Federal National Mortgage Association
Fannie Mae

Enterprise Regulatory Capital Framework Disclosures

For the Quarterly Period Ended June 30, 2023

Federal National Mortgage Association - Fannie Mae
Capital Disclosures Report
For the quarterly period ended June 30, 2023

Table of Contents

Disclosure Map 3
Introduction 5
1. Capital Structure 7
2. Capital Adequacy 9
3. Capital Buffers 13
4. Credit Risk: General Disclosures 14
5. Counterparty Credit Risk 18
6. Credit Risk Mitigation 20
7. Credit Risk Transfers and Securitization 21
8. Equities 27
9. Interest Rate Risk for Non-Trading Activities 29
10. Operational Risk 30
11. Tier 1 Leverage Ratio 31
12. Market Risk 33
Glossary 36

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DISCLOSURE MAP

Disclosure Requirement	Description	Capital Disclosures page reference	2022 Form 10-K page reference	Q2 2023 Form 10-Q page reference
Introduction	Forward-Looking Statements	5	30	59
	Risk Factors	5	33	
Capital Structure	Short-Term and Long-Term Debt	7	F-43	93
	Equity	7	F-53	
	Regulatory Capital Requirements	7	F-60	115
Capital Adequacy	Conservatorship	9	10	
	GSE and Conservatorship Risk	9	35	
	Capital Requirements	9	134	52
	Regulatory Capital Requirements	9		115
Capital Buffers	Capital Requirements	13	17	
Credit Risk: General Disclosures	Managing Mortgage Credit Risk	14	8	
	Single-Family Mortgage Credit Risk Management	14	90	26
	Multifamily Mortgage Credit Risk Management	14	119	41
	Mortgage Credit Risk Management Overview	14	138	
	Climate and Natural Disaster Risk Management	14	138	
	Concentrations of Credit Risk	14, 15	F-63	100
	Summary of Significant Accounting Policies	14	F-8	68
	Nonaccrual Loans	14	F-17	
	Institutional Counterparty Credit Risk Management	14	141	
	Mortgage Loans	14		73
	Off-Balance Sheet Arrangements	14		50
	Financial Guarantees	14		92
	Liquidity and Capital Management	14		46
	Investments in Securities	14		90
	Derivative Instruments	14		94
	Netting Arrangements	14		104
	Allowance for Loan Losses	16		88
Counterparty Credit Risk	Institutional Counterparty Credit Risk Management	17	141	
	Derivative Instruments	18		94
Credit Risk Mitigation	Collateral	19	F-22	
	Institutional Counterparty Credit Risk Management	19	141	
	Single-Family Mortgage Credit Risk Management	19	90	26
	Multifamily Mortgage Credit Risk Management	19	119	41
	Concentrations of Credit Risk	19	F-63	100

Disclosure Requirement	Description	Capital Disclosures page reference	2022 Form 10-K page reference	Q2 2023 Form 10-Q page reference
Credit Risk Transfers and Securitization	Sharing and Selling Credit Risk	20	10	
	Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk	20	97	29
	Transfer of Multifamily Mortgage Credit Risk	20, 24	120	41
	Model Risk Management	20	155	
	Risk Factors | Operational Risk	20	46	
	Managing Mortgage Credit Risk	20	8	
	Single-Family Mortgage Credit Risk Management	20	90	26
	Multifamily Mortgage Credit Risk Management	20	119	41
	Institutional Counterparty Credit Risk Management	20	141	
	Consolidations and Transfers of Financial Assets	21	F-24	71
	Investments in Securities	21	F-16	
	Special Purpose Vehicles (“SPVs“) Associated with Our Credit Risk Transfer Programs	21	F-25	
	Financial Guarantees	21	F-42	92
	Credit Risk Transfer Transactions	24	97	
Equities	Condensed Consolidated Balance Sheets	26		63
	Condensed Consolidated Statements of Operations and Comprehensive Income	26		64
	Available-for-Sale Securities	27		90
Interest Rate Risk for Non-Trading Activities	How Interest Rates Can Affect Our Financial Results	28	61	6
	Market Risk Management, including Interest-Rate Risk Management	28	149	54
	Measurement of Interest-Rate Risk	28	151	55
Operational Risk	Risk Management | Operational Risk Management	29	154	
	Risk Factors | Operational Risk	29	46	
Tier 1 Leverage Ratio	No references included			
Market Risk	Unconsolidated Variable Interest Entities (“VIEs”)	32		72
	Financial Guarantees	32	F-42	92
	Single-Class Resecuritization Trusts	32	F-14	
	Multi-Class Resecuritization Trusts	33	F-14	
	Fair Value Measurement	33	F-71	105
	Model Risk Management	33	155	
	Risk Factors | Operational Risk	33	46	

Introduction

Fannie Mae is a leading source of financing for mortgages in the United States. Organized as a government-sponsored enterprise ("GSE"), Fannie Mae is a shareholder-owned corporation. We were chartered by Congress to provide liquidity and stability to the residential mortgage market and to promote access to mortgage credit. Our revenues are primarily driven by guaranty fees we receive for assuming the credit risk on loans underlying the mortgage-backed securities we issue. We do not originate mortgage loans or lend money directly to borrowers. Rather, we work primarily with lenders who originate mortgage loans to borrowers. We acquire and securitize those loans into mortgage-backed securities that we guarantee (which we refer to as Fannie Mae MBS or our MBS).

We manage the risks that arise from our business activities through our enterprise risk management program. Our risk management program aims to monitor and manage the following major business risks: credit risk, market risk, liquidity and funding risk, and operational risk. These risks can materially adversely affect our business, results of operations, financial condition, liquidity, and net worth.

Our risk management program is composed of four inter-related components that are designed to work together as a comprehensive risk management system aimed at enhancing our performance:

- Governance and Organizational Structure;
- Risk Appetite Framework;
- Risk Identification, Assessment, Control and Monitoring; and
- Reporting and Communication Processes.

We manage risk by using the industry standard "three lines of defense" structure:

- First line: Business units and corporate functions—generate, own and manage risks;
- Second line: Enterprise Risk Management ("ERM"), Compliance & Ethics and other risk oversight functions—provide independent risk oversight and effective challenge; and
- Third line: Internal Audit—provides independent assurance.

Our Board of Directors and management-level risk committees are also integral to our risk management program.

As a GSE, we are subject to the regulatory capital rules issued by the Federal Housing Finance Agency ("FHFA") pursuant to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended, including by the Housing and Economic Recovery Act of 2008 (together, the "GSE Act").

The enterprise regulatory capital framework (12 C.F.R. Part 1240) ("ERCF") establishes minimum capital requirements by capital tier. Under the ERCF, Fannie Mae is required to satisfy minimum risk-based capital requirements based on total capital, adjusted total capital, tier 1 capital, and common equity tier 1 ("CET1") capital. In addition to the minimum capital requirements, the ERCF establishes regulatory capital buffers. The ERCF requires Fannie Mae to maintain CET1 capital that exceeds its minimum risk-based capital requirements by at least the amount of its prescribed capital conservation buffer amount ("PCCBA"). If Fannie Mae's capital position does not exceed its minimum risk-based capital requirements and PCCBA, Fannie Mae will be subject to limitations on its capital distributions and discretionary bonus payments to executives. Similarly, the ERCF establishes a leverage capital buffer titled the prescribed leverage buffer amount ("PLBA") requiring Fannie Mae's tier 1 capital to exceed the PLBA to avoid capital or discretionary bonus distribution limitations.

Although the ERCF went into effect in February 2021, Fannie Mae is not required to hold capital according to the framework's requirements until the date of termination of its conservatorship or such later date as may be ordered by FHFA. Fannie Mae is required to provide timely public disclosures each calendar quarter of the information specified in subpart D of the ERCF.

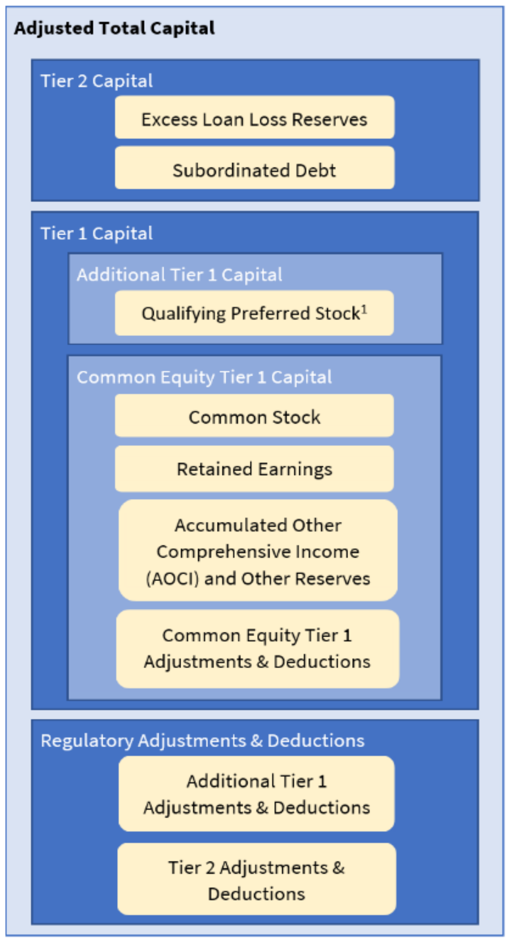
Fannie Mae's capital disclosures in this report are not required to be, and have not been, audited by its independent registered public accounting firm. Some measures of exposures contained in this report may not be consistent with accounting principles generally accepted in the U.S. ("U.S. GAAP") and may not be comparable with measures reported in our Form 10-Q for the quarter ended June 30, 2023 (the "Q2 2023 Form 10-Q").

This report includes forward-looking statements regarding future requirements under the ERCF and our intention with respect to future credit risk transfer ("CRT") transactions. Actual outcomes could be materially different from what is set forth in these forward-looking statements due to a variety of factors, including those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)—Forward-Looking Statements" in our Q2 2023 Form 10-Q, and in "Business—Forward-Looking Statements" and "Risk Factors" in our annual report on Form 10-K for the year ended December 31, 2022 (the "2022 Form 10-K").

1. Capital Structure

Fannie Mae has a variety of issued and outstanding capital instruments, including common stock, preferred stock, qualifying junior preferred stock, and short-term debt and long-term debt (callable securities, non-callable securities, fixed/floating rate notes, etc.). For more information about our outstanding capital instruments, refer to “Note 7, Short-Term and Long-Term Debt” and “Note 14, Regulatory Capital Requirements” in our Q2 2023 Form 10-Q and “Note 7, Short-Term and Long-Term Debt,” “Note 11, Equity,” and “Note 12, Regulatory Capital Requirements” in our 2022 Form 10-K.

FHFA has provided guidance on the different tiers and classifications of capital in the ERCF. The representative components of regulatory capital under the ERCF are shown below:



“Core capital” is defined in the GSE Act and the ERCF as having four components: outstanding common stock, outstanding perpetual noncumulative preferred stock[1], paid-in capital, and retained earnings (accumulated deficit). “Total capital” is defined in the GSE Act to include core capital, a general allowance for foreclosure losses, and other amounts from sources of funds available to absorb losses (that the Director of FHFA by regulation determines are appropriate to include in determining total capital).

The following exhibit provides a summary of Fannie Mae’s capital instruments and reconciliations as of June 30, 2023.

[1] These capital classification measures exclude the funds provided to us by Treasury pursuant to the senior preferred stock purchase agreement, as the senior preferred stock does not qualify as core capital due to its cumulative dividend provisions.

Exhibit 1.1: Capital Instruments & Reconciliations

		As of June 30, 2023 (Dollars in millions)
GAAP	Common stock	$ 687
	Treasury stock	(7,400)
	Retained earnings[2]	(64,245)
	Accumulated other comprehensive income ("AOCI")	36
	Junior preferred stock[3]	19,130
	Senior preferred stock	120,836
	Stockholders' equity under GAAP	69,044
Regulatory Capital	Less: Senior & junior preferred stock	139,966
	Common stockholders' equity	(70,922)
	Less:	
	Goodwill[4]	—
	Other intangible assets[4]	—
	Deferred tax assets ("DTAs")[5]	11,990
	AOCI-related adjustments	—
	Other deductions	—
	Common equity tier 1 ("CET1") capital (deficit)	(82,912)
	Qualifying junior preferred stock	19,130
	Other adjustments and deductions	—
	Tier 1 capital (deficit)	(63,782)
	Qualifying subordinated debt and other instruments	—
	Qualifying allowance for credit losses	—
	Other adjustments and deductions	—
	Tier 2 capital	—
	Adjusted total capital (deficit)	(63,782)
Statutory Capital	Par value or stated value of outstanding common stock	687
	Par value or stated value of outstanding perpetual, non-cumulative preferred stock	19,130
	Paid-in capital	—
	Retained earnings[2]	(64,245)
	Treasury stock	(7,400)
	Total core capital (deficit)	(51,828)
	General allowance for foreclosure losses[6]	10,247
	Other[7]	—
	Total capital (deficit)	$ (41,581)

[2] Referred to as "Accumulated deficit" on the company's condensed consolidated balance sheet as of June 30, 2023, as this number represents a deficit.
[3] Referred to as "Preferred Stock" on the company's condensed consolidated balance sheet as of June 30, 2023.
[4] Net of associated deferred tax liabilities ("DTLs").
[5] DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances and net of DTLs, and DTAs arising from temporary differences that could not be realized through net operating loss carrybacks, net of related valuation allowances and net of DTLs, that exceed the 10 percent common equity tier 1 deduction threshold.
[6] Includes an allowance for portfolio mortgage losses, an allowance for non-reimbursable foreclosure costs on government claims, and an allowance for liabilities reflected on the balance sheet for estimated foreclosure losses on mortgage-backed securities.
[7] From sources of funds available to absorb losses that the Director of FHFA by regulation determines are appropriate to include in determining total capital.

2. Capital Adequacy

In conjunction with Fannie Mae's management of and adherence to risk appetite limits, capital management is integral to our risk and governance processes. Fannie Mae's ability to manage capital resources under baseline and stress environments supports its capacity to absorb expected and unexpected future losses and to carry out its statutory mission. Our capital adequacy assessment process informs the capital management actions that we may take to align with our regulatory requirements, forecasts, risks, strategic goals, and other business objectives. Additionally, operating under the conservatorship of FHFA affects our business and capital management. For more information on how conservatorship impacts us, refer to "Business—Conservatorship and Treasury Agreements—Conservatorship" and "Risk Factors—GSE and Conservatorship Risk" in our 2022 Form 10-K.

Fannie Mae actively monitors its capital levels as part of the capital adequacy assessment process. Periodic capital adequacy monitoring enables the identification and assessment of actual changes and potential impacts to capital levels and requirements. The objective of this monitoring process is to understand Fannie Mae's current and forecasted capital levels and requirements.

The dates by which we must comply with the requirements of the ERCF are staggered and largely dependent on whether we remain in conservatorship. The minimum capital ratio requirements prescribed by the ERCF for CET1, tier 1, and adjusted total capital are 4.5%, 6.0%, and 8.0%, respectively, of risk-weighted assets ("RWA"). Under the ERCF, our compliance with the minimum regulatory capital requirements will be required by the later of our exit from conservatorship or such later date as may be ordered by FHFA.

For more information on Fannie Mae's approach to assessing its capital adequacy, refer to "MD&A—Liquidity and Capital Management—Capital Management—Capital Requirements" in our Q2 2023 Form 10-Q and "MD&A—Liquidity and Capital Management—Capital Management—Capital Requirements" in our 2022 Form 10-K.

As of June 30, 2023, our capital levels reflect deficits and were significantly below the levels that will be required under the ERCF. For more information about our capital metrics under the ERCF as of June 30, 2023, see "MD&A—Liquidity and Capital Management—Capital Management—Capital Requirements" and "Note 14, Regulatory Capital Requirements" in our Q2 2023 Form 10-Q.

The following exhibit presents the RWA, CET1, tier 1, and adjusted total risk-based capital ratios as of June 30, 2023.

Exhibit 2.1: Capital Metrics under the Enterprise Regulatory Capital Framework[8]

	As of June 30, 2023 (Dollars in billions)
Adjusted total assets	$ 4,562
Risk-weighted assets	1,316

	Amounts			Ratios		
	Available Capital (Deficit)	Minimum Capital Requirement	Total Capital Requirement (including Buffers)	Available Capital (Deficit) Ratio	Minimum Capital Ratio Requirement	Total Capital Requirement Ratio (including Buffers)
Risk-based Capital:						
Total capital (statutory)	$ (42)	$ 105	$ 105	(3.2)%	8.0 %	8.0 %
Common equity tier 1 capital	(83)	59	138	(6.3)	4.5	10.5
Tier 1 capital	(64)	79	158	(4.9)	6.0	12.0
Adjusted total capital	(64)	105	184	(4.9)	8.0	14.0
Leverage capital:						
Core capital (statutory)	(52)	114	114	(1.1)	2.5	2.5
Tier 1 capital	(64)	114	137	(1.4)	2.5	3.0

Risk-Weighted Assets

Under the ERCF, Fannie Mae is required to determine its RWA under both a standardized approach and an advanced approach; however, the advanced approach requirements are not effective until the later of January 1, 2025 or such date provided by an FHFA transition order.[9] Currently, Fannie Mae calculates its RWA using the standardized approach set forth in the ERCF. Under the standardized approach, Fannie Mae's total RWA equals the sum of its credit risk, market risk and operational risk RWA.

Our credit risk exposure exists primarily in connection with our guaranty book of business and our institutional counterparties. Mortgage credit risk arises from the risk of loss resulting from the failure of a borrower to make required mortgage payments.

[8] Ratios are calculated as a percentage of risk-weighted assets for risk-based capital metrics and as a percentage of adjusted total assets for leverage capital metrics.

[9] In March 2023, FHFA published a proposed rule that would further extend the compliance date for an Enterprise's advanced approaches to January 1, 2028. See 88 Fed. Reg. 15306 (Mar. 13, 2023).

Market risk is the risk of loss resulting from changes in the economic environment. Market risk arises from fluctuations in interest rates, exchange rates, and other market rates and prices. Market risk includes interest-rate risk, which is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings or capital. Market risk also includes spread risk, which is the risk from changes in an instrument's value that relate to factors other than changes in interest rates. We can experience losses from changes in the spreads between our mortgage assets and the debt and derivatives we use to hedge our position.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems, or disruptions from external events.

The following exhibit provides a summary of Fannie Mae's RWA as of June 30, 2023.

Exhibit 2.2: RWA Summary

	As of June 30, 2023 (Dollars in millions)	
	Standardized Approach RWA	
Credit risk	$	1,201,037
Market risk		29,313
Operational risk		85,531
Total	$	1,315,881

Fannie Mae uses CRT transactions to transfer a portion of the credit risk on some of the loans in its guaranty book of business to unaffiliated third parties. The credit risk RWA above includes the RWA benefit associated with these CRT transactions. These transactions reduce RWA based on the structure of the transaction. For more information regarding our CRT transactions, refer to "Section 7, Credit Risk Transfers (CRT) and Securitization."

The following exhibit presents credit RWA by risk and exposure type as of June 30, 2023.

Exhibit 2.3: Credit RWA Summary

	As of June 30, 2023 (Dollars in millions)	
	Exposure Amount	RWA Amount
Exposures to the U.S. Government	$ 110,030	$ 1,474
Exposures to supranational entities and multilateral development banks	—	—
Exposures to GSEs	509,417	44,979
Exposures to depository institutions and credit unions, except for equity exposure	28,135	5,627
Exposures to U.S. public sector entities (PSEs)	137	68
Corporate exposures	20	20
Residential mortgage exposures[10]	2,971,115	926,337
a. Single-family	2,576,967	810,027
i. Performing loans	2,451,909	733,657
ii. Non-modified re-performing loans	22,985	10,954
iii. Modified re-performing loans	82,286	40,766
iv. Non-performing loans	19,787	24,650
b. Multifamily	394,148	116,310
i. Fixed-rate exposures	352,341	88,357
ii. Adjustable-rate exposures	41,807	27,953
Past due exposures of more than 90 days past due and nonaccrual	—	—
Other assets[11]	20,471	10,381
Insurance assets	2,971	2,971
Default fund contributions to central counterparties[12]	—	—
Securitization exposures	1,116,145	203,386
Over-the-counter (OTC) derivative contracts	—	—
Cleared transactions	633	89
Unsettled transactions	—	—
Equity exposures	3,087	3,087
Repo-style transactions	34,920	148
Forward agreements	200	19
Commitments	2	—
Other off-balance sheet exposures[13]	2,451	2,451
Total	$ 4,799,734	$ 1,201,037

[10] Reflects only residential mortgage exposures that are not subject to the Credit Risk Transfer Approach.

[11] Includes cash held in insured depository institution or in transit, cash in process of collection, DTAs arising from temporary differences that can be realized through net operating loss carrybacks, DTAs arising from temporary differences that cannot be realized through net operating loss carrybacks (amount in excess of the 10/15% limitations), Master Servicing Assets (“MSAs”) non-deducted portion (amount in excess of the 10/15% limitations) and other assets subject to a 100% risk weight.

[12] Central counterparty (“CCP”) means a counterparty (for example, a clearing house) that facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts.

[13] Includes off-balance sheet guarantees, repurchase agreements, off-balance sheet securities lending, and off-balance sheet securities borrowing.

3. Capital Buffers

The ERCF includes a requirement for Fannie Mae to hold prescribed capital buffers that can be drawn down in periods of financial stress and rebuilt over time as economic conditions improve. Our compliance with these capital buffers will be required upon exit from conservatorship. In general, once we are required to be in compliance with the capital buffers, if Fannie Mae's capital levels fall below the prescribed buffer amounts, we must restrict capital distributions such as stock repurchases and dividends, as well as discretionary bonus payments to executives, until the buffer amounts are restored. The stability capital buffer, stress capital buffer, and countercyclical capital buffer comprise the PCCBA. The PLBA for 2023 was set at 50% of the stability capital buffer. Going forward, the stability capital buffer and PLBA will be updated with an effective date that depends on whether the stability capital buffer increases or decreases relative to the previously calculated value.

For additional information regarding Fannie Mae's capital buffers, refer to "Business—Legislation and Regulation—GSE-Focused Matters—Capital Requirements" in our 2022 Form 10-K.

The following exhibit presents Fannie Mae's PCCBA, PLBA, eligible retained income, and maximum payout ratio as of June 30, 2023.

Exhibit 3.1: PCCBA, PLBA, Eligible Retained Income, and Maximum Payout Ratio

	As of June 30, 2023 (Dollars in millions)
	Amount
Stress capital buffer[14]	$ 34,201
Stability capital buffer[15]	45,128
Countercyclical capital buffer[16]	—
Prescribed capital conservation buffer amount (PCCBA)	**79,329**
Prescribed leverage buffer amount (PLBA)	22,564
Eligible retained income[17]	$ 12,287
Maximum payout ratio[18]	0 percent

[14] The stress capital buffer is calculated by multiplying prescribed factors by adjusted total assets as of the last day of the previous calendar quarter.

[15] The stability capital buffer is based on our share of mortgage debt outstanding.

[16] The countercyclical capital buffer is calculated by multiplying prescribed factors by adjusted total assets as of the last day of the previous calendar quarter.

[17] Eligible retained income is the greater of: (1) net income for the four preceding calendar quarters, net of distributions and associated tax effects not already reflected in net income and (2) average of our net income over the preceding four quarters.

[18] While it is not applicable until the date of termination of our conservatorship, our maximum payout ratio represents the percentage of eligible retained income that we are permitted to pay out in the form of distributions or discretionary bonus payments under the ERCF. The maximum payout ratio for a given quarter is the lowest of the payout ratios determined by our capital conservation buffer and our leverage buffer.

4. Credit Risk: General Disclosures

Credit risk is the risk of loss arising from another party's failure to meet its contractual obligations. For financial securities or instruments, credit risk is the risk of not receiving principal, interest, or other financial obligation on a timely basis. Our credit risk exposure exists primarily in connection with our guaranty book of business and our institutional counterparties.

The components of our credit risk management program are implemented by our first line-of-defense risk managers, procedures and controls that identify, manage and mitigate credit risk. We have business Credit Risk Officers in our ERM Division acting in a second-line function. For more information on credit risk management, credit risk-related policies, exposures, and derivatives see the following referenced sections in our Q2 2023 Form 10-Q and our 2022 Form 10-K.

Mortgage Credit Risk – "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management" and "Note 10, Concentrations of Credit Risk" in our Q2 2023 Form 10-Q. Additionally, see "Business—Managing Mortgage Credit Risk," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," "MD&A—Risk Management—Mortgage Credit Risk Management Overview," "MD&A—Risk Management—Climate and Natural Disaster Risk Management," and "Note 13, Concentrations of Credit Risk" in our 2022 Form 10-K.

Policy for determining past due[19] or delinquency status – "Note 3, Mortgage Loans" in our Q2 2023 Form 10-Q and "Note 1, Summary of Significant Accounting Policies—Mortgage Loans—Nonaccrual Loans" in our 2022 Form 10-K.

Accounting Policies – "Note 1, Summary of Significant Accounting Policies" in our Q2 2023 Form 10-Q and "Note 1, Summary of Significant Accounting Policies" in our 2022 Form 10-K.

Credit Risk Management – "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," and "Note 10, Concentrations of Credit Risk" in our Q2 2023 Form 10-Q. Additionally, see "Business—Managing Mortgage Credit Risk," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," "MD&A—Risk Management—Mortgage Credit Risk Management Overview," "MD&A—Risk Management—Climate and Natural Disaster Risk Management," "MD&A—Risk Management—Institutional Counterparty Credit Risk Management," and "Note 13, Concentrations of Credit Risk" in our 2022 Form 10-K.

Loan Credit Risk Exposures – "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," "Note 10, Concentrations of Credit Risk," and "Note 3, Mortgage Loans" in our Q2 2023 Form 10-Q.

Off-Balance Sheet Exposures – "MD&A—Liquidity and Capital Management—Liquidity Management—Off-Balance Sheet Arrangements" and "Note 6, Financial Guarantees" in our Q2 2023 Form 10-Q.

Other Non-Derivative Off-Balance Sheet Exposures – "MD&A—Liquidity and Capital Management—Liquidity Management—Off-Balance Sheet Arrangements" and "Note 6, Financial Guarantees" in our Q2 2023 Form 10-Q.

Debt Securities and OTC Derivatives – "MD&A—Liquidity and Capital Management," "Note 5, Investments in Securities," "Note 8, Derivative Instruments," and "Note 11, Netting Arrangements" in our Q2 2023 Form 10-Q.

[19] Loans that are 30 days or more past due, or in the foreclosure process, are considered "past due."

Geographic Concentration of Loans – "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and "Note 10, Concentrations of Credit Risk" in our Q2 2023 Form 10-Q.

Major Types of Counterparty Exposures – "Note 10, Concentrations of Credit Risk" in our Q2 2023 Form 10-Q and "MD&A—Risk Management—Institutional Counterparty Credit Risk Management" in our 2022 Form 10-K.

The following exhibit presents a summary of single-family and multifamily loans and the associated unpaid principal balance ("UPB") and allowance as of June 30, 2023.

Exhibit 4.1: Single-Family and Multifamily Loans and Associated Allowance[20]

	As of June 30, 2023 (Dollars in millions)			
	Single-Family		Multifamily	
	UPB Amount	Adjusted Allowance for Credit Losses[21]	UPB Amount	Adjusted Allowance for Credit Losses[21]
Current	$3,582,360	$ 7,389	$ 443,246	$ 1,867
30 to 89 days delinquent	33,879	472	655	119
90+ days delinquent and on nonaccrual	14,717	208	953	4 [22]
90+ days delinquent and still accruing	4,184	177	337	2
Other[23]	—	—	—	—
Total	$3,635,140	$ 8,246 [24]	$ 445,191	$ 1,992

For the six months ended June 30, 2023, gross write-offs were $99 million for single-family and $254 million for multifamily.

[20] Includes held-for-investment mortgage loans, excluding loans for which we have elected the fair value option.
[21] Adjusted allowance for credit losses refers to valuation allowances that have been established through a charge against earnings or retained earnings for expected credit losses on financial assets as determined in accordance with U.S. GAAP.
[22] For loans charged-off prior to foreclosure, the allowance may include an estimate of expected recoveries, in accordance with U.S. GAAP, which may result in a small or negative allowance for delinquent loans.
[23] Adjustments to modeled results.
[24] Total includes allowance related to loan UPB plus $256 million related to accrued interest receivable and advance receivables for pre-foreclosure costs.

The following exhibit presents a geographic distribution of single-family and multifamily past due loans and the associated allowances for the respective geographic regions, as of June 30, 2023.

Exhibit 4.2: Geographic Distribution of Past Due Loans and Associated Allowances

	As of June 30, 2023 (Dollars in millions)			
	Single-Family		Multifamily	
Geographic Region[25]	UPB Amount of Past Due Loans	Allowances for Past Due Loans	UPB Amount of Past Due Loans	Allowances for Past Due Loans
Midwest	$ 6,923	$ 124	$ 789	$ 111
Northeast	10,092	135	399	6
Southeast	12,494	201	253	3
Southwest	10,548	198	386	4
West	12,723	199	118	1
Other[26]	—	—	—	—
Total	$ 52,780	$ 857	$ 1,945	$ 125

Adjusted Allowance for Credit Losses – Our adjusted allowance for credit losses consists of our allowance for loan losses, accrued interest receivable losses, and reserves on advance receivables for pre-foreclosure costs. For a reconciliation of changes in the allowance for loan losses, see “Note 4 – Allowance for Loan Losses” in our Q2 2023 Form 10-Q.

[25] Midwest consists of IL, IN, IA, MI, MN, NE, ND, OH, SD, and WI. Northeast consists of CT, DE, ME, MA, NH, NJ, NY, PA, PR, RI, VT, and VI. Southeast consists of AL, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA, and WV. Southwest consists of AZ, AR, CO, KS, LA, MO, NM, OK, TX, and UT. West consists of AK, CA, GU, HI, ID, MT, NV, OR, WA, and WY.

[26] Portion of allowance that is not geography-specific.

The following exhibit presents the remaining contractual maturity of single-family and multifamily mortgage loans, as of June 30, 2023.

Exhibit 4.3: Remaining Contractual Maturity of Mortgage Loans[27]

	As of June 30, 2023 (Dollars in millions)				
	Due in 1 Year or Less	Due after 1 Year through 5 Years	Due after 5 Years through 15 Years	Due after 15 Years	Total
Single-family fixed rate	$ 125,953	$ 533,332	$ 1,348,156	$ 1,594,163	$ 3,601,604
Single-family adjustable-rate	7,974	4,539	12,544	12,755	37,812
Multifamily	9,360	120,112	310,240	6,302	446,014
Total unpaid principal balance of outstanding mortgage loans	$ 143,287	$ 657,983	$ 1,670,940	$ 1,613,220	$ 4,085,430

[27] Consists of the contractual unpaid principal balance for held-for-investment mortgage loans, held-for-sale mortgage loans, and loans for which we have elected the fair value option.

5. Counterparty Credit Risk

Institutional counterparty credit risk is the risk of loss resulting from the failure of an institutional counterparty to fulfill its contractual obligations to us. Our primary exposure to institutional counterparty credit risk exists with our:

- credit guarantors, including mortgage insurers, reinsurers and multifamily lenders with risk sharing arrangements;
- mortgage sellers and servicers; and
- financial institutions that issue investments included in our other investments portfolio.

We also have counterparty exposure to: derivatives counterparties; custodial depository institutions; mortgage originators, investors and dealers; debt security dealers; central counterparty clearing institutions; and document custodians.

We routinely enter into a high volume of transactions with counterparties in the financial services industry resulting in a significant credit concentration with respect to this industry. We also may have multiple exposures to particular counterparties, as many of our institutional counterparties perform several types of services for us. Accordingly, if one of these counterparties were to become insolvent or otherwise default on its obligations to us, it could harm our business and financial results in a variety of ways. Our overall objective in managing institutional counterparty credit risk is to maintain individual and portfolio-level counterparty exposures within acceptable ranges based on our risk-based rating system. We seek to achieve this objective through the following:

- establishment and observance of counterparty eligibility standards appropriate to each exposure type and level;
- establishment of risk limits;
- requiring collateralization of exposures where appropriate; and
- exposure monitoring and management.

Counterparty Credit Limits – For a discussion of how we establish risk limits for counterparty credit exposures, refer to "MD&A—Risk Management—Institutional Counterparty Credit Risk Management" in our 2022 Form 10-K. Fannie Mae also has established processes for the management, identification, and valuation of collateral received from or posted by counterparties.

Principal types of collateral taken include cash and Treasury securities (Treasury Bills less than one year, Treasury Notes of varying maturities and floating-rate Treasury bonds), as well as agency mortgage-backed securities, and Ginnie Mae multi-class securities.

The following exhibit presents the gross positive fair values and collateral values of derivative contracts and securities financing transactions as of June 30, 2023.

Exhibit 5.1: Derivative Contracts and Securities Financing Transactions

	As of June 30, 2023 (Dollars in millions)	
Activity Type	**Gross Positive Fair Value**	**Collateral Value**
Risk management derivatives	$ 46	$ 26
Swaps	79	
Swaptions	185	
Netting adjustment	(218)	
Mortgage commitment derivatives	52	—
Credit enhancement derivatives[28]	47	—
Securities financing transactions[29]	33,050	33,050
Total	$ 33,195	$ 33,076

Fannie Mae's collateral requirements vary based on the provisions present within individual agreements. Under many of our International Swaps and Derivatives Association ("ISDA") agreements, in the event of a counterparty credit downgrade the posted collateral is subject to an additional collateral haircut. Additionally, if the counterparty credit rating is downgraded to a certain level, the party that has not been downgraded maintains the ability to terminate all trades.

We account for certain forms of credit risk transfer transactions as derivatives. For more information on our derivative transactions, refer to "Note 8, Derivative Instruments" in our Q2 2023 Form 10-Q.

[28] Represents fair value of derivatives associated with risk sharing programs.

[29] Represents reverse repurchase agreements, excluding reverse repurchase agreements classified as cash equivalents.

6. Credit Risk Mitigation

We enter into various arrangements to mitigate credit risk. In connection with some of these arrangements, we pledge and accept collateral to reduce potential credit risk exposure. For a discussion of our credit risk mitigation practices regarding collateral valuation and the types of collateral engaged, see "Note 1, Summary of Significant Accounting Policies—Collateral" in our 2022 Form 10-K.

We rely on our institutional counterparties to provide services and credit enhancements that are critical to our business. For more information on the guarantors and other providers of credit risk mitigation that we engage, see "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," and "Note 10, Concentrations of Credit Risk" in our Q2 2023 Form 10-Q and "MD&A—Risk Management—Institutional Counterparty Credit Risk Management," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," and "Note 13, Concentrations of Credit Risk" in our 2022 Form 10-K.

Our charter generally requires credit enhancement on conventional single-family mortgage loans we acquire with a loan-to-value ratio over 80%. This requirement is usually met by the provision of private mortgage insurance from one of six mortgage insurance providers. Eligibility standards for mortgage insurers are established under private mortgage insurer eligibility requirements and exposure concentrations managed via counterparty limit monitoring. The financial ability and willingness of our approved mortgage insurers to pay claims is an important determinant of our overall credit risk exposure.

CRT transactions provide another form of credit risk mitigation. We manage the concentration, market, and counterparty risks associated with CRT transactions through back-end CRT deal structures, including Connecticut Avenue Securities® ("CAS") issuances and reinsurance transactions, as well as counterparty risk requirements and collateral requirements. For additional information on counterparty risk and collateral refer to "Section 5, Counterparty Credit Risk."

Collateral levels for repurchase agreement transactions are consistent with the ERCF requirements and are detailed in the exhibit below as of June 30, 2023.

Exhibit 6.1: Eligible Financial Collateral Coverage[30]

	As of June 30, 2023 (Dollars in millions)	
	Enterprise-level[31]	
Total exposure covered by eligible financial collateral	$	531,542
Collateral pre-haircut		37,538
Collateral post-haircut		34,894
Total RWA associated with exposure	$	102,844

With the exception of mortgage insurance, CRT exposures, and the guarantees we receive from affiliates of certain derivative counterparties, Fannie Mae does not have any other exposures whose credit risk is mitigated by eligible guarantees or credit derivatives obtained from external third parties. Fannie Mae's exposure to institutional counterparty credit risk is discussed in "Section 5, Counterparty Credit Risk" of this report.

[30] Exposures based on definitions under ERCF. Includes collateral from reverse repurchase transactions and certain credit risk transfer transactions.

[31] Exhibit excludes multifamily loans for which lenders have posted $1,258 million collateral pre-haircut and $1,227 million collateral post-haircut.

7. Credit Risk Transfers and Securitization

One of the key components of our credit risk management strategy is the transfer of mortgage credit risk to third parties. Credit risk transfer transactions, including CAS issuances, generally transfer a portion of credit losses on a reference pool of mortgage loans to investors. We also use Credit Insurance Risk Transfer™ ("CIRT™") deals to transfer a portion of the credit risk on a pool of loans to an insurance provider that retains the risk, or to an insurance provider that simultaneously cedes all of its risk to one or more reinsurers.

For more information on Fannie Mae's credit risk management strategy regarding CRTs, see "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk," and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk" in our Q2 2023 Form 10-Q. Additionally see "Business—Managing Mortgage Credit Risk—Sharing and Selling Credit Risk," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk," and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk" in our 2022 Form 10-K.

Fannie Mae's issuance of CRT securities does not create any new mortgage credit exposure for Fannie Mae, since Fannie Mae already guarantees the loans in the underlying reference pools. CRT transactions are designed to reduce our mortgage credit risk by transferring a portion of our single-family and multifamily mortgage credit risk on reference pools of mortgage loans to the private market. CIRT transactions do give rise to incremental counterparty credit risk, which reduces the capital relief provided by the transactions, because Fannie Mae is subject to the risk that the CIRT counterparties (insurers and reinsurers) may not meet their payment obligations to us following a credit loss event; CAS transactions, however, do not present a similar risk as the CAS trust receives the proceeds upon issuance that will reimburse us for certain credit events on the related loans. All CRT transactions have model, pricing, and structuring risks given their inherent complexity.

The metrics used to measure the interest-rate and spread securitization exposures of CRT transactions are generated using internal models. Our internal models, consistent with standard practice for models used in our industry, require numerous assumptions. There are inherent limitations in any methodology used to estimate the exposure to changes in interest rates for transactions where CRT is applied. The reliability of our prepayment estimates and interest-rate risk metrics depends on the availability and quality of historical data for each of the types of securities in our net portfolio. When market conditions change rapidly and dramatically, the assumptions of our models may no longer accurately capture or reflect the changing conditions. On a regular basis, management makes judgments about the appropriateness of the risk assessments indicated by the models. For more information on our models, see "MD&A—Risk Management—Operational Risk Management—Model Risk Management" and "Risk Factors—Operational Risk" in our 2022 Form 10-K.

For a discussion of how Fannie Mae mitigates mortgage credit risk retained through securitization exposures, see "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management" in our Q2 2023 Form 10-Q. Additionally, see "Business—Managing Mortgage Credit Risk," "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management," "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management," and "MD&A—Risk Management—Institutional Counterparty Credit Risk Management" in our 2022 Form 10-K.

Special Purpose Entities ("SPEs") used to Securitize Third-Party Exposures – For information on the type of securitization SPEs that Fannie Mae, as sponsor, uses to securitize third-party exposures, see "*Note 2, Consolidations and Transfers of Financial Assets"* in our Q2 2023 Form 10-Q and "*Note 2, Consolidations and Transfers of Financial Assets"* in our 2022 Form 10-K.

Fannie Mae had no affiliated entities in CRT securitization transactions as of June 30, 2023.

CRT Processes – For information on Fannie Mae's CRT processes, see "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk" in our Q2 2023 Form 10-Q and "MD&A—Single-Family Business—Single-Family Mortgage Credit Risk Management—Single-Family Credit Enhancement and Transfer of Mortgage Credit Risk" and "MD&A—Multifamily Business—Multifamily Mortgage Credit Risk Management—Transfer of Multifamily Mortgage Credit Risk" in our 2022 Form 10-K. In addition, for information regarding the methods and key assumptions applied in valuing retained or purchased interests, treatment of synthetic securitizations, and recognizing liabilities on the balance sheet for arrangements that could require the company to provide financial support for securitized assets, see "Note 6, Financial Guarantees" in our Q2 2023 Form 10-Q and "Note 1, Summary of Significant Accounting Policies—Investments in Securities," "Note 2, Consolidations and Transfers of Financial Assets—Types of VIEs —SPVs Associated with our Credit Risk Transfer Programs," and "Note 6, Financial Guarantees" in our 2022 Form 10-K.

Fannie Mae's CRTs are off-balance sheet exposures. As the reference pool loans remain on Fannie Mae's balance sheet, there is no sale associated with the issuance of the accompanying securities (i.e., for CAS) or reinsurance (CIRT deals). The assessment and valuation of a CRT transaction does not result in the recognition of retained or purchased interest nor any gain-on-sale. We do not have any credit-enhancing interest-only strip CRT-related exposures assigned 1,250% risk weights. Additionally, the process for valuing exposures intended to be securitized through CRT transactions is the same as the process for valuing other exposures.

For private-label securitization and other non-CRT securitization exposures, we utilize the Simplified Supervisory Formula Approach ("SSFA") for calculating RWA. For CRT exposures, we utilize the Credit Risk Transfer Approach ("CRTA") for calculating RWA.

We perform regular evaluations and assessments of our CRT objectives, risks, processes, and policies.

The following exhibit sets forth our CRT exposures, their related exposure amounts, retained and acquired breakout, and past due and recognized loss amounts, as of June 30, 2023.

Exhibit 7.1: CRT and Securitizations by Exposure Types

	As of June 30, 2023 (Dollars in millions)						
	Total Exposure	**On-Balance Sheet Exposure**	**Off-Balance Sheet Exposure**	**Retained**	**Acquired**	**Past Due Amount**	**Loss Recognized**
Traditional							
Single-family securitization	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Multifamily securitization	—	—	—	—	—	—	—
Private-label securities	549	549	—	378	171	128	25
Other	—	—	—	—	—	—	—
Synthetic / Reinsurance CRT							
Single-family CRT[32]	1,055,434	1,055,434	—	1,055,434	—	8,631	554
Multifamily CRT	60,162	60,162	—	60,162	—	383	15
Total CRT and securitization exposure	$1,116,145	$1,116,145	$ —	$1,115,974	$ 171	$ 9,142	$ 594

[32] The exposure amounts correspond to CRT deals for which we elected the Credit Risk Transfer Approach (CRTA) capital treatment under ERCF. The past due amounts and loss recognized correspond to total active CRT deals and include $5,463 million and $85 million, respectively, for the deals subject to CRTA.

The following exhibit provides information on our CRT exposures, their related exposure amounts, and the associated RWA, as of June 30, 2023.

Exhibit 7.2: CRT and Securitizations by Capital Treatment

	As of June 30, 2023 (Dollars in millions)				
			RWA by Calculation Methodology		
	Total Exposure	RWA	SSFA[33]	CRTA[34]	1250% Risk Weighted
Traditional					
Single-family securitization	$ —	$ —	$ —	$ —	$ —
Multifamily securitization	—	—	—	—	—
Private-label securities	549	6,866	—	—	6,866
Other	—	—	—	—	—
Synthetic / Reinsurance CRT					
Single-family CRT	1,055,434	185,673	—	185,673	—
Multifamily CRT	60,162	10,848	—	10,848	—
Total CRT and securitization exposure	$ 1,116,145	$ 203,387	$ —	$ 196,521	$ 6,866

[33] Refers to the Simplified Supervisory Formula Approach ("SSFA"), which is a calculation methodology, defined in the ERCF, used to determine the risk-weight for a securitization exposure.

[34] Refers to the credit risk transfer approach ("CRTA"), which is a calculation methodology, defined in the ERCF, used to determine the risk-weight for a retained CRT exposure.

The following exhibit provides information on our securitization exposures by risk-weight bands, as of June 30, 2023.

Exhibit 7.3: CRT, Securitization and Resecuritization by Credit Risk Bands

	As of June 30, 2023 (Dollars in millions)			
	Total Exposure	**SSFA Risk-Weighted Assets**[35]	**CRTA Risk-Weighted Assets**	**Capital Impact of RWA**[36]
Securitization / Reinsurance CRT				
Zero to 20%	$ 816,272	$ —	$ 98,755	$ 4,444
21% to 50%	245,210	—	70,280	3,163
51% to 100%	54,114	—	27,485	1,237
Over 100%	431	5,388	—	242
Resecuritization				
Zero to 20%	—	—	—	—
21% to 50%	—	—	—	—
51% to 100%	—	—	—	—
Over 100%	118	1,478	—	67
Total CRT and securitization/ resecuritization exposure	$ 1,116,145	$ 6,866	$ 196,520	$ 9,153

[35] Includes exposures risk-weighted at 1,250%.
[36] Required CET1 capital amount associated with the exposure.

The following exhibit provides information on our exposures intended to be securitized, exposures securitized year-to-date, and the associated gain/loss on sale as of June 30, 2023.

Exhibit 7.4: CRT and Securitization Pipeline & Activity

	As of June 30, 2023 (Dollars in millions)		
	Carrying Value of Assets Pending Securitization[37]	Assets Securitized YTD	Recognized Gain/ Loss on Sale YTD
Traditional			
Single-family securitization	$ —	$ —	$ —
Multifamily securitization	—	—	—
Private-label securities	—	—	—
Other	—	—	—
Synthetic / Reinsurance CRT			
Single-family CRT	30,793	—	—
Multifamily CRT	—	6,903	—
Total CRT and securitization exposure	$ 30,793	$ 6,903	$ —

As the underlying reference pools for CRT transactions only consist of loans (i.e., they do not include MBS trusts), there are no retained or purchased CRT resecuritization exposures on Fannie Mae's balance sheet.

[37] Represents the unpaid principal balance of loans we intend to include in reference pools for CRT issuances in the subsequent fiscal quarter as of June 30, 2023.

8. Equities

We account for securities we have acquired as either trading or available-for-sale ("AFS"). We measure trading securities at fair value in our consolidated balance sheets with unrealized and realized gains and losses included as a component of "Fair value gains (losses), net" in our consolidated statements of operations and comprehensive income.

We adhere to U.S. GAAP to guide our determination of each pricing approach and primarily use independent pricing sources. Vendor pricing is generally our preferred method for pricing assets and liabilities, which enables us to leverage and validate pricing information from multiple independent sources. To corroborate results, we subject vendor prices to stringent testing by pricing teams. When vendor pricing is not available or appropriate, we use either an internal method based on market observable data or pricing models. Models used for financial reporting purposes must be approved by our independent model risk management team within our Enterprise Risk Management division prior to use. Additionally, our internal pricing teams conduct regular model assessments to determine whether models are still reasonable and appropriate for their intended business purposes.

For information regarding the types/nature of our equity investments, the carrying and fair value of the investments, refer to the "*Condensed Consolidated Balance Sheets"* and the "*Condensed Consolidated Statements of Operations and Comprehensive Income"* in our Q2 2023 Form 10-Q.

The following exhibit provides information on unrealized gains and losses for publicly-traded and non-publicly traded equity investments as of June 30, 2023.

Exhibit 8.1: Equity Investments

	As of June 30, 2023 (Dollars in millions)		
	Public	**Non-Public**[38]	**Total**
Carrying value	$ 3	$ 3,084	$ 3,087
Unrealized gains/losses	—	—	—
Unrealized gains/losses not recognized on the balance sheet or through earnings	—	—	—
Fair value	3	3,084	3,087
Unrealized gains/losses included in risk-based capital	—	—	—
YTD Cumulative realized gains/losses from sales and liquidation	—	—	—

[38] Includes low-income housing tax credits, community investments and other partnership investments; for these investments, carrying value approximates fair value.

The following exhibit provides information on the capital treatment of equity investments as of June 30, 2023.

Exhibit 8.2: Capital Treatment of Equity Investments

	As of June 30, 2023 (Dollars in millions)		
Risk Weight	**Exposure**[39]	**RWA**	**Capital Impact of RWA**[40]
0%	$ —	$ —	$ —
20%	—	—	—
100%	3,087	3,087	139
300%	—	—	—
400%	—	—	—
600%	—	—	—
Total equity investments	$ 3,087	$ 3,087	$ 139

We record AFS securities at fair value with unrealized gains and losses, recorded net of tax, as a component of "Other comprehensive income (loss)" and we recognize realized gains and losses from the sale of AFS securities in "Investment gains (losses), net" in our consolidated statements of operations and comprehensive income. We define the amortized cost basis of our AFS securities as unpaid principal balance, net of unamortized premiums and discounts, and other cost basis adjustments. For a breakout of the total unrealized gains and losses recognized on our consolidated balance sheet but not through earnings, see "Note 5, Investments in Securities—Available-for-Sale Securities" in our *Q2 2023* Form 10-Q.

We did not have any equity investments subject to supervisory transition during the quarter ended June 30, 2023.

[39] Represents net exposure of equity investments.
[40] Required CET1 capital amount associated with the exposure.

9. Interest Rate Risk for Non-Trading Activities

We are subject to interest-rate risk, which is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings or capital. Our exposure to interest-rate risk primarily arises from two sources: (1) our "net portfolio," which we define as: our retained mortgage portfolio assets, other investments portfolio, outstanding debt of Fannie Mae used to fund the retained mortgage portfolio assets and other investments portfolio, mortgage commitments and risk management derivatives; and (2) our consolidated MBS trusts.

For general derivatives activities, we use a wide range of Futures Commission Merchants and receive and pledge collateral to address market concentration and counterparty risk management requirements. These risks include counterparty default risk and market risks.

For more information on the nature of interest rate risk for non-trading activities, and the key assumptions used, see "MD&A—Key Market Economic Indicators—How Interest Rates Can Affect Our Financial Results" and "MD&A—Risk Management—Market Risk Management, including Interest-Rate Risk Management" in our Q2 2023 Form 10-Q and "MD&A—Key Market Economic Indicators—How Interest Rates Can Affect Our Financial Results" and "MD&A—Risk Management—Market Risk Management, including Interest-Rate Risk Management" in our 2022 Form 10-K.

For information on Fannie Mae's market value sensitivity based on interest-rate shocks, see "MD&A—Risk Management—Market Risk Management, including Interest-Rate Risk Management—Measurement of Interest-Rate Risk" in our Q2 2023 Form 10-Q.

10. Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems or disruptions from external events. For information on the operational risks we face and how we identify, monitor, and manage these risks (including cybersecurity risks), see “Risk Factors—Operational Risk” and “MD&A—Risk Management—Operational Risk Management” in our 2022 Form 10-K.

As previously discussed, Fannie Mae calculates its RWA using the standardized approach, whereby operational risk RWA is calculated by multiplying adjusted total assets by 15 basis points, and then multiplying by 12.5.

For information on how insurance is used to mitigate operational risk, see “Risk Factors—Operational Risk” and “MD&A—Risk Management—Operational Risk Management” in our 2022 Form 10-K.

11. Tier 1 Leverage Ratio

The ERCF requires Fannie Mae to maintain tier 1 capital in excess of the amount required under its tier 1 leverage ratio[41] requirement by at least the amount of its PLBA. The leverage ratio requirement measures the amount of tier 1 capital relative to Fannie Mae's adjusted total assets. The following exhibit provides a view of Fannie Mae's adjusted total assets and tier 1 leverage as of June 30, 2023.

[41] Tier 1 leverage ratio is the capital metric calculated as a result of dividing tier 1 capital by adjusted total assets.

Exhibit 11.1: Tier 1 Leverage Ratio

		As of June 30, 2023 (Dollars in millions)
Part 1: Summary comparison of accounting assets and adjusted total assets		
1 Total consolidated assets as reported in published financial statements	$	4,323,710
2 Adjustment for fiduciary assets recognized on balance sheet but excluded from total leverage exposure		—
3 Adjustment for derivative exposures		689
4 Adjustment for repo-style transactions		1,870
5 Adjustment for off-balance sheet exposures (that is, conversion to credit equivalent amounts of off-balance sheet exposures)		237,120
6 Other adjustments		(1,743)
7 Adjusted total assets (sum of lines 1 to 6)	$	4,561,646
Part 2: Tier 1 leverage ratio		
On-balance sheet exposures		
1 On-balance sheet assets (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions and including allowance for credit losses)	$	4,300,763
2 LESS: Amounts deducted from tier 1 capital		11,990
3 Total on-balance sheet exposures (excluding on-balance sheet assets for repo-style transactions and derivative exposures, but including cash collateral received in derivative transactions) (sum of lines 1 and 2)	$	4,288,773
Derivative exposures		
4 Current exposure for derivative exposures (that is, net of cash variation margin)	$	(3,935)
5 Add-on amounts for potential future exposure (PFE) for derivative exposures		689
6 Gross-up for cash collateral posted if deducted from the on-balance sheet assets, except for cash variation margin		4,033
7 LESS: Deductions of receivable assets for cash variation margin posted in derivative transactions, if included in on-balance sheet assets		—
8 LESS: Exempted CCP leg of client-cleared transactions		—
9 Effective notional principal amount of sold credit protection		46
10 LESS: Effective notional principal amount offsets and PFE adjustments for sold credit protection		—
11 Total derivative exposures (sum of lines 4 to 10)	$	833
Repo-style transactions		
12 On-balance sheet assets for repo-style transactions, except include the gross value of receivables for reverse repurchase transactions. Exclude from this item the value of securities received in a security-for-security repo-style transaction where the securities lender has not sold or re-hypothecated the securities received. Include in this item the value of securities that qualified for sales treatment that must be reversed	$	33,050
13 LESS: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements		—
14 Counterparty credit risk for all repo-style transactions		1,870
15 Exposure for repo-style transactions where a banking organization acts as an agent		—
16 Total exposures for repo-style transactions (sum of lines 12 to 15)	$	34,920
Other off-balance sheet exposures		
17 Off-balance sheet exposures at gross notional amounts	$	237,205
18 LESS: Adjustments for conversion to credit equivalent amounts and off-balance sheet exposures held in retained portfolio		85
19 Off-balance sheet exposures (sum of lines 17 and 18)	$	237,120
Capital and adjusted total assets		
20 Tier 1 capital (deficit)		(63,782)
21 Adjusted total assets (sum of lines 3, 11, 16, and 19)	$	4,561,646
Tier 1 leverage ratio		
22 Tier 1 leverage ratio (in percent)		(1.4)%

12. Market Risk

We are subject to market risk, which includes interest-rate risk and spread risk. These risks arise primarily from our mortgage asset investments. Interest-rate risk is the risk that movements in interest rates will adversely affect the value of our assets or liabilities or our future earnings or capital. Spread risk is the risk from changes in an instrument's value that relate to factors other than changes in interest rates. We can experience losses from changes in the spreads between our mortgage assets and the debt and derivatives we use to hedge our position.

We monitor current market conditions, including the interest-rate environment, to assess the impact of these conditions on individual positions and our interest-rate risk profile. In addition to qualitative factors, we use various quantitative risk metrics in determining the appropriate composition of our retained mortgage portfolio, our investments in non-mortgage securities and relative mix of debt and derivatives positions to remain within pre-defined risk tolerance levels that we consider acceptable. We regularly disclose two interest-rate risk metrics that estimate our interest-rate exposure: (1) fair value sensitivity to changes in interest-rate levels and the slope of the yield curve and (2) duration gap.

We calculate market risk RWA under the standardized approach in the ERCF. We use one of the following three approaches depending principally on instrument type: (1) a single-point approach used for instruments primarily with credit risk only; (2) a spread duration approach for instruments with additional spread and prepayment risk; or (3) an internal models approach for instruments with spread risk not included in the previous two categories, such as commercial mortgage-backed securities ("CMBS"), single-family agency securities, performing loans not securitized, and Ginnie Mae mortgage-backed securities.

The following exhibit provides the covered position exposure amounts and RWA for each of the three types of ERCF standardized approaches as of June 30, 2023.

The population of covered positions includes those with spread risk exposure regardless of intent or accounting treatment.

Exhibit 12.1: Covered Position Exposure Amounts and RWA

	As of June 30, 2023 (Dollars in millions)	
	Exposure Amount	**Standardized Market Risk RWA**
Single Point Approach		
Mortgage exposures that are not secured by an MBS guaranteed by the Enterprise		
Non-performing loans	$ 7,993	$ 4,746
Re-performing loans	19,554	11,610
Reverse mortgage loans	5,032	1,006
Reverse mortgage securities	3,587	1,838
Spread Duration Approach		
Multifamily mortgage exposures	1,666	48
Private-label securities	549	283
MBS (non-interest only) guaranteed by an Enterprise or by Ginnie Mae	3,966	2,626
Internal Estimates		
Covered Positions that are not subject to the Single Point or Spread Duration Approaches		
Single-family MBS guaranteed by the Enterprise	(7,912)	(2,950)
Single-family MBS guaranteed by Ginnie Mae	(1)	(3)
Single-family MBS guaranteed by the other Enterprise[42]	19	10
Multifamily interest-only securities guaranteed by an Enterprise or Ginnie Mae	338	251
Commercial MBS	—	—
CRT exposures	—	—
Other securitization exposures	145	43
Performing loans, not securitized	16,248	8,849
Other trading assets and liabilities	609	956
Total	$ 51,793	$ 29,313

On- and Off-Balance Sheet Exposure Types – For additional information on our aggregate amount of on-balance sheet and off-balance sheet securitization positions by exposure type, refer to "Note 2, Consolidations and Transfers of Financial Assets—Unconsolidated VIEs" and "Note 6, Financial Guarantees" in our Q2 2023 Form 10-Q.

Composition of Material Covered Positions – For information on material changes to significant covered positions, refer to "Note 1, Summary of Significant Accounting Policies—Single-Class Resecuritization Trusts" and "Note 1, Summary of Significant Accounting Policies—Multi-Class Resecuritization Trusts" in our 2022 Form 10-K.

[42] "Other Enterprise" refers to Freddie Mac.

Fannie Mae's valuation framework incorporates key elements for governance, methodology, valuation adjustments, and model validation.

Valuation governance provides: (1) an overview of governance bodies and committees; (2) an outline of the structure emphasizing independence of the valuation review process; (3) detail on governance processes and financial instruments covered; and (4) the end-to-end valuation process, including the control framework and roles and responsibilities for first and second lines of defense in the valuation processes. For more information on Fannie Mae's valuation techniques, refer to "Note 12, Fair Value— Fair Value Measurement" in our Q2 2023 Form 10-Q and "Note 15, Fair Value— Fair Value Measurement" in our 2022 Form 10-K.

The internal model approach is intended to capture at a granular level the risk associated with changes in the discounting spread used to value the future cash flows of the assets in our retained mortgage portfolio. The future cash flows are projected by models that reflect the expected prepayment behavior associated with the different characteristics of the assets (amortization terms, vintages, mortgage rates, etc.) in our current economic outlook. However, internal models do not incorporate basis risk[43] across positions.

Consistent with our model risk management framework, regulatory expectations and industry practice, an independent second line model risk function subjects our material market risk models to rigorous validation testing for conceptual soundness and fitness for use.

The calculation of market risk capital for our net portfolio quantifies the amount of market value losses that its assets could experience under spread widening consistent with the size of the spread movements observed during the recession of 2008, assuming that other risk factors such as benchmark interest rates, mortgage rates, and home prices remain the same as in the current economic outlook.

Per our model risk management framework and policies, relevant market risk models using internal-derived models are subject to model performance management to ensure conformance between model estimates and actual portfolio value changes.

The metrics used to measure our interest-rate exposure are generated using internal models. Our internal models, consistent with standard practice for models used in our industry, require numerous assumptions. There are inherent limitations in any methodology used to estimate the exposure to changes in market interest rates. The reliability of our prepayment estimates and interest-rate risk metrics depends on the availability and quality of historical data for each of the types of securities in our net portfolio. When market conditions change rapidly and dramatically, the assumptions of our models may no longer accurately capture or reflect the changing conditions. On a regular basis, management makes judgments about the appropriateness of the risk assessments indicated by the models. For more information on our models, see "MD&A—Risk Management—Operational Risk Management—Model Risk Management" and "Risk Factors—Operational Risk" in our 2022 Form 10-K.

The metrics used to measure the interest-rate and spread exposure of re-securitization positions are generated using internal models in combination with external models that project how the securitization cash flows are allocated to the re-securitization positions.

[43] Basis risk is the risk that the value of a futures contract or an over-the-counter hedge will not perfectly offset an underlying position.

Glossary

This section defines acronyms and terms included in this report.

- **AFS** – Available-for-sale
- **AOCI** – Accumulated other comprehensive income
- **CCP** – Central counterparty
- **CET1** – Common equity tier 1
- **CAS** – Connecticut Avenue Securities® - A type of security that allows Fannie Mae to transfer a portion of the credit risk from loan reference pools, consisting of certain mortgage loans in our guaranty book of business, to third-party investors
- **CIRT**™ – Credit Insurance Risk Transfer™ - Insurance transactions whereby we obtain actual loss coverage on pools of loans either directly from an insurance provider that retains the risk, or from an insurance provider that simultaneously cedes all of its risk to one or more reinsurers
- **CMBS** – Commercial mortgage-backed securities
- **CRT** – Credit risk transfer
- **CRTA** – Credit Risk Transfer Approach - A calculation methodology, defined in the ERCF, used to determine the risk-weight for a retained CRT exposure
- **DTA** – Deferred tax assets
- **DTL** – Deferred tax liabilities
- **ERCF** – The enterprise regulatory capital framework (12 C.F.R. Part 1240), which establishes minimum capital requirements and regulatory capital buffers by capital tier as described in "*Introduction*"
- **ERM** – Fannie Mae's Enterprise Risk Management Division
- **Fannie Mae** – The Federal National Mortgage Association
- **FHFA** – The Federal Housing Finance Agency - FHFA is an independent agency of the federal government with general supervisory and regulatory authority over Fannie Mae, Freddie Mac and the Federal Home Loan Banks
- **GSE** – Government-sponsored enterprise
- **MBS** – Mortgage-backed securities
- **MD&A** – The Management's Discussion and Analysis section of the applicable referenced Fannie Mae Form 10-K or Form 10-Q filing with the Securities and Exchange Commission
- **MSA** – Master Servicing Asset
- **Multifamily loan** – A mortgage loan secured by a property containing five or more residential dwelling units
- **Net Portfolio** – Our retained mortgage portfolio assets, other investments portfolio, outstanding debt of Fannie Mae used to fund the retained mortgage portfolio assets and other investments portfolio, mortgage commitments and risk management derivatives
- **OTC Derivative Contracts** – Over-the-counter derivative contracts
- **PCCBA** – Prescribed capital conservation buffer amount
- **PFE** – Potential future exposure

- **PLBA** – Prescribed leverage buffer amount
- **Private-Label Securities** – Mortgage-related securities issued by entities other than agency issuers Fannie Mae, Freddie Mac or Ginnie Mae
- **PSE** – Public sector entity
- **Retained Mortgage Portfolio** – Mortgage-related assets we own (excluding the portion of assets that back mortgage-related securities owned by third parties)
- **RWA** – Risk-weighted assets
- **Senior Preferred Stock** - Shares of Variable Liquidation Preference Senior Preferred Stock, Series 2008-2, issued to the U.S. Treasury under the senior preferred stock purchase agreement
- **Single-family loan** - A mortgage loan secured by a property containing four or fewer residential dwelling units
- **SPE** – Special Purpose Entity
- **SSFA** – Simplified Supervisory Formula Approach - A calculation methodology, defined in the ERCF, used to determine the risk-weight for a securitization exposure
- **Synthetic securitization** - A synthetic securitization means a transaction in which: (1) all or a portion of the credit risk of one or more underlying exposures is retained or transferred to one or more third parties through the use of one or more credit derivatives or guarantees; (2) the credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority; (3) performance of the securitization exposures depends upon the performance of the underlying exposures; and (4) all or substantially all of the underlying exposures are financial exposures
- **UPB** – Unpaid Principal Balance
- **U.S. GAAP** – Accounting principles generally accepted in the U.S.
- **VIE** – Variable Interest Entity
- **Write-off** – Loan amounts written off as uncollectible bad debts (These loan amounts are removed from our consolidated balance sheet and charged against our loss reserves when the balance is deemed uncollectible, which is generally at foreclosure or other liquidation events, such as a deed-in-lieu of foreclosure or a short-sale.)