

CAS Structural and Delinquency Deal Performance Test Monitor

Today, we launched the Deal Performance Test Monitor in [Data Dynamics](#). This report (available through CAS Deal Performance) provides additional transparency into the monthly status of Connecticut Avenue Securities® (CAS) deal-level credit enhancement and delinquency tests, which may have implications for investor cashflows. Investors may reference this report for a summary of deal-specific test provisions and may use the reported values in conjunction with their own assumptions about future deal performance to project the future status of these tests and gain insights for their investment cashflows.

Minimum Credit Enhancement Test

Applies to all offered tranches, excluding the A-1 tranche. All CAS transactions contain a Minimum Credit Enhancement Test, which compares the then-current Subordinate Percentage (defined as the Beginning Period Credit Support Percentage in the Deal Performance Test Monitor) to the target specified in deal documents, which varies across deals. This provision exists to ensure that the senior tranche(s) maintain sufficient protection from loss. Unless the target level of credit enhancement is reached, the appropriate principal payments are allocated to the senior tranche(s) (the A-H senior tranche is always retained by Fannie Mae). For CAS 2020 R02 and prior, Scheduled Principal will continue to be paid to the offered subordinate tranches *pro rata* with the senior tranches. For CAS 2021 R01 and forward, the offered subordinate tranches will not receive any Scheduled or Unscheduled Principal payments. Once this test has been satisfied, principal payments are allocated *pro rata* between the senior and subordinate portions of the deal structure. Several of our older deals by design initially fail the Minimum Credit Enhancement Test for a period after issuance, as the subordination level builds by paying the appropriate principal to the senior tranche.

Delinquency Test

Applies to all subordinate tranches, which excludes the A-1 tranche. All actual loss CAS transactions contain a Delinquency Test, which compares the six-month average Distressed Principal Balance to a calculated threshold that depends on the Subordinate Percentage. This provision exists to ensure that the senior tranche builds up sufficient protection from potential losses associated with seriously delinquent loans. The Distressed Principal Balance is defined as the aggregate unpaid principal balance of Reference Obligations that are 90 days or more delinquent or are in foreclosure, bankruptcy, or REO status as of that Payment Date. The Distressed Principal Balance notably does not include modified, performing loans. If a deal fails to satisfy the Delinquency Test, the appropriate principal payments are diverted to the senior tranche(s). For CAS 2020 R02 and prior, the subordinate portion of the deal structure continues to receive its *pro rata* share of Scheduled Principal payments. For CAS 2021 R01 and forward the subordinate portion of the deal structure will not receive any Scheduled or Unscheduled principal payments. This dynamic enables the senior tranche(s) to accumulate additional loss protection while the deal is failing the Delinquency Test.

Supplemental Reduction Amount (SRA)

One nuance that only applies to deals issued using the Real Estate Mortgage Investment Conduit (REMIC) structure (indicated by CAS deals with an “R” name designation, for example CAS 2019-R01) is the Supplemental Reduction Amount (SRA) feature, which effectively caps the size of the offered tranches relative to the Reference Obligations. This provision was implemented in order to comply with REMIC requirements. The SRA varies across deals. If attachment points of coverage to the A-H tranche for a deal in any given period exceeds the adjusted supplemental reduction amount, the principal will be allocated to the offered tranches, starting with the subordinate tranches until all subordinate tranches are paid in full in order to accelerate their amortizations even if the deal is failing other performance tests. A-1 tranche will receive funds from SRA only after subordinate tranches are paid in full.

Note, SRA was previously referred to as Supplemental Subordinate Reduction Amount (SSRA), in CAS REMICs® that do not offer the A-1 Class.



Current Period Applicable Subordinate Principal Distribution

Applies to all offered tranches, excluding the A-1 tranche. The status of Scheduled Principal and/or Unscheduled Principal, as applicable, assigned to the subordinate tranches in the respective period.

Cumulative Net Loss Test (CNL)

Applies only to the A-1 tranche, where issued, and only applies while the A-1 tranche remains outstanding. This test compares Cumulative Net Loss (CNL) Test Threshold Percentage, as specified in deal documents, to the Current Calculated Cumulative Net Loss Test Percentage. The specified CNL Test must be satisfied for the A-1 tranche to receive the A-1 Reduction Amount. If the CNL Test is not satisfied, no further principal related to the A-1 Reduction Amount will be allocated to the A-1 tranche in that period and or any period thereafter.

Data Dynamics

The Deal Performance Test Monitor is a [Data Dynamics](#) tool that allows investors to analyze the monthly status of CAS deal-level credit enhancement and delinquency tests. With Data Dynamics, our goal is to continue to provide high levels of transparency and useful, intuitive tools to help investors analyze and understand the vast amount of data that Fannie Mae makes available to the market. As a reminder, deal data is updated on the 25th of each month with each remittance cycle.



Appendix

Glossary of Definitions for Deal Performance Test Monitor

Adjusted Supplemental Reduction Amount (SRA) Percentage: For CAS REMICs®, the sum of: (1) the current remaining balance of the retained first loss class(es), divided by the current UPB of the Reference Obligations; and (2) the deal-specific SRA threshold.

Adjusted Supplemental Reduction Amount (SRA) Achieved: For CAS REMICs®, once the SRA is achieved, unscheduled principal will once again be assigned to the respective subordinate tranche, in compliance with REMIC requirements.

Beginning Period Credit Support Percentage: With respect to any Payment Date, the percentage equal to 100% minus the Senior Percentage for such Payment Date. The Senior Percentage is calculated as the aggregate Class Notional Amount of the Senior Reference Tranches immediately prior to the preceding Payment Date divided by the aggregate unpaid principal balance of the Reference Obligations at the end of the previous Reporting Period.

Cumulative Net Loss Test Pass/Fail: The status of the Cumulative Net Loss (CNL) Test for a deal as of the Reporting Date. This test is only applicable to the A-1 tranche, where offered and while outstanding.

Cumulative Net Loss Test Threshold Percentage: The deal-specific percentage used in determining the deal's status for the purpose of the Cumulative Net Loss Test.

Current Calculated Cumulative Net Loss Test Percentage: (1) The *quotient*, expressed as a percentage, of (a) the *excess* of (x) the aggregate of the Principal Loss Amounts for such Payment Date and all prior Payment Dates *over* (y) the aggregate of the Principal Recovery Amounts for such Payment Date and all prior Payment Dates *divided by* (b) the Cut-off Date Balance. When this value is below the Cumulative Net Loss Test Threshold Percentage and was below with respect to any prior Payment Date, the Cumulative Net Loss Test is satisfied.

Current Calculated Delinquency Test Percentage: The quotient of (a) the sum of the Distressed Principal Balance for the current Payment Date and each of the preceding five Payment Dates, divided by six; and (b) the excess of (i) the product of (x) the Subordinate Percentage and (y) the aggregate UPB of the Reference Obligations as of the preceding Payment Date *over* (ii) the Principal Loss Amount for the current Payment Date. When this value is below the Delinquency Test Threshold Percentage, the Delinquency Test is satisfied.

Current Period Applicable Subordinate Principal Distribution: This field reports the subordinate principal distribution status as of the current period.

Delinquency Test Pass/Fail: The status of the Delinquency Test for a deal as of the Reporting Date. If the DLQ Test is satisfied, the status will be shown as "Pass".

Delinquency Test Threshold Percentage: The deal-specific percentage used in determining the deal's status for the purpose of the Delinquency Test.

DLQ Test Applies: This field reports whether the deal has a Delinquency Test provision. Only actual loss CAS deals contain this provision.

Distressed Principal Balance: for any Payment Date, the aggregate unpaid principal balance that are 90 days or more delinquent or are otherwise in foreclosure or REO status.

Ending Period Credit Support Percentage: With respect to any Payment Date, the percentage equal to 100% minus the Senior Percentage for such Payment Date. The Senior Percentage is calculated as the aggregate Class Notional Amount of the Senior Reference Tranches immediately prior to the preceding Payment Date divided by the aggregate unpaid principal balance of the Reference Obligations at the end of the previous Reporting Period.

Ending Period Amount Above (Below) Minimum Subordinate Percentage: The amount by which the Ending Period Credit Support Percentage exceeds the Minimum Credit Enhancement Test Percentage. If the amount is positive, the Minimum Credit Enhancement Test is satisfied.



Initial Credit Support Percentage: The percentage equal to 100% minus the Senior Percentage at the time of deal issuance. The Senior Percentage is calculated as the aggregate Class Notional Amount of the Senior Reference Tranches as of the Closing Date divided by the aggregate unpaid principal balance of the Reference Obligations as of the Cut-Off Date

Minimum Credit Enhancement Test Percentage: The deal-specific target of subordinate credit support required to be provided to the senior tranche(s).

Remaining Amount Below the Adjusted SRA Percentage: For CAS REMICs®, the Current Credit Support Percentage less the Adjusted Supplemental Reduction Amount (SRA).

Subordinate and A-1 Support Percentage: The sum of the Ending Period Credit Support Percentage and A-1 class thickness as of the period, if offered. For deals that did not offer the A-1 this reflects the Ending Period Credit Support Percentage. This is compared to the Adjusted Supplemental Reduction Amount (SRA) Percentage for determination if the Adjusted SRA is achieved.

Resources

- Access [Data Dynamics](#)
- Contact Us via [email](#) or 1-800-232-6643, Option 3
- [Sign up](#) for news and commentaries