

Federal Home Loan Mortgage Corporation

Enterprise Regulatory Capital Framework (ERCF) —Public Disclosures for the Standardized Approach

For the quarterly period ended December 31, 2022

	Freddie Mac
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INTRODUCTION

Business Overview

Freddie Mac (the Enterprise) is a Government-Sponsored Enterprise (GSE) chartered by Congress in 1970,¹ with a mission to provide liquidity, stability, and affordability to the U.S. housing market. The Enterprise achieves its goals and mission primarily by purchasing Single-Family and Multifamily residential mortgage loans originated by lenders. In most instances, the Enterprise packages these loans into guaranteed mortgage-related securities, which are sold in the global capital markets, and subsequently transfers interest-rate and liquidity risks to third-party investors. In addition, the Enterprise transfers mortgage credit risk exposure to third-party investors through its Credit Risk Transfer (CRT) programs, which include securities and insurance-based offerings. The Enterprise also invests in mortgage loans and mortgage-related securities. The Enterprise does not originate mortgage loans nor does the Enterprise lend money directly to mortgage borrowers.

Since September 2008, the Enterprise has been operating in conservatorship, with the Federal Housing Finance Agency (FHFA) acting as both its Conservator and Regulator. As a matter of course, the conservatorship and related matters collectively impact the Enterprise's management, business activities, financial condition, and results of operations.

 For additional information on the conservatorship and related matters, as well as the Enterprise and the Department of the Treasury's (Treasury) Senior Preferred Stock Purchase Agreement (Purchase Agreement), refer to sections detailing the nature of the GSE Conservatorship and Supervision of the Enterprise within the Enterprise's 2022 Annual Report on Form 10-K (2022 Form 10-K).²

FHFA as Freddie Mac's Regulatory Agency

FHFA, an independent agency of the United States federal government, is responsible for the oversight of the operations of Freddie Mac, Fannie Mae, and the Federal Home Loan Banks (FHLBs).

Under the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended (the GSE Act), FHFA has safety and soundness authority that is comparable to, and in some respects broader than, that of the federal banking agencies.

Since 2020, FHFA has adopted the following requirements related to regulatory capital that Freddie Mac and Fannie Mae (together, the Enterprises or the GSEs) are required to meet.

Enterprise Regulatory Capital Framework (ERCF) and Capital Requirement Overview

In 2020, FHFA formally established the ERCF, which requires the GSEs to hold substantially more regulatory capital than prior capital requirements. The Enterprise's current capital levels are substantially below the levels that would be required under the final ERCF framework.

The ERCF has a transition period for compliance. In general, the compliance date for the regulatory ERCF capital requirements will be the later of the termination date of the Enterprise's conservatorship and any compliance date provided in a transition order. The compliance date for regulatory buffer requirements in the ERCF will be the date of termination of the conservatorship. With respect to the ERCF's advanced approach requirements, the compliance date is currently established as January 1, 2025, or any later compliance date as specified by FHFA.

The ERCF framework establishes risk-based and leverage capital requirements for the Enterprises, and includes the following:

- Regulatory capital requirements relating to the amount and form of capital held by the Enterprise, are based largely on definitions of capital used in U.S. banking regulators' capital framework consistent with Basel III. The ERCF requirements contain both regulatory capital elements (Common Equity Tier 1 (CET1) Capital, Tier 1 Capital, and Adjusted Total Capital) and statutory capital elements (Total Capital and Core Capital);
- A requirement that the Enterprise holds prescribed regulatory capital buffers (risk-based and leverage-based) that can be drawn down in periods of financial stress and then rebuilt over time as economic conditions improve. If the Enterprise falls below the prescribed regulatory buffer amounts, it must then restrict any relevant capital distributions such as stock repurchases and dividends, as well as discretionary bonus payments to executives, until the buffer amounts are restored;
- A requirement to file quarterly public capital reports with FHFA, regardless of the Enterprise's status in conservatorship;
- A requirement to maintain capital for operational and market risks, in addition to capital requirements specific to the Enterprise's credit risk;
- Specific minimum percentages, or "floors," on the risk-weights applicable to Single-Family and Multifamily exposures, which
 have the effect of increasing the capital required to be held for loans otherwise subject to lower risk-weights;

- ² See 2022 Form 10-K at 4-5 (Conservatorship and Government Support for Our Business); 104-112 (Regulation and Supervision); and 145-150 (Note
- 2 Conservatorship and Related Matters).

¹ Throughout this Public Disclosure Report, the terms "Freddie Mac," "Enterprise," "we," "our" or "us," refer to Freddie Mac, unless stated or the context implies otherwise.

- Specific floors on the risk-weights applicable to retained portions of CRT transactions, which have the effect of decreasing the capital relief obtained from these transactions;
- Additional components based on the U.S. banking regulators' regulatory capital framework, including the phased implementation of advanced approach as an alternative to the standardized approach for measuring Risk-Weighted Assets (RWA).

Risk-Based Capital Requirements

Under the ERCF risk-based capital requirements, Freddie Mac must maintain its minimum CET1 capital, Tier 1 capital, and adjusted total capital ratios equal to at least 4.5%, 6.0%, and 8.0%, respectively, of RWA. The Enterprise must also maintain statutory total capital equivalent to at least 8.0% of the total RWA. To avoid limits on capital distributions and discretionary bonus payments tied to executive compensation, the Enterprise also must maintain CET1 capital that exceeds the risk-based capital requirements by at least the amount of the prescribed capital conservation buffer amount (PCCBA). The PCCBA consists of three separate regulatory buffers - a stress capital buffer (SCB), a stability capital buffer (equivalent to the G-SIB surcharge which is applicable to systemically large banking organizations), and a countercyclical capital buffer (currently set at 0%, consistent with Bank Holding Companies).

Leverage Capital Requirements

Under the ERCF leverage capital requirements, Freddie Mac must maintain its Tier 1 capital ratio equal to at least 2.5% of Adjusted Total Assets (ATA). The Enterprise must also maintain its statutory core capital ratio equal to at least 2.5% of ATA. To avoid limits on capital distributions and discretionary bonus payments, Freddie Mac also must maintain the Tier 1 capital that exceeds the leverage capital requirements by at least the amount of the prescribed leverage buffer amount (PLBA). The PLBA is equal to 50% of the Enterprise's stability capital buffer.

Oversight, Governance, and Reporting

Freddie Mac's capital management is governed by policies, standards, and procedures overseen by key internal governing bodies.

The Capital Management Council (CMC) is responsible for the oversight of compliance with the ERCF capital framework, including reporting, capital model changes, and any associated stress testing activities impacting the Enterprise, as well as any other related policy initiatives related to capital, equity restoration, resolution planning, and stress testing. The CMC helps to ensure that the Enterprise maintains an integrated and coherent capital monitoring and adequacy assessment process and meets both internal and regulatory capital reporting, monitoring, forecasting, and stress testing requirements. The CMC is overseen by the Head of Capital, Stress Testing, and Resolution Planning and the Chief Financial Officer (CFO), and reports directly to the Enterprise's Capital Committee, which is overseen by the Chief Executive Officer (CEO) and President of the Enterprise.

The Capital Committee, composed primarily of senior executive officers across the various divisions (including the CFO, Chief Risk Officer (CRO), and heads of businesses) provides general governance across the overall capital management framework across the Enterprise. In addition, Enterprise Risk Management (ERM) and Internal Audit conduct independent assessments of capital management and implementation for the Enterprise. These assessments are intended to help ensure that the Enterprise's capital execution, reporting, assessment, and monitoring are consistent with and in compliance with the latest ERCF regulation, inclusive of any applicable amendments to the final rule.

Capital Reporting and Public Disclosures for the Standardized Approach

Under the ERCF, Freddie Mac is required to submit quarterly capital reports to FHFA. These requirements include quarterly quantitative information metrics which help to support the calculation of ERCF capital level and ratios, in addition to any underlying enterprise risk weighting calculations.

The ERCF public disclosure requirements include quarterly quantitative and annual qualitative disclosures related to risk management, corporate governance, capital structure, and capital requirements and regulatory buffers under the standardized approach. The required public disclosures cover eleven categories plus Market Risk, with each category containing certain quantitative and qualitative disclosures, if applicable.

 For additional background information pertaining to the establishment of the ERCF and its corresponding risk-based capital requirements and leverage capital requirements, refer to the 2022 Form 10-K at 218-219 (Note 18 Regulatory Capital). For additional information on specific ERCF amendments including requirements on public disclosure, refer to the 2022 Form 10-K at 105-106 (Capital Standards and Public Disclosures).

The compliance date for the Enterprise's first public disclosure is no later than ten business days after the filing of the Annual Report on Form 10-K for the year ending December 31, 2022.

This public report filing should be read in conjunction with the 2022 Form 10-K which has been filed with the U.S. Securities and Exchange Commission (SEC). This capital disclosure is not required to be nor has been audited by Freddie Mac's independent registered public accounting firm as some measures of exposures contained in this report may not be consistent with GAAP and may not be comparable with measures reported in Freddie Mac's 2022 Form 10-K.

RISK MANAGEMENT

To achieve Freddie Mac's mission of providing liquidity, stability, and affordability to the U.S. housing market, the Enterprise takes risks as an integral part of its business activities. Risk is the possibility that events will occur that adversely affect the Enterprise's financial strength, safe-and-sound operations, and ability to achieve its mission, strategic, and business objectives. Risk can manifest itself in many ways and the responsibility for risk management resides at all levels of the Enterprise. The Enterprise seeks to take risks in a safe-and-sound, well-controlled manner in order to earn acceptable risk-adjusted returns on a corporate-wide, divisional, and, where applicable, transaction basis. The Enterprise's goal is to maintain an effective risk culture where employees are risk aware, collaborative, transparent, and individually accountable for their decisions, and to conduct business in an effective, legal, and ethical manner.

The Enterprise utilizes a risk taxonomy to define, classify, and report risks that Freddie Mac faces in operating its business. These risks have the potential to adversely affect Freddie Mac's current or projected financial and operational resilience. Risks are classified into the following categories:

- Credit Risk;
- Market Risk;
- Liquidity Risk;
- Operational Risk;
- Compliance Risk;
- Legal Risk;
- Strategic Risk; and
- Reputation Risk.

These risks are factored into Freddie Mac's day-to-day business decisions, as appropriate, with legal, strategic, and reputation risks managed outside of the three lines of defense, which are referenced in *Enterprise Risk Governance Structure* below.

Enterprise Risk Framework

The enterprise risk framework (the Framework) defines how Freddie Mac manages risk in order to achieve its mission, strategic, and business objectives. By serving as the basis for managing risk in a consistent, effective, and efficient manner, the Framework supports the Enterprise's financial strength and safe-and-sound operations through a range of potentially stressful conditions. The Framework is implemented through Freddie Mac's enterprise risk management program, which consists of Freddie Mac's enterprise-wide risk management practices and processes (the ERM Program).

The Framework includes the following components:

- Risk Culture Risk culture is the set of corporate values, key competencies, and behaviors related to risk taking and risk
 management at Freddie Mac. Management supports an effective risk culture by establishing clear risk objectives, assigning
 accountability, and setting a tone at the top so that employees feel empowered to challenge business decisions without fear of
 negative consequences. An effective risk culture promotes an environment where employees who take and manage risks for
 the Enterprise are risk aware, collaborative, and transparent.
- Risk Governance Risk governance is the set of corporate requirements and processes that must be followed to make and implement risk decisions across the Enterprise. Effective risk governance establishes a reporting and escalation path for risks and issues across the Enterprise. Freddie Mac's risk governance structure provides forums for transparent and communication of risks and issues, as well as risk management and control activities. Risk governance is established through:
 - Assignments of Risk Authority Risk authority is vested in an individual employee to make risk decisions for the Enterprise, which includes internally approving policies, transactions, significant changes, and/or accepting risk. Individual business or functional risk officers in the first and second lines of defense, as described in *Enterprise Risk Governance Structure*, below, may be assigned risk authority for specific risk areas and functions, as appropriate.
 - Corporate Risk Policies and Standards Corporate risk policies and standards define roles and responsibilities with respect to risk management, establish limits to risk-taking authority, and set forth escalation and reporting requirements.
 - Risk Governance Structure The risk governance structure consists of management- and Board-level committees with roles and responsibilities formalized in their charters.
- Risk Appetite Risk appetite is the level of risk, both in aggregate and by risk type, within the Enterprise's risk capacity that the Board of Directors and management are willing to assume to achieve the Enterprise's strategic goals. The risk appetite is integrated and aligned with the strategic plans for the Enterprise and each business division. The risk appetite is approved by

the Board of Directors and then by FHFA as Conservator, and consists of qualitative risk appetite statements and quantitative metrics with limits.

- Risk Identification, Assessment, Control, and Monitoring Processes Freddie Mac's ERM Program supports risk
 management through enterprise-wide practices and processes designed to identify, assess, control, monitor, and report on all
 risks, including emerging, significant, and top risks.
- Risk Reporting Freddie Mac's risk management framework requires accurate and timely reporting needed for managing risks. Regular reporting is provided to senior management and to the Board of Directors, or appropriate Board committees, at an aggregate level to provide a comprehensive view of the Enterprise's risk position; its adherence to established Board limits and management thresholds; risk drivers; emerging, significant, and top risks; internal control deficiencies; issues and their remediation status; and stress testing and scenario analysis.

FHFA has increased supervisory expectations related to how risk is managed and overseen by management and the Board of Directors, and specifically the role of ERM to provide independent risk oversight and effective challenge. As a result, Freddie Mac must continue to invest in its risk management practices to meet these expectations.

Enterprise Risk Governance Structure

Freddie Mac manages risks using a three-line-of-defense risk management model and governance structure that includes enterprise-wide oversight by the Board of Directors and its committees, the Chief Risk Officer (CRO), and the Chief Compliance Officer (CCO).

The information and diagram below present the responsibilities associated with the Enterprise's three lines of defense risk management model and risk governance structure. The risk governance structure also includes divisional risk committees to actively discuss and monitor division-specific risk profiles, risk decisions, and risk appetite metrics, limits and thresholds, as well as Enterprise Risk Committee to oversee certain enterprise-wide risks.

Board of Directors

Provides enterprise-wide risk oversight, including through its committees

Approves the Enterprise Risk Policy, which establishes the enterprise risk management program and framework

Approves the Strategic Plan

Board

Management

Approves the enterprise risk appetite, which must be aligned with the Strategic Plan, subject to FHFA (as Conservator) approval

Risk Committee
Reviews and recommends the Enterprise Risk Policy and the enterprise Risk Policy and the Directors for approval Assists the Board in the oversight of our enterprise risk framework and adherence to the Board-approved risk appetite Reviews significant enterprise risk exposures, risk management strategies, and top and emerging risks Reviews changes to business practices or new business initiatives that may significantly impact the enterprise risk profile, the achievement of Freddie Mac's business strategy, or the ability to operate within the Board-approved risk appetite
Reviews aggregate enterprise-wide key risk
FIRST LINE OF DEFENSE
District D
usiness Divisions Responsible, with support from our

For more detailed discussions of specific components of the Enterprise's risk management processes, refer to Section 4. Credit Risk, Section 5. Counterparty Credit Risk, Section 6. Credit Risk Mitigation, Section 7. CRT and Securitization, Section 9 Interest Rate Risk, Section 10. Operational Risk, and Section 12. Market Risk in this document. In consideration, ERM has dedicated Enterprise Credit Risk and Market Risk functions to examine risks related to above sections within this document.

1. CAPITAL STRUCTURE

Per the final ERCF rule, ERCF establishes risk-based and leverage capital requirements and includes supplemental capital requirements relating to the amount and form of the capital Freddie Mac holds, based largely on the definitions of capital used in U.S. banking regulators' regulatory capital framework. The ERCF capital requirements contain both statutory capital elements (Total Capital and Core Capital) and regulatory capital elements (CET1 Capital, Tier 1 Capital, and Adjusted Total Capital).

Terms and Conditions of Capital Instruments

Common Stock and Preferred Stock

As of December 31, 2022, Freddie Mac had 21 classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: (1) voting common stock, no par value per share (Common Stock), and (2) twenty series of perpetual, noncumulative preferred stock, par value of \$1.00 per share (Preferred Stock). The Enterprise also has four classes of perpetual, noncumulative preferred stock outstanding that were issued through private placement and are not registered under Section 12 (together with the Preferred Stock).

Dividends on shares of the Enterprise's Common Stock are not mandatory. Dividends on shares of the Enterprise's Preferred Stock are not mandatory and are non-cumulative.

During conservatorship, the holders of the Enterprise's Common Stock have no voting rights. Upon its appointment as Conservator, FHFA immediately succeeded to the voting rights of holders of the Enterprise's Common Stock, including the right to elect members of its Board of Directors.

 For additional information on Common Stock and Preferred Stock refer to the 2022 Form 10-K at Exhibit 4.30 (Description of Registrant's Securities Registered Pursuant to Section 12 of The Securities Exchange Act of 1934) and 139 (Consolidated Balance Sheets).

Senior Preferred Stock

On September 7, 2008, Freddie Mac, through FHFA, in its capacity as Conservator, entered into the Purchase Agreement with Treasury. The Purchase Agreement requires Treasury, upon the request of the Conservator, to provide funds to the Enterprise after any quarter in which it has a negative net worth (that is, its total liabilities exceed its total assets, as reflected on its consolidated balance sheets). In addition, the Purchase Agreement requires Treasury, upon the request of the Conservator, to provide funds to the Enterprise if the Conservator determines, at any time, that it will be mandated by law to appoint a receiver unless it receives these funds from Treasury.

For additional information, refer to the 2022 Form 10-K at 145-150 (Note 2 Conservatorship and Related Matters).

Pursuant to the Purchase Agreement, the Enterprise issued one million shares of Senior Preferred Stock (SPS) to Treasury on September 8, 2008, in partial consideration of Treasury's commitment to provide funds to the Enterprise. Treasury, as the holder of the SPS, is entitled to receive quarterly cash dividends, when, as, and if declared by the Enterprise's Board of Directors. The SPS is senior to the Enterprise's common stock and all other outstanding series of its preferred stock, as well as any capital stock it issues in the future, as to both dividends and rights upon liquidation. SPS is not part of the regulatory capital.

For additional information, refer to the 2022 Form 10-K at 188-192 (Note 11 Stockholders' Equity and Earnings Per Share).

Reconciliation of Regulatory Capital Elements

The table on the next page presents a reconciliation from stockholder's equity on the GAAP consolidated balance sheets to regulatory capital components, as well as composition of core capital and total capital.

Freddie Mac's components of total stockholder's equity include its SPS, preferred stock, common stock, retained earnings, accumulated other comprehensive income (AOCI) net of taxes, and treasury stock.

• For additional information, refer to the 2022 Form 10-K at 139 (Consolidated Balance Sheets) and 98-99 (Capital Metrics).

Table 1.1 - Reconciliation of GAAP Stockholder's Equity to Regulatory Capital and Statutory Capital Components

		December 31, 2022
(Dolla	rs in millions)	Amount
	Common stock	\$—
	Treasury stock	(3,885)
۵.	Retained earnings	(45,666)
GAAP	Accumulated other comprehensive income (AOCI)	(188)
Q	Preferred stock	14,109
	Senior preferred stock ³	72,648
	Stockholders' Equity under GAAP	37,018
	Less: Senior Preferred Stock & Preferred stock	86,757
	Common stockholder's equity	(49,739)
	Less:	
	Goodwill ⁴	_
	Other intangible assets ⁴	_
	Deferred tax assets (DTAs) ^{4, 5}	5,777
<u>a</u>	AOCI-related adjustments ⁶	(152)
apit	Other deductions ^{4, 7}	129
C A	Common Equity Tier 1 (CET1) Capital	(55,493)
tor	Qualifying preferred stock	14,109
Jula	Other adjustments and deductions	
Regulatory Capital	Tier 1 Capital	(41,384)
	Qualifying subordinated debt and other instruments	_
	Qualifying allowance for credit losses	—
	Other adjustments and deductions	
	Tier 2 Capital	
	Adjusted Total Capital	(\$41,384)
	Par value or stated value of outstanding common stock	\$—
	Par value or stated value of outstanding perpetual, noncumulative preferred stock	464
ital	Paid-in capital	13,645
Cap	Retained earnings	(45,666)
2	Treasury stock	(3,885)
ę	Total Core Capital	(35,442)
Statutory Capital	General allowance for foreclosure losses	7,893
	Other ⁸	
	Total Capital	(\$27,549)

³ Pursuant to the Purchase Agreement, Freddie Mac issued one million shares of senior preferred stock to Treasury on September 8, 2008. Shares of the senior preferred stock have a par value of \$1.00.

 ⁴ Net of associated deferred tax liabilities (DTLs), where applicable.
 ⁵ 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 CET1 deduction threshold. ⁶ Accumulated net loss on cash flow hedges included in AOCI, net of applicable income taxes, that relates to the hedging of items that are not

 ⁷ Mortgage Servicing Assets (MSA), net of associated DTLs, that exceed the 10% CET1 capital deduction threshold.
 ⁸ From sources of funds available to absorb losses that the Director by regulation determines are appropriate.

2. CAPITAL ADEQUACY

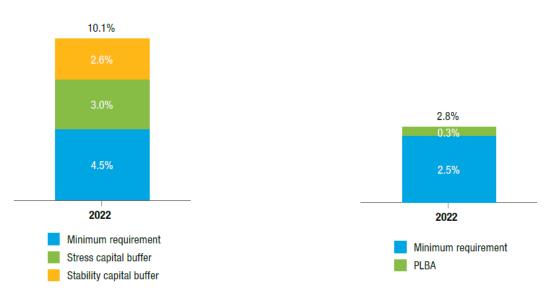
As of 2020, FHFA has established the ERCF structure for the Enterprises, which requires them to hold substantially more capital than prior capital-related requirements. ERCF formally became effective on February 16, 2021. As of December 31, 2022, Freddie Mac's capital levels (both risk-based capital and Tier 1 leverage capital) were below the required levels given that Freddie Mac is still in the process of building its regulatory capital base.

As discussed in the Introduction section, the Enterprise is currently not required to comply with the regulatory capital requirements or the associated regulatory buffer requirements while in conservatorship. With respect to the ERCF's advanced approach requirements, the compliance date is January 1, 2025, or any later compliance date specified by FHFA. For additional information on ERCF capital requirements, refer to the Introduction.

The charts below present the ERCF capital adequacy requirements under the risk-based capital requirement (CET1 capital ratio relative to RWA) and leverage capital requirement (Tier 1 capital ratio relative to ATA) as of December 31, 2022.

Risk-Based Capital Requirement: CET1 Capital Ratio





In October of 2008, FHFA suspended capital classification of the Enterprise during conservatorship, in light of the Purchase Agreement.

The Enterprise's entry into Conservatorship resulted in significant changes to the assessment of its capital adequacy and its management of capital. The Enterprise entered into the Purchase Agreement with Treasury, under which it issued to Treasury both SPS and a warrant to purchase 79.9% of common stock outstanding on a fully diluted basis on the date of exercise. Under the Purchase Agreement, Treasury made a commitment to provide the Enterprise with equity funding in certain conditions to eliminate deficits in its net worth. The Enterprise's ability to obtain equity funding from Treasury pursuant to its commitment under the Purchase Agreement has enabled the Enterprise to avoid being placed into receivership by FHFA and maintain the confidence of the debt markets as having very high-quality credit, upon which the Enterprise's business model is dependent. The amount of available funding remaining under the Purchase Agreement was \$140.2 billion as of December 31, 2022, which will be reduced by any potential future draws.

Pursuant to the Purchase Agreement, the Enterprise will not have a dividend requirement to Treasury on the SPS until its Net Worth Amount exceeds the amount of adjusted total capital necessary to meet regulatory capital requirements and regulatory buffers as set forth within the final ERCF regulation. Based on the Enterprise's current Net Worth Amount of \$37.0 billion as of December 31, 2022, no dividend is payable to Treasury for the quarter ended December 31, 2022. Under the Purchase Agreement, the payment of dividends does not reduce the outstanding liquidation preference on the SPS. The Enterprise's cumulative SPS dividend payments totaled \$119.7 billion as of December 31, 2022.

For additional information, refer to the 2022 Form 10-K at 96 (Capital Resources, Table 53 - Net Worth Activity).

The Enterprise's current business objectives reflect direction it has received from FHFA as Conservator, including in the FHFA Conservatorship Scorecards. At the direction of FHFA as Conservator, the Enterprise has made changes to certain business practices that are designed to provide support for the mortgage market in a manner that serves its mission and other non-financial objectives. Given the Enterprise's housing mission and the important role the Conservator has placed on Freddie Mac in addressing

housing and mortgage market conditions, the Enterprise may at times implement specific actions that could have potentially negative impacts on its business, operating results, and/or financial condition.

 For additional information, refer to the 2022 Form 10-K at 100 (Conservator Powers Over Our Company) and 100-101 (Purchase Agreement, Warrant, and Senior Preferred Stock).

On June 3, 2022, FHFA amended the ERCF by issuing the Capital Planning and Stress Capital Buffer Determination Final Rule which requires the Enterprises to develop, maintain, and submit annual capital plans to FHFA. Under this amendment, the Enterprises' capital plans are required to include, among other requirements, the following:

- An assessment of the expected sources and uses of capital over the planning horizon;
- Estimates of projected revenues, expenses, losses, reserves, and pro forma capital levels under a range of the Enterprise's internal scenarios, as well as under scenarios that FHFA may provide to the Enterprise;
- A description of all planned capital actions over the planning horizon;
- A discussion of how the Enterprise will, under expected and stressful conditions, maintain capital commensurate with its business risks and continue to serve the housing market; and
- A discussion of any expected changes to the Enterprise's business plan that are likely to have a material impact on the Enterprise's capital adequacy or liquidity.

This amendment also incorporates the determination of the stress capital buffer into the capital planning process and builds upon the existing supervisory expectation that the Enterprises incorporate forward-looking projections of revenue and losses to monitor and maintain their internal capital adequacy.

 For a summary discussion of the Enterprise's approach to assessing the adequacy of its capital to support current and future activities, refer to the 2022 Form 10-K at 96 (Capital Resources), 100-101 (Conservator Powers Over Our Company and Purchase Agreement, Warrant, and Senior Preferred Stock) and 105-106 (Capital Standards and Public Disclosures).

Risk-Weighted Assets and Adjusted Total Assets

The ERCF establishes two approaches for calculating RWA (the "standardized approach" and the "advanced approach"). The riskbased capital requirements are determined using the higher of the RWA calculated under each approach. Under both approaches, Freddie Mac's RWA equals the sum of its credit RWA, market RWA, and operational RWA. However, the advanced approach requirements will be delayed until the later of January 1, 2025 and any later compliance date specific to those requirements provided in a transition order applicable to the Enterprise. For information related to ATA and its components, refer to Section 11 Tier 1 Leverage Ratio.

The table below presents the Enterprise's ATA and standardized RWA and its components.

Table 2.1 - Adjusted Total Assets and Standardized Risk-Weighted Assets Requirements⁹

	December 31, 2022
(Dollars in millions)	Amount
Adjusted Total Assets	\$3,710,125
Risk-weighted Assets (Standardized Approach)	899,068
Credit Risk	777,960
Market Risk	51,543
Operational Risk	69,565

⁹ ATA and RWA include regulatory adjustments and deductions.

Regulatory Capital Amounts and Ratios

The table below presents Freddie Mac's regulatory capital amounts and ratios under the ERCF and required capital versus available capital. As of December 31, 2022, the maximum payout ratio under the ERCF was 0.0%, which limits the Enterprise's capital distributions and discretionary bonus payments discussed under the risk-based and leverage capital requirements.

			December 31, 2022		
(Dollars in billions)	Minimum Capital Requirement	Applicable Buffers ¹⁰	Capital Requirement (including Buffer)	Available Capital	Capital Shortfall
Risk-based capital amounts:					
Total capital (statutory) ¹¹	\$72	N/A	\$72	(\$27)	(\$99)
CET1 capital ¹²	40	\$50	90	(55)	(145)
Tier 1 Capital ¹²	54	50	104	(41)	(145)
Adjusted Total Capital ¹²	72	50	122	(41)	(163)
Risk-based capital ratios: ¹³					
Total capital (statutory)	8.0 %	N/A	8.0 %	(3.1)%	(11.1)%
CET1 capital	4.5	5.6 %	10.1	(6.2)	(16.3)
Tier 1 Capital	6.0	5.6	11.6	(4.6)	(16.2)
Adjusted Total Capital	8.0	5.6	13.6	(4.6)	(18.2)
Leverage capital amounts:					
Core capital (statutory) ¹⁴	\$93	N/A	\$93	(\$35)	(\$128)
Tier 1 Capital ¹²	93	\$11	104	(41)	(145)
Leverage capital ratios: ¹⁵					
Core capital (statutory)	2.5 %	N/A	2.5 %	(1.0)%	(3.5)%
Tier 1 Capital	2.5	0.3 %	2.8	(1.1)	(3.9)

Table 2.2 - ERCF Available Capital and Capital Requirements

For additional information on ERCF adjusted total assets, risk-weighted assets, required capital and available capital, refer to • the 2022 Form 10-K at 99 (Table 56 - ERCF Available Capital and Capital Requirements).

¹⁰ PCCBA for risk-based capital and PLBA for leverage capital.

¹¹ Total capital is equal to core capital plus certain allowances for credit losses.

¹² Regulatory capital amounts exclude SPS, DTA arising from temporary differences that exceed 10% of CET1 capital, and certain other items.

¹³ As a percentage of RWA.

¹⁴ Core capital excludes certain components of GAAP total equity (i.e., AOCI and SPS) as these items do not meet the statutory definition of core capital. ¹⁵ As a percentage of ATA.

Credit Exposure and RWA Under Different Categories

The table below presents Freddie Mac's credit exposure and RWA under different categories. Details on the Enterprise's market RWA are covered in the Market Risk section.

Table 2.3 - Credit Risk Exposure and RWA

	December 31, 2022	
(Dollars in millions)	Exposure	Credit RWA
Exposures to the U.S. Government/Sovereign entities	\$24,754	\$13
Exposures to certain supranational entities and MDBs	125	_
Exposures to GSEs	125,954	23,979
Exposure to depository institutions and credit unions	5,026	1,005
Exposures to PSEs	16	8
Corporate exposures	25	1
Aggregate Single-Family mortgage exposures categorized by:16	1,389,680	437,120
(i) Performing loans;	1,326,423	401,731
(ii) Non-modified re-performing loans;	12,046	4,497
(iii) Modified re-performing loans;	39,747	18,051
(iv) Non-performing loans	11,464	12,841
Aggregate Multifamily mortgage exposures categorized by:	46,082	23,372
(i) Multifamily fixed-rate exposures;	29,016	11,953
(ii) Multifamily adjustable-rate exposures	17,066	11,419
Past-due loans ¹⁷	—	—
Insurance Assets	244	166
Off-balance sheet exposures	967	2,224
Cleared Transactions	791	16
Default fund contributions	1,333	314
Unsettled Transactions	—	_
CRT and other securitization exposures	1,929,557	260,986
Equity Exposures	2,838	2,838
Other Assets ¹⁸	42,332	25,918
Total	\$3,569,724	\$777,960

 ¹⁶ Exposure for these items is represented by UPB.
 ¹⁷ Captures non-mortgage related past due items only.
 ¹⁸ Other assets primarily consist of guarantee fee assets, commitments, cash in process of collection and other miscellaneous assets.

3. CAPITAL BUFFERS

The final ERCF rule includes a specific requirement that Freddie Mac hold prescribed regulatory capital buffers which can be drawn down in periods of financial stress and then rebuilt over time as economic conditions improve. If the Enterprise falls below the prescribed buffer amounts, it must restrict capital distributions such as stock repurchases and dividends, as well as discretionary bonus payments to executives, until the regulatory buffer amounts are restored. The ERCF prescribes two types of regulatory capital buffers as described below.

For additional information related to ERCF's risk-based and leverage capital requirements, refer to the Introduction.

Prescribed Capital Conservation Buffer Amount (PCCBA)

To avoid limitations on capital distributions and discretionary bonus payments, Freddie Mac must maintain CET1 capital that exceeds its risk-based capital requirements by at least the amount of its PCCBA. That PCCBA consists of three separate component buffers: a stress capital buffer, a stability capital buffer, and a 0% countercyclical capital buffer.

- The stress buffer must be at least 0.75% of Freddie Mac's ATA as of the last day of the previous calendar quarter. FHFA will
 periodically re-size the stress capital buffer to the extent that FHFA's eventual program for supervisory stress tests determines
 that Freddie Mac's peak capital exhaustion under a severely adverse stress scenario would exceed 0.75% of ATA;
- The stability capital buffer is tailored to the risk that an Enterprise's default or other financial distress could pose to the liquidity, efficiency, competitiveness, or resiliency of the national housing finance markets. Similar to the G-SIB surcharge applicable to Bank Holding Companies, the stability capital buffer is based on an Enterprise's share of residential mortgage debt outstanding. As of December 31, 2022, Freddie Mac's stability capital buffer was 0.61% of ATA;
- The countercyclical capital buffer is currently set at 0% of ATA. Consistent with the treatment for Bank Holding Companies, FHFA has indicated that it will adjust the countercyclical capital buffer when taking into account the macro-financial environment in which Freddie Mac operates, such that the buffer would be deployed only when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk.

Prescribed Leverage Buffer Amount (PLBA)

To avoid limitations on capital distributions and discretionary bonus payments, Freddie Mac would be required to maintain Tier 1 capital above the amount required under the Tier 1 leverage ratio requirement by at least the amount of a PLBA equal to 50% of the stability capital buffer.

Available Capital Buffers

As of December 31, 2022, Freddie Mac's capital levels (both risk-based capital and leverage capital) were significantly below the levels that would be required under the ERCF. Accordingly, the Enterprise maintained no capital buffers as of yet. The ERCF has a transition period for compliance, and the Enterprise is not required to comply with the buffer requirements specified below while in conservatorship. In general, the compliance date for the buffer requirements in the ERCF will be the date of termination of the conservatorship.

• For additional information on ERCF capital buffers, refer to the 2022 Form 10-K at 218 (Note 18 Regulatory Capital).

Required Capital Buffers and Related Metrics

The table below presents Freddie Mac's required regulatory capital buffers and payout metrics as of December 31, 2022.

Table 3.1 - Required Capital Buffers and Payout Metrics

	December 31, 2022
(Dollars in millions)	Amount
Prescribed Capital Conservation Buffer (PCCBA)	\$50,305
Stress Capital Buffer	27,710
Stability Capital Buffer	22,595
Countercyclical Capital Buffer Amount	—
Prescribed Leverage Buffer Amount (PLBA)	11,297
Eligible Retained Income ¹⁹	10,309
Risk-based Capital Maximum Payout Ratio	— %
Leverage Maximum Payout Ratio	— %
Maximum Payout Amount	

• For additional information on ERCF required capital buffers and maximum payout ratio, refer to the 2022 Form 10-K at 99 (Capital Resources).

¹⁹ The eligible retained income of an Enterprise is the greater of: (i) the Enterprise's net income, as defined under GAAP, for the four calendar quarters preceding the current calendar quarter, net of any distributions and associated tax effects not already reflected in net income; and (ii) the average of the Enterprise's net income for the four calendar quarters preceding the current calendar quarter.

4. CREDIT RISK: GENERAL DISCLOSURES

Credit risk is the risk associated with the inability or failure of a borrower, issuer, or counterparty to meet its financial and/or contractual obligations. Freddie Mac is exposed to counterparty credit risk (see Section 5. Counterparty Credit Risk), and two types of mortgage credit risks listed below:

- Single-Family mortgage credit risk, through the Enterprise's ownership or guarantee of loans in its Single-Family mortgage portfolio;
- Multifamily mortgage credit risk, through the Enterprise's ownership or guarantee of loans in its Multifamily mortgage portfolio.

Single-Family Mortgage Credit Risk Management

Freddie Mac manages its exposure to Single-Family mortgage credit risk, which is a type of consumer credit risk, using the following principal strategies:

- Maintaining prudent underwriting standards and quality control practices and managing seller/servicer performance;
- Transferring credit risk to third-party investors;
- Monitoring loan performance and characteristics;
- Engaging in loss mitigation activities; and
- Managing foreclosure and REO activities.

Multifamily Mortgage Credit Risk Management

Freddie Mac manages its exposure to Multifamily mortgage credit risk, which is a type of commercial real estate credit risk, using the following principal strategies:

- Maintaining policies and procedures for new business activity, including prudent underwriting standards;
- Transferring credit risk to third-party investors; and
- Managing its portfolio, including loss mitigation activities.
- For additional information on how the Enterprise executes these principal strategies and a detailed discussion on the Enterprise's credit risk management, refer to the 2022 Form 10-K at 52-71 (Credit Risk).

Other Key Credit Risk Management Items

Past Due Loans

Freddie Mac defines a loan as past due if a full payment of principal and interest is not received within one month of its due date.

Placing Loans on Non-accrual

Freddie Mac recognizes interest income on an accrual basis except when the Enterprise believes the collection of principal and interest in full is not reasonably assured, which generally occurs when a loan is past due by three months or more, at which point the Enterprise places the loan on non-accrual status unless the loan is well secured and in the process of collection based upon an individual loan assessment.

Returning Loans to Accrual Status

Freddie Mac returns a non-accrual loan to accrual status when the collectability of principal and interest in full is reasonably assured. For Single-Family loans, the Enterprise generally determines that collectability is reasonably assured when the loan returns to current payment status. For Multifamily loans, the collectability of principal and interest is considered reasonably assured based on an analysis of the factors specific to the loan being assessed. Upon a loan's return to accrual status, all previously reversed interest income is recognized. In addition, the amortization amount of any basis adjustments into interest income will also resume.

For additional information on the terms defined above, refer to the 2022 Form 10-K at 158-159 (Interest Income).

Allowance for Credit Losses Methodology

Freddie Mac's allowance for credit losses on mortgage loans pertains to both Single-Family and Multifamily loans classified as heldfor-investment for which the Enterprise has not elected the fair value option. The Enterprise measures the allowance for credit losses on a pooled basis when its loans share similar risk characteristics. Freddie Mac recognizes changes in the allowance for credit losses through provision for credit losses on its consolidated statements of income.

Charging-off Uncollectible Amounts

Freddie Mac records charge-offs in the period in which a loan is deemed to be uncollectible. Proceeds received in excess of amounts previously written off are recorded as a decrease to non-interest expense on the Enterprise's consolidated statements of income.

• For additional information on the terms defined above, refer to the 2022 Form 10-K at 171-173 (Allowance for Credit Loss Methodology).

Credit Risk Exposures and Types

Freddie Mac has an Enterprise Credit Risk Policy that defines credit risk management, roles and responsibilities, and governance requirements among different stakeholders.

- For mortgage loans by Single-Family and Multifamily, refer to the 2022 Form 10-K at 157 (Table 4.1 Mortgage Loans). The table presents details of the loans on Freddie Mac's consolidated balance sheets.
- For information on mortgage portfolio's Unpaid Principal Balance (UPB), mortgage-related investments portfolio, and other investments portfolio, refer to the 2022 Form 10-K at 21-22 (Our Portfolios).
- For financial guarantees by Single-Family and Multifamily, refer to the 2022 Form 10-K at 169 (Table 5.1 Financial Guarantees). The table presents the Enterprise's financial guarantees' maximum exposure, recognized liability (excludes allowance for credit losses on off-balance sheet credit exposures), and maximum remaining term.
- For mortgage loan purchase commitments and other commitments, refer to the 2022 Form 10-K at 170 (Table 5.3 Other Off-Balance Sheet Credit Exposures).
- For details on investment securities exposures, refer to the 2022 Form 10-K at 174-175 (Note 7 Investment Securities).
- For accounting offsets to credit risk exposures as well as collateral information of financial assets and liabilities, refer to the 2022 Form 10-K at 186 (Table 10.1 - Offsetting and Collateral Information of Financial Assets and Liabilities). The table presents offsetting and collateral information related to derivatives, securities purchased under agreements to resell, and securities sold under agreements to repurchase which are subject to enforceable master netting agreements or similar agreements.
- For average credit risk exposures, refer to the 2022 Form 10-K at 16 (MD&A Table 3 Analysis of Net Interest Yield). The table presents a yield analysis of interest-earning assets and interest-bearing liabilities and also average asset balance.²⁰

²⁰ Excludes the average balances of off-balance sheet credit exposures.

Mortgage Portfolio Geographic Distribution

The tables below summarize the concentration by geographic area of Freddie Mac's Single-Family mortgage portfolio and Multifamily mortgage portfolio.

Table 4.1 – Concentration of Credit Risk of Single-Family Mortgage Portfolio

	December 31, 2022		
(Dollars in millions)	Portfolio UPB	Seriously Delinquent Rate	
Region:			
West	\$906,123	30 %	0.49 %
Northeast	695,944	23	0.82
North Central	436,294	15	0.65
Southeast	512,495	17	0.73
Southwest	434,907	15	0.63
Total	\$2,985,763	100 %	0.66
State:			
California	\$516,891	17 %	0.51
Texas	200,807	7	0.64
Florida	191,009	6	0.84
New York	129,935	4	1.16
Illinois	112,784	4	0.90
All other	1,834,337	62	0.63
Total	\$2,985,763	100 %	0.66

Table 4.2 – Concentration of Credit Risk of Multifamily Mortgage Portfolio

	December 31, 2022			
(Dollars in millions)	Portfolio UPB % of Portfolio Seriously Delinquent			
Region:				
West	\$107,260	25 %	0.04 %	
Northeast	106,478	25	0.28	
North Central	40,524	9	0.16	
Southeast	85,438	20	0.04	
Southwest	89,602	21	0.08	
Total	\$429,302	100 %	0.12	

• For additional information on geographic concentration of Single-Family and Multifamily mortgage portfolios, refer to the 2022 Form 10-K at 198-199 (Table - 15.1 and Table 15.2, Concentration of Credit Risk of Mortgage Portfolio).

Past Due Loans

For information on the amount of loans and off-balance exposures not past due or past due less than 30 days, past due 30 days but less than 90 days, past due 90 days or in foreclosure, and past due 90 days and still accruing, refer to the 2022 Form 10-K at 162 (Table 4.8 - Amortized Cost Basis of Held-for-Investment Loans by Payment Status) and 170 (Table 5.2 - UPB of Loans Underlying Our Mortgage-Related Guarantees by Payment Status). The tables present the amortized cost basis of Freddie Mac's Single-Family and Multifamily held-for-investment loans that are not measured at fair value by payment status and the UPB of mortgage loans underlying mortgage-related guarantees by payment status.

Allowance for Credit Losses

For information on the balance of allowance for credit losses at the end of the period, charge-offs during the period, and reconciliation of changes in allowance for credit losses refer to the 2022 Form 10-K at 171 (Table 6.1 - Details of the Allowance for Credit losses). The table presents a summary of changes in Freddie Mac's allowance for credit losses.

The table below presents Single-Family's loans by past due status, along with the corresponding ratio of the Single-Family allowance for credit losses. Multifamily mortgage loans allowance for credit losses was immaterial as of December 31, 2022.

Table 4.3 - Single-Family Allowance for Credit Losses to Amortized Cost Basis

	December 31, 2022		
Past Due Status (Dollars in millions)	Amortized Cost Basis	Allowance for Credit Losses to Amortized Cost Basis	
Loans Not Past Due or Past Due Less Than 30 Days	\$2,941,384	0.25 %	
Loans Past Due 30 Days but Less Than 90 Days	26,676	27.42	
Loans on Nonaccrual ²¹	10,095	72.45	
Loans Past Due 90 Days and Still Accruing	3,653	200.22	

Contractual Principal Payments Due by Specified Timeframe for Mortgage Loans

The table below presents the contractual principal payments due on loans underlying Freddie Mac's mortgage portfolio by specified timeframe

Table 4.4 - Principal Amounts Due by Specified Timeframe for Mortgaged Loans

		December 31, 2022					
(Dollars in millions)	Due in One Year or Less	Due after One Year through Five Years	Due after Five Years through 15 Years	Due after 15 Years	Total		
Single-Family Fixed Rate	\$91,831	\$393,828	\$1,064,089	\$1,367,345	\$2,917,093		
Single-Family Adjustable Rate	786	3,397	9,644	10,585	24,412		
Single-Family Sub-Total	92,617	397,225	1,073,733	1,377,930	2,941,505		
Multifamily Fixed Rate	20,881	106,373	193,361	16,215	336,830		
Multifamily Adjustable Rate	1,166	18,354	71,465	1,146	92,131		
Multifamily Sub-Total ²²	22,047	124,727	264,826	17,361	428,961		
Total	\$114,664	\$521,952	\$1,338,559	\$1,395,291	\$3,370,466		

²¹ Vast majority of non-accrual loans are past due over 90 days. There is a small overlap between loans past due 30 days but less than 90 days and loans on nonaccrual. ²² Excludes UPB of mortgage loans underlying off-balance sheet securitization trusts where Freddie Mac no longer has credit risk exposure.

5. COUNTERPARTY CREDIT RISK

Counterparty credit risk is the risk associated with the inability or failure of a counterparty to meet its contractual obligations.

The Enterprise manages its exposure to counterparty credit risk using the following principal strategies:

- Maintaining eligibility standards;
- · Evaluating creditworthiness and monitoring performance; and
- Working with underperforming counterparties and limiting the Enterprise's losses from their nonperformance of obligations, when possible.
- For additional information on counterparty risks on derivatives and repo-style transactions, refer to the 2022 Form 10-K at 77-78 (Financial Intermediaries, Clearinghouses, and Other Counterparties).

In addition to the risk management strategies above, the Enterprise has defined guidelines to enable prudent risk management which are briefly described below.

Methodology Used to Assign Credit Limits

As part of the overall credit risk assessment, Freddie Mac's counterparty credit exposures are assigned risk ratings and are subject to approval based on defined credit approval standards. In making credit decisions, the Enterprise considers risk rating, collateral, country, industry, and single-name concentration limits while also balancing these considerations with the total borrower or counterparty relationship. The Enterprise uses a variety of tools to continuously monitor the ability of a borrower or counterparty to perform under its obligations. The Enterprise uses risk rating aggregations to measure and evaluate concentrations within portfolios.

Policies for Securing, Valuing and Managing Collateral

Freddie Mac's policies and procedures cover the management and governance of financial assets (including securing and valuing collateral) utilized to mitigate the credit risk of over-the-counter (OTC) derivatives and repo-style transactions. Businesses are required to establish standard eligibility criteria for collateral usage and review processes for approving non-standard collateral. Industry-standard legal agreements combined with internal reviews for legal enforceability are used to achieve a perfected security interest in the collateral.

Additionally, risk management establishes guidelines on appropriate collateral haircuts related to repo-style transactions. Potential correlations between the exposure and the underlying collateral are reflected through appropriate haircuts. A haircut is the percentage of reduction in current market value applicable to each type of collateral and is largely based on market liquidity and price volatility of the underlying security. Given the above, the Enterprise considers the liquidity and marketability of its collateral when determining its eligibility as a risk mitigant and in applying appropriate haircuts under the ERCF rules.

The current market value of collateral is monitored regularly. Margin procedures are established for managing margin calls for which daily margining is considered the best practice to maintain an appropriate level of collateral coverage reflecting market value fluctuations. Trades are reconciled regularly - consistent with regulatory or industry best practice guidelines. Similarly, margin dispute processes in line with general industry practices are also in place. Procedures are established surrounding collateral substitution and collateral reuse/re-hypothecation.

Freddie Mac's derivatives are reported at their fair value on the Enterprise's consolidated balance sheets. The Enterprise offsets fair value amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral against fair value amounts recognized for derivative instruments executed with the same counterparty under a master netting agreement. When a counterparty in OTC derivatives that is subject to a master netting agreement has a net obligation to Freddie Mac, generally, the counterparty is obligated to deliver collateral in the form of cash, securities, or a combination of both, in order to satisfy its obligation to the Enterprise under the master netting agreement.

For additional information, refer to the 2022 Form 10-K at 77 (Derivative Counterparties) and 179 (Note 9 Derivatives).

The Enterprise monitors the financial strength of the Enterprise's counterparties to other investments, including securities purchased under agreements to resell, and may use collateral maintenance requirements to manage the Enterprise's exposure to individual counterparties. As of December 31, 2022, all of Freddie Mac's securities purchased under agreements to resell were fully collateralized.

For additional information, refer to the 2022 Form 10-K at 202 (Other Investment Counterparties).

Collateral and Creditworthiness

When a counterparty in OTC derivatives that is subject to a master netting agreement has a net obligation to Freddie Mac with a market value above an agreed-upon threshold (if applicable), the counterparty is obligated to deliver such collateral in the form of cash, securities, or a combination of both, in order to satisfy its obligation to the Enterprise under the master netting agreement.

Accordingly, the Enterprise's OTC derivatives contracts require Freddie Mac to post collateral to counterparties consistent with agreed-upon thresholds, if any, when it is in a derivative liability position.

The collateral posting thresholds that the Enterprise's OTC counterparties assign to it are generally based on Standard & Poor's (S&P) or Moody's credit rating. The lowering or withdrawal of the Enterprise's credit rating by S&P or Moody's may increase its obligation to post collateral, depending on the amount of the counterparty's exposure to it with respect to the derivative transactions.

- For additional information on the primary types of collateral taken, refer to the 2022 Form 10-K at 77 (Financial Intermediaries, Clearinghouses, and Other Counterparties) and 183-186 (Note 10 Collateralized Agreements and Offsetting Arrangements).
- For additional information on the impact of the amount of collateral the Enterprise would have to provide given credit rating downgrade, refer to the 2022 Form 10-K at 77 (Financial Intermediaries, Clearinghouses, and Other Counterparties) and 183 (Derivative Portfolio).

Gross Positive Fair Value of Contracts, Collateral Held, and Net Unsecured Credit Exposure

 For information on the gross positive fair value of contracts, collateral held, and net unsecured credit exposure, refer to the table below or the 2022 Form 10-K at 186 (Table 10.1 - Offsetting and Collateral Information of Financial Assets and Liabilities).

Table 5.1 - Offsetting and Collateral Information of Financial Assets and Liabilities

			Decem	ber 31, 2022		
	Gross Amount	Amount Offset in the Consolidated Balance Sheets Presented in the		Gross Amount not Offset in the	Net Amount	
(Dollars in millions)	Recognized	Counterparty Netting	Cash Collateral Netting	Consolidated Balance Sheet	Consolidated Balance Sheet	Net Amount
Assets:						
Derivatives:						
OTC	\$6,385	(\$4,468)	(\$1,681)	\$236	(\$214)	\$22
Cleared and exchange-traded	28	_	22	50	_	50
Mortgage commitment	19	_	_	19	(4)	15
Other	2	_	_	2	_	2
Total derivatives	6,434	(4,468)	(1,659)	307	(218)	89
Securities purchased under agreements to resell	99,286	(11,991)	_	87,295	(87,295)	_
Total	\$105,720	(\$16,459)	(\$1,659)	\$87,602	(\$87,513)	\$89
Liabilities:						
Derivatives:						
OTC	(\$10,230)	\$4,468	\$5,702	(\$60)	\$23	(\$37)
Cleared and exchange-traded	(25)	_	17	(8)	8	_
Mortgage commitment	(11)	_	_	(11)	_	(11)
Other	(679)	—	_	(679)	—	(679)
Total derivatives	(10,945)	4,468	5,719	(758)	31	(727)
Securities sold under agreements to	(11.001)	44.004				
repurchase	(11,991)	11,991		(\$750)		(\$707)
Total	(\$22,936)	\$16,459	\$5,719	(\$758)	\$31	(\$727)

Purchased and Sold Derivatives

For information on the notional amount of purchased and sold derivatives, including the distribution of the credit derivative products used, categorized further by protection bought and sold within each product group, refer to the table below or the 2022 Form 10-K at 180 (Table 9.1 - Derivative Assets and Liabilities at Fair Value). Freddie Mac does not perform intermediation activities related to derivatives.

Table 5.2 - Derivative Assets and Liabilities at Fair Value

	De	ecember 31, 2022	
	Notional or Contractual	Derivatives at Fair Value	
(Dollars in millions)	Amount	Assets	Liabilities
Not designated as hedges			
Interest-rate risk management derivatives:			
Swaps	\$480,824	\$1,762	(\$526)
Written options	46,101	_	(1,857)
Purchased options	92,010	4,302	_
Futures	182,330	_	_
Total interest-rate management derivatives	801,265	6,064	(2,383)
Mortgage commitment derivatives	29,354	12	(11)
CRT-related derivatives	31,647	_	(55)
Other	14,426	2	(624)
Total derivatives not designated as hedges	876,692	6,078	(3,073)
Designated as fair value hedges			
Interest-rate risk management derivatives:			
Swaps	181,298	321	(7,847)
Total derivatives designated as fair value hedges	181,298	321	(7,847)
Receivables (payables)		35	(25)
Netting adjustments		(6,127)	10,187
Total derivative portfolio, net	\$1,057,990	\$307	(\$758)

6. CREDIT RISK MITIGATION

This section covers credit risk concentration as well as non-securitized credit enhancements (CE) of which examples include primary mortgage insurance (MI), lender risk-sharing, seller indemnification, Multifamily pool insurance and Multifamily bond insurance etc. Freddie Mac's CE via securitization is covered in Section 7 CRT and Securitization.

The Enterprise holds an immaterial amount of collateral for non-securitized credit risk mitigation as of December 31, 2022.

Risk Concentrations and Credit Enhancement Providers

Based on Freddie Mac's assessment of business conditions that could affect its financial results, the Enterprise has determined that concentrations of credit risk exist among certain borrowers (including geographic concentrations), loan sellers and servicers, credit enhancement providers, and other investment counterparties.

• For a general discussion of the Enterprise's derivative counterparties as well as related master netting and collateral agreements, see Section 5. Counterparty Credit Risk.

The sections below discuss the concentration of credit risk for each of the groups to which the Enterprise is exposed.

Single-Family Mortgage Portfolio

In the Single-Family mortgage portfolio, geographic concentrations may increase the exposure of Freddie Mac's portfolio to specific credit risk, as regional economic conditions may affect a borrower's ability to repay and the underlying property value.

For a summary of the concentration by geographic area of the Enterprise's Single-Family mortgage portfolio, refer to the 2022
 Form 10-K at 198 (Note 15 Concentration of Credit and Other Risks & Table 15.1 - Concentration of Credit Risk of Our Single-Family Mortgage Portfolio).

Multifamily Mortgage Portfolio

In the Multifamily mortgage portfolio, the primary concentration of credit risk is based on the legal structure of the investments the Enterprise holds. Freddie Mac's exposure to credit risk in its senior subordinate securitization products is minimal, as the expected credit risk is generally absorbed by the subordinate tranches, which are typically sold to third-party investors. As a result, the Enterprise's Multifamily mortgage credit risk is primarily related to loans that have not been securitized.

Numerous factors affect the credit risk related to Multifamily borrowers, the most significant of which are effective rents paid and capitalization rates for the mortgaged property. Effective rents paid vary among geographic regions of the United States. Geographic concentrations may increase the exposure of the Enterprise's portfolio to credit risk, as regional economic conditions may affect a Multifamily borrower's ability to repay and the underlying property value.

 For a summary of the concentration of Multifamily mortgage portfolio by geographic area refer to the 2022 Form 10-K at 199 (Note 15 Concentration of Credit and Other Risks & Table 15.2 - Concentration of Credit Risk of Our Multifamily Mortgage Portfolio).

Sellers and Servicers

Freddie Mac acquires a significant portion of its Single-Family and Multifamily loan purchase and guarantee volume from several large sellers. Significant portions of the Enterprise's Single-Family and Multifamily loans are serviced by several large servicers.

 For additional information on the concentration of Single-Family and Multifamily sellers, refer to the 2022 Form 10-K at 199 (Sellers and Servicers & Table 15.3 - Seller Concentration).

The Enterprise is also exposed to the risk that servicers might fail to service loans in accordance with the contractual requirements, resulting in increased credit losses. For example, the Enterprise's servicers have an active role in its loss mitigation efforts, and the Enterprise, therefore, has exposure to such servicers to the extent that a decline in their business performance results in a failure to realize the anticipated benefits of the loss mitigation plans. Since the Enterprise does not have its own servicing operation, if the servicers lack appropriate governance and controls, experience a failure in their controls, and/or experience an operational disruption in their ability to service loans, the Enterprise's overall business and financial results could be adversely affected.

 For additional information on the concentration of Single-Family and Multifamily servicers, refer to the 2022 Form 10-K at 200 (Sellers and Servicers & Table 15.4 - Servicer Concentration).

Credit Enhancement Providers

Freddie Mac has counterparty credit risk relating to the potential insolvency of, or nonperformance by, mortgage insurers that insure Single-Family loans purchased or guaranteed.

The Enterprise evaluates the recovery and collectability from mortgage insurers as part of the estimate of its allowance for credit losses. Changes in the Enterprise's expectations related to recovery and collectability from its credit enhancement providers may affect its estimates of expected credit losses.

 For a summary of the concentration of mortgage insurer counterparties who provided 10% or more of the Enterprise's overall primary mortgage insurance coverage, refer to the 2022 Form 10-K at 201 (Credit Enhancement Providers & Table 15.5 -Primary Mortgage Insurer Concentration).

Other Investment Counterparties

Freddie Mac is exposed to the non-performance of counterparties relating to other investments (including non-mortgage-related securities and cash equivalents) transactions, including those entered on behalf of its securitization trusts. The Enterprise's policies require that the counterparty be evaluated using Freddie Mac's internal counterparty rating model prior to entering such transactions. The Enterprise monitors the financial strength of its counterparties to these transactions and may use collateral maintenance requirements to manage its exposure to individual counterparties. The permitted term and dollar limits for each of these transactions are also based on the counterparty's financial strength.

The Enterprise's other investments (including non-mortgage-related securities and cash equivalents) counterparties are primarily major financial institutions, including other GSEs, Treasury, the Federal Reserve Bank of New York, the Government Securities Division (GSD)/Fixed Income Clearing Corporation (FICC), highly rated supranational institutions, depository and non-depository institutions, brokers and dealers, and government money market funds.

 For additional information on derivative counterparties credit worthiness and the concentration of credit and other risks and main types of credit enhancement providers and their creditworthiness, refer to the 2022 Form 10-K at 77-78 (Derivatives Counterparties & Table 42 - Derivative Counterparty Credit Exposure) and 198-202 (Note 15 Concentration of Credit and Other Risks).

Exposures Covered by Eligible Financial Collateral and/or Guarantees

The table below presents exposure and post-CE RWA of Single-Family primary mortgage insurance and other non-CRT credit enhancements and Multifamily non-CRT credit enhancements.

Table 6.1 - Exposures and Post-CE RWA of Non-CRT Credit Enhancements

	December 31, 2022		
(Dollars in millions)	Exposure	Post – CE RWA	
Single-Family			
Primary mortgage insurance	\$609,123	\$291,579	
Other non-CRT credit enhancements	6,784	1,814	
Less: exposures with multiple non-CRT credit enhancements	791	274	
Total Single-Family	615,116	293,119	
Multifamily non-CRT credit enhancements	13,702	2,327	
Total	\$628,818	\$295,446	

7. CRT AND SECURITIZATION

Freddie Mac engages in various types of credit enhancements, including CRT transactions and other securitized credit enhancements, to reduce its credit risk exposure. The Enterprise defines CRT transactions as those arrangements where the Enterprise actively transfers the credit risk exposure on mortgages owned or guaranteed. Importantly, CRT transactions allow Freddie Mac to transfer credit risk to the private market, reducing the risk of future losses to Freddie Mac when borrowers default and supporting Freddie Mac's mission of providing stability, liquidity and affordability to the U.S. housing market.

Objectives for Securitizing Assets

The Enterprise's CRT transactions are designed to reduce the amount of required capital related to credit risk, to transfer portions of credit losses on groups of previously acquired loans to third-party investors, and to reduce the risk of future losses when borrowers default.

• For additional information on Single-Family and Multifamily's objectives for securitizing assets, refer to the 2022 Form 10-K at 29 and 43 (CRT Activities).

Scope of CRT and Securitization Exposures

CRT and Securitization exposures under this section include both on-balance sheet and off-balance sheet exposures that arise from traditional or synthetic securitizations. Traditional securitization exposures are those where all or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties other than through the use of credit derivatives or guarantees, whereas synthetic securitizations utilize derivatives or guarantees to transfer the risk to a third-party.

The Enterprise had no affiliated entities in CRT securitization transactions as of December 31, 2022.

The retained or purchased resecuritization exposures that meet the ERCF criteria were deemed de minimis as of December 31, 2022.

Freddie Mac's Role and Involvement

Freddie Mac mainly acts as an originator in traditional senior subordinated securitizations (for example Multifamily K Certificates and Single-Family reperforming loan senior subordinated securities) and synthetic CRT securitizations such as Structured Agency Credit Risk (STACR) debt notes and trust notes and Structured Credit Risk (SCR) debt notes and trust notes. The Enterprise acts as an insurance buyer in reinsurance CRT transactions which mainly include Agency Credit Insurance Structure (ACIS) and Multifamily Credit Insurance Pool (MCIP).

Nature of Inherent Risks

Freddie Mac's CRT transactions may not be available in adverse economic conditions.

In addition, some of the Enterprise's CRT transactions have early termination clauses or maturity dates that are earlier than the maturities of the reference mortgage loans, and the Enterprise may also seek to terminate certain CRT transactions by repurchasing the related securities. The Enterprise will be exposed to increased credit risk on the reference mortgage loans after termination of such transactions.

The Enterprise retains a portion of the risk of future losses on loans covered by CRT transactions, including all or a portion of the first loss risk in Single-Family STACR and ACIS transactions and Multifamily MCIP and SCR transactions. For some CRT transactions, there may be a significant difference in time between the recognition of a credit loss in earnings and when recognizing the related recovery in earnings, and this lag could adversely affect the Enterprise's financial results in the earlier period.

The Enterprise has counterparty credit risk relating to the potential insolvency of, or nonperformance by, insurers and reinsurers that insure the ACIS and MCIP transactions where purchased insurance policies are part of its CRT activities.

The profitability of Freddie Mac's Multifamily business could be adversely affected by market competition and/or investor demand for its K Certificates and other securities. Freddie Mac's current Multifamily business model is highly dependent on its ability to purchase and securitize loans at terms that provide it with an appropriate economic return.

• For additional details on risks in the Enterprise's CRT and securitization, refer to the 2022 Form 10-K at 123 (Credit Risks), 126 (Market Risks) and 201 (Credit Enhancement Providers).

Risk Management, Monitoring, and Mitigation

Freddie Mac requires ACIS and MCIP counterparties to partially collateralize their exposure to reduce the risk that the Enterprise might not be reimbursed for claims under the policies.

 For additional information on ACIS and MCIP collateral, refer to the 2022 Form 10-K at 76 (ACIS Counterparties) and 43 (CRT Activities). The Enterprise monitors the costs and benefits provided by the CRT coverage it has obtained on a regular basis, including the impact of CRT on its capital requirements under the ERCF. The Enterprise may periodically terminate certain CRT transactions, through the exercise of contractual call options, repurchases of outstanding securities, or other means, if the Enterprise determines prior to contractual maturity that they are no longer economically sensible.

The Enterprise's Single-Family loss mitigation strategy emphasizes early intervention by servicers in delinquent loans and offers alternatives to foreclosure by providing servicers with default management programs designed to manage delinquent loans and to assist borrowers in maintaining homeownership or facilitate foreclosure alternatives. The Enterprise offers (or previously offered) a variety of borrower assistance programs, including refinance programs for certain eligible loans and loan workout activities for struggling borrowers. The Enterprise's loan workouts include both home retention options and foreclosure alternatives.

To help mitigate the Enterprise's Multifamily potential losses, sellers are generally required to act as the primary servicer for loans they have sold to the Enterprise, including property monitoring tasks beyond those typically performed by Single-Family servicers.

• For additional details on managing the credit risk retained through securitization via loss mitigation activities, refer to the 2022 Form 10-K at 31-32 (Loss Mitigation Activities) and 71 (Managing Our Portfolio, Including Loss Mitigation Activities).

Collateral Types

For the main types of collateral posted by ACIS providers, refer to the 2022 Form 10-K at 76 (ACIS Counterparties), which may
include agency securities, Treasury securities, and cash. Collateral posted by MCIP providers was minimal as of December 31,
2022.

Risk-Based Capital Approaches

All of Freddie Mac's CRT deals follow the Credit Risk Transfer Approach (CRTA) for measuring risk-based capital. The Enterprise may elect to not recognize a CRT transaction that does not provide ERCF capital relief. The Enterprise applies the Simplified Supervisory Formula Approach (SSFA) for certain legacy private label security (PLS) securitization exposures that have not been originated by the Enterprise.

Securitization Special Purpose Entities (SPEs)

Freddie Mac's Multifamily segment occasionally securitizes loans or bonds contributed by third parties that are underwritten by the Enterprise after origination. Prior to securitization, the Enterprise is not exposed to the credit risk of these underlying loans or bonds. However, as the Enterprise may guarantee some or all of the securities issued by the trusts used in these transactions, credit risk is effectively assumed to be equal to the guaranteed UPB. Similar to the Enterprise's primary securitizations, these other securitizations generally provide for structural credit enhancements (e.g., subordination or other loss sharing arrangements) that allocate first loss exposure to third parties.

 For additional information on the Enterprise's occasional securitization of third-party exposures and the off-balance sheet accounting treatment of its interests in such VIEs, refer to the 2022 Form 10-K at 68 (Maintaining Policies and Procedures for New Business Activity, including Prudent Underwriting Standards) and 151-156 (Note 3 Securitizations and Variable Interest Entities).

Accounting Policies

1. Accounting Treatment of CRT and Securitizations

In Single-Family's CRT via traditional securitization with senior subordinate structures, the Enterprise sells loans into non-Freddie Mac controlled trusts, derecognizes the transferred loans, and accounts for its guarantee to the nonconsolidated VIE. The Enterprise accounts for its investments in the beneficial interests issued by the nonconsolidated Variable Interest Entity (VIE), if any, as investments in debt securities.

In a Multifamily K Certificate transaction, Freddie Mac sells Multifamily loans to a non-Freddie Mac trust that issues senior and subordinate securities, and simultaneously purchases and places the senior securities into a Freddie Mac trust that issues guaranteed K Certificates. In these transactions, the Enterprise guarantees the senior securities issued by the non-Freddie Mac trust but does not issue or guarantee the subordinate securities.

 For additional information on traditional securitization and other securitization products, refer to the 2022 Form 10-K at 152 and 154 (Note 3 Securitizations and Variable Interest Entities, Nonconsolidated VIEs).

In the Enterprise's STACR Trust notes transactions, a trust issues credit-linked notes whose repayments are based on the credit performance of a reference pool of mortgage loans. The trust uses the proceeds from the issuance of the notes to purchase short-term eligible investments and makes periodic payments of principal and interest on the notes to investors. Freddie Mac makes payments to the trust in order to support payment of the interest due on the notes, and the Enterprise receives payments from the trust that otherwise would have been made to the noteholders to the extent that there are credit events on the mortgages embedded within the reference pool. As such, the note balances are reduced by the amount of the payments to Freddie Mac. Accordingly, the trust was designed to create and pass along to its interest holders any risk or variability related to the credit risk of the mortgages within the reference pool. The Enterprise does not have a variable interest in the risk that the trust was designed to create and

therefore passes along such risks to its interest holders or related power so as to direct the activities that most significantly affect the economic performance of the applicable VIE. As a result, the Enterprise does not consolidate the trusts used in the STACR Trust note transactions.

In Multifamily, Freddie Mac may transfer credit risk on mortgage loans that the Enterprise owns or guarantees by entering into SCR Trust note transactions, which are similar to STACR Trust note transactions in Single-Family. The Enterprise does not consolidate the trusts used in SCR Trust note transactions and accounts for SCR Trust note transactions in the same manner as the Enterprise accounts for STACR Trust note transactions.

• For additional information on trust note transactions, refer to the 2022 Form 10-K at 154-155 (Note 3 Securitizations and Variable Interest Entities).

STACR debt note is a Freddie Mac issued debt security where the principal balance is linked to the credit performance of a reference pool of Single-Family loans owned or guaranteed by Freddie Mac.

SCR debt note is a debt security where the principal balance is subject to the performance of a reference pool of Multifamily loans guaranteed by Freddie Mac.

For additional information on definition and accounting treatment of STACR debt note and SCR debt note, refer to the 2022
 Form 10-K at 58, 69 (Transferring Credit Risk to Third-Party Investors), 176-178 (Note 8 Debt) and 279-280 (Glossary).

The Enterprise applies freestanding accounting treatment to ACIS and MCIP transactions.

 For additional information on summary of accounting treatment of the Enterprise's CRT securitization, refer to the 2022 Form 10-K at 58 and 69 (Transferring Credit Risk to Third-Party Investors).

As of December 31, 2022, the Enterprise recognized no gain-on-sale (as defined in ERCF) that will need to be deducted from available CET1 capital for its CRT and/or securitization transactions.

2. Valuation Method

Freddie Mac uses fair value measurements for the initial recording of certain assets and liabilities and periodic remeasurement of certain assets and liabilities on a recurring or non-recurring basis.

The Enterprise elected the fair value option on debt that contains embedded derivatives, including certain STACR and SCR debt notes.

• For additional information on the Enterprise's election of the fair value option, refer to the 2022 form 10-K at 203-215 (Note 16 Fair Value Disclosures).

The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value. The levels of the fair value hierarchy are defined as follows in rank priority order:

- Level 1 Inputs to the valuation techniques are based on quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs to the valuation techniques are based on observable inputs other than quoted prices in active markets for identical assets or liabilities;
- Level 3 One or more inputs to the valuation technique are unobservable and significant to the fair value measurement.

The Enterprise uses quoted market prices and valuation techniques that seek to maximize the use of observable inputs, where available, and minimize the use of unobservable inputs. The Enterprise's inputs are based on the assumptions a market participant would use in valuing the asset or liability. Assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. Many of the Enterprise's valuation techniques use, either directly or indirectly, data provided by third-party pricing services or dealers. The techniques used by these pricing services and dealers to develop the prices generally are either as follows: (1) A comparison to recent transactions involving the instrument or transactions involving instruments with similar collateral and risk profiles, adjusted as necessary based on specific characteristics of the asset or liability being valued, or (2) Industry-standard modeling, such as a discounted cash flow model.

• For additional details of methods and key assumptions applied in valuing assets and liabilities at fair value, refer to the 2022 Form 10-K at 203-215 (Note 16 Fair Value Disclosures).

For Single-Family loans intended to go into the GSE securitization markets, the general valuation technique is to benchmark security pricing for actively traded mortgage-related securities with similar characteristics, adjusting for the value of the Enterprise's guarantee fee and its credit obligation related to performing its guarantee. The credit obligation is based on compensation charged under current market pricing for qualified loans under the Enterprise's current underwriting standards (Level 2) and internal credit models for unqualified loans under the current underwriting standards (Level 3).

Multifamily held-for-sale loans (pipeline for the Enterprise's K Certificates) and held-for-investment loans (pipeline for the Enterprise's Multifamily PCs and subsequently SCR or MCIP) are primarily valued using discounted cash flows based on observable K Certificate market spreads.

• For additional information on how exposures intended to be securitized are valued, refer to the 2022 Form 10-K at 205-206 (Note 16 Fair Value Disclosures, Valuation Techniques).

Significant Changes

• For an explanation of significant changes to quantitative information since the last reporting period for Single-Family and Multifamily, refer to the 2022 Form 10-K at 37 and 47 (CRT Activities).

On- & Off-Balance Sheet Exposures, Past Due Amount and Loss Recognized

The table below presents on- and off-balance sheet exposures by type of underlying collateral. These exposures arise from both traditional and synthetic securitization transactions. Note that the table excludes CRT transactions that no longer provide capital relief and may include transactions that were not executed as of the period end.

	December 31, 2022						
(Dollars in millions)	Total Exposure	On-Balance Sheet Exposure	Off Balance Sheet Exposure	Retained	Acquired	Past-due Amount ²³	Loss Recognized During the Quarter
Traditional							
Single-Family securitization	\$24,844	\$—	\$24,844	\$24,844	\$—	\$2,627	\$—
Multifamily securitization	308,917	_	308,917	308,917	_	354	_
Private label securities	533	533		_	533	6	_
Synthetic							
Single-Family CRT	1,564,906	1,564,906		1,564,906		8,585	13
Multifamily CRT	30,357	24,664	5,693	30,357	—	42	—
Total	\$1,929,557	\$1,590,103	\$339,454	\$1,929,024	\$533	\$11,614	\$13

Table 7.1 - On- & Off-Balance Sheet Exposures, Past Due Amount and Loss Recognized

Securitization Exposures and Risk-based Capital Treatment

The table below presents Freddie Mac's securitization exposures and the associated risk-based capital treatment as of December 31, 2022.

Table 7.2 - Securitization Exposures and Risk-based Capital Treatment

		E	December 31, 2022		
			RWA by (Calculation Metho	dology
(Dollars in millions)	Total Exposure	RWA	SSFA	CRTA	1250% Risk Weighted
Traditional					
Single-Family securitization	\$24,844	\$1,242	\$—	\$1,242	\$—
Multifamily securitization	308,917	27,569	_	27,569	-
Private label securities	533	1,064	1,064	_	-
Synthetic					
Single-Family CRT	1,564,906	226,857	_	226,857	_
Multifamily CRT	30,357	4,254	—	4,254	-
Total	\$1,929,557	\$260,986	\$1,064	\$259,922	\$-

²³ Sixty days or more past due.

Securitization Exposures and Risk Weight Bands

The table below presents Freddie Mac's securitization exposures and the associated risk weight bands and capital impact of RWA as of December 31, 2022.

	December 31, 2022				
(Dollars in millions)	Total Exposure	SSFA Risk-Weighted Assets	CRTA Risk-Weighted Assets	Capital Impact of RWA ²⁴	
Securitization					
Zero to 20%	\$1,634,181	\$12	\$145,017	\$6,526	
21% to 50%	237,297	_	71,813	3,232	
51% to 100%	49,221	9	32,078	1,444	
Over 100%	8,858	1,043	11,014	543	
Resecuritization					
Zero to 20%	_	_	_	_	
21% to 50%	_	_	_	_	
51% to 100%	_	_	_	_	
Over 100%	_	_	_	_	
Total	\$1,929,557	\$1,064	\$259,922	\$11,745	

Assets Intended for Securitization and Securitization Activities

The table below presents assets pending securitization (i.e., assets held with the intent to securitize) and Freddie Mac's year-to-date securitization activities. Freddie Mac did not have gain-on-sale on a securitization that has been deducted from CET1 capital as of December 31, 2022.

Table 7.4 - Assets Intended for Securitization and Securitization Activities

		December 31, 2022	
(Dollars in millions)	Assets Pending Securitization	Securitized YTD	Recognized Gain/Loss on Sale YTD
Traditional ²⁵			
Single-Family securitization	\$3,564	\$2,196	\$—
Multifamily securitization	9,329	49,678	_
Private label securities		_	_
Synthetic ²⁶			
Single-Family CRT	15,144	550,791	_
Multifamily CRT	17,480	11,487	-
Total	\$45,517	\$614,152	\$-

²⁴ Required CET1 capital amount associated with the exposure.

 ²⁷ Required CETT capital amount associated with the exposure.
 ²⁵ Single-Family assets pending securitization into traditional securities represent held-for-sale population as of quarter-end. Multifamily assets pending securitization into traditional securities represent retained held-for-sale loans pending K-Deal securitizations.
 ²⁶ Single-Family assets pending securitization into synthetic securities represent those STACR and ACIS transactions when a third-party broker/dealer

is engaged, and collateral has been targeted for a CRT transaction. The assets are considered to be held with the intent to securitize and represented by assets pending securitization. Multifamily assets pending securitization into synthetic securities represent a) retained held-for-investment loans intended to be securitized into Multifamily Participation Certificates (Multi PCs®) and other securities that are fully guaranteed by Freddie Mac, and (b) Multi PCs® and other guaranteed securities, as applicable, that haven't yet been credit enhanced by an MCIP reinsurance and/or an SCR transaction.

8. EQUITIES

Freddie Mac's equity investments include its Multifamily investments in certain non-publicly traded Low-Income Housing Tax Credit (LIHTC) fund partnerships. The Enterprise accounts for these investments using the proportional amortization method.

These LIHTC fund partnerships invest as a Limited Partner directly in operating partnerships that own and operate affordable Multifamily rental properties that generate federal income tax credits and deductible operating losses. Multifamily's ongoing investment in LIHTC partnerships helps to support and preserve the supply of affordable housing.

The tables below present carrying value, RWA and capital impact of RWA of LIHTC as of December 31, 2022.

Table 8.1 - Multifamily LIHTC Carrying Value and RWA

	December 31, 2022		
(Dollars in millions)	Public	Non-Public	Total
Carrying value	\$—	\$2,838	\$2,838
Unrealized gains/losses	—	—	—
Unrealized gains/losses not recognized on the balance sheet or through earnings	_	_	_
Fair value ²⁷	\$—	\$2,838	\$2,838
Unrealized gains/losses included in risk-based capital	—	—	—
YTD Cumulative realized gains/losses from sales and liquidation			_

 For additional information on Multifamily LIHTC, refer to the 2022 Form 10-K at 43 (Multifamily Investing Activities) and 46 (Multifamily Mortgage Portfolio and Guarantee Portfolio).

Table 8.2 - Multifamily LIHTC Risk Weight Band

		December 31, 2022		
(Dollars in millions)	Exposure	RWA	Capital Impact of RWA ²⁸	
0% Risk Weight	\$—	\$—	\$—	
20%	_	_	_	
100%	2,838	2,838	128	
300%	_	_	_	
400%	_	_	_	
600%	—	—	_	
Total	\$2,838	\$2,838	\$128	

²⁷ Mathematical sum of above line items. Non-publicly traded investments do not have readily determinable fair values.

²⁸ Required CET1 capital amount associated with the exposure.

9. INTEREST RATE RISK FOR NON-TRADING ACTIVITIES

Freddie Mac defines its enterprise-specific interest-rate risk as the economic risk related to adverse changes in the level or volatility of interest rates. Interest rates can fluctuate for many reasons, including changes in the fiscal and monetary policies of the federal government and its agencies as well as geopolitical events or changes in general economic conditions, such as increased inflation.

A change in the level of interest rates (represented by a parallel shift of the yield curve, all else constant) exposes the Enterprise's assets and liabilities to possible risk, potentially affecting expected future cash flows and their present values. Similarly, changes in the shape or slope of the yield curve (often reflecting changes in the market's expectation of future interest rates) expose the Enterprise's assets and liabilities to risk, potentially affecting expected future cash flows and their present values. Volatility risk is the risk that changes in the market's expectation of the magnitude of future variations in interest rates will adversely affect the Enterprise's economic value. The Enterprise is exposed to volatility risk in both mortgage-related assets and liabilities, especially in instruments with embedded options.

Changes in interest rates could adversely affect the cash flows and prepayment rates on assets owned and related debt and derivatives. In addition, changes in interest rates could adversely affect the prepayment rate or default rate on the loans guaranteed. For example, when interest rates decrease, borrowers are more likely to prepay their loans by refinancing them at a lower rate. An increased likelihood of prepayment on the loans underlying the Enterprise's mortgage-related securities may adversely affect the value of these securities.

Interest-rate risk is managed across both non-trading and any limited trading activities the Enterprise undertakes. The Enterprise measures the impact of interest rate shifts on the prices and durations of its interest rate sensitive assets and liabilities daily.

- For a detailed discussion of the Enterprise's interest rate risk management, including the nature of interest rate risk for all applicable activities, key assumptions, and the use of interest rate derivatives, including swaps, swaptions, and futures as hedges to manage interest rate risk, refer to the 2022 Form 10-K at 80-85 (Risk Management, Market Risk) and 124 (Risk Factors, Market Risks).
- For the increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring interest rate risk for all applicable activities, refer to the 2022 Form 10-K at 82-84 (Tables 43-46).

10. OPERATIONAL RISK

Operational risk is the risk of direct or indirect loss resulting from inadequate or failed internal processes, people, systems, or external events. As such, operational risk is generally inherent within all of Freddie Mac's day-to-day activities.

Operational risk events include the prospective breakdowns related to people, processes, infrastructure and/or technology that could result in financial loss, legal actions, regulatory fines, and reputational harm. Operational risk includes people, reporting, transactions and governance, information, technology, third-party resiliency, and models. As part of the ERM Framework, operational risks are identified, assessed, controlled, monitored, and reported.

The Enterprise's current approach for measuring operational risk capital is based on a Standardized Approach of 15 basis points of its ATA. The Enterprise is working towards implementing an Advanced Measurement Approach (AMA) which is targeted for implementation in 2025. Additional disclosures behind the model and considerations will be provided after AMA is implemented.

• For general information on operational risk and a description of the use of insurance to mitigate operational risk, refer to the 2022 Form 10-K at 86-88 (Operational Risk).

11. TIER 1 LEVERAGE RATIO

Per the final ERCF rule, the Tier 1 leverage ratio is calculated as available Tier 1 Capital under the ERCF divided by Freddie Mac's ATA.

The Enterprise's available Tier 1 Capital as of December 31, 2022, consists of total equity minus SPS, DTA arising from temporary differences that exceed 10% of CET1 capital, and certain other items with immaterial balances.

The Enterprise's ATA for the same period mainly consists of total on-balance sheet assets and Single-Family and Multifamily offbalance sheet financial guarantees, which mainly include Single-Family and Multifamily exposures from securitization activity guarantees, other mortgage-related guarantees and guarantees of Fannie Mae securities.

Tier 1 leverage requirement acts as a backstop to risk-based capital requirements as it is less sensitive to risk and less prone to model and assumption errors.

Accounting Assets and Adjusted Total Assets

The table below presents a summary comparison of Freddie Mac's accounting assets and its ATA.

Table 11.1 - Reconciliation of Accounting Total Assets to Adjusted Total Assets

	December 31, 2022
(Dollars in millions)	Amount
Total consolidated assets as reported in published financial statements	\$3,208,333
Adjustment for fiduciary assets recognized on balance sheet but excluded from total leverage exposure	_
Adjustment for derivative exposures	3,452
Adjustment for repo-style transactions	14,120
Adjustment for off-balance sheet exposures (that is, conversion to credit equivalent amounts of off- balance sheet exposures)	482,081
Other adjustments	2,139
Adjusted Total Assets	\$3,710,125

Tier 1 Capital Leverage Ratio

The table below presents the components of Freddie Mac's Tier 1 Capital Leverage Ratio.

Table 11.2 - Composition of Adjusted Total Assets and Tier 1 Leverage Ratio

	December 31, 2022
(Dollars in millions)	Amount
On-balance sheet exposures	
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 add-	
back of allowance for credit losses)	\$3,128,626
Less: Amounts deducted from Tier 1 Capital	5,755
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)	3,122,871
Derivative exposures	
Current exposure for derivative exposures (that is, net of cash variation margin)	148
Add-on amounts for potential future exposure (PFE) for derivative exposures	2,278
Gross-up for cash collateral posted if deducted from the on-balance sheet assets, except for cash variation margin	_
Less: Deductions of receivable assets for cash variation margin posted in derivative transactions, if included in on-balance sheet assets	_
Less: Exempted CCP leg of client-cleared transactions	_
Effective notional principal amount of sold credit protection	_
Less: Effective notional principal amount offsets and PFE adjustments for sold credit protection	
Default Fund Contributions	1,333
Current exposure for derivative exposures (that is, net of cash variation margin)	3,759
Repo-style transactions	
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	99,286
Less: Reduction of the gross value of receivables in reverse repurchase transactions by cash payables in repurchase transactions under netting agreements	_
Counterparty credit risk for all repo-style transactions	2,128
Exposure for repo-style transactions where the Enterprise acts as an agent	_
Total exposures for repo-style transactions	101,414
Other off-balance sheet exposures	
Off-balance sheet exposures at gross notional amounts.	496,658
Less: Adjustments for conversion to credit equivalent amounts and off-balance sheet exposures held in retained portfolio	14,577
Off-balance sheet exposures	482,081
Capital and Adjusted Total Assets	
Tier 1 Capital	(41,384
Adjusted total assets (sum of total on-balance sheet exposures, total derivative exposures, total	, , , , , , , , , , , , , , , ,
exposures for repo-style transactions, and off-balance sheet exposures)	\$3,710,125
Fier 1 leverage ratio	
Fier 1 leverage ratio (in percent)	(1.1

12. MARKET RISK DISCLOSURES

Freddie Mac's business segments have embedded exposure to market risk, which is the economic risk associated with adverse changes in interest rates, volatility, and spreads. Market risk can adversely affect future cash flows, or economic value, as well as earnings and net worth. The primary sources of market risk are from the Enterprise's investments in mortgage-related assets, the debt issued to fund these assets, and Single-Family guarantees.

Market risk under ERCF reflects spread risk and defines covered position as any asset that has more than de minimis spread risk (other than any intangible asset, such as any servicing asset). Based on the ERCF, measurement of market risk approaches includes prescribed capital percentage, spread duration approach and internal model method. For additional details, refer to Table 12.1.

Characteristics of the Internal Models Used in Market Risk Capital Calculations

As the ERCF regulation requires that the market risk capital be limited to spread risk, the Investment and Capital Markets (ICM) market risk capital model is designed to be consistent with a 99.9% Value at Risk (VaR) spread return loss over a one-year holding period, with an adjustment to explicitly account for the impact from potential prepayment model error.

The model reflects a blended approach, using historical spread returns to establish a backward-looking basis for the 99.9% VaR. Then on a forward-looking basis, it measures the prepayment model uncertainty relative to the Enterprise's past experience. The spread return used in the model is based on key unhedged components, with the primary driver being profit and loss attributed to the variability of Option-Adjusted-Spread (OAS).

Market value and spread duration for Multifamily loans and security investments are monitored and used as inputs to compute market risk capital based on a single point spread shock as prescribed by ERCF. The Enterprise leverages the internal Multifamily market risk capital model for securities where the spread shock is not prescribed by ERCF (e.g., Interest-Only (IO) securities).

Benchmarking of Internal Estimates

In model development, Freddie Mac aims to use available historical data on spread returns. In this sense, the ICM market risk capital model is periodically updated. In addition, the Enterprise has ongoing monitoring in place to benchmark the model results against Comprehensive Capital Analysis and Review (CCAR).

Material Portfolios

• For the composition of the material portfolio of covered positions, refer to Table 12.1.

Valuation Policies, Procedures, and Methodologies

Freddie Mac uses fair value measurements for the initial recording of certain assets and liabilities and periodic remeasurement of certain assets and liabilities on a recurring or non-recurring basis.

The accounting guidance for fair value measurements and disclosures establishes a three-level fair value hierarchy that prioritizes the inputs into the valuation techniques used to measure fair value. The levels of the fair value hierarchy are defined as follows in priority order:

- Level 1 Inputs to the valuation techniques are based on quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs to the valuation techniques are based on observable inputs other than quoted prices in active markets for identical assets or liabilities;
- . Level 3 One or more inputs to the valuation technique are unobservable and significant to the fair value measurement.

The Enterprise's inputs are based on the assumptions a market participant would use in valuing the asset or liability. Assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement.

The independent validation procedures performed by the ERM Division are intended to monitor whether the prices received from third parties are consistent with observed market activity, and that fair value measurements developed using internal data reflect the assumptions that a market participant would use in pricing the Enterprise's assets and liabilities. These validation procedures include performing a daily price review and a monthly independent verification of fair value measurements through independent modeling, analytics, and comparisons to other market source data, if available. If the reasonableness of a given price cannot be validated, it will not be used for fair value measurements on the consolidated financial statements. These procedures are risk-based and are executed before the Enterprise finalizes the prices used in preparing its fair value measurements for its financial statements.

In addition to performing the validation procedures noted above, the ERM Division provides independent risk governance over all valuation processes by establishing and maintaining a corporate-wide valuation risk policy. The ERM Division also independently reviews significant judgments, methodologies, and valuation techniques to monitor compliance with established policies.

Where models are employed to assist in the measurement and verification of fair values, changes made to those models during the period are reviewed and approved according to the corporate model change governance process, with material changes reviewed at the Valuation Risk Committee. Inputs used by models are regularly updated for changes in the underlying data, assumptions, valuation inputs, and market conditions and are subject to the valuation controls noted above.

 For additional information on the Enterprise's valuation policies, procedures, and methodologies for covered positions including, for securitization positions, the methods and key assumptions used for valuing such positions, refer to the 2022 Form 10-K at 203-215 (Note 16 Fair Value Disclosures).

Internal Modeling

Model development, changes to existing models, and model risks are managed in each business line according to Freddie Mac's three-lines-of-defense framework (see Risk Management for more information). New model development and changes to existing models undergo a review process. Each business periodically reviews model performance, embedded assumptions, limitations, and modeling techniques, and updates its models as it deems appropriate. ERM independently validates the work done by the business lines (e.g., conducting independent assessments of ongoing monitoring results, model risk ratings, performance monitoring, and reporting against thresholds and alerts).

• For additional information on the approaches used for validating and evaluating the accuracy of models and modeling processes, refer to the 2022 Form 10-K at 87-88 (Model Risk).

Stress Test

Stress testing of Freddie Mac's credit spread risk is included as a component of the annual regulatory Dodd-Frank Act Stress Testing (DFAST) requirements. The global market shock component consists of applying instantaneous spread shocks provided by FHFA to trading securities, available-for-sale (AFS) securities, derivatives, and other assets and debt measured at fair value under GAAP accounting.

The Enterprise employs models to analyze possible future interest-rate scenarios, along with the cash flows of its assets and liabilities over those scenarios.

The Enterprise calculates its exposure to changes in interest rates for its interest-rate sensitive assets and liabilities using effective duration and effective convexity, based on its models.

• For additional information on the scenarios applied to the positions subject to particular interest rate risk factors, refer to the 2022 Form 10-K at 80-85 (Market Risk).

Market Risk Change Monitoring

Freddie Mac actively measures and manages its duration gap exposure. In addition to such duration gap management, the Enterprise also measures and manages the price sensitivity of its portfolio to a number of different specific interest rate changes along the yield curve. The price sensitivity of an instrument to specific changes in interest rates is known as the instrument's key rate duration risk. By managing the duration exposure both in aggregate through duration gap and to specific changes in interest rates through key rate duration, the Enterprise expects to limit the exposure to interest rate changes for a wide range of interest rate yield curve scenarios.

The Enterprise evaluates a range of interest rate scenarios to determine the sensitivity of its earnings due to changes in interest rates and to determine its fair value hedge accounting strategies.

• For additional information related to monitoring changes in the market risk of securitization positions, refer to the 2022 Form 10-K at 81-83 (Interest-Rate Risk). The Enterprise has no resecuritization exposure as of December 31, 2022.

Exposure Amounts and Risk-Weighted Assets

The table below presents the exposure amounts and RWA by each product type included in covered positions of any material portfolio.

Table 12.1 - Market Risk Exposures and RWA

	December 31, 2022	
(Dollars in millions)	Exposure	Standardized Market RWA
Single Point Approach		
Non-Performing loans	\$4,833	\$2,870
Re-Performing loans	17,366	10,311
Spread Duration Approach		
Multifamily mortgage exposures	26,291	2,497
Private-Label Securities ²⁹	550	660
MBS (non-IO) guaranteed by an Enterprise or by Ginnie Mae and secured by Multifamily mortgage exposures	5,925	3,587
Internal Estimates	0,020	0,007
Single-Family MBS guaranteed by the Enterprise	23,078	25,901
Single-Family MBS guaranteed by Ginnie Mae	_	_
Single-Family MBS guaranteed by the other Enterprise	378	373
Multifamily IO securities guaranteed by an Enterprise or		
Ginnie Mae	1,893	2,956
Commercial MBS	65	22
CRT exposures ³⁰	313	167
Other securitization exposures	—	—
Performing loans, not securitized	9,890	1,685
Other trading assets and liabilities	279	514
Total	\$90,861	\$51,543

 ²⁹ Market risk exposure and RWA of on-balance sheet PLS.
 ³⁰ Market risk exposure and RWA of off-balance sheet re-performing loan senior subordination securities.

GLOSSARY

This Glossary includes acronyms and defined terms that are used throughout this report.

- ACIS Agency Credit Insurance Structure Transactions in which Freddie Mac purchases insurance policies that provide credit protection for certain specified credit events that are typically allocated to the non-issued notional credit risk positions of a STACR transaction. The Enterprise also enters into other ACIS transactions that provide credit protection for certain specified credit events on loans not included in a reference pool created for a STACR transaction or provide front-end credit risk transfer as loans come into the portfolio. Under each of these insurance policies, the Enterprise pays monthly premiums that are determined based on the outstanding balance of the reference pool. When specific credit events occur, the Enterprise generally receives compensation from the insurance policy up to an aggregate limit based on actual losses.
- **AFS** Available-For-Sale.
- AMA Advanced Measurement Approach.
- AOCI Accumulated Other Comprehensive Income (loss), net of taxes.
- ATA Adjusted Total Assets.
- CCAR Comprehensive Capital Analysis and Review.
- CCO Chief Compliance Officer.
- CE Credit Enhancements.
- CEO Chief Executive Officer.
- CET1 Common Equity Tier 1.
- CFO Chief Financial Officer.
- Charge-Offs Represent the amount of a financial asset that is removed from the consolidated balance sheets when deemed uncollectible, regardless of when the impact of the credit loss was recorded on the consolidated statements of comprehensive income. For mortgage loans, generally the amount of a charge-off is the recorded investment in excess of the fair value of the loan's collateral.
- CMC Capital Management Council.
- **Conservator** FHFA, acting in its capacity as Conservator of Freddie Mac.
- Conservatorship Scorecard FHFA's mechanism for outlining specific conservatorship priorities for Freddie Mac, Fannie Mae, and their joint venture, Common Securitization Solutions, LLCSM.
- Credit Enhancement A financial arrangement that is designed to reduce credit risk by partially or fully compensating an investor in a mortgage or security (e.g., Freddie Mac) in the event of specified losses. Examples of credit enhancements include insurance, CRT transactions, overcollateralization, indemnification agreements, and government guarantees.
- CRO Chief Risk Officer.
- CRT Credit Risk Transfer Arrangements where Freddie Mac actively transfers the credit risk exposure on mortgages that it
 owns or guarantees.
- CRTA Credit Risk Transfer Approach.
- DFAST Dodd-Frank Act Stress Testing.
- DRO Division Risk Officer.
- DSCR Debt Service Coverage Ratio An indicator of future credit performance for Multifamily loans. The DSCR estimates a
 Multifamily borrower's ability to service its mortgage obligation using the secured property's cash flow, after deducting nonmortgage expenses from income. The higher the DSCR, the more likely a Multifamily borrower will be able to continue servicing
 its loan obligation.
- DTA Deferred Tax Assets.
- Duration A measure of a financial instrument's price sensitivity to changes in interest rates.
- Duration Gap One of Freddie Mac's primary interest-rate risk measures. Duration gap is a measure of the difference between
 the estimated durations of the Enterprise's interest rate sensitive assets and liabilities. The Enterprise presents the duration gap
 of its financial instruments in units expressed as months. A duration gap of zero implies that the change in value of the
 Enterprise's interest rate sensitive assets from an instantaneous change in interest rates would be expected to be

accompanied by an equal and offsetting change in the value of its interest rate sensitive liabilities, thus leaving economic value unchanged.

- Enterprises Freddie Mac and Fannie Mae.
- ERCF Enterprise Regulatory Capital Framework Rule initially adopted by FHFA in 2020, and subsequently amended in 2022, which establishes a new regulatory capital framework for Freddie Mac and Fannie Mae.
- ERM Enterprise Risk Management.
- **ESOP** Employee Stock Ownership Plan.
- Fannie Mae Federal National Mortgage Association.
- **FHFA** Federal Housing Finance Agency An independent agency of the U.S. government with responsibility for regulating Freddie Mac, Fannie Mae, and the FHLBs.
- FHLBs Federal Home Loan Banks.
- FICC Fixed Income Clearing Corporation.
- **GAAP** Generally Accepted Accounting Principles in the United States of America.
- GSD/FICC Government Securities Division of the Fixed Income Clearing Corporation.
- GSE Government-Sponsored Enterprises Refers to certain legal entities created by the U.S. government, including Freddie Mac, Fannie Mae, and the FHLBs.
- ICM Investment and Capital Markets division of Freddie Mac.
- K Certificates Structured pass-through certificates backed primarily by recently originated Multifamily loans purchased by Freddie Mac.
- LIHTC Low-Income Housing Tax Credit.
- LTV ratio Loan-to-value ratio The ratio of the unpaid principal amount of a loan to the value of the property that serves as collateral for the loan, expressed as a percentage. The Enterprise reports LTV ratios based solely on the amount of the loan purchased or guaranteed by Freddie Mac.
- MBS Mortgage-Backed Security.
- MCIP Multifamily Credit Insurance Pool.
- MD&A Management's Discussion and Analysis of Financial Condition and Results of Operations.
- MI Mortgage Insurance.
- Multifamily Loan A loan secured by a property with five or more residential rental units or by a manufactured housing community.
- Multi PCs[®] Multifamily Participation Certificates.
- Net Worth Amount The term Net Worth Amount is defined as the total assets of Freddie Mac (excluding Treasury's commitment and any unfunded amounts thereof), less the Enterprise's total liabilities (excluding any obligation in respect of capital stock), in each case as reflected on the Enterprise's consolidated balance sheets prepared in conformity with GAAP. If the calculation of the dividend payment for the quarter does not exceed zero, then no dividend shall accrue or be payable for that quarter.
- Non-Accrual Loan A loan for which Freddie Mac is not accruing interest income. Freddie Mac places loans on non-accrual status when it believes collectability of principal and interest in full is not reasonably assured, which generally occurs when a loan is three monthly payments past due, unless the loan is well secured and in the process of collection based upon an individual loan assessment.
- OAS Option-Adjusted Spread An estimate of the incremental yield spread between a particular financial instrument (e.g., a security, loan, or derivative contract) and a benchmark yield curve (e.g., LIBOR, SOFR, agency, or U.S. Treasury securities). This includes consideration of potential variability in the instrument's cash flows resulting from any options embedded in the instrument, such as prepayment options. When the OAS on a given asset widens, the fair value of that asset will typically decline, all other market factors being equal. The opposite is true when the OAS on a given asset tightens.
- **OTC** Over-the-counter.
- PCCBA Prescribed Capital Conservation Buffer Amount.
- **PFE** Potential Future Exposure.

- PLBA Prescribed Leverage Buffer Amount.
- PLS Private Label Security.
- Preferred Stock Preferred Stock as defined and described in Exhibit 4.30 of 2022 Form 10-K.
- Purchase Agreement Senior Preferred Stock Purchase Agreement
- Purchase Agreement / Senior Preferred Stock Purchase Agreement An agreement that Freddie Mac through the Conservator, acting on its behalf, entered into with Treasury on September 7, 2008, relating to Treasury's purchase of senior preferred stock and warrant, which was subsequently amended and restated on September 26, 2008 and further amended on May 6, 2009, December 24, 2009, August 17, 2012, December 21, 2017, September 27, 2019, January 14, 2021, and September 14,2021.
- Regulatory Capital Elements Common Equity Tier 1 (CET1) Capital, Tier 1 Capital, and Adjusted Total Capital.
- REO Real Estate Owned Real estate which Freddie Mac has acquired through a foreclosure sale or through a deed in lieu of foreclosure.
- **RWA** Risk-Weighted Assets.
- S&P Standard & Poor's.
- SCB Stress Capital Buffer.
- SCR Debt Note Structured Credit Risk debt note A debt security where the principal balance is subject to the performance of a reference pool of Multifamily loans guaranteed by Freddie Mac.
- SCR Trust Note Structured Credit Risk Trust note A debt security issued by a nonconsolidated trust where the principal balance is linked to the credit performance of a reference pool of Multifamily loans owned or guaranteed by Freddie Mac. The Enterprise makes payments to the trust to support payment of the interest due on the notes, and it receives payments from the trust as a result of defined credit events on the reference pool.
- SEC U.S. Securities and Exchange Commission.
- Seriously Delinquent or SDQ Single-Family loans that are three monthly payments or more past due or in the process of foreclosure as reported to Freddie Mac by its servicers. Multifamily loans that are two monthly payments or more past due or in the process of foreclosure as reported to Freddie Mac. Unless stated otherwise, SDQ rates presented in this report refer to gross SDQ rates before consideration of credit enhancements.
- SPE Special Purpose Entity.
- Senior Preferred Stock (SPS) The shares of Variable Liquidation Preference Senior Preferred Stock issued to Treasury under the Purchase Agreement.
- SSFA Simplified Supervisory Formula Approach.
- **STACR Debt Note** Structured Agency Credit Risk debt note A Freddie Mac issued debt security where the principal balance is linked to the credit performance of a reference pool of Single-Family loans owned or guaranteed by the Enterprise.
- STACR Trust Note Structured Agency Credit Risk Trust note A debt security issued by a nonconsolidated trust where the
 principal balance is linked to the credit performance of a reference pool of Single-Family loans owned or guaranteed by Freddie
 Mac. The Enterprise makes payments to the trust to support payment of the interest due on the notes, and it receives
 payments from the trust as a result of defined credit events on the reference pool.
- Statutory Capital Elements Total Capital and Core Capital.
- **Swaption** An option contract to enter into an interest-rate swap. In exchange for an option premium, a buyer obtains the right but not the obligation to enter into a specified swap agreement with the issuer on a specified future date.
- **UPB** Unpaid Principal Balance Loan UPB amounts in this report have not been reduced by charge-offs recognized prior to the loan being subject to a foreclosure sale, deed in lieu of foreclosure, or short sale transaction.
- VIEs Variable Interest Entity A VIE is an entity that has a total equity investment at risk that is not sufficient to finance its activities without additional subordinated financial support provided by another party, or where the group of equity holders does not have: (1) the ability to make significant decisions about the entity's activities; (2) the obligation to absorb the entity's expected losses; or (3) the right to receive the entity's expected residual returns.