranche write-down amounts for the reference pool are applied in reverse sequential order until each class' principal balance has been reduced to zero:

- To the class B-3H reference tranche;
- To the class B-2H reference tranche;
- To the class B-1H reference tranche;
- Pro rata, to the related class M-2B and M-2BH reference tranches;
- Pro rata, to the related class M-2A and M-2AH reference tranches;
- Pro rata, to the related class M-1B and M-1BH reference tranches;
- Pro rata, to the related class M-1A and M-1AH reference tranches; and then
- To the related class A-H reference tranche.

If an exchange is made, the exchanged notes will receive a proportionate share of the write-down amounts otherwise allocable to the classes of initial exchangeable notes.

Reimbursement for prior realized losses and write-down amounts are allocated first to the senior tranches and then sequentially to the subordinate tranches. Write-ups that occur in excess of the cumulative write-down amounts will result in overcollateralization.

There are certain provisions where Freddie Mac may redeem the notes before the maturity date (when the aggregate unpaid balance of the reference obligations is less than or equal to 10.00% of the cutoff date balance or on the September 2027 optional redemption date). It does this by paying an amount equal to the outstanding notes' principal balance plus accrued and unpaid interest. Regardless of the outstanding balance remaining on the reference obligations, Freddie Mac must retire the notes on the September 2042 payment date by paying an amount equal to the notes' full remaining class principal balance plus accrued and unpaid interest.

Cash Flow And Scenario Analysis

As outlined in "Methodology And Assumptions For Rating U.S. RMBS Issued 2009 And Later," published Feb. 22, 2018, we typically will not perform our cash flow analysis on transactions with sequential payment structures. Regardless of the split in the principal payment allocation between the senior and subordinate classes, the principal will be allocated sequentially among the subordinate classes. Therefore, we did not perform cash flow and structural scenario analyses because the rated notes will not be affected by the credit enhancement to more-junior tranches.

Interest stresses

For each outstanding class of notes and any payment date, interest will accrue at the note rate minus potential adjustments for modified reference obligations due on the outstanding class' principal balance. To the extent that funds from the IO Q-REMIC interest and earnings on eligible investments are insufficient, Freddie Mac will pay the difference.

Additional Features

Allocation of supplemental subordinate reduction

In recent pre-REMIC STACR transactions, when triggers are failing, all principal payments are distributed to the class A-H reference tranche. STACR 2022-DNA7 allows for the distribution of principal to the subordinate notes if the offered reference tranche percentage exceeds 5.5% of the unpaid principal balance of the reference obligations. The offered reference tranche percentage is equal to the aggregate class notional amount of the class M-1A, M-1AH, M-1B, M-1BH, M-2A, M-2AH, M-2B, and M-2BH notes divided by the unpaid principal balance of the reference obligations at the end of the related reporting period.

If the offered reference tranche percentage exceeds 5.5%, the excess, multiplied by the unpaid principal balance of the reference obligations at the end of the related reporting period, will be distributed sequentially (and pro rata with each corresponding reference tranche) to each offered class until its class notional amount is reduced to zero. Subsequently, any remaining amounts will reduce the class B-3H and then the class A-H reference tranches.

We view this feature as a positive for the rated notes, relative to other recent STACR transactions, because principal could still be paid in certain scenarios when triggers are failing.

Five-year optional redemption

The notes have a five-year optional redemption and can be redeemed by Freddie Mac at the earlier of the payment date on or after September 2027 and when the aggregate unpaid balance of the reference obligations is less than or equal to 10% of the cutoff date balance.

Twenty-year maturity feature

The notes are scheduled to mature on the September 2042 payment date, which is 20 years after the closing date. The notes in certain prior STACR transactions have a 12.5-year maturity. We view the increase in maturity length as a credit negative that may increase the weighted average life of the preliminary rated notes. In this transaction, scheduled principal will be distributed pro rata between the senior class and the most-senior outstanding subordinate class if each trigger is satisfied. Due to certain triggers, such as the credit enhancement test (detailed in the Payment Structure And Cash Flow Mechanics section), the payment priority for unscheduled principal will begin as fully sequential, allocated to the most-senior class first; when the triggers pass, the payment priority for unscheduled principal will switch to pro rata between the senior class and the most-senior outstanding subordinate class, which again benefits the rated subordinate class notes. Furthermore, the effect of the scheduled maturity's extension on the preliminary rated notes' weighted average life could be mitigated by the optional redemption.

Notwithstanding the five-year optional redemption, 20-year maturity, and trigger mechanisms, the sequential payment priority among the subordinate notes provides sufficient, locked-out credit enhancement to the preliminary rated notes given our loss projections.

Payment deferral events

For this transaction, payment deferrals will be considered modification events for the purpose of calculated modification gains and losses when the servicer reports the related loan's non-interest bearing forborne balance as outstanding. The related loan balance would be considered distressed principal for 12 months following the payment deferral event for the purposes of calculating the delinquency trigger, which could impact the timing of payments on the rated notes.

Enhanced Relief Refinance (ERR) program

At the direction of the FHFA and in coordination with Fannie Mae, Freddie Mac introduced the ERR program, a high-LTV-ratio refinancing program designed to provide refinance opportunities to borrowers with existing Freddie Mac mortgage loans who are current on their mortgage payments but whose LTV ratios exceed the maximum permitted for standard refinance products under the Freddie Mac Guide. All of the pool's reference obligations are eligible to participate in the ERR program.

STACR 2022-DNA7 allows for the replacement of reference obligations in the reference pool with ERR reference obligations in the future (meaning that a reference obligation related to one borrower will be replaced by an ERR obligation related to that same borrower).

Borrowers participating in the ERR program are given the opportunity to reduce their interest payments or amortization terms if they meet certain eligibility criteria, such as a mostly clean payment history. In most instances, the program reduces payment stress on already performing borrowers in declining home price environments, potentially decreasing their likelihood of default.

The replacement of a reference obligation with the resulting ERR reference obligation will not constitute a credit event or a modification event, though the potential refinancing may add uncertainty to expected prepayment speeds and the weighted average life of the notes. However, we would expect a reduction in interest rates to result in higher prepayment speeds in stable environments.

To be eligible for refinancing under the ERR program, the mortgage loan being refinanced must, among other things, have a note date on or after Oct. 1, 2017, have been originated at least 15 months prior to the refinance note date, and have had no 30-day delinquencies in the preceding six months and no more than one 30-day delinquency in the preceding 12 months. On May 26, 2021, Freddie Mac announced it would pause its purchase of mortgage loans under the ERR program until further notice.

Imputed Promises Analysis

When rating U.S. RMBS transactions where credit-related events can result in reduced interest owed to the tranches across the capital structure rather than the credit-related loss allocated to the available credit support, we impute the interest owed to the security holders. Interest deterioration that occurs due to defaults, repurchases, or prepayments is either already accounted for in our analysis or not considered credit-related; therefore, we did not consider it for this analysis.

The modification interest rate reduction amounts are allocated in reverse sequential order, as outlined below, and are not shared among the different classes of notes, as is the case in many non-agency transactions. The interest rate on each note is not directly tied to the weighted average coupons on the reference obligations, though mortgage loans could be modified. As a result, the notes' interest entitlements will be subject to reduction and the class principal balances will be subject to write-downs. To account for this potential decrease in cash flow, the transaction is structured so that modification loss amounts will, in most cases, be allocated first to reduce the current period's interest payment on the most subordinate class and then to write down that class' related principal balance. This reduces the available credit support for higher tranches.

The modification loss amount is calculated for each reference obligation as the difference between the interest accrued at the original interest rate and the current interest rate in addition to the interest that is no longer due given forborne principal amounts. This amount represents reduced interest amounts from events such as loan rate and forbearance modifications and does not include interest rate modifications.

The order in which modification loss amounts are applied is:

- To the class B-3H reference tranche until the amount allocated to the class B-3H reference tranche is equal to the preliminary class notional amount of the class B-3H reference tranche;
- To the class B-2H reference tranche until the amount allocated to the class B-2H reference tranche is equal to the class B-2H reference tranche interest accrual amount;
- To the class B-2H reference tranche until the amount allocated to the class B-2H reference tranche is equal to the preliminary class notional amount of the class B-2H reference tranche;
- To the class B-1H reference tranche until the amount allocated to the class B-1H reference tranche is equal to the class B-1H reference tranche interest accrual amount;
- To the class B-1H reference tranche until the amount allocated to the class B-1H reference tranche is equal to the preliminary class notional amount of the class B-1H reference tranche;
- To the class M-2B and class M-2BH reference tranches, pro rata based on their class notional amounts immediately prior to such payment date, until the amount allocated to the class M-2B reference tranche is equal to the class M-2B notes interest accrual amount;
- To the class M-2A and class M-2AH reference tranches, pro rata based on their class notional amounts immediately prior to such payment date, until the amount allocated to the class M-2A reference tranche is equal to the class M-2A notes interest accrual amount;
- To the class M-2B and class M-2BH reference tranches, pro rata based on their preliminary class notional amounts for such payment date, until the aggregate amount allocated to the class M-2B and class M-2BH reference tranches is equal to the aggregate of the preliminary class notional amounts of the class M-2B and class M-2BH reference tranches;
- To the class M-2A and class M-2AH reference tranches, pro rata based on their preliminary class notional amounts for such payment date, until the aggregate amount allocated to the class M-2A and class M-2AH reference tranches is equal to the aggregate of the preliminary class notional amounts of the class M-2A and class M-2AH reference tranches;
- To the class M-1B and class M-1BH reference tranches, pro rata based on their class notional amounts immediately prior to such payment date, until the amount allocated to the class M-1B reference tranche is equal to the class M-1B notes interest accrual amount;
- To the class M-1B and class M-1BH reference tranches, pro rata based on their preliminary class notional amounts for such payment date, until the aggregate amount allocated to the class M-1B and class M-1BH reference tranches is equal to the aggregate of the preliminary class notional amounts of the class M-1B and class M-1BH reference tranches;
- To the class M-1A and class M-1AH reference tranches, pro rata based on their class notional amounts immediately prior to such payment date, until the amount allocated to the class M-1A reference tranche is equal to the class M-1A notes interest accrual amount; and
- To the class M-1A and class M-1AH reference tranches, pro rata based on their preliminary class notional amounts for such payment date, until the aggregate amount allocated to the class M-1A and class M-1AH reference tranches is equal to the aggregate of the preliminary class notional amounts of the class M-1A and class M-1AH reference tranches.

In this transaction, interest and principal of more-junior tranches are available to absorb modification loss amounts first. For the class M-2A notes, the class M-2B notes principal amount is not available to absorb modification loss amounts before the class M-2A notes' interest reduction; however, the class M-2B notes' interest amount does absorb these modification loss amounts first. We considered the degree of projected modification loss amounts under the given rating scenario associated with the class M-2A notes ('BB+ (sf)'), in conjunction with the expected support provided by the class M-2B notes' interest amount. Although the class M-2A notes may experience interest reductions due to modification loss amounts, we believe the degree of potential interest reductions is commensurate with the preliminary rating on the class M-2A notes.

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