**FEDERAL HOUSING FINANCE AGENCY**

**12 CFR Parts 1206, 1225, and 1240**

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT**

**Office of Federal Housing Enterprise Oversight**

**12 CFR Part 1750**

**RIN 2590–AA95**

## Enterprise Regulatory Capital Framework

**AGENCY:** Federal Housing Finance Agency; Office of Federal Housing Enterprise Oversight.

**ACTION:** Final rule.

**SUMMARY:** The Federal Housing Finance Agency (FHFA or the Agency) is adopting a final rule (final rule) that establishes risk-based and leverage capital requirements for the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac, and with Fannie Mae, each an Enterprise). The final rule also makes conforming amendments to definitions in FHFA's regulations governing assessments and minimum capital and removes the Office of Federal Housing Enterprise Oversight's (OFHEO) regulation on capital for the Enterprises.

**DATES:** This rule is effective February 16, 2021.

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### Introduction

On June 30, 2020, FHFA published in the **Federal Register** a notice of proposed rulemaking (proposed rule) seeking comment on a new regulatory capital framework for the Enterprises.[1] The proposed rule was a re-proposal of the regulatory capital framework set forth in the notice of proposed rulemaking published in the **Federal Register** on July 17, 2018 (2018 proposal).[2] While the 2018 proposal remained the foundation of the proposed rule, the proposed rule contemplated enhancements to establish a post-conservatorship regulatory capital framework that would ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle, in particular during periods of financial stress. FHFA is now adopting in this final rule the proposed regulatory capital framework, with certain changes to the proposed rule described below.

### The Proposed Rule

Pursuant to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992[3] (Safety and Soundness Act), as amended by the Housing and Economic Recovery Act of 2008[4] (HERA), the FHFA Director's principal duties include, among other duties, ensuring that each Enterprise operates in a safe and sound manner, that the operations and activities of each Enterprise foster liquid, efficient, competitive, and resilient national housing finance markets, and that each Enterprise carries out its statutory mission only through activities that are authorized under and consistent with the Safety and Soundness Act and its charter.[5] Pursuant to their charters, the statutory purposes of the Enterprises are, among other purposes, to provide stability in, and ongoing assistance to, the secondary market for residential mortgages.[6]

Consistent with these statutory duties and purposes, FHFA re-proposed the regulatory capital framework for the Enterprises for three key reasons. First, FHFA has begun the process to responsibly end the conservatorships of the Enterprises. This policy is a departure from the expectations of interested parties at the time of the 2018 proposal when the prospects for indefinite conservatorships informed comments and perhaps even the decision whether to comment at all.

Second, FHFA proposed to increase the quantity and quality of regulatory capital to ensure that each Enterprise operates in a safe and sound manner

[1] 85 FR 39274.

[2] 83 FR 33312.

[3] Public Law 102–550, 106 Stat. 3941 (1992).

[4] Public Law 110–289, 122 Stat. 2654 (2008).

[5] 12 U.S.C. 4513(a)(1).

[6] 12 U.S.C. 1451 note, 1716.

and is positioned to fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle, in particular during periods of financial stress. To achieve this objective, each Enterprise must be capitalized to be regarded as a viable going concern by creditors and counterparties both during and after a severe economic downturn. The importance of this going-concern standard was made clear by the Enterprises' funding difficulties and near failure during the 2008 financial crisis. The Enterprises fund themselves with a significant amount of short-term unsecured debt that must be regularly refinanced. Each Enterprise's funding needs are very likely to increase during an economic downturn, all else equal, as the Enterprise funds purchases of non-performing loans (NPLs) out of securitization pools and lenders increase their reliance on the Enterprise's cash window. These ordinary course and procyclical funding needs can be met only if the Enterprise continues to be regarded as a viable going concern by creditors throughout the duration of an economic downturn. Indeed, it was the increase in the Enterprises' borrowing costs and the associated difficulties that the Enterprises faced in refinancing their debt that were among the most immediate grounds for FHFA placing the Enterprises into conservatorship.[7]

The 2008 financial crisis also established that credit, market, and other losses can be incurred quickly during a stress and that an Enterprise's capacity to absorb those losses as incurred while still timely performing its financial obligations defines creditors' and other counterparties' views as to whether the Enterprise remains a viable going concern. During a stress, creditors are unlikely to give much consideration to future revenue prospects in assessing whether an Enterprise can timely perform its financial obligations. Market confidence in the Enterprises waned in mid-2008 when Fannie Mae and Freddie Mac had total capital of, respectively, $55.6 billion and $42.9 billion, notwithstanding their rights to future guarantee fees.

It was in this historical context that HERA amended the Safety and Soundness Act to give FHFA greater authority to establish regulatory capital requirements for the Enterprises. OFHEO had previously been bound by the Safety and Soundness Act's prescriptive restrictions on the stress scenario used to calibrate the risk-based capital requirements. Under HERA's expanded authority, FHFA is required to prescribe by regulation risk-based capital requirements ''to ensure that the enterprises operate in a safe and sound manner, maintaining sufficient capital and reserves to support the risks that arise in the operations and management of the enterprises.'' [8] Importantly, the requirement that each Enterprise ''maintain[] sufficient capital and reserves'' applies before, during, and after a severe economic downturn, codifying in statute a going-concern standard.

For the reasons given in Section IV.B.2 and elsewhere of the proposed rule, FHFA determined that the 2018 proposal's credit risk capital requirements were insufficient to ensure each Enterprise would continue to be regarded as a viable going concern during and after a severe economic downturn. Had the 2018 proposal been in effect at the end of 2007, Fannie Mae's and Freddie Mac's peak cumulative capital exhaustion would have left, respectively, capital equal to only 0.1 percent and 0.5 percent of their total assets and off-balance sheet guarantees. These amounts would not have sustained the market confidence necessary for the Enterprises to continue as going concerns, particularly given the prevailing stress in the financial markets at that time and given the uncertainty as to the potential for other write-downs and the adequacy of the Enterprises' allowances for loan and lease losses (ALLL).[9]

Reinforcing that point, the Enterprises' crisis-era cumulative capital losses, while significant, could have been greater. The Enterprises' losses were likely mitigated by unprecedented federal government support of the housing market and the economy during the crisis, including through the Home Affordable Modification Program, the Troubled Asset Relief Program, the 2009 stimulus package,[10] and the Federal Reserve System's purchases of more than $1.2 trillion of the Enterprises' debt and mortgage-backed securities (MBS) from January 2009 to March 2010. The Enterprises' losses also were likely dampened by the declining interest rate environment of the period, when the interest rates on 30-year fixed-rate mortgage loans declined by approximately 200 basis points through the end of 2011, facilitating refinancings and loss mitigation programs.

In addition to ensuring each Enterprise would continue to be regarded as a viable going concern during and after a repeat of the 2008 financial crisis, FHFA also determined that enhancements to the quantity and quality of regulatory capital at the Enterprises were necessary to mitigate certain risks and limitations associated with the underlying historical data and models used to calibrate the 2018 proposal's credit risk capital requirements. Mitigation of model risk figured prominently in FHFA's design of the proposed rule. As discussed in Section IV.B.2 of the proposed rule, the calibration of the 2018 proposal's credit risk capital requirements attributed a significant portion of the Enterprises' crisis-era losses to the product characteristics of mortgage loans that are no longer eligible for acquisition.[11] The statistical methods used to allocate losses between borrower-related risk attributes and product-related risk

[7] *See Memorandum dated September 6, 2008 re: Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Fannie Mae* at 29 (''The Enterprise's practice of relying upon repo financing of its agency collateral to raise cash in the current credit and liquidity environment is an unsafe or unsound practice that has led to an unsafe or unsound condition, given the unavailability of willing lenders to provide secured financing in significant size to reduce pressure on its discount notes borrowings.''); and *Memorandum dated September 6, 2008 re: Proposed Appointment of the Federal Housing Finance Agency as Conservator for the Freddie Mac* at 28 (''The Enterprise's prolonged reliance almost exclusively on 30-day discount notes is an untenable long-term source of funding and an unsafe or unsound practice that poses abnormal risk to the viability of the Enterprise. Operating without an adequate liquidity funding contingency plan is an unsafe or unsound condition to transact business.''); and Fin. Crisis Inquiry Comm'n, The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States at 316 (2011) (the FCIC Report), available at *https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf;* (''In July and August 2008, Fannie suffered a liquidity squeeze, because it was unable to borrow against its own securities to raise sufficient cash in the repo market.''); *see id.* at 316 (''By June 2008, the spread [between the yield on the GSEs' long-term bonds and rates on Treasuries] had risen 65 percent over the 2007 level; by September 5, just before regulators parachuted in, the spread had nearly doubled from its 2007 level to just under 1 percent, making it more difficult and costly for the GSEs to fund their operations.'').

[8] 12 U.S.C. 4611.

[9] Indeed, in October 2010, FHFA projected $90 billion in additional draws under the Senior Preferred Stock Purchase Agreements through 2013 under the baseline scenario. Only $34 billion in additional draws proved necessary. *See Fed. Hous. Fin. Agency, Projections of the Enterprises' Financial Performance* at 10 (Oct. 2010), available at *https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/2010-10_Projections_508.pdf.*

[10] American Recovery and Reinvestment Act of 2009, Public Law 111–5, 123 Stat. 115 (2009).

[11] These ineligible mortgage loan products included ''Alt-A,'' negative amortization, interest-only, and low or no documentation loans, as well as loans with debt-to-income ratio at origination greater than 50 percent, cash out refinances with total loan-to-value ratios (LTV) greater than 85 percent, and investor loans with LTV greater than or equal to 90 percent.

attributes pose significant model risk.[12] To ensure safety and soundness, the capital requirements should be sized to mitigate the risk of potential underestimation of credit losses that would be incurred in an economic downturn with national housing price declines similar to those observed in the 2008 financial crisis, even absent those ineligible loan types and even assuming a repeat of federal support of the economy and a declining interest rate environment. There also were some material risks to the Enterprises that were not assigned a risk-based capital requirement under either the 2018 proposal or the proposed rule—for example, risks relating to uninsured or underinsured losses from flooding, earthquakes, or other natural disasters or radiological or biological hazards. There also was no risk-based capital requirement for the risks that climate change could pose to property values in some localities.

The third reason FHFA re-proposed the Enterprises' regulatory capital framework was to make changes to mitigate the procyclicality of the aggregate risk-based capital requirements of the 2018 proposal. FHFA agreed with many of the commenters on the 2018 proposal that mitigating the procyclicality of the 2018 proposal's risk-based capital requirements would facilitate capital management and enhance the safety and soundness of the Enterprises. Mitigating that procyclicality was also critical, in FHFA's view, to position each Enterprise to fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle.

The enhancements contemplated by the proposed rule, while important, preserved the 2018 proposal as the foundation of the Enterprises' regulatory capital framework. FHFA nonetheless determined to solicit comments on the revised framework in its entirety in light of the changed policy environment, the extent and nature of the enhancements, the technical nature of the underlying issues, the diverse range of interested parties, and the critical importance of the Enterprises' regulatory capital framework to the national housing finance markets.

[12] Reliance on static look-up grids and multipliers might also introduce additional model risk as borrower behavior, mortgage products, underwriting and collateral valuation practices, or the national housing markets continue to evolve.

**Overview of the Final Rule**

*Key Modifications to the Proposed Rule*

After carefully considering the comments on the proposed rule, and as described in this preamble, FHFA has determined to make a number of changes to the proposed rule to ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle, in particular during periods of financial stress. Key modifications to the proposed rule include, among others:

- Changes to the approach to credit risk transfers (CRT) will better tailor the risk-based capital requirements to the risk retained by an Enterprise on its CRT. These enhancements include a change to the overall effectiveness adjustment for a CRT on a pool of mortgage exposures that has a relatively lower aggregate credit risk capital requirement, a change to the method for assigning a risk weight to a retained CRT exposure so as to increase the risk sensitivity of the risk weight, and a modification to the loss-timing adjustment for a CRT on multifamily mortgage exposures to better tailor the adjustment to the contractual term of the CRT and the loan terms of the underlying exposures. These changes will together generally increase the dollar amount of the capital relief for certain CRT structures commonly entered into by the Enterprises.
- The floor on the adjusted risk weight assigned to mortgage exposures will be 20 percent instead of 15 percent. This adjustment may increase to some extent the dollar amount of the capital relief provided by a CRT on a pool of mortgage exposures that, absent the 20 percent risk weight floor, would have had a smaller aggregate net credit risk capital requirement.
- The credit risk capital requirement for a single-family mortgage exposure that is or was in forbearance pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act or a program established by FHFA to provide forbearance for COVID–19-impacted borrowers will be assigned under an approach that is specifically tailored to these exposures. This approach will significantly reduce the credit risk capital requirement for a non-performing loan that is subject to a COVID–19-related forbearance and, following a reinstatement, will then disregard that period of non-performance.
- The framework for determining credit risk capital requirements will permit a modified re-performing loan to transition to a performing loan after a 5-year period of performance, treat a single-family mortgage exposure in a repayment plan (including following a COVID–19-related forbearance) as a non-modified re-performing loan instead of a modified re-performing loan, and apply a more risk-sensitive approach to single-family mortgage exposures with marked-to-market loan-to-value ratios between 30 and 60 percent.
- The combined risk multiplier for a single-family mortgage exposure will be capped at 3.0, as contemplated by the 2018 proposal.
- The countercyclical adjustment to the standardized credit risk capital requirement for a single-family mortgage exposure will be based on the national, not-seasonally adjusted expanded-data FHFA House Price Index® (expanded-data FHFA HPI) instead of the all-transaction FHFA HPI. The long-term HPI trend line will be subject to re-estimation according to a mechanism specified in the final rule. As of June 30, 2020, house prices were moderately greater than the 5 percent collar. As a result, the adjusted marked-to-market loan-to-value ratios of single-family mortgage exposures would be increased by the countercyclical adjustment, increasing the aggregate risk-based capital requirements for these exposures.
- The stress capital buffer will be periodically re-sized to the extent that FHFA's eventual program for supervisory stress tests determines that an Enterprise's peak capital exhaustion under a severely adverse stress would exceed 0.75 percent of adjusted total assets.
- The advanced approaches requirements will have a delayed effective date of the later of January 1, 2025 and any later compliance date provided by a transition order applicable to the Enterprise. During that interim period, an Enterprise's operational risk capital requirement will be 15 basis points of its adjusted total assets.

*B. Modifications to the 2018 Proposal*

With these modifications to the proposed rule, the final rule adopts most of the proposed rule's contemplated enhancements to the 2018 proposal, including:

- Simplifications and refinements of the grids and risk multipliers for the credit risk capital requirements for single-family mortgage exposures, including removal of the single-family risk multipliers for loan balance and the number of borrowers.
- A stability capital buffer tailored to the risk that an Enterprise's default or

other financial distress could pose to the liquidity, efficiency, competitiveness, and resiliency of national housing finance markets.

- A stress capital buffer that would, among other things, enhance the resiliency of the Enterprises, help ensure that each Enterprise would continue to be regarded as a viable going concern by creditors and other counterparties after a severe economic downturn, and dampen the procyclicality of the regulatory capital framework by encouraging each Enterprise to retain capital during periods of economic expansion while remaining able to provide stability and ongoing assistance to the secondary mortgage market during a period of financial stress by utilizing capital buffers to absorb losses as incurred.
- A countercyclical adjustment for single-family credit risk that would result in greater capital retention when housing markets may be vulnerable to correction, while better enabling the Enterprises to continue to support the secondary mortgage market during a period of financial stress.
- A prudential floor on the credit risk capital requirement assigned to mortgage exposures to mitigate the model and other risks associated with the methodology for calibrating the credit risk capital requirements and also provide further stability in the aggregate risk-based capital requirements through the economic cycle.
- A credit risk capital requirement on senior tranches of CRT held by an Enterprise to capitalize the retained credit risk, an adjustment to the CRT capital treatment to reflect that CRT is not equivalent in loss-absorbing capacity to equity financing, and operational criteria for CRT structures that together would help mitigate certain structuring, recourse, and other risks associated with these securitizations.
- Risk-based capital requirements for a number of exposures not expressly addressed by the 2018 proposal, including credit risk on commitments to acquire mortgage loans, counterparty risk on interest rate and other derivatives, and credit risk on an Enterprise's holdings or guarantees of the other Enterprise's MBS or debt.
- A revised method for determining operational risk capital requirements, as well as a higher floor.
- A requirement that each Enterprise maintain internal models for determining its own risk-based capital requirements that is intended to prompt each Enterprise to develop its own view of credit and other risks and not rely solely on the risk assessments underlying the standardized risk weights assigned under the regulatory capital framework.
- A 2.5 percent leverage ratio requirement and a 1.5 percent leverage buffer that together would serve as a credible backstop to the risk-based capital requirements and mitigate the inherent risks and limitations of any methodology for calibrating granular credit risk capital requirements.

*C. Regulatory Capital Requirements*

As implemented by this final rule, the regulatory capital framework will require each Enterprise to maintain the following risk-based capital:

- Total capital not less than 8.0 percent of risk-weighted assets, determined as discussed below;
- Adjusted total capital not less than 8.0 percent of risk-weighted assets;
- Tier 1 capital not less than 6.0 percent of risk-weighted assets; and
- Common equity tier 1 (CET1) capital not less than 4.5 percent of risk-weighted assets.

Each Enterprise also will be required to satisfy the following leverage ratios:

- Core capital not less than 2.5 percent of adjusted total assets; and
- Tier 1 capital not less than 2.5 percent of adjusted total assets.

Adjusted total assets will be defined as total assets under generally accepted accounting principles (GAAP), with adjustments to include certain off-balance sheet exposures. Total capital and core capital will have the meaning given in the Safety and Soundness Act. Adjusted total capital, tier 1 capital, and CET1 capital will be defined based on the definitions of total capital, tier 1 capital, and CET1 capital set forth in the regulatory capital framework (the Basel framework) developed by the Basel Committee on Bank Supervision (BCBS) that is the basis for the United States banking regulators' regulatory capital framework (U.S. banking framework). These supplemental regulatory capital definitions will fill certain gaps in the statutory definitions of core capital and total capital by making customary deductions and other adjustments for certain deferred tax assets (DTAs) and other assets that tend to have less loss-absorbing capacity during a financial stress.

To calculate its risk-based capital requirements, an Enterprise will determine its risk-weighted assets under two approaches—a standardized approach and an advanced approach—with the greater of the two used to determine its risk-based capital requirements. Under both approaches, an Enterprise's risk-weighted assets will equal the sum of its credit risk-weighted assets, market risk-weighted assets, and operational risk-weighted assets.

Under the standardized approach, the credit risk-weighted assets for mortgage loans secured by one-to-four residential units (single-family mortgage exposures) and mortgage loans secured by five or more residential units (multifamily mortgage exposures) will be determined using lookup grids and multipliers that assign an exposure-specific risk weight based on the risk characteristics of the mortgage exposure. These lookup grids and multipliers generally are similar to those of the 2018 proposal, with some simplifications and refinements.[13]

Like the 2018 proposal, the base risk weight will be a function of the mortgage exposure's loan-to-value ratio with the property value generally marked to market (MTMLTV). For single-family mortgage exposures, the MTMLTV will be subject to a countercyclical adjustment to the extent that national house prices are 5.0 percent greater than or less than an inflation-adjusted long-term trend. For both single-family and multifamily mortgage exposures, this base risk weight will then be adjusted to reflect additional risk attributes of the mortgage exposure and any loan-level credit enhancement. To ensure an appropriate level of capital, this adjusted risk weight will be subject to a minimum floor of 20 percent.

As of June 30, 2020, under the final rule's standardized approach, the Enterprises' average risk weight for single-family mortgage exposures would have been 37 percent, and the Enterprises' average risk weight for multifamily mortgage exposures would have been 49 percent.[14]

While the standardized approach will utilize FHFA-prescribed lookup grids and risk multipliers, the advanced approach for determining credit risk-weighted assets will rely on each Enterprise's internal models. The advanced approach requirements will require each Enterprise to maintain its own processes for identifying and assessing credit risk, market risk, and operational risk. These requirements are

[13] This base risk weight would be equal to the adjusted total capital requirement for the mortgage exposure expressed in basis points and divided by 800, which is the 8.0 percent adjusted total capital requirement also expressed in basis points. For example, the credit risk capital requirement for a mortgage exposure with a base risk weight of 50 percent would be 400 basis points (800 multiplied by 50 percent).

[14] These average risk weights are determined based on the credit risk capital requirement for single-family and multifamily mortgage exposures after adjustments for mortgage insurance and other loan-level credit enhancement but before any adjustment for CRT.

intended to ensure that each Enterprise continues to enhance its risk management system and also that neither Enterprise relies solely on the standardized approach's lookup grids and multipliers to define credit risk tolerances, measure its credit risk, or allocate capital. In the course of FHFA's supervision of each Enterprise's internal models for credit risk, FHFA also could identify opportunities to update or otherwise enhance the standardized approach's lookup grids and multipliers through a future rulemaking.

Under both the standardized and advanced approaches, an Enterprise will determine the capital treatment for eligible CRT by assigning risk weights to retained CRT exposures. Under the standardized approach, tranche-specific risk weights will be subject to a 10 percent floor. The risk-weighted assets of a retained CRT exposure will be subject to adjustments to reflect loss-sharing effectiveness, loss-timing effectiveness, and the differences between CRT and regulatory capital, ensuring that the capital relief afforded by the CRT appropriately reflects the credit risk retained by the Enterprise.

Each Enterprise also will determine a market risk capital requirement for spread risk. Market risks other than spread risk will not be assigned a market risk capital requirement, but FHFA continues to consider more comprehensive approaches for future rulemakings. Under the standardized approach, an Enterprise will determine its market risk-weighted assets using FHFA-specified formulas for some covered positions and its own models for other covered positions. An Enterprise will separately determine its market risk-weighted assets under an advanced approach that relies only on its own internal models for all covered positions.

The final rule also will require each Enterprise to determine its operational risk capital requirement utilizing the U.S. banking framework's advanced measurement approach, subject to a floor equal to 15 basis points of the Enterprise's adjusted total assets.

Each of these regulatory capital requirements will be enforceable by FHFA under its general authority to order an Enterprise to cease and desist from a violation of law, which would include the final rule and its regulatory capital requirements. Pursuant to that authority, FHFA may require an Enterprise to develop and implement a capital restoration plan or take other appropriate corrective action. FHFA also could elect to enforce the risk-based and leverage ratio requirements pursuant to its authority to require an Enterprise to develop a plan to achieve compliance with prescribed prudential management and operational standards, and FHFA also could enforce the core capital leverage ratio requirement or the risk-based total capital requirement pursuant to its separate authority to require prompt corrective action if an Enterprise fails to maintain certain prescribed regulatory levels.

*D. Capital Buffers*

To avoid limits on capital distributions and discretionary bonus payments, an Enterprise must maintain CET1 capital that exceeds its risk-based capital requirements by at least the amount of its prescribed capital conservation buffer amount (PCCBA). That PCCBA will consist of three separate component buffers—a stress capital buffer, a countercyclical capital buffer, and a stability capital buffer.

- The stress capital buffer will be at least 0.75 percent of an Enterprise's adjusted total assets. FHFA will periodically re-size the stress capital buffer to the extent that FHFA's eventual program for supervisory stress tests determines that an Enterprise's peak capital exhaustion under a severely adverse stress would exceed 0.75 percent of adjusted total assets.
- The countercyclical capital buffer amount initially will be set at 0 percent of an Enterprise's adjusted total assets. FHFA does not expect to adjust this buffer in the place of, or to supplement, the countercyclical adjustment to the risk-based capital requirements. Instead, as under the Basel and U.S. banking frameworks, FHFA will adjust the countercyclical capital buffer taking into account the macro-financial environment in which the Enterprises operate, 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. This focus on excess aggregate credit growth means the countercyclical buffer likely will be deployed on an infrequent basis, and generally only when similar buffers are deployed by the U.S. banking regulators.
- An Enterprise's stability capital buffer will be tailored to the risk that an Enterprise's default or other financial distress could pose to the liquidity, efficiency, competitiveness, or resiliency of national housing finance markets. The stability capital buffer will be based on an Enterprise's share of residential mortgage debt outstanding. As of June 30, 2020, Fannie Mae's and Freddie Mac's stability capital buffers would have been, respectively, 1.07 and 0.66 percent of adjusted total assets.

Finally, to avoid limits on capital distributions and discretionary bonus payments, the Enterprise also will be required to maintain tier 1 capital in excess of the amount required under its tier 1 leverage ratio requirement by at least the amount of its prescribed leverage buffer amount (PLBA). The PLBA will equal 1.5 percent of the Enterprise's adjusted total assets, such that the PLBA-adjusted leverage ratio requirement would function as a credible backstop to the PCCBA-adjusted risk-based capital requirements.

*E. Transition Period*

An Enterprise will not be subject to any requirement under the final rule until the compliance date for the requirement under the final rule. The compliance date for the regulatory capital requirements (distinct from the PCCBA or the PLBA) will be the later of the date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of the final rule, which would be 60 days after publication in the **Federal Register**) and any later compliance date provided in a consent order or other transition order applicable to the Enterprise. In contrast, FHFA contemplates that the compliance dates for the PCCBA and the PLBA will be the date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of the final rule), so as to provide additional authority to FHFA to restrict dividends and other capital distributions during the period in which the Enterprise raises regulatory capital to achieve compliance with the regulatory capital requirements. FHFA expects that this interim period could be governed by a capital restoration plan that would be binding on the Enterprise pursuant to a consent order or other transition order.

The final rule's advanced approaches requirements will be delayed until the later of January 1, 2025 and any later compliance date specific to those requirements provided in a consent order or other transition order applicable to the Enterprise. Regardless of the date of the termination of the conservatorship of an Enterprise, the Enterprise will be required to report its regulatory capital, PCCBA, PLBA, standardized total risk-weighted assets, and adjusted total assets beginning January 1, 2022.

## IV. FSOC Review of the Secondary Mortgage Market

On September 25, 2020, the Financial Stability Oversight Council (FSOC) released a statement on its activities-based review of the secondary mortgage

market (FSOC Secondary Market Statement). FSOC found that any distress at the Enterprises that affected their secondary mortgage market activities could pose a risk to financial stability, if risks are not properly mitigated. Much of FSOC's analysis centered on the extent to which the proposed rule would adequately mitigate the potential stability risk of the Enterprises.

The FSOC Secondary Market Statement affirmed the overall quantity and quality of the regulatory capital required by the proposed rule. The FSOC Secondary Market Statement also indicated that greater capital requirements might be appropriate for some exposures. Notably, FSOC's analysis suggested that ''risk-based capital requirements and leverage ratio requirements that are materially less than those contemplated by the proposed rule would likely not adequately mitigate the potential stability risk posed by the Enterprises.'' FSOC also found that ''it is possible that additional capital could be required for the Enterprises to remain viable concerns in the event of a severely adverse stress . . . .''

The FSOC Secondary Market Statement included other findings and recommendations that generally endorsed the objectives, rationales, and approaches of the proposed rule.

• *Going-concern standard.* Consistent with the proposed rule's objectives, FSOC ''encourage[d] FHFA to require the Enterprises to be sufficiently capitalized to remain viable as going concerns during and after a severe economic downturn.'' This recommendation should preclude a ''claims-paying capacity'' or similar framework that seeks only to ensure that an Enterprise has the ability to perform its guarantee and other financial obligations over time, perhaps subject to a stay or other pause in the payment of claims and other financial obligations during a resolution proceeding. Instead, each Enterprise should be capitalized not only to absorb losses as they are incurred in a severely adverse stress, but also so that the Enterprise would have sufficient regulatory capital after that stress to continue to be regarded as a viable going concern by creditors and other counterparties.

• *Enterprise-specific stability buffer.* In a significant departure from the 2018 proposal, the proposed rule contemplated an Enterprise-specific stability capital buffer tailored to the risk that an Enterprise's default or other financial distress could pose to the liquidity, efficiency, competitiveness, or resiliency of national housing finance markets. FSOC affirmed that ''[a] stability capital buffer would mitigate risks to financial stability by reducing the expected impact of an Enterprise's distress on financial markets or other financial market participants and by addressing the potential for decreased market discipline due to an Enterprise's size and importance.'' FSOC also recommended that ''[t]he capital buffers should be tailored to mitigate the potential risks to financial stability.''

• *Quality of capital.* FSOC endorsed the proposed rule's use of the U.S. banking framework's definitions of regulatory capital to prescribe supplemental capital requirements. Specifically, FSOC ''encourage[d] FHFA to ensure high-quality capital by implementing regulatory capital definitions that are similar to those in the U.S. banking framework.'' This recommendation supports FHFA's determination in the proposed rule and in the 2018 proposal, consistent with the U.S. banking framework, not to include a measure of guarantee fees or other future revenues as an element of regulatory capital.

• *U.S. banking framework comparisons.* FSOC found that ''[t]he Enterprises' credit risk requirements . . . likely would be lower than other credit providers across significant portions of the risk spectrum and during much of the credit cycle, which would create an advantage that could maintain significant concentration of risk with the Enterprises.'' This finding is consistent with FHFA's determination in the proposed rule that, as of September 30, 2019, the proposed rule's average credit risk capital requirements for the Enterprises' mortgage exposures generally were roughly half those of similar exposures under the U.S. banking framework. Those lower average credit risk capital requirements were before any adjustment for the capital relief afforded through CRT.

The FSOC Secondary Market Statement also identified potential opportunities to enhance the proposed rule and FHFA's regulatory framework more generally.

• *Buffer calibration.* FSOC ''encourage[d] FHFA to consider the relative merits of alternative approaches for more dynamically calibrating the capital buffers.'' The proposed rule contemplated a stress capital buffer sized as a fixed percent of an Enterprise's adjusted total assets, and FHFA sought comment on whether to adopt an alternative approach under which FHFA would periodically re-size the stress capital buffer, similar to the approach recently adopted by the U.S. banking regulators, to the extent that FHFA's eventual program for supervisory stress tests determines that an Enterprise's peak capital exhaustion under a severely adverse stress would exceed 0.75 percent of adjusted total assets. FHFA has adopted that alternative approach in this final rule.

• *Level playing field.* FSOC ''encourage[d] FHFA and other regulatory agencies to coordinate and take other appropriate action to avoid market distortions that could increase risks to financial stability by generally taking consistent approaches to the capital requirements and other regulation of similar risks across market participants, consistent with the business models and missions of their regulated entities.'' In the final rule, FHFA has adopted a risk weight floor on mortgage exposures that is equal to the smallest risk weight contemplated by the Basel framework for residential real estate exposures.[15]

• *Other regulatory requirements.* FSOC noted that FHFA's ''efforts to strengthen Enterprise liquidity regulation, stress testing, supervision, and resolution planning would help mitigate the potential risk to financial stability.'' FSOC stated that it ''support[ed] FHFA's commitment to developing its broader prudential regulatory framework for the Enterprises and encourage[d] FHFA to continue those efforts.''

FSOC also committed to continue to monitor the secondary mortgage market activities of the Enterprises and FHFA's implementation of the regulatory framework to ensure potential risks to financial stability are adequately addressed. Significantly, if FSOC later determines that such risks to financial stability are not adequately addressed by FHFA's capital and other regulatory requirements or other risk mitigants, FSOC may consider more formal recommendations or other actions, consistent with the interpretive guidance on nonbank financial company determinations issued by FSOC in December 2019.

If the activities-based approach contemplated by that guidance does not adequately address a potential threat to financial stability, FHFA understands that FSOC could consider a nonbank financial company, including an Enterprise, for potential designation for supervision and regulation by the Board of Governors of the Federal Reserve System (Federal Reserve Board).

[15] BCBS, *Basel III: Finalising post-crisis reforms* ¶¶ 59–68 (Dec. 2017).

## V. General Comments on the Proposed Rule

FHFA received 128 public comment letters on the proposed rule from the Enterprises, trade associations, consumer advocacy groups, private individuals, and other interested parties.[16] Overall, most commenters supported FHFA's effort to establish a post-conservatorship regulatory capital framework that would ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle. However, many commenters also expressed concern about the potential impacts, costs, and burdens of various aspects of the proposed rule.

### *A. Access and Affordability and Other Aggregate Impacts*

Many commenters expressed concern about the potential aggregate impacts of the proposed rule, such as: Higher borrowing costs, including for first-time and low- and moderate-income borrowers and minority and rural communities; implications for the Enterprises' ability to satisfy their affordable housing goals or their duty to serve mandates or perform their countercyclical mission; greater cost of home ownership; an increased racial wealth gap; impacts on the affordability of multifamily housing; different pricing impacts on specific mortgage products; lower Enterprise returns on equity; reduced investor demand for the Enterprises' equity; shifts in market share from the Enterprises to banks, private-label securitization (PLS), or the Federal Housing Administration; limits on the ability of credit unions to serve their customers; incentives for the Enterprises to increase risk taking, retain mortgage credit risk, or engage in risk-based pricing of their guarantee fees; disincentives to engage in CRT; and greater compliance costs.

Some commenters urged that the Enterprises' charter mandate to serve the public interest should inform changes to the proposed rule. Other commenters challenged the perceived complexity of the proposed rule. Still other commenters requested that FHFA perform additional studies on the impact of all or parts of the proposed rule, while certain other commenters sought withdrawal or re-proposal of the proposed rule. Other commenters urged that any future changes to the Enterprises' guarantee fees should wait until there is additional clarity about the future regulatory and market structure.

Some commenters questioned whether the regulatory capital framework might impede an Enterprise's ability to raise capital, while some commenters thought that the Enterprises would still have an attractive return on equity under the proposed rule. A few commenters urged FHFA to consider that each Enterprise's existing books of businesses might have been priced assuming smaller required quantities of regulatory capital, which might be particularly relevant to the extent that recent refinancing volumes extend the expected life of the portfolio.

Many commenters generally supported FHFA's objective to establish a post-conservatorship regulatory capital framework that would ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle. Some commenters argued that the interests of low- and moderate-income borrowers would be best served by capitalizing the Enterprises to support the secondary market during a period of financial stress, especially as these borrowers' access to credit tends to be most adversely affected by financial stress. Also, some commenters stated that appropriately capitalizing each Enterprise would mitigate risk to financial stability. A few commenters advocated that FHFA should protect taxpayers against future bailouts by requiring adequate loss-absorbing capacity.

FHFA carefully considered these comments in identifying and assessing potential changes to the proposed rule. As context for that discussion elsewhere in this preamble, FHFA notes that the Safety and Soundness Act requires FHFA to establish by regulation risk-based capital requirements for the Enterprises to ensure that each Enterprise operates in a safe and sound manner, maintaining sufficient capital and reserves to support the risks that arise in the operations and management of the Enterprise.[17] While FHFA has other mission-related mandates, this particular statutory mandate focuses only on safety and soundness.

In addition to ensuring the Enterprises' safety and soundness, the proposed rule did still seek to ensure that each Enterprise will be positioned to fulfill its statutory mission across the economic cycle. This objective led to changes to the 2018 proposal to reduce the regulatory capital framework's procyclicality. The proposed rule also took specific steps to mitigate the potential impacts on higher risk exposures. These steps included setting the PCCBA as a fixed percent of adjusted total assets (not risk-weighted assets), removing the single-family risk multipliers for loan balance and number of borrowers, and reducing the risk-based capital requirements for low down-payment loans with private mortgage insurance. More generally, FHFA continues to believe that appropriately capitalizing each Enterprise is critical to ensuring that the secondary mortgage market supports access to affordable mortgage credit for low- and moderate-income borrowers and minority borrowers during periods of financial stress, when these borrowers are potentially most vulnerable to loss of access to affordable mortgage credit.

In FHFA's view, predictions of a material increase in mortgage credit borrowing costs as a result of the proposed rule are subject to scrutiny and significant uncertainty. Some economic theory and empirical evidence suggest that an increase in an Enterprise's equity financing would lead to some decrease in the Enterprise's cost of equity capital, mooting some, or perhaps much, of any such potential impact of increased regulatory capital requirements.[18] Evidencing that point, the significant increase in the U.S. banking framework's regulatory capital requirements following the 2008 financial crisis generally did not lead to significant increases in borrowing costs, contrary to the predictions of market participants at the time.[19] The Enterprises' cost of capital also might be affected by the pricing and availability of CRT over time. Further complicating the analysis, the Enterprises' pricing decisions will be influenced by a variety of regulatory and market considerations. The Enterprises' housing goals set by FHFA will be a particularly important consideration in each Enterprise's pricing decisions with respect to low- and moderate-income borrowers. As

[16] *See* comments on Enterprise Regulatory Capital Framework, *available* at *https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/Comment-List.aspx?RuleID=674.* The comment period for the proposed rule closed on August 31, 2020.

[17] 12 U.S.C. 4611(a)(1). Safety and soundness is also the standard governing FHFA's authority to set a leverage ratio higher than the minimum prescribed by the statute. 12 U.S.C. 4612(c).

[18] Modigliani, F., and Miller, M.H. (1958), *The Cost of Capital, Corporation Finance and the Theory of Investment,* The American Economic Review, 48:3 (1958); BCBS, *The costs and benefits of bank capital—a review of the literature* (June 2019) at section 2.3; Jihad Dagher et al., *IMF Staff Discussion Note: Benefits and Costs of Bank Capital* (March 2016) at Table 4.A; Federal Reserve Bank of Minneapolis, *The Minneapolis Plan to End Too Big to Fail* (November 2016).

[19] *See, e.g.,* Simon Firestone, Amy Lorenc, and Ben Ranish, *An Empirical Economic Assessment of the Costs and Benefits of Bank Capital in the US* (March 31, 2017).

discussed in Section V.D, an Enterprise's pricing decisions should be increasingly based on its own risk assessment as the Enterprise retains capital. An Enterprise's pricing decisions will also inevitably take into account the pricing and other economic decisions of the other Enterprise, with pricing equilibriums under a duopoly difficult to model and predict. To the extent that the Enterprises compete with other market participants, the cost of mortgage credit will depend on the pricing decisions of those competitors, with those competitors outside the scope of FHFA's regulatory capital framework. Finally, the proposed rule was intended to ensure each Enterprise could support the secondary market during a period of financial stress, and any assessment of the regulatory capital framework's impact on borrowing costs should evaluate borrowing costs over the course of the economic cycle. Commentary on the proposed rule generally did not address these complicating factors and should be considered in the context of similar concerns that post-crisis enhancements to the U.S. banking framework would significantly and adversely affect the cost of and access to credit.

*B. Similarities to the U.S. Banking Framework*

Some commenters supported the proposed rule's use of the Basel framework's regulatory capital definitions to prescribe supplemental capital requirements. Some commenters also supported the use of risk weights to define each mortgage exposure's risk-based capital requirement, the inclusion of the stress capital buffer, and the incorporation of other concepts from the Basel and U.S. banking frameworks. Some commenters advocated a general alignment of the credit risk capital requirements for similar mortgage exposures across the Enterprises and other market participants, which also was a recommendation in the FSOC Secondary Market Statement.

Other commenters criticized the extent to which the proposed rule incorporated concepts from the Basel and U.S. banking frameworks. Some commenters argued that the proposed rule inappropriately treated the Enterprises as banks and that ''bank-like'' quantities of required capital would be inappropriate for the Enterprises.

As discussed in Sections VIII.A.7 and VIII.B.6 of the proposed rule, as of September 30, 2019, and before adjusting for CRT or the buffers, the average credit risk capital requirements for the Enterprises' mortgage exposures generally were roughly half those of similar exposures under the U.S. banking framework.[20] The Enterprises together would have been required under the proposed rule's risk-based capital requirements to maintain $234 billion in risk-based adjusted total capital as of September 30, 2019 to avoid restrictions on capital distributions and discretionary bonuses. Had they been instead subject to the U.S. banking framework, the Enterprises would have been required to maintain approximately $450 billion, perhaps significantly more, in risk-based total capital (not including market risk and operational risk capital) to avoid similar restrictions.[21] In light of these facts, FHFA reiterates that the proposed rule would not have subjected the Enterprises to the same capital requirements that apply to U.S. banking organizations.

*C. Differences Between the Enterprises and Banks*

Prompted in some cases perhaps by the comparisons in the proposed rule to the Basel and U.S. banking frameworks, many commenters emphasized the differences in the business models, statutory mandates, and risk profiles of the Enterprises and banking organizations. FHFA agrees with these commenters that there are important differences between the Enterprises and banking organizations. The proposed rule discussed those differences in several places, including Sections IV.B.2, VI.B.3, and XIII of the proposed rule, noting, for example, that while the Enterprises transfer much of the interest rate and funding risk on their mortgage exposures through their sales of guaranteed MBS, banking organizations generally fund themselves through customer deposits and other sources. The different interest rate risk profile of the Enterprises is one reason that the proposed rule's market risk capital requirements constituted a relatively small share of the aggregate risk-based capital requirement.

The differences between the business models, statutory mandates, and risk profiles of the Enterprises and banking organizations, however, should not preclude the proposed rule's comparison of the *credit risk* capital requirement of a large U.S. banking organization for a specific mortgage exposure to the *credit risk* capital requirement of an Enterprise for a similar mortgage exposure.[22] The different interest rate risk profiles do not preclude this comparison because the Basel and U.S. banking frameworks generally do not contemplate an explicit capital requirement for interest rate risk on banking book exposures, instead leaving interest rate risk capital requirements to bank-specific tailoring through the supervisory process.[23] Related to this comparison, the monoline nature of the Enterprises' mortgage-focused businesses suggests that the concentration risk of an Enterprise is generally greater than that of a diversified banking organization with a similar amount of mortgage credit risk. That heightened concentration risk would tend to suggest that greater credit risk capital requirements, relative to banking organizations, could be appropriate for the Enterprises for similar exposures, all else equal.

The differences between the business models, statutory mandates, and risk profiles of the Enterprises and banking

[20] FHFA's mortgage risk-sensitive framework results in a more granular calibration of credit risk capital requirements for mortgage exposures, and some meaningful portion of the gap between the credit risk capital requirements of the Enterprises and large banking organizations under the proposed rule was due to the proposed rule's use of MTMLTV instead of OLTV, as under the U.S. banking framework, to assign credit risk capital requirements. Adjusting for the appreciation in the value of the underlying real property generally led to lower actual credit risk capital requirements at the Enterprises, and some of the gap between the credit risk capital requirements of the Enterprises and large U.S. banking organizations perhaps might be expected to narrow somewhat were real property prices to move toward their long-term trend.

[21] These estimates are complicated and sensitive to important assumptions. There were several key drivers of the gap between the aggregate risk-based capital requirements under the proposed rule and under the U.S. banking framework. The lower underlying credit risk capital requirements contributed significantly to this gap. Different approaches to the capital relief for private mortgage insurance and CRT also contributed to some of the gap. The risk-weighted assets-based buffers of the U.S. banking framework also could increase the gap, depending on the assumptions made as to each Enterprise's buffer requirement. Some of the gap perhaps might be expected to narrow somewhat were real property prices to move toward their long-term trend.

[22] Comparisons of credit risk capital requirements can further safety and soundness by helping to identify and mitigate model and related risks relating to the calibration of the requirements. Comparisons of credit risk capital requirements can also further financial stability by identifying undue differences in regulatory requirements that might distort the market structure, as acknowledged by the FSOC Secondary Market Statement. According to the FSOC Secondary Market Statement, ''[t]he alignment of market participants' credit risk capital requirements across similar credit risk exposures would mitigate risk to financial stability by minimizing market structure distortions.''

[23] *See* BCBS, *Interest Rate Risk in the Banking Book,* ¶ 1 (April 2016), available at *https://www.bis.org/bcbs/publ/d368.pdf;* (''Interest rate risk in the banking book (IRRBB) is part of the Basel capital framework's Pillar 2 (Supervisory Review Process) and subject to the Committee's guidance set out in the 2004 Principles for the management and supervision of interest rate risk (henceforth, the IRR Principles).'').

organizations also should not be understood as inconsistent with capitalizing each Enterprise to remain a viable going concern both during and after a severe economic downturn. As discussed in Section II, each Enterprise has considerable funding risk even if it does not rely on customer deposits, and an Enterprise's ordinary course and procyclical funding needs can be met only if the Enterprise continues to be regarded as a viable going concern by creditors throughout the duration of a financial stress.

*D. Mortgage-Risk Sensitive Framework*

Many commenters expressed concern that those aspects of the proposed rule that tended to decrease the risk sensitivity of the regulatory capital framework could distort the pricing, risk transfer, or other economic decisions of the Enterprises. FHFA agrees with commenters that there are significant benefits to a mortgage risk-sensitive framework. There are, however, trade-offs associated with risk sensitivity. A more risk-sensitive framework tends to amplify the model and related risks associated with any methodology for calibrating a granular assessment of credit risk, which poses significant risk to safety and soundness. A more risk-sensitive framework can be significantly more procyclical, which was a concern of many commenters on the 2018 proposal. A more risk-sensitive framework also can adversely affect an Enterprise's ability to support access to affordable mortgage credit for higher risk borrowers, perhaps excessively so to the extent that the historical performance of these borrowers, which was used to determine the credit risk capital requirements, might not be predictive of future performance. FHFA believes that it has struck an appropriate balance between these competing policy considerations by preserving risk sensitivity while ensuring that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle.

FHFA also believes that those aspects of the final rule that might tend to decrease the regulatory capital framework's risk sensitivity will not unduly distort each Enterprise's pricing, credit, CRT, and other economic decisions. FHFA expects that each Enterprise, like other regulated financial institutions, will base its decisions on its own risk assessments, not solely or even primarily on the regulatory capital requirements. By capitalizing each Enterprise to remain a viable going concern without government support, the final rule will incentivize an Enterprise to continually enhance its own risk assessments so as to effectively manage its now-internalized risk. That incentive will be supplemented by the final rule's advanced approaches requirements, which will require each Enterprise to continually enhance its internal models. FHFA also anticipates that each Enterprise's decisions will be informed by other considerations, in particular the decisions of the other Enterprise and other market participants and also the statutory requirement to satisfy FHFA's housing goals. Evidencing this view that the regulatory capital framework generally will not define pricing decisions, the U.S. banking framework's standardized credit risk capital requirements for residential mortgage exposures have very limited risk sensitivity, and yet the pricing of mortgage credit risk varies widely across U.S. banking organizations and especially across borrowers. Mortgage insurers are subject to aligned Enterprise requirements to maintain minimum levels of financial strength, and yet the pricing of mortgage credit risk varies across mortgage insurers.

More generally, the regulatory capital framework should encourage decisions based on nuanced, dynamic, and diverse understandings of risk. A significant and perhaps underappreciated benefit of capitalizing each Enterprise so that its risks are internalized, rather than borne by taxpayers, is that each Enterprise will face market discipline and strong incentives to base its decisions more on its own understanding of the costs and benefits and less on that of its regulator. This is important because FHFA's risk-based capital requirements should not be regarded as the last or best view on risk. Other modeling approaches might consider the loss experiences of other market participants during the 2008 financial crisis, incorporate data from other economic downturns, both in the United States and abroad, take a different approach to the significant portion of the Enterprises' crisis-era losses that were attributed to product features that are no longer eligible for acquisition (approximately $108 billion), or employ different regularization techniques. The now apparent shortcomings of OFHEO's and the Enterprises' pre-crisis credit models, and other well-known failures of analytical models to accurately predict risk, reinforce the need for a meaningful degree of regulatory caution regarding any modeled estimate of risk. Reform should therefore provide incentives for each Enterprise to develop and act on its own view of risk.

*Housing Finance Reform*

Commenters raised a variety of issues relating to housing finance reform proposals. Some commenters urged FHFA to wait to finalize a regulatory capital framework for the Enterprises until Congress enacts housing reform legislation clarifying the extent of any federal government support of the Enterprises or their successors. Similarly, some commenters argued that the conservatorships should continue until Congress acts. Some commenters advocated for regulating the Enterprises' pricing or otherwise subjecting the Enterprises to utility-like regulation, while other commenters suggested other administrative or legislative reforms, for example, steps to ensure equitable access to the secondary market by lenders of all sizes and charter types.

Commenters also offered views on issues relating to the Enterprises' conservatorships, including the Enterprises' consent to conservatorship in 2008, subsequent actions by FHFA or the U.S. Department of the Treasury (Treasury), and FHFA's policy to responsibly end the conservatorships. Many commenters urged FHFA to end the conservatorships and recommended certain steps toward that end. Some commenters argued in favor of a resolution of the claims made by the Enterprises' legacy shareholders or that the liquidation preference of Treasury's senior preferred shares should be extinguished. Commenters advocated that FHFA should consider Treasury's commitment under the Senior Preferred Stock Purchase Agreements (PSPA) in designing the regulatory capital framework.

FHFA continues to believe that the regulatory capital framework should not assume extraordinary government support, whether under the PSPAs or otherwise. A central tenet of the reforms following the 2008 financial crisis is that the post-crisis regulatory framework should prevent future taxpayer rescues of financial institutions.[24] Expectations of government support increase risk to the Enterprises' safety and soundness and the stability of the national housing finance markets by undermining market discipline and encouraging excessive

[24] The Dodd-Frank Act is an Act ''[t]o promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail', to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes.''

risk taking.[25] Other regulatory capital frameworks generally would not treat a line of credit or similar arrangement, even one with a governmental actor, as a form of regulatory capital. Moreover, to the extent that there are existing arrangements under which the federal government could be exposed to the losses of a financial institution—for example, the Federal Deposit Insurance Corporation's Deposit Insurance Fund or its Orderly Liquidation Fund—those arrangements have motivated *greater* regulatory capital requirements to mitigate the risk to safety and soundness and to protect taxpayers. More practically, Treasury's commitment under the PSPAs is finite and cannot be replenished, and that commitment could be inadequate to ensure each Enterprise would remain a viable going concern during and after a severe economic downturn, particularly to the extent that an Enterprise's liabilities and other obligations were to grow relative to that fixed commitment.

FHFA continues to support legislation to reform the flaws in the structure of the housing finance system that were at the root of the 2008 financial crisis and that continue to pose risk to taxpayers and financial stability. To that end, FHFA recommended specific legislative reforms in its last Annual Report to Congress. FHFA reiterates its recommendation that Congress authorize FHFA to charter competitors to the Enterprises and remove unnecessary statutory exemptions and other special treatments afforded the Enterprises. Chartering competitors to the Enterprises could reduce the size and importance of any single Enterprise, which could lead to a smaller stability capital buffer and therefore smaller aggregate capital requirements.

Pending legislation, FHFA, as conservator of each Enterprise, is required by statute to act ''for the purpose of reorganizing, rehabilitating, or winding up the affairs of [the Enterprise].''[26] That definite and limited statutory purpose does not authorize an indefinite conservatorship. FHFA is in the process of preparing each Enterprise to responsibly exit conservatorship consistent with its statutory mandate and the FHFA Director's other duties. Finalization of the Enterprises' regulatory capital framework is a key step in that effort.

Finalization of the Enterprise's regulatory capital framework is also required by law. The Safety and Soundness Act not only authorizes, but affirmatively requires, FHFA to prescribe risk-based capital requirements by regulation.[27] FHFA has been subject to this statutory mandate for more than 12 years, and in FHFA's view, this final rule is long overdue.

## VI. Definitions of Regulatory Capital

As discussed in Section VII, the proposed rule would have required each Enterprise to maintain specified amounts of core capital and total capital, as defined in the Safety and Soundness Act. The proposed rule would have supplemented the core capital and total capital requirements with risk-based and leverage ratio requirements based on the Basel framework's definitions of total capital, tier 1 capital, and CET1 capital. The supplemental definitions of regulatory capital would have made deductions and other adjustments for certain DTAs, ALLL, goodwill, intangibles, and other assets that might tend to have less loss-absorbing capacity during a financial stress. The tier 1 and CET1 capital requirements also would have ensured that retained earnings and other high-quality capital are the predominant form of regulatory capital.

Some commenters supported the proposed rule's use of the Basel framework's regulatory capital definitions to prescribe supplemental capital requirements, potentially as a means to better align credit risk capital requirements across market participants and also to facilitate comparability across regulatory capital frameworks. Some commenters suggested that CRT should be treated as an element of regulatory capital, while a few commenters argued that tier 1 capital was the best basis for both leverage ratio and risk-based capital requirements. Commenters otherwise generally focused on the proposed rule's treatment of guarantee fees, reserves, and subordinated debt.

### *A. Guarantee Fees*

Consistent with the 2018 proposal, neither the statutory definitions nor the supplemental definitions of regulatory capital in the proposed rule would have included a measure of future guarantee fees or other future revenues. FHFA instead gave consideration to the loss-absorbing capacity of future revenues in calibrating the stress capital buffer.

Many commenters argued that a measure of guarantee fees should be included in one or more of the definitions of regulatory capital. That measure, for example, could be limited to guarantee fees that have been received by an Enterprise but not yet recognized as revenue for accounting purposes. These commenters generally contended that future revenues are available to absorb future losses or pay future claims, as reflected in the estimates of capital exhaustion produced by the Enterprises' annual stress tests. A few commenters noted that the proposed rule could incentivize an Enterprise to create interest-only strips of guarantee fee revenue to recognize assets that could count toward regulatory capital. Commenters also suggested that the proposed rule's approach could have a relatively greater impact on higher risk mortgage exposures.

After considering these comments, FHFA has determined to not include a measure of future revenues in any of the final rule's definitions of regulatory capital. Future revenues instead would continue to be considered in sizing the stress capital buffer, as discussed in Section VIII.A.2. Like the proposed rule, the final rule seeks to ensure that each Enterprise would be capitalized to remain a viable going concern both during and after a severe economic downturn. The 2008 financial crisis established that credit, market, and other losses can be incurred quickly during a stress, and it is an Enterprise's capacity to absorb those losses as incurred while still timely performing its financial obligations that defines creditors' and other counterparties' views as to whether the Enterprise is a viable going concern. During a stress, creditors are unlikely to give much

[25] *See* BCBS, *Global systemically important banks: revised assessment methodology and the higher loss absorbency requirement* ¶ 3 (''[T]he moral hazard costs associated with implicit guarantees derived from the perceived expectation of government support may amplify risk-taking, reduce market discipline and create competitive distortions, and further increase the probability of distress in the future. As a result, the costs associated with moral hazard add to any direct costs of support that may be borne by taxpayers.''); Federal Reserve Board, *Calibrating the GSIB Surcharge* (2015) at 1 (''The experience of the crisis made clear that the failure of a SIFI during a period of stress can do great damage to financial stability, that SIFIs themselves lack sufficient incentives to take precautions against their own failures, that reliance on extraordinary government interventions going forward would invite moral hazard and lead to competitive distortions, and that the pre-crisis regulatory focus on microprudential risks to individual financial firms needed to be broadened to include threats to the overall stability of the financial system.'').

[26] 12 U.S.C. 4617(a)(2).

[27] 12 U.S.C. 4611(a)(1) (''The Director *shall,* by regulation, establish risk-based capital requirements for the enterprises to ensure that the enterprises operate in a safe and sound manner, maintaining sufficient capital and reserves to support the risks that arise in the operations and management of the enterprises.'') (emphasis added). FHFA's predecessor agency, OFHEO, adopted a risk-based capital rule (12 CFR part 1750) that will not have been formally rescinded until the effective date of this final rule. That rule was suspended by FHFA at the inception of the conservatorships in 2008. That rule clearly failed to ensure the safety and soundness of each Enterprise.

consideration to future revenue prospects in assessing whether an Enterprise can timely perform its financial obligations. Market confidence in the Enterprises waned in mid-2008 when Fannie Mae and Freddie Mac had total capital of, respectively, $55.6 billion and $42.9 billion, notwithstanding their right to future guarantee fees. Moreover, as discussed in Section IV, the FSOC Secondary Market Statement endorsed the proposed rule's use of the U.S. banking framework's definitions of regulatory capital to prescribe supplemental capital requirements, and these definitions do not include a measure of future revenues.

*B. Reserves*

The statutory definition of total capital includes a general allowance for foreclosure losses. As for advanced approaches banking organizations under the U.S. banking framework, the proposed rule would have permitted an Enterprise to include in the supplemental definition of tier 2 capital only the excess of its eligible credit reserves over its total expected credit loss, provided the amount does not exceed 0.6 percent of its credit risk-weighted assets. A few commenters suggested that it might be appropriate to include some portion of ALLL in the supplemental definitions of regulatory capital, particularly if the U.S. banking regulators were in the future to adjust their approach to ALLL after considering the implications of the current expected credit losses methodology (CECL) for estimating allowances for credit losses.

The final rule adopts the proposed rule's approach to ALLL. The limited inclusion of ALLL in tier 2 capital was an outgrowth of FHFA's calibration methodology for mortgage exposures under which the base risk weights and risk multipliers are intended to require credit risk capital sufficient to absorb the lifetime *unexpected* losses incurred on mortgage exposures experiencing a shock to house prices similar to that observed during the 2008 financial crisis. The same is also true for non-mortgage exposures. FHFA will continue to monitor the implications of CECL implementation for this issue and could consider adjustments in the future.

*C. Subordinated Debt*

The proposed rule would have treated some subordinated debt instruments as tier 2 capital. Some commenters supported the proposed rule's approach. One commenter thought that each Enterprise should be financed primarily through term unsecured debt rather than equity because debt can lock in a structured schedule of funding to meet liquidity needs. Other commenters urged FHFA not to treat subordinated debt instruments as a capital element. In the view of some commenters, the historical record has led to a market expectation that subordinated debt is not actually at risk of absorbing losses. A few commenters expressed concern that, unlike equity instruments, an Enterprise would not be able to suspend debt service on subordinated debt.

FHFA has adopted the proposed rule's approach to subordinated debt in the final rule, and certain subordinated debt instruments will continue to be treated as tier 2 capital. To ensure tier 2 capital actually provides loss-absorbing capacity, an Enterprise would be permitted to include an instrument in its tier 2 capital only if FHFA has determined that the Enterprise has made appropriate provision, including in any resolution plan of the Enterprise, to ensure that the instrument would not pose a material impediment to the ability of an Enterprise to issue common stock instruments following any future appointment of FHFA as conservator or receiver under the Safety and Soundness Act.

## VII. Capital Requirements

*A. Risk-Based Capital Requirements*

The proposed rule would have required each Enterprise to maintain the following risk-based capital:

- Total capital not less than 8.0 percent of risk-weighted assets;
- Adjusted total capital not less than 8.0 percent of risk-weighted assets;
- Tier 1 capital not less than 6.0 percent of risk-weighted assets; and
- CET1 capital not less than 4.5 percent of risk-weighted assets.

As discussed in Section III.B.3 of the proposed rule, a lesson of the 2008 financial crisis is that the Enterprises' safety and soundness depends not only on the quantity but also on the quality of their capital. To that end, FHFA proposed to supplement the risk-based capital requirement based on statutorily defined total capital with additional risk-based capital requirements based on the Basel framework's definitions of total capital, tier 1 capital, and CET1 capital.

FHFA noted in the 2018 proposal and the proposed rule that the Enterprises' DTAs, which are included in total capital and core capital by statute, may provide minimal to no loss-absorbing capability during a period of financial stress as recoverability (via taxable income) may become uncertain. The 2018 proposal addressed this issue by establishing a risk-based capital requirement for DTAs. However, the 2018 proposal did not include adjustments for other capital elements that tend to have less loss-absorbing capacity during a financial stress (*e.g.,* ALLL, goodwill, and intangibles), although FHFA did request comment on how best to compensate for the loss-absorbing deficiencies of ALLL and preferred stock within the framework of the 2018 proposal. The 2018 proposal also requested comment on, but did not adjust for, accumulated other comprehensive income (AOCI), leaving open the possibility that an Enterprise could have positive total capital and core capital despite being insolvent under GAAP. By incorporating deductions and other adjustments, the supplemental risk-based capital requirements for adjusted total capital, tier 1 capital, and CET1 capital would have addressed these safety and soundness issues. The supplemental risk-based capital requirements also would have ensured that retained earnings and other high-quality capital would be the predominant form of regulatory capital.

The shift to a terminology of risk-weighted assets in the proposed rule was a change from the 2018 proposal. The addition of three new risk-based capital requirements raised the need for a straightforward mechanism to specify the aggregate regulatory capital required for each. Also, this approach and its associated terminology are well-understood by those familiar with the U.S. banking framework. Expressing the risk-based capital requirement for an exposure as a risk-weight would facilitate transparency and comparability with the U.S. banking framework and other regulatory capital frameworks. Because these concepts are well-understood, this approach also should facilitate market discipline over each Enterprise's risk-taking by its creditors and other counterparties.

As discussed in Section V.A, many commenters expressed concern about the potential impacts of the proposed rule's regulatory capital requirements on borrowing costs, the Enterprises' ability to satisfy their affordable housing goals or other statutory mandates, the incentives for the Enterprises to increase risk taking or engage in CRT, among other concerns. As discussed in Sections VII.B and VIII.B, many commenters contended that the PLBA-adjusted leverage ratio requirement (*i.e.,* the sum of the leverage ratio requirement and the PLBA) likely would often exceed the PCCBA-adjusted risk-based capital requirements.

Commenters also offered related views on the definitions of regulatory capital and the risk weights and other approaches to assigning risk-based capital requirements for the purpose of determining compliance with these required ratios, as discussed in Sections VI and IX.

Specifically, with respect to the required ratios of risk-based capital, commenters offered views on the relative mix of capital instruments contemplated by the risk-based capital requirements. A few commenters argued that tier 1 capital was the best basis for both leverage ratio and risk-based capital requirements. Some commenters urged FHFA to not treat subordinated debt instruments as a capital element because, in their view, the historical record has led to a market expectation that subordinated debt is not actually at risk of absorbing losses.

After considering these comments, FHFA has determined to adopt each of the required risk-based capital ratios as proposed. FHFA continues to believe it is important to supplement the risk-based capital requirement based on statutorily defined total capital with additional risk-based capital requirements based on the Basel framework's definitions of total capital, tier 1 capital, and CET1 capital. The supplemental risk-based capital requirements will reflect customary deductions and other adjustments for assets that might tend to have less loss-absorbing capacity during a financial stress. The tier 1 and CET1 capital requirements will ensure that retained earnings and other high-quality capital are the predominant form of regulatory capital. The use of the U.S. banking framework's required ratios of risk-based capital will foster comparability and enhance market discipline. As discussed in Section IV, the FSOC Secondary Market Statement endorsed the proposed rule's use of the U.S. banking framework's definitions of regulatory capital to prescribe supplemental capital requirements.

While the final rule adopts required ratios of risk-based capital based on the U.S. banking framework, FHFA reiterates that this approach does not result in each Enterprise having the same risk-based capital requirements as U.S. banking organizations. Under the final rule, the credit risk capital requirement for an exposure is determined by multiplying the risk weight assigned to the exposure by 8 percent. The risk weight of an exposure is the key driver of its credit risk capital requirement, and as of June 30, 2020, the risk weight assigned to single-family mortgage exposures under the final rule would have been roughly three-quarters that of similar exposures under the U.S. banking framework. The Enterprises together would have been required under the final rule's risk-based capital requirements to maintain $283 billion in risk-based adjusted total capital as of June 30, 2020 to avoid restrictions on capital distributions and discretionary bonuses. Had they been instead subject to the U.S. banking framework, the Enterprises would have been required to maintain approximately $450 billion, perhaps significantly more, in risk-based total capital (not including market risk and operational risk capital) to avoid similar restrictions.

*B. Leverage Ratio Requirements*

1. Adjusted Total Assets

The proposed rule's leverage ratio requirements would have been based on an Enterprise's adjusted total assets. Adjusted total assets would have been defined as total assets under GAAP, with adjustments to include many of the off-balance sheet and other exposures that are included in the supplemental leverage ratio requirements of the U.S. banking framework.

Commenters generally supported basing the supplemental leverage ratio requirement on tier 1 capital. Commenters also generally supported basing the leverage ratio requirements on adjusted total assets, although a few preferred total assets as defined under GAAP. Some commenters suggested the leverage ratio should be adjusted to exclude credit risk that had been transferred to third parties through mortgage insurance or CRT. Another commenter advocated including CRT as an element of capital for purposes of calculating the leverage ratio.

FHFA is adopting the definition of adjusted total assets as proposed.

2. Sizing of the Requirements

The primary purpose of the proposed rule's leverage ratio requirements was to provide a credible, non-risk-based backstop to the risk-based capital requirements to safeguard against model risk and measurement error with a simple, transparent, independent measure of risk. From a safety-and-soundness perspective, each type of requirement offsets potential weaknesses of the other, and well-calibrated risk-based capital requirements working with a credible leverage ratio requirement is more effective than either would be in isolation. The proposed rule's leverage ratio requirements would have had the added benefit of dampening some of the procyclicality inherent in the aggregate risk-based capital requirements.

Under the proposed rule, each Enterprise would have been required to maintain capital sufficient to satisfy two leverage ratio requirements:

- Core capital not less than 2.5 percent of adjusted total assets; and
- Tier 1 capital not less than 2.5 percent of adjusted total assets.

As discussed in Section V.A, many commenters expressed concern about the potential impacts of the proposed rule's regulatory capital requirements on borrowing costs, the Enterprises' ability to satisfy their affordable housing goals or other statutory mandates, the incentives for the Enterprises to increase risk taking or engage in CRT, among other concerns. Commenters also offered related views on the definitions of regulatory capital for the purpose of determining compliance with the leverage ratio requirements, as discussed in Sections VI and IX.

Commenters criticized FHFA's method for sizing the proposed rule's two leverage ratio requirements, with many focusing on FHFA's consideration of the Enterprises' historical loss experience. Some commenters urged FHFA to adopt the 2018 proposal's bifurcated alternative that would have prescribed different leverage ratio requirements for trust and non-trust assets. Other commenters described rationales for lower leverage ratio requirements or for not adopting a leverage ratio requirement at all. Some commenters contended that the model risk, measurement error, and related risks mitigated by the leverage ratio requirements were already mitigated by other aspects of the proposed rule. Other commenters indicated that they did not have sufficient information to assess the relationship between the proposed rule's risk-based capital requirements and the leverage ratio requirements and urged FHFA to make additional information available to the public.

Commenters also offered related views on the proposed rule's PLBA-adjusted leverage ratio requirement, and some of those comments have implications for these leverage ratio requirements. The PLBA-adjusted leverage ratio requirement prescribed the tier 1 capital necessary to avoid restrictions on capital distributions and discretionary bonuses. Many of these commenters contended that the PLBA-adjusted leverage ratio requirement likely would often exceed the PCCBA-adjusted risk-based capital requirements. A binding PLBA-adjusted leverage ratio requirement, in the view of many of these commenters, could

reduce the risk sensitivity of the regulatory capital framework, decrease an Enterprise's incentive to engage in CRT, incentivize an Enterprise to increase risk taking, or reduce an Enterprise's ability to offset lower returns on higher risk exposures with higher returns on lower risk exposures. Some commenters, on the other hand, argued that the PLBA-adjusted leverage ratio requirement was inadequate given the Enterprises' historical loss experience and the risk that each Enterprise poses to financial stability. One commenter thought that the PLBA-adjusted leverage ratio requirement should be the primary measure for setting the Enterprises' regulatory capital requirements because the risk-based capital requirements are complex, less transparent, and perhaps subject to manipulation. Some commenters suggested sizing the PLBA-adjusted leverage ratio requirement based on the pre-CRT risk-based capital requirements. Commenters' views specific to the PLBA are further discussed in Section VIII.B.

FHFA has determined to finalize the leverage ratio requirements as proposed. FHFA continues to believe that the proposed rule's calibration methodology for the leverage ratio requirements was fundamentally sound. First, the leverage ratio requirements are generally aligned with the analogous leverage ratio requirements of U.S. banking organizations, after adjusting for the difference in the average risk weight on their exposures.[28] The monoline nature of the Enterprises' mortgage-focused businesses suggests that the concentration risk of an Enterprise is greater than that of a diversified banking organization with a similar amount of mortgage credit risk, perhaps meriting a leverage ratio requirement greater than 2.5 percent, all else equal. Related to that concentration risk, the leverage ratio requirements are roughly aligned with, if not below, the 4 percent total leverage ratio requirement of the Federal Home Loan Banks, which also have mortgage-focused businesses.[29] Second, the leverage ratio requirements are broadly consistent with the Enterprises' historical loss experiences. The Enterprises' crisis-era cumulative capital losses peaked at the end of 2011 at $265 billion, approximately 4.8 percent of their adjusted total assets as of December 31, 2007.[30] Third, the risks and limitations associated with the underlying historical data and models used to calibrate the credit risk capital requirements reinforce the importance of leverage ratio requirements that safeguard against model risk and measurement error.[31]

The FSOC Secondary Market Statement affirmed the sizing of these leverage ratio requirements. FSOC's analysis suggested that ''leverage ratio requirements that are materially less than those contemplated by the proposed rule would likely not adequately mitigate the potential stability risk posed by the Enterprises.'' FSOC also found that ''it is possible that additional capital could be required for the Enterprises to remain viable concerns in the event of a severely adverse stress . . . .''

FHFA has considered commenters' views that the Enterprises' historical loss experience was an inappropriate consideration in calibrating the proposed rule's leverage ratio requirements because it did not reflect the changes to the Enterprises' acquisition criteria since the 2008 financial crisis. Some commenters suggested that the Enterprises' historical loss experiences should be adjusted to remove the Enterprises' valuation allowances on DTAs, the dividends paid to Treasury, and other deductions from capital that were subsequently reversed.

As discussed in the proposed rule, a portion of the crisis-era losses arose from single-family loans that are no longer eligible for acquisition by the Enterprises. However, the sizing of the leverage ratio requirements must guard against potential future relaxation of underwriting standards and regulatory oversight over those underwriting standards. The sizing of leverage ratio requirements also must take into account the model risk posed by the attribution of such losses to specific product characteristics.

The Enterprises' historical loss experience actually might tend to understate the regulatory capital that would be necessary to remain a viable going concern. The Enterprises' crisis-era losses likely were mitigated to at least some extent by the unprecedented support by the federal government of the housing market and the economy and also by the declining interest rate environment of the period. The calibration of the leverage ratio requirements cannot assume a repeat of those loss mitigants. Also, there are some material risks to the Enterprises that are not assigned a risk-based capital requirement—for example, risks relating to uninsured or underinsured losses from flooding, earthquakes, or other natural disasters or radiological or biological hazards. There also is no risk-

[28] The U.S. banking framework's leverage ratio requirement requires banking organizations to maintain tier 1 capital no less than 4.0 percent of total assets. Insured depository institutions subsidiaries of certain large U.S. bank holding companies also must maintain tier 1 capital no less than 6.0 percent of total assets to be ''well capitalized.'' Using data for the 18 bank holding companies subject to the Federal Reserve Board's supervisory stress testing program in 2018, FHFA determined that the average risk weight on the assets of these banks was 61 percent in the fourth quarter of 2018. Under the U.S. banking framework, the Enterprises' mortgage assets generally would be assigned a 50 percent risk weight under the standardized approach. This suggests that the average risk weight on the assets of the Enterprises would have been approximately 81 percent (50 percent divided by 61 percent) of that of these large bank holding companies. That in turn implies a risk-adjusted analogous leverage ratio requirement for the Enterprises of 3.3 percent (81 percent of the 4.0 percent leverage ratio requirement for U.S. banking organizations).

[29] That 4.0 percent leverage ratio requirement should be considered in the context of the safety and soundness benefits of the statutory requirement that each Federal Home Loan Bank advance be fully secured. Related to that, the safety and soundness benefits of that collateral might be furthered by law, as any security interest granted to a Federal Home Loan Bank by a member (or affiliate of a member) is entitled to special protections under the Federal Home Loan Bank Act.

[30] FHFA's view is that substantially all of each Enterprise's valuation allowances on its DTAs should not be deducted from the estimate of peak capital exhaustion. First, a substantial portion of the Enterprises' DTA valuation allowances were on DTAs first recognized under GAAP during the stress period. As such, these valuation allowances had no net impact on adjusted total capital exhaustion during the stress period because the initial GAAP recognition was offset by the subsequent valuation allowance. Second, had the Enterprises been more appropriately capitalized as of December 31, 2007, much of the DTAs that were already recognized under GAAP at the beginning of the stress period would not have been deducted from adjusted total capital, with the effect that the valuation allowance during the stress period would have contributed to adjusted total capital exhaustion. In other words, there was only a relatively small amount of DTAs that (i) was recognized under GAAP as of the beginning of the stress period, (ii) would have already been deducted from adjusted total capital at the time of the beginning of the stress period, and (iii) were subject to a valuation allowance during the stress period. Despite this, given the complexity of the issue, the considerable attention to the issue by interested parties, and the somewhat different impacts of DTA valuation allowances on different measures of regulatory capital, the proposed rule also noted that the sizing of the regulatory capital requirements was consistent with historical loss experiences even if all of the DTA valuation allowances were deducted from the estimate of peak capital exhaustion.

[31] As discussed in Section IV.B.2 of the proposed rule, a disproportionate share of the Enterprises' crisis-era losses arose from certain single-family mortgage exposures that are no longer eligible for acquisition by the Enterprises. The calibration of the credit risk capital requirements attributed a significant portion of the Enterprises' crisis-era losses (approximately $108 billion) to these products. The statistical methods used to allocate losses between borrower-related risk attributes and product-related risk attributes pose significant model risk. It is possible that the calibration understates the credit losses that would be incurred in an economic downturn with national housing price declines of similar magnitude, even assuming a repeat of crisis-era federal support of the economy and the declining interest rate environment.

based capital requirement for the risks that climate change could pose to property values in some localities.

FHFA also considered commenters' views that the proposed rule's leverage ratio requirements were disproportionate to the capital exhaustion estimated by the Enterprises' annual stress tests. FHFA believes that the Enterprises' stress tests are not an appropriate consideration in calibrating the leverage ratio requirements. The leverage ratio requirements are calibrated to be a credible backstop to the risk-based capital requirements, which are themselves calibrated to absorb the lifetime unexpected losses incurred in a shock similar to that observed during the 2008 financial crisis. The capital exhaustion projected by the Enterprises' past stress tests is different in key respects from the projected lifetime unexpected losses in a severely adverse stress. The Enterprises' stress tests use a nine-quarter loss horizon, whereas much of the projected lifetime unexpected losses would be recognized after the end of that horizon. The Enterprises' stress tests then offset those limited losses with the revenues recognized in the horizon, yielding a projection of capital exhaustion considerably lower than lifetime unexpected losses. Furthermore, the capital exhaustion projected by an Enterprise's stress test results could change significantly across the economic cycle, with projected capital exhaustion following a long period of house price appreciation being considerably less than the projections produced by a stress test at a different point in the economic cycle.

FHFA agrees with commenters that the risk-based capital requirements should, as a general rule, exceed the regulatory capital required under the leverage ratio requirements. At the same time, if the leverage ratio requirements are to be an independently meaningful and credible backstop, there will inevitably be some exceptions in which the leverage ratio requirements exceed the risk-based capital requirements. In FHFA's view, the measurement period of September 30, 2019 was, in fact, consistent with the circumstances under which a credible leverage ratio would be binding, given the exceptional single-family house price appreciation since 2012, the strong credit performance of both single-family and multifamily mortgage exposures, the significant progress by the Enterprises to materially reduce legacy exposure to NPLs and re-performing loans, robust CRT market access enabling substantial risk transfer, and the generally strong condition of key counterparties, such as mortgage insurers.

Some commenters' analysis suggested that the leverage ratio requirements generally would exceed the risk-based capital requirements over most of the economic cycle. That could evidence flaws in FHFA's method for calibrating the leverage ratio requirements, the risk-based capital requirements, or both. After taking into account the views of commenters, and also after considering the FSOC Secondary Market Statement's affirmation of the sizing of the leverage ratio requirements and its suggestion that additional capital could be required, FHFA has adopted adjustments to the risk-based capital requirements that generally should reduce the likelihood that the leverage ratio requirements would exceed the risk-based capital requirements.

*C. Enforcement*

Under the proposed rule, FHFA stated that it may draw upon several authorities to address potential Enterprise failures to meet the risk-based capital requirements and leverage ratio requirements. An Enterprise failure to meet a capital threshold that is required by regulation may be addressed through enforcement mechanisms for regulatory violations including procedures for cease and desist and consent orders.[32] FHFA may also use the enforcement tools available under its authority to prescribe and enforce prudential management and operations standards (PMOS).[33] The prompt corrective action (PCA) framework set out in the Safety and Soundness Act[34] also provides for enforcement tools when a shortfall occurs in capital requirements that are set forth in the statute, using the statute's prescribed capital concepts.

Commenters generally did not comment on the proposed rule's enforcement framework for the risk-based capital requirements and leverage ratio requirements. After taking into account any implications posed by the changes adopted in the final rule, FHFA is adopting the proposed rule's enforcement framework as proposed.

## VIII. Capital Buffers

*A. Prescribed Capital Conservation Buffer Amount*

Under the proposed rule, to avoid limits on capital distributions and discretionary bonus payments, an Enterprise would have had to maintain regulatory capital that exceeds each of its adjusted total capital, tier 1 capital, and CET1 capital requirements by at least the amount of its PCCBA. The proposed rule's PCCBA would consist of three separate component buffers—a stress capital buffer, a countercyclical capital buffer, and a stability capital buffer.

1. Comments Applicable to Each Component Buffer

Each component buffer of the proposed rule's PCCBA was tailored to achieve its own policy objective and had its own rationale and sizing considerations. Many commenters, however, offered criticisms and other views on the PCCBA as a whole or that could be relevant to one or more of the component buffers. FHFA considered these cross-cutting comments in identifying and assessing potential changes to each of these buffers.

Commenters generally supported the flexibility that the PCCBA afforded the Enterprises in their capital planning and to continue to support the secondary market during a period of financial stress. Many commenters criticized the overall size of the proposed rule's PCCBA, particularly its sizing relative to the risk-based capital requirements. These commenters expressed concern that the PCCBA could adversely affect the availability of mortgage credit or the Enterprises' ability to fulfill their statutory mission. Some commenters recommended eliminating the PCCBA, capping the PCCBA as a share of the underlying risk-based capital requirements, or otherwise reducing the PCCBA. A few commenters thought that the PCCBA added unnecessary complexity. Other commenters offered alternatives to the PCCBA based on the PSPA or reinsurance arrangements. A few commenters thought that the PCCBA should not have to be composed solely of CET1 capital.

Some commenters noted that even with the PCCBA, the Enterprises likely would need support from the federal government to remain viable during a severe economic downturn. Some commenters observed that the PCCBA would mitigate the procyclicality of the aggregate risk-based capital requirements. A few commenters argued that the PCCBA could be replaced with a stress testing program that informs regulatory approvals of capital distributions and bonuses. At least one commenter suggested that FHFA should periodically reassess and solicit public comment on the sizing of the PCCBA or its component buffers.

A recurring comment related to the risk sensitivity of the PCCBA. Each of the PCCBA component buffers would

[32] 12 U.S.C. 4581, 12 CFR part 1209.

[33] 12 U.S.C. 4513b; 12 CFR part 1236.

[34] 12 U.S.C. 4614 *et seq.*

have been determined as a percent of an Enterprise's adjusted total assets. While some commenters supported this approach, many commenters advocated assessing the PCCBA or one or more of its component buffers as a percent of an Enterprise's risk-weighted assets. Related to this concern, the FSOC Secondary Market Statement found that, ''[b]ecause the proposed buffers change based on adjusted total asset size and market share, an Enterprise's capital buffers could decline on a risk-adjusted basis in response to deteriorating Enterprise asset quality or during periods of stress.'' While acknowledging that a more risk-sensitive approach could increase the procyclicality of the aggregate risk-based requirements, FSOC ''encourage[d] FHFA to consider the relative merits of alternative approaches for more dynamically calibrating the capital buffers.''

The final rule adopts the proposed rule's approach to assess each of the PCCBA component buffers as a specified percent of an Enterprise's adjusted total assets. This is a notable departure from the Basel and U.S. banking frameworks, and it is a departure that does reduce the risk-sensitivity of the framework. FHFA continues to believe that the balance of considerations weighs in favor of this approach. In FHFA's view, a fixed-percent PCCBA is important, among other reasons, to reduce the impact that the PCCBA potentially could have on higher risk exposures, avoid amplifying the secondary effects of any model or similar risks inherent to the calibration of granular risk weights for mortgage exposures, and further mitigate the procyclicality of the aggregate risk-based capital requirements. While the Basel and U.S. banking framework assess the analogous buffers against risk-weighted assets, FHFA's underlying credit risk capital requirements for mortgage exposures are considerably more risk sensitive than the analogous requirements of those frameworks. As discussed in Section V.D, that heightened risk sensitivity engenders more procyclicality than the Basel and U.S. banking frameworks, at least with respect to the aggregate risk-based capital required on mortgage exposures, and that procyclicality is in tension with FHFA's objective to ensure the safety and soundness of each Enterprise and that each Enterprise can fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle. This tension is heightened by the concentration risk associated with the monoline nature of the Enterprises' mortgage-focused businesses. Notwithstanding the final rule's approach, however, FHFA has taken steps to enhance the risk sensitivity of the stress capital buffer.

2. Stress Capital Buffer

Under the proposed rule, an Enterprise's stress capital buffer would have equaled 0.75 percent of the Enterprise's adjusted total assets. The proposed stress capital buffer was similar in amount and rationale to the 0.75 percent going-concern buffer contemplated by the 2018 proposal. For the reasons elaborated in Section III.B.2 of the proposed rule, and as also contemplated by the Basel and U.S. banking frameworks,[35] FHFA continues to believe that each Enterprise should be capitalized to remain a viable going concern both during and after a severe economic downturn. While the regulatory capital requirements are sized to ensure an Enterprise would be regarded as a viable going concern by creditors and other counterparties, the stress capital buffer is sized to ensure that the Enterprise would, in ordinary times, maintain regulatory capital that could be drawn down during a financial stress and still maintain regulatory capital sufficient to satisfy the regulatory capital requirements after that stress.

Some commenters thought that the stress capital buffer was appropriately sized at 0.75 percent of an Enterprise's adjusted total assets. Other commenters argued that the stress capital buffer was excessive or should be eliminated. Some commenters suggested that each Enterprise needs to be capitalized only to absorb losses incurred in a severely adverse stress, not to be regarded as a viable going concern by creditors and other counterparties after that stress. One commenter suggested that FHFA consider calibrating a buffer based on an actuarial model for minimum capital, perhaps after considering the Federal Housing Administration's process for determining the minimum economic net worth and soundness of its Mutual Mortgage Insurance Fund.

Many commenters advocated increasing the risk sensitivity of the stress capital buffer. Some of these commenters suggested that the stress capital buffer should be assessed against risk-weighted assets, not adjusted total assets. A few commenters suggested that it was inappropriate to assess the same stress capital buffer on each Enterprise because each has a different risk profile. Some commenters urged FHFA to adopt the proposed rule's alternative that would rely on FHFA's eventual program for supervisory stress tests, although one commenter thought that should be implemented only after FHFA's supervisory stress testing capabilities have been developed.

After considering these comments, FHFA has determined to adopt the proposed rule's alternative approach under which FHFA would periodically re-size the stress capital buffer to the extent that FHFA's eventual program for supervisory stress tests determines that an Enterprise's peak capital exhaustion under a severely adverse stress would exceed 0.75 percent of adjusted total assets. Pending FHFA's implementation of its supervisory stress testing program, or in any year in which FHFA does not assign a greater stress capital buffer, an Enterprise's stress capital buffer would be 0.75 percent of its adjusted total assets.

FHFA is adopting the alternative approach because a dynamically re-sized stress capital buffer would be more risk-sensitive than a fixed-percent stress capital buffer, potentially varying in amount across the economic cycle and also varying in response to changes in the risk of the Enterprise's mortgage exposures. By leveraging a supervisory stress test, this approach could also incorporate nuanced assumptions, such as with respect to the continued availability and pricing of CRT during a period of financial stress. The final rule's approach is also consistent with the FSOC Secondary Market Statement's recommendation that ''encourage[d] FHFA to consider the relative merits of alternative approaches for more dynamically calibrating the capital buffers.''

3. Countercyclical Capital Buffer

Under the proposed rule, the countercyclical capital buffer for the Enterprises would have initially been set at 0 percent of adjusted total assets. The proposed rule's countercyclical capital buffer was similar in purpose and rationale to the analogous buffer of the U.S. banking framework.

Many commenters argued that FHFA should not adopt a countercyclical capital buffer. One commenter thought

[35] 78 FR at 51105 (''In calibrating the revised risk-based capital framework, the BCBS identified those elements of regulatory capital that would be available to absorb unexpected losses on a going-concern basis. The BCBS agreed that an appropriate regulatory minimum level for the risk-based capital requirements should force banking organizations to hold enough loss-absorbing capital to provide market participants a high level of confidence in their viability. The BCBS also determined that a buffer above the minimum risk-based capital requirements would enhance stability, and that such a buffer should be calibrated to allow banking organizations to absorb a severe level of loss, while still remaining above the regulatory minimum requirements.'').

the value of the countercyclical capital buffer was unclear, as the concept was still theoretical and yet to be modeled and vetted. One commenter argued the countercyclical capital buffer should be more predictable and have a phase-in period and time limitation. Another commenter suggested that FHFA should include a buffer that was triggered when home prices moved a specified amount above the long-term trend. Other commenters suggested that FHFA should clarify the degree of alignment with the U.S. banking framework. Some commenters noted that the U.S. banking regulators have been reluctant to adjust the countercyclical capital buffer. A few commenters advocated adjusting the countercyclical capital buffer based on excessive credit growth in the national housing finance markets. Some commenters were concerned that the method for sizing the countercyclical capital buffer was overly subjective. Several commenters suggested that the countercyclical capital buffer was unnecessary because of stress testing or because the Safety and Soundness Act already authorizes FHFA to temporarily increase regulatory capital requirements.

The final rule adopts the countercyclical capital buffer as proposed. FHFA continues to believe that the countercyclical capital buffer serves an important purpose to the extent that it facilitates FHFA's exercise of its existing authorities to temporarily increase regulatory capital requirements when excess aggregate credit growth poses heightened risk to the safety and soundness of the Enterprises. As discussed in the proposed rule, FHFA does not expect to adjust this buffer as a means to replace or supplement the countercyclical adjustment to the risk-based capital requirements for single-family mortgage exposures. Instead, as under the Basel and U.S. banking frameworks, FHFA would adjust the countercyclical capital buffer taking into account the macro-financial environment in which the Enterprises operate, such that it would be deployed only when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk. This focus on excess aggregate credit growth would have meant that the countercyclical capital buffer likely would be deployed on an infrequent basis and generally only when similar buffers are deployed by the U.S. banking regulators. FHFA also affirms that any adjustment to the countercyclical capital buffer would be made in accordance with applicable law and after appropriate notice to the Enterprises.

4. Stability Capital Buffer

a. Proposed Rule's Approach

As discussed in Section III.B.4 of the proposed rule, the lessons of the 2008 financial crisis have established that the failure of an Enterprise could result in significant harm to the national housing finance markets, as well as the U.S. economy more generally. The Enterprises remain the dominant participants in the housing finance system, owning or guaranteeing 45 percent of residential mortgage debt outstanding as of June 30, 2020. The Enterprises also continue to control critical infrastructure for securitizing and administering $5.8 trillion of single-family and multifamily MBS. Because of the interconnectedness between the Enterprises, distress at one Enterprise could cause distress at the other Enterprise. The Enterprises' imprudent risk-taking and inadequate capitalization led to their near collapse and were among the proximate causes of the 2008 financial crisis. The precipitous financial decline of the Enterprises was also among the most destabilizing events of the 2008 financial crisis, leading to their taxpayer-backed rescue in September 2008. Even today, a perception persists that the Enterprises are ''too big to fail.'' This perception reduces the incentives of creditors and other counterparties to discipline risk-taking by the Enterprises. This perception also produces competitive distortions to the extent that it enables the Enterprises to fund themselves at a lower cost than other market participants.

Pursuant to the Safety and Soundness Act, as amended by HERA, the FHFA Director's principal duties are, among other duties, to ensure that each Enterprise operates in a safe and sound manner and that the operations and activities of each Enterprise foster liquid, efficient, competitive, and resilient national housing finance markets.[36] FHFA proposed to incorporate into each Enterprise's PCCBA an Enterprise-specific stability capital buffer that would be tailored to the risk that the Enterprise's default or other financial distress could have on the liquidity, efficiency, competitiveness, or resiliency of the national housing finance markets (housing finance market stability risk).[37] FHFA cited several reasons for the proposed rule's stability capital buffer.

First, an Enterprise-specific stability capital buffer would foster liquid, efficient, competitive, and resilient national housing finance markets by reducing the expected impact of the Enterprise's failure on the national housing finance markets. Under a regulatory capital framework in which each Enterprise is subject to the same capital requirements and has the same probability of default, a larger Enterprise's default would nonetheless still pose a greater expected impact due to the greater magnitude of the effects of its default on the national housing finance markets. As a result, a probability of default that might be acceptable for a smaller Enterprise might be unacceptably high for a larger Enterprise. By subjecting a larger Enterprise to a larger capital surcharge, an Enterprise-specific stability capital buffer would reduce the probability of a larger Enterprise's default, aligning the expected impact of its default with that of a smaller Enterprise.

Second, an Enterprise-specific stability capital buffer also would foster liquid, efficient, competitive, and resilient national housing finance markets by creating incentives for each Enterprise to reduce its housing finance market stability risk by curbing its market share and growth in ordinary times, with the possibility of an expanded role during a period of financial stress.

Third, an Enterprise-specific stability capital buffer could offset any funding advantage that an Enterprise might have on account of being perceived as ''too big to fail.'' That, in turn, would remove the incentive for counterparties to shift risk to the Enterprise, where that incentive not only increases the housing finance market stability risk posed by the Enterprise but also undermines the competitiveness of the national housing finance markets.

Fourth, a larger capital cushion at an Enterprise could afford the Enterprise and FHFA more time to address emerging weaknesses at the Enterprise that could adversely impact the national housing finance markets. In addition to mitigating national housing finance market risk, the additional time afforded by a larger capital cushion could help FHFA ensure that each Enterprise operates in a safe and sound manner.

Finally, with respect to safety and soundness, any perception that an

[36] 12 U.S.C. 4513(a)(1).

[37] FHFA's proposed stability capital buffer should not be construed to imply or otherwise suggest that a similar capital surcharge would necessarily be appropriate for the Enterprises' counterparties or other market participants in the housing finance system. Some of these market participants do not pose much, if any, risk to the liquidity, efficiency, competitiveness, or resiliency of national housing finance markets.

Enterprise is ''too big to fail'' leads to moral hazard that undermines market discipline by creditors and other counterparties over the risk taking at an Enterprise. By increasing the regulatory capital at an Enterprise, the stability capital buffer would shift more tail risk back to the Enterprise's shareholders, which should have the added benefit of offsetting any ''too big to fail'' funding advantage arising from unpriced tail risk. The resulting enhanced market discipline should enhance safety and soundness by increasing each Enterprise's incentives to effectively manage its risks.

FHFA proposed a stability capital buffer based on a market share approach. Under FHFA's market share approach, an Enterprise's stability capital buffer would have depended on an Enterprise's share of total residential mortgage debt outstanding that exceeds a threshold of 5.0 percent market share. The stability capital buffer, expressed as a percent of adjusted total assets, would have increased by 5 basis points for each percentage point of market share exceeding that threshold. FHFA also solicited comment on an alternative approach that would have the Enterprises compute their stability capital buffer in a manner analogous to the U.S. banking approach for determining the surcharge for global systemically important bank holding companies (GSIB).

b. FSOC Secondary Market Statement

The proposed rule's stability capital buffer was a significant departure from the 2018 proposal. That proposal did not contemplate an Enterprise-specific capital surcharge or other buffer that was tailored to the Enterprise's size or importance, any funding advantage that the Enterprise might have on account of being perceived as ''too big to fail,'' or the risk that the Enterprise's default could pose to the national housing finance markets. The FSOC Secondary Market Statement generally affirmed the merit of this enhancement to the 2018 proposal, and in particular the importance of a separate capital buffer that is expressly intended to mitigate an Enterprise's stability risk.

FSOC found that any distress at the Enterprises that affected their secondary mortgage market activities could pose a risk to financial stability, if risks are not properly mitigated. This important, if perhaps obvious, finding was echoed by the statements made by several of the FSOC principals in connection with FSOC Secondary Market Statement.[38] This finding also confirmed a premise of the proposed rule's stability capital buffer.

FSOC recommended that the regulatory capital requirements should be an important mitigant of the Enterprises' potential stability risk. Specifically, the FSOC Secondary Market Statement stated that ''[a] stability capital buffer would mitigate risks to financial stability by reducing the expected impact of an Enterprise's distress on financial markets or other financial market participants and by addressing the potential for decreased market discipline due to an Enterprise's size and importance.'' Even more importantly, FSOC also recommended that the capital buffers should be intentionally tailored to that potential stability risk, stating ''[t]he capital buffers should be tailored to mitigate the potential risks to financial stability.''

After the FSOC Secondary Market Statement, and given the historical record as to the significant harm an Enterprise's failure could have on the financial system and the economy more generally, it is clear that not only FHFA, but also the other federal regulators, expect that a meaningful stability capital buffer that is specific to each Enterprise's stability risk is a critical feature of the Enterprises' regulatory capital framework.

c. Comments on the Proposed Rule

Many commenters criticized the overall size of each Enterprise's stability capital buffer. Some commenters thought that the stability capital buffer was excessive or even unnecessary given the sizing of the risk-based capital requirements or because of Treasury's commitment under the PSPA. One commenter suggested capping the stability capital buffer at a fixed percent. Other commenters urged eliminating the stability capital buffer because, in their view, it conflicts with the Enterprises' countercyclical mission, while others questioned its applicability because the Enterprises transfer much of the interest rate risk and funding risk on the mortgage exposures that secure their guaranteed MBS. One commenter remarked that the Enterprises' failures in the 2008 financial crisis were due to their underwriting practices, not their market shares.

A few commenters thought that the Enterprises' stability capital buffers were insufficient. Some commenters emphasized the necessity of the stability capital buffer in light of Treasury's rescue of the Enterprises during the 2008 financial crisis. One commenter thought that the stability capital buffer reflects the lessons learned from past crises and the Enterprises' effects on the economy.

Many commenters criticized the proposed rule's market share approach. Some commenters were concerned that the market share approach would be procyclical, increasing an Enterprise's stability capital buffer during a period of financial stress as the Enterprise increased its acquisition share. Some commenters thought that the market share approach might not be well-tailored to an Enterprise's housing finance market stability risk. Many commenters expressed support for either or both of the U.S. banking framework's GSIB surcharge methods, perhaps with adjustments. Other commenters viewed each of the U.S. banking framework's GSIB surcharge methods as inapplicable to the Enterprises due to the different business models.

d. Final Rule's Approach

FHFA is adopting the stability capital buffer as proposed. Consistent with the findings and recommendations of the FSOC Secondary Market Statement, FHFA continues to believe that the stability capital buffer is a critical feature of the Enterprises' regulatory capital framework. An Enterprise-specific stability capital buffer will foster liquid, efficient, competitive, and

[38] *See* Statement of CFTC Chairman Heath P. Tarbert on FSOC's Activities-Based Review of Secondary Mortgage Market Activities, available at: *https://www.cftc.gov/PressRoom/SpeechesTestimony/tarbertstatement092520* (''The good news is that for the first time, the FSOC is formally acknowledging that any distress that affects the secondary market activities of the GSEs could pose a risk to the financial stability of the United States if not properly mitigated.''); Statement by FDIC Chairman Jelena McWilliams on FSOC Activities-Based Review of Secondary Mortgage Market Activities, available at: *https://www.fdic.gov/news/speeches/spsep2520.html* (''Prior to the global financial crisis, Fannie Mae and Freddie Mac were two of the largest, most highly leveraged financial companies in the world. Since being placed into conservatorship in September of 2008, their role in the mortgage market has only grown.''); Statement by the Acting Comptroller of the Currency Regarding FSOC's Consideration of Secondary Mortgage Market Activities, available at: *https://www.occ.gov/news-issuances/news-releases/2020/nr-occ-2020–128.html* (''I support the FSOC's activities-based review of the secondary mortgage market and the thoughtful analysis of the Government Sponsored Enterprises' contribution to financial stability risks as well as of the efforts to address them, . . . .''); CFPB Director Kraninger's Remarks at the Financial Stability Oversight Council Meeting, available at: *https://www.consumerfinance.gov/about-us/newsroom/director-kraningers-remarks-financial-stability-oversight-council-meeting/* (''As the dominant participants in the secondary mortgage market, [the GSEs] provide the liquidity needed by lenders to provide affordable housing options to consumers. Financial stability and access to credit may be imperiled if the GSEs cannot perform this role effectively. It therefore is critical that we take steps to mitigate that risk.'').

resilient national housing finance markets by reducing the expected impact of the Enterprise's failure on the national housing finance markets. It also will create incentives for each Enterprise to reduce its housing finance market stability risk by curbing its market share and growth in ordinary times, preserving room for a larger role during a period of financial stress. An Enterprise-specific stability capital buffer could offset any funding advantage that an Enterprise might have on account of being perceived as ''too big to fail,'' which would remove the incentive for counterparties to shift risk to the Enterprise and thereby increase the housing finance market stability risk posed by the Enterprise. A larger capital cushion at an Enterprise could afford the Enterprise and FHFA more time to address emerging weaknesses at the Enterprise that could adversely impact the national housing finance markets. By increasing the regulatory capital at an Enterprise, the stability capital buffer also will shift more tail risk back to the Enterprise's shareholders, which should have the added benefit of offsetting any ''too big to fail'' funding advantage arising from unpriced tail risk and thereby enhance market discipline over excessive risk taking.

As urged by many commenters, FHFA carefully considered the proposed rule's alternative that would have had each Enterprise compute its stability capital buffer in a manner analogous to the U.S. banking approach for determining the GSIB surcharge. However, limits on available data preclude, at least at this time, the adjustments that would be necessary to ensure that a modified U.S. banking framework approach yields an Enterprise-specific stability capital buffer that is reasonably tailored to each Enterprise's housing finance market stability risk.

While the U.S. banking framework's GSIB surcharge methods might appear adaptable to financial institutions other than banking organizations, adopting an analogous approach for calibrating the Enterprises' stability capital buffer is not practicable for at least two reasons. First, the U.S. banking framework determines some of the systemic risk indicators using data specific to banking organizations, which presents data limitations that would need to be overcome. For example, each of the U.S. banking framework's systemic indicators is a relative measure determined by dividing the banking organization's applicable measure by the aggregate measure for a set of large banking organizations. The Enterprises' measures are not included in such aggregate measures, and the GSIB surcharge tiers were calibrated based on the bank-only aggregate measure. Therefore, each Enterprise's measure cannot simply be added to that aggregate measure.

Second, FHFA has not identified reliable alternative systemic risk indicators for the Enterprises. For example, the U.S. banking framework's systemic indicators for substitutability relate to measures of payments activity, assets under custody, and underwritten transactions in debt and equity markets. Using the data inputs specified by the U.S. banking framework, the systemic indicator for substitutability would have produced an exceedingly small measure for each Enterprise, perhaps even zero. That measure is clearly inconsistent with any reasonable understanding of the substitutability of the Enterprises, which currently have a near absence of private-sector market participants that could quickly fill the role of the Enterprises in supporting the secondary market.

Without considerable adjustments that are not practicable with existing data, applying the U.S. banking framework's GSIB surcharge methods to the Enterprises would produce results having little, if any, correspondence with a commonsense understanding of each Enterprise's housing finance market stability risk. Consistent with this conclusion, the U.S. banking framework's GSIB framework does not apply to any nonbank financial companies supervised by the Federal Reserve Board, and instead the Federal Reserve Board contemplates a tailored approach to these financial institutions.[39]

With respect to the market share approach, FHFA continues to believe that the sizing of each Enterprise's stability capital buffer is reasonably tailored to the Enterprise's housing finance market stability risk. As of June 30, 2020, Fannie Mae and Freddie Mac would have had stability capital buffers of, respectively, 1.07 and 0.66 percent of adjusted total assets. Under the 33 percent average risk weight on their exposures at that time, Fannie Mae and Freddie Mac's stability capital buffers would have been 3.3 and 2.0 percent of risk-weighted assets, respectively, which would have been a somewhat less than U.S. GSIBs of similar size. Notably, were the average risk weight on the Enterprises' exposures to increase to 35 percent, Fannie Mae's and Freddie Mac's stability capital buffers would be equivalent to 3.1 and 1.9 percent of risk-weighted assets, respectively, considerably below the capital surcharges of U.S. GSIBs of similar size.

FHFA acknowledges that the market share approach could increase the procyclicality of the aggregate risk-based capital requirements. There is inherently some tension between tailoring the stability capital buffer to an Enterprise's housing finance market stability risk, which generally would increase when it expands its role, and mitigating the procyclicality of the regulatory capital framework. To strike an appropriate balance, the final rule adopts the approach of the proposed rule, which provided that an increase in an Enterprise's stability capital buffer would in effect apply two years after an increase in the Enterprise's market share.

*B. Prescribed Leverage Buffer Amount*

Under the proposed rule, to avoid limits on capital distributions and discretionary bonus payments, an Enterprise would have been required to maintain tier 1 capital in excess of the amount required under the tier 1 leverage ratio requirement by at least the amount of a PLBA equal to 1.5 percent of the Enterprise's adjusted total assets. The primary purpose of the PLBA was to serve as a non-risk-based supplementary measure that provides a credible backstop to the combined PCCBA and risk-based capital requirements. From a safety-and-soundness perspective, each of the risk-based and leverage ratio requirements offsets potential weaknesses of the other. Taken together, well-calibrated risk-based capital requirements working with a credible leverage ratio requirement are more effective than either would be in isolation. FHFA deemed it important that the buffer-adjusted risk-based and leverage ratio requirements are also closely calibrated to each other so that they have an effective complementary relationship.

Many commenters criticized the sizing of the PLBA. Some of these commenters suggested reducing the PLBA to 0.5 percent or 0.75 percent of adjusted total assets. Some commenters argued the PLBA should be removed entirely. A few commenters did support the proposed rule's PLBA of 1.5 percent of adjusted total assets. Other commenters suggested that payout restrictions should be based only on the PCCBA-adjusted risk-based capital requirements.

As discussed in Section VII.B.2, commenters also offered related views on the proposed rule's PLBA-adjusted leverage ratio requirement, and those comments have some implications for the PLBA itself. The PLBA-adjusted

[39] 80 FR 49084.

leverage ratio requirement prescribed the tier 1 capital necessary to avoid restrictions on capital distributions and discretionary bonuses. Many of these commenters contended that the PLBA-adjusted leverage ratio requirement likely would often exceed the PCCBA-adjusted risk-based capital requirements. A binding PLBA-adjusted leverage ratio requirement, in the view of many of these commenters, could reduce the risk sensitivity of the regulatory capital framework, decrease an Enterprise's incentive to engage in CRT, incentivize an Enterprise to increase risk taking, or reduce an Enterprise's ability to offset lower returns on some exposures with higher returns on other exposures. Some commenters, on the other hand, argued that the PLBA-adjusted leverage ratio requirement was inadequate given the Enterprises' historical loss experience and the risk that each Enterprise poses to financial stability. Some commenters suggested sizing the PLBA-adjusted leverage ratio requirement based on the pre-CRT risk-based capital requirements.

After considering these comments, FHFA has determined to adopt the PLBA as proposed. FHFA continues to believe that the proposed rule's calibration methodology for the PLBA was fundamentally sound. The 1.5 percent PLBA is calibrated to ensure that the PCCBA and PLBA have an effective complementary relationship such that each is independently meaningful. The PLBA for Fannie Mae and Freddie Mac would have been, respectively, $53 billion and $38 billion as of September 30, 2019 and would have been $58 billion and $41 billion as of June 30, 2020. For Fannie Mae, the PLBA would have been less than its PCCBA, while for Freddie Mac the reverse would have been true. Moreover, the relative sizing of the PLBA is generally consistent with the relative sizing of similar buffers under the U.S. banking framework. A 1.5 percent PLBA for the Enterprises is 37.5 percent of the 4.0 percent PLBA-adjusted leverage ratio requirement to avoid payout restrictions. The 2.0 percent supplementary leverage ratio requirement of the U.S. banking framework is 40 percent of the 5.0 percent buffer-adjusted leverage ratio requirement to avoid payout restrictions. Finally, FHFA notes that the Federal Home Loan Banks are subject to a 4.0 percent total leverage ratio requirement. While the Federal Home Loan Banks might have greater interest rate risk profiles than the Enterprises, the Federal Home Loan Banks also have the safety and soundness benefits of the statutory requirement that each advance be fully secured, and that security interest has special protection under the Federal Home Loan Bank Act.

FHFA agrees with commenters that the PCCBA-adjusted risk-based capital requirements should, as a general rule, exceed the regulatory capital required under the PLBA-adjusted leverage ratio requirement. Some commenters' analysis suggested that the PLBA-adjusted leverage ratio requirement generally would exceed the PCCBA-adjusted risk-based capital requirements over most of the economic cycle. That could evidence flaws in FHFA's method for calibrating the PLBA-adjusted leverage ratio requirements, the PCCBA-adjusted risk-based capital requirements, or both. After taking into account the views of commenters, and also after considering the FSOC Secondary Market Statement's affirmation of the sizing of the leverage ratio requirements and its suggestion that additional capital could be required, FHFA has adopted adjustments to the risk-based capital requirements that generally should reduce the likelihood that the PLBA-adjusted leverage ratio requirements would exceed the PCCBA-adjusted risk-based capital requirements.

*C. Payout Restrictions*

Under the proposed rule, an Enterprise would have been subject to limits on its capital distributions and discretionary bonus payments if either its capital conservation buffer was less than its PCCBA or its leverage buffer was less than its PLBA. An Enterprise's maximum payout ratio would have determined the extent to which it is subject to limits on capital distributions and discretionary bonuses. An Enterprise also would not have been permitted to make distributions or discretionary bonus payments during the current calendar quarter if, as of the end of the previous calendar quarter: (i) The eligible retained income of the Enterprise was negative; and (ii) either (A) the capital conservation buffer of the Enterprise was less than its stress capital buffer, or (B) the leverage buffer of the Enterprise was less than its PLBA.

Some commenters supported the payout restrictions as proposed. A few commenters suggested that restrictions on discretionary bonuses would be unfair to employees. Other commenters argued against payout restrictions when an Enterprise is profitable. Some contended that an Enterprise should not be permitted to make any capital distribution at all if it maintained regulatory capital less than its PCCBA-adjusted risk-based capital requirements or its PLBA-adjusted leverage ratio requirements. Other commenters sought clarification as to the circumstances under which an Enterprise would be subject to enforcement action for maintaining regulatory capital less than its PCCBA-adjusted risk-based capital requirements or its PLBA-adjusted leverage ratio requirements. A few commenters suggested changes to the proposed rule's maximum payout ratios.

The final rule adopts the payout restrictions as proposed. FHFA continues to believe that the payout restrictions are appropriately tailored to ensure each Enterprise will maintain safe and sound levels of regulatory capital in the ordinary course while also being able to draw down its regulatory capital during a period of financial stress.

With respect to commenters' suggested clarifications, FHFA continues to expect that each Enterprise generally will seek to avoid any payout restriction by maintaining regulatory capital in excess of its buffer-adjusted risk-based and leverage ratio requirements during ordinary times. FHFA also expects that, consistent with its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle, each Enterprise might draw down its buffers during a period of financial stress. However, it would not be consistent with the safe and sound operation of an Enterprise for the Enterprise to maintain regulatory capital less than its buffer-adjusted requirements in the ordinary course except for some reasonable period after a financial stress, pending the Enterprise's efforts to raise and retain regulatory capital.

Nothing in the final rule limits the authority of FHFA to take action to address unsafe or unsound practices or violations of law, including actions inconsistent with an Enterprise's charter. FHFA could, depending on the facts and circumstances, determine that it is an unsafe or unsound practice, or that it is inconsistent with the Enterprise's statutory mission, for an Enterprise to maintain regulatory capital that is less than its buffer-adjusted requirements during ordinary times. If FHFA were to make that determination, FHFA would have all of its enforcement and other authorities, including its authority to issue a cease-and-desist order, to require the Enterprise to remediate that unsafe or unsound practice—for example, by developing and implementing a plan to raise additional regulatory capital.

## IX. Credit Risk Capital: Standardized Approach

*A. Single-Family Mortgage Exposures*

Much like the proposed rule, the standardized credit risk-weighted assets for each single-family mortgage exposure will be determined under the final rule using grids and risk multipliers that together will assign an exposure-specific risk weight based on the risk characteristics of the single-family mortgage exposure. The base risk weight will be a function of the single-family mortgage exposure's MTMLTV, among other things. The MTMLTV will be subject to a countercyclical adjustment to the extent that national house prices are 5.0 percent greater or less than an inflation-adjusted long-term trend. This base risk weight will then be adjusted based on other risk attributes, including any mortgage insurance or other loan-level credit enhancement and the counterparty strength on that enhancement. Finally, this adjusted risk weight will be subject to a floor.

1. Base Risk Weights

In general, FHFA calibrated the proposed rule's base risk weights and risk multipliers for single-family mortgage exposures to require credit risk capital sufficient to absorb the lifetime unexpected losses incurred on single-family mortgage exposures experiencing a shock to house prices similar to that observed during the 2008 financial crisis. Lifetime unexpected losses are the difference between lifetime credit losses in such conditions (also known as stress losses) and expected losses. The proposed rule would have required an Enterprise to determine a base risk weight for each single-family mortgage exposure using one of four single-family grids (each, a single-family grid) based on performance history:

- *Non-performing loan (NPL):* A single-family mortgage exposure that is 60 days or more past due.
- *Modified re-performing loan (modified RPL):* A single-family mortgage exposure that is not an NPL and has previously been modified or entered a repayment plan.
- *Non-modified re-performing loan (non-modified RPL):* A single-family mortgage exposure that is not an NPL, has not been previously modified or entered a repayment plan, and has been an NPL at any time in the last 48 calendar months.
- *Performing loan:* A single-family mortgage exposure that is not an NPL, a modified RPL, or a non-modified RPL. A non-modified RPL generally would have transitioned to a performing loan after not being an NPL at any time in the prior 48 calendar months.

Many commenters generally supported the proposed rule's base risk weights, which resulted in exposure-specific credit risk capital requirements generally similar to those of the 2018 proposal, subject to some simplifications and refinements. Several commenters suggested that FHFA should establish a process for reviewing the base risk weights every few years that includes soliciting public input from interested parties.

FHFA also received comments on the framework for calibrating the proposed rule's base risk weights. Some commenters advocated greater transparency into, and justification of, the calibration framework, particularly the increase in base risk weights relative to the 2018 proposal.[40] One commenter argued that the house price shock and recovery assumptions underlying the calibration framework were inappropriate given the changes in the national housing finance markets since the 2008 financial crisis, including the enhanced consumer protections and greater capital requirements for mortgage insurers and other market participants. Another commenter recommended a separate capital requirement of 50 basis points of adjusted total assets to mitigate the model risk associated with the calibration framework. Several commenters argued that FHFA should acknowledge that accounting losses comprised a substantial portion of the Enterprises' crisis-era loss experience. Some commenters suggested that the credit risk capital requirements were motivated by an intent to drive changes to the structure of the national housing finance markets. Commenters also suggested that the final rule should permit flexibility to allow the Enterprises to adapt to an evolving market and for their partners to innovate.

Commenters suggested that the base risk weights for high MTMLTV loans were excessive and could adversely impact lending by state housing finance agencies. Some commenters argued that the base risk weight should be assigned based on original loan-to-value (OLTV) instead of MTMLTV for the first few years because, among other things, the change would reduce procyclicality. One commenter recommended splitting each single-family grid's band for single-family mortgage exposures with MTMLTV between 30 percent and 60 percent into three equally sized bands to increase the risk sensitivity of the base risk weights. Some commenters argued that the base risk weights for some higher MTMLTV single-family mortgage exposures were excessive. One commenter suggested using a national house price index instead of state-level house prices to calculate the MTMLTV for a single-family mortgage exposure.

A few commenters advocated the use of a borrower's original credit score instead of the refreshed credit score because the refreshed credit score could materially impact a borrower's access to credit and might increase procyclicality.

Commenters urged changes to the proposed rule's treatment of modified RPLs and non-modified RPLs. Some commenters suggested permitting a modified RPL to transition to a performing loan after several years of performance because these modified RPLs perform much like single-family mortgage exposures that had never been delinquent. One commenter proposed that single-family mortgage exposures subject to repayment plans and other loss mitigation programs that do not modify the required payments should be treated as non-modified RPLs so as to not discourage use of these plans and programs.

Many commenters advocated changes for single-family mortgage exposures in COVID–19-related forbearance. Commenters argued that these exposures (and other single-family mortgage exposures in similar disaster-related forbearance programs) should not be treated as NPLs or modified RPLs for purposes of assigning a basis risk weight and instead generally should be assigned a lower base risk weight. Commenters also suggested that these exposures should be assigned a different performance classification only after the forbearance period ends.

After considering these comments, FHFA has adopted the following changes to the proposed rule's base risk weights.

- The final rule adopts a revised definition of modified RPL that provides that a modified RPL will become a performing loan after 60 calendar months of performance. This treatment is similar to the treatment afforded to non-modified RPLs. In its analysis supporting the proposed rule, FHFA found a material difference in loan performance for modified RPLs that re-performed for four years and performing loans that were never modified. However, FHFA also found this difference began to diminish after five years of re-performance. In light of the commenters' recommendation and upon

[40] FHFA previously published a white paper on its calibration framework available at *https://www.fhfa.gov/PolicyProgramsResearch/Research/Pages/FHFA-Mortgage-Analytics-Platform-Whitepaper-V2.aspx.*

re-examining the available information, the final rule allows for modified RPLs that perform for five years to be reclassified as performing loans.

- Each single-family grid's band for single-family mortgage exposures with an MTMLTV between 30 percent and 60 percent has been divided into three separate, equally-sized bands. This change will moderately enhance the regulatory capital framework's risk sensitivity without materially increasing its complexity.
- A single-family mortgage exposure in a repayment plan will be treated as a non-modified RPL instead of a modified RPL. This change will avoid discouraging the use of these programs, which are important means of mitigating the Enterprises' losses. If after the forbearance the borrower elects a payment deferral instead of a reinstatement or a repayment plan, the single-family mortgage exposure will still be treated as a modified RPL.

The final rule also implements a tailored approach to any single-family mortgage exposure that is in a forbearance pursuant to the CARES Act or a forbearance program for COVID–19-impacted borrowers. During the forbearance (and pending negotiations or other steps reasonably expected to result in a modification), the base risk weight for an NPL will be equal to the product of 0.45 and the base risk weight that would otherwise be assigned to the NPL. After the forbearance, any period of time during which the single-family mortgage exposure was past due will be disregarded for the purpose of assigning a risk weight if the entire amount past due was repaid upon the termination of the forbearance. In effect, a single-family mortgage exposure will, after a reinstatement, return to the classification it had before the COVID–19-related forbearance. As discussed above, because a repayment plan will not be treated as a modification, a single-family mortgage exposure that is subject to a repayment plan after a COVID–19-related forbearance will be treated as a non-modified RPL instead of a modified RPL.

With respect to commenters' concerns about the perceived increase in the base risk weights, FHFA notes that, while the proposed rule's base risk weights generally were greater than the base risk weights implicit in the single-family grids of the 2018 proposal, that change generally would not result in greater aggregate credit risk capital requirements after taking into account offsetting changes to the risk multipliers. The proposed rule eliminated the 2018 proposal's risk multipliers for number of borrowers and loan size, and reallocated the associated unexpected losses across the base risk weights. The practical effect of this change was that the base risk weights in the single-family grids are greater than they otherwise would have been if the two risk multipliers had not been eliminated.

2. Countercyclical Adjustment

Under the proposed rule, the MTMLTV used to assign a base risk weight to a single-family mortgage exposure would have been subject to a countercyclical adjustment that an Enterprise would have been required to make when national house prices increased or decreased by more than 5.0 percent from an estimated inflation-adjusted long-term trend (MTMLTV adjustment). The proposed rule's MTMLTV adjustment would have been based on FHFA's U.S. all-transactions FHFA HPI.

Several commenters generally supported the MTMLTV adjustment as an effective means of mitigating the procyclicality of the aggregate risk-based capital requirements. One commenter suggested that the MTMLTV adjustment was duplicative of the countercyclical capital buffer and therefore unnecessary. A commenter argued that, while the MTMLTV adjustment functioned effectively when applied to historical datasets, it might not function as expected in the future and could, under certain circumstances, reduce the Enterprises' incentives to acquire high OLTV single-family mortgage exposures. Other commenters thought that the procyclicality could be addressed by increasing reliance on OLTV and credit scores at origination instead of MTMLTV and refreshed credit scores. Some commenters thought that CRT could play a role in mitigating procyclicality.

Many commenters recommended changes to the MTMLTV adjustment. Some commenters suggested that the MTMLTV adjustment should be regionalized by using home prices in each state or metropolitan statistical area to avoid distorting regional lending based on national house price trends. Another commenter advocated using a purchase-only HPI instead of the all-transactions FHFA HPI. That commenter also advocated using data from 1975 to 2001 to specify the long-term trend. Commenters also proposed periodically reevaluating the MTMLTV adjustment.

Some commenters focused on the 5.0 percent collar. A few commenters advocated not using a collar and instead applying the MTMLTV adjustment regardless of the extent to which national house prices had departed from the long-term trend. Other commenters suggested a wider collar or an asymmetrical collar that set thresholds at different levels of deviation above and below the long-term trend. One commenter suggested applying the MTMTLTV adjustment to only half the incremental house price appreciation above the collar.

After considering the views of commenters, FHFA has determined to adopt the proposed rule's MTMLTV adjustment with two changes. First, FHFA agrees with commenters that an expanded-data HPI, for example the recently published national, not-seasonally adjusted, expanded-data FHFA House Price Index®, provides a better basis for identifying departures from the inflation-adjusted long-term national house price trends. The expanded-data FHFA HPI excludes the potential valuation biases associated with refinancing transactions, which generally assign a house valuation through an appraisal. The expanded-data FHFA HPI also more accurately reflects market activity by supplementing the Enterprises' acquisitions with data from Federal Housing Administration mortgages and real property records. The additional data provide sufficient sample sizes to ensure robust estimation of the HPI back to 1975.

To estimate the long-term trend using the expanded-data FHFA HPI, FHFA employed the same trough-to-trough methodology used in the proposed rule. The parameters of the long-term trend are estimated using a linear regression on the natural logarithm of real HPI from the trough in the first quarter of 1976 to the trough in the first quarter of 2012, where the quarterly HPI has been deflated by the average quarterly non-seasonally adjusted Consumer Price Index for All Urban Consumers, U.S. City Average, All Items Less Shelter. The long-term trend line for the expanded-data FHFA HPI is somewhat different than the long-term trend line under the proposed rule. Under the final rule's long-term trend line, as of June 30, 2020, house prices were moderately greater than the 5 percent collar. As a result, as of June 30, 2020, each Enterprise would be required to make an increase to the MTMLTVs of single-family mortgage exposures, increasing aggregate risk-based capital for these exposures.

Second, the final rule prescribes a trigger for FHFA to re-estimate the long-term trend line upon a new trough. FHFA will adjust the formula for the long-term HPI trend in accordance with applicable law if two conditions are

satisfied as of the end of a calendar quarter that follows the last adjustment to the long-run HPI trend: (i) The average of the deflated HPI's departures from the long-term HPI trend over four consecutive calendar quarters has been less than -5.0 percent; and (ii) after the end of the calendar quarter in which the first condition is satisfied, the deflated HPI has increased to an extent that it again exceeds the long-term HPI trend. The point in time of the new trough used by FHFA to adjust the formula for the long-term HPI trend will be identified by the calendar quarter with the smallest deflated HPI in the period that includes the calendar quarter in which the first condition is satisfied and ends at the end of the calendar quarter in which the second condition is first satisfied. The proposed rule contemplated changes to the 2018 proposal to mitigate the procyclicality of the aggregate risk-based capital requirements of the 2018 proposal. FHFA agreed with many of the commenters on the 2018 proposal that mitigating the procyclicality of the 2018 proposal's risk-based capital requirements would facilitate capital management and enhance the safety and soundness of the Enterprises by preventing risk-based capital requirements from decreasing to unsafe and unsound levels. Mitigating that procyclicality was also critical, in FHFA's view, to position each Enterprise to fulfill its statutory mission across the economic cycle. FHFA continues to believe that the MTMLTV adjustment is effective in mitigating that procyclicality.

In FHFA's view, the MTMLTV adjustment and the countercyclical capital buffer are not duplicative. Each serves a different purpose. FHFA does not expect to adjust the countercyclical capital buffer as a means to replace or supplement the MTMLTV adjustment. Instead, as under the Basel and U.S. banking frameworks, FHFA would adjust the countercyclical capital buffer taking into account the macro-financial environment in which the Enterprises operate, such that it would be deployed only when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk. This focus on excess aggregate credit growth would mean that the countercyclical capital buffer likely would be deployed on an infrequent basis and generally only when similar buffers are deployed by the U.S. banking regulators. In contrast, the application of the MTMLTV would not depend on a determination by FHFA. Rather the MTMLTV adjustment has an automatic trigger such that an Enterprise would be required to make the adjustment when national house prices increased or decreased by more than 5.0 percent from the long-term trend. The MTMLTV adjustment therefore could apply in circumstances in which house prices deviate significantly from the long-term trend, but there is not simultaneously a build-up of system-wide risk.

FHFA also continues to believe that the 5.0 percent collar strikes an appropriate balance between mitigating procyclicality and preserving the risk sensitivity of the regulatory capital framework. FHFA did consider an asymmetric collar. After considering the relative frequency of significant departures of house prices from the long-term trend, FHFA believes the symmetrical 5.0 percent collar strikes an appropriate balance that avoids distorting the economic signals provided by relatively frequent, but less significant, departures both above and below that trend.

FHFA also considered, but determined not to, regionalize the MTMLTV adjustment by using more granular house price indexes, such as state or MSA house price indexes. Doing so could potentially have enhanced risk sensitivity but would significantly increase the complexity of the regulatory capital framework and the model risk associated with a more granular adjustment.

3. Risk Multipliers

The proposed rule would have required an Enterprise to adjust the base risk weight assigned to a single-family mortgage exposure using a set of risk multipliers to account for additional loan characteristics. The risk multipliers would have refined the base risk weight to account for risk factors beyond the primary risk factors reflected in the single-family grids and for variations in secondary risk factors not captured in the risk profiles of the synthetic loans used to calibrate the single-family grids. The proposed rule's risk multipliers were substantially the same as those of the 2018 proposal, with some simplifications and refinements. The adjusted risk weight for a single-family mortgage exposure would have been the product of the base risk weight, the combined risk multiplier, and any credit enhancement multiplier.

Commenters generally supported the proposed rule's risk multipliers, including the simplifications and refinements made to the 2018 proposal. Several commenters suggested that FHFA should establish a process for reviewing the risk multipliers every few years that includes soliciting public input from interested parties. Some commenters argued that the risk multipliers would result in more capital relief for mortgage insurance than other forms of credit risk transfer.

Several commenters urged FHFA to reinstate the 2018 proposal's cap on the maximum combined risk multiplier for a single-family mortgage exposure. One commenter argued that the base risk weights, when adjusted by risk multipliers, would result in excessive credit risk capital requirements for rate-term refinance loans and purchase-money loans and inadequate credit risk capital requirements for cash-out refinance loans. Other commenters suggested eliminating the risk multiplier for refinance burnout.

Some commenters advocated risk multipliers that would reduce the credit risk capital requirement for a single-family mortgage exposure originated by a state housing finance agency or credit union, where the borrower received down-payment support from a state housing finance agency, or where the borrower received specified homebuyer counseling. One commenter suggested that the risk multipliers should reduce the credit risk capital requirement for a single-family mortgage exposure with a lower balance, for a borrower below a particular area median income threshold, and for a borrower in a locality with lower home ownership rates. A commenter also suggested that the risk multipliers should not increase the credit risk capital requirement for condominium-secured single-family mortgage exposures and should permit lenders to consider credit score alternatives, such as rent or utility payments, for low-income and certain other borrowers. Some commenters encouraged FHFA to align the risk multiplier for high-debt-to-income ratio (DTI) single-family mortgage exposures with the 43 percent DTI threshold of the qualified mortgage rule of the Bureau of Consumer Financial Protection. Other commenters supported more tailored risk multipliers for third-party originations based on an assessment of the originator. Some commenters suggested removing the risk multipliers for the borrower's credit score or that FHFA not use refreshed credit scores for RPLs and NPLs so as to not disincentivize loan modifications or encourage foreclosures.

FHFA is adopting the risk multipliers as proposed with one change. To address commenters' concerns that risk multipliers, while individually reasonable, could compound in certain combinations to assign excessive credit risk capital requirements for single-family mortgage exposures, the final

rule reinstates the 2018 proposal's cap that limits the combined risk multiplier for a single-family mortgage exposure to 3.0. Relatively few single-family mortgage exposures would have a risk multiplier in excess of this cap, such that the cap should not increase the safety and soundness risk to an Enterprise.

FHFA acknowledges commenters' concerns related to certain loan characteristics that the commenters perceived to pose less credit risk, including single-family mortgage exposures originated by state housing finance agencies, credit unions, and certain third-party originators. However, FHFA continues to believe that the base risk weights and risk multipliers for these single-family mortgage exposures are consistent with the best available evidence of the credit risk posed by these exposures.

4. Credit Enhancement Multipliers

Under the proposed rule, to account for the decrease in an Enterprise's exposure to unexpected loss on a single-family mortgage exposure subject to loan-level credit enhancement, an Enterprise would have adjusted the base risk weight using an adjusted credit enhancement multiplier. That adjusted credit enhancement multiplier would have been based on a credit enhancement multiplier (CE multiplier) for the loan-level credit enhancement and then adjusted for the strength of the counterparty providing the loan-level credit enhancement. A smaller CE multiplier (and therefore a smaller adjusted credit enhancement multiplier) would have corresponded to a loan-level credit enhancement that transfers more of the projected unexpected loss to the counterparty and thus requires the Enterprise to maintain less credit risk capital for the single-family mortgage exposure.

Some commenters supported the proposed rule's approach to assigning adjusted CE multipliers to single-family mortgage exposures with loan-level credit enhancement, including the refinements to the counterparty ratings. Many commenters criticized the proposed rule's approach for providing less capital relief for loan-level credit enhancement than the 2018 proposal. Commenters argued that the reduced capital relief would not provide appropriate incentives for loan-level credit enhancement, increasing risk to taxpayers. Commenters suggested that the proposed rule's 35 percent loss-given-default assumption ignored distinctions among counterparty types. Some commenters argued that more capital relief should be provided for deeper loan-level credit enhancement. Commenters suggested using the same CE multiplier for cancelable and non-cancelable mortgage insurance. A few commenters suggested that the CE multiplier on seasoned loans with cancelable mortgage insurance did not provide sufficient capital relief. One commenter argued that the approach to charter-level mortgage insurance would penalize low-income borrowers. Other commenters urged FHFA to provide capital relief only to mortgage insurers in compliance with the Enterprises' Private Mortgage Insurer Eligibility Requirements (PMIERs).

Many commenters advocated that FHFA require each Enterprise to disclose more information with respect to the metrics and processes that would be used by each Enterprise to assign counterparty ratings and mortgage concentration classifications for the purpose of the adjustments to the CE multiplier.

The final rule generally adopts the approach to adjusted CE multipliers as proposed, except that FHFA has refined the counterparty rating definitions to facilitate transparency. FHFA does not expect the definitional changes to result in a change in the rating of any counterparty. With this refinement, FHFA continues to believe that the adjusted CE multipliers provide appropriate capital relief to account for the decrease in an Enterprise's exposure to unexpected loss on a single-family mortgage exposure subject to loan-level credit enhancement, striking an appropriate balance between mitigating the counterparty risk on loan-level enhancement while not adding undue complexity to the regulatory capital framework.

5. Minimum Adjusted Risk Weight

The proposed rule would have established a floor on the adjusted risk weight for a single-family mortgage exposure equal to 15 percent. As discussed in the proposed rule, FHFA determined that a minimum risk weight was necessary to ensure the safety and soundness of each Enterprise and that each Enterprise is positioned to fulfill its statutory mission across the economic cycle.

Some commenters supported the proposed rule's 15 percent floor on the adjusted risk weight for a single-family mortgage exposure, agreeing that the risk-sensitive framework posed meaningful model and related risks and that the proposed rule's credit risk capital requirements were generally too small.

Many other commenters were critical of the floor or its sizing. Commenters thought that the floor reduced the risk sensitivity of the regulatory capital framework and should be removed. Other commenters thought that the floor was too high and should be reduced. Some commenters suggested that the calibration of the floor could merit more of an empirical basis. Some commenters argued that the floor was unnecessary because other aspects of the proposed rule mitigated the model and related risks associated with the calibration framework. Other commenters thought the floor was not well calibrated to mitigate model risk across the spectrum of single-family mortgage exposures. One commenter suggested that the floor inappropriately capitalized political risk, natural disaster risk, interest rate risk, and legal risk, when the credit risk capital requirements should be calibrated based only on credit risk.

Commenters observed that the floor would lead to an increase in the credit risk capital requirement for a substantial portion of the Enterprises' single-family mortgage exposures. Some commenters were concerned that the floor would adversely impact the borrowing costs of lower risk borrowers or could limit an Enterprise's ability to use higher returns on these lower risk borrowers to support lower returns on higher risk borrowers. Some commenters thought that the floor could disincentivize the Enterprises from engaging in CRT. Commenters expressed concern that the floor could cause mortgage intermediation to shift away from the Enterprises to other market participants. Some commenters thought that the floor could reduce the availability of mortgage credit during normal economic conditions but without supporting the availability of mortgage credit during economic downturns. One commenter thought that the floor should be applied to the base risk weight.

FHFA has determined that the final rule will include a floor on the adjusted risk weight for a single-family mortgage exposure. As discussed in the proposed rule, absent the floor, the credit risk capital requirements as of the end of 2007 would not have been sufficient to absorb each Enterprise's crisis-era cumulative capital losses on its single-family book. As also discussed in the proposed rule, FHFA continues to believe that a floor is appropriate to mitigate certain risks and limitations associated with the underlying historical data and models used to calibrate the credit risk capital requirements. These risks and limitations are inherent to any methodology for calibrating granular credit risk capital requirements. In particular:

• A disproportionate share of the Enterprises' crisis-era credit losses arose from certain single-family mortgage exposures that are no longer eligible for acquisition by the Enterprises. The calibration of the credit risk capital requirements attributed a significant portion of the Enterprises' crisis-era losses to these products. The statistical methods used to allocate losses between borrower-related risk attributes and product-related risk attributes pose significant model risk. The sizing of the regulatory capital requirements also must guard against potential future relaxation of underwriting standards and regulatory oversight over those underwriting standards.

• The Enterprises' crisis-era losses likely were mitigated at least to some extent by the unprecedented support by the federal government of the housing market and the economy and also by the declining interest rate environment of the period. There is therefore some risk that the risk-based capital requirements are not specifically calibrated to ensure each Enterprise would be regarded as a viable going concern following a future severe economic downturn that potentially entails more unexpected losses, whether because there is less or no federal support of the economy, because there is less or no reduction in interest rates, or because of other causes.

• There are some potentially material risks to the Enterprises that are not assigned a risk-based capital requirement—for example, risks relating to uninsured or underinsured losses from flooding, earthquakes, or other natural disasters or radiological or biological hazards. There also is no risk-based capital requirement for the risks that climate change could pose to property values in some localities.

Comparisons to the Basel and U.S. banking frameworks' credit risk capital requirements for similar exposures reinforce FHFA's view that a floor is appropriate. Absent a floor, before adjusting for CRT, and before adjusting for the capital buffers under the proposed rule and the Basel and U.S. banking frameworks, the Enterprises' average credit risk capital requirement for single-family mortgage exposures would have been roughly 40 percent that of U.S. banking organizations and roughly 60 percent that of non-U.S. banking organizations.[41]

Several commenters expressed concern about the model and related risks associated with the calibration framework for the risk-based capital requirements for mortgage exposures. Several commenters also argued that credit risk capital requirements generally should be aligned across market participants. The FSOC Secondary Market Statement found that ''[t]he Enterprises' credit risk requirements [under the proposed rule] . . . likely would be lower than other credit providers across significant portions of the risk spectrum and during much of the credit cycle, which would create an advantage that could maintain significant concentration of risk with the Enterprises.'' FSOC ''encourage[d] FHFA and other regulatory agencies to coordinate and take other appropriate action to avoid market distortions that could increase risks to financial stability by generally taking consistent approaches to the capital requirements and other regulation of similar risks across market participants, consistent with the business models and missions of their regulated entities.''

After considering the views of commenters, FHFA has determined to increase the floor to 20 percent. First, the gap between the proposed rule's risk weights for lower risk single-family mortgage exposures and the risk weights for analogous exposures under the Basel and U.S. banking frameworks further evidences that the proposed rule's credit risk capital requirements, even with the proposed rule's floor, might not be adequate to ensure that each Enterprise operates in a safe and sound manner. Mitigation of model risk has figured prominently in FHFA's design of the final rule, including the calibration of the floor. Second, some commenters' analysis suggested that the leverage ratio requirements generally would exceed the risk-based capital requirements over most of the economic cycle. That could further evidence flaws in FHFA's method for calibrating the risk-based capital requirements, particularly given FHFA's confidence in the method for calibrating the leverage ratio requirements as affirmed by the FSOC Secondary Market Statement's affirmation of the sizing of the leverage ratio requirements. Third, FHFA remains concerned that the portfolio-invariant calibration of the credit risk capital requirements for mortgage exposures might not adequately take into account that each Enterprise's mortgage-focused business does not permit a diversified portfolio. Fourth, the gap in credit risk capital requirements relative to the Basel and U.S. banking frameworks also suggests that the Enterprises would continue to have a competitive advantage over some other sources of mortgage credit. That would heighten risk to the competitiveness, efficiency, and resiliency of the national housing finance markets.

As discussed in Section V.B, FHFA continues to believe that the differences between the business models, statutory mandates, and risk profiles of the Enterprises and banking organizations should not preclude comparisons of the *credit risk* capital requirement of a large U.S. banking organization for a specific mortgage exposure to the *credit risk* capital requirement of an Enterprise for a similar mortgage exposure. Comparisons of credit risk capital requirements can further safety and soundness by helping to identify and mitigate model and related risks relating to the calibration of the requirements. Comparisons of credit risk capital requirements can also further financial stability by identifying undue differences in regulatory requirements that might distort the market structure.

The BCBS has finalized a more risk-sensitive set of risk weights for residential real estate exposures, which are to be implemented by January 1, 2022.[42] The Basel framework's standardized risk weights for residential real estate exposures would depend on the LTV of the exposure and would range from 20 percent to 70 percent for an exposure on which repayment is not materially dependent on cash flows generated by the property.[43] The final rule's 20 percent risk weight floor is aligned with the smallest risk weight under the eventual Basel framework.

Notably the Basel framework's 20 percent risk weight applies only to residential real estate exposures with LTVs less than 50 percent. Under the final rule, single-family exposures with LTVs considerably greater than 50 percent could be, and as of June 30, 2020 often would have been, assigned a 20 percent risk weight. Even with this increase in the floor, the Enterprises' average credit risk capital requirements for single-family mortgage exposures likely would be lower than other credit

[41] Absent a floor, as of September 30, 2019, the average pre-CRT net credit risk capital requirement on the Enterprises' single-family mortgage exposures (which reflects the benefit of private mortgage insurance but no adjustments for CRT) would have been 1.7 percent of unpaid principal balance, implying an average risk weight of 21 percent. The U.S. banking framework generally assigns a 50 percent risk weight to these exposures to determine the credit risk capital requirement (equivalent to a 4.0 percent adjusted total capital requirement), while the current Basel framework generally assigns a 35 percent risk weight (equivalent to a 2.8 percent adjusted total capital requirement).

[42] BCBS, *Basel III: Finalising post-crisis reforms* ¶¶ 59–68 (Dec. 2017).

[43] Greater risk weights would apply to residential real estate where repayment is materially dependent on cash flows generated by the property.

providers across significant portions of the risk spectrum and during much of the credit cycle.

*B. Multifamily Mortgage Exposures*

Much like the proposed rule, the standardized credit risk-weighted assets for each multifamily mortgage exposure will be determined under the final rule using grids and risk multipliers that together assign an exposure-specific risk weight based on the risk characteristics of the multifamily mortgage exposure. The base risk weight will be a function of the multifamily mortgage exposure's MTMLTV and mark-to-market debt service coverage ratio (MTMDSCR). This base risk weight will then be adjusted based on other risk attributes. Finally, this adjusted risk weight will be subject to a floor.

1. Calibration Framework

Many commenters were critical of the framework for calibrating the credit risk capital requirements for multifamily mortgage exposures. Commenters recommended that FHFA provide more transparency into the data and models used to calibrate these requirements. Some commenters indicated that they could not reproduce the proposed rule's credit risk capital requirements using available data. Some commenters thought that, relative to single-family mortgage exposures, FHFA had not devoted sufficient time and attention to the proposed rule's approach to multifamily mortgage exposures, raising the risk of unintended consequences. Several commenters suggested that FHFA should establish a process for reviewing the base risk weights and risk multipliers every few years that includes soliciting public input from interested parties and that considers new performance data.

Commenters argued that the proposed rule's credit risk capital requirements exceeded the Enterprises' historical loss experiences, including during the 2008 financial crisis. Some commenters suggested that the credit risk capital requirements for multifamily mortgage exposures should not be significantly greater those of single-family mortgage exposures, particularly in light of the unique characteristics and risk management practices and the crisis-era performance of each Enterprise's multifamily business relative to its single-family business. One commenter suggested that one Enterprise's multifamily business incurred significant losses in the late 1980s and early 1990s but viewed that loss experience as irrelevant as a result of changes in the market structure. Commenters argued that it would be inappropriate, if a severe economic downturn has recently occurred, to require credit risk capital sufficient to absorb the lifetime unexpected losses of a second severe economic downturn.

One commenter noted that the delinquency rate of one Enterprise's single-family business was greater than that of its multifamily business. Some commenters argued that the multifamily mortgage exposures of the Enterprises historically have performed better than similar exposures of U.S. banking organizations, such that the comparisons to the U.S. banking framework were not meaningful. Commenters provided pre-crisis data on peak credit loss ratios and loss rates across different vintages of multifamily mortgage exposures and also comparisons to single-family mortgage exposure performance. Some commenters urged FHFA to use the same stress scenarios and assumptions to calibrate credit risk capital requirements for both multifamily mortgage exposures and single-family mortgage exposures.

Some commenters thought that the credit risk capital requirements were not sufficiently sensitive to the leverage of the multifamily mortgage exposures. One commenter suggested a cap on the risk weights for multifamily mortgage exposures and that less regulatory capital be required of exposures with less leverage.

Another commenter recommended a separate capital requirement of 50 basis points of adjusted total assets to mitigate the model risk associated with the calibration framework. Several commenters argued that FHFA should acknowledge that accounting losses comprised a substantial portion of the Enterprises' crisis-era loss experience. Some commenters suggested that the credit risk capital requirements were motivated by an intent to drive changes to the structure of the national housing finance markets. Commenters also suggested that the final rule should permit flexibility to allow the Enterprises to adapt to an evolving market and for their partners to innovate.

A commenter expressed the view that the calibration framework did not properly address the differences between each Enterprise's multifamily business model. One potential remedy, according to a commenter, would be to permit an Enterprise to count three years of future servicing revenue, instead of one year, to determine its uncollateralized exposure. Some commenters argued that the credit risk capital requirements were not aligned with the different credit risks across workforce housing, student housing, and luxury housing.

FHFA continues to believe that the calibration framework is appropriate to ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle. As discussed in the proposed rule, FHFA generally calibrated the base risk weights and risk multipliers for multifamily mortgage exposures to require credit risk capital sufficient to absorb the lifetime unexpected losses incurred on multifamily mortgage exposures experiencing a shock to property values similar to that observed during the 2008 financial crisis. The multifamily-specific stress scenarios used to generate the base risk weights and risk multipliers involve two parameters: (i) Net operating income (NOI), where NOI represents gross potential income (gross rents) net of vacancy and operating expenses, and (ii) property values. The multifamily-specific stress scenario assumes an NOI decline of 15 percent and a property value decline of 35 percent. This stress scenario is consistent with market conditions observed during the 2008 financial crisis, views from third-party market participants and data vendors, and assumptions behind the Enterprises' stress tests.

FHFA acknowledges commenters' views that this calibration framework results in credit risk capital requirements for multifamily mortgage exposures that might be greater than the Enterprises' loss experience during the 2008 financial crisis. That economic downturn featured a decrease in homeownership rates and an increase in demand for multifamily housing. Future economic downturns might not entail similar market dynamics that would mitigate unexpected losses on multifamily mortgage exposures. FHFA continues to monitor the effects of the COVID–19 stress on the Enterprises' student housing, senior housing, and other multifamily businesses. Moreover, the credit risk capital requirements are calibrated to absorb projected lifetime losses (net of expected losses) in a stress scenario that entails a NOI decline of 15 percent and a property value decline of 35 percent, not to absorb the losses actually experienced during the 2008 financial crisis. Related to this, FHFA believes that the Enterprises' stress tests are not an appropriate consideration in calibrating the credit risk capital requirements for multifamily mortgage exposures. The Enterprises' past stress tests use a nine-quarter loss horizon, whereas much of the projected lifetime unexpected losses would be recognized

after the end of that horizon. The Enterprises' stress tests then offset those limited losses with the revenues recognized in the horizon, yielding a projection of capital exhaustion considerably lower than lifetime unexpected losses.

2. Base Risk Weights

The proposed rule would have required an Enterprise to determine a base risk weight for each multifamily mortgage exposure using a set of two multifamily grids—one for multifamily mortgage exposures with fixed rates (multifamily FRMs), and one for multifamily mortgage exposures with adjustable rates (multifamily ARMs). A multifamily mortgage exposure that has both a fixed-rate period and an adjustable-rate period (hybrid loans) would have been deemed a multifamily FRM during the fixed-rate period and a multifamily ARM during the adjustable-rate period. The proposed rule's multifamily grids were quantitatively identical to the multifamily grids in the 2018 proposal, except the credit risk capital requirements were presented as base risk weights relative to the 8.0 percent adjusted total capital requirement rather than as a percent of unpaid principal balance.

One commenter recommended that FHFA recalibrate the base risk weights for multifamily mortgage exposures to more accurately reflect the Enterprises' historical loss experiences, including during the 2008 financial crisis. Multiple commenters recommended that the base risk weights be more sensitive to MTMLTV, particularly for multifamily mortgage exposures with relatively low MTMLTVs, so as to not incentivize the Enterprises to support higher leverage lending. One commenter suggested FHFA reduce the differences in the base risk weights for multifamily FRMs and multifamily ARMs. Another commenter thought that the base risk weights would discourage the Enterprises from supporting affordable workforce housing because of the greater base risk weights for higher MTMLTV and lower MTMDSCR multifamily mortgage exposures.

The final rule adopts the base risk weights for multifamily mortgage exposures as proposed. As discussed in Section IX.B.1, FHFA continues to believe that the calibration framework for the base risk weights is appropriate to ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle.

3. Countercyclical Adjustment

In contrast to the single-family framework, the proposed rule's multifamily framework did not include an adjustment to mitigate the procyclicality of the aggregate risk-based capital requirements, although FHFA believed such an adjustment could be merited. The proposed rule's single-family countercyclical adjustment was based on an estimated long-term trend in an inflation-adjusted all-transactions FHFA HPI. As of the time of the proposed rule, FHFA did not produce a comparable multifamily series, and it was unclear whether there was sufficient data from which to develop a reliable long-term trend in multifamily property values. FHFA solicited comments on options and available data for a countercyclical adjustment to the credit risk capital requirements for multifamily mortgage exposures.

Commenters generally recommended that FHFA adopt a countercyclical adjustment to mitigate the procyclicality of the aggregate risk-based capital requirements for multifamily mortgage exposures. Some commenters suggested a countercyclical adjustment was particularly important for multifamily mortgage exposures because many have balloon-payment features. Commenters suggested that FHFA construct an index based on vacancy rates, effective rents, or other indicia of the fundamental value of multifamily properties. Several commenters urged FHFA use OLTV instead of MTMLTV as an alternative to an index-based countercyclical adjustment.

FHFA is not adopting a countercyclical adjustment in the final rule. After considering the suggestions and views of commenters, FHFA has not identified sufficient public domain data to develop a reliable long-term trend for multifamily property values. Some of the data sets recommended by commenters are not available without cost to the public. FHFA continues to see considerable merit to a countercyclical or similar adjustment. FHFA will continue to monitor the issue and assess available data with which to potentially construct an index.

4. Risk Multipliers

As with single-family mortgage exposures, the proposed rule would have required an Enterprise to adjust the base risk weight for a multifamily mortgage exposure to account for additional loan characteristics using a set of multifamily-specific risk multipliers. The risk multipliers would have refined the base risk weight to account for risk factors beyond the primary risk factors reflected in the multifamily grids and for variations in secondary risk factors not captured in the risk profiles of the synthetic loans used to calibrate the multifamily grids. The risk multipliers were substantially the same as those of the 2018 proposal, with some simplifications and refinements. The adjusted risk weight for a multifamily mortgage exposure would have been the product of the base risk weight and the combined risk multiplier.

Several commenters urged FHFA to reinstate the 2018 proposal's risk multiplier for multifamily mortgage exposures with a government subsidy. One commenter recommended a risk multiplier that would reduce the credit risk capital requirement for targeted affordable housing properties, such as properties with income and rent restrictions pursuant to Low-Income Housing Tax Credit (LIHTC) or similar programs, properties benefitting from project-based rental assistance programs, properties with supplemental tenant services, housing tax credits and tax-exempt bond financing, property tax abatement, energy retrofits, or income diversification. Another commenter suggested a risk multiplier of 0.6 for LIHTC properties.

Commenters recommended that FHFA provide for more similar risk multipliers across loan sizes. Commenters recommended that the risk multiplier for loan size should be a continuous function of loan size to avoid incentivizes to adjust the loan size. One commenter questioned whether the risk multiplier for small loan sizes was consistent with the underlying credit risk.

A commenter recommended that FHFA revisit the risk multiplier for loan term, providing some evidence that credit risk was less for multifamily mortgage exposures with longer terms. A commenter recommended greater risk multipliers for senior housing and student housing, offset by lower risk multipliers for other multifamily properties.

The final rule adopts the risk multipliers as proposed. As discussed in Section IX.B.1, FHFA continues to believe that the calibration framework for the risk multipliers is appropriate to ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle. FHFA has analyzed the available performance data for government-subsidized multifamily mortgage exposures. Due to the relatively infrequent instances of loss across multifamily loan programs that include a government subsidy, FHFA

has determined that it was not feasible to accurately calibrate thresholds at which the level of government subsidy impacted the probability of loss occurring or the severity of that loss. FHFA acknowledges commenters' arguments in support of more nuanced or finely calibrated risk multipliers for loan size, loan term, and other risk characteristics, but FHFA believes that any potential benefit is outweighed by the increased complexity.

5. Minimum Adjusted Risk Weight

The 2018 proposal acknowledged that combinations of overlapping characteristics could potentially result in unduly low credit risk capital requirements for certain multifamily mortgage exposures. Under the 2018 proposal, the Enterprises were required to impose a floor of 0.5 on the combined multiplier. FHFA took a somewhat different approach in the proposed rule. As for single-family mortgage exposures, the proposed rule would have established a floor on the adjusted risk weight for a multifamily mortgage exposure equal to 15 percent.

The commenters' views on the proposed rule's 15 percent floor on the adjusted risk weight for a multifamily mortgage exposure were similar to their views on the floor for single-family mortgage exposures, with some commenters addressing the two floors together. Some commenters supported the floor, agreeing that the risk-sensitive framework posed meaningful model and related risks and that the proposed rule's credit risk capital requirements were generally too small.

Many other commenters were critical of the floor or its sizing. Commenters thought that the floor reduced the risk sensitivity of the regulatory capital framework and should be removed. Other commenters thought that the floor was too high and should be reduced. Some commenters suggested that the calibration of the floor could merit more of an empirical basis. Some commenters argued that the floor was unnecessary because other aspects of the proposed rule mitigated the model and related risks associated with the calibration framework. Other commenters thought the floor was not well calibrated to mitigate model risk across the spectrum of multifamily mortgage exposures.

Some commenters thought that the floor could disincentivize the Enterprises from engaging in CRT. Commenters expressed concern that the floor could cause mortgage intermediation to shift away from the Enterprises to other market participants. Some commenters thought the calibration of the floor should not take into account the risk weights under the U.S. banking framework because of the better historical performance of the Enterprises' multifamily mortgage exposures. Commenters also argued that different floors would be appropriate for single-family mortgage exposures and multifamily mortgage exposures. One commenter thought that the floor should be applied to the base risk weight, assuming certain other changes for CRT on multifamily mortgage exposures.

FHFA has determined that the final rule will include a floor on the adjusted risk weight for a multifamily mortgage exposure. As discussed in the proposed rule, FHFA continues to believe that a floor is appropriate to mitigate certain risks and limitations associated with the underlying historical data and models used to calibrate the credit risk capital requirements. These risks include the potential that crisis-era losses were mitigated by the unprecedented federal government support of the economy and the impact of lower interest rates. In addition, these risks include potentially material risks that are not assigned a risk-based requirement, for example those that might arise from natural or other disasters.

FHFA has determined to increase the floor to 20 percent for reasons similar to its determination with respect to the floor on the risk weight assigned to a single-family mortgage exposure. Several commenters expressed concern about the model and related risks associated with the calibration framework for the risk-based capital requirements for mortgage exposures. Several commenters also argued that credit risk capital requirements generally should be aligned across market participants. Some commenters' analysis suggested that the leverage ratio requirements generally would exceed the risk-based capital requirements over most of the economic cycle. That could evidence flaws in FHFA's method for calibrating the risk-based capital requirements, particularly given FHFA's confidence in the method for calibrating the leverage ratio requirements and the FSOC Secondary Market Statement's affirmation of the sizing of the leverage ratio requirements. FHFA also remains concerned that the portfolio-invariant calibration of the credit risk capital requirements for mortgage exposures might not adequately take into account that each Enterprise's mortgage-focused business does not permit a diversified portfolio.

The BCBS has finalized a more risk-sensitive set of risk weights for residential real estate exposures, which are to be implemented by January 1, 2022.[44] The Basel framework's standardized risk weights for residential real estate exposures would depend on the LTV of the exposure and would range from 30 percent to 105 percent for an exposure on which repayment is materially dependent on cash flows generated by the property. Those risk weights would range from 20 percent to 70 percent for an exposure on which repayment is not materially dependent on cash flows generated by the property. The final rule's 20 percent risk weight floor is aligned with the smallest risk weight under the eventual Basel framework.

*C. PLS and Other Non-CRT Securitization Exposures*

As contemplated by the 2018 proposal, under the proposed rule, an Enterprise would have determined its credit risk capital requirement for PLS and other securitization exposures under a securitization framework that would have been substantially the same as that of the U.S. banking framework. An Enterprise was permitted to elect to determine its credit risk capital requirement for a retained CRT exposure under a somewhat different framework, even if that retained CRT exposure might be similar to an exposure to a traditional or synthetic securitization under the securitization framework.

Under the proposed rule, an Enterprise generally would have assigned a risk weight for a PLS or other securitization exposure using the simplified supervisory formula approach (SSFA). Pursuant to the SSFA, an Enterprise would have determined the risk weight for a securitization exposure using a formula that is based on, among other things, the subordination level of the securitization exposure and the adjusted aggregate credit risk capital requirement of the underlying exposures. A 1,250 percent risk weight would have been assigned to any securitization exposure that absorbs losses up to the adjusted aggregate credit risk capital requirement of the underlying exposures, in effect requiring one dollar of adjusted total capital for each dollar of exposure amount. After that point, the risk weight for a securitization exposure would have been assigned pursuant to an exponential decay function that decreases as the detachment point or attachment point increases, subject to a minimum risk weight of 20 percent.

At the inception of a securitization, the SSFA's exponential decay function

[44] BCBS, *Basel III: Finalising post-crisis reforms* ¶¶ 59–68 (Dec. 2017).

for risk weights, together with the 20 percent risk weight floor, would have required more regulatory capital on a transaction-wide basis than would be required if the underlying exposures had not been securitized. That is, if an Enterprise held every tranche of a securitization, its overall regulatory capital requirement would have been greater than if the Enterprise owned all of the underlying exposures. Consistent with the rationale of U.S. banking regulators, FHFA stated in the proposed rule that it believed this outcome was important to reduce regulatory capital arbitrage through securitizations and to manage the structural and other risks that might be posed by a securitization.[45]

FHFA did not receive comments on the proposed rule's approach to PLS and other non-CRT securitization exposures and is adopting that approach as proposed.

*D. Retained CRT Exposures*

As discussed below, FHFA received many comments on the proposed rule's approach to CRT. FHFA continues to believe that CRT can play an important role in ensuring that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission across the economic cycle. FHFA also continues to believe that an Enterprise does retain some credit risk on its CRT and that that risk should be appropriately capitalized. As discussed below, FHFA has adopted changes in the final rule that are intended to better tailor the risk-based capital requirements to the risk retained by an Enterprise on its CRT. For CRT on mortgage exposures having relatively lower credit risk, the final rule reduces the amount of regulatory capital that must be maintained to reflect that the CRT does not have the same loss-absorbing capacity as equity financing. Other changes increase the risk sensitivity of the method for assigning a risk weight to a retained CRT exposure and the method for calculating the loss-timing adjustment on a CRT on multifamily mortgage exposures. Relative to the proposed rule, these changes were intended to increase the capital relief afforded an Enterprise for well-structured CRT on many common mortgage exposures, and generally to provide increased risk sensitivity in the CRT framework, potentially increasing incentives for the Enterprises to engage in CRT.

1. Proposed Rule's Enhancements

FHFA has continued to refine the CRT assessment framework based on its understanding of the safety and soundness risks and limits relating to the effectiveness of CRT in transferring credit risk on the underlying exposures. CRT transfers credit risk only on a specified reference pool, while equity financing is available to ''cross cover'' credit risk on other exposures of the Enterprise. CRT transfers only credit risk, while equity financing also can absorb losses arising from operational and market risks. An Enterprise generally may pause distributions on equity financing during a financial stress but typically must continue debt service or other payments on CRT instruments. Therefore, equity financing provides more robust safety and soundness benefits across exposures and risks than a similar amount of credit exposure transferred through CRT.

One of the lessons of the 2008 financial crisis is that securitization structures, especially complex securitizations, might not perform as expected during a financial stress. In fact, some large banking organizations even elected to reconsolidate some of their securitizations.[46] Similarly, there might be unique legal risks posed by the contractual terms of CRT structures and by the practices associated with contractual enforcement. CRT investors have recently threatened litigation with respect to credit events arising out of COVID–19-related forbearances. There also are structural and other risks that were not reflected in the proposed rule's adjustments for loss-sharing risk and loss-timing risk that could further limit the effectiveness of CRT in transferring credit risk.

FHFA's assessment framework also considers the extent to which an Enterprise's CRT program could limit the Enterprise's ability to fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle. A financial stress could reduce investor demand for, or increase the cost of, new CRT issuances or undermine the financial strength of some existing CRT counterparties. The procyclicality of some CRT structures could adversely impact an Enterprise's ability to support the secondary mortgage market if the Enterprise lacked sufficient equity financing to support new acquisitions of mortgage exposures. To fulfill its mission, an Enterprise should avoid overreliance on CRT and should maintain at least enough equity capital to support new originations during a period of financial stress, when new CRT issuances might not be available.

FHFA's assessment framework also seeks to prevent each Enterprise's CRT program from undermining the liquidity, efficiency, competitiveness, or resiliency of the national housing finance markets. Some CRT structures might tend to increase the leverage in the housing finance system, especially to the extent some CRT investors themselves rely on short-term debt funding. The disruption in the CRT markets during the recent COVID–19-related financial stress might have been driven in part by leveraged market participants that had invested in CRT rapidly de-levering when confronted by margin calls on short-term financing.

Taking into account these considerations, the proposed rule contemplated enhancements to the 2018

[45] *See Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule,* 78 FR 62018, 62119 (Oct. 11, 2013) (''At the inception of a securitization, the SSFA requires more capital on a transaction-wide basis than would be required if the underlying assets had not been securitized. That is, if the banking organization held every tranche of a securitization, its overall capital requirement would be greater than if the banking organization held the underlying assets in portfolio. The agencies believe this overall outcome is important in reducing the likelihood of regulatory capital arbitrage through securitizations.'').

[46] *See Risk-Based Capital Guidelines; Capital Adequacy Guidelines; Capital Maintenance: Regulatory Capital; Impact of Modifications to Generally Accepted Accounting Principles; Consolidation of Asset-Backed Commercial Paper Programs; and Other Related Issues,* 74 FR 47138, 47142 (Sept. 15, 2009) (''In the case of some structures that banking organizations were not required to consolidate prior to the 2009 GAAP modifications, the recent turmoil in the financial markets has demonstrated the extent to which the credit risk exposure of the sponsoring banking organization to such structures (and their related assets) has in fact been greater than the agencies estimated, and more associated with non-contractual considerations than the agencies had expected. For example, recent performance data on structures involving revolving assets show that banking organizations have often provided non-contractual (implicit) support to prevent senior securities of the structure from being downgraded, thereby mitigating reputational risk and the associated alienation of investors, and preserving access to cost-effective funding.''); *see also* FCIC Report at 246, available at *https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf* (''When the mortgage securities market dried up and money market mutual funds became skittish about broad categories of ABCP, the banks would be required under these liquidity puts to stand behind the paper and bring the assets onto their balance sheets, transferring losses back into the commercial banking system. In some cases, to protect relationships with investors, banks would support programs they had sponsored even when they had made no prior commitment to do so.''); *see also* FCIC Report at 138–139 (''The events of 2007 would reveal the fallacy of those assumptions and catapult the entire $25 billion in commercial paper straight onto the bank's balance sheet, requiring it to come up with $25 billion in cash as well as more capital to satisfy bank regulators.'').

proposal's regulatory capital treatment of CRT to refine FHFA's balancing of the safety and soundness benefits of CRT against the potential safety and soundness, mission, and housing market stability risks that might be posed by CRT. Consistent with the U.S. banking framework, FHFA proposed operational criteria to mitigate the risk that the terms or structure of the CRT would not be effective in transferring credit risk. These operational criteria for CRT were less restrictive than those applicable to traditional or synthetic securitizations under the U.S. banking framework. To partially mitigate the safety and soundness risks posed by this less restrictive approach, FHFA would have required an Enterprise to publicly disclose material risks to the effectiveness of the CRT so as to foster market discipline and FHFA's supervision and regulation.

FHFA also proposed to prescribe the regulatory capital consequences of an Enterprise providing support to a CRT in excess of the Enterprise's pre-determined contractual obligations. As under the U.S. banking framework, if an Enterprise provides implicit support for a CRT, the Enterprise would have been required to include in its risk-weighted assets all of the underlying exposures associated with the CRT as if the exposures were not covered by the CRT.

Generally consistent with the U.S. banking framework, FHFA also proposed a prudential floor of 10 percent on the risk weight assigned to any retained CRT exposure. FHFA also proposed certain refinements to the adjustments to the regulatory capital treatment of CRT for the loss-sharing, loss-timing, and other risks that a CRT might not be fully effective in transferring credit risk to third parties. In particular, FHFA proposed to refine the 2018 proposal's loss-sharing adjustment and loss-timing adjustment, add an overall effectiveness adjustment for the differences between CRT and regulatory capital, and incorporate a loss-timing adjustment for CRT on multifamily mortgage exposures.

2. Risk Weight Floor

Many commenters criticized the proposed rule's 10 percent floor on the risk weight assigned to retained CRT exposures. As discussed below, FHFA continues to believe that an Enterprise retains credit risk to the extent it retains CRT exposures and that such risk should be appropriately capitalized.

Many commenters argued that the 10 percent floor on the risk weight assigned to a retained CRT exposure would unduly decrease the capital relief provided by CRT and reduce the Enterprises' incentives to engage in CRT. Commenters suggested that the floor was duplicative of the proposed rule's overall effectiveness adjustment or unnecessary because of other enhancements contemplated by the proposed rule, including FHFA's ability to approve CRT structures and the stress capital and other buffers. Commenters argued that a credit risk capital requirement for retained CRT exposures was inconsistent with the Enterprises' stress tests. Commenters pointed out the differences between the proposed rule's approach and the 2018 proposal's approach, which in effect assigned a 0 percent risk weight to some retained CRT exposures. Some commenters saw no need for a floor given the perceived remote risk of loss borne by senior CRT tranches.

Commenters argued that FHFA had not provided sufficient analytical support for the floor. Commenters suggested that FHFA should assess the impact of the floor on the Enterprises' risk management practices, their business models, and their CRT programs. Commenters thought that the floor could misalign the Enterprises' incentives, including in some cases by requiring an Enterprise to maintain more regulatory capital for some CRT structures than other structures that transferred less credit risk. One commenter suggested that, as a result of the floor, an Enterprise could achieve more capital relief with a CRT that has a shorter maturity and a detachment point that is less than projected stress loss.

Commenters noted that the floor on the risk weight for retained CRT exposures and the overall effectiveness adjustment would have unique implications for CRT on multifamily mortgage exposures. A commenter recommended that the 15 percent floor on the risk weight for multifamily mortgage exposures should be applied to the base risk weight instead of the adjusted risk weight so as to not distort incentives to enter into CRT.

Some commenters did recommend reducing instead of eliminating the floor. Other commenters suggested calibrating a variable floor based on the seniority of the retained risk weight and aggregate net credit risk capital requirement of the underlying mortgage exposures. One commenter questioned the relevance of the Basel framework's analogous floor, arguing that that floor protected banking organizations from unknown risks while that risk is mitigated for the Enterprises by their underwriting standards and their control over servicing and loss mitigation. Another commenter suggested that the floor could provide a rationale for a smaller PLBA-leverage ratio requirement.

FHFA has determined that the final rule should preserve the proposed rule's 10 percent floor on the risk weight assigned to a retained CRT exposure. The floor avoids treating a retained CRT exposure as if it poses no credit risk. Under the 2018 proposal, a retained CRT exposure with a detachment point less than the net credit risk capital requirement of the underlying mortgage exposures would, in effect, have had a risk weight of 1,250 percent (*i.e.,* the 2018 proposal would have required a dollar of total capital for each dollar of exposure amount), while a retained CRT exposure with an attachment point only marginally greater than that net credit risk capital requirement would have had a risk weight of 0 percent. A retained CRT exposure with an attachment point just beyond that cut-off point likely still would pose some credit risk as a result of the model risks associated with the calibration of the credit risk capital requirement of the underlying exposures and the calibration of the loss-timing adjustment and loss-sharing adjustment. Related to model risk, there is the risk that the structuring of some CRT is driven by regulatory arbitrage, with an Enterprise focused on CRT structures that obtain capital relief that is disproportionate to the modeled credit risk actually transferred. There is also the risk that a CRT will not perform as expected in transferring credit risk to third parties, perhaps because a court will not enforce the contractual terms of the CRT structure as expected. To that point, each Enterprise has significant discretion in performing loss mitigation and other servicing activities, which can sometimes result in significant impact on the timing and amount of losses that are borne by the CRT investors.

Because CRT tranches, even senior CRT tranches, are not risk-free, each Enterprise should maintain regulatory capital to absorb losses on those retained CRT exposures. This approach is generally consistent with that of the Basel and U.S. banking framework, both of which also impose floors on the risk weights for retained securitization exposures.[47] Notably, the U.S. banking

[47] For these and other reasons, the Basel and U.S. banking frameworks impose a prudential floor on the risk weight for any securitization exposure. BCBS, *Revisions to the Securitisation Framework Consultative Document* at 17 (Dec. 2013; final July 2016), available at *https://www.bis.org/publ/bcbs269.pdf* (''The objectives of a risk-weight floor are: [m]itigate concerns related to incorrect model specifications and error from banks' estimates of inputs to capital formulas ([*i.e.*] model risk); and [r]educe the variation in outcomes for similar risks.'').

framework's risk weight floor on securitization exposures is considerably greater at 20 percent.

3. Risk Weight Determination

As discussed above, commenters thought that the 10 percent risk weight floor could misalign the Enterprises' incentives, including in some cases by requiring an Enterprise to maintain more regulatory capital for some CRT structures than other structures that transferred less credit risk. One commenter suggested that, as a result of the floor, an Enterprise could achieve more capital relief with a CRT that has a shorter maturity and a detachment point that is less than projected stress loss.

FHFA acknowledges that the interaction of the floor with the loss-sharing, loss-timing, and overall effectiveness adjustments could, for certain structures, result in an Enterprise's credit risk capital requirement decreasing even as the Enterprise transfers less risk to third parties by lowering the detachment point of the most senior transferred tranche. A reduction in the required regulatory capital arising from less risk transfer would be a misalignment of incentives that could pose safety and soundness risk.

To address these concerns, FHFA has revised the calculation of the risk weight assigned to each CRT tranche. Under the final rule, this approach assigns a 1,250 percent risk weight for a tranche with a detachment point less than the projected stress loss (which is, in effect, the same risk-based capital requirement that would have been assigned to the tranche under the 2018 proposal), a 10 percent risk weight for a tranche with an attachment point greater than the projected stress loss, and a weighted average risk weight for a tranche that straddles the stress loss. That weighted average risk weight would be the average of 1,250 percent weighted by the portion of the tranche exposed to projected stress loss and 10 percent weighted by the portion of the tranche not exposed to projected stress loss. One benefit of this approach is that the required regulatory capital on retained CRT exposures should decrease monotonically with an increase in the detachment point on the transferred CRT tranches, all else equal.

4. Overall Effectiveness Adjustment

The proposed rule's overall effectiveness adjustment would have reduced the risk-weighted assets of transferred CRT tranches by 10 percent, thereby reducing the capital relief afforded by the CRT. This adjustment accounted for the fact that a CRT does not provide the same loss-absorbing capacity as equity financing. Many commenters criticized this overall effectiveness adjustment. Several commenters argued that the overall effectiveness adjustment would disincentivize the Enterprises from engaging in CRT. Commenters also argued that the overall effectiveness adjustment is unnecessary because of other enhancements contemplated by the proposed rule, including the 10 percent risk weight floor on retained CRT exposures, FHFA's ability to approve CRT structures, and the stress capital and other buffers.

Other commenters recommended that FHFA consider alternatives to the overall effectiveness adjustment. Commenters recommended that the overall effectiveness adjustment should not be applied to the Enterprises' fully funded capital markets transactions because those CRT structures do not entail counterparty credit risk. Some commenters supported the overall effective adjustment or even increasing the adjustment, with some conditioning that view on the removal of the 10 percent risk weight floor. One commenter viewed the overall effectiveness adjustment as not unreasonable and recommended that FHFA periodically review its calibration. Some commenters thought that the overall effectiveness adjustment should not be applied to CRT on multifamily exposures in light of the unique structures of those CRT.

After considering commenters' views on the overall effectiveness adjustment and other aspects of the proposed rule's approach to CRT, FHFA has modified the overall effectiveness adjustment so that a CRT on mortgage exposures with less credit risk will be subject to a smaller adjustment, and potentially no adjustment at all. This modification should reduce the extent to which the overall effectiveness adjustment, in combination with the 10 percent risk weight floor, may require more regulatory capital for retained CRT exposures than is necessary to ensure safety and soundness. This modification would reduce the amount of the overall effectiveness adjustment for many of the CRT historically conducted by the Enterprises. This modification also helps ensure that FHFA does not unduly disincentivize CRT on mortgage exposures with risk profiles similar to those of recent acquisitions by the Enterprises.

Under the final rule's overall effectiveness adjustment, the overall effectiveness adjustment would still reduce the risk-weighted assets of transferred CRT tranches by 10 percent (reducing the capital relief afforded by the CRT) if the aggregate net credit risk capital requirement on the underlying mortgage exposures is 4.0 percent or greater (corresponding to a weighted average risk weight of 50 percent). If the aggregate net credit risk capital requirement on the underlying mortgage exposures is less than 4.0 percent, the overall effectiveness adjustment would reduce the risk-weighted assets by a percent amount less than 10 percent, with that percent amount specified by a linear function that decreases the adjustment as the underlying aggregate net credit risk capital requirement decreases. The adjustment would be zero for a CRT on mortgage exposures with an aggregate net credit risk capital requirement less than or equal to 1.6 percent (corresponding to a weighted average risk weight of 20 percent). For example, the final rule's overall effectiveness adjustment amount would be 95 percent on a CRT on mortgage exposures with a weighted average risk weight of 35 percent, as compared to the 90 percent overall effectiveness adjustment under the proposed rule.

5. Loss-Timing Adjustment

The proposed rule would have required an Enterprise to adjust the exposure amount of its retained CRT exposures to account for the mismatch between the contractual coverage of the CRT and the timing of the unexpected losses on the underlying mortgage exposures.

Some commenters generally supported the loss-timing adjustment and its calibration. Some commenters noted that the loss-timing adjustment's impact on the capital relief afforded by CRT was less than that of the overall effectiveness adjustment or the 10 percent risk weight floor. Some commenters urged FHFA to replace the various adjustments with a single measure of the effectiveness of a CRT. Commenters also noted that the various adjustments tended to compound into a substantial discount on the capital relief afforded CRT. As discussed above, some commenters thought that the 10 percent risk weight floor could, in combination with the loss-timing and other adjustments, misalign the Enterprises' incentives, including in some cases by requiring an Enterprise to maintain more regulatory capital for some CRT structures than other structures that transferred less credit risk.

Commenters recommended that the weighted average maturity, instead of the maximum maturity, be used to determine the loss-timing adjustment of a CRT with respect to multifamily

mortgage exposures. These commenters noted that the proposed rule's approach would disproportionately reduce the capital relief on a CRT when there is just one multifamily mortgage exposure with a large mismatch between the contractual term of the CRT and the loan term of the longest maturity multifamily mortgage exposure. That could reduce the incentive to engage in CRT on multifamily mortgage exposures with longer terms, which could adversely impact multifamily mortgage exposures that support affordable housing.

FHFA agrees with commenters that the loss-timing adjustment should be better calibrated to the relationship between the contractual term of the CRT and the maturity profile of the underlying multifamily mortgage exposures. This calibration should consider that many multifamily mortgage exposures have balloon payments that could pose credit losses toward the end of the contractual term of a CRT. Under the proposed rule, the loss-timing adjustment was based on the ratio of the contractual term of the CRT to the term of the multifamily mortgage exposure with the longest maturity to protect against understating the risk retained by the Enterprise. Under the final rule, the loss-timing adjustment will be 100 percent for a multifamily mortgage exposure that has a loan term that is less than or equal to the contractual term of the CRT. For multifamily mortgage exposures with a loan term that is greater than the contractual term of the CRT, the loss-timing adjustment will be the ratio of the remaining contractual term of the CRT to the unpaid principal balance-weighted average loan term of the multifamily mortgage exposures, with that amount divided by two to reflect FHFA's judgment as to the maturity-related risk for these multifamily mortgage exposures with longer terms. The loss-timing adjustment for the CRT would then be an average of those two adjustments, each weighted by the unpaid principal balance of the underlying mortgage exposures used to determine that adjustment. In general, the final rule's approach will result in a greater loss-timing adjustment amount, and greater capital relief, than was contemplated by the proposed rule for a CRT with a contractual term less than 30 years. This approach also should provide an incentive for the Enterprises to lengthen the contractual term of CRTs on multifamily mortgage exposures. The final rule's approach also should generally provide more capital relief than the proposed rule for certain CRT on multifamily mortgage exposures, all else equal.

6. Loss-Sharing Adjustment

The proposed rule would have required an Enterprise to adjust the exposure amount of its retained CRT exposures to account for the counterparty credit risk of the CRT counterparty.

Some commenters generally supported the loss-sharing adjustment and its calibration. Some commenters noted that the loss-sharing adjustment's impact on the capital relief afforded by CRT was less than that of the overall effectiveness adjustment or the 10 percent risk weight floor. Some commenters urged FHFA to replace the various adjustments with a single measure of the effectiveness of a CRT. Commenters also noted that the various adjustments tended to compound into a substantial discount on the capital relief afforded CRT.

One commenter suggested that the proposed rule's loss-sharing adjustment required excessive regulatory capital for counterparty credit risk. Commenters argued that increased transparency as to the criteria and process for assigning counterparty ratings could create incentives for counterparties to take steps to satisfy that criteria and become stronger counterparties. Some commenters thought that FHFA should not assign more capital relief to diversified counterparties, noting that mortgage-focused counterparties have specialized expertise that might offset some of the counterparty strength benefits of diversification. Commenters also urged FHFA to refine the framework so that it takes into account which counterparties are more likely to continue to participate in CRT across the economic cycle, including during a period of financial stress.

Several commenters expressed views on CRT counterparty credit risk management more broadly. Commenters reiterated that there is no counterparty risk on CRT structures that are fully funded at issuance, with the issuance proceeds kept in segregated accounts. Some commenters stated that enhanced collateral requirements were unnecessary. Another commenter noted recent developments in the international regulation of collateralized insurance agreements and conveyed its view that additional collateralization requirements were not necessary. One commenter recommended that FHFA adopt a preference for CRT counterparties such as reinsurers that support mortgage exposures to low-income borrowers at lower interest rates (or pools with greater shares of low-income mortgage loans). A commenter suggested that an Enterprise should be required to publicly disclose implicit support provided to a CRT counterparty and maintain regulatory capital for the underlying mortgage exposures.

Commenters criticized the proposed rule's treatment of Fannie Mae's DUS transactions. Some commenters argued that the capital relief for DUS transactions should be determined under the framework for mortgage insurance and other loan-level credit enhancement. One commenter recommended that the loss-sharing adjustment for DUS transactions should be determined at the level of the servicer, not at the level of the CRT structure, using the aggregates of the credit risk capital requirements, loss-share obligations, collateral, and other inputs relating to the servicer's DUS transactions. One commenter thought that the overall effectiveness adjustment duplicated the loss-sharing adjustment when applied to a DUS transaction. A commenter suggested that three years of future servicing revenue, instead of one year, should be considered in determining the loss-sharing adjustment.

FHFA continues to believe the loss-sharing adjustment is appropriately calibrated and is adopting the loss-sharing adjustment as proposed. FHFA believes that the potential benefits of modifications to the collateral or other requirements would be outweighed by the increased safety and soundness risk. FHFA has determined to retain the proposed rule's calculation of the loss-sharing adjustment at the exposure level, while collateral is calculated at the lender-level. FHFA believes this approach more accurately captures differences in exposure-level loss-sharing structures and risk share percentages that may occur within the portfolio of any given lender.

7. Eligible CRT Structures

The proposed rule would have provided capital relief for any category of credit risk transfers that has been approved by FHFA as effective in transferring the credit risk of one or more mortgage exposures to another party, taking into account any counterparty, recourse, or other risk to the Enterprise and any capital, liquidity, or other requirements applicable to counterparties. That approach gave FHFA considerable discretion to approve new structures, and it did not afford interested parties an opportunity to comment on the specific requirements governing each structure.

To foster transparency and increase the likelihood that FHFA identifies and

mitigates the safety and soundness and other risks posed by CRT structures, the final rule instead identifies and defines five specific CRT structures that are eligible to provide capital relief. FHFA contemplates that capital relief for other CRT structures could be approved in the future. That change, however, would require an amendment to the final rule following notice and an opportunity to comment.

The eligible CRT structures identified in the final rule are the structures currently used by the Enterprises for substantially all of their CRT. These structures are:

- Eligible funded synthetic risk transfers, which include the Enterprises' STACR/CAS deals;
- Eligible reinsurance risk transfers, which include the Enterprises' ACIS/CIRT deals;
- Eligible single-family lender risk shares, which include any partial or full recourse agreement or similar agreement (other than a participation agreement) between an Enterprise and the seller or servicer of a single-family mortgage exposure;
- Eligible multifamily lender risk share, which include credit risk transfers that are on substantially the same terms and conditions as in effect on June 30, 2020 for Fannie Mae's credit risk transfers known as the ''Delegated Underwriting and Servicing program''; and
- Eligible senior-subordinated structures, which include Freddie Mac's K-deals.

Any FHFA-approved CRT entered into before the effective date of the final rule would continue to be eligible to provide capital relief under the final rule regardless of whether it qualifies as one of these five structures.

The final rule's approach to recourse agreements is somewhat different from the proposed rule. Under the proposed rule, recourse agreements would have afforded capital relief under an approach generally similar to that of mortgage insurance, although with a loss-timing adjustment for partial recourse agreements and less prescriptive requirements for the counterparties. The economic substance of a recourse agreement is the same as other credit risk transfers, and in particular these structures generally pose counterparty risk and structuring risk and do not have the same loss-absorbing capacity as equity financing. FHFA has determined that integrating recourse agreements into the CRT framework would result in a more consistent and appropriate capitalization of the retained credit risk borne by the Enterprises under their recourse agreements.

8. Other Comments and Issues

Commenters also offered more general concerns about the proposed rule's approach to CRT. Commenters endorsed CRT as effective in transferring risk to other private-sector market participants, protecting taxpayers, and fostering the stability of the national housing finance markets. Many commenters argued that the proposed rule's approach did not provide appropriate capital relief for CRT, was too punitive, and would disincentivize CRT. Commenters thought that there could be adverse implications on the Enterprises' cost of capital and their guarantee fees if the Enterprises were to reduce their use of CRT.

Some commenters agreed with FHFA's view that equity financing provides more loss-absorbing capacity than CRT. Some commenters agreed that CRT should not be the dominant form of loss-absorbing capacity for an Enterprise. Other commenters disagreed about CRT's loss-absorbing capacity relative to equity financing. One commenter noted that equity financing is exposed to other demands that could reduce its loss-absorbing capacity, including the demands of creditors, while CRT is dedicated to the absorption of credit losses. Some commenters agreed that the loss-timing and loss-sharing adjustments could be appropriate to mitigate the risk that CRT is not as effective as expected in transferring credit risk, but that the proposed rule's other departures from capital neutrality could lead to undesirable and counterintuitive outcomes, including a CRT actually increasing an Enterprise's risk-based capital requirements. Other commenters did not take issue with the departure from capital neutrality so long as the adjustments were not excessive.

Many commenters contended that the PLBA-adjusted leverage ratio requirement likely would often exceed the PCCBA-adjusted risk-based capital requirements, and that a binding PLBA-adjusted leverage ratio requirement could decrease an Enterprise's incentive to engage in CRT.

Commenters observed that, while CRT could tend to increase leverage in the national housing finance markets, the use of leverage in the financial system is not novel, and that market mechanisms and sophisticated market actors can respond to the misuse of leverage. Commenters criticized FHFA's view that a financial stress could reduce investor demand for, or increase the cost of, new CRT issuances or undermine the financial strength of some existing CRT counterparties. Multiple commenters asserted that the CRT markets had generally continued to function during the COVID–19 stress and during several natural disasters in 2017.

Commenters argued that the proposed rule's approach to CRT was inconsistent with Treasury's recommendations in its Housing Reform Plan, which they viewed as supporting the Enterprises' CRT programs and a policy in favor of reducing the Enterprises' footprint by transferring more risk to other private market participants. Some commenters asserted that the proposed rule provided more credit relief for mortgage insurance than CRT. Another commenter urged FHFA to permit the Enterprises to restart their lender risk-sharing CRT on single-family mortgage exposures. Some commenters recommended FHFA identify enhancements to ensure that CRT structures transfer credit risk definitively and without recourse to the Enterprises.

Some commenters asserted that CRT was uneconomic for the Enterprises, provided excessive returns to CRT investors, and left catastrophic risk with the Enterprises. One commenter suggested that the Enterprises should not engage in CRT and instead the Enterprises should be subject to minimum capital requirements.

Commenters suggested that FHFA preserve or expand certain features of the CRT market, such as Real Estate Mortgage Investment Conduit (REMIC) and To Be Announced (TBA) eligibility. Commenters generally supported a tailored approach to CRT and recommended that FHFA not adopt the SSFA.

Several commenters encouraged FHFA to enhance transparency into the Enterprises' CRT programs and FHFA's assessment framework. One commenter suggested that FHFA provide more data and analysis before finalizing an approach to CRT. Another commenter recommended that FHFA develop and disclose a model for assessing CRT structures under different stress scenarios. Commenters also sought information on the future of the Enterprises' CRT programs, including whether the Enterprises would issue PLS or a security guaranteed by the federal government.

Commenters urged FHFA to disclose more information on the criteria and processes for assigning counterparty ratings. Commenters also recommended FHFA require CRT counterparties to provide financial disclosures. One commenter suggested that FHFA disclose a list of counterparties in

significant CRT to foster transparency into the Enterprises' counterparty credit risk.

Several commenters recommended that the proposed rule's approach to CRT should apply only prospectively. One commenter urged FHFA to temporarily extend for 10 years the 2018 proposal's approach to CRT entered into before the publication of the proposed rule. Another commenter expressed the view that current and future CRT structures should be subject to the same requirements and restrictions.

One commenter recommended that the operational criterion restricting clean-up calls should be clarified or removed so as not to limit the practice of including optional redemptions provisions in CRT structures. The commenter argued that other operational criteria, in particular the requirement that a CRT be an ''eligible CRT structure'' approved by FHFA, would ensure appropriate supervision and regulation of an Enterprise's redemptions of CRT.

FHFA believes that the changes to the final rule discussed in this Section IX.D will mitigate some of the commenters' concerns about the impact of the regulatory capital framework on the Enterprises' CRT programs. The final rule also provides that many of the operational criteria will apply only to CRT entered into after the effective date of the final rule. However, even with these changes, the final rule generally will require at inception more credit risk capital on a transaction-wide basis than would be required if the underlying mortgage exposures had not been made subject to a CRT. That is, if an Enterprise held every tranche of a CRT, the Enterprise's credit risk capital requirement on the retained CRT exposures generally would be greater than the credit risk capital requirement of the underlying mortgage exposures.[48] As under the securitization framework, this departure from strict capital neutrality is important to manage the potential safety and soundness risks of CRT. This approach would help mitigate the model risk associated with the calibration of the credit risk capital requirements of the underlying exposures and also the model risk posed by the calibration of the loss-timing adjustment and loss-sharing adjustment.[49] Complex CRT also may pose structural risk and other risks that merit a departure from capital neutrality.[50] This departure from capital neutrality also is important to reducing the likelihood of regulatory capital arbitrage through CRT.[51]

The effects of the final rule on the Enterprises' CRT programs are difficult to predict. As of September 30, 2019, the proposed rule would have afforded the Enterprises' existing CRT roughly half of the capital relief that would have been available under the 2018 proposal. That estimate however does not provide an accurate sense of the final rule's impact on future CRT. Each Enterprise structured its existing CRT structures with attachment and detachment points, collateralization, and other terms based on the conservatorship capital framework, and each Enterprise likely will be able to structure the tranches and other aspects of its future CRT somewhat differently, taking into account the final rule, so as to better optimize capital relief. Also, the 10 percent risk weight floor has a larger impact on CRT on mortgage exposures with lower risk weights, and the Enterprises will be able to achieve more capital relief through CRT to the extent that house prices converge toward their long-term trend or the Enterprises' risk weights on their mortgage exposures included in CRT transactions tend to increase.

The final rule continues to provide each Enterprise a mechanism for flexible and substantial capital relief through CRT, and CRT likely will remain a valuable tool for managing credit risk. As in Section V.D, FHFA expects that each Enterprise will base its decisions on its own risk assessments, not solely or even primarily on the regulatory risk-based capital requirements. The changes made in the final rule generally serve to increase incentives to use CRT relative to the proposed rule. The Enterprises might also have incentives to transfer credit risk beyond projected stress loss to mitigate the risk of an increase in risk-based capital requirements during a period of stress. The 20 percent floor on the risk weight assigned to mortgage exposures might also increase the incentive to enter into CRT on mortgage exposures subject to that floor.

The proposed rule solicited comment on whether FHFA should impose any restrictions on the collateral eligible to secure CRT that pose counterparty credit risk. The proposed rule also solicited comment on whether the adjustments for counterparty credit risk are appropriately calibrated. After considering the views of commenters, FHFA believes that there might be opportunities to enhance the collateral and other requirements and restrictions that mitigate the counterparty credit risk posed by CRT counterparties. Given the complexity of these issues and FHFA's commitment to transparency, FHFA is contemplating future rulemakings to address these issues. Those future rulemakings also could potentially seek to establish exceptions or other approaches to the final rule's requirements and restrictions for certain CRT that satisfy enhanced standards to ensure the effectiveness of the CRT.

### *E. Other Exposures*

While substantially all of an Enterprise's credit risk is posed by its single-family and multifamily mortgage exposures, each Enterprise does have some amount of credit risk arising from a wide variety of other exposures, including non-traditional mortgage exposures and non-mortgage exposures. Calibrating credit risk capital requirements for some of these non-mortgage exposures—for example, an Enterprise's over-the-counter (OTC) and cleared derivatives and repo-style transactions—is complex and

[48] One implication of departing from capital neutrality is that an Enterprise might have some existing CRT structures for which the aggregate credit risk capital requirement of the retained CRT exposures actually would be greater than the aggregate credit risk capital requirement of the underlying exposures. This outcome might be more likely, all else equal, where the underlying exposures have a lower average risk weight, such as, for example, a CRT with respect to seasoned single-family mortgage exposures. Consistent with the U.S. banking framework, an Enterprise may elect to not recognize a CRT for purposes of the credit risk capital requirements and instead hold risk-based capital against the underlying exposures.

[49] BCBS, *Revisions to the Securitisation Framework Consultative Document* at 4 (Dec. 2013; final July 2016), available at *https://www.bis.org/publ/bcbs269.pdf* (''Capital requirements should be calibrated to reasonably conservative standards. This requires the framework to account for the model risk of determining the risks of specific exposures. Models for securitisation tranche performance depend in turn on models for underlying pools. In addition, securitisations have a wide range of structural features that do not exist for banks holding the underlying pool outright and that are impossible to capture in models. This layering of models and simplifying assumptions can exacerbate model risk, justifying a rejection of a strict 'capital neutrality' premise ([*i.e.*] the total capital required after securitisation should not be identical to the total capital before securitisation).'').

[50] BCBS, *Revisions to the Securitisation Framework* at 6 (Dec. 2014; rev. July 2016), available at *https://www.bis.org/bcbs/publ/d374.pdf* (''All other things being equal, a securitisation with lower structural risk needs a lower capital surcharge than a securitisation with higher structural risk; and a securitisation with less risky underlying assets requires a lower capital surcharge than a securitisation with riskier underlying assets.'').

[51] *See* Joint Agency Regulatory Capital Final Rule, 78 FR at 62119 (''At the inception of a securitization, the SSFA requires more capital on a transaction-wide basis than would be required if the underlying assets had not been securitized. That is, if the banking organization held every tranche of a securitization, its overall capital requirement would be greater than if the banking organization held the underlying assets in portfolio. The agencies believe this overall outcome is important in reducing the likelihood of regulatory capital arbitrage through securitizations.'').

technically challenging. As discussed in the proposed rule, FHFA continues to believe it is important to assign a credit risk capital requirement to all material exposures, even those of small amounts relative to an Enterprise's aggregate credit risk exposure.

The proposed rule contemplated incorporating the extensive expertise of the U.S. and international banking regulators in calibrating credit risk capital requirements for these other exposures, with adjustments as appropriate for the Enterprises.[52] The Basel framework has evolved over almost four decades of debate and collaboration among the world's leading financial regulators. That framework also has been enhanced to address the lessons of the 2008 financial crisis. Moreover, developing FHFA's own framework for assigning credit risk capital requirements for these other complex and technically challenging exposures would risk distracting FHFA from its core responsibility and area of relative expertise—fashioning a mortgage risk-sensitive framework for the Enterprises.

Under the proposed rule, an Enterprise generally would have assigned a risk weight or risk weighted asset amount for an exposure other than a mortgage exposure using the same methods for determining credit risk capital requirements under the U.S. banking framework's standardized approach, in particular the Federal Reserve Board's regulatory capital requirements at subpart D of 12 CFR part 217 (Regulation Q). Exposures that would be assigned risk weights under the U.S. banking framework include corporate exposures, exposures to sovereigns, OTC derivatives, cleared transactions, collateralized transactions, and off-balance sheet exposures.

Similarly, some exposures that were assigned credit risk capital requirements under the 2018 proposal would instead have had a credit risk capital requirement assigned under the U.S. banking framework. These would include some DTAs, municipal debt, reverse mortgage loans, reverse MBS, and cash and cash equivalents. For any exposure that was not assigned a specific risk weight under the proposed rule, the default risk weight would have been 100 percent, consistent with the U.S. banking framework.

FHFA received few comments on the proposed rule's credit risk capital requirements for other exposures. The main exception was that commenters criticized the proposed rule's credit risk capital requirement for exposures of an Enterprise to the other Enterprise or another GSE. Commenters argued that the proposed rule would undermine FHFA's single security initiative pursuant to which each Enterprise has begun issuing a single MBS known as the Uniform Mortgage-backed Security (UMBS). To foster fungibility, the UMBS initiative contemplates that each Enterprise may issue a ''Supers'' mortgage-related security, which is a re-securitization of UMBS and certain other TBA-eligible securities, including other Supers.[53] Commenters argued that UMBS fungibility and liquidity could be adversely affected by the proposed rule's assignment of a 20 percent risk weight to an Enterprise's exposure to the other Enterprise arising out of a guarantee of a security backed in whole or in part by securities of the other Enterprise. For example, a credit risk capital requirement for cross-guarantees could lead to a bifurcated treatment of UMBS because each Enterprise could be incentivized to only guarantee Supers only with its own UMBS, leading to different volumes and investor perceptions of UMBS issued by each Enterprise. Some commenters also argued that an Enterprise's exposures to the other Enterprise do not increase aggregate credit risk among the Enterprises and that the proposed rule's credit risk capital requirement in effect double-counted that risk.

FHFA has determined to finalize the proposed rule's approach to other exposures, including an Enterprise's exposures to the other Enterprise. The Enterprises currently are in conservatorship and benefit from Treasury's commitment under the PSPA. However, the Enterprises remain privately-owned corporations, and their obligations do not have the explicit guarantee of the full faith and credit of the United States. The U.S. banking regulators ''have long held the view that obligations of the GSEs should not be accorded the same treatment as obligations that carry the explicit guarantee of the U.S. government.'' [54] FHFA agrees that the MBS and other obligations of an Enterprise should be subject to a credit risk capital requirement greater than that assigned to those obligations that have an explicit guarantee of the full faith and credit of the United States. FHFA also agrees with the FSOC Secondary Market Statement that ''[t]he Enterprises' provision of secondary market liquidity generates significant interconnectedness among the Enterprises . . . . Moreover, given their similar business models, risks at the Enterprises are highly correlated; if one Enterprise experiences financial distress, the other may as well.'' The interconnectedness arising out of UMBS can further important policy objectives, but FHFA still believes the exposures between each Enterprise should be appropriately capitalized to mitigate the risk to safety and soundness that could be posed by distress at the other Enterprise.

This approach does not constitute double-counting of the required capital. An Enterprise issuing and guaranteeing a security backed by the other Enterprise's MBS is not holding capital against the other Enterprise's mortgage exposures, but only against its own exposure to the other Enterprise's guarantee. The investor in the top-level security is receiving double protection against credit risk by means of a guarantee from each Enterprise. It is that double protection that is being capitalized. FHFA believes that this capital treatment of that double guarantee is appropriate and correctly reflects the risk to each Enterprise.

To support investor confidence in that fungibility, FHFA promulgated a final rule governing Enterprise actions that affect UMBS cash flows to investors, issues quarterly prepayment monitoring reports, and has used its powers as the Enterprises' conservator to limit certain pooling practices with respect to the creation of UMBS. In November 2019, FHFA issued a request for input on Enterprise UMBS pooling practices. FHFA remains committed to the success of the UMBS initiative and will continue to enforce that final rule and, if necessary, will take appropriate supervisory and regulatory steps to achieve that objective.

## X. Credit Risk Capital: Advanced Approach

The proposed rule would have required an Enterprise to comply with the risk-based capital requirements using the greater of its risk-weighted

[52] For example, consistent with the Enterprises' limited authority to own equity, the final rule adopts a simplified version of the Basel framework's approach to equity exposures. The final rule will establish a default risk weight of 400 percent for equity exposures (consistent with the U.S. banking framework's risk weight for equity exposures to private ventures) and a 100 percent risk weight for certain equity exposures to community development ventures.

[53] If an Enterprise guarantees a security backed in whole or in part by securities of the other Enterprise, the Enterprise is obligated under its guarantee to fund any shortfall in the event that the other Enterprise fails to make a payment due on its securities. The Enterprises have entered into an indemnification agreement relating to commingled securities issued by the Enterprises. The indemnification agreement obligates each Enterprise to reimburse the other for any such shortfall.

[54] 77 FR 52888, 52896 (Aug. 30, 2012).

assets calculated under the standardized approach and the advanced approach. The advanced approach requirements would have required each Enterprise to maintain its own processes for identifying and assessing credit risk, market risk, and operational risk. An Enterprise also would have been subject to requirements and restrictions governing the design, senior management oversight, independent validation, and stress testing of its advanced systems. However, the proposed rule would not have provided more specific and comprehensive prescriptions for an Enterprise's internal models beyond these minimum requirements and FHFA's supervision.

FHFA received relatively few comments on the proposed rule's advanced approaches requirements for determining credit risk-weighted assets. One commenter supported the proposed rule's approach because it would require the Enterprise to improve their internal models. One commenter argued that the proposed rule's requirements were not sufficiently detailed and recommended re-proposing more specific requirements.

Some commenters opposed the advanced approaches requirements. Commenters argued that the standardized approach's lookup grids and multipliers were already risk sensitive. Other commenters suggested that the U.S. banking regulators now disfavor the analogous internal model requirements applicable to large U.S. banking organizations. Some commenters expressed concern about the lack of transparency into the internal models that the Enterprises would use.

FHFA has determined that the final rule's advanced approaches requirements should require each Enterprise to use its internal models to determine its credit risk capital requirements for mortgage and other exposures. As discussed in the proposed rule, these requirements will help ensure that each Enterprise continues to enhance its risk management system and that neither Enterprise simply relies on the standardized approach's lookup grids and multipliers to define credit risk tolerances, measure its credit risk, or allocate economic capital. In the course of FHFA's supervision of each Enterprise's internal models for credit risk, FHFA also could identify opportunities to update or otherwise enhance the standardized approach's lookup grids and multipliers through future rulemakings as market conditions evolve.

The final rule adopts the advanced approaches requirements as proposed. FHFA acknowledges the views of those commenters that argued that the proposed rule's advanced approaches requirements could merit more specificity. FHFA solicited comment on whether to prescribe more specific requirements and restrictions governing the internal models and other procedures used by an Enterprise to determine its advanced credit risk-weighted assets, including whether to require an Enterprise to determine its advanced credit risk-weighted assets under subpart E of Regulation Q. FHFA, however, did not propose specific rule text. FHFA continues to see merit in more specific requirements and restrictions governing an Enterprise's determination of its advanced credit risk-weighted assets, and FHFA continues to contemplate that it might engage in future rulemakings to further enhance this aspect of the regulatory capital framework.

The final rule provides a transition period to permit each Enterprise to develop the governance of the internal models required by the final rule. Specifically, the advanced approaches requirements generally will apply to an Enterprise on the later of January 1, 2025 and any later compliance date specific to those requirements provided in a consent order or other transition order applicable to the Enterprise.

## XI. Market Risk Capital

The proposed rule would have required an Enterprise to calculate its market risk-weighted assets for mortgage exposures and other exposures with spread risk. Single-family and multifamily loans and investments in securities held in an Enterprise's portfolio have market risk from changes in value due to movements in interest rates and credit spreads, among other things. As the Enterprises currently hedge interest rate risk at the portfolio level, and under the assumption that the Enterprises' hedging effectively manages that risk, the proposed rule's market risk capital requirements would have been limited only to spread risk.[55] Exposures that were subject to the proposed rule's market risk capital requirement would have included any tangible asset that has more than *de minimis* spread risk, regardless of whether the position is marked-to-market for financial statement reporting purposes and regardless of whether the position is held by the Enterprise for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits. Covered positions would have included:

- Any NPL, re-performing loan (RPL), reverse mortgage loan, or other mortgage exposure that, in any case, does not secure an MBS guaranteed by the Enterprise;
- Any MBS guaranteed by an Enterprise, MBS guaranteed by Ginnie Mae, reverse mortgage security, PLS, CRT exposure, or other securitization exposure; and
- Any other trading asset or trading liability, whether on- or off-balance sheet.

FHFA received relatively few comments on the proposed rule's market risk capital requirements. With respect to the standardized approach, a commenter indicated no objection to the single point approach or a spread duration approach. Another commenter argued that the market risk capital requirements should only apply to exposures with more than *de minimis* spread risk. Another commenter recommended increasing the market risk capital requirement on multifamily mortgage exposures to at least 100 basis points so that it was consistent with the requirement for multifamily MBS.

With respect to the advanced approaches requirements, commenters suggested that the U.S. banking regulators now disfavor the analogous requirements applicable to the large U.S. banking organizations. Commenters argued that the standardized approach was already risk sensitive. Commenters also suggested that the proposed rule's requirements were not sufficiently detailed and recommended re-proposing more specific requirements and restrictions, while another recommended that FHFA allow a sufficient transition period.

The final rule adopts the market risk capital requirements as proposed. FHFA acknowledges the views of those commenters that thought that the proposed rule's advanced approaches requirements could merit more specificity. FHFA solicited comment on whether to prescribe more specific requirements and restrictions governing the internal models and other procedures used by an Enterprise to determine its advanced market risk-weighted assets, including whether to require an Enterprise to determine its advanced market risk-weighted assets under subpart F of Regulation Q. FHFA, however, did not propose specific rule text. FHFA continues to see merit in more specific requirements and restrictions governing an Enterprise's determination of its advanced market risk-weighted assets, and FHFA

[55] FHFA's supervision of each Enterprise includes examinations of the effectiveness of the Enterprise's hedging of its interest rate risk.

continues to contemplate that it might engage in future rulemakings to further enhance this aspect of the regulatory capital framework.

The final rule provides a transition period to permit each Enterprise to develop the internal models required by the final rule. Specifically, the advanced approaches requirements generally will apply to an Enterprise on the later of January 1, 2025 and any later compliance date specific to those requirements provided in a consent order or other transition order applicable to the Enterprise. During the transition period, each Enterprise's market risk capital requirement will be equal to its measure for spread risk, determined as contemplated by the proposed rule's standardized approach.

## XII. Operational Risk Capital

The proposed rule would have established an operational risk capital requirement to be calculated using the advanced measurement approach of the U.S. banking framework but with a floor set at 15 basis points of adjusted total assets. This approach was developed in response to comments on the 2018 proposal. Commenters on the 2018 proposal suggested that the proposed Basel basic indicators approach was insufficient because the Enterprises were too complex to justify such a simple approach and because FHFA's implementation did not allow the requirement to vary appropriately under the basic indicators approach.

Operational risk was defined under the proposed rule as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (including legal risk but excluding strategic and reputational risk). Under the proposed rule, the Enterprise's risk-based capital requirement for operational risk generally would have been its operational risk exposure minus any eligible operational risk offsets. That amount would potentially have been subject to adjustments if the Enterprise qualified to use operational risk mitigants. An Enterprise's operational risk exposure would have been the 99.9th percentile of the distribution of potential aggregate operational losses, as generated by the Enterprise's operational risk quantification system over a one-year horizon (and not incorporating eligible operational risk offsets or qualifying operational risk mitigants).

FHFA received relatively few comments on the proposed rule's operational risk capital requirements. Some commenters were critical of the overall approach and the floor. One commenter recommended reducing the confidence interval. A few commenters raised concerns about the transparency of the Enterprises' internal models. A commenter recommended that FHFA develop a transparent approach using historical data and statistical analysis. Another commenter recommended the U.S. banking framework's standardized measurement approach. One commenter recommended an operational risk capital requirement of 25 basis points.

Other commenters criticized the floor on the operational risk capital requirement. Several commenters urged FHFA to remove or reduce the floor, which could reduce an Enterprise's incentive to enhance its internal models. One commenter argued that FHFA had not justified doubling the floor from the 2018 proposal's requirement.

The final rule adopts the proposed rule's approach to operational risk capital, including the floor of 15 basis points of adjusted total assets. FHFA continues to believe that it is important that operational risk capital does not fall below a meaningful, credible amount. 15 basis points of adjusted total assets also would have represented approximately double what FHFA originally proposed in the 2018 proposal, and approximately double the amount of operational risk capital estimated internally by the Enterprises using the Basel standardized approach. FHFA believes doubling the internally estimated figure is appropriate given the estimates were calculated using historical results while in conservatorship. FHFA estimates that the Enterprises' operational risk capital requirements under the U.S. banking framework's standardized measurement approach would have been somewhat greater than this floor. FHFA also calibrated this floor taking into account the operational risk capital requirements of large U.S. banking organizations. Of the U.S. bank holding companies with at least $500 billion in total assets at the end of 2019, the smallest operational risk capital requirement was 0.69 percent of that U.S. banking organization's total leverage exposure.

FHFA understands that time and resources will be required for each Enterprise to develop the internal models and data to implement the advanced measurement approach. FHFA is also aware that the U.S. banking regulators are considering potentially replacing the advanced measurement approach with the Basel framework's standardized measurement approach. FHFA contemplates a transition period to permit each Enterprise to develop the internal models required by the final rule. Specifically, the internal model requirements of these operational risk capital requirements generally will apply to an Enterprise on the later of January 1, 2025 and any later compliance date specific to those requirements provided in a consent order or other transition order applicable to the Enterprise. During that interim period, each Enterprise's operational risk capital requirement will be 15 basis points of its adjusted total assets.

## XIII. Impact of the Enterprise Capital Rule

These impact tables are based on FHFA's estimates based on available data and could differ from an Enterprise's estimates.

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**TABLE 1: SUMMARY OF RISK-BASED CAPITAL REQUIREMENTS FOR FANNIE MAE AND FREDDIE MAC COMBINED AS OF JUNE 30, 2020**

Enterprises Combined

**Risk-based Capital Requirements**

| *$ in billions* | Total Capital (Statutory) | CET1 | Tier 1 | Adjusted Total Capital |
|---|---|---|---|---|
| Capital Requirement | $174 | $98 | $131 | $174 |
| Prescribed Buffers | | | | |
| Stress Capital Buffer | | 50 | 50 | 50 |
| Stability Capital Buffer | | 60 | 60 | 60 |
| Countercyclical Capital Buffer Amount | | 0 | 0 | 0 |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 0 | 109 | 109 | 109 |
| Requirement and PCCBA | $174 | $207 | $240 | $283 |

**Leverage Capital Requirements**

| | Core Capital (Statutory) | Tier 1 |
|---|---|---|
| Capital Requirement | $166 | $166 |
| Prescribed Leverage Buffer Amount (PLBA) | 0 | 100 |
| Requirement and PLBA | $166 | $265 |

**TABLE 1A: SUMMARY OF RISK-BASED CAPITAL REQUIREMENTS FOR FANNIE MAE AS OF JUNE 30, 2020**

Fannie Mae

**Risk-based Capital Requirements**

| *$ in billions* | Total Capital (Statutory) | CET1 | Tier 1 | Adjusted Total Capital |
|---|---|---|---|---|
| Capital Requirement | $101 | $57 | $76 | $101 |
| Prescribed Buffers | | | | |
| Stress Capital Buffer | | 29 | 29 | 29 |
| Stability Capital Buffer | | 42 | 42 | 42 |
| Countercyclical Capital Buffer Amount | | 0 | 0 | 0 |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 0 | 71 | 71 | 71 |
| Requirement and PCCBA | $101 | $127 | $146 | $171 |

**Leverage Capital Requirements**

| | Core Capital (Statutory) | Tier 1 |
|---|---|---|
| Capital Requirement | $97 | $97 |
| Prescribed Leverage Buffer Amount (PLBA) | 0 | 58 |
| Requirement and PLBA | $97 | $155 |

**TABLE 1B: SUMMARY OF RISK-BASED CAPITAL REQUIREMENTS FOR FREDDIE MAC AS OF JUNE 30, 2020**

Freddie Mac

**Risk-based Capital Requirements**

| *$ in billions* | Total Capital (Statutory) | CET1 | Tier 1 | Adjusted Total Capital |
|---|---|---|---|---|
| Capital Requirement | $73 | $41 | $55 | $73 |
| Prescribed Buffers | | | | |
| Stress Capital Buffer | | 21 | 21 | 21 |
| Stability Capital Buffer | | 18 | 18 | 18 |
| Countercyclical Capital Buffer Amount | | 0 | 0 | 0 |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 0 | 39 | 39 | 39 |
| Requirement and PCCBA | $73 | $80 | $94 | $112 |

**Leverage Capital Requirements**

| | Core Capital (Statutory) | Tier 1 |
|---|---|---|
| Capital Requirement | $69 | $69 |
| Prescribed Leverage Buffer Amount (PLBA) | 0 | 41 |
| Requirement and PLBA | $69 | $110 |

## TABLE 2: COMPARISON OF FANNIE MAE AND FREDDIE MAC COMBINED RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY RISK CATEGORY

| Enterprises Combined | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | % of Adjusted Total Assets |
| Gross Credit Risk | $151.9 | | $188.6 | | $214.5 | | 3.23% |
| Loan-Level Credit Enhancement | (17.0) | | (22.3) | | (24.8) | | (0.37%) |
| Net Credit Risk | $134.9 | | $166.3 | | $189.6 | | 2.86% |
| CRT Impact, net | (22.1) | | (33.9) | | (36.6) | | (0.55%) |
| Post-CRT Net Credit Risk | 112.8 | 84% | 132.4 | 86% | 153.0 | 88% | 2.31% |
| Market Risk | 13.6 | 10% | 10.6 | 7% | 10.6 | 6% | 0.16% |
| Operational Risk | 8.7 | 6% | 10.0 | 6% | 10.0 | 6% | 0.15% |
| Deferred Tax Assets | 0.0 | 0% | 0.5 | 0% | 0.5 | 0% | 0.01% |
| Total Capital Requirement | $135.1 | 100% | $153.4 | 100% | $174.1 | 100% | 2.62% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 45.5 | | 49.8 | | 49.8 | | 0.75% |
| Stability Capital Buffer | 53.3 | | 59.6 | | 59.6 | | 0.90% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 98.8 | | 109.3 | | 109.3 | | 1.65% |
| Total Capital Requirement and PCCBA | $233.9 | | $262.7 | | $283.4 | | 4.27% |
| Adjusted Total Assets | $6,072.0 | | $6,635.2 | | $6,635.2 | | |
| Total Capital Requirement and PCCBA/ Adjusted Total Assets | 3.85% | | 3.96% | | 4.27% | | |
| Total Risk-Weighted Assets | $1,689 | | $1,918 | | $2,176 | | |

## TABLE 2A: COMPARISON OF FANNIE MAE RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY RISK CATEGORY

| Fannie Mae | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | % of Adjusted Total Assets |
| Gross Credit Risk | $90.8 | | $108.7 | | $123.6 | | 3.18% |
| Loan-Level Credit Enhancement | (10.4) | | (13.5) | | (14.9) | | (0.38%) |
| Net Credit Risk | 80.3 | | $95.2 | | $108.7 | | 2.80% |
| CRT Impact, net | (10.5) | | (16.3) | | (18.3) | | (0.47%) |
| Post-CRT Net Credit Risk | 69.8 | 86% | 78.9 | 88% | 90.4 | 90% | 2.33% |
| Market Risk | 6.2 | 8% | 4.5 | 5% | 4.5 | 4% | 0.12% |
| Operational Risk | 5.1 | 6% | 5.8 | 7% | 5.8 | 6% | 0.15% |
| Deferred Tax Assets | 0.0 | 0% | 0.0 | 0% | 0.0 | 0% | 0.00% |
| Total Capital Requirement | $81.2 | 100% | $89.2 | 100% | $100.7 | 100% | 2.59% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 26.6 | | 29.1 | | 29.1 | | 0.75% |
| Stability Capital Buffer | 37.3 | | 41.5 | | 41.5 | | 1.07% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 63.9 | | 70.6 | | 70.6 | | 1.82% |
| Total Capital Requirement and PCCBA | $145.1 | | $159.8 | | $171.4 | | 4.41% |
| Adjusted Total Assets | $3,547.4 | | $3,881.9 | | $3,881.9 | | |
| Total Capital Requirement and PCCBA/ Adjusted Total Assets | 4.09% | | 4.12% | | 4.41% | | |
| Total Risk-Weighted Assets | $1,015 | | $1,115 | | $1,259 | | |

## TABLE 2B: COMPARISON OF FREDDIE MAC RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY RISK CATEGORY

| Freddie Mac | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | % of Adjusted Total Assets |
| Gross Credit Risk | $61.2 | | $79.9 | | $90.9 | | 3.30% |
| Loan-Level Credit Enhancement | (6.6) | | (8.8) | | (9.9) | | (0.36%) |
| Net Credit Risk | 54.6 | | $71.0 | | $80.9 | | 2.94% |
| CRT Impact, net | (11.6) | | (17.6) | | (18.3) | | (0.67%) |
| Post-CRT Net Credit Risk | 43.0 | 80% | 53.5 | 83% | 62.6 | 85% | 2.27% |
| Market Risk | 7.4 | 14% | 6.2 | 10% | 6.2 | 8% | 0.22% |
| Operational Risk | 3.6 | 7% | 4.1 | 6% | 4.1 | 6% | 0.15% |
| Deferred Tax Assets | 0.0 | 0% | 0.5 | 1% | 0.5 | 1% | 0.02% |
| Total Capital Requirement | $53.9 | 100% | $64.2 | 100% | $73.4 | 100% | 2.66% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 18.9 | | 20.6 | | 20.6 | | 0.75% |
| Stability Capital Buffer | 16.0 | | 18.0 | | 18.0 | | 0.66% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | 35.0 | | 38.7 | | 38.7 | | 1.41% |
| Total Capital Requirement and PCCBA | $88.9 | | $102.9 | | $112.0 | | 4.07% |
| Adjusted Total Assets | $2,524.6 | | $2,753.3 | | $2,753.3 | | |
| Total Capital Requirement and PCCBA/ Adjusted Total Assets | 3.52% | | 3.74% | | 4.07% | | |
| Total Risk-Weighted Assets | $674 | | $803 | | $917 | | |

## TABLE 3: COMPARISON OF FANNIE MAE AND FREDDIE MAC COMBINED RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY ASSET CATEGORY

Enterprises Combined

| | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | % of Adjusted Total Assets |
| Single-family | $111.0 | 82% | $122.5 | 80% | $142.8 | 82% | 2.15% |
| Multifamily | 17.8 | 13% | 17.8 | 12% | 18.2 | 10% | 0.27% |
| Other Assets* | 6.3 | 5% | 13.1 | 9% | 13.1 | 8% | 0.20% |
| Total Capital Requirement | $135.1 | 100% | $153.4 | 100% | $174.1 | 100% | 2.62% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 45.5 | | 49.8 | | 49.8 | | 0.75% |
| Stability Capital Buffer | 53.3 | | 59.6 | | 59.6 | | 0.90% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | $98.8 | | $109.3 | | $109.3 | | 1.65% |
| Total Capital Requirement and PCCBA | $233.9 | | $262.7 | | $283.4 | | 4.27% |
| Adjusted Total Assets | $6,072.0 | | $6,635.2 | | $6,635.2 | | |
| Total Capital Requirement and Buffer Target/ Adjusted Total Assets | 3.85% | | 3.96% | | 4.27% | | |
| Total Risk-Weighted Assets | $1,689 | | $1,918 | | $2,176 | | |

*Includes PLS, CMBS, DTA, Other.

## TABLE 3A: COMPARISON OF FANNIE MAE RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY ASSET CATEGORY

Fannie Mae

| | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | % of Adjusted Total Assets |
| Single-family | $66.5 | 82% | $71.3 | 80% | $82.3 | 82% | 2.12% |
| Multifamily | 10.7 | 13% | 11.4 | 13% | 11.9 | 12% | 0.31% |
| Other Assets* | 4.0 | 5% | 6.5 | 7% | 6.5 | 6% | 0.17% |
| Total Capital Requirement | $81.2 | 100% | $89.2 | 100% | $100.7 | 100% | 2.59% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 26.6 | | 29.1 | | 29.1 | | 0.75% |
| Stability Capital Buffer | 37.3 | | 41.5 | | 41.5 | | 1.07% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | $63.9 | | $70.6 | | $70.6 | | 1.82% |
| Total Capital Requirement and PCCBA | $145.1 | | $159.8 | | $171.4 | | 4.41% |
| Adjusted Total Assets | $3,547.4 | | $3,881.9 | | $3,881.9 | | |
| Total Capital Requirement and Buffer Target/ Adjusted Total Assets | 4.09% | | 4.12% | | 4.41% | | |
| Total Risk-Weighted Assets | $1,015 | | $1,115 | | $1,259 | | |

*Includes PLS, CMBS, DTA, Other.

## TABLE 3B: COMPARISON OF FREDDIE MAC RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, BY ASSET CATEGORY

Freddie Mac

| | 2020 Re-proposed Rule As of | | | | Final Rule As of | | |
|---|---|---|---|---|---|---|---|
| | 9/30/2019 | | 6/30/2020 | | 6/30/2020 | | |
| | $ in billions | % of Total | $ in billions | % of Total | $ in billions | % of Total | Adjusted Total |
| Single-family | $44.5 | 83% | $51.3 | 80% | $60.5 | 83% | 2.20% |
| Multifamily | 7.1 | 13% | 6.4 | 10% | 6.2 | 8% | 0.23% |
| Other Assets* | 2.3 | 4% | 6.6 | 10% | 6.6 | 9% | 0.24% |
| Total Capital Requirement | $53.9 | 100% | $64.2 | 100% | $73.4 | 100% | 2.66% |
| Prescribed Buffers | | | | | | | |
| Stress Capital Buffer | 18.9 | | 20.6 | | 20.6 | | 0.75% |
| Stability Capital Buffer | 16.0 | | 18.0 | | 18.0 | | 0.66% |
| Countercyclical Capital Buffer Amount | 0.0 | | 0.0 | | 0.0 | | 0.00% |
| Prescribed Capital Conservation Buffer Amount (PCCBA) | $35.0 | | $38.7 | | $38.7 | | 1.41% |
| Total Capital Requirement and PCCBA | $88.9 | | $102.9 | | $112.0 | | 4.07% |
| Adjusted Total Assets | $2,524.6 | | $2,753.3 | | $2,753.3 | | |
| Total Capital Requirement and Buffer Target/ Adjusted Total Assets | 3.52% | | 3.74% | | 4.07% | | |
| Total Risk-Weighted Assets | $674 | | $803 | | $917 | | |

*Includes PLS, CMBS, DTA, Other.

## TABLE 4: COMPARISON OF SINGLE-FAMILY RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, AS OF JUNE 30, 2020

| *$ in billions* | Fannie Mae | | Freddie Mac | | Enterprises Combined | | | |
|---|---|---|---|---|---|---|---|---|
| | Re-proposed Rule As of 6/30/2020 | Final Rule As of 6/30/2020 | Re-proposed Rule As of 6/30/2020 | Final Rule As of 6/30/2020 | Re-proposed Rule As of 6/30/2020 | Risk Weight | Final Rule As of 6/30/2020 | Risk Weight |
| Gross Credit Risk | $89.2 | $103.8 | $63.0 | $73.7 | $152.1 | 37% | $177.5 | 43% |
| Loan Level Enchancement | (13.5) | (14.9) | (8.8) | (9.9) | (22.2) | | (24.8) | |
| Net Credit Risk | 75.7 | 88.9 | 54.2 | 63.9 | 129.9 | 31% | 152.8 | 37% |
| CRT Impact, net | (12.0) | (14.2) | (11.0) | (11.5) | (23.1) | | (25.7) | |
| Post-CRT Net Credit Risk | 63.7 | 74.7 | 43.1 | 52.4 | 106.8 | 26% | 127.1 | 31% |
| Market Risk | 2.9 | 2.9 | 5.0 | 5.0 | 7.9 | | 7.9 | |
| Operational Risk | 4.6 | 4.6 | 3.1 | 3.1 | 7.8 | | 7.8 | |
| Total Capital Requirement | $71.3 | $82.3 | $51.3 | $60.5 | $122.5 | | $142.8 | |
| Total UPB | $3,084.7 | | $2,084.5 | | $5,169.2 | | | |

*Includes single-family whole loans, Fannie Mae and Freddie Mac guarantees of single-family securities held by third parties, and investments in single-family securities guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae.*

## TABLE 5: COMPARISON OF MULTIFAMILY RISK-BASED CAPITAL REQUIREMENTS UNDER THE 2020 PROPOSED RULE AND THE FINAL RULE, AS OF JUNE 30, 2020

| *$ in billions* | Fannie Mae | | Freddie Mac | | Enterprises Combined | | | |
|---|---|---|---|---|---|---|---|---|
| | Re-proposed Rule As of 6/30/2020 | Final Rule As of 6/30/2020 | Re-proposed Rule As of 6/30/2020 | Final Rule As of 6/30/2020 | Re-proposed Rule As of 6/30/2020 | Risk Weight | Final Rule As of 6/30/2020 | Risk Weight |
| Net Credit Risk | $14.7 | $15.0 | $11.9 | $12.2 | $26.6 | 48% | $27.1 | 49% |
| CRT Impact, net | (4.3) | (4.0) | (6.5) | (6.9) | (10.8) | | (10.9) | |
| Post-CRT Net Credit Risk | 10.4 | 10.9 | 5.4 | 5.3 | 15.8 | 28% | 16.2 | 29% |
| Market Risk | 0.4 | 0.4 | 0.5 | 0.5 | 0.9 | | 0.9 | |
| Operational Risk | 0.6 | 0.6 | 0.5 | 0.5 | 1.0 | | 1.0 | |
| Total Capital Requirement | $11.4 | $11.9 | $6.4 | $6.2 | $17.8 | | $18.2 | |
| Total UPB | $379.8 | | $318.1 | | $697.9 | | $697.9 | |

*Includes multifamily whole loans, Fannie Mae and Freddie Mac guarantees of multifamily securities held by third parties, and investments in multifamily securities guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae.*

## TABLE 6: OTHER ASSETS TOTAL CAPITAL REQUIREMENTS AS OF JUNE 30, 2020

| | Fannie Mae | | | Freddie Mac | | | Enterprises Combined | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capital, $billions | UPB, $billions | Capital, bps | Capital, $billions | UPB, $billions | Capital, bps | Capital, $billions | UPB, $billions | Capital, bps |
| Other Assets | | | | | | | | | |
| Private-label Securities | $0.4 | $1.6 | 2,545 | $0.2 | $1.4 | 1,478 | $0.6 | $2.9 | 2,054 |
| CMBS | 0.0 | 0.0 | 0 | 0.0 | 0.1 | 218 | 0.0 | 0.1 | 218 |
| Deferred Tax Assets | 0.0 | 13.1 | 0 | 0.5 | 5.7 | 815 | 0.5 | 18.8 | 247 |
| Other | 6.1 | 391.4 | 156 | 5.9 | 241.1 | 246 | 12.0 | 632.5 | 190 |
| Total Capital Requirements | $6.5 | $406.1 | 160 | $6.6 | $248.3 | 266 | $13.1 | $654.4 | 200 |

**TABLE 7: CALCULATION OF THE STABILITY CAPITAL BUFFER**

| | In billions of dollars | | Data Source* |
|---|---|---|---|
| | **Sep 30, 2019** | **Jun 30, 2020** | Z.1 - L.217 |
| **Total Market** | | | |
| Single-Family | $11,080.1 | $11,303.8 | Line 2 |
| Multifamily | $1,560.9 | $1,671.8 | Line 3 |
| Total | $12,641.0 | $12,975.6 | |
| **Fannie Mae** | | | |
| Regular | $3,280.2 | $3,417.8 | Line 34 |
| Pools | $7.7 | $7.5 | Line 42 |
| Total | $3,287.9 | $3,425.3 | |
| Market Share | 26.0% | 26.4% | |
| less 5% | -5.0% | -5.0% | |
| Share subject to buffer | 21.0% | 21.4% | |
| x 5 bps | 105.0 | 107.0 | |
| Adjusted Total Assets | $3,547.4 | $3,881.9 | |
| Stability Capital Buffer | $37.3 | $41.5 | |
| **Freddie Mac** | | | |
| Regular | $1,969.3 | $2,063.4 | Line 35 |
| Pools | $268.2 | $285.6 | Line 41 |
| Total | $2,237.5 | $2,349.0 | |
| Market Share | 17.7% | 18.1% | |
| less 5% | -5.0% | -5.0% | |
| Share subject to buffer | 12.7% | 13.1% | |
| x 5 bps | 63.5 | 65.5 | |
| x Adjusted Total Assets | $2,524.6 | $2,753.3 | |
| Stability Capital Buffer | $16.0 | $18.0 | |

Note: The 9/30/19 column represents figures reported in the re-proposed rule. The Federal Reserve revised the total market numbers, so the updated buffer would be 104.8 bp for Fannie Mae ($37.2 bil) and 63.3 bps for Freddie Mac ($16.0).
Source: Financial Accounts of the United States - Z.1, L.217 Total Mortgages
https://www.federalreserve.gov/releases/z1/20200921/z1.pdf

BILLING CODE 8070–01–C

## XIV. Key Differences From the U.S. Banking Framework

FHFA solicited comment on the appropriateness of key differences between the credit risk capital requirements for mortgage exposures under the proposed rule and the U.S. banking framework. Some commenters argued that the proposed rule inappropriately treated the Enterprises as banks and that ''bank-like'' quantities of required capital would be inappropriate for the Enterprises. Other commenters advocated a general alignment of the credit risk capital requirements for similar mortgage exposures across the Enterprises and other market participants.

As discussed in the proposed rule and in Section V.C, FHFA continues to believe that the differences between the business models, statutory mandates, and risk profiles of the Enterprises and banking organizations should not preclude comparisons of the *credit risk* capital requirement of a large U.S. banking organization for a specific mortgage exposure to the *credit risk* capital requirement of an Enterprise for a similar mortgage exposure. FSOC also viewed this as a valid and meaningful point of comparison. The FSOC Secondary Market Statement found that ''[t]he Enterprises' credit risk requirements . . . likely would be lower than other credit providers across significant portions of the risk spectrum and during much of the credit cycle, which would create an advantage that could maintain significant concentration of risk with the

Enterprises.'' FSOC ''encourage[d] FHFA and other regulatory agencies to coordinate and take other appropriate action to avoid market distortions that could increase risks to financial stability by generally taking consistent approaches to the capital requirements and other regulation of similar risks across market participants, consistent with the business models and missions of their regulated entities.''

Consistent with FSOC's recommendation, and in furtherance of continued transparency and coordination, FHFA has identified several key differences between this final rule and the U.S. banking framework.

• *Risk-based capital requirements.* As of June 30, 2020 and before adjusting for CRT or the buffers under both frameworks, the average credit risk capital requirements under the final rule for the Enterprises' single-family mortgage exposures generally would have been roughly three-quarters those of similar exposures under the U.S. banking framework. The Enterprises together would have been required under the final rule's risk-based capital requirements to maintain $283 billion in risk-based adjusted total capital as of June 30, 2020 to avoid restrictions on capital distributions and discretionary bonuses. Had they been instead subject to the U.S. banking framework, the Enterprises would have been required to maintain approximately $450 billion, perhaps significantly more, in risk-based total capital (not including market risk and operational risk capital) to avoid similar restrictions. In light of these facts, FHFA reiterates that the final rule would not subject the Enterprises to the same capital requirements that apply to U.S. banking organizations.

• *CRT capital relief.* The final rule takes a considerably different approach to assigning risk weights to retained CRT exposures. In particular, the minimum risk weight assigned to retained CRT exposures would be 10 percent under the final rule, while it would have been 20 percent under the U.S. banking framework. The final rule also provides capital relief for a number of CRT structures that would not be eligible for capital relief under the U.S. banking framework.

• *Mortgage insurance.* The final rule provides a more explicit mechanism than the U.S. banking framework for recognizing and assigning capital relief for mortgage insurance.

• *Buffers.* As acknowledged by the FSOC Secondary Market Statement, an increase in the average risk weight on an Enterprise's exposures would cause the dollar amount of the stress capital buffer, capital conservation buffer, and stability capital buffer to become a smaller share of the dollar amount of the U.S. banking framework's analogous buffers were they applied to the Enterprise.[56] At the June 30, 2020 average risk weight of 33 percent, Fannie Mae's PCCBA of 1.82 percent of adjusted total assets would have been equivalent to a buffer that is 5.6 percent of risk-weighted assets. If that average risk weight had instead been 35 percent, that same PCCBA would have been equivalent to a buffer that is 5.2 percent of risk-weighted assets. That growing gap could have implications for a level playing field and the potential for market distortions that pose risk to financial stability.

• *Market risk capital.* The final rule and U.S. banking framework take considerably different approaches to market risk capital requirements. As discussed in Section XI, the final rule generally assigns market risk capital requirements to a broader set of exposures, including ones already subject to credit risk capital requirements, while the U.S. banking framework requires market risk capital not just for spread risk but also a broader range of market risks. The final rule also would be significantly less prescriptive as to requirements and restrictions governing the internal models used to determine the market risk capital requirements. FHFA is considering future rulemakings to prescribe more specific requirements and restrictions.

• *Internal-ratings approach.* Like the U.S. banking framework, each Enterprise would be required to determine its risk-weighted assets under two approaches—a standardized approach and an advanced approach—with the greater of the two risk-weighted assets used to determine its risk-based capital requirements. Unlike the U.S. banking framework, the final rule would be significantly less prescriptive as to requirements and restrictions governing the internal models used to determine the advanced risk-weighted assets. FHFA is considering future rulemakings to prescribe more specific requirements and restrictions.

FHFA believes that each of these differences from the U.S. banking framework is appropriate given the different business models, statutory mandates, and risk profiles of the Enterprises. FHFA acknowledges that these differences could create some risks with respect to a level playing field, the potential for market distortions that pose risk to financial stability or the competitiveness, efficiency, or resiliency of the national housing finance markets, and even the safety and soundness of the Enterprises. FHFA is committed to working with other regulatory agencies to coordinate and take other appropriate action to avoid market distortions that could increase risks to financial stability or the national housing finance markets and, in that spirit, is also committed to reassessing its regulatory capital framework from time to time.

[56] FSOC Secondary Market Statement (''Because the proposed buffers change based on adjusted total asset size and market share, an Enterprise's capital buffers could decline on a risk-adjusted basis in response to deteriorating Enterprise asset quality or during periods of stress.'').

## XV. Transition Period

The proposed rule was intended to establish a post-conservatorship regulatory capital framework that would ensure that each Enterprise operates in a safe and sound manner and is positioned to fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle, in particular during periods of financial stress. Given the Enterprises' current conservatorship status and capitalization, certain sections and subparts of the proposed rule would have been subject to delayed compliance dates as set forth in § 1240.4 of the proposed rule.

The capital requirements and buffers set out in subpart B of the proposed rule would have had a delayed compliance date, unless adjusted by FHFA as described below, of the later of one year from publication of the final rule or the date of the termination of conservatorship. FHFA recognized that the path for transition out of conservatorship and meeting the full capital requirements and buffers was not settled at the time of the proposed rule. Therefore, the proposed rule would have provided FHFA with the discretion to defer compliance with the capital requirements and thereby not subject an Enterprise to statutory prohibitions on capital distributions that would apply if those requirements were not met.

During that deferral period, the PCCBA would have been the CET1 capital that would otherwise be required under the proposed rule's § 1240.10 plus the PCCBA that would otherwise apply under normal conditions under the proposed rule's § 1240.11(a)(5); and the PLBA would have been 4.0 percent of the adjusted total assets of the Enterprise. To benefit from the deferral period, an Enterprise would have been required to comply with any corrective

plan or agreement or order that sets out the actions by which an Enterprise will achieve compliance with specified capital requirements. In addition, the proposed rule would have delayed compliance for reporting under the proposed rule's § 1240.1(f) for one year from the date of publication of the final rule.

Commenters generally were supportive of the proposed rule's compliance period. Commenters were particularly concerned that a short recapitalization period could disrupt the national housing finance markets. Some commenters generally supported a longer compliance period. Some commenters urged FHFA to provide a specific timeline for phase-in of the regulatory capital requirements and PCCBA and PLBA, as the U.S. banking regulators did for similar requirements. Some focused on delaying the effective date for the proposed rule's payout restrictions. A few commenters endorsed the contemplated deferral period so long as an Enterprise complied with any corrective action plan or agreement or order. These commenters noted that an order could position FHFA to maintain heightened supervision of the Enterprise during a recapitalization period while facilitating each Enterprise's ability to conduct significant common equity offerings.

FHFA has revised the contemplated compliance period in several respects, including to provide for an effective date of the final rule that is 60 days after publication in the **Federal Register** and establish different transition periods for the advanced approaches requirements.

Under the final rule, an Enterprise will not be subject to any requirement under the final rule until the compliance date for the requirement under the final rule. The compliance date for the regulatory capital requirements (distinct from the PCCBA or the PLBA) will be the later of the date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of the final rule, which would be 60 days after its publication in the **Federal Register**) and any later compliance date provided in a consent order or other transition order applicable to the Enterprise. In contrast, the final rule provides that the compliance date for the PCCBA and the PLBA will be the date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of the final rule), so as to provide additional authority to FHFA to restrict dividends and other capital distributions during the period in which the Enterprise raises regulatory capital to achieve compliance with the regulatory capital requirements. FHFA expects that this interim period could be governed by a capital restoration plan that would be binding on the Enterprise pursuant to a consent order or other transition order.

The final rule's advanced approaches requirements will be delayed until the later of January 1, 2025 and any later compliance date specific to those requirements provided in a consent order or other transition order applicable to the Enterprise. Regardless of the date of the termination of the conservatorship of an Enterprise, the Enterprise will be required to report its regulatory capital, PCCBA, PLBA, standardized total risk-weighted assets, and adjusted total assets beginning January 1, 2022.

## XVI. Temporary Increases of Minimum Capital Requirements

To reinforce its reserved authorities under § 1240.1(d), FHFA proposed to amend its existing rule, 12 CFR part 1225, ''Minimum Capital—Temporary Increase,'' to clarify that the authority implemented in that rule to temporarily increase a regulated entity's required capital minimums applies to risk-based minimum capital levels as well as to minimum leverage ratios. This amendment would have aligned the scope of this regulation, adopted under 12 U.S.C. 4612(d), with the FHFA Director's authority under 12 U.S.C. 4612(e) to establish additional capital and reserve requirements for particular purposes, which authorizes risk-based adjustments to capital requirements for particular products and activities and is not limited to adjustments to the leverage ratio. FHFA also proposed to amend the definition of ''total exposure'' in § 1206.2 to have the same meaning as ''adjusted total assets'' as defined in § 1240.2 of the proposed rule. FHFA also proposed to remove 12 CFR part 1750.

FHFA did not receive any comments on this aspect of the proposed rule, and the final rule adopts these provisions as proposed.

## XVII. Administrative Law Matters

### *A. Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires that a regulation that has a significant economic impact on a substantial number of small entities, small businesses, or small organizations must include an initial regulatory flexibility analysis describing the regulation's impact on small entities. FHFA need not undertake such an analysis if FHFA has certified that the regulation will not have a significant economic impact on a substantial number of small entities. 5 U.S.C. 605(b). FHFA has considered the impact of the final rule under the Regulatory Flexibility Act. The General Counsel of FHFA certifies that the final rule will not have a significant economic impact on a substantial number of small entities because the final rule is applicable only to the Enterprises, which are not small entities for purposes of the Regulatory Flexibility Act.

### *B. Paperwork Reduction Act*

The Paperwork Reduction Act (PRA) (44 U.S.C. 3501 *et seq.*) requires that regulations involving the collection of information receive clearance from the Office of Management and Budget (OMB). The final rule contains no such collection of information requiring OMB approval under the PRA. Therefore, no information has been submitted to OMB for review.

### *C. Congressional Review Act*

In accordance with the Congressional Review Act (5 U.S.C. 801 *et seq.*), FHFA has determined that this final rule is a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

## Final Rule

### List of Subjects

*12 CFR Part 1206*

Assessments, Federal home loan banks, Government-sponsored enterprises, Reporting and recordkeeping requirements.

*12 CFR Part 1225*

Federal home loan banks, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, Capital, Filings, Minimum capital, Procedures, Standards.

*12 CFR Part 1240*

Capital, Credit, Enterprise, Investments, Reporting and recordkeeping requirements.

*12 CFR Part 1750*

Banks, banking, Capital classification, Mortgages, Organization and functions (Government agencies), Risk-based capital, Securities.

### Authority and Issuance

For the reasons stated in the preamble, under the authority of 12 U.S.C. 4511, 4513, 4513b, 4514, 4515, 4526, 4611, and 4612, FHFA amends chapters XII and XVII, of title 12 of the Code of Federal Regulations as follows:

**Chapter XII—Federal Housing Finance Agency**

**Subchapter A—Organization and Operations**

## PART 1206—ASSESSMENTS

■ 1. The authority citation for part 1206 continues to read as follows:

**Authority:** 12 U.S.C. 4516.

■ 2. Amend § 1206.2 by revising the definition of ''Total exposure'' to read as follows:

**§ 1206.2 Definitions.**

* * * * *

*Total exposure* has the same meaning given to adjusted total assets in 12 CFR 1240.2.

* * * * *

**Subchapter B—Entity Regulations**

## PART 1225—MINIMUM CAPITAL—TEMPORARY INCREASE

■ 3. The authority citation for part 1225 is amended to read as follows:

**Authority:** 12 U.S.C. 4513, 4526, and 4612.

■ 4. Amend § 1225.2 by revising the definition of ''Minimum capital level'' to read as follows:

**§ 1225.2 Definitions.**

* * * * *

*Minimum capital level* means the lowest amount of capital meeting any regulation or orders issued pursuant to 12 U.S.C. 1426 and 12 U.S.C. 4612, or any similar requirement established by regulation, order or other action.

* * * * *

**Subchapter C—Enterprises**

■ 5. Add part 1240 to subchapter C to read as follows:

## PART 1240—CAPITAL ADEQUACY OF ENTERPRISES

Sec.



**Authority:** 12 U.S.C. 4511, 4513, 4513b, 4514, 4517, 4526, 4611, and 4612.

### Subpart A—General Provisions

**§ 1240.1 Purpose, applicability, reservations of authority, reporting, and timing.**

(a) *Purpose.* This part establishes capital requirements and overall capital adequacy standards for the Enterprises. This part includes methodologies for calculating capital requirements, disclosure requirements related to the capital requirements, and transition provisions for the application of this part.

(b) *Authorities*—(1) *Limitations of authority.* Nothing in this part shall be read to limit the authority of FHFA to take action under other provisions of law, including action to address unsafe or unsound practices or conditions, deficient capital levels, or violations of law or regulation under the Safety and Soundness Act, and including action under sections 1313(a)(2), 1365–1367, 1371–1376 of the Safety and Soundness Act (12 U.S.C. 4513(a)(2), 4615–4617, and 4631–4636).

(2) *Permissible activities.* Nothing in this part may be construed to authorize, permit, or require an Enterprise to engage in any activity not authorized by its authorizing statute or that would otherwise be inconsistent with its authorizing statute or the Safety and Soundness Act.

(c) *Applicability*—(1) *Covered regulated entities.* This part applies on a consolidated basis to each Enterprise.

(2) *Capital requirements and overall capital adequacy standards.* Subject to § 1240.4, each Enterprise must calculate its capital requirements and meet the overall capital adequacy standards in subpart B of this part.

(3) *Regulatory capital.* Subject to § 1240.4, each Enterprise must calculate its regulatory capital in accordance with subpart C of this part.

(4) *Risk-weighted assets.* (i) Subject to § 1240.4, each Enterprise must use the methodologies in subparts D and F of this part to calculate standardized total risk-weighted assets.

(ii) Subject to § 1240.4, each Enterprise must use the methodologies in subparts E and F of this part to calculate advanced approaches total risk-weighted assets.

(d) *Reservation of authority regarding capital.* Subject to applicable provisions of the Safety and Soundness Act—

(1) *Additional capital in the aggregate.* FHFA may require an Enterprise to hold an amount of regulatory capital greater than otherwise required under this part if FHFA determines that the Enterprise's capital requirements under this part are not commensurate with the Enterprise's

credit, market, operational, or other risks.

(2) *Regulatory capital elements.* (i) If FHFA determines that a particular common equity tier 1 capital, additional tier 1 capital, or tier 2 capital element has characteristics or terms that diminish its ability to absorb losses, or otherwise present safety and soundness concerns, FHFA may require the Enterprise to exclude all or a portion of such element from common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, as appropriate.

(ii) Notwithstanding the criteria for regulatory capital instruments set forth in subpart C of this part, FHFA may find that a capital element may be included in an Enterprise's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital on a permanent or temporary basis consistent with the loss absorption capacity of the element and in accordance with § 1240.20(e).

(3) *Risk-weighted asset amounts.* If FHFA determines that the risk-weighted asset amount calculated under this part by the Enterprise for one or more exposures is not commensurate with the risks associated with those exposures, FHFA may require the Enterprise to assign a different risk-weighted asset amount to the exposure(s) or to deduct the amount of the exposure(s) from its regulatory capital.

(4) *Total leverage.* If FHFA determines that the adjusted total asset amount calculated by an Enterprise is inappropriate for the exposure(s) or the circumstances of the Enterprise, FHFA may require the Enterprise to adjust this exposure amount in the numerator and the denominator for purposes of the leverage ratio calculations.

(5) *Consolidation of certain exposures.* FHFA may determine that the risk-based capital treatment for an exposure or the treatment provided to an entity that is not consolidated on the Enterprise's balance sheet is not commensurate with the risk of the exposure and the relationship of the Enterprise to the entity. Upon making this determination, FHFA may require the Enterprise to treat the exposure or entity as if it were consolidated on the balance sheet of the Enterprise for purposes of determining the Enterprise's risk-based capital requirements and calculating the Enterprise's risk-based capital ratios accordingly. FHFA will look to the substance of, and risk associated with, the transaction, as well as other relevant factors FHFA deems appropriate in determining whether to require such treatment.

(6) *Other reservation of authority.* With respect to any deduction or limitation required under this part, FHFA may require a different deduction or limitation, provided that such alternative deduction or limitation is commensurate with the Enterprise's risk and consistent with safety and soundness.

(e) *Corrective action and enforcement.* (1) FHFA may enforce this part pursuant to sections 1371, 1372, and 1376 of the Safety and Soundness Act (12 U.S.C. 4631, 4632, 4636).

(2) FHFA also may enforce the total capital requirement established under § 1240.10(a) and the core capital requirement established under § 1240.10(e) pursuant to section 1364 of the Safety and Soundness Act (12 U.S.C. 4614).

(3) This part is also a prudential standard adopted under section 1313B of the Safety and Soundness Act (12 U.S.C. 4513b), excluding § 1240.11, which is a prudential standard only for purposes of § 1240.4. Section 1313B of the Safety and Soundness Act (12 U.S.C. 4513b) authorizes the Director to require that an Enterprise submit a corrective plan under § 1236.4 specifying the actions the Enterprise will take to correct the deficiency if the Director determines that an Enterprise is not in compliance with this part.

(f) *Reporting procedure and timing*—(1) *Capital Reports*—(i) *In general.* Each Enterprise shall file a capital report with FHFA every calendar quarter providing the information and data required by FHFA. The specifics of required information and data, and the report format, will be separately provided to the Enterprise by FHFA.

(ii) *Required content.* The capital report shall include, as of the end of the last calendar quarter—

(A) The common equity tier 1 capital, core capital, tier 1 capital, total capital, and adjusted total capital of the Enterprise;

(B) The stress capital buffer, the capital conservation buffer amount (if prescribed by FHFA), the stability capital buffer, and the maximum payout ratio of the Enterprise;

(C) The adjusted total assets of the Enterprise; and

(D) The standardized total risk-weighted assets of the Enterprise.

(2) *Timing.* The Enterprise must submit the capital report not later than 60 days after the last day of the calendar quarter or at such other time as the Director requires.

(3) *Approval.* The capital report must be approved by the Chief Risk Officer and the Chief Financial Officer of an Enterprise prior to submission to FHFA.

(4) *Adjustment.* In the event an Enterprise makes an adjustment to its financial statements for a quarter or a date for which information was provided pursuant to this paragraph (f), which would cause an adjustment to a capital report, an Enterprise must file with the Director an amended capital report not later than 15 days after the date of such adjustment.

(5) *Public disclosure.* An Enterprise must disclose in an appropriate publicly available filing or other document each of the information reported under paragraph (f)(1)(ii) of this section.

### § 1240.2 Definitions.

As used in this part:

*Acquired CRT exposure* means, with respect to an Enterprise:

(1) Any exposure that arises from a credit risk transfer of the Enterprise and has been acquired by the Enterprise since the issuance or entry into the credit risk transfer by the Enterprise; or

(2) Any exposure that arises from a credit risk transfer of the other Enterprise.

*Additional tier 1* capital is defined in § 1240.20(c).

*Adjusted allowances for credit losses (AACL)* means valuation allowances that have been established through a charge against earnings or retained earnings for expected credit losses on financial assets measured at amortized cost and a lessor's net investment in leases that have been established to reduce the amortized cost basis of the assets to amounts expected to be collected as determined in accordance with GAAP. For purposes of this part, adjusted allowances for credit losses include allowances for expected credit losses on off-balance sheet credit exposures not accounted for as insurance as determined in accordance with GAAP. Adjusted allowances for credit losses allowances created that reflect credit losses on purchased credit deteriorated assets and available-for-sale debt securities.

*Adjusted total assets* means the sum of the items described in paragraphs (1) though (9) of this definition, as adjusted pursuant to paragraph (9) of this definition for a clearing member Enterprise:

(1) The balance sheet carrying value of all of the Enterprise's on-balance sheet assets, plus the value of securities sold under a repurchase transaction or a securities lending transaction that qualifies for sales treatment under GAAP, less amounts deducted from tier 1 capital under § 1240.22(a), (c), and (d), and less the value of securities received in security-for-security repo-style transactions, where the Enterprise acts as a securities lender and includes the securities received in its on-balance

sheet assets but has not sold or re-hypothecated the securities received;

(2) The potential future credit exposure (PFE) for each derivative contract or each single-product netting set of derivative contracts (including a cleared transaction except as provided in paragraph (9) of this definition and, at the discretion of the Enterprise, excluding a forward agreement treated as a derivative contract that is part of a repurchase or reverse repurchase or a securities borrowing or lending transaction that qualifies for sales treatment under GAAP), to which the Enterprise is a counterparty as determined under § 1240.36, but without regard to § 1240.36(c), provided that:

(i) An Enterprise may choose to exclude the PFE of all credit derivatives or other similar instruments through which it provides credit protection when calculating the PFE under § 1240.36, but without regard to § 1240.36(c), provided that it does not adjust the net-to-gross ratio (NGR); and

(ii) An Enterprise that chooses to exclude the PFE of credit derivatives or other similar instruments through which it provides credit protection pursuant to paragraph (2)(i) of this definition must do so consistently over time for the calculation of the PFE for all such instruments;

(3)(i) The amount of cash collateral that is received from a counterparty to a derivative contract and that has offset the mark-to-fair value of the derivative asset, or cash collateral that is posted to a counterparty to a derivative contract and that has reduced the Enterprise's on-balance sheet assets, unless such cash collateral is all or part of variation margin that satisfies the conditions in paragraphs (3)(iv) through (vii) of this definition;

(ii) The variation margin is used to reduce the current credit exposure of the derivative contract, calculated as described in § 1240.36(b), and not the PFE;

(iii) For the purpose of the calculation of the NGR described in § 1240.36(b)(2)(ii)(B), variation margin described in paragraph (3)(ii) of this definition may not reduce the net current credit exposure or the gross current credit exposure;

(iv) For derivative contracts that are not cleared through a QCCP, the cash collateral received by the recipient counterparty is not segregated (by law, regulation, or an agreement with the counterparty);

(v) Variation margin is calculated and transferred on a daily basis based on the mark-to-fair value of the derivative contract;

(vi) The variation margin transferred under the derivative contract or the governing rules of the CCP or QCCP for a cleared transaction is the full amount that is necessary to fully extinguish the net current credit exposure to the counterparty of the derivative contracts, subject to the threshold and minimum transfer amounts applicable to the counterparty under the terms of the derivative contract or the governing rules for a cleared transaction;

(vii) The variation margin is in the form of cash in the same currency as the currency of settlement set forth in the derivative contract, provided that for the purposes of this paragraph (3)(vii), currency of settlement means any currency for settlement specified in the governing qualifying master netting agreement and the credit support annex to the qualifying master netting agreement, or in the governing rules for a cleared transaction; and

(viii) The derivative contract and the variation margin are governed by a qualifying master netting agreement between the legal entities that are the counterparties to the derivative contract or by the governing rules for a cleared transaction, and the qualifying master netting agreement or the governing rules for a cleared transaction must explicitly stipulate that the counterparties agree to settle any payment obligations on a net basis, taking into account any variation margin received or provided under the contract if a credit event involving either counterparty occurs;

(4) The effective notional principal amount (that is, the apparent or stated notional principal amount multiplied by any multiplier in the derivative contract) of a credit derivative, or other similar instrument, through which the Enterprise provides credit protection, provided that:

(i) The Enterprise may reduce the effective notional principal amount of the credit derivative by the amount of any reduction in the mark-to-fair value of the credit derivative if the reduction is recognized in common equity tier 1 capital;

(ii) The Enterprise may reduce the effective notional principal amount of the credit derivative by the effective notional principal amount of a purchased credit derivative or other similar instrument, provided that the remaining maturity of the purchased credit derivative is equal to or greater than the remaining maturity of the credit derivative through which the Enterprise provides credit protection and that:

(A) With respect to a credit derivative that references a single exposure, the reference exposure of the purchased credit derivative is to the same legal entity and ranks *pari passu* with, or is junior to, the reference exposure of the credit derivative through which the Enterprise provides credit protection; or

(B) With respect to a credit derivative that references multiple exposures, the reference exposures of the purchased credit derivative are to the same legal entities and rank *pari passu* with the reference exposures of the credit derivative through which the Enterprise provides credit protection, and the level of seniority of the purchased credit derivative ranks *pari passu* to the level of seniority of the credit derivative through which the Enterprise provides credit protection;

(C) Where an Enterprise has reduced the effective notional amount of a credit derivative through which the Enterprise provides credit protection in accordance with paragraph (4)(i) of this definition, the Enterprise must also reduce the effective notional principal amount of a purchased credit derivative used to offset the credit derivative through which the Enterprise provides credit protection, by the amount of any increase in the mark-to-fair value of the purchased credit derivative that is recognized in common equity tier 1 capital; and

(D) Where the Enterprise purchases credit protection through a total return swap and records the net payments received on a credit derivative through which the Enterprise provides credit protection in net income, but does not record offsetting deterioration in the mark-to-fair value of the credit derivative through which the Enterprise provides credit protection in net income (either through reductions in fair value or by additions to reserves), the Enterprise may not use the purchased credit protection to offset the effective notional principal amount of the related credit derivative through which the Enterprise provides credit protection;

(5) Where an Enterprise acting as a principal has more than one repo-style transaction with the same counterparty and has offset the gross value of receivables due from a counterparty under reverse repurchase transactions by the gross value of payables under repurchase transactions due to the same counterparty, the gross value of receivables associated with the repo-style transactions less any on-balance sheet receivables amount associated with these repo-style transactions included under paragraph (1) of this definition, unless the following criteria are met:

(i) The offsetting transactions have the same explicit final settlement date under their governing agreements;

(ii) The right to offset the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable in the normal course of business and in the event of receivership, insolvency, liquidation, or similar proceeding; and

(iii) Under the governing agreements, the counterparties intend to settle net, settle simultaneously, or settle according to a process that is the functional equivalent of net settlement, (that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date), where both transactions are settled through the same settlement system, the settlement arrangements are supported by cash or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day, and the settlement of the underlying securities does not interfere with the net cash settlement;

(6) The counterparty credit risk of a repo-style transaction, including where the Enterprise acts as an agent for a repo-style transaction and indemnifies the customer with respect to the performance of the customer's counterparty in an amount limited to the difference between the fair value of the security or cash its customer has lent and the fair value of the collateral the borrower has provided, calculated as follows:

(i) If the transaction is not subject to a qualifying master netting agreement, the counterparty credit risk (E*) for transactions with a counterparty must be calculated on a transaction by transaction basis, such that each transaction i is treated as its own netting set, in accordance with the following formula, where Ei is the fair value of the instruments, gold, or cash that the Enterprise has lent, sold subject to repurchase, or provided as collateral to the counterparty, and Ci is the fair value of the instruments, gold, or cash that the Enterprise has borrowed, purchased subject to resale, or received as collateral from the counterparty:

$E_i^* = \max \{0, [E_i — C_i]\}$

(ii) If the transaction is subject to a qualifying master netting agreement, the counterparty credit risk (E*) must be calculated as the greater of zero and the total fair value of the instruments, gold, or cash that the Enterprise has lent, sold subject to repurchase or provided as collateral to a counterparty for all transactions included in the qualifying master netting agreement ($\Sigma E_i$), less the total fair value of the instruments, gold, or cash that the Enterprise borrowed, purchased subject to resale or received as collateral from the counterparty for those transactions ($\Sigma C_i$), in accordance with the following formula:

$E^* = \max \{0, [\Sigma E_i - \Sigma C_i]\}$

(7) If an Enterprise acting as an agent for a repo-style transaction provides a guarantee to a customer of the security or cash its customer has lent or borrowed with respect to the performance of the customer's counterparty and the guarantee is not limited to the difference between the fair value of the security or cash its customer has lent and the fair value of the collateral the borrower has provided, the amount of the guarantee that is greater than the difference between the fair value of the security or cash its customer has lent and the value of the collateral the borrower has provided;

(8) The credit equivalent amount of all off-balance sheet exposures of the Enterprise, excluding repo-style transactions, repurchase or reverse repurchase or securities borrowing or lending transactions that qualify for sales treatment under GAAP, and derivative transactions, determined using the applicable credit conversion factor under § 1240.35(b), provided, however, that the minimum credit conversion factor that may be assigned to an off-balance sheet exposure under this paragraph is 10 percent; and

(9) For an Enterprise that is a clearing member:

(i) A clearing member Enterprise that guarantees the performance of a clearing member client with respect to a cleared transaction must treat its exposure to the clearing member client as a derivative contract for purposes of determining its adjusted total assets;

(ii) A clearing member Enterprise that guarantees the performance of a CCP with respect to a transaction cleared on behalf of a clearing member client must treat its exposure to the CCP as a derivative contract for purposes of determining its adjusted total assets;

(iii) A clearing member Enterprise that does not guarantee the performance of a CCP with respect to a transaction cleared on behalf of a clearing member client may exclude its exposure to the CCP for purposes of determining its adjusted total assets;

(iv) An Enterprise that is a clearing member may exclude from its adjusted total assets the effective notional principal amount of credit protection sold through a credit derivative contract, or other similar instrument, that it clears on behalf of a clearing member client through a CCP as calculated in accordance with paragraph (4) of this definition; and

(v) Notwithstanding paragraphs (9)(i) through (iii) of this definition, an Enterprise may exclude from its adjusted total assets a clearing member's exposure to a clearing member client for a derivative contract, if the clearing member client and the clearing member are affiliates and consolidated for financial reporting purposes on the Enterprise's balance sheet.

*Adjusted total capital* means the sum of tier 1 capital and tier 2 capital.

*Advanced approaches total risk-weighted assets* means:

(1) The sum of:

(i) Credit-risk-weighted assets for general credit risk (including for mortgage exposures), cleared transactions, default fund contributions, unsettled transactions, securitization exposures (including retained CRT exposures), equity exposures, and the fair value adjustment to reflect counterparty credit risk in valuation of OTC derivative contracts, each as calculated under § 1240.123.

(ii) Risk-weighted assets for operational risk, as calculated under § 1240.162(c); and

(iii) Advanced market risk-weighted assets; minus

(2) Excess eligible credit reserves not included in the Enterprise's tier 2 capital.

*Advanced market risk-weighted assets* means the advanced measure for spread risk calculated under § 1240.204(a) multiplied by 12.5.

*Affiliate* has the meaning given in section 1303(1) of the Safety and Soundness Act (12 U.S.C. 4502(1)).

*Allowances for loan and lease losses (ALLL)* means valuation allowances that have been established through a charge against earnings to cover estimated credit losses on loans, lease financing receivables or other extensions of credit as determined in accordance with GAAP. For purposes of this part, *ALLL* includes allowances that have been established through a charge against earnings to cover estimated credit losses associated with off-balance sheet credit exposures as determined in accordance with GAAP.

*Bankruptcy remote* means, with respect to an entity or asset, that the entity or asset would be excluded from an insolvent entity's estate in receivership, insolvency, liquidation, or similar proceeding.

*Carrying value* means, with respect to an asset, the value of the asset on the balance sheet of an Enterprise as determined in accordance with GAAP. For all assets other than available-for-sale debt securities or purchased credit deteriorated assets, the carrying value is not reduced by any associated credit

loss allowance that is determined in accordance with GAAP.

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

*CFTC* means the U.S. Commodity Futures Trading Commission.

*Clean-up call* means a contractual provision that permits an originating Enterprise or servicer to call securitization exposures before their stated maturity or call date.

*Cleared transaction* means an exposure associated with an outstanding derivative contract or repo-style transaction that an Enterprise or clearing member has entered into with a central counterparty (that is, a transaction that a central counterparty has accepted).

(1) The following transactions are cleared transactions:

(i) A transaction between a CCP and an Enterprise that is a clearing member of the CCP where the Enterprise enters into the transaction with the CCP for the Enterprise's own account;

(ii) A transaction between a CCP and an Enterprise that is a clearing member of the CCP where the Enterprise is acting as a financial intermediary on behalf of a clearing member client and the transaction offsets another transaction that satisfies the requirements set forth in § 1240.3(a);

(iii) A transaction between a clearing member client Enterprise and a clearing member where the clearing member acts as a financial intermediary on behalf of the clearing member client and enters into an offsetting transaction with a CCP, provided that the requirements set forth in § 1240.3(a) are met; or

(iv) A transaction between a clearing member client Enterprise and a CCP where a clearing member guarantees the performance of the clearing member client Enterprise to the CCP and the transaction meets the requirements of § 1240.3(a)(2) and (3).

(2) The exposure of an Enterprise that is a clearing member to its clearing member client is not a cleared transaction where the Enterprise is either acting as a financial intermediary and enters into an offsetting transaction with a CCP or where the Enterprise provides a guarantee to the CCP on the performance of the client.

*Clearing member* means a member of, or direct participant in, a CCP that is entitled to enter into transactions with the CCP.

*Clearing member client* means a party to a cleared transaction associated with a CCP in which a clearing member acts either as a financial intermediary with respect to the party or guarantees the performance of the party to the CCP.

*Client-facing derivative transaction* means a derivative contract that is not a cleared transaction where the Enterprise is either acting as a financial intermediary and enters into an offsetting transaction with a qualifying central counterparty (QCCP) or where the Enterprise provides a guarantee on the performance of a client on a transaction between the client and a QCCP.

*Collateral agreement* means a legal contract that specifies the time when, and circumstances under which, a counterparty is required to pledge collateral to an Enterprise for a single financial contract or for all financial contracts in a netting set and confers upon the Enterprise a perfected, first-priority security interest (notwithstanding the prior security interest of any custodial agent), or the legal equivalent thereof, in the collateral posted by the counterparty under the agreement. This security interest must provide the Enterprise with a right to close-out the financial positions and liquidate the collateral upon an event of default of, or failure to perform by, the counterparty under the collateral agreement. A contract would not satisfy this requirement if the Enterprise's exercise of rights under the agreement may be stayed or avoided:

(1) Under applicable law in the relevant jurisdictions, other than

(i) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar to the U.S. laws referenced in this paragraph (1)(i) in order to facilitate the orderly resolution of the defaulting counterparty;

(ii) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (1)(i) of this definition; or

(2) Other than to the extent necessary for the counterparty to comply with applicable law.

*Commitment* means any legally binding arrangement that obligates an Enterprise to extend credit or to purchase assets.

*Common equity tier 1 capital* is defined in § 1240.20(b).

*Company* means a corporation, partnership, limited liability company, depository institution, business trust, special purpose entity, association, or similar organization.

*Core capital* has the meaning given in section 1303(7) of the Safety and Soundness Act (12 U.S.C. 4502(7)).

*Corporate exposure* means an exposure to a company that is not:

(1) An exposure to a sovereign, the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, a multi-lateral development bank (MDB), a depository institution, a foreign bank, a credit union, or a public sector entity (PSE);

(2) An exposure to a GSE;

(3) A mortgage exposure;

(4) A cleared transaction;

(5) A default fund contribution;

(6) A securitization exposure;

(7) An equity exposure;

(8) An unsettled transaction; or

(9) A separate account.

*Credit derivative* means a financial contract executed under standard industry credit derivative documentation that allows one party (the protection purchaser) to transfer the credit risk of one or more exposures (reference exposure(s)) to another party (the protection provider) for a certain period of time.

*Credit-enhancing interest-only strip (CEIO)* means an on-balance sheet asset that, in form or in substance:

(1) Represents a contractual right to receive some or all of the interest and no more than a minimal amount of principal due on the underlying exposures of a securitization; and

(2) Exposes the holder of the CEIO to credit risk directly or indirectly associated with the underlying exposures that exceeds a pro rata share of the holder's claim on the underlying exposures, whether through subordination provisions or other credit-enhancement techniques.

*Credit risk mitigant* means collateral, a credit derivative, or a guarantee.

*Credit risk transfer (CRT)* means any traditional securitization, synthetic securitization, senior/subordinated structure, credit derivative, guarantee, or other contract, structure, or arrangement (other than primary mortgage insurance) that allows an Enterprise to transfer the credit risk of one or more mortgage exposures (reference exposure(s)) to another party (the protection provider).

*Credit union* means an insured credit union as defined under the Federal Credit Union Act (12 U.S.C. 1752 *et seq.*).

*CRT special purpose entity (CRT SPE)* means a corporation, trust, or other entity organized for the specific purpose of bearing credit risk transferred through

a CRT, the activities of which are limited to those appropriate to accomplish this purpose.

*Current Expected Credit Losses (CECL)* means the current expected credit losses methodology under GAAP.

*Current exposure* means, with respect to a netting set, the larger of zero or the fair value of a transaction or portfolio of transactions within the netting set that would be lost upon default of the counterparty, assuming no recovery on the value of the transactions.

*Current exposure methodology* means the method of calculating the exposure amount for over-the-counter derivative contracts in § 1240.36(b).

*Custodian* means a financial institution that has legal custody of collateral provided to a CCP.

*Default fund contribution* means the funds contributed or commitments made by a clearing member to a CCP's mutualized loss sharing arrangement.

*Depository institution* means a depository institution as defined in section 3 of the Federal Deposit Insurance Act.

*Derivative contract* means a financial contract whose value is derived from the values of one or more underlying assets, reference rates, or indices of asset values or reference rates. Derivative contracts include interest rate derivative contracts, exchange rate derivative contracts, equity derivative contracts, commodity derivative contracts, credit derivative contracts, and any other instrument that poses similar counterparty credit risks. Derivative contracts also include unsettled securities, commodities, and foreign exchange transactions with a contractual settlement or delivery lag that is longer than the lesser of the market standard for the particular instrument or five business days.

*Discretionary bonus payment* means a payment made to an executive officer of an Enterprise, where:

(1) The Enterprise retains discretion as to whether to make, and the amount of, the payment until the payment is awarded to the executive officer;

(2) The amount paid is determined by the Enterprise without prior promise to, or agreement with, the executive officer; and

(3) The executive officer has no contractual right, whether express or implied, to the bonus payment.

*Distribution* means:

(1) A reduction of tier 1 capital through the repurchase of a tier 1 capital instrument or by other means, except when an Enterprise, within the same quarter when the repurchase is announced, fully replaces a tier 1 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for:

(i) A common equity tier 1 capital instrument if the instrument being repurchased was part of the Enterprise's common equity tier 1 capital, or

(ii) A common equity tier 1 or additional tier 1 capital instrument if the instrument being repurchased was part of the Enterprise's tier 1 capital;

(2) A reduction of tier 2 capital through the repurchase, or redemption prior to maturity, of a tier 2 capital instrument or by other means, except when an Enterprise, within the same quarter when the repurchase or redemption is announced, fully replaces a tier 2 capital instrument it has repurchased by issuing another capital instrument that meets the eligibility criteria for a tier 1 or tier 2 capital instrument;

(3) A dividend declaration or payment on any tier 1 capital instrument;

(4) A dividend declaration or interest payment on any tier 2 capital instrument if the Enterprise has full discretion to permanently or temporarily suspend such payments without triggering an event of default; or

(5) Any similar transaction that FHFA determines to be in substance a distribution of capital.

*Dodd-Frank Act* means the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Pub. L. 111–203, 124 Stat. 1376).

*Early amortization provision* means a provision in the documentation governing a securitization that, when triggered, causes investors in the securitization exposures to be repaid before the original stated maturity of the securitization exposures, unless the provision:

(1) Is triggered solely by events not directly related to the performance of the underlying exposures or the originating Enterprise (such as material changes in tax laws or regulations); or

(2) Leaves investors fully exposed to future draws by borrowers on the underlying exposures even after the provision is triggered.

*Effective notional amount* means for an eligible guarantee or eligible credit derivative, the lesser of the contractual notional amount of the credit risk mitigant and the exposure amount of the hedged exposure, multiplied by the percentage coverage of the credit risk mitigant.

*Eligible clean-up call* means a clean-up call that:

(1) Is exercisable solely at the discretion of the originating Enterprise or servicer;

(2) Is not structured to avoid allocating losses to securitization exposures held by investors or otherwise structured to provide credit enhancement to the securitization; and

(3)(i) For a traditional securitization, is only exercisable when 10 percent or less of the principal amount of the underlying exposures or securitization exposures (determined as of the inception of the securitization) is outstanding; or

(ii) For a synthetic securitization or credit risk transfer, is only exercisable when 10 percent or less of the principal amount of the reference portfolio of underlying exposures (determined as of the inception of the securitization) is outstanding.

*Eligible credit derivative* means a credit derivative in the form of a credit default swap, nth-to-default swap, total return swap, or any other form of credit derivative approved by FHFA, provided that:

(1) The contract meets the requirements of an eligible guarantee and has been confirmed by the protection purchaser and the protection provider;

(2) Any assignment of the contract has been confirmed by all relevant parties;

(3) If the credit derivative is a credit default swap or nth-to-default swap, the contract includes the following credit events:

(i) Failure to pay any amount due under the terms of the reference exposure, subject to any applicable minimal payment threshold that is consistent with standard market practice and with a grace period that is closely in line with the grace period of the reference exposure; and

(ii) Receivership, insolvency, liquidation, conservatorship or inability of the reference exposure issuer to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and similar events;

(4) The terms and conditions dictating the manner in which the contract is to be settled are incorporated into the contract;

(5) If the contract allows for cash settlement, the contract incorporates a robust valuation process to estimate loss reliably and specifies a reasonable period for obtaining post-credit event valuations of the reference exposure;

(6) If the contract requires the protection purchaser to transfer an exposure to the protection provider at settlement, the terms of at least one of the exposures that is permitted to be transferred under the contract provide that any required consent to transfer may not be unreasonably withheld;

(7) If the credit derivative is a credit default swap or nth-to-default swap, the

contract clearly identifies the parties responsible for determining whether a credit event has occurred, specifies that this determination is not the sole responsibility of the protection provider, and gives the protection purchaser the right to notify the protection provider of the occurrence of a credit event; and

(8) If the credit derivative is a total return swap and the Enterprise records net payments received on the swap as net income, the Enterprise records offsetting deterioration in the value of the hedged exposure (either through reductions in fair value or by an addition to reserves).

*Eligible credit reserves* means all general allowances that have been established through a charge against earnings or retained earnings to cover expected credit losses associated with on- or off-balance sheet wholesale and retail exposures, including AACL associated with such exposures. Eligible credit reserves exclude allowances that reflect credit losses on purchased credit deteriorated assets and available-for-sale debt securities and other specific reserves created against recognized losses.

*Eligible funded synthetic risk transfer* means a credit risk transfer in which—

(1) A CRT SPE that is bankruptcy remote from the Enterprise and not consolidated with the Enterprise under GAAP is contractually obligated to reimburse the Enterprise for specified losses on a reference pool of mortgage exposures of the Enterprise upon designated credit events and designated modification events;

(2) The credit risk transferred to the CRT SPE is transferred to one or more third parties through two or more classes of securities of different seniority issued by the CRT SPE;

(3) The performance of each class of securities issued by the CRT SPE depends on the performance of the reference pool; and

(4) The proceeds of the securities issued by the CRT SPE—

(i) Are, at the time of entry into the transaction, in the aggregate no less than the maximum obligation of the CRT SPE to the Enterprise; and

(ii) Are invested in financial collateral that secures the payment obligations of the CRT SPE to the Enterprise.

*Eligible guarantee* means a guarantee that:

(1) Is written;

(2) Is either:

(i) Unconditional, or

(ii) A contingent obligation of the U.S. government or its agencies, the enforceability of which is dependent upon some affirmative action on the part of the beneficiary of the guarantee or a third party (for example, meeting servicing requirements);

(3) Covers all or a pro rata portion of all contractual payments of the obligated party on the reference exposure;

(4) Gives the beneficiary a direct claim against the protection provider;

(5) Is not unilaterally cancelable by the protection provider for reasons other than the breach of the contract by the beneficiary;

(6) Except for a guarantee by a sovereign, is legally enforceable against the protection provider in a jurisdiction where the protection provider has sufficient assets against which a judgment may be attached and enforced;

(7) Requires the protection provider to make payment to the beneficiary on the occurrence of a default (as defined in the guarantee) of the obligated party on the reference exposure in a timely manner without the beneficiary first having to take legal actions to pursue the obligor for payment;

(8) Does not increase the beneficiary's cost of credit protection on the guarantee in response to deterioration in the credit quality of the reference exposure;

(9) Is not provided by an affiliate of the Enterprise; and

(10) Is provided by an eligible guarantor.

*Eligible guarantor* means:

(1) A sovereign, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Commission, a Federal Home Loan Bank, Federal Agricultural Mortgage Corporation (Farmer Mac), the European Stability Mechanism, the European Financial Stability Facility, a multilateral development bank (MDB), a depository institution, a bank holding company as defined in section 2 of the Bank Holding Company Act of 1956, as amended (12 U.S.C. 1841 *et seq.*), a savings and loan holding company, a credit union, a foreign bank, or a qualifying central counterparty; or

(2) An entity (other than a special purpose entity):

(i) That at the time the guarantee is issued or anytime thereafter, has issued and outstanding an unsecured debt security without credit enhancement that is investment grade;

(ii) Whose creditworthiness is not positively correlated with the credit risk of the exposures for which it has provided guarantees; and

(iii) That is not an insurance company engaged predominately in the business of providing credit protection (such as a monoline bond insurer or re-insurer).

*Eligible margin loan* means:

(1) An extension of credit where:

(i) The extension of credit is collateralized exclusively by liquid and readily marketable debt or equity securities, or gold;

(ii) The collateral is marked-to-fair value daily, and the transaction is subject to daily margin maintenance requirements; and

(iii) The extension of credit is conducted under an agreement that provides the Enterprise the right to accelerate and terminate the extension of credit and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, conservatorship, or similar proceeding, of the counterparty, provided that, in any such case:

(A) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:

(*1*) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs,[1] or laws of foreign jurisdictions that are substantially similar to the U.S. laws referenced in this paragraph (1)(iii)(A)(*1*) in order to facilitate the orderly resolution of the defaulting counterparty; or

(*2*) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (1)(iii)(A)(*1*) of this definition; and

(B) The agreement may limit the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set-off collateral promptly upon an event of default of the counterparty to the extent necessary for the counterparty to comply with applicable law.

(2) In order to recognize an exposure as an eligible margin loan for purposes of this subpart, an Enterprise must comply with the requirements of § 1240.3(b) with respect to that exposure.

*Eligible multifamily lender risk share* means a credit risk transfer under which an entity that is approved by an Enterprise to sell multifamily mortgage exposures to an Enterprise retains credit risk of one or more multifamily mortgage exposures on substantially the same terms and conditions as in effect

[1] This requirement is met where all transactions under the agreement are (i) executed under U.S. law and (ii) constitute ''securities contracts'' under section 555 of the Bankruptcy Code (11 U.S.C. 555), qualified financial contracts under section 11(e)(8) of the Federal Deposit Insurance Act, or netting contracts between or among financial institutions.

on June 30, 2020 for Fannie Mae's credit risk transfers known as the ''Delegated Underwriting and Servicing program''.

*Eligible reinsurance risk transfer* means a credit risk transfer in which the Enterprise transfers the credit risk on one or more mortgage exposures to an insurance company or reinsurer that has been approved by the Enterprise.

*Eligible senior-subordinated structure* means a traditional securitization in which the underlying exposures are mortgage exposures of the Enterprise and the Enterprise guarantees the timely payment of principal and interest on one or more senior tranches.

*Eligible single-family lender risk share* means any partial or full recourse agreement or similar agreement (other than a participation agreement) between an Enterprise and the seller or servicer of a single-family mortgage exposure pursuant to which the seller or servicer agrees either to reimburse the Enterprise for losses arising out of the default of the single-family mortgage exposure or to repurchase or replace the single-family mortgage exposure in the event of the default of the single-family mortgage exposure.

*Equity exposure* means:

(1) A security or instrument (whether voting or non-voting and whether certificated or not certificated) that represents a direct or an indirect ownership interest in, and is a residual claim on, the assets and income of a company, unless:

(i) The issuing company is consolidated with the Enterprise under GAAP;

(ii) The Enterprise is required to deduct the ownership interest from tier 1 or tier 2 capital under this part;

(iii) The ownership interest incorporates a payment or other similar obligation on the part of the issuing company (such as an obligation to make periodic payments); or

(iv) The ownership interest is a securitization exposure;

(2) A security or instrument that is mandatorily convertible into a security or instrument described in paragraph (1) of this definition;

(3) An option or warrant that is exercisable for a security or instrument described in paragraph (1) of this definition; or

(4) Any other security or instrument (other than a securitization exposure) to the extent the return on the security or instrument is based on the performance of a security or instrument described in paragraph (1) of this definition.

*ERISA* means the Employee Retirement Income and Security Act of 1974 (29 U.S.C. 1001 *et seq.*).

*Executive officer* means a person who holds the title or, without regard to title, salary, or compensation, performs the function of one or more of the following positions: President, chief executive officer, executive chairman, chief operating officer, chief financial officer, chief investment officer, chief legal officer, chief lending officer, chief risk officer, or head of a major business line, and other staff that the board of directors of the Enterprise deems to have equivalent responsibility.

*Exposure amount* means:

(1) For the on-balance sheet component of an exposure (including a mortgage exposure); an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the Enterprise determines the exposure amount under § 1240.39; a cleared transaction; a default fund contribution; or a securitization exposure), the Enterprise's carrying value of the exposure.

(2) For the off-balance sheet component of an exposure (other than an OTC derivative contract; a repo-style transaction or an eligible margin loan for which the Enterprise calculates the exposure amount under § 1240.39; a cleared transaction; a default fund contribution; or a securitization exposure), the notional amount of the off-balance sheet component multiplied by the appropriate credit conversion factor (CCF) in § 1240.35.

(3) For an exposure that is an OTC derivative contract, the exposure amount determined under § 1240.36.

(4) For an exposure that is a cleared transaction, the exposure amount determined under § 1240.37.

(5) For an exposure that is an eligible margin loan or repo-style transaction for which the Enterprise calculates the exposure amount as provided in § 1240.39, the exposure amount determined under § 1240.39.

(6) For an exposure that is a securitization exposure, the exposure amount determined under § 1240.42.

*Federal Deposit Insurance Act* means the Federal Deposit Insurance Act (12 U.S.C. 1813).

*Federal Reserve Board* means the Board of Governors of the Federal Reserve System.

*Financial collateral* means collateral:

(1) In the form of:

(i) Cash on deposit with the Enterprise (including cash held for the Enterprise by a third-party custodian or trustee);

(ii) Gold bullion;

(iii) Long-term debt securities that are not resecuritization exposures and that are investment grade;

(iv) Short-term debt instruments that are not resecuritization exposures and that are investment grade;

(v) Equity securities that are publicly traded;

(vi) Convertible bonds that are publicly traded; or

(vii) Money market fund shares and other mutual fund shares if a price for the shares is publicly quoted daily; and

(2) In which the Enterprise has a perfected, first-priority security interest or, outside of the United States, the legal equivalent thereof (with the exception of cash on deposit and notwithstanding the prior security interest of any custodial agent or any priority security interest granted to a CCP in connection with collateral posted to that CCP).

*Gain-on-sale* means an increase in the equity capital of an Enterprise resulting from a traditional securitization other than an increase in equity capital resulting from:

(1) The Enterprise's receipt of cash in connection with the securitization; or

(2) The reporting of a mortgage servicing asset.

*General obligation* means a bond or similar obligation that is backed by the full faith and credit of a public sector entity (PSE).

*Government-sponsored enterprise (GSE)* means an entity established or chartered by the U.S. government to serve public purposes specified by the U.S. Congress but whose debt obligations are not explicitly guaranteed by the full faith and credit of the U.S. government, including an Enterprise.

*Guarantee* means a financial guarantee, letter of credit, insurance, or other similar financial instrument (other than a credit derivative) that allows one party (beneficiary) to transfer the credit risk of one or more specific exposures (reference exposure) to another party (protection provider).

*Investment grade* means that the entity to which the Enterprise is exposed through a loan or security, or the reference entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure. Such an entity or reference entity has adequate capacity to meet financial commitments if the risk of its default is low and the full and timely repayment of principal and interest is expected.

*Minimum transfer amount* means the smallest amount of variation margin that may be transferred between counterparties to a netting set pursuant to the variation margin agreement.

*Mortgage-backed security (MBS)* means a security collateralized by a pool or pools of mortgage exposures,

including any pass-through or collateralized mortgage obligation.

*Mortgage exposure* means either a single-family mortgage exposure or a multifamily mortgage exposure.

*Multifamily mortgage exposure* means an exposure that is secured by a first or subsequent lien on a property with five or more residential units.

*Mortgage servicing assets (MSAs)* means the contractual rights owned by an Enterprise to service for a fee mortgage loans that are owned by others.

*Multilateral development bank (MDB)* means the International Bank for Reconstruction and Development, the Multilateral Investment Guarantee Agency, the International Finance Corporation, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the European Investment Fund, the Nordic Investment Bank, the Caribbean Development Bank, the Islamic Development Bank, the Council of Europe Development Bank, and any other multilateral lending institution or regional development bank in which the U.S. government is a shareholder or contributing member or which FHFA determines poses comparable credit risk.

*Netting set* means a group of transactions with a single counterparty that are subject to a qualifying master netting agreement or a qualifying cross-product master netting agreement. For derivative contracts, netting set also includes a single derivative contract between an Enterprise and a single counterparty. For purposes of calculating risk-based capital requirements using the internal models methodology in subpart E of this part, this term does not cover a transaction:

(1) That is not subject to such a master netting agreement; or

(2) Where the Enterprise has identified specific wrong-way risk.

*Non-guaranteed separate account* means a separate account where the insurance company:

(1) Does not contractually guarantee either a minimum return or account value to the contract holder; and

(2) Is not required to hold reserves (in the general account) pursuant to its contractual obligations to a policyholder.

*Nth-to-default credit derivative* means a credit derivative that provides credit protection only for the nth-defaulting reference exposure in a group of reference exposures.

*Original maturity* with respect to an off-balance sheet commitment means the length of time between the date a commitment is issued and:

(1) For a commitment that is not subject to extension or renewal, the stated expiration date of the commitment; or

(2) For a commitment that is subject to extension or renewal, the earliest date on which the Enterprise can, at its option, unconditionally cancel the commitment.

*Originating Enterprise,* with respect to a securitization, means an Enterprise that directly or indirectly originated or securitized the underlying exposures included in the securitization.

*Over-the-counter (OTC) derivative contract* means a derivative contract that is not a cleared transaction. An OTC derivative includes a transaction:

(1) Between an Enterprise that is a clearing member and a counterparty where the Enterprise is acting as a financial intermediary and enters into a cleared transaction with a CCP that offsets the transaction with the counterparty; or

(2) In which an Enterprise that is a clearing member provides a CCP a guarantee on the performance of the counterparty to the transaction.

*Participation agreement* is defined in § 1240.33(a).

*Protection amount (P)* means, with respect to an exposure hedged by an eligible guarantee or eligible credit derivative, the effective notional amount of the guarantee or credit derivative, reduced to reflect any currency mismatch, maturity mismatch, or lack of restructuring coverage (as provided in § 1240.38).

*Publicly-traded* means traded on:

(1) Any exchange registered with the SEC as a national securities exchange under section 6 of the Securities Exchange Act; or

(2) Any non-U.S.-based securities exchange that:

(i) Is registered with, or approved by, a national securities regulatory authority; and

(ii) Provides a liquid, two-way market for the instrument in question.

*Public sector entity (PSE)* means a state, local authority, or other governmental subdivision below the sovereign level.

*Qualifying central counterparty (QCCP)* means a central counterparty that:

(1)(i) Is a designated financial market utility (FMU) under Title VIII of the Dodd-Frank Act;

(ii) If not located in the United States, is regulated and supervised in a manner equivalent to a designated FMU; or

(iii) Meets the following standards:

(A) The central counterparty requires all parties to contracts cleared by the counterparty to be fully collateralized on a daily basis;

(B) The Enterprise demonstrates to the satisfaction of FHFA that the central counterparty:

(*1*) Is in sound financial condition;

(*2*) Is subject to supervision by the Federal Reserve Board, the CFTC, or the Securities Exchange Commission (SEC), or, if the central counterparty is not located in the United States, is subject to effective oversight by a national supervisory authority in its home country; and

(*3*) Meets or exceeds the risk-management standards for central counterparties set forth in regulations established by the Federal Reserve Board, the CFTC, or the SEC under Title VII or Title VIII of the Dodd-Frank Act; or if the central counterparty is not located in the United States, meets or exceeds similar risk-management standards established under the law of its home country that are consistent with international standards for central counterparty risk management as established by the relevant standard setting body of the Bank of International Settlements; and

(2)(i) Provides the Enterprise with the central counterparty's hypothetical capital requirement or the information necessary to calculate such hypothetical capital requirement, and other information the Enterprise is required to obtain under § 1240.37(d)(3);

(ii) Makes available to FHFA and the CCP's regulator the information described in paragraph (2)(i) of this definition; and

(iii) Has not otherwise been determined by FHFA to not be a QCCP due to its financial condition, risk profile, failure to meet supervisory risk management standards, or other weaknesses or supervisory concerns that are inconsistent with the risk weight assigned to qualifying central counterparties under § 1240.37.

(3) A QCCP that fails to meet the requirements of a QCCP in the future may still be treated as a QCCP under the conditions specified in § 1240.3(f).

*Qualifying master netting agreement* means a written, legally enforceable agreement provided that:

(1) The agreement creates a single legal obligation for all individual transactions covered by the agreement upon an event of default following any stay permitted by paragraph (2) of this definition, including upon an event of receivership, conservatorship, insolvency, liquidation, or similar proceeding, of the counterparty;

(2) The agreement provides the Enterprise the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, conservatorship, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case:

(i) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:

(A) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar to the U.S. laws referenced in this paragraph (2)(i)(A) in order to facilitate the orderly resolution of the defaulting counterparty; or

(B) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (2)(i)(A) of this definition; and

(ii) The agreement may limit the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set-off collateral promptly upon an event of default of the counterparty to the extent necessary for the counterparty to comply with applicable law.

*Repo-style transaction* means a repurchase or reverse repurchase transaction, or a securities borrowing or securities lending transaction, including a transaction in which the Enterprise acts as agent for a customer and indemnifies the customer against loss, provided that:

(1) The transaction is based solely on liquid and readily marketable securities, cash, or gold;

(2) The transaction is marked-to-fair value daily and subject to daily margin maintenance requirements;

(3)(i) The transaction is a ''securities contract'' or ''repurchase agreement'' under section 555 or 559, respectively, of the Bankruptcy Code (11 U.S.C. 555 or 559), a qualified financial contract under section 11(e)(8) of the Federal Deposit Insurance Act, or a netting contract between or among financial institutions; or

(ii) If the transaction does not meet the criteria set forth in paragraph (3)(i) of this definition, then either:

(A) The transaction is executed under an agreement that provides the Enterprise the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set-off collateral promptly upon an event of default, including upon an event of receivership, insolvency, liquidation, or similar proceeding, of the counterparty, provided that, in any such case:

(*1*) Any exercise of rights under the agreement will not be stayed or avoided under applicable law in the relevant jurisdictions, other than:

(*i*) In receivership, conservatorship, or resolution under the Federal Deposit Insurance Act, Title II of the Dodd-Frank Act, or under any similar insolvency law applicable to GSEs, or laws of foreign jurisdictions that are substantially similar to the U.S. laws referenced in this paragraph (3)(ii)(A)(*1*)(*i*) in order to facilitate the orderly resolution of the defaulting counterparty;

(*ii*) Where the agreement is subject by its terms to, or incorporates, any of the laws referenced in paragraph (3)(ii)(A)(*1*)(*i*) of this definition; and

(*2*) The agreement may limit the right to accelerate, terminate, and close-out on a net basis all transactions under the agreement and to liquidate or set-off collateral promptly upon an event of default of the counterparty to the extent necessary for the counterparty to comply with applicable law; or

(B) The transaction is:

(*1*) Either overnight or unconditionally cancelable at any time by the Enterprise; and

(*2*) Executed under an agreement that provides the Enterprise the right to accelerate, terminate, and close-out the transaction on a net basis and to liquidate or set-off collateral promptly upon an event of counterparty default; and

(*3*) In order to recognize an exposure as a repo-style transaction for purposes of this subpart, an Enterprise must comply with the requirements of § 1240.3(e) with respect to that exposure.

*Resecuritization* means a securitization which has more than one underlying exposure and in which one or more of the underlying exposures is a securitization exposure.

*Resecuritization exposure* means:

(1) An on- or off-balance sheet exposure to a resecuritization; or

(2) An exposure that directly or indirectly references a resecuritization exposure.

*Retained CRT exposure* means, with respect to an Enterprise, any exposure that arises from a credit risk transfer of the Enterprise and has been retained by the Enterprise since the issuance or entry into the credit risk transfer by the Enterprise.

*Revenue obligation* means a bond or similar obligation that is an obligation of a PSE, but which the PSE is committed to repay with revenues from the specific project financed rather than general tax funds.

*Securities and Exchange Commission (SEC)* means the U.S. Securities and Exchange Commission.

*Securities Exchange Act* means the Securities Exchange Act of 1934 (15 U.S.C. 78).

*Securitization exposure* means:

(1) An on-balance sheet or off-balance sheet credit exposure that arises from a traditional securitization or synthetic securitization (including a resecuritization);

(2) An exposure that directly or indirectly references a securitization exposure described in paragraph (1) of this definition;

(3) A retained CRT exposure; or

(4) An acquired CRT exposure.

*Securitization special purpose entity (securitization SPE)* means a corporation, trust, or other entity organized for the specific purpose of holding underlying exposures of a securitization, the activities of which are limited to those appropriate to accomplish this purpose, and the structure of which is intended to isolate the underlying exposures held by the entity from the credit risk of the seller of the underlying exposures to the entity.

*Separate account* means a legally segregated pool of assets owned and held by an insurance company and maintained separately from the insurance company's general account assets for the benefit of an individual contract holder. To be a separate account:

(1) The account must be legally recognized as a separate account under applicable law;

(2) The assets in the account must be insulated from general liabilities of the insurance company under applicable law in the event of the insurance company's insolvency;

(3) The insurance company must invest the funds within the account as directed by the contract holder in designated investment alternatives or in accordance with specific investment objectives or policies; and

(4) All investment gains and losses, net of contract fees and assessments, must be passed through to the contract holder, provided that the contract may specify conditions under which there may be a minimum guarantee but must not include contract terms that limit the maximum investment return available to the policyholder.

*Servicer cash advance facility* means a facility under which the servicer of the underlying exposures of a securitization may advance cash to ensure an

uninterrupted flow of payments to investors in the securitization, including advances made to cover foreclosure costs or other expenses to facilitate the timely collection of the underlying exposures.

*Single-family mortgage exposure* means an exposure that is secured by a first or subsequent lien on a property with one to four residential units.

*Sovereign* means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government.

*Sovereign default* means noncompliance by a sovereign with its external debt service obligations or the inability or unwillingness of a sovereign government to service an existing loan according to its original terms, as evidenced by failure to pay principal and interest timely and fully, arrearages, or restructuring.

*Sovereign exposure* means:

(1) A direct exposure to a sovereign; or

(2) An exposure directly and unconditionally backed by the full faith and credit of a sovereign.

*Specific wrong-way risk* means wrong-way risk that arises when either:

(1) The counterparty and issuer of the collateral supporting the transaction; or

(2) The counterparty and the reference asset of the transaction, are affiliates or are the same entity.

*Standardized market risk-weighted assets* means the standardized measure for spread risk calculated under § 1240.204(a) multiplied by 12.5.

*Standardized total risk-weighted assets* means:

(1) The sum of—

(i) Total risk-weighted assets for general credit risk as calculated under § 1240.31;

(ii) Total risk-weighted assets for cleared transactions and default fund contributions as calculated under § 1240.37;

(iii) Total risk-weighted assets for unsettled transactions as calculated under § 1240.40;

(iv) Total risk-weighted assets for retained CRT exposures, acquired CRT exposures, and other securitization exposures as calculated under § 1240.42;

(v) Total risk-weighted assets for equity exposures as calculated under § 1240.52;

(vi) Risk-weighted assets for operational risk, as calculated under § 1240.162(c) or § 1240.162(d), as applicable; and

(vii) Standardized market risk-weighted assets; minus

(2) Excess eligible credit reserves not included in the Enterprise's tier 2 capital.

*Subsidiary* means, with respect to a company, a company controlled by that company.

*Synthetic securitization* means a transaction in which:

(1) All or a portion of the credit risk of one or more underlying exposures is retained or transferred to one or more third parties through the use of one or more credit derivatives or guarantees (other than a guarantee that transfers only the credit risk of an individual mortgage exposure or other retail exposure);

(2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;

(3) Performance of the securitization exposures depends upon the performance of the underlying exposures; and

(4) All or substantially all of the underlying exposures are financial exposures (such as mortgage exposures, loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities).

*Tier 1 capital* means the sum of common equity tier 1 capital and additional tier 1 capital.

*Tier 2 capital* is defined in § 1240.20(d).

*Total capital* has the meaning given in section 1303(23) of the Safety and Soundness Act (12 U.S.C. 4502(23)).

*Traditional securitization* means a transaction in which:

(1) 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;

(2) The credit risk associated with the underlying exposures has been separated into at least two tranches reflecting different levels of seniority;

(3) Performance of the securitization exposures depends upon the performance of the underlying exposures;

(4) All or substantially all of the underlying exposures are financial exposures (such as mortgage exposures, loans, commitments, credit derivatives, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities);

(5) The underlying exposures are not owned by an operating company;

(6) The underlying exposures are not owned by a small business investment company defined in section 302 of the Small Business Investment Act;

(7) The underlying exposures are not owned by a firm an investment in which qualifies as a community development investment under section 24 (Eleventh) of the National Bank Act;

(8) FHFA may determine that a transaction in which the underlying exposures are owned by an investment firm that exercises substantially unfettered control over the size and composition of its assets, liabilities, and off-balance sheet exposures is not a traditional securitization based on the transaction's leverage, risk profile, or economic substance;

(9) FHFA may deem a transaction that meets the definition of a traditional securitization, notwithstanding paragraph (5), (6), or (7) of this definition, to be a traditional securitization based on the transaction's leverage, risk profile, or economic substance; and

(10) The transaction is not:

(i) An investment fund;

(ii) A collective investment fund held by a State member bank as fiduciary and, consistent with local law, invested collectively—

(A) In a common trust fund maintained by such bank exclusively for the collective investment and reinvestment of monies contributed thereto by the bank in its capacity as trustee, executor, administrator, guardian, or custodian under the Uniform Gifts to Minors Act; or

(B) In a fund consisting solely of assets of retirement, pension, profit sharing, stock bonus or similar trusts which are exempt from Federal income taxation under the Internal Revenue Code (26 U.S.C.).

(iii) An employee benefit plan (as defined in 29 U.S.C. 1002(3)), a governmental plan (as defined in 29 U.S.C. 1002(32)) that complies with the tax deferral qualification requirements provided in the Internal Revenue Code;

(iv) A synthetic exposure to the capital of a financial institution to the extent deducted from capital under § 1240.22; or

(v) Registered with the SEC under the Investment Company Act of 1940 (15 U.S.C. 80a–1 *et seq.*) or foreign equivalents thereof.

*Tranche* means all securitization exposures associated with a securitization that have the same seniority level.

*Transition order* means an order issued by the Director under section 1371 of the Safety and Soundness Act (12 U.S.C. 4631), a plan required by the Director under section 1313B of the Safety and Soundness Act (12 U.S.C. 4513b), or an order, agreement, or similar arrangement of FHFA that, in any case, provides for a compliance date for a requirement of this part that is later

than the compliance date for the requirement specified under § 1240.4.

*Unconditionally cancelable* means with respect to a commitment, that an Enterprise may, at any time, with or without cause, refuse to extend credit under the commitment (to the extent permitted under applicable law).

*Underlying exposures* means one or more exposures that have been securitized in a securitization transaction.

*Variation margin agreement* means an agreement to collect or post variation margin.

*Variation margin threshold* means the amount of credit exposure of an Enterprise to its counterparty that, if exceeded, would require the counterparty to post variation margin to the Enterprise pursuant to the variation margin agreement.

*Wrong-way risk* means the risk that arises when an exposure to a particular counterparty is positively correlated with the probability of default of such counterparty itself.

**§ 1240.3 Operational requirements for counterparty credit risk.**

For purposes of calculating risk-weighted assets under subpart D of this part:

(a) *Cleared transaction.* In order to recognize certain exposures as cleared transactions pursuant to paragraphs (1)(ii), (iii), or (iv) of the definition of ''cleared transaction'' in § 1240.2, the exposures must meet the applicable requirements set forth in this paragraph (a).

(1) The offsetting transaction must be identified by the CCP as a transaction for the clearing member client.

(2) The collateral supporting the transaction must be held in a manner that prevents the Enterprise from facing any loss due to an event of default, including from a liquidation, receivership, insolvency, or similar proceeding of either the clearing member or the clearing member's other clients.

(3) The Enterprise must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from a default or receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the arrangements of paragraph (a)(2) of this section to be legal, valid, binding and enforceable under the law of the relevant jurisdictions.

(4) The offsetting transaction with a clearing member must be transferable under the transaction documents and applicable laws in the relevant jurisdiction(s) to another clearing member should the clearing member default, become insolvent, or enter receivership, insolvency, liquidation, or similar proceedings.

(b) *Eligible margin loan.* In order to recognize an exposure as an eligible margin loan as defined in § 1240.2, an Enterprise must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:

(1) Meets the requirements of paragraph (1)(iii) of the definition of ''eligible margin loan'' in § 1240.2, and

(2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

(c) [Reserved]

(d) *Qualifying master netting agreement.* In order to recognize an agreement as a qualifying master netting agreement as defined in § 1240.2, an Enterprise must:

(1) Conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that:

(i) The agreement meets the requirements of paragraph (2) of the definition of ''qualifying master netting agreement'' in § 1240.2; and

(ii) In the event of a legal challenge (including one resulting from default or from receivership, insolvency, liquidation, or similar proceeding) the relevant court and administrative authorities would find the agreement to be legal, valid, binding, and enforceable under the law of the relevant jurisdictions; and

(2) Establish and maintain written procedures to monitor possible changes in relevant law and to ensure that the agreement continues to satisfy the requirements of the definition of ''qualifying master netting agreement'' in § 1240.2.

(e) *Repo-style transaction.* In order to recognize an exposure as a repo-style transaction as defined in § 1240.2, an Enterprise must conduct sufficient legal review to conclude with a well-founded basis (and maintain sufficient written documentation of that legal review) that the agreement underlying the exposure:

(1) Meets the requirements of paragraph (3) of the definition of ''repo-style transaction'' in § 1240.2, and

(2) Is legal, valid, binding, and enforceable under applicable law in the relevant jurisdictions.

(f) *Failure of a QCCP to satisfy the rule's requirements.* If an Enterprise determines that a CCP ceases to be a QCCP due to the failure of the CCP to satisfy one or more of the requirements set forth in paragraphs (2)(i) through (iii) of the definition of a ''QCCP'' in § 1240.2, the Enterprise may continue to treat the CCP as a QCCP for up to three months following the determination. If the CCP fails to remedy the relevant deficiency within three months after the initial determination, or the CCP fails to satisfy the requirements set forth in paragraphs (2)(i) through (iii) of the definition of a ''QCCP'' continuously for a three-month period after remedying the relevant deficiency, an Enterprise may not treat the CCP as a QCCP for the purposes of this part until after the Enterprise has determined that the CCP has satisfied the requirements in paragraphs (2)(i) through (iii) of the definition of a ''QCCP'' for three continuous months.

**§ 1240.4 Transition.**

(a) *Compliance dates.* An Enterprise will not be subject to any requirement under this part until the compliance date for the requirement under this section.

(b) *Reporting requirements.* The compliance date will be January 1, 2022, for the reporting requirements under any of the following:

(1) Any requirement under § 1240.1(f);

(2) Any requirement under subpart C, D, or G of this part;

(3) Any requirement under § 1240.162(d); and

(4) Any requirement to calculate the standardized measure for spread risk under § 1240.204.

(c) *Advanced approaches requirements.* Any requirement under subpart E or F (other than § 1240.162(d) or any requirement to calculate the standardized measure for spread risk under § 1240.204) will have a compliance date of the later of January 1, 2025 and any later compliance date for that requirement provided in a transition order applicable to the Enterprise.

(d) *Capital requirements and buffers*—(1) *Requirements.* The compliance date of any requirement under § 1240.10 will be the later of:

(i) The date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of this part); and

(ii) Any later compliance date for § 1240.10 provided in a transition order applicable to the Enterprise.

(2) *Buffers.* The compliance date of any requirement under § 1240.11 will be the date of the termination of the conservatorship of the Enterprise (or, if later, the effective date of this part).

(3) *Capital restoration plan.* If a transition order of an Enterprise provides a compliance date for

§ 1240.10, the Director may determine that, for the period between the compliance date for § 1240.11 under paragraph (d)(2) of this section and any later compliance date for § 1240.10 provided in the transition order—

(i) The prescribed capital conservation buffer amount of the Enterprise will be the amount equal to the sum of—

(A) The common equity tier 1 capital that would otherwise be required under § 1240.10(d); and

(B) The prescribed capital conservation buffer amount that would otherwise apply under § 1240.11(a)(5); and

(ii) The prescribed leverage buffer amount of the Enterprise will be equal to 4.0 percent of the adjusted total assets of the Enterprise.

(4) *Prudential standard.* If the Director makes a determination under paragraph (d)(3) of this section, § 1240.11 will be a prudential standard adopted under section 1313B of the Safety and Soundness Act (12 U.S.C. 4513b) until the compliance date of § 1240.10.

## Subpart B—Capital Requirements and Buffers

### § 1240.10 Capital requirements.

(a) *Total capital.* An Enterprise must maintain total capital not less than the amount equal to 8.0 percent of the greater of:

(1) Standardized total risk-weighted assets; and

(2) Advanced approaches total risk-weighted assets.

(b) *Adjusted total capital.* An Enterprise must maintain adjusted total capital not less than the amount equal to 8.0 percent of the greater of:

(1) Standardized total risk-weighted assets; and

(2) Advanced approaches total risk-weighted assets.

(c) *Tier 1 capital.* An Enterprise must maintain tier 1 capital not less than the amount equal to 6.0 percent of the greater of:

(1) Standardized total risk-weighted assets; and

(2) Advanced approaches total risk-weighted assets.

(d) *Common equity tier 1 capital.* An Enterprise must maintain common equity tier 1 capital not less than the amount equal to 4.5 percent of the greater of:

(1) Standardized total risk-weighted assets; and

(2) Advanced approaches total risk-weighted assets.

(e) *Core capital.* An Enterprise must maintain core capital not less than the amount equal to 2.5 percent of adjusted total assets.

(f) *Leverage ratio.* An Enterprise must maintain tier 1 capital not less than the amount equal to 2.5 percent of adjusted total assets.

(g) *Capital adequacy.* (1) Notwithstanding the minimum requirements in this part, an Enterprise must maintain capital commensurate with the level and nature of all risks to which the Enterprise is exposed. The supervisory evaluation of an Enterprise's capital adequacy is based on an individual assessment of numerous factors, including the character and condition of the Enterprise's assets and its existing and prospective liabilities and other corporate responsibilities.

(2) An Enterprise must have a process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

### § 1240.11 Capital conservation buffer and leverage buffer.

(a) *Definitions.* For purposes of this section, the following definitions apply:

(1) *Capital conservation buffer.* An Enterprise's capital conservation buffer is the amount calculated under paragraph (c)(2) of this section.

(2) *Eligible retained income.* 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.

(3) *Leverage buffer.* An Enterprise's leverage buffer is the amount calculated under paragraph (d)(2) of this section.

(4) *Maximum payout ratio.* The maximum payout ratio is the percentage of eligible retained income that an Enterprise can pay out in the form of distributions and discretionary bonus payments during the current calendar quarter. The maximum payout ratio is determined under paragraph (b)(2) of this section.

(5) *Prescribed capital conservation buffer amount.* An Enterprise's prescribed capital conservation buffer amount is equal to its stress capital buffer in accordance with paragraph (a)(7) of this section plus its applicable countercyclical capital buffer amount in accordance with paragraph (e) of this section plus its applicable stability capital buffer in accordance with paragraph (f) of this section.

(6) *Prescribed leverage buffer amount.* An Enterprise's prescribed leverage buffer amount is 1.5 percent of the Enterprise's adjusted total assets, as of the last day of the previous calendar quarter.

(7) *Stress capital buffer.* (i) Subject to paragraph (a)(7)(iii) of this section, FHFA will determine the stress capital buffer pursuant to this paragraph (a)(7).

(ii) An Enterprise's stress capital buffer is equal to the Enterprise's adjusted total assets, as of the last day of the previous calendar quarter, multiplied by the greater of:

(A) The following calculation:

(*1*) The ratio of an Enterprise's common equity tier 1 capital to adjusted total assets, as of the final quarter of the previous calendar year, unless otherwise determined by FHFA; minus

(*2*) The lowest projected ratio of the Enterprise's common equity tier 1 capital to adjusted total assets in any quarter of the planning horizon under a supervisory stress test; plus

(*3*) The ratio of:

(*i*) The sum of the Enterprise's planned common stock dividends (expressed as a dollar amount) for each of the quarters of the planning horizon of the supervisory stress test, unless otherwise determined by FHFA; to

(*ii*) The adjusted total assets of the Enterprise in the quarter in which the Enterprise had its lowest projected ratio of common equity tier 1 capital to adjusted total assets in any quarter of the planning horizon under the supervisory stress test; and

(B) 0.75 percent.

(iii) Notwithstanding anything to the contrary in paragraph (a)(7)(ii) of this section, if FHFA does not determine the stress capital buffer for an Enterprise under this paragraph (a)(7), the Enterprise's stress capital buffer is equal to 0.75 percent of the Enterprise's adjusted total assets, as of the last day of the previous calendar quarter.

(b) *Maximum payout amount*—(1) *Limits on distributions and discretionary bonus payments.* An Enterprise shall not make distributions or discretionary bonus payments or create an obligation to make such distributions or payments during the current calendar quarter that, in the aggregate, exceed the amount equal to the Enterprise's eligible retained income for the calendar quarter, multiplied by its maximum payout ratio.

(2) *Maximum payout ratio.* The maximum payout ratio of an Enterprise is the lowest of the payout ratios determined by its capital conservation buffer and its leverage buffer, as set forth on Table 1 to paragraph (b)(5) of this section.

(3) *No maximum payout amount limitation.* An Enterprise is not subject

to a restriction under paragraph (b)(1) of this section if it has:

(i) A capital conservation buffer that is greater than its prescribed capital conservation buffer amount; and

(ii) A leverage buffer that is greater than its prescribed leverage buffer amount.

(4) *Negative eligible retained income.* An Enterprise may not make distributions or discretionary bonus payments during the current calendar quarter if:

(i) The eligible retained income of the Enterprise is negative; and

(ii) Either:

(A) The capital conservation buffer of the Enterprise was less than its stress capital buffer; or

(B) The leverage buffer of the Enterprise was less than its prescribed leverage buffer amount.

(5) *Prior approval.* Notwithstanding the limitations in paragraphs (b)(1) through (3) of this section, FHFA may permit an Enterprise to make a distribution or discretionary bonus payment upon a request of the Enterprise, if FHFA determines that the distribution or discretionary bonus payment would not be contrary to the purposes of this section or to the safety and soundness of the Enterprise. In making such a determination, FHFA will consider the nature and extent of the request and the particular circumstances giving rise to the request.

**TABLE 1 TO PARAGRAPH (b)(5): CALCULATION OF MAXIMUM PAYOUT RATIO**

| **Capital buffer**[1] | **Maximum payout ratio** |
|---|---|
| Greater than or equal to the Enterprise's prescribed buffer amount.[2] | No payout ratio limitation applies |
| Less than the Enterprise's prescribed buffer amount, and greater than or equal to 75 percent of the Enterprise's prescribed buffer amount. | 60 percent |
| Less than 75 percent of the Enterprise's prescribed buffer amount, and greater than or equal to 50 percent of the Enterprise's prescribed buffer amount. | 40 percent |
| Less than 50 percent of the Enterprise's prescribed buffer amount, and greater than or equal to 25 percent of the Enterprise's prescribed buffer amount. | 20 percent |
| Less than 25 percent of the Enterprise's prescribed buffer amount. | 0 percent |

[1] An Enterprise's "capital buffer" means, as applicable, its capital conservation buffer or its leverage buffer.

[2] An Enterprise's "prescribed buffer amount" means, as applicable, its prescribed capital conservation buffer amount or its prescribed leverage buffer amount.

(c) *Capital conservation buffer*—(1) *Composition of the capital conservation buffer.* The capital conservation buffer is composed solely of common equity tier 1 capital.

(2) *Calculation of capital conservation buffer.* (i) An Enterprise's capital conservation buffer is equal to the lowest of the following, calculated as of the last day of the previous calendar quarter:

(A) The Enterprise's adjusted total capital minus the minimum amount of adjusted total capital under § 1240.10(b);

(B) The Enterprise's tier 1 capital minus the minimum amount of tier 1 capital under § 1240.10(c); or

(C) The Enterprise's common equity tier 1 capital minus the minimum amount of common equity tier 1 capital under § 1240.10(d).

(ii) Notwithstanding paragraphs (c)(2)(i)(A) through (C) of this section, if the Enterprise's adjusted total capital, tier 1 capital, or common equity tier 1 capital is less than or equal to the Enterprise's minimum adjusted total capital, tier 1 capital, or common equity tier 1 capital, respectively, the Enterprise's capital conservation buffer is zero.

(d) *Leverage buffer*—(1) *Composition of the leverage buffer.* The leverage buffer is composed solely of tier 1 capital.

(2) *Calculation of the leverage buffer.* (i) An Enterprise's leverage buffer is equal to the Enterprise's tier 1 capital minus the minimum amount of tier 1 capital under § 1240.10(f), calculated as of the last day of the previous calendar quarter.

(ii) Notwithstanding paragraph (d)(2)(i) of this section, if the Enterprise's tier 1 capital is less than or equal to the minimum amount of tier 1 capital under § 1240.10(d), the Enterprise's leverage buffer is zero.

(e) *Countercyclical capital buffer amount*—(1) *Composition of the countercyclical capital buffer amount.* The countercyclical capital buffer amount is composed solely of common equity tier 1 capital.

(2) *Amount*—(i) *Initial countercyclical capital buffer.* The initial countercyclical capital buffer amount is zero.

(ii) *Adjustment of the countercyclical capital buffer amount.* FHFA will adjust the countercyclical capital buffer amount in accordance with applicable law.

(iii) *Range of countercyclical capital buffer amount.* FHFA will adjust the countercyclical capital buffer amount between zero percent and 0.75 percent of adjusted total assets.

(iv) *Adjustment determination.* FHFA will base its decision to adjust the countercyclical capital buffer amount under this section on a range of macroeconomic, financial, and

supervisory information indicating an increase in systemic risk, including the ratio of credit to gross domestic product, a variety of asset prices, other factors indicative of relative credit and liquidity expansion or contraction, funding spreads, credit condition surveys, indices based on credit default swap spreads, options implied volatility, and measures of systemic risk.

(3) *Effective date of adjusted countercyclical capital buffer amount*—(i) *Increase adjustment.* A determination by FHFA under paragraph (e)(2)(ii) of this section to increase the countercyclical capital buffer amount will be effective 12 months from the date of announcement, unless FHFA establishes an earlier effective date and includes a statement articulating the reasons for the earlier effective date.

(ii) *Decrease adjustment.* A determination by FHFA to decrease the established countercyclical capital buffer amount under paragraph (e)(2)(ii) of this section will be effective on the day following announcement of the final determination or the earliest date permissible under applicable law or regulation, whichever is later.

(iii) *Twelve month sunset.* The countercyclical capital buffer amount will return to zero percent 12 months after the effective date that the adjusted countercyclical capital buffer amount is announced, unless FHFA announces a decision to maintain the adjusted countercyclical capital buffer amount or adjust it again before the expiration of the 12-month period.

(f) *Stability capital buffer.* An Enterprise must use its stability capital buffer calculated in accordance with subpart G of this part for purposes of determining its maximum payout ratio under Table 1 to paragraph (b)(5) of this section.

## Subpart C—Definition of Capital

### § 1240.20 Capital components and eligibility criteria for regulatory capital instruments.

(a) *Regulatory capital components.* An Enterprise's regulatory capital components are:

(1) Common equity tier 1 capital;

(2) Additional tier 1 capital;

(3) Tier 2 capital;

(4) Core capital; and

(5) Total capital.

(b) *Common equity tier 1 capital.* Common equity tier 1 capital is the sum of the common equity tier 1 capital elements in this paragraph (b), minus regulatory adjustments and deductions in § 1240.22. The common equity tier 1 capital elements are:

(1) Any common stock instruments (plus any related surplus) issued by the Enterprise, net of treasury stock, that meet all the following criteria:

(i) The instrument is paid-in, issued directly by the Enterprise, and represents the most subordinated claim in a receivership, insolvency, liquidation, or similar proceeding of the Enterprise;

(ii) The holder of the instrument is entitled to a claim on the residual assets of the Enterprise that is proportional with the holder's share of the Enterprise's issued capital after all senior claims have been satisfied in a receivership, insolvency, liquidation, or similar proceeding;

(iii) The instrument has no maturity date, can only be redeemed via discretionary repurchases with the prior approval of FHFA to the extent otherwise required by law or regulation, and does not contain any term or feature that creates an incentive to redeem;

(iv) The Enterprise did not create at issuance of the instrument through any action or communication an expectation that it will buy back, cancel, or redeem the instrument, and the instrument does not include any term or feature that might give rise to such an expectation;

(v) Any cash dividend payments on the instrument are paid out of the Enterprise's net income, retained earnings, or surplus related to common stock, and are not subject to a limit imposed by the contractual terms governing the instrument.

(vi) The Enterprise has full discretion at all times to refrain from paying any dividends and making any other distributions on the instrument without triggering an event of default, a requirement to make a payment-in-kind, or an imposition of any other restrictions on the Enterprise;

(vii) Dividend payments and any other distributions on the instrument may be paid only after all legal and contractual obligations of the Enterprise have been satisfied, including payments due on more senior claims;

(viii) The holders of the instrument bear losses as they occur equally, proportionately, and simultaneously with the holders of all other common stock instruments before any losses are borne by holders of claims on the Enterprise with greater priority in a receivership, insolvency, liquidation, or similar proceeding;

(ix) The paid-in amount is classified as equity under GAAP;

(x) The Enterprise, or an entity that the Enterprise controls, did not purchase or directly or indirectly fund the purchase of the instrument;

(xi) The instrument is not secured, not covered by a guarantee of the Enterprise or of an affiliate of the Enterprise, and is not subject to any other arrangement that legally or economically enhances the seniority of the instrument;

(xii) The instrument has been issued in accordance with applicable laws and regulations; and

(xiii) The instrument is reported on the Enterprise's regulatory financial statements separately from other capital instruments.

(2) Retained earnings.

(3) Accumulated other comprehensive income (AOCI) as reported under GAAP.[1]

(4) Notwithstanding the criteria for common stock instruments referenced above, an Enterprise's common stock issued and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (b)(1)(iii), (iv), or (xi) of this section, provided that any repurchase of the stock is required solely by virtue of ERISA for an instrument of an Enterprise that is not publicly-traded. In addition, an instrument issued by an Enterprise to its employee stock ownership plan does not violate the criterion in paragraph (b)(1)(x) of this section.

(c) *Additional tier 1 capital.* Additional tier 1 capital is the sum of additional tier 1 capital elements and any related surplus, minus the regulatory adjustments and deductions in § 1240.22. Additional tier 1 capital elements are:

(1) Subject to paragraph (e)(2) of this section, instruments (plus any related surplus) that meet the following criteria:

(i) The instrument is issued and paid-in;

(ii) The instrument is subordinated to general creditors and subordinated debt holders of the Enterprise in a receivership, insolvency, liquidation, or similar proceeding;

(iii) The instrument is not secured, not covered by a guarantee of the Enterprise or of an affiliate of the Enterprise, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument;

(iv) The instrument has no maturity date and does not contain a dividend step-up or any other term or feature that creates an incentive to redeem; and

(v) If callable by its terms, the instrument may be called by the Enterprise only after a minimum of five years following issuance, except that the

[1] *See* § 1240.22 for specific adjustments related to AOCI.

terms of the instrument may allow it to be called earlier than five years upon the occurrence of a regulatory event that precludes the instrument from being included in additional tier 1 capital, a tax event, or if the issuing entity is required to register as an investment company pursuant to the Investment Company Act of 1940 (15 U.S.C. 80a–1 *et seq.*). In addition:

(A) The Enterprise must receive prior approval from FHFA to exercise a call option on the instrument.

(B) The Enterprise does not create at issuance of the instrument, through any action or communication, an expectation that the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the Enterprise must either: Replace the instrument to be called with an equal amount of instruments that meet the criteria under paragraph (b) of this section or this paragraph (c);[2] or demonstrate to the satisfaction of FHFA that following redemption, the Enterprise will continue to hold capital commensurate with its risk.

(vi) Redemption or repurchase of the instrument requires prior approval from FHFA.

(vii) The Enterprise has full discretion at all times to cancel dividends or other distributions on the instrument without triggering an event of default, a requirement to make a payment-in-kind, or an imposition of other restrictions on the Enterprise except in relation to any distributions to holders of common stock or instruments that are *pari passu* with the instrument.

(viii) Any distributions on the instrument are paid out of the Enterprise's net income, retained earnings, or surplus related to other additional tier 1 capital instruments.

(ix) The instrument does not have a credit-sensitive feature, such as a dividend rate that is reset periodically based in whole or in part on the Enterprise's credit quality, but may have a dividend rate that is adjusted periodically independent of the Enterprise's credit quality, in relation to general market interest rates or similar adjustments.

(x) The paid-in amount is classified as equity under GAAP.

(xi) The Enterprise, or an entity that the Enterprise controls, did not purchase or directly or indirectly fund the purchase of the instrument.

(xii) The instrument does not have any features that would limit or discourage additional issuance of capital by the Enterprise, such as provisions that require the Enterprise to compensate holders of the instrument if a new instrument is issued at a lower price during a specified time frame.

(xiii) If the instrument is not issued directly by the Enterprise or by a subsidiary of the Enterprise that is an operating entity, the only asset of the issuing entity is its investment in the capital of the Enterprise, and proceeds must be immediately available without limitation to the Enterprise or to the Enterprise's top-tier holding company in a form which meets or exceeds all of the other criteria for additional tier 1 capital instruments.[3]

(xiv) The governing agreement, offering circular, or prospectus of an instrument issued after February 16, 2021 must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the Enterprise enters into a receivership, insolvency, liquidation, or similar proceeding.

(2) Notwithstanding the criteria for additional tier 1 capital instruments referenced above, an instrument issued by an Enterprise and held in trust for the benefit of its employees as part of an employee stock ownership plan does not violate any of the criteria in paragraph (c)(1)(iii) of this section, provided that any repurchase is required solely by virtue of ERISA for an instrument of an Enterprise that is not publicly-traded. In addition, an instrument issued by an Enterprise to its employee stock ownership plan does not violate the criteria in paragraphs (c)(1)(v) or (c)(1)(xi) of this section.

(d) *Tier 2 capital.* Tier 2 capital is the sum of tier 2 capital elements and any related surplus, minus the regulatory adjustments and deductions in § 1240.22. Tier 2 capital elements are:

(1) Subject to paragraph (e)(2) of this section, instruments (plus related surplus) that meet the following criteria:

(i) The instrument is issued and paid-in.

(ii) The instrument is subordinated to general creditors of the Enterprise.

(iii) The instrument is not secured, not covered by a guarantee of the Enterprise or of an affiliate of the Enterprise, and not subject to any other arrangement that legally or economically enhances the seniority of the instrument in relation to more senior claims.

(iv) The instrument has a minimum original maturity of at least five years. At the beginning of each of the last five years of the life of the instrument, the amount that is eligible to be included in tier 2 capital is reduced by 20 percent of the original amount of the instrument (net of redemptions) and is excluded from regulatory capital when the remaining maturity is less than one year. In addition, the instrument must not have any terms or features that require, or create significant incentives for, the Enterprise to redeem the instrument prior to maturity.[4]

(v) The instrument, by its terms, may be called by the Enterprise only after a minimum of five years following issuance, except that the terms of the instrument may allow it to be called sooner upon the occurrence of an event that would preclude the instrument from being included in tier 2 capital, a tax event. In addition:

(A) The Enterprise must receive the prior approval of FHFA to exercise a call option on the instrument.

(B) The Enterprise does not create at issuance, through action or communication, an expectation the call option will be exercised.

(C) Prior to exercising the call option, or immediately thereafter, the Enterprise must either: Replace any amount called with an equivalent amount of an instrument that meets the criteria for regulatory capital under this section;[5] or demonstrate to the satisfaction of FHFA that following redemption, the Enterprise would continue to hold an amount of capital that is commensurate with its risk.

(vi) The holder of the instrument must have no contractual right to accelerate payment of principal or interest on the instrument, except in the event of a receivership, insolvency, liquidation, or similar proceeding of the Enterprise.

(vii) The instrument has no credit-sensitive feature, such as a dividend or interest rate that is reset periodically based in whole or in part on the Enterprise's credit standing, but may have a dividend rate that is adjusted periodically independent of the Enterprise's credit standing, in relation to general market interest rates or similar adjustments.

(viii) The Enterprise, or an entity that the Enterprise controls, has not purchased and has not directly or indirectly funded the purchase of the instrument.

[2] Replacement can be concurrent with redemption of existing additional tier 1 capital instruments.

[3] *De minimis* assets related to the operation of the issuing entity can be disregarded for purposes of this criterion.

[4] An instrument that by its terms automatically converts into a tier 1 capital instrument prior to five years after issuance complies with the five-year maturity requirement of this criterion.

[5] An Enterprise may replace tier 2 capital instruments concurrent with the redemption of existing tier 2 capital instruments.

(ix) If the instrument is not issued directly by the Enterprise or by a subsidiary of the Enterprise that is an operating entity, the only asset of the issuing entity is its investment in the capital of the Enterprise, and proceeds must be immediately available without limitation to the Enterprise or the Enterprise's top-tier holding company in a form that meets or exceeds all the other criteria for tier 2 capital instruments under this section.[6]

(x) Redemption of the instrument prior to maturity or repurchase requires the prior approval of FHFA.

(xi) The governing agreement, offering circular, or prospectus of an instrument issued after February 16, 2021 must disclose that the holders of the instrument may be fully subordinated to interests held by the U.S. government in the event that the Enterprise enters into a receivership, insolvency, liquidation, or similar proceeding.

(2) Any eligible credit reserves that exceed expected credit losses to the extent that the excess reserve amount does not exceed 0.6 percent of credit risk-weighted assets.

(e) *FHFA approval of a capital element.* (1) An Enterprise must receive FHFA prior approval to include a capital element (as listed in this section) in its common equity tier 1 capital, additional tier 1 capital, or tier 2 capital unless the element:

(i) Was included in an Enterprise's tier 1 capital or tier 2 capital prior to June 30, 2020 and the underlying instrument may continue to be included under the criteria set forth in this section; or

(ii) Is equivalent, in terms of capital quality and ability to absorb losses with respect to all material terms, to a regulatory capital element FHFA determined may be included in regulatory capital pursuant to paragraph (e)(3) of this section.

(2) An Enterprise may not include an instrument in its additional tier 1 capital or a tier 2 capital unless FHFA has determined that the Enterprise has made appropriate provision, including in any resolution plan of the Enterprise, to ensure that the instrument would not pose a material impediment to the ability of an Enterprise to issue common stock instruments following the appointment of FHFA as conservator or receiver under the Safety and Soundness Act.

(3) After determining that a regulatory capital element may be included in an Enterprise's common equity tier 1 capital, additional tier 1 capital, or tier 2 capital, FHFA will make its decision publicly available, including a brief description of the material terms of the regulatory capital element and the rationale for the determination.

(f) *FHFA prior approval.* An Enterprise may not repurchase or redeem any common equity tier 1 capital, additional tier 1, or tier 2 capital instrument without the prior approval of FHFA to the extent such prior approval is required by paragraph (b), (c), or (d) of this section, as applicable.

### § 1240.21 [Reserved]

### § 1240.22 Regulatory capital adjustments and deductions.

(a) *Regulatory capital deductions from common equity tier 1 capital.* An Enterprise must deduct from the sum of its common equity tier 1 capital elements the items set forth in this paragraph (a):

(1) Goodwill, net of associated deferred tax liabilities (DTLs) in accordance with paragraph (e) of this section;

(2) Intangible assets, other than MSAs, net of associated DTLs in accordance with paragraph (e) of this section;

(3) Deferred tax assets (DTAs) that arise from net operating loss and tax credit carryforwards net of any related valuation allowances and net of DTLs in accordance with paragraph (e) of this section;

(4) Any gain-on-sale in connection with a securitization exposure;

(5) Any defined benefit pension fund net asset, net of any associated DTL in accordance with paragraph (e) of this section, held by the Enterprise. With the prior approval of FHFA, this deduction is not required for any defined benefit pension fund net asset to the extent the Enterprise has unrestricted and unfettered access to the assets in that fund. An Enterprise must risk weight any portion of the defined benefit pension fund asset that is not deducted under this paragraph (a) as if the Enterprise directly holds a proportional ownership share of each exposure in the defined benefit pension fund.

(6) The amount of expected credit loss that exceeds its eligible credit reserves.

(b) *Regulatory adjustments to common equity tier 1 capital.* (1) An Enterprise must adjust the sum of common equity tier 1 capital elements pursuant to the requirements set forth in this paragraph (b). Such adjustments to common equity tier 1 capital must be made net of the associated deferred tax effects.

(i) An Enterprise must deduct any accumulated net gains and add any accumulated net losses on cash flow hedges included in AOCI that relate to the hedging of items that are not recognized at fair value on the balance sheet.

(ii) An Enterprise must deduct any net gain and add any net loss related to changes in the fair value of liabilities that are due to changes in the Enterprise's own credit risk. An Enterprise must deduct the difference between its credit spread premium and the risk-free rate for derivatives that are liabilities as part of this adjustment.

(2) [Reserved]

(c) *Deductions from regulatory capital related to investments in capital instruments.*[1] An Enterprise must deduct an investment in the Enterprise's own capital instruments as follows:

(1) An Enterprise must deduct an investment in the Enterprise's own common stock instruments from its common equity tier 1 capital elements to the extent such instruments are not excluded from regulatory capital under § 1240.20(b)(1);

(2) An Enterprise must deduct an investment in the Enterprise's own additional tier 1 capital instruments from its additional tier 1 capital elements; and

(3) An Enterprise must deduct an investment in the Enterprise's own tier 2 capital instruments from its tier 2 capital elements.

(d) *Items subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds.* (1) An Enterprise must deduct from common equity tier 1 capital elements the amount of each of the items set forth in this paragraph (d) that, individually, exceeds 10 percent of the sum of the Enterprise's common equity tier 1 capital elements, less adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section (the 10 percent common equity tier 1 capital deduction threshold).

(i) DTAs arising from temporary differences that the Enterprise could not realize through net operating loss carrybacks, net of any related valuation allowances and net of DTLs, in accordance with paragraph (e) of this section. An Enterprise is not required to deduct from the sum of its common equity tier 1 capital elements DTAs (net of any related valuation allowances and net of DTLs, in accordance with paragraph (e) of this section) arising from timing differences that the Enterprise could realize through net

[6] An Enterprise may disregard *de minimis* assets related to the operation of the issuing entity for purposes of this criterion.

[1] The Enterprise must calculate amounts deducted under paragraphs (c) through (f) of this section after it calculates the amount of ALLL or AACL, as applicable, includable in tier 2 capital under § 1240.20(d).

operating loss carrybacks. The Enterprise must risk weight these assets at 100 percent.

(ii) MSAs net of associated DTLs, in accordance with paragraph (e) of this section.

(2) An Enterprise must deduct from common equity tier 1 capital elements the items listed in paragraph (d)(1) of this section that are not deducted as a result of the application of the 10 percent common equity tier 1 capital deduction threshold, and that, in aggregate, exceed 17.65 percent of the sum of the Enterprise's common equity tier 1 capital elements, minus adjustments to and deductions from common equity tier 1 capital required under paragraphs (a) through (c) of this section, minus the items listed in paragraph (d)(1) of this section (the 15 percent common equity tier 1 capital deduction threshold).[2]

(3) For purposes of calculating the amount of DTAs subject to the 10 and 15 percent common equity tier 1 capital deduction thresholds, an Enterprise may exclude DTAs and DTLs relating to adjustments made to common equity tier 1 capital under paragraph (b) of this section. An Enterprise that elects to exclude DTAs relating to adjustments under paragraph (b) of this section also must exclude DTLs and must do so consistently in all future calculations. An Enterprise may change its exclusion preference only after obtaining the prior approval of FHFA.

(e) *Netting of DTLs against assets subject to deduction.* (1) Except as described in paragraph (e)(3) of this section, netting of DTLs against assets that are subject to deduction under this section is permitted, but not required, if the following conditions are met:

(i) The DTL is associated with the asset; and

(ii) The DTL would be extinguished if the associated asset becomes impaired or is derecognized under GAAP.

(2) A DTL may only be netted against a single asset.

(3) For purposes of calculating the amount of DTAs subject to the threshold deduction in paragraph (d) of this section, the amount of DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances, and of DTAs arising from temporary differences that the Enterprise could not realize through net operating loss carrybacks, net of any related valuation allowances, may be offset by DTLs (that have not been netted against assets subject to deduction pursuant to paragraph (e)(1) of this section) subject to the conditions set forth in this paragraph (e).

(i) Only the DTAs and DTLs that relate to taxes levied by the same taxation authority and that are eligible for offsetting by that authority may be offset for purposes of this deduction.

(ii) The amount of DTLs that the Enterprise nets against DTAs that arise from net operating loss and tax credit carryforwards, net of any related valuation allowances, and against DTAs arising from temporary differences that the Enterprise could not realize through net operating loss carrybacks, net of any related valuation allowances, must be allocated in proportion to the amount of DTAs that arise from net operating loss and tax credit carryforwards (net of any related valuation allowances, but before any offsetting of DTLs) and of DTAs arising from temporary differences that the Enterprise could not realize through net operating loss carrybacks (net of any related valuation allowances, but before any offsetting of DTLs), respectively.

(4) An Enterprise must net DTLs against assets subject to deduction under this section in a consistent manner from reporting period to reporting period. An Enterprise may change its preference regarding the manner in which it nets DTLs against specific assets subject to deduction under this section only after obtaining the prior approval of FHFA.

(f) *Insufficient amounts of a specific regulatory capital component to effect deductions.* Under the corresponding deduction approach, if an Enterprise does not have a sufficient amount of a specific component of capital to effect the required deduction after completing the deductions required under paragraph (d) of this section, the Enterprise must deduct the shortfall from the next higher (that is, more subordinated) component of regulatory capital.

(g) *Treatment of assets that are deducted.* An Enterprise must exclude from standardized total risk-weighted assets and advanced approaches total risk-weighted assets any item deducted from regulatory capital under paragraphs (a), (c), and (d) of this section.

## Subpart D—Risk-Weighted Assets—Standardized Approach

### § 1240.30 Applicability.

(a) This subpart sets forth methodologies for determining risk-weighted assets for purposes of the generally applicable risk-based capital requirements for the Enterprises.

(b) This subpart is also applicable to covered positions, as defined in subpart F of this part.

### Risk-Weighted Assets for General Credit Risk

### § 1240.31 Mechanics for calculating risk-weighted assets for general credit risk.

(a) *General risk-weighting requirements.* An Enterprise must apply risk weights to its exposures as follows:

(1) An Enterprise must determine the exposure amount of each mortgage exposure, each other on-balance sheet exposure, each OTC derivative contract, and each off-balance sheet commitment, trade and transaction-related contingency, guarantee, repo-style transaction, forward agreement, or other similar transaction that is not:

(i) An unsettled transaction subject to § 1240.40;

(ii) A cleared transaction subject to § 1240.37;

(iii) A default fund contribution subject to § 1240.37;

(iv) A retained CRT exposure, acquired CRT exposure, or other securitization exposure subject to §§ 1240.41 through 1240.46; or

(v) An equity exposure (other than an equity OTC derivative contract) subject to §§ 1240.51 and 1240.52.

(2) An Enterprise must multiply each exposure amount by the risk weight appropriate to the exposure based on the exposure type or counterparty, eligible guarantor, or financial collateral to determine the risk-weighted asset amount for each exposure.

(b) *Total risk-weighted assets for general credit risk.* Total risk-weighted assets for general credit risk equals the sum of the risk-weighted asset amounts calculated under this section.

### § 1240.32 General risk weights.

(a) *Exposures to the U.S. government.* (1) Notwithstanding any other requirement in this subpart, an Enterprise must assign a zero percent risk weight to:

(i) An exposure to the U.S. government, its central bank, or a U.S. government agency; and

(ii) The portion of an exposure that is directly and unconditionally guaranteed by the U.S. government, its central bank, or a U.S. government agency. This includes a deposit or other exposure, or the portion of a deposit or other exposure, that is insured or otherwise unconditionally guaranteed by the FDIC or NCUA.

(2) An Enterprise must assign a 20 percent risk weight to the portion of an exposure that is conditionally guaranteed by the U.S. government, its central bank, or a U.S. government

[2] The amount of the items in paragraph (d) of this section that is not deducted from common equity tier 1 capital pursuant to this section must be included in the risk-weighted assets of the Enterprise and assigned a 250 percent risk weight.

agency. This includes an exposure, or the portion of an exposure, that is conditionally guaranteed by the FDIC or NCUA.

(b) *Certain supranational entities and multilateral development banks (MDBs).* An Enterprise must assign a zero percent risk weight to an exposure to the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility, or an MDB.

(c) *Exposures to GSEs.* (1) An Enterprise must assign a zero percent risk weight to any MBS guaranteed by the Enterprise (other than any retained CRT exposure).

(2) An Enterprise must assign a 20 percent risk weight to an exposure to another GSE, including an MBS guaranteed by the other Enterprise.

(d) *Exposures to depository institutions and credit unions.* (1) An Enterprise must assign a 20 percent risk weight to an exposure to a depository institution or credit union that is organized under the laws of the United States or any state thereof, except as otherwise provided under paragraph (d)(2) of this section.

(2) An Enterprise must assign a 100 percent risk weight to an exposure to a financial institution if the exposure may be included in that financial institution's capital unless the exposure is:

(i) An equity exposure; or

(ii) Deducted from regulatory capital under § 1240.22.

(e) *Exposures to U.S. public sector entities (PSEs).* (1) An Enterprise must assign a 20 percent risk weight to a general obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.

(2) An Enterprise must assign a 50 percent risk weight to a revenue obligation exposure to a PSE that is organized under the laws of the United States or any state or political subdivision thereof.

(f) *Corporate exposures.* (1) An Enterprise must assign a 100 percent risk weight to all its corporate exposures, except as provided in paragraphs (f)(2) and (3) of this section.

(2) An Enterprise must assign a 2 percent risk weight to an exposure to a QCCP arising from the Enterprise posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of § 1240.37(b)(3)(i)(A) and a 4 percent risk weight to an exposure to a QCCP arising from the Enterprise posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of § 1240.37(b)(3)(i)(B).

(3) An Enterprise must assign a 2 percent risk weight to an exposure to a QCCP arising from the Enterprise posting cash collateral to the QCCP in connection with a cleared transaction that meets the requirements of § 1240.37(c)(3)(i).

(g) *Residential mortgage exposures*—(1) *Single-family mortgage exposures.* An Enterprise must assign a risk weight to a single-family mortgage exposure in accordance with § 1240.33.

(2) *Multifamily mortgage exposures.* An Enterprise must assign a risk weight to a multifamily mortgage exposure in accordance with § 1240.34.

(h) *Past due exposures.* Except for an exposure to a sovereign entity or a mortgage exposure, if an exposure is 90 days or more past due or on nonaccrual:

(1) An Enterprise must assign a 150 percent risk weight to the portion of the exposure that is not guaranteed or that is unsecured;

(2) An Enterprise may assign a risk weight to the guaranteed portion of a past due exposure based on the risk weight that applies under § 1240.38 if the guarantee or credit derivative meets the requirements of that section; and

(3) An Enterprise may assign a risk weight to the collateralized portion of a past due exposure based on the risk weight that applies under § 1240.39 if the collateral meets the requirements of that section.

(i) *Other assets.* (1) An Enterprise must assign a zero percent risk weight to cash owned and held in the offices of an insured depository institution or in transit.

(2) An Enterprise must assign a 20 percent risk weight to cash items in the process of collection.

(3) An Enterprise must assign a 100 percent risk weight to DTAs arising from temporary differences that the Enterprise could realize through net operating loss carrybacks.

(4) An Enterprise must assign a 250 percent risk weight to the portion of each of the following items to the extent it is not deducted from common equity tier 1 capital pursuant to § 1240.22(d):

(i) MSAs; and

(ii) DTAs arising from temporary differences that the Enterprise could not realize through net operating loss carrybacks.

(5) An Enterprise must assign a 100 percent risk weight to all assets not specifically assigned a different risk weight under this subpart and that are not deducted from tier 1 or tier 2 capital pursuant to § 1240.22.

(j) *Insurance assets.* (1) An Enterprise must risk-weight the individual assets held in a separate account that does not qualify as a non-guaranteed separate account as if the individual assets were held directly by the Enterprise.

(2) An Enterprise must assign a zero percent risk weight to an asset that is held in a non-guaranteed separate account.

### § 1240.33 Single-family mortgage exposures.

(a) *Definitions.* Subject to any additional instructions set forth on table 1 to this paragraph (a), for purposes of this section:

*Adjusted MTMLTV* means, with respect to a single-family mortgage exposure and as of a particular time, the amount equal to:

(i) The MTMLTV of the single-family mortgage exposure (or, if the loan age of the single-family mortgage exposure is less than 6, the OLTV of the single-family mortgage exposure); divided by

(ii) The amount equal to 1 plus the single-family countercyclical adjustment as of that time.

*Approved insurer* means an insurance company that is currently approved by an Enterprise to guarantee or insure single-family mortgage exposures acquired by the Enterprise.

*Cancelable mortgage insurance* means a mortgage insurance policy that, pursuant to its terms, may or will be terminated before the maturity date of the insured single-family mortgage exposure, including as required or permitted by the Homeowners Protection Act of 1998 (12 U.S.C. 4901).

*Charter-level coverage* means mortgage insurance that satisfies the minimum requirements of the authorizing statute of an Enterprise.

*Cohort burnout* means the number of refinance opportunities since the loan age of the single-family mortgage exposure was 6, categorized into ranges pursuant to the instructions set forth on Table 1 to this paragraph (a).

*Coverage percent* means the percent of the sum of the unpaid principal balance, any lost interest, and any foreclosure costs that is used to determine the benefit or other coverage under a mortgage insurance policy.

*COVID–19-related forbearance* means a forbearance granted pursuant to section 4022 of the Coronavirus Aid, Relief, and Economic Security Act or under a program established by FHFA to provide forbearance to borrowers adversely impacted by COVID–19.

*Days past due* means the number of days a single-family mortgage exposure is past due.

*Debt-to-income ratio (DTI)* means the ratio of a borrower's total monthly obligations (including housing expense)

divided by the borrower's monthly income, as calculated under the Guide of the Enterprise.

*Deflated HPI* means, as of a particular time, the amount equal to:

(i) The national, not-seasonally adjusted Expanded-Data FHFA House Price Index® as of the end of the preceding calendar quarter; divided by

(ii) The average of the three monthly observations of the preceding calendar quarter from the non-seasonally adjusted Consumer Price Index for All Urban Consumers, U.S. City Average, All Items Less Shelter.

*Guide* means, as applicable, the Fannie Mae Single Family Selling Guide, the Fannie Mae Single Family Servicing Guide and the Freddie Mac Single-family Seller/Servicers Guide.

*Guide-level coverage* means mortgage insurance that satisfies the requirements of the Guide of the Enterprise with respect to mortgage insurance that has a coverage percent that exceeds charter-level coverage.

*Interest-only (IO)* means a single-family mortgage exposure that requires only payment of interest without any principal amortization during all or part of the loan term.

*Loan age* means the number of scheduled payment dates since the origination of a single-family mortgage exposure.

*Loan-level credit enhancement* means:

(i) Mortgage insurance; or

(ii) A participation agreement.

*Loan documentation* means the completeness of the documentation used to underwrite a single-family mortgage exposure, as determined under the Guide of the Enterprise.

*Loan purpose* means the purpose of a single-family mortgage exposure at origination.

*Long-term HPI trend* means, as of a particular time, the amount equal to: 0.66112295.

Where $t$ = the number of quarters from the first quarter of 1975 to and including the end of the preceding calendar quarter and where the first quarter of 1975 is counted as one.[1]

[1] FHFA will adjust the formula for the long-term HPI trend in accordance with applicable law if two conditions are satisfied as of the end of a calendar quarter that follows the last adjustment to the long-term HPI trend: (i) The average of the long-term trend departures over four consecutive calendar quarters has been less than −5.0 percent; and (ii) after the end of the calendar quarter in which the first condition is satisfied, the deflated HPI has increased to an extent that it again exceeds the long-term HPI trend. The point in time of the new trough used by FHFA to adjust the formula for the long-term HPI trend will be identified by the calendar quarter with the smallest deflated HPI in the period that includes the calendar quarter in which the first condition is satisfied and ends at the end of the calendar quarter in which the second condition is first satisfied.

*Long-term trend departure* means, as of a particular time, the percent amount equal to—

(i) The deflated HPI as of that time divided by the long-term HPI trend as of that time; minus

(ii) 1.0.

*MI cancelation feature* means an indicator for whether mortgage insurance is cancelable mortgage insurance or non-cancelable mortgage insurance, assigned pursuant to the instructions set forth on Table 1 to this paragraph (a).

*Modification* means a permanent amendment or other change to the interest rate, maturity date, unpaid principal balance, or other contractual term of a single-family mortgage exposure or a deferral of a required payment until the maturity or earlier payoff of the single-family mortgage exposure. A modification does not include a repayment plan with respect to any amounts that are past due or a COVID–19-related forbearance.

*Modified re-performing loan (modified RPL)* means a single-family mortgage exposure (other than an NPL) that is or has been subject to a modification, excluding any single-family mortgage exposure that was not 60 or more days past due at any time in a continuous 60-calendar month period that begins at any time after the effective date of the last modification.

*Months since last modification* means the number of scheduled payment dates since the effective date of the last modification of a single-family mortgage exposure.

*Mortgage concentration risk* means the extent to which a mortgage insurer or other counterparty is exposed to mortgage credit risk relative to other risks.

*MTMLTV* means, with respect to a single-family mortgage exposure, the amount equal to:

(i) The unpaid principal balance of the single-family mortgage exposure; divided by

(ii) The amount equal to:

(A) The unpaid principal balance of the single-family mortgage exposure at origination; divided by

(B) The OLTV of the single-family mortgage exposure; multiplied by

(C) The most recently available FHFA Purchase-only State-level House Price Index of the State in which the property securing the single-family mortgage exposure is located; divided by

(D) The FHFA Purchase-only State-level House Price Index, as of date of the origination of the single-family mortgage exposure, in which the property securing the single-family mortgage exposure is located.

*Non-cancelable mortgage insurance* means a mortgage insurance policy that, pursuant to its terms, may not be terminated before the maturity date of the insured single-family mortgage exposure.

*Non-modified re-performing loan (non-modified RPL)* means a single-family mortgage exposure (other than a modified RPL or an NPL) that was previously an NPL at any time in the prior 48 calendar months.

*Non-performing loan (NPL)* means a single-family mortgage exposure that is 60 days or more past due.

*Occupancy type* means the borrowers' intended use of the property securing a single-family mortgage exposure.

*Original credit score* means the borrower's credit score as of the origination date of a single-family mortgage exposure.

*OLTV* means, with respect to a single-family mortgage exposure, the amount equal to:

(i) The unpaid principal balance of the single-family mortgage exposure at *origination;* divided by

(ii) The lesser of:

(A) The appraised value of the property securing the single-family mortgage exposure; and

(B) The sale price of the property securing the single-family mortgage exposure.

*Origination channel* means the type of institution that originated a single-family mortgage exposure, assigned pursuant to the instructions set forth on table 1 to this paragraph (a).

*Participation agreement* means, with respect to a single-family mortgage exposure, any agreement between an Enterprise and the seller of the single-family mortgage exposure pursuant to which the seller retains a participation of not less than 10 percent in the single-family mortgage exposure.

*Past due* means, with respect to a single-family mortgage exposure, that any amount required to be paid by the borrower under the terms of the single-family mortgage exposure has not been paid.

*Payment change from modification* means the amount, expressed as a percent, equal to:

(i) The amount equal to:

(A) The monthly payment of a single-family mortgage exposure after a modification; divided by

(B) The monthly payment of the single-family mortgage exposure before the modification; minus

(ii) 1.0.

*Performing loan* means any single-family mortgage exposure that is not an

NPL, a modified RPL, or a non-modified RPL.

*Previous maximum days past due* means the maximum number of days a modified RPL or non-modified RPL was past due in the prior 36 calendar months.

*Product type* means an indicator reflecting the contractual terms of a single-family mortgage exposure as of the origination date, assigned pursuant to the instructions set forth on Table 1 to this paragraph (a).

*Property type* means the physical structure of the property securing a single-family mortgage exposure.

*Refinance opportunity* means, with respect to a single-family mortgage exposure, any calendar month in which the Primary Mortgage Market Survey (PMMS) rate for the month and year of the origination of the single-family mortgage exposure exceeds the PMMS rate for that calendar month by more than 50 basis points.

*Refreshed credit score* means the borrower's most recently available credit score.

*Single-family countercyclical adjustment* means, as of a particular time, zero percent except:

(i) If the long-term trend departure as of that time is greater than 5 percent, the percent amount equal to:

(A) 1.05 multiplied by the long-term HPI trend, as of that time, divided by the deflated HPI, as of that time, minus

(B) 1.0.

(ii) If the long-term trend departure as of that time is less than −5 percent, the percent amount equal to:

(A) 0.95 multiplied by the long-term HPI trend, as of that time, divided by the deflated HPI, as of that time, minus

(B) 1.0.

*Streamlined refi* means a single-family mortgage exposure that was refinanced through a streamlined refinance program of an Enterprise, including the Home Affordable Refinance Program, Relief Refi, and Refi-Plus.

*Subordination* means, with respect to a single-family mortgage exposure, the amount equal to the original unpaid principal balance of any second lien single-family mortgage exposure divided by the lesser of the appraised value or sale price of the property that secures the single-family mortgage exposure.

TABLE 1 TO PARAGRAPH (a): PERMISSIBLE VALUES AND ADDITIONAL INSTRUCTIONS

| Defined term | Permissible values | Additional instructions |
|---|---|---|
| Cohort burnout | "No burnout," if the single-family mortgage exposure has not had a refinance opportunity since the loan age of the single-family mortgage exposure was 6.<br>"Low," if the single-family mortgage exposure has had 12 or fewer refinance opportunities since the loan age of the single-family mortgage exposure was 6.<br>"Medium," if the single-family mortgage exposure has had between 13 and 24 refinance opportunities since the loan age of the single-family mortgage exposure was 6.<br>"High," if the single-family mortgage exposure has had more than 24 refinance opportunities since the loan age of the single-family mortgage exposure was 6. | High if unable to determine. |
| Coverage percent | 0 percent <= coverage percent <= 100 percent | 0 percent if outside of permissible range or unable to determine. |
| Days past due | Non-negative integer | 210 if negative or unable to determine. |
| Debt-to-income (DTI) ratio | 0 percent < DTI < 100 percent | 42 percent if outside of permissible range or unable to determine. |
| Interest-only (IO) | Yes, no | Yes if unable to determine. |
| Loan age | 0 <= loan age <= 500 | 500 if outside of permissible range or unable to determine. |
| Loan documentation | None, low, full | None if unable to determine. |
| Loan purpose | Purchase, cashout refinance, rate/term refinance | Cashout refinance if unable to determine. |
| MTMLTV | 0 percent < MTMLTV <= 300 percent | If the property securing the single-family mortgage exposure is located in Puerto Rico or the U.S. Virgin Islands, use the FHFA House Price Index of the United States.<br>If the property securing the single-family mortgage exposure is located in Guam, use the FHFA Purchase-only State-level House Price Index of Hawaii.<br>If the single-family mortgage exposure was originated before 1991, use the Enterprise's proprietary housing price index.<br>Use geometric interpolation to convert quarterly housing price index data to monthly data.<br>300 percent if outside of permissible range or unable to determine. |
| Mortgage concentration risk | High, not high | High if unable to determine. |
| MI cancellation feature | Cancelable mortgage insurance, non-cancelable mortgage insurance. | Cancelable mortgage insurance, if unable to determine. |
| Occupancy type | Investment, owner-occupied, second home | Investment if unable to determine. |
| OLTV | 0 percent < OLTV <= 300 percent | 300 percent if outside of permissible range or unable to determine. |
| Original credit score | 300 <= original credit score <= 850 | If there are credit scores from multiple credit repositories for a borrower, use the following logic to determine a single original credit score:<br>• If there are credit scores from two repositories, take the lower credit score. |

TABLE 1 TO PARAGRAPH (a): PERMISSIBLE VALUES AND ADDITIONAL INSTRUCTIONS—Continued

| Defined term | Permissible values | Additional instructions |
|---|---|---|
| | | • If there are credit scores from three repositories, use the middle credit score.<br>• If there are credit scores from three repositories and two of the credit scores are identical, use the identical credit score.<br>If there are multiple borrowers, use the following logic to determine a single original credit score:<br>• Using the logic above, determine a single credit score for each borrower.<br>• Select the lowest single credit score across all borrowers.<br>600 if outside of permissible range or unable to determine. |
| Origination channel | Retail, third-party origination (TPO) | TPO includes broker and correspondent channels.<br>TPO if unable to determine. |
| Payment change from modification. | −80 percent < payment change from modification < 50 percent. | If the single-family mortgage exposure initially had an adjustable or step-rate feature, the monthly payment after a permanent modification is calculated using the initial modified rate.<br>0 percent if unable to determine.<br>−79 percent if less than or equal to −80 percent.<br>49 percent if greater than or equal to 50 percent. |
| Previous maximum days past due. | Non-negative integer | 181 months if negative or unable to determine. |
| Product type | "FRM30" means a fixed-rate single-family mortgage exposure with an original amortization term greater than 309 months and less than or equal to 429 months.<br>"FRM20" means a fixed-rate single-family mortgage exposure with an original amortization term greater than 189 months and less than or equal to 309 months.<br>"FRM15" means a fixed-rate single-family mortgage exposure with an original amortization term less than or equal to 189 months.<br>"ARM 1/1" is an adjustable-rate single-family mortgage exposure that has a mortgage rate and required payment that adjust annually. | Product types other than FRM30, FRM20, FRM15 or ARM 1/1 should be assigned to FRM30.<br>Use the post-modification product type for modified mortgage exposures.<br>ARM 1/1 if unable to determine. |
| Property type | 1-unit, 2–4 units, condominium, manufactured home | Use condominium for cooperatives.<br>2–4 units if unable to determine. |
| Refreshed credit score | 300 <= refreshed credit score <= 850 | If there are credit scores from multiple credit repositories for a borrower, use the following logic to determine a single refreshed credit score:<br>• If there are credit scores from two repositories, take the lower credit score.<br>• If there are credit scores from three repositories, use the middle credit score.<br>• If there are credit scores from three repositories and two of the credit scores are identical, use the identical credit score.<br>If there are multiple borrowers, use the following logic to determine a single Original Credit Score:<br>• Using the logic above, determine a single credit score for each borrower.<br>• Select the lowest single credit score across all borrowers.<br>600 if outside of permissible range or unable to determine. |
| Streamlined refi | Yes, no | No if unable to determine. |
| Subordination | 0 percent <= Subordination <= 80 percent | 80 percent if outside permissible range. |

(b) *Risk weight*—(1) *In general.* Subject to paragraph (b)(2) of this section, an Enterprise must assign a risk weight to a single-family mortgage exposure equal to:

(i) The base risk weight for the single-family mortgage exposure as determined under paragraph (c) of this section; multiplied by

(ii) The combined risk multiplier for the single-family mortgage exposure as determined under paragraph (d) of this section; multiplied by

(iii) The adjusted credit enhancement multiplier for the single-family mortgage exposure as determined under paragraph (e) of this section.

(2) *Minimum risk weight.* Notwithstanding the risk weight determined under paragraph (b)(1) of this section, the risk weight assigned to a single-family mortgage exposure may not be less than 20 percent.

(c) *Base risk weight*—(1) *Performing loan.* The base risk weight for a performing loan is set forth on Table 2 to this paragraph (c)(1). For purposes of this paragraph (c)(1), credit score means, with respect to a single-family mortgage exposure:

(i) The original credit score of the single-family mortgage exposure, if the loan age of the single-family mortgage exposure is less than 6; or

(ii) The refreshed credit score of the single-family mortgage exposure.

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**TABLE 2 TO PARAGRAPH (c)(1): PERFORMING LOANS**

| | Adjusted MTMLTV | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Credit Score** | <= 30% | > 30%, <= 40% | > 40%, <= 50% | > 50%, <= 60% | > 60%, <= 70% | > 70%, <= 75% | > 75%, <= 80% | > 80%, <= 85% | > 85%, <= 90% | > 90%, <= 95% | > 95%, <= 100% | > 100%, <= 110% | > 110%, <= 120% | > 120% |
| < 620 | 2% | 10% | 18% | 34% | 49% | 72% | 105% | 129% | 159% | 188% | 218% | 247% | 275% | 317% |
| >=620, < 640 | 2% | 8% | 14% | 27% | 39% | 58% | 84% | 102% | 127% | 151% | 178% | 208% | 237% | 282% |
| >=640, < 660 | 2% | 7% | 12% | 23% | 34% | 51% | 73% | 89% | 111% | 133% | 159% | 186% | 214% | 258% |
| >=660, < 680 | 2% | 6% | 10% | 20% | 29% | 44% | 63% | 78% | 98% | 119% | 141% | 168% | 194% | 236% |
| >=680, < 700 | 2% | 6% | 9% | 18% | 26% | 38% | 55% | 67% | 88% | 109% | 125% | 150% | 176% | 215% |
| >=700, < 720 | 2% | 5% | 8% | 15% | 22% | 33% | 47% | 57% | 75% | 94% | 110% | 134% | 158% | 194% |
| >=720, < 740 | 2% | 4% | 6% | 13% | 19% | 28% | 41% | 50% | 66% | 84% | 96% | 118% | 140% | 172% |
| >=740, < 760 | 2% | 4% | 5% | 11% | 16% | 23% | 33% | 40% | 54% | 69% | 80% | 99% | 119% | 147% |
| >=760, < 780 | 2% | 3% | 4% | 9% | 13% | 19% | 27% | 32% | 43% | 56% | 65% | 82% | 99% | 122% |
| >= 780 | 2% | 3% | 3% | 7% | 10% | 14% | 21% | 25% | 33% | 43% | 50% | 63% | 77% | 96% |

(2) *Non-modified RPL.* The base risk weight for a non-modified RPL is set forth on Table 3 to this paragraph (c)(2). For purposes of this paragraph (c)(2), re-performing duration means, with respect to a non-modified RPL, the number of scheduled payment dates since the non-modified RPL was last an NPL.

**TABLE 3 TO PARAGRAPH (c)(2): NON-MODIFIED RPLS**

| | Adjusted MTMLTV | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Non-modified re-performing duration** | <= 30% | > 30%, <= 40% | > 40%, <= 50% | > 50%, <= 60% | >60%, <= 70% | > 70%, <= 75% | > 75%, <= 80% | > 80%, <= 85% | > 85%, <= 90% | > 90%, <= 95% | > 95%, <= 100% | > 100%, <= 110% | > 110%, <= 120% | > 120% |
| <= 3 | 2% | 11% | 20% | 35% | 50% | 69% | 84% | 105% | 122% | 135% | 149% | 160% | 174% | 180% |
| >3, <= 12 | 2% | 8% | 14% | 27% | 39% | 54% | 67% | 84% | 100% | 113% | 127% | 141% | 160% | 177% |
| > 12, <= 36 | 2% | 7% | 11% | 22% | 32% | 46% | 57% | 69% | 84% | 97% | 111% | 127% | 150% | 175% |
| > 36, <= 48 | 2% | 5% | 7% | 14% | 21% | 32% | 46% | 56% | 72% | 88% | 103% | 123% | 143% | 174% |

(3) *Modified RPL.* The base risk weight for a modified RPL is set forth on Table 4 to paragraph (c)(3)(ii) of this section. For purposes of this paragraph (c)(3), re-performing duration means, with respect to a modified RPL, the lesser of:

(i) The months since last modification of the modified RPL; and

(ii) The number of scheduled payment dates since the modified RPL was last an NPL.

## TABLE 4 TO PARAGRAPH (c)(3)(ii): MODIFIED RPLS

| | Adjusted MTMLTV | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Modified re-performing duration** | <= 30% | > 30%, <= 40% | > 40%, <= 50% | > 50%, <= 60% | >60%, <= 70% | > 70%, <= 75% | > 75%, <= 80% | > 80%, <= 85% | > 85%, <= 90% | > 90%, <= 95% | > 95%, <= 100% | > 100%, <= 110% | > 110%, <= 120% | > 120% |
| <= 3 | 2% | 17% | 31% | 54% | 76% | 98% | 115% | 129% | 145% | 159% | 170% | 179% | 189% | 196% |
| >3, <= 12 | 2% | 14% | 25% | 44% | 62% | 81% | 95% | 109% | 124% | 139% | 152% | 164% | 178% | 195% |
| > 12, <= 36 | 2% | 11% | 19% | 35% | 50% | 66% | 79% | 92% | 107% | 123% | 136% | 152% | 169% | 194% |
| > 36 | 2% | 8% | 13% | 24% | 35% | 50% | 68% | 80% | 98% | 117% | 133% | 150% | 168% | 193% |

(4) *NPL.* The base risk weight for an NPL is set forth on Table 5 to this paragraph (c)(4).

## TABLE 5 TO PARAGRAPH (c)(4): NPLS

| | Adjusted MTMLTV | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Days past due** | <= 30% | > 30%, <= 40% | > 40%, <= 50% | > 50%, <= 60% | >60%, <= 70% | > 70%, <= 75% | > 75%, <= 80% | > 80%, <= 85% | > 85%, <= 90% | > 90% |
| 60 to 89 days | 8% | 40% | 71% | 122% | 173% | 193% | 205% | 215% | 226% | 238% |
| 90 to 209 days | 11% | 48% | 85% | 135% | 184% | 201% | 211% | 218% | 224% | 230% |
| >= 210 days | 28% | 76% | 124% | 172% | 219% | 227% | 231% | 233% | 234% | 221% |

(d) *Combined risk multiplier*—(1) *In general.* Subject to paragraph (d)(2) of this section, the combined risk multiplier for a single-family mortgage exposure is equal to the product of each of the applicable risk multipliers set forth under the applicable single-family segment on Table 6 to paragraph (d)(2) of this section.

(2) *Maximum combined risk multiplier.* Notwithstanding the combined risk multiplier determined under paragraph (d)(1) of this section, the combined risk multiplier for a single-family mortgage exposure may not exceed 3.0.

TABLE 6 TO PARAGRAPH (d)(2): RISK MULTIPLIERS

| Risk factor | Value or range | Single-family segment | | | |
|---|---|---|---|---|---|
| | | Performing loan | Non-modified RPL | Modified RPL | NPL |
| Loan Purpose | Purchase | 1.0 | 1.0 | 1.0 | |
| | Cashout refinance | 1.4 | 1.4 | 1.4 | |
| | Rate/term refinance | 1.3 | 1.2 | 1.3 | |
| Occupancy Type | Owner-occupied or second home | 1.0 | 1.0 | 1.0 | 1.0 |
| | Investment | 1.2 | 1.5 | 1.3 | 1.2 |
| Property Type | 1-unit | 1.0 | 1.0 | 1.0 | 1.0 |
| | 2–4 unit | 1.4 | 1.4 | 1.3 | 1.1 |
| | Condominium | 1.1 | 1.0 | 1.0 | 1.0 |
| | Manufactured home | 1.3 | 1.8 | 1.6 | 1.2 |
| Origination Channel | Retail | 1.0 | 1.0 | 1.0 | 1.0 |
| | TPO | 1.1 | 1.1 | 1.1 | 1.0 |
| DTI | DTI <= 25% | 0.8 | 0.9 | 0.9 | |
| | 25% < DTI <= 40% | 1.0 | 1.0 | 1.0 | |
| | DTI >40% | 1.2 | 1.2 | 1.1 | |
| Product Type | FRM30 | 1.0 | 1.0 | 1.0 | 1.0 |
| | ARM1/1 | 1.7 | 1.1 | 1.0 | 1.1 |
| | FRM15 | 0.3 | 0.3 | 0.5 | 0.5 |
| | FRM20 | 0.6 | 0.6 | 0.5 | 0.8 |
| Subordination | No subordination | 1.0 | 1.0 | 1.0 | |
| | 30% < OLTV <= 60% and 0% <subordination <= 5%. | 1.1 | 0.8 | 1.0 | |
| | 30% < OLTV <= 60% and subordination >5%. | 1.5 | 1.1 | 1.2 | |
| | OLTV >60% and 0% <subordination <= 5%. | 1.1 | 1.2 | 1.1 | |
| | OLTV >60% and subordination >5% | 1.4 | 1.5 | 1.3 | |
| Loan Age | Loan age <= 24 months | 1.0 | | | |

TABLE 6 TO PARAGRAPH (d)(2): RISK MULTIPLIERS—Continued

| Risk factor | Value or range | Single-family segment | | | |
|---|---|---|---|---|---|
| | | Performing loan | Non-modified RPL | Modified RPL | NPL |
| | 24 months <loan age <= 36 months | 0.95 | | | |
| | 36 months <loan Age <= 60 months | 0.80 | | | |
| | Loan age >60 months | 0.75 | | | |
| Cohort Burnout | No burnout | 1.0 | | | |
| | Low | 1.2 | | | |
| | Medium | 1.3 | | | |
| | High | 1.4 | | | |
| Interest-only | No IO | 1.0 | 1.0 | 1.0 | |
| | Yes IO | 1.6 | 1.4 | 1.1 | |
| Loan Documentation | Full | 1.0 | 1.0 | 1.0 | |
| | None or low | 1.3 | 1.3 | 1.2 | |
| Streamlined Refi | No | 1.0 | 1.0 | 1.0 | |
| | Yes | 1.0 | 1.2 | 1.1 | |
| Refreshed Credit Score for Modified RPLs and Non-modified RPLs. | Refreshed credit score <620 | | 1.6 | 1.4 | |
| | 620 <= refreshed credit score <640 | | 1.3 | 1.2 | |
| | 640 <= refreshed credit score <660 | | 1.2 | 1.1 | |
| | 660 <= refreshed credit score <700 | | 1.0 | 1.0 | |
| | 700 <= refreshed credit score <720 | | 0.7 | 0.8 | |
| | 720 <= refreshed credit score <740 | | 0.6 | 0.7 | |
| | 740 <= refreshed credit score <760 | | 0.5 | 0.6 | |
| | 760 <= refreshed credit score <780 | | 0.4 | 0.5 | |
| | Refreshed credit score >= 780 | | 0.3 | 0.4 | |
| Payment Change from Modification | Payment change >= 0% | | | 1.1 | |
| | −20% <= payment change <0% | | | 1.0 | |
| | −30% <= payment change < −20%. | | | 0.9 | |
| | Payment change < −30% | | | 0.8 | |
| Previous Maximum Days Past Due | 0–59 days | | 1.0 | 1.0 | |
| | 60–90 days | | 1.2 | 1.1 | |
| | 91–150 days | | 1.3 | 1.1 | |
| | 151+ days | | 1.5 | 1.1 | |
| Refreshed Credit Score for NPLs | Refreshed credit score <580 | | | | 1.2 |
| | 580 <= refreshed credit score <640 | | | | 1.1 |
| | 640 <= refreshed credit score <700 | | | | 1.0 |
| | 700 <= refreshed credit score <720 | | | | 0.9 |
| | 720 <= refreshed credit score <760 | | | | 0.8 |
| | 760 <= refreshed credit score <780 | | | | 0.7 |
| | Refreshed credit score >= 780 | | | | 0.5 |

(e) *Credit enhancement multiplier*—(1) *Amount*—(i) *In general.* The adjusted credit enhancement multiplier for a single-family mortgage exposure that is subject to loan-level credit enhancement is equal to 1.0 minus the product of:

(A) 1.0 minus the credit enhancement multiplier for the single-family mortgage exposure as determined under paragraph (e)(2) of this section; multiplied by

(B) 1.0 minus the counterparty haircut for the loan-level credit enhancement as determined under paragraph (e)(3) of this section.

(ii) *No loan-level credit enhancement.* The adjusted credit enhancement multiplier for a single-family mortgage exposure that is not subject to loan-level credit enhancement is equal to 1.0.

(2) *Credit enhancement multiplier.* (i) The credit enhancement multiplier for a single-family mortgage exposure that is subject to a participation agreement is 1.0.

(ii) Subject to paragraph (e)(2)(iii) of this section, the credit enhancement multiplier for—

(A) A performing loan, non-modified RPL, or modified RPL that is subject to non-cancelable mortgage insurance is set forth on Table 7 to paragraph (e)(2)(iii)(E) of this section;

(B) A performing loan or non-modified RPL that is subject to cancelable mortgage insurance is set forth on Table 8 to paragraph (e)(2)(iii)(E) of this section;

(C) A modified RPL with a 30-year post-modification amortization that is subject to cancelable mortgage insurance is set forth on Table 9 to paragraph (e)(2)(iii)(E) of this section;

(D) A modified RPL with a 40-year post-modification amortization that is subject to cancelable mortgage insurance is set forth on Table 10 to paragraph (e)(2)(iii)(E) of this section; and

(E) NPL, whether subject to non-cancelable mortgage insurance or cancelable mortgage insurance, is set forth on Table 11 to paragraph (e)(2)(iii)(E) of this section.

(iii) Notwithstanding anything to the contrary in this paragraph (e), for purposes of paragraph (e)(2)(ii) of this section:

(A) The OLTV of a single-family mortgage exposure will be deemed to be 80 percent if the single-family mortgage exposure has an OLTV less than or equal to 80 percent.

(B) If the single-family mortgage exposure has an interest-only feature, any cancelable mortgage insurance will be deemed to be non-cancelable mortgage insurance.

(C) If the coverage percent of the mortgage insurance is greater than charter-level coverage and less than guide-level coverage, the credit enhancement multiplier is the amount equal to a linear interpolation between the credit enhancement multiplier of the single-family mortgage exposure for charter-level coverage and the credit

enhancement multiplier of the single-family mortgage exposure for guide-level coverage.

(D) If the coverage percent of the mortgage insurance is less than charter-level coverage, the credit enhancement multiplier is the amount equal to the midpoint of a linear interpolation between a credit enhancement multiplier of 1.0 and the credit enhancement multiplier of the single-family mortgage exposure for charter-level coverage.

(E) If the coverage percent of the mortgage insurance is greater than guide-level coverage, the credit enhancement multiplier is determined as if the coverage percent were guide-level coverage.

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## TABLE 7 TO PARAGRAPH (e)(2)(iii)(E): CREDIT ENHANCEMENT MULTIPLIERS FOR SINGLE-FAMILY MORTGAGE EXPOSURES SUBJECT TO NON-CANCELABLE MORTGAGE INSURANCE (EXCEPT NPLS)

| Amortization Term / Coverage Type | Coverage Category | Credit Enhancement Multiplier |
|---|---|---|
| 15/20-year with Guide-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.846 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.701 |
| | 90% < OLTV <= 95% and coverage percent = 25% | 0.408 |
| | 95% < OLTV <= 97% and coverage percent = 35% | 0.226 |
| | OLTV > 97% and coverage percent = 35% | 0.184 |
| 30-year with Guide-level Coverage | 80% < OLTV <= 85% and coverage percent = 12% | 0.706 |
| | 85% < OLTV <= 90% and coverage percent = 25% | 0.407 |
| | 90% < OLTV <= 95% and coverage percent = 30% | 0.312 |
| | 95% < OLTV <= 97% and coverage percent = 35% | 0.230 |
| | OLTV > 97% and coverage percent = 35% | 0.188 |
| 15/20-year with Charter-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.846 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.701 |
| | 90% < OLTV <= 95% and coverage percent = 16% | 0.612 |
| | 95% < OLTV <= 97% and coverage percent = 18% | 0.570 |
| | OLTV > 97% and coverage percent = 20% | 0.535 |
| 30-year with Charter-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.850 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.713 |
| | 90% < OLTV <= 95% and coverage percent = 16% | 0.627 |
| | 95% < OLTV <= 97% and coverage percent = 18% | 0.590 |
| | OLTV > 97% and coverage percent = 20% | 0.558 |

## TABLE 8 TO PARAGRAPH (e)(2)(iii)(E): CREDIT ENHANCEMENT MULTIPLIERS FOR PERFORMING LOANS AND NON-MODIFIED RPLS SUBJECT TO CANCELABLE MORTGAGE INSURANCE

| | | | Loan Age | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLTV | Coverage Percent | <= 5 | >5, <= 12 | >12, <= 24 | >24, <= 36 | >36, <= 48 | >48, <= 60 | > 60, <= 72 | > 72, <= 84 | > 84, <= 96 | >96, <=108 | >108, <=120 | >120 |
| **15/20 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.988 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 25% | 0.826 | 0.853 | 0.912 | 0.973 | 0.996 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 35% | 0.732 | 0.765 | 0.848 | 0.936 | 0.986 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >97% | 35% | 0.630 | 0.673 | 0.762 | 0.865 | 0.945 | 0.980 | 0.996 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| **30 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 12% | 0.867 | 0.884 | 0.928 | 0.962 | 0.994 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 25% | 0.551 | 0.584 | 0.627 | 0.679 | 0.785 | 0.893 | 0.950 | 0.986 | 0.998 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 30% | 0.412 | 0.440 | 0.456 | 0.484 | 0.547 | 0.654 | 0.743 | 0.845 | 0.932 | 0.969 | 0.992 | 1.000 |
| | >95%, <=97% | 35% | 0.322 | 0.351 | 0.369 | 0.391 | 0.449 | 0.535 | 0.631 | 0.746 | 0.873 | 0.925 | 0.965 | 1.000 |
| | >97% | 35% | 0.272 | 0.295 | 0.314 | 0.353 | 0.410 | 0.462 | 0.515 | 0.607 | 0.756 | 0.826 | 0.887 | 1.000 |
| **15/20 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.988 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.887 | 0.904 | 0.943 | 0.983 | 0.997 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 18% | 0.854 | 0.874 | 0.918 | 0.966 | 0.992 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >97% | 20% | 0.788 | 0.810 | 0.859 | 0.922 | 0.969 | 0.989 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| **30 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.934 | 0.943 | 0.964 | 0.981 | 0.997 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.780 | 0.795 | 0.819 | 0.845 | 0.896 | 0.948 | 0.976 | 0.993 | 0.999 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.679 | 0.690 | 0.703 | 0.719 | 0.755 | 0.813 | 0.861 | 0.916 | 0.963 | 0.983 | 0.995 | 1.000 |
| | >95%, <=97% | 18% | 0.642 | 0.652 | 0.662 | 0.676 | 0.708 | 0.756 | 0.806 | 0.866 | 0.933 | 0.960 | 0.981 | 1.000 |
| | >97% | 20% | 0.597 | 0.607 | 0.617 | 0.629 | 0.658 | 0.686 | 0.715 | 0.765 | 0.845 | 0.882 | 0.914 | 1.000 |

## TABLE 9 TO PARAGRAPH (e)(2)(iii)(E): CREDIT ENHANCEMENT MULTIPLIERS FOR MODIFIED RPLS WITH 30-YEAR POST-MODIFICATION AMORTIZATION THAT IS SUBJECT TO CANCELABLE MORTGAGE INSURANCE

| | | Months Since Last Modification | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLTV | Coverage Percent | <= 5 | >5, <= 12 | >12, <= 24 | >24, <= 36 | >36, <= 48 | >48, <= 60 | > 60, <= 72 | > 72, <= 84 | > 84, <= 96 | >96, <=108 | >108, <=120 | >120 |
| **15/20 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.988 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 25% | 0.826 | 0.853 | 0.912 | 0.973 | 0.996 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 35% | 0.732 | 0.765 | 0.848 | 0.936 | 0.986 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >97% | 35% | 0.630 | 0.673 | 0.762 | 0.865 | 0.945 | 0.980 | 0.996 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| **30 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 12% | 0.867 | 0.906 | 0.978 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 25% | 0.551 | 0.568 | 0.653 | 0.839 | 0.968 | 0.992 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 30% | 0.412 | 0.426 | 0.470 | 0.601 | 0.794 | 0.889 | 0.951 | 0.981 | 0.992 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 35% | 0.322 | 0.337 | 0.380 | 0.492 | 0.689 | 0.810 | 0.899 | 0.945 | 0.965 | 1.000 | 1.000 | 1.000 |
| | >97% | 35% | 0.272 | 0.284 | 0.334 | 0.436 | 0.561 | 0.682 | 0.791 | 0.857 | 0.887 | 1.000 | 1.000 | 1.000 |
| **15/20 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.988 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.887 | 0.904 | 0.943 | 0.983 | 0.997 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 18% | 0.854 | 0.874 | 0.918 | 0.966 | 0.992 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >97% | 20% | 0.788 | 0.810 | 0.859 | 0.922 | 0.969 | 0.989 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| **30 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.934 | 0.954 | 0.989 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.780 | 0.788 | 0.832 | 0.922 | 0.985 | 0.996 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.679 | 0.685 | 0.711 | 0.784 | 0.889 | 0.940 | 0.973 | 0.989 | 0.995 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 18% | 0.642 | 0.647 | 0.669 | 0.732 | 0.836 | 0.900 | 0.947 | 0.971 | 0.981 | 1.000 | 1.000 | 1.000 |
| | >97% | 20% | 0.597 | 0.602 | 0.623 | 0.672 | 0.740 | 0.805 | 0.864 | 0.898 | 0.914 | 1.000 | 1.000 | 1.000 |

## TABLE 10 TO PARAGRAPH (e)(2)(iii)(E): CREDIT ENHANCEMENT MULTIPLIERS FOR MODIFIED RPLS WITH 40-YEAR POST-MODIFICATION AMORTIZATION THAT IS SUBJECT TO CANCELABLE MORTGAGE INSURANCE

| | | | Months Since Last Modification | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OLTV | Coverage Percent | <= 5 | >5, <= 12 | >12, <= 24 | >24, <= 36 | >36, <= 48 | >48, <= 60 | > 60, <= 72 | > 72, <= 84 | > 84, <= 96 | >96, <=108 | >108, <=120 | >120 |
| **15/20 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 0.999 | 0.999 | 0.999 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.971 | 0.971 | 0.980 | 0.988 | 0.994 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 25% | 0.826 | 0.853 | 0.853 | 0.853 | 0.883 | 0.912 | 0.943 | 0.973 | 0.996 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 35% | 0.732 | 0.765 | 0.765 | 0.765 | 0.807 | 0.848 | 0.892 | 0.936 | 0.986 | 0.998 | 1.000 | 1.000 |
| | >97% | 35% | 0.630 | 0.673 | 0.673 | 0.673 | 0.718 | 0.762 | 0.814 | 0.865 | 0.945 | 0.980 | 0.996 | 1.000 |
| **30 Year Amortizing Loan with Guide-level Coverage** | >80%, <=85% | 12% | 0.867 | 0.884 | 0.928 | 0.962 | 0.994 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 25% | 0.551 | 0.584 | 0.627 | 0.679 | 0.785 | 0.893 | 0.950 | 0.986 | 0.998 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 30% | 0.412 | 0.440 | 0.456 | 0.484 | 0.547 | 0.654 | 0.743 | 0.845 | 0.932 | 0.969 | 0.992 | 1.000 |
| | >95%, <=97% | 35% | 0.322 | 0.351 | 0.369 | 0.391 | 0.449 | 0.535 | 0.631 | 0.746 | 0.873 | 0.925 | 0.965 | 1.000 |
| | >97% | 35% | 0.272 | 0.295 | 0.314 | 0.353 | 0.410 | 0.462 | 0.515 | 0.607 | 0.756 | 0.826 | 0.887 | 1.000 |
| **15/20 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.997 | 0.998 | 0.998 | 0.999 | 0.998 | 0.998 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.963 | 0.971 | 0.971 | 0.971 | 0.980 | 0.988 | 0.994 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.887 | 0.904 | 0.904 | 0.904 | 0.924 | 0.943 | 0.963 | 0.983 | 0.997 | 1.000 | 1.000 | 1.000 |
| | >95%, <=97% | 18% | 0.854 | 0.874 | 0.874 | 0.874 | 0.896 | 0.918 | 0.942 | 0.966 | 0.992 | 0.999 | 1.000 | 1.000 |
| | >97% | 20% | 0.788 | 0.810 | 0.810 | 0.810 | 0.835 | 0.859 | 0.891 | 0.922 | 0.969 | 0.989 | 0.998 | 1.000 |
| **30 Year Amortizing Loan with Charter-level Coverage** | >80%, <=85% | 6% | 0.934 | 0.943 | 0.964 | 0.981 | 0.997 | 0.999 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| | >85%, <=90% | 12% | 0.780 | 0.795 | 0.819 | 0.845 | 0.896 | 0.948 | 0.976 | 0.993 | 0.999 | 1.000 | 1.000 | 1.000 |
| | >90%, <=95% | 16% | 0.679 | 0.690 | 0.703 | 0.719 | 0.755 | 0.813 | 0.861 | 0.916 | 0.963 | 0.983 | 0.995 | 1.000 |
| | >95%, <=97% | 18% | 0.642 | 0.652 | 0.662 | 0.676 | 0.708 | 0.756 | 0.806 | 0.866 | 0.933 | 0.960 | 0.981 | 1.000 |
| | >97% | 20% | 0.597 | 0.607 | 0.617 | 0.629 | 0.658 | 0.686 | 0.715 | 0.765 | 0.845 | 0.882 | 0.914 | 1.000 |

## TABLE 11 TO PARAGRAPH (e)(2)(iii)(E): CREDIT ENHANCEMENT MULTIPLIERS FOR NPLS SUBJECT TO CANCELABLE MORTGAGE INSURANCE OR NON-CANCELABLE MORTGAGE INSURANCE

| Amortization Term / Coverage Type | Coverage Category | Credit Enhancement Multiplier |
|---|---|---|
| 15/20-year with Guide-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.893 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.803 |
| | 90% < OLTV <= 95% and coverage percent = 25% | 0.597 |
| | 95% < OLTV <= 97% and coverage percent = 35% | 0.478 |
| | OLTV > 97% and coverage percent = 35% | 0.461 |
| 30-year with Guide-level Coverage | 80% < OLTV <= 85% and coverage percent = 12% | 0.813 |
| | 85% < OLTV <= 90% and coverage percent = 25% | 0.618 |
| | 90% < OLTV <= 95% and coverage percent = 30% | 0.530 |
| | 95% < OLTV <= 97% and coverage percent = 35% | 0.490 |
| | OLTV > 97% and coverage percent = 35% | 0.505 |
| 15/20-year with Charter-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.893 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.803 |
| | 90% < OLTV <= 95% and coverage percent = 16% | 0.775 |
| | 95% < OLTV <= 97% and coverage percent = 18% | 0.678 |
| | OLTV > 97% and coverage percent = 20% | 0.663 |
| 30-year with Charter-level Coverage | 80% < OLTV <= 85% and coverage percent = 6% | 0.902 |
| | 85% < OLTV <= 90% and coverage percent = 12% | 0.835 |
| | 90% < OLTV <= 95% and coverage percent = 16% | 0.787 |
| | 95% < OLTV <= 97% and coverage percent = 18% | 0.765 |
| | OLTV > 97% and coverage percent = 20% | 0.760 |

(3) *Credit enhancement counterparty haircut*—(i) *Counterparty rating*—(A) *In general.* For purposes of this paragraph (e)(3), the counterparty rating for a counterparty is—

(*1*) 1, if the Enterprise has determined that the counterparty has extremely strong capacity to perform its financial obligations in a severely adverse stress;

(*2*) 2, if the Enterprise has determined that the counterparty has very strong capacity to perform its financial obligations in a severely adverse stress;

(*3*) 3, if the Enterprise has determined that the counterparty has strong capacity to perform its financial obligations in a severely adverse stress;

(*4*) 4, if the Enterprise has determined that the counterparty has adequate capacity to perform its financial obligations in a severely adverse stress;

(*5*) 5, if the Enterprise has determined that the counterparty does not have adequate capacity to perform its financial obligations in a severely adverse stress but does have adequate capacity to perform its financial obligations in an adverse stress;

(*6*) 6, if the Enterprise has determined that the counterparty does not have adequate capacity to perform its financial obligations in an adverse stress;

(*7*) 7, if the Enterprise has determined that the counterparty's capacity to perform its financial obligations is questionable under prevailing economic conditions;

(*8*) 8, if the Enterprise has determined that the counterparty is in default on a material contractual obligation (including any obligation with respect to collateral requirements) or is under a resolution proceeding or similar regulatory proceeding.

(B) *Required considerations.* (*1*) In determining the capacity of a counterparty to perform its financial obligations, the Enterprise must consider the likelihood that the counterparty will not perform its material obligations with respect to the posting of collateral and the payment of any amounts payable under its contractual obligations.

(*2*) A counterparty does not have an adequate capacity to perform its financial obligations in a severely adverse stress if there is a material risk that the counterparty would fail to timely perform any financial obligation in a severely adverse stress.

(ii) *Counterparty haircut.* The counterparty haircut is set forth on table 12 to this paragraph (e)(3)(ii). For purposes of this paragraph (e)(3)(ii), RPL means either a modified RPL or a non-modified RPL.

**TABLE 12 TO PARAGRAPH (e)(3)(ii): COUNTERPARTY HAIRCUTS**

| | Mortgage Concentration Risk: Not High | | | High Mortgage Concentration Risk and Approved Insurer | | | High Mortgage Concentration Risk and Not an Approved Insurer | | |
|---|---|---|---|---|---|---|---|---|---|
| Counterparty Rating | Performing Loans and RPLs | | NPLs | Performing Loans and RPLs | | NPLs | Performing Loans and RPLs | | NPLs |
| | 30 Year Product | 20/15 Year Product | | 30 Year Product | 20/15 Year Product | | 30 Year Product | 20/15 Year Product | |
| 1 | 1.8% | 1.3% | 0.6% | 2.3% | 1.6% | 0.7% | 2.8% | 2.0% | 0.9% |
| 2 | 4.5% | 3.5% | 2.0% | 5.9% | 4.5% | 2.6% | 7.3% | 5.6% | 3.2% |
| 3 | 5.2% | 4.0% | 2.4% | 6.7% | 5.1% | 3.1% | 8.3% | 6.4% | 3.9% |
| 4 | 11.4% | 9.5% | 6.9% | 14.2% | 11.8% | 8.5% | 17.2% | 14.3% | 10.4% |
| 5 | 14.8% | 12.7% | 9.9% | 17.8% | 15.2% | 11.9% | 20.9% | 18.0% | 14.0% |
| 6 | 21.2% | 19.1% | 16.4% | 24.0% | 21.7% | 18.6% | 26.8% | 24.2% | 20.8% |
| 7 | 40.0% | 38.2% | 35.7% | 42.0% | 40.1% | 37.5% | 43.7% | 41.7% | 39.0% |
| 8 | 47.6% | 46.6% | 45.3% | 47.6% | 46.6% | 45.3% | 47.6% | 46.6% | 45.3% |

(f) *COVID–19-related forbearances*—(1) *During forbearance.* Notwithstanding anything to the contrary under paragraph (c)(4) of this section, the base risk weight for an NPL is equal to the product of 0.45 and the base risk weight that would otherwise be assigned to the NPL under paragraph (c)(4) of this section if the NPL—

(i) Is subject to a COVID–19-related forbearance; or

(ii) Was subject to a COVID–19-related forbearance at any time in the prior 6 calendar months and is subject to a trial modification plan.

(2) *After forbearance.* Notwithstanding the definition of ''past due'' under paragraph (a) of this section, any period of time in which a single-family mortgage exposure was past due while subject to a COVID–19-related forbearance is to be disregarded for the purpose of assigning a risk weight under this section if the entire amount past due was repaid upon the termination of the COVID–19-related forbearance.

**§ 1240.34 Multifamily mortgage exposures.**

(a) *Definitions.* Subject to any additional instructions set forth on Table 1 to this paragraph (a), for purposes of this section:

*Acquisition debt-service-coverage ratio (acquisition DSCR)* means, with respect to a multifamily mortgage exposure, the amount equal to:

(i) The net operating income (NOI) (or, if not available, the net cash flow) of the multifamily property that secures the multifamily mortgage exposure, at the time of the acquisition by the Enterprise (or, if not available, at the time of the underwriting or origination) of the multifamily mortgage exposure; divided by

(ii) The scheduled periodic payment on the multifamily mortgage exposure (or, if interest-only, fully amortizing payment), at the time of the acquisition by the Enterprise (or, if not available, at the time of the origination) of the multifamily mortgage exposure.

*Acquisition loan-to-value (acquisition LTV)* means, with respect to a multifamily mortgage exposure, the amount, determined as of the time of the acquisition by the Enterprise (or, if not available, at the time of the underwriting or origination) of the multifamily mortgage exposure, equal to:

(i) The unpaid principal balance of the multifamily mortgage exposure; divided by

(ii) The value of the multifamily property securing the multifamily mortgage exposure.

*Debt-service-coverage ratio* (*DSCR)* means, with respect to a multifamily mortgage exposure:

(i) The acquisition DSCR of the multifamily mortgage exposure if the loan age of the multifamily mortgage exposure is less than 6; or

(ii) The MTMDSCR of the multifamily mortgage exposure.

*Interest-only (IO)* means a multifamily mortgage exposure that requires only payment of interest without any principal amortization during all or part of the loan term.

*Loan age* means the number of scheduled payment dates since the origination of the multifamily mortgage exposure.

*Loan term* means the number of years until final loan payment (which may be a balloon payment) under the terms of a multifamily mortgage exposure.

*LTV* means, with respect to a multifamily mortgage exposure;

(i) The acquisition LTV of the multifamily mortgage exposure if the loan age of the multifamily mortgage exposure is less than 6, or

(ii) The MTMLTV of the multifamily mortgage exposure.

*Mark-to-market debt-service coverage ratio (MTMDSCR)* means, with respect to a multifamily mortgage exposure, the amount equal to—

(i) The net operating income (or, if not available, the net cash flow) of the multifamily property that secures the multifamily mortgage exposure, as reported on the most recently available property operating statement; divided by

(ii) The scheduled periodic payment on the multifamily mortgage exposure (or, for interest-only, fully amortizing payment), as reported on the most recently available property operating statement.

*Mark-to-market loan-to-value (MTMLTV)* means, with respect to a multifamily mortgage exposure, the amount equal to:

(i) The unpaid principal balance of the multifamily mortgage exposure; divided by

(ii) The current value of the property security the multifamily mortgage exposure, estimated using either:

(A) The acquisition property value adjusted using a multifamily property value index; or

(B) The property value estimated based on net operating income and capitalization rate indices.

*Multifamily adjustable-rate exposure* means a multifamily mortgage exposure that is not, at that time, a multifamily fixed-rate exposure.

*Multifamily fixed-rate exposure* means a multifamily mortgage exposure that, at that time, has an interest rate that may not then increase or decrease based on a change in a reference index or other methodology, including:

(i) A multifamily mortgage exposure that has an interest rate that is fixed over the life of the loan; and

(ii) A multifamily mortgage exposure that has an interest rate that may increase or decrease in the future, but is fixed at that time.

*Net cash flow* means, with respect to a multifamily mortgage exposure, the amount equal to:

(i) The net operating income of the multifamily mortgage exposure; minus

(ii) Reserves for capital improvements; minus

(iii) Other expenses not included in net operating income required for the proper operation of the multifamily property securing the multifamily mortgage exposure, including any commissions paid to leasing agents in securing renters and special improvements to the property to accommodate the needs of certain renters.

*Net operating income* means, with respect to a multifamily mortgage exposure, the amount equal to:

(i) The rental income generated by the multifamily property securing the multifamily mortgage exposure; minus

(ii) The vacancy and property operating expenses of the multifamily property securing the multifamily mortgage exposure.

*Original amortization term* means the number of years, determined as of the time of the origination of a multifamily mortgage exposure, that it would take a borrower to pay a multifamily mortgage exposure completely if the borrower only makes the scheduled payments, and without making any balloon payment.

*Original loan size* means the dollar amount of the unpaid principal balance of a multifamily mortgage exposure at origination.

*Payment performance* means the payment status of history of a multifamily mortgage exposure, assigned pursuant to the instructions set forth on table 1 to this paragraph (a).

*Supplemental mortgage exposure* means any multifamily fixed-rate exposure or multifamily adjustable-rate exposure that is originated after the origination of a multifamily mortgage exposure that is secured by all or part of the same multifamily property.

*Unpaid principal balance (UPB)* means the outstanding loan amount of a multifamily mortgage exposure.

**TABLE 1 TO PARAGRAPH (a): PERMISSIBLE VALUES AND ADDITIONAL INSTRUCTIONS**

| Defined Term | Permissible Values | Additional Instructions |
|---|---|---|
| **Acquisition DSCR** | Greater than or equal to 0. | Origination DSCR if negative or unable to determine. If origination DSCR is unavailable, use underwriting DSCR. If underwriting DSCR is unavailable, use 1.00. |
| **Acquisition LTV** | Greater than or equal to 0. | Origination LTV if negative or unable to determine. If origination LTV is unavailable, use underwriting LTV. If underwriting LTV is unavailable, use 100 percent. |
| **Interest-only** | Yes, no. | Yes if unable to determine. |
| **Loan Term** | Non-negative integer in years. | 11 years if negative or unable to determine. |
| **MTMDSCR** | Greater than or equal to 0. | If the MTMDSCR is unavailable, the last observed DSCR can be marked to market using a property NOI index or an NOI estimate based on rent and expense indices.<br>If the index is not sufficiently granular, either because of its frequency or geography, or with respect to a certain multifamily property type, use a more geographically broad index or a recently estimated mark-to-market value. |
| **MTMLTV** | Greater than or equal to 0. | If the MTMLTV is unavailable, mark to market using an index. If the index is not sufficiently granular, either because of its frequency or geography or with respect to a certain multifamily property type, use a more geographically broad index or a recently estimated mark-to-market value. |
| **Net Operating Income (NOI) / Net Cash Flow (NCF)** | Greater than or equal to 0. | Infer using origination LTV or origination DSCR if NOI/NCF is unavailable. Alternatively, infer using actual MTMLTV or actual MTMDSCR. |
| **Original Amortization Term** | Non-negative integer in years. | 31 years if negative or unable to determine. |
| **Original Loan Size** | Non-negative dollar value. | $3,000,000 if negative or unable to determine |
| **Payment Performance** | Performing, delinquent 60 days or more, re-performing (without modification), modified. | Modified if unable to determine. |
| **Special Product** | Not a special product, student housing, rehab/value-add/lease-up, supplemental mortgage exposure. | Rehab/value-add/lease-up if unable to determine. |
| **UPB** | UPB > $0 | $100,000,000 if negative or unable to determine. |

(b) *Risk weight*—(1) *In general.* Subject to paragraphs (b)(2) and (3) of this section, an Enterprise must assign a risk weight to a multifamily mortgage exposure equal to:

(i) The base risk weight for the multifamily mortgage exposure as determined under paragraph (c) of this section; multiplied by

(ii) The combined risk multiplier for the multifamily mortgage exposure as

determined under paragraph (d) of this section.

(2) *Minimum risk weight.* Notwithstanding the risk weight determined under paragraph (b)(1) of this section, the risk weight assigned to a multifamily mortgage exposure may not be less than 20 percent.

(3) *Loan groups.* If a multifamily property that secures a multifamily mortgage exposure also secures one or more supplemental mortgage exposures:

(i) A multifamily mortgage exposure-specific base risk weight must be determined under paragraph (c) of this section using for each of these multifamily mortgage exposures a single DSCR and single LTV, both calculated as if all of the multifamily mortgage exposures secured by the multifamily property were consolidated into a single multifamily mortgage exposure; and

(ii) A multifamily mortgage exposure-specific combined risk multiplier must be determined under paragraph (d) of this section based on the risk characteristics of the multifamily mortgage exposure (except with respect to the loan size multiplier, which would be determined using the aggregate unpaid principal balance of these multifamily mortgage exposures).

(c) *Base risk weight*—(1) *Multifamily fixed-rate exposure.* The base risk weight for a multifamily fixed-rate exposure is set forth on table 2 to this paragraph (c)(1).

**TABLE 2 TO PARAGRAPH (c)(1): MULTIFAMILY FIXED-RATE EXPOSURE**

| | | LTV | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | <=35% | > 35%, <=45% | > 45%, <=55% | > 55%, <=65% | > 65%, <=70% | > 70%, <=75% | > 75%, <=80% | > 80%, <=90% | > 90%, <=100% | >100% |
| DSCR | <1.00 | 52% | 60% | 76% | 109% | 125% | 140% | 153% | 166% | 172% | 182% |
| | >= 1.00, <1.15 | 45% | 52% | 65% | 92% | 105% | 118% | 129% | 140% | 145% | 153% |
| | >=1.15, < 1.20 | 40% | 46% | 58% | 81% | 93% | 103% | 112% | 122% | 127% | 134% |
| | >=1.20, < 1.25 | 37% | 42% | 52% | 72% | 83% | 92% | 97% | 107% | 112% | 119% |
| | >=1.25, < 1.30 | 33% | 38% | 47% | 65% | 74% | 81% | 86% | 94% | 99% | 105% |
| | >=1.30, < 1.35 | 31% | 35% | 43% | 59% | 66% | 71% | 76% | 84% | 88% | 93% |
| | >=1.35, < 1.50 | 29% | 32% | 39% | 54% | 59% | 64% | 69% | 76% | 80% | 86% |
| | >=1.50, < 1.65 | 25% | 27% | 31% | 39% | 43% | 47% | 51% | 57% | 62% | 70% |
| | >=1.65, < 1.80 | 22% | 23% | 26% | 31% | 34% | 37% | 41% | 47% | 53% | 61% |
| | >=1.80, < 1.95 | 16% | 17% | 19% | 24% | 26% | 29% | 32% | 41% | 47% | 56% |
| | >=1.95, < 2.10 | 15% | 15% | 16% | 20% | 23% | 26% | 28% | 37% | 44% | 54% |
| | >=2.10, < 2.25 | 13% | 14% | 15% | 19% | 21% | 24% | 25% | 36% | 42% | 53% |
| | >=2.25 | 13% | 13% | 14% | 18% | 20% | 23% | 24% | 35% | 42% | 52% |

(2) *Multifamily adjustable-rate exposure.* The base risk weight for a multifamily adjustable-rate exposure is set forth on table 3 to this paragraph (c)(2).

**TABLE 3 TO PARAGRAPH (c)(2): MULTIFAMILY ADJUSTABLE-RATE EXPOSURE**

| | | LTV | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | <=35% | > 35%, <=45% | > 45%, <=55% | > 55%, <=65% | > 65%, <=70% | > 70%, <=75% | > 75%, <=80% | > 80%, <=90% | > 90%, <=100% | >100% |
| DSCR | <1.00 | 81% | 86% | 93% | 133% | 153% | 172% | 189% | 211% | 229% | 255% |
| | >=1.00, <1.25 | 71% | 75% | 80% | 113% | 129% | 145% | 158% | 178% | 193% | 215% |
| | >=1.25, < 1.30 | 63% | 67% | 71% | 100% | 114% | 127% | 138% | 156% | 169% | 188% |
| | >=1.30, < 1.36 | 57% | 60% | 63% | 88% | 101% | 113% | 120% | 136% | 149% | 168% |
| | >=1.36, < 1.42 | 51% | 54% | 57% | 79% | 90% | 99% | 106% | 120% | 131% | 148% |
| | >=1.42, < 1.47 | 45% | 49% | 51% | 71% | 80% | 86% | 93% | 107% | 116% | 131% |
| | >=1.47, < 1.53 | 37% | 42% | 47% | 64% | 71% | 77% | 84% | 97% | 106% | 120% |
| | >=1.53, < 1.70 | 30% | 33% | 37% | 47% | 51% | 56% | 63% | 72% | 83% | 98% |
| | >=1.70, < 1.87 | 23% | 26% | 30% | 36% | 40% | 45% | 51% | 60% | 70% | 86% |
| | >=1.87, < 2.03 | 19% | 21% | 22% | 28% | 31% | 35% | 40% | 52% | 62% | 79% |
| | >=2.03, < 2.21 | 17% | 18% | 19% | 24% | 26% | 31% | 34% | 47% | 58% | 75% |
| | >=2.21, < 2.38 | 16% | 17% | 17% | 22% | 24% | 28% | 31% | 45% | 56% | 73% |
| | >=2.38 | 16% | 16% | 16% | 21% | 23% | 27% | 30% | 44% | 55% | 72% |

(d) *Combined risk multiplier.* The combined risk multiplier for a multifamily mortgage exposure is equal to the product of each of the applicable risk multipliers set forth on table 4 to this paragraph (d).

**TABLE 4 TO PARAGRAPH (d): MULTIFAMILY RISK MULTIPLIERS**

| Risk Factor | Value or Range | Risk Multiplier |
|---|---|---|
| **Payment Performance** | Performing | 1.00 |
| | Delinquent more than 60 days | 1.10 |
| | Re-performing (without modification) | 1.10 |
| | Modified | 1.20 |
| **Interest-only** | No | 1.00 |
| | Yes (during the interest-only period) | 1.10 |
| **Loan Term** | Loan term <= 1Yr | 0.70 |
| | 1Yr < loan term <= 2Yr | 0.75 |
| | 2Yr < loan term <= 3Yr | 0.80 |
| | 3Yr < loan term <= 4Yr | 0.85 |
| | 4Yr < loan term <= 5Yr | 0.90 |
| | 5Yr < loan term <= 7Yr | 0.95 |
| | 7Yr < loan term <= 10Yr | 1.00 |
| | Loan term > 10Yr | 1.15 |
| **Original Amortization Term** | Original amortization term <= 20Yr | 0.70 |
| | 20Yr < original amortization term <= 25Yr | 0.80 |
| | 25Yr < original amortization term <= 30Yr | 1.00 |
| | Original amortization term > 30Yr | 1.10 |
| **Original Loan Size (in millions)** | Loan size <= $2m | 1.45 |
| | $2m < loan size <= $3m | 1.35 |
| | $3m < loan size <= $4m | 1.25 |
| | $4m < loan size <= $5m | 1.15 |
| | $5m < loan size <= $6m | 1.08 |
| | $6m < loan size <= $7m | 1.02 |
| | $7m < loan size <= $8m | 0.96 |
| | $8m < loan size <= $9m | 0.92 |
| | $9m < loan size <= $10m | 0.88 |
| | $10m < loan size <= $11m | 0.86 |
| | $11m < loan size <= $12m | 0.84 |
| | $12m < loan size <= $13m | 0.82 |
| | $13m < loan size <= $14m | 0.81 |
| | $14m < loan size <= $15m | 0.81 |
| | $15m < loan size <= $16m | 0.80 |
| | $16m < loan size <= $17m | 0.80 |
| | $17m < loan size <= $18m | 0.80 |
| | $18m < loan size <= $19m | 0.80 |
| | $19m < loan size <= $20m | 0.80 |
| | $20m < loan size <= $21m | 0.80 |
| | $21m < loan size <= $22m | 0.80 |
| | $22m < loan size <= $23m | 0.79 |
| | $23m < loan size <= $24m | 0.78 |
| | $24m < loan size <= $25m | 0.76 |
| | Loan size >$25m | 0.70 |
| Special Products | Not a special product | 1.00 |
| | Student housing | 1.15 |
| | Rehab/value-add/lease-up | 1.25 |

**§ 1240.35 Off-balance sheet exposures.**

(a) *General.* (1) An Enterprise must calculate the exposure amount of an off-balance sheet exposure using the credit conversion factors (CCFs) in paragraph (b) of this section.

(2) Where an Enterprise commits to provide a commitment, the Enterprise may apply the lower of the two applicable CCFs.

(3) Where an Enterprise provides a commitment structured as a syndication or participation, the Enterprise is only required to calculate the exposure amount for its pro rata share of the commitment.

(4) Where an Enterprise provides a commitment or enters into a repurchase agreement and such commitment or repurchase agreement, the exposure amount shall be no greater than the maximum contractual amount of the commitment or repurchase agreement, as applicable.

(b) *Credit conversion factors*—(1) *Zero percent CCF.* An Enterprise must apply a zero percent CCF to the unused portion of a commitment that is unconditionally cancelable by the Enterprise.

(2) *20 percent CCF.* An Enterprise must apply a 20 percent CCF to the amount of commitments with an original maturity of one year or less that are not unconditionally cancelable by the Enterprise.

(3) *50 percent CCF.* An Enterprise must apply a 50 percent CCF to the amount of commitments with an original maturity of more than one year that are not unconditionally cancelable by the Enterprise.

(4) *100 percent CCF.* An Enterprise must apply a 100 percent CCF to the amount of the following off-balance sheet items and other similar transactions:

(i) Guarantees;

(ii) Repurchase agreements (the off-balance sheet component of which equals the sum of the current fair values of all positions the Enterprise has sold subject to repurchase);

(iii) Off-balance sheet securities lending transactions (the off-balance sheet component of which equals the sum of the current fair values of all positions the Enterprise has lent under the transaction);

(iv) Off-balance sheet securities borrowing transactions (the off-balance sheet component of which equals the sum of the current fair values of all non-cash positions the Enterprise has posted as collateral under the transaction); and

(v) Forward agreements.

**§ 1240.36 Derivative contracts.**

(a) *Exposure amount for derivative contracts.* An Enterprise must use the current exposure methodology (CEM) described in paragraph (b) of this section to calculate the exposure amount for all its OTC derivative contracts.

(b) *Current exposure methodology exposure amount*—(1) *Single OTC derivative contract.* Except as modified by paragraph (c) of this section, the exposure amount for a single OTC derivative contract that is not subject to a qualifying master netting agreement is equal to the sum of the Enterprise's current credit exposure and potential future credit exposure (PFE) on the OTC derivative contract.

(i) *Current credit exposure.* The current credit exposure for a single OTC derivative contract is the greater of the fair value of the OTC derivative contract or zero.

(ii) *PFE.* (A) The PFE for a single OTC derivative contract, including an OTC derivative contract with a negative fair value, is calculated by multiplying the notional principal amount of the OTC derivative contract by the appropriate conversion factor in Table 1 to paragraph (b)(1)(ii)(E) of this section.

(B) For purposes of calculating either the PFE under this paragraph (b)(1)(ii) or the gross PFE under paragraph (b)(2)(ii)(A) of this section for exchange rate contracts and other similar contracts in which the notional principal amount is equivalent to the cash flows, notional principal amount is the net receipts to each party falling due on each value date in each currency.

(C) For an OTC derivative contract that does not fall within one of the specified categories in table 1 to paragraph (b)(1)(ii)(E) of this section, the PFE must be calculated using the appropriate ''other'' conversion factor.

(D) An Enterprise must use an OTC derivative contract's effective notional principal amount (that is, the apparent or stated notional principal amount multiplied by any multiplier in the OTC derivative contract) rather than the apparent or stated notional principal amount in calculating PFE.

(E) The PFE of the protection provider of a credit derivative is capped at the net present value of the amount of unpaid premiums.

**TABLE 1 TO PARAGRAPH (b)(1)(ii)(E)—CONVERSION FACTOR MATRIX FOR DERIVATIVE CONTRACTS[1]**

| Remaining maturity[2] | Interest rate | Foreign exchange rate and gold | Credit (investment grade reference asset)[3] | Credit (non-investment-LI>grade reference asset) | Equity | Precious metals (except gold) | Other |
|---|---|---|---|---|---|---|---|
| One year or less | 0.00 | 0.01 | 0.05 | 0.10 | 0.06 | 0.07 | 0.10 |
| Greater than one year and less than or equal to five years | 0.005 | 0.05 | 0.05 | 0.10 | 0.08 | 0.07 | 0.12 |
| Greater than five years | 0.015 | 0.075 | 0.05 | 0.10 | 0.10 | 0.08 | 0.15 |

[1] For a derivative contract with multiple exchanges of principal, the conversion factor is multiplied by the number of remaining payments in the derivative contract.

[2] For an OTC derivative contract that is structured such that on specified dates any outstanding exposure is settled and the terms are reset so that the fair value of the contract is zero, the remaining maturity equals the time until the next reset date. For an interest rate derivative contract with a remaining maturity of greater than one year that meets these criteria, the minimum conversion factor is 0.005.

[3] An Enterprise must use the column labeled "Credit (investment-grade reference asset)" for a credit derivative whose reference asset is an outstanding unsecured long-term debt security without credit enhancement that is investment grade. An Enterprise must use the column labeled "Credit (non-investment-grade reference asset)" for all other credit derivatives.

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(2) *Multiple OTC derivative contracts subject to a qualifying master netting agreement.* Except as modified by paragraph (c) of this section, the exposure amount for multiple OTC derivative contracts subject to a qualifying master netting agreement is equal to the sum of the net current credit exposure and the adjusted sum of the PFE amounts for all OTC derivative contracts subject to the qualifying master netting agreement.

(i) *Net current credit exposure.* The net current credit exposure is the greater of the net sum of all positive and negative fair values of the individual OTC derivative contracts subject to the qualifying master netting agreement or zero.

(ii) *Adjusted sum of the PFE amounts.* The adjusted sum of the PFE amounts, Anet, is calculated as Anet = (0.4 × Agross) + (0.6 × NGR × Agross), where:

(A) Agross = the gross PFE (that is, the sum of the PFE amounts as determined under paragraph (b)(1)(ii) of this section for each individual derivative contract subject to the qualifying master netting agreement); and

(B) Net-to-gross Ratio (NGR) = the ratio of the net current credit exposure to the gross current credit exposure. In calculating the NGR, the gross current credit exposure equals the sum of the positive current credit exposures (as determined under paragraph (b)(1)(i) of this section) of all individual derivative contracts subject to the qualifying master netting agreement.

(c) *Recognition of credit risk mitigation of collateralized OTC derivative contracts.* (1) An Enterprise may recognize the credit risk mitigation benefits of financial collateral that secures an OTC derivative contract or multiple OTC derivative contracts subject to a qualifying master netting agreement (netting set) by using the simple approach in § 1240.39(b).

(2) As an alternative to the simple approach, an Enterprise may recognize the credit risk mitigation benefits of financial collateral that secures such a contract or netting set if the financial collateral is marked-to-fair value on a daily basis and subject to a daily margin maintenance requirement by applying a risk weight to the uncollateralized portion of the exposure, after adjusting the exposure amount calculated under paragraph (b)(1) or (2) of this section using the collateral haircut approach in § 1240.39(c). The Enterprise must substitute the exposure amount calculated under paragraph (b)(1) or (2) of this section for ΣE in the equation in § 1240.39(c)(2).

(d) *Counterparty credit risk for credit derivatives*—(1) *Protection purchasers.* An Enterprise that purchases a credit derivative that is recognized under § 1240.38 as a credit risk mitigant for an exposure is not required to compute a separate counterparty credit risk capital requirement under this subpart provided that the Enterprise does so consistently for all such credit derivatives. The Enterprise must either include all or exclude all such credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure to all relevant counterparties for risk-based capital purposes.

(2) *Protection providers.* (i) An Enterprise that is the protection provider under a credit derivative must treat the credit derivative as an exposure to the underlying reference asset. The Enterprise is not required to compute a counterparty credit risk capital requirement for the credit derivative under this subpart, provided that this treatment is applied consistently for all such credit derivatives. The Enterprise must either include all or exclude all such credit derivatives that are subject to a qualifying master netting agreement from any measure used to determine counterparty credit risk exposure.

(ii) The provisions of this paragraph (d)(2) apply to all relevant counterparties for risk-based capital purposes.

(e) [Reserved]

(f) *Clearing member Enterprise's exposure amount.* (1) The exposure amount of a clearing member Enterprise for a client-facing derivative transaction or netting set of client-facing derivative transactions equals the exposure amount calculated according to paragraph (b)(1) or (2) of this section multiplied by the scaling factor the square root of ½ (which equals 0.707107). If the Enterprise determines that a longer period is appropriate, the Enterprise must use a larger scaling factor to adjust for a longer holding period as follows:

$$\text{Scaling factor} = \sqrt{\frac{H}{10}}$$

Where H = the holding period greater than or equal to five days.

(2) Additionally, FHFA may require the Enterprise to set a longer holding period if FHFA determines that a longer period is appropriate due to the nature, structure, or characteristics of the transaction or is commensurate with the risks associated with the transaction.

**§ 1240.37 Cleared transactions.**

(a) *General requirements*—(1) *Clearing member clients.* An Enterprise that is a clearing member client must use the methodologies described in paragraph (b) of this section to calculate risk-weighted assets for a cleared transaction.

(2) *Clearing members.* An Enterprise that is a clearing member must use the methodologies described in paragraph (c) of this section to calculate its risk-weighted assets for a cleared transaction and paragraph (d) of this section to calculate its risk-weighted assets for its default fund contribution to a CCP.

(b) *Clearing member client Enterprise*—(1) *Risk-weighted assets for cleared transactions.* (i) To determine the risk-weighted asset amount for a cleared transaction, an Enterprise that is a clearing member client must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (b)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (b)(3) of this section.

(ii) A clearing member client Enterprise's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all its cleared transactions.

(2) *Trade exposure amount.* (i) For a cleared transaction that is either a derivative contract or a netting set of derivative contracts, the trade exposure amount equals:

(A) The exposure amount for the derivative contract or netting set of derivative contracts, calculated using the methodology used to calculate exposure amount for OTC derivative contracts under § 1240.36; plus

(B) The fair value of the collateral posted by the clearing member client Enterprise and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, the trade exposure amount equals:

(A) The exposure amount for the repo-style transaction calculated using the methodologies under § 1240.39(c); plus

(B) The fair value of the collateral posted by the clearing member client Enterprise and held by the CCP, clearing member, or custodian in a manner that is not bankruptcy remote.

(3) *Cleared transaction risk weights.* (i) For a cleared transaction with a QCCP, a clearing member client Enterprise must apply a risk weight of:

(A) 2 percent if the collateral posted by the Enterprise to the QCCP or clearing member is subject to an

arrangement that prevents any losses to the clearing member client Enterprise due to the joint default or a concurrent insolvency, liquidation, or receivership proceeding of the clearing member and any other clearing member clients of the clearing member; and the clearing member client Enterprise has conducted sufficient legal review to conclude with a well-founded basis (and maintains sufficient written documentation of that legal review) that in the event of a legal challenge (including one resulting from an event of default or from liquidation, insolvency, or receivership proceedings) the relevant court and administrative authorities would find the arrangements to be legal, valid, binding and enforceable under the law of the relevant jurisdictions; or

(B) 4 percent if the requirements of § 1240.37(b)(3)(i)(A) are not met.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member client Enterprise must apply the risk weight appropriate for the CCP according to this subpart D.

(4) *Collateral.* (i) Notwithstanding any other requirements in this section, collateral posted by a clearing member client Enterprise that is held by a custodian (in its capacity as custodian) in a manner that is bankruptcy remote from the CCP, clearing member, and other clearing member clients of the clearing member, is not subject to a capital requirement under this section.

(ii) A clearing member client Enterprise must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or custodian in connection with a cleared transaction in accordance with the requirements under this subpart D.

(c) *Clearing member Enterprises*—(1) *Risk-weighted assets for cleared transactions.* (i) To determine the risk-weighted asset amount for a cleared transaction, a clearing member Enterprise must multiply the trade exposure amount for the cleared transaction, calculated in accordance with paragraph (c)(2) of this section, by the risk weight appropriate for the cleared transaction, determined in accordance with paragraph (c)(3) of this section.

(ii) A clearing member Enterprise's total risk-weighted assets for cleared transactions is the sum of the risk-weighted asset amounts for all of its cleared transactions.

(2) *Trade exposure amount.* A clearing member Enterprise must calculate its trade exposure amount for a cleared transaction as follows:

(i) For a cleared transaction that is either a derivative contract or a netting set of derivative contracts, the trade exposure amount equals:

(A) The exposure amount for the derivative contract, calculated using the methodology to calculate exposure amount for OTC derivative contracts under § 1240.36; plus

(B) The fair value of the collateral posted by the clearing member Enterprise and held by the CCP in a manner that is not bankruptcy remote.

(ii) For a cleared transaction that is a repo-style transaction or netting set of repo-style transactions, trade exposure amount equals:

(A) The exposure amount for repo-style transactions calculated using methodologies under § 1240.39(c); plus

(B) The fair value of the collateral posted by the clearing member Enterprise and held by the CCP in a manner that is not bankruptcy remote.

(3) *Cleared transaction risk weight.* (i) A clearing member Enterprise must apply a risk weight of 2 percent to the trade exposure amount for a cleared transaction with a QCCP.

(ii) For a cleared transaction with a CCP that is not a QCCP, a clearing member Enterprise must apply the risk weight appropriate for the CCP according to this subpart D.

(iii) Notwithstanding paragraphs (c)(3)(i) and (ii) of this section, a clearing member Enterprise may apply a risk weight of zero percent to the trade exposure amount for a cleared transaction with a CCP where the clearing member Enterprise is acting as a financial intermediary on behalf of a clearing member client, the transaction offsets another transaction that satisfies the requirements set forth in § 1240.3(a), and the clearing member Enterprise is not obligated to reimburse the clearing member client in the event of the CCP default.

(4) *Collateral.* (i) Notwithstanding any other requirement in this section, collateral posted by a clearing member Enterprise that is held by a custodian in a manner that is bankruptcy remote from the CCP is not subject to a capital requirement under this section.

(ii) A clearing member Enterprise must calculate a risk-weighted asset amount for any collateral provided to a CCP, clearing member, or a custodian in connection with a cleared transaction in accordance with requirements under this subpart D.

(d) *Default fund contributions*—(1) *General requirement.* A clearing member Enterprise must determine the risk-weighted asset amount for a default fund contribution to a CCP at least quarterly, or more frequently if, in the opinion of the Enterprise or FHFA, there is a material change in the financial condition of the CCP.

(2) *Risk-weighted asset amount for default fund contributions to non-qualifying CCPs.* A clearing member Enterprise's risk-weighted asset amount for default fund contributions to CCPs that are not QCCPs equals the sum of such default fund contributions multiplied by 1,250 percent, or an amount determined by FHFA, based on factors such as size, structure and membership characteristics of the CCP and riskiness of its transactions, in cases where such default fund contributions may be unlimited.

(3) *Risk-weighted asset amount for default fund contributions to QCCPs.* A clearing member Enterprise's risk-weighted asset amount for default fund contributions to QCCPs equals the sum of its capital requirement, $K_{CM}$ for each QCCP, as calculated under the methodology set forth in paragraphs (d)(3)(i) through (iii) of this section (Method 1), multiplied by 1,250 percent or in paragraphs (d)(3)(iv) of this section (Method 2).

(i) *Method 1.* The hypothetical capital requirement of a QCCP ($K_{CCP}$) equals:

$$K_{CCP} = \sum_{clearing\ member\ i} max\left(EBRM_i - VM_i - IM_i - DF_i; 0\right) \times RW \times 0.08$$

Where:

(A) $EBRM_i$ = the exposure amount for each transaction cleared through the QCCP by clearing member i, calculated in accordance with § 1240.36 for OTC derivative contracts and § 1240.39(c)(2) for repo-style transactions, provided that:

(*1*) For purposes of this section, in calculating the exposure amount the Enterprise may replace the formula provided in § 1240.36(b)(2)(ii) with the following: Anet = (0.15 × Agross) + (0.85 × NGR × Agross); and

(*2*) For option derivative contracts that are cleared transactions, the PFE described in § 1240.36(b)(1)(ii) must be adjusted by multiplying the notional principal amount of

the derivative contract by the appropriate conversion factor in Table 1 to paragraph (b)(1)(ii)(E) of § 1240.36 and the absolute value of the option's delta, that is, the ratio of the change in the value of the derivative contract to the corresponding change in the price of the underlying asset.

(*3*) For repo-style transactions, when applying § 1240.39(c)(2), the Enterprise must use the methodology in § 1240.39(c)(3);

(B) $VM_i$ = any collateral posted by clearing member i to the QCCP that it is entitled to receive from the QCCP, but has not yet received, and any collateral that the QCCP has actually received from clearing member i;

(C) $IM_i$ = the collateral posted as initial margin by clearing member i to the QCCP;

(D) $DF_i$ = the funded portion of clearing member i's default fund contribution that will be applied to reduce the QCCP's loss upon a default by clearing member i;

(E) RW = 20 percent, except when FHFA has determined that a higher risk weight is more appropriate based on the specific characteristics of the QCCP and its clearing members; and

(F) Where a QCCP has provided its $K_{CCP}$, an Enterprise must rely on such disclosed figure instead of calculating $K_{CCP}$ under this paragraph (d), unless the Enterprise determines that a more conservative figure is appropriate based on the nature, structure, or characteristics of the QCCP.

(ii) For an Enterprise that is a clearing member of a QCCP with a default fund supported by funded commitments, $K_{CM}$ equals:

$$K_{CM_i} = \left(1 + \beta \cdot \frac{N}{N-2}\right) \cdot \frac{DF_i}{DF_{CM}} \cdot K^*_{CM}$$

$$K^*_{CM} = \begin{cases} c_2 \cdot \mu \cdot (K_{CCP} - DF') + c_2 \cdot DF'_{CM} & if \quad DF' < K_{CCP} \quad (i) \\ c_2 \cdot (K_{CCP} - DF_{CCP}) + c_1 \cdot (DF' - K_{CCP}) & if \quad DF_{CCP} < K_{CCP} \leq DF' \quad (ii) \\ c_1 \cdot DF'_{CM} & if \quad K_{CCP} \leq DF_{CCP} \quad (iii) \end{cases}$$

Where

$$\text{(A)} \quad \beta = \frac{A_{Net,1} + A_{Net,2}}{\sum_i A_{Net,i}}$$

Subscripts 1 and 2 denote the clearing members with the two largest $A_{Net}$ values. For purposes of this paragraph (d), for derivatives $A_{Net}$ is defined in § 1240.36(b)(2)(ii) and for repo-style transactions, $A_{Net}$ means the exposure amount as defined in § 1240.39(c)(2) using the methodology in § 1240.39(c)(3);

(B) N = the number of clearing members in the QCCP;

(C) $DF_{CCP}$ = the QCCP's own funds and other financial resources that would be used to cover its losses before clearing members' default fund contributions are used to cover losses;

(D) $DF_{CM}$ = funded default fund contributions from all clearing members and any other clearing member contributed financial resources that are available to absorb mutualized QCCP losses;

(E) $DF = DF_{CCP} + DF_{CM}$ (that is, the total funded default fund contribution);

(F) $\overline{DF}_l$ = average $\overline{DF}_l$ = the average funded default fund contribution from an individual clearing member;

(G) $DF'_{CM} = DF_{CM} - 2 \cdot \overline{DF}_l = \Sigma_i DF_i - 2 \cdot \overline{DF}_l$ (that is, the funded default fund contribution from surviving clearing members assuming that two average clearing members have defaulted and their default fund contributions and initial margins have been used to absorb the resulting losses);

(H) $DF' = DF_{CCP} + DF'_{CM} = DF - 2 \cdot \overline{DF}_l$ (that is, the total funded default fund contributions from the QCCP and the surviving clearing members that are available to mutualize losses, assuming that two average clearing members have defaulted);

$$\text{(I)} \quad c_1 = Max\left\{\frac{1.6\%}{(DF'/K_{CCP})^{0.3}}; 0.16\%\right\}$$

(that is, a decreasing capital factor, between 1.6 percent and 0.16 percent, applied to the excess funded default funds provided by clearing members);

(J) $c_2$ = 100 percent; and

(K) $\mu$ = 1.2;

(iii)(A) For an Enterprise that is a clearing member of a QCCP with a default fund supported by unfunded commitments, $K_{CM}$ equals;

$$K_{CM_i} = \frac{DF_i}{DF_{CM}} \cdot K^*_{CM}$$

Where:

(*1*) $DF_i$ = the Enterprise's unfunded commitment to the default fund;

(*2*) $DF_{CM}$ = the total of all clearing members' unfunded commitment to the default fund; and

(*3*) $K^*_{CM}$ as defined in paragraph (d)(3)(ii) of this section.

(B) For an Enterprise that is a clearing member of a QCCP with a default fund supported by unfunded commitments and is unable to calculate $K_{CM}$ using the methodology described in paragraph (d)(3)(iii) of this section, $K_{CM}$ equals:

$$K_{CM_i} = \frac{IM_i}{IM_{CM}} \cdot K^*_{CM}$$

Where:

(*1*) $IM_i$ = the Enterprise's initial margin posted to the QCCP;

(*2*) $IM_{CM}$ = the total of initial margin posted to the QCCP; and

(*3*) $K^*_{CM}$ as defined in paragraph (d)(3)(ii) of this section.

(iii) *Method 2.* A clearing member Enterprise's risk-weighted asset amount for its default fund contribution to a QCCP, $RWA_{DF}$, equals:

$RWA_{DF} = Min \{12.5 * DF; 0.18 * TE\}$

Where:

(A) TE = the Enterprise's trade exposure amount to the QCCP, calculated according to paragraph (c)(2) of this section;

(B) DF = the funded portion of the Enterprise's default fund contribution to the QCCP.

(*4*) *Total risk-weighted assets for default fund contributions.* Total risk-weighted assets for default fund contributions is the sum of a clearing member Enterprise's risk-weighted assets for all of its default fund contributions to all CCPs of which the Enterprise is a clearing member.

**§ 1240.38 Guarantees and credit derivatives: substitution treatment.**

(a) *Scope*—(1) *General.* An Enterprise may recognize the credit risk mitigation benefits of an eligible guarantee or eligible credit derivative by substituting the risk weight associated with the protection provider for the risk weight assigned to an exposure, as provided under this section.

(2) *Applicability.* This section applies to exposures for which:

(i) Credit risk is fully covered by an eligible guarantee or eligible credit derivative; or

(ii) Credit risk is covered on a pro rata basis (that is, on a basis in which the Enterprise and the protection provider share losses proportionately) by an eligible guarantee or eligible credit derivative.

(3) *Tranching.* Exposures on which there is a tranching of credit risk (reflecting at least two different levels of seniority) generally are securitization exposures subject to §§ 1240.41 through 1240.46.

(4) *Multiple guarantees or credit derivatives.* If multiple eligible guarantees or eligible credit derivatives cover a single exposure described in this section, an Enterprise may treat the hedged exposure as multiple separate exposures each covered by a single eligible guarantee or eligible credit derivative and may calculate a separate risk-weighted asset amount for each separate exposure as described in paragraph (c) of this section.

(5) *Single guarantees or credit derivatives.* If a single eligible guarantee or eligible credit derivative covers multiple hedged exposures described in paragraph (a)(2) of this section, an Enterprise must treat each hedged exposure as covered by a separate eligible guarantee or eligible credit derivative and must calculate a separate risk-weighted asset amount for each exposure as described in paragraph (c) of this section.

(b) *Rules of recognition.* (1) An Enterprise may only recognize the credit risk mitigation benefits of eligible guarantees and eligible credit derivatives.

(2) An Enterprise may only recognize the credit risk mitigation benefits of an eligible credit derivative to hedge an exposure that is different from the credit derivative's reference exposure used for determining the derivative's cash settlement value, deliverable obligation, or occurrence of a credit event if:

(i) The reference exposure ranks *pari passu* with, or is subordinated to, the hedged exposure; and

(ii) The reference exposure and the hedged exposure are to the same legal entity, and legally enforceable cross-default or cross-acceleration clauses are in place to ensure payments under the credit derivative are triggered when the obligated party of the hedged exposure fails to pay under the terms of the hedged exposure.

(c) *Substitution approach*—(1) *Full coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is greater than or equal to the exposure amount of the hedged exposure, an Enterprise may recognize the guarantee or credit derivative in determining the risk-weighted asset amount for the hedged exposure by substituting the risk weight applicable to the guarantor or credit derivative protection provider under this subpart D for the risk weight assigned to the exposure.

(2) *Partial coverage.* If an eligible guarantee or eligible credit derivative meets the conditions in paragraphs (a) and (b) of this section and the protection amount (P) of the guarantee or credit derivative is less than the exposure amount of the hedged exposure, the Enterprise must treat the hedged exposure as two separate exposures (protected and unprotected) in order to recognize the credit risk mitigation benefit of the guarantee or credit derivative.

(i) The Enterprise may calculate the risk-weighted asset amount for the protected exposure under this subpart D, where the applicable risk weight is the risk weight applicable to the guarantor or credit derivative protection provider.

(ii) The Enterprise must calculate the risk-weighted asset amount for the unprotected exposure under this subpart D, where the applicable risk weight is that of the unprotected portion of the hedged exposure.

(iii) The treatment provided in this section is applicable when the credit risk of an exposure is covered on a partial pro rata basis and may be applicable when an adjustment is made to the effective notional amount of the guarantee or credit derivative under paragraph (d), (e), or (f) of this section.

(d) *Maturity mismatch adjustment.* (1) An Enterprise that recognizes an eligible guarantee or eligible credit derivative in determining the risk-weighted asset amount for a hedged exposure must adjust the effective notional amount of the credit risk mitigant to reflect any maturity mismatch between the hedged exposure and the credit risk mitigant.

(2) A maturity mismatch occurs when the residual maturity of a credit risk mitigant is less than that of the hedged exposure(s).

(3) The residual maturity of a hedged exposure is the longest possible remaining time before the obligated party of the hedged exposure is scheduled to fulfil its obligation on the hedged exposure. If a credit risk mitigant has embedded options that may reduce its term, the Enterprise (protection purchaser) must use the shortest possible residual maturity for the credit risk mitigant. If a call is at the discretion of the protection provider, the residual maturity of the credit risk mitigant is at the first call date. If the call is at the discretion of the Enterprise (protection purchaser), but the terms of the arrangement at origination of the credit risk mitigant contain a positive incentive for the Enterprise to call the transaction before contractual maturity, the remaining time to the first call date is the residual maturity of the credit risk mitigant.

(4) A credit risk mitigant with a maturity mismatch may be recognized only if its original maturity is greater than or equal to one year and its residual maturity is greater than three months.

(5) When a maturity mismatch exists, the Enterprise must apply the following adjustment to reduce the effective notional amount of the credit risk mitigant: $Pm = E \times (t - 0.25)/(T - 0.25)$, where:

(i) Pm = effective notional amount of the credit risk mitigant, adjusted for maturity mismatch;

(ii) E = effective notional amount of the credit risk mitigant;

(iii) t = the lesser of T or the residual maturity of the credit risk mitigant, expressed in years; and

(iv) T = the lesser of five or the residual maturity of the hedged exposure, expressed in years.

(e) *Adjustment for credit derivatives without restructuring as a credit event.* If an Enterprise recognizes an eligible credit derivative that does not include as a credit event a restructuring of the hedged exposure involving forgiveness or postponement of principal, interest, or fees that results in a credit loss event (that is, a charge-off, specific provision, or other similar debit to the profit and loss account), the Enterprise must apply the following adjustment to reduce the effective notional amount of the credit derivative: $Pr = Pm \times 0.60$, where:

(1) Pr = effective notional amount of the credit risk mitigant, adjusted for lack of restructuring event (and maturity mismatch, if applicable); and

(2) Pm = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch, if applicable).

(f) *Currency mismatch adjustment.* (1) If an Enterprise recognizes an eligible guarantee or eligible credit derivative that is denominated in a currency different from that in which the hedged exposure is denominated, the Enterprise must apply the following formula to the effective notional amount of the guarantee or credit derivative: $P_C = Pr \times (1 - H_{FX})$, where:

(i) $P_C$ = effective notional amount of the credit risk mitigant, adjusted for currency mismatch (and maturity mismatch and lack of restructuring event, if applicable);

(ii) Pr = effective notional amount of the credit risk mitigant (adjusted for maturity mismatch and lack of restructuring event, if applicable); and

(iii) $H_{FX}$ = haircut appropriate for the currency mismatch between the credit risk mitigant and the hedged exposure.

(2) An Enterprise must set $H_{FX}$ equal to eight percent unless it qualifies for the use of and uses its own internal estimates of foreign exchange volatility based on a ten-business-day holding period. An Enterprise qualifies for the use of its own internal estimates of foreign exchange volatility if it qualifies for the use of its own-estimates haircuts in § 1240.39(c)(4).

(3) An Enterprise must adjust $H_{FX}$ calculated in paragraph (f)(2) of this section upward if the Enterprise revalues the guarantee or credit derivative less frequently than once every 10 business days using the following square root of time formula:

$$H_{FX} = 8\%\sqrt{\frac{T_M}{10}},$$

where $T_M$ equals the greater of 10 or the number of days between revaluation.

**§ 1240.39 Collateralized transactions.**

(a) *General.* (1) To recognize the risk-mitigating effects of financial collateral (other than with respect to a retained CRT exposure), an Enterprise may use:

(i) The simple approach in paragraph (b) of this section for any exposure; or

(ii) The collateral haircut approach in paragraph (c) of this section for repo-style transactions, eligible margin loans, collateralized derivative contracts, and single-product netting sets of such transactions.

(2) An Enterprise may use any approach described in this section that is valid for a particular type of exposure or transaction; however, it must use the same approach for similar exposures or transactions.

(b) *The simple approach*—(1) *General requirements.* (i) An Enterprise may recognize the credit risk mitigation benefits of financial collateral that secures any exposure (other than a retained CRT exposure).

(ii) To qualify for the simple approach, the financial collateral must meet the following requirements:

(A) The collateral must be subject to a collateral agreement for at least the life of the exposure;

(B) The collateral must be revalued at least every six months; and

(C) The collateral (other than gold) and the exposure must be denominated in the same currency.

(2) *Risk weight substitution.* (i) An Enterprise may apply a risk weight to the portion of an exposure that is secured by the fair value of financial collateral (that meets the requirements of paragraph (b)(1) of this section) based on the risk weight assigned to the collateral under this subpart D. For repurchase agreements, reverse repurchase agreements, and securities lending and borrowing transactions, the collateral is the instruments, gold, and cash the Enterprise has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction. Except as provided in paragraph (b)(3) of this section, the risk weight assigned to the collateralized portion of the exposure may not be less than 20 percent.

(ii) An Enterprise must apply a risk weight to the unsecured portion of the exposure based on the risk weight applicable to the exposure under this subpart.

(3) *Exceptions to the 20 percent risk-weight floor and other requirements.* Notwithstanding paragraph (b)(2)(i) of this section:

(i) An Enterprise may assign a zero percent risk weight to an exposure to an OTC derivative contract that is marked-to-market on a daily basis and subject to a daily margin maintenance requirement, to the extent the contract is collateralized by cash on deposit.

(ii) An Enterprise may assign a 10 percent risk weight to an exposure to an OTC derivative contract that is marked-to-market daily and subject to a daily margin maintenance requirement, to the extent that the contract is collateralized by an exposure to a sovereign that qualifies for a zero percent risk weight under § 1240.32.

(iii) An Enterprise may assign a zero percent risk weight to the collateralized portion of an exposure where:

(A) The financial collateral is cash on deposit; or

(B) The financial collateral is an exposure to a sovereign that qualifies for a zero percent risk weight under § 1240.32, and the Enterprise has discounted the fair value of the collateral by 20 percent.

(c) *Collateral haircut approach*—(1) *General.* An Enterprise may recognize the credit risk mitigation benefits of financial collateral that secures an eligible margin loan, repo-style transaction, collateralized derivative contract, or single-product netting set of such transactions, by using the collateral haircut approach in this section. An Enterprise may use the standard supervisory haircuts in paragraph (c)(3) of this section or, with prior written notice to FHFA, its own estimates of haircuts according to paragraph (c)(4) of this section.

(2) *Exposure amount equation.* An Enterprise must determine the exposure amount for an eligible margin loan, repo-style transaction, collateralized derivative contract, or a single-product netting set of such transactions by setting the exposure amount equal to $\max\{0, [(\Sigma E - \Sigma C) + \Sigma(Es \times Hs) + \Sigma(Efx \times Hfx)]\}$, where:

(i)(A) For eligible margin loans and repo-style transactions and netting sets thereof, ΣE equals the value of the exposure (the sum of the current fair values of all instruments, gold, and cash the Enterprise has lent, sold subject to repurchase, or posted as collateral to the counterparty under the transaction (or netting set)); and

(B) For collateralized derivative contracts and netting sets thereof, ΣE equals the exposure amount of the OTC derivative contract (or netting set) calculated under § 1240.36(b)(1) or (2).

(ii) ΣC equals the value of the collateral (the sum of the current fair

values of all instruments, gold and cash the Enterprise has borrowed, purchased subject to resale, or taken as collateral from the counterparty under the transaction (or netting set));

(iii) Es equals the absolute value of the net position in a given instrument or in gold (where the net position in the instrument or gold equals the sum of the current fair values of the instrument or gold the Enterprise has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of that same instrument or gold the Enterprise has borrowed, purchased subject to resale, or taken as collateral from the counterparty);

(iv) Hs equals the market price volatility haircut appropriate to the instrument or gold referenced in Es;

(v) Efx equals the absolute value of the net position of instruments and cash in a currency that is different from the settlement currency (where the net position in a given currency equals the sum of the current fair values of any instruments or cash in the currency the Enterprise has lent, sold subject to repurchase, or posted as collateral to the counterparty minus the sum of the current fair values of any instruments or cash in the currency the Enterprise has borrowed, purchased subject to resale, or taken as collateral from the counterparty); and

(vi) Hfx equals the haircut appropriate to the mismatch between the currency referenced in Efx and the settlement currency.

(3) *Standard supervisory haircuts.* (i) An Enterprise must use the haircuts for market price volatility (Hs) provided in table 1 to this paragraph (c)(3)(i), as adjusted in certain circumstances in accordance with the requirements of paragraphs (c)(3)(iii) and (iv) of this section.

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**TABLE 1 TO PARAGRAPH (c)(3)(i)—STANDARD SUPERVISORY MARKET PRICE VOLATILITY HAIRCUTS[1]**

| Residual maturity | Haircut (in percent) assigned based on: Sovereign issuers risk weight under §1240.32 (in percent)[2] | | | Non-sovereign issuers risk weight under §1240.32 (in percent) | | | Investment grade securitization exposures (in percent) |
|---|---|---|---|---|---|---|---|
| | Zero | 20 or 50 | 100 | 20 | 50 | 100 | |
| Less than or equal to 1 year | 0.5 | 1.0 | 15.0 | 1.0 | 2.0 | 4.0 | 4.0 |
| Greater than 1 year and less than or equal to 5 years | 2.0 | 3.0 | 15.0 | 4.0 | 6.0 | 8.0 | 12.0 |
| Greater than 5 years | 4.0 | 6.0 | 15.0 | 8.0 | 12.0 | 16.0 | 24.0 |
| Main index equities (including convertible bonds) and Gold | | | | 15.0 | | | |
| Other publicly traded equities (including convertible bonds) | | | | 25.0 | | | |
| Mutual funds | | | | Highest haircut applicable to any security in which the fund can invest. | | | |
| Cash collateral held | | | | Zero. | | | |
| Other exposure types | | | | 25.0 | | | |

[1] The market price volatility haircuts in Table 1 to §1240.39 are based on a 10 business-day holding period.

[2] Includes a foreign PSE that receives a zero percent risk weight.

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(ii) For currency mismatches, an Enterprise must use a haircut for foreign exchange rate volatility (Hfx) of 8.0 percent, as adjusted in certain circumstances under paragraphs (c)(3)(iii) and (iv) of this section.

(iii) For repo-style transactions and client-facing derivative transactions, an Enterprise may multiply the standard supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section by the square root of ½ (which equals 0.707107). For client-facing derivative transactions, if a larger scaling factor is applied under § 1240.36(f), the same factor must be used to adjust the supervisory haircuts.

(iv) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, an Enterprise must

adjust the supervisory haircuts provided in paragraphs (c)(3)(i) and (ii) of this section upward on the basis of a holding period of twenty business days for the following quarter except in the calculation of the exposure amount for purposes of § 1240.37. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, an Enterprise must adjust the supervisory haircuts upward on the basis of a holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Enterprise must adjust the supervisory haircuts upward for that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set. An Enterprise must adjust the standard supervisory haircuts upward using the following formula:

$$H_A = H_S\sqrt{\frac{T_M}{T_S}},$$

where

(A) $T_M$ equals a holding period of longer than 10 business days for eligible margin loans and derivative contracts other than client-facing derivative transactions or longer than 5 business days for repo-style transactions and client-facing derivative transactions;

(B) $H_S$ equals the standard supervisory haircut; and

(C) $T_S$ equals 10 business days for eligible margin loans and derivative contracts other than client-facing derivative transactions or 5 business days for repo-style transactions and client-facing derivative transactions.

(v) If the instrument an Enterprise has lent, sold subject to repurchase, or posted as collateral does not meet the definition of ''financial collateral,'' the Enterprise must use a 25.0 percent haircut for market price volatility (Hs).

(4) *Own internal estimates for haircuts.* With the prior written notice to FHFA, an Enterprise may calculate haircuts (Hs and Hfx) using its own internal estimates of the volatilities of market prices and foreign exchange rates:

(i) To use its own internal estimates, an Enterprise must satisfy the following minimum standards:

(A) An Enterprise must use a 99th percentile one-tailed confidence interval.

(B) The minimum holding period for a repo-style transaction and client-facing derivative transaction is five business days and for an eligible margin loan and a derivative contract other than a client-facing derivative transaction is ten business days except for transactions or netting sets for which paragraph (c)(4)(i)(C) of this section applies. When an Enterprise calculates an own-estimates haircut on a $T_N$-day holding period, which is different from the minimum holding period for the transaction type, the applicable haircut ($H_M$) is calculated using the following square root of time formula:

$$H_M = H_N\sqrt{\frac{T_M}{T_N}},$$

where

(*1*) $T_M$ equals 5 for repo-style transactions and client-facing derivative transactions and 10 for eligible margin loans and derivative contracts other than client-facing derivative transactions;

(*2*) $T_N$ equals the holding period used by the Enterprise to derive $H_N$; and

(*3*) $H_N$ equals the haircut based on the holding period $T_N$.

(C) If the number of trades in a netting set exceeds 5,000 at any time during a quarter, an Enterprise must calculate the haircut using a minimum holding period of twenty business days for the following quarter except in the calculation of the exposure amount for purposes of § 1240.37. If a netting set contains one or more trades involving illiquid collateral or an OTC derivative that cannot be easily replaced, an Enterprise must calculate the haircut using a minimum holding period of twenty business days. If over the two previous quarters more than two margin disputes on a netting set have occurred that lasted more than the holding period, then the Enterprise must calculate the haircut for transactions in that netting set on the basis of a holding period that is at least two times the minimum holding period for that netting set.

(D) An Enterprise is required to calculate its own internal estimates with inputs calibrated to historical data from a continuous 12-month period that reflects a period of significant financial stress appropriate to the security or category of securities.

(E) An Enterprise must have policies and procedures that describe how it determines the period of significant financial stress used to calculate the Enterprise's own internal estimates for haircuts under this section and must be able to provide empirical support for the period used. The Enterprise must provide prior written notice to FHFA if the Enterprise makes any material changes to these policies and procedures.

(F) Nothing in this section prevents FHFA from requiring an Enterprise to use a different period of significant financial stress in the calculation of own internal estimates for haircuts.

(G) An Enterprise must update its data sets and calculate haircuts no less frequently than quarterly and must also reassess data sets and haircuts whenever market prices change materially.

(ii) With respect to debt securities that are investment grade, an Enterprise may calculate haircuts for categories of securities. For a category of securities, the Enterprise must calculate the haircut on the basis of internal volatility estimates for securities in that category that are representative of the securities in that category that the Enterprise has lent, sold subject to repurchase, posted as collateral, borrowed, purchased subject to resale, or taken as collateral. In determining relevant categories, the Enterprise must at a minimum take into account:

(A) The type of issuer of the security;

(B) The credit quality of the security;

(C) The maturity of the security; and

(D) The interest rate sensitivity of the security.

(iii) With respect to debt securities that are not investment grade and equity securities, an Enterprise must calculate a separate haircut for each individual security.

(iv) Where an exposure or collateral (whether in the form of cash or securities) is denominated in a currency that differs from the settlement currency, the Enterprise must calculate a separate currency mismatch haircut for its net position in each mismatched currency based on estimated volatilities of foreign exchange rates between the mismatched currency and the settlement currency.

(v) An Enterprise's own estimates of market price and foreign exchange rate volatilities may not take into account the correlations among securities and foreign exchange rates on either the exposure or collateral side of a transaction (or netting set) or the correlations among securities and foreign exchange rates between the exposure and collateral sides of the transaction (or netting set).

**Risk-Weighted Assets for Unsettled Transactions**

**§ 1240.40 Unsettled transactions.**

(a) *Definitions.* For purposes of this section:

(1) Delivery-versus-payment (DvP) transaction means a securities or commodities transaction in which the buyer is obligated to make payment only if the seller has made delivery of the securities or commodities and the seller is obligated to deliver the securities or

commodities only if the buyer has made payment.

(2) Payment-versus-payment (PvP) transaction means a foreign exchange transaction in which each counterparty is obligated to make a final transfer of one or more currencies only if the other counterparty has made a final transfer of one or more currencies.

(3) A transaction has a normal settlement period if the contractual settlement period for the transaction is equal to or less than the market standard for the instrument underlying the transaction and equal to or less than five business days.

(4) Positive current exposure of an Enterprise for a transaction is the difference between the transaction value at the agreed settlement price and the current market price of the transaction, if the difference results in a credit exposure of the Enterprise to the counterparty.

(b) *Scope.* This section applies to all transactions involving securities, foreign exchange instruments, and commodities that have a risk of delayed settlement or delivery. This section does not apply to:

(1) Cleared transactions that are marked-to-market daily and subject to daily receipt and payment of variation margin;

(2) Repo-style transactions, including unsettled repo-style transactions;

(3) One-way cash payments on OTC derivative contracts; or

(4) Transactions with a contractual settlement period that is longer than the normal settlement period (which are treated as OTC derivative contracts as provided in § 1240.36).

(c) *System-wide failures.* In the case of a system-wide failure of a settlement, clearing system or central counterparty, FHFA may waive risk-based capital requirements for unsettled and failed transactions until the situation is rectified.

(d) *Delivery-versus-payment (DvP) and payment-versus-payment (PvP) transactions.* An Enterprise must hold risk-based capital against any DvP or PvP transaction with a normal settlement period if the Enterprise's counterparty has not made delivery or payment within five business days after the settlement date. The Enterprise must determine its risk-weighted asset amount for such a transaction by multiplying the positive current exposure of the transaction for the Enterprise by the appropriate risk weight in table 1 to this paragraph (d).

**TABLE 1 TO PARAGRAPH (d)—RISK WEIGHTS FOR UNSETTLED DVP AND PVP TRANSACTIONS**

| Number of business days after contractual settlement date | Risk weight to be applied to positive current exposure (in percent) |
|---|---|
| From 5 to 15 | 100.0 |
| From 16 to 30 | 625.0 |
| From 31 to 45 | 937.5 |
| 46 or more | 1,250.0 |

(e) *Non-DvP/non-PvP (non-delivery-versus-payment/non-payment-versus-payment) transactions.* (1) An Enterprise must hold risk-based capital against any non-DvP/non-PvP transaction with a normal settlement period if the Enterprise has delivered cash, securities, commodities, or currencies to its counterparty but has not received its corresponding deliverables by the end of the same business day. The Enterprise must continue to hold risk-based capital against the transaction until the Enterprise has received its corresponding deliverables.

(2) From the business day after the Enterprise has made its delivery until five business days after the counterparty delivery is due, the Enterprise must calculate the risk-weighted asset amount for the transaction by treating the current fair value of the deliverables owed to the Enterprise as an exposure to the counterparty and using the applicable counterparty risk weight under this subpart D.

(3) If the Enterprise has not received its deliverables by the fifth business day after counterparty delivery was due, the Enterprise must assign a 1,250 percent risk weight to the current fair value of the deliverables owed to the Enterprise.

(f) *Total risk-weighted assets for unsettled transactions.* Total risk-weighted assets for unsettled transactions is the sum of the risk-weighted asset amounts of all DvP, PvP, and non-DvP/non-PvP transactions.

**Risk-Weighted Assets for CRT and Other Securitization Exposures**

**§ 1240.41 Operational requirements for CRT and other securitization exposures.**

(a) *Operational criteria for traditional securitizations.* An Enterprise that transfers exposures it has purchased or otherwise acquired to a securitization SPE or other third party in connection with a traditional securitization may exclude the exposures from the calculation of its risk-weighted assets only if each condition in this section is satisfied. An Enterprise that meets these conditions must hold risk-based capital against any credit risk it retains in connection with the securitization. An Enterprise that fails to meet these conditions must hold risk-based capital against the transferred exposures as if they had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the transaction. The conditions are:

(1) The exposures are not reported on the Enterprise's consolidated balance sheet under GAAP;

(2) The Enterprise has transferred to one or more third parties credit risk associated with the underlying exposures;

(3) Any clean-up calls relating to the securitization are eligible clean-up calls; and

(4) The securitization does not:

(i) Include one or more underlying exposures in which the borrower is permitted to vary the drawn amount within an agreed limit under a line of credit; and

(ii) Contain an early amortization provision.

(b) *Operational criteria for synthetic securitizations.* For synthetic securitizations, an Enterprise may recognize for risk-based capital purposes the use of a credit risk mitigant to hedge underlying exposures only if each condition in this paragraph (b) is satisfied. An Enterprise that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the synthetic securitization. An Enterprise that fails to meet these conditions or chooses not to recognize the credit risk mitigant for purposes of this section must instead hold risk-based capital against the underlying exposures as if they had not been synthetically securitized. The conditions are:

(1) The credit risk mitigant is:

(i) Financial collateral;

(ii) A guarantee that meets all criteria as set forth in the definition of ''eligible guarantee'' in § 1240.2, except for the criteria in paragraph (3) of that definition; or

(iii) A credit derivative that meets all criteria as set forth in the definition of ''eligible credit derivative'' in § 1240.2, except for the criteria in paragraph (3) of the definition of ''eligible guarantee'' in § 1240.2.

(2) The Enterprise transfers credit risk associated with the underlying exposures to one or more third parties, and the terms and conditions in the credit risk mitigants employed do not include provisions that:

(i) Allow for the termination of the credit protection due to deterioration in the credit quality of the underlying exposures;

(ii) Require the Enterprise to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;

(iii) Increase the Enterprise's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;

(iv) Increase the yield payable to parties other than the Enterprise in response to a deterioration in the credit quality of the underlying exposures; or

(v) Provide for increases in a retained first loss position or credit enhancement provided by the Enterprise after the inception of the securitization;

(3) The Enterprise obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk mitigant in all relevant jurisdictions; and

(4) Any clean-up calls relating to the securitization are eligible clean-up calls.

(c) *Operational criteria for credit risk transfers.* For credit risk transfers, an Enterprise may recognize for risk-based capital purposes, the use of a credit risk transfer only if each condition in this paragraph (c) is satisfied (or, for a credit risk transfer entered into before February 16, 2021, only if each condition in paragraphs (c)(2) and (3) of this section is satisfied). An Enterprise that meets these conditions must hold risk-based capital against any credit risk of the exposures it retains in connection with the credit risk transfer. An Enterprise that fails to meet these conditions or chooses not to recognize the credit risk transfer for purposes of this section must instead hold risk-based capital against the underlying exposures as if they had not been subject to the credit risk transfer. The conditions are:

(1) The credit risk transfer is any of the following—

(i) An eligible funded synthetic risk transfer;

(ii) An eligible reinsurance risk transfer;

(iii) An eligible single-family lender risk share;

(iv) An eligible multifamily lender risk share; or

(v) An eligible senior-subordinated structure.

(2) The credit risk transfer has been approved by FHFA as effective in transferring the credit risk of one or more mortgage exposures to another party, taking into account any counterparty, recourse, or other risk to the Enterprise and any capital, liquidity, or other requirements applicable to counterparties;

(3) The Enterprise transfers credit risk associated with the underlying exposures to one or more third parties, and the terms and conditions in the credit risk transfer employed do not include provisions that:

(i) Allow for the termination of the credit risk transfer due to deterioration in the credit quality of the underlying exposures;

(ii) Require the Enterprise to alter or replace the underlying exposures to improve the credit quality of the underlying exposures;

(iii) Increase the Enterprise's cost of credit protection in response to deterioration in the credit quality of the underlying exposures;

(iv) Increase the yield payable to parties other than the Enterprise in response to a deterioration in the credit quality of the underlying exposures; or

(v) Provide for increases in a retained first loss position or credit enhancement provided by the Enterprise after the inception of the credit risk transfer;

(4) The Enterprise obtains a well-reasoned opinion from legal counsel that confirms the enforceability of the credit risk transfer in all relevant jurisdictions;

(5) Any clean-up calls relating to the credit risk transfer are eligible clean-up calls; and

(6) The Enterprise includes in its periodic disclosures under the Federal securities laws, or in other appropriate public disclosures, a reasonably detailed description of—

(i) The material recourse or other risks that might reduce the effectiveness of the credit risk transfer in transferring the credit risk on the underlying exposures to third parties; and

(ii) Each condition under paragraph (a) of this section (governing traditional securitizations) or paragraph (b) of this section (governing synthetic securitizations) that is not satisfied by the credit risk transfer and the reasons that each such condition is not satisfied.

(d) *Due diligence requirements for securitization exposures.* (1) Except for exposures that are deducted from common equity tier 1 capital and exposures subject to § 1240.42(h), if an Enterprise is unable to demonstrate to the satisfaction of FHFA a comprehensive understanding of the features of a securitization exposure that would materially affect the performance of the exposure, the Enterprise must assign the securitization exposure a risk weight of 1,250 percent. The Enterprise's analysis must be commensurate with the complexity of the securitization exposure and the materiality of the exposure in relation to its capital.

(2) An Enterprise must demonstrate its comprehensive understanding of a securitization exposure under paragraph (d)(1) of this section, for each securitization exposure by:

(i) Conducting an analysis of the risk characteristics of a securitization exposure prior to acquiring the exposure, and documenting such analysis within three business days after acquiring the exposure, considering:

(A) Structural features of the securitization that would materially impact the performance of the exposure, for example, the contractual cash flow waterfall, waterfall-related triggers, credit enhancements, liquidity enhancements, fair value triggers, the performance of organizations that service the exposure, and deal-specific definitions of default;

(B) Relevant information regarding the performance of the underlying credit exposure(s), for example, the percentage of loans 30, 60, and 90 days past due; default rates; prepayment rates; loans in foreclosure; property types; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographic diversification data on the underlying exposure(s);

(C) Relevant market data of the securitization, for example, bid-ask spread, most recent sales price and historic price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the securitization; and

(D) For resecuritization exposures, performance information on the underlying securitization exposures, for example, the issuer name and credit quality, and the characteristics and performance of the exposures underlying the securitization exposures; and

(ii) On an on-going basis (no less frequently than quarterly), evaluating, reviewing, and updating as appropriate the analysis required under paragraph (d)(1) of this section for each securitization exposure.

**§ 1240.42 Risk-weighted assets for CRT and other securitization exposures.**

(a) *Securitization risk weight approaches.* Except as provided elsewhere in this section or in § 1240.41:

(1) An Enterprise must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from a securitization and apply a 1,250 percent risk weight to the portion of a CEIO that does not constitute after-tax gain-on-sale.

(2) If a securitization exposure does not require deduction under paragraph (a)(1) of this section, an Enterprise may assign a risk weight to the securitization exposure either using the simplified supervisory formula approach (SSFA) in accordance with § 1240.43(a) through (d) for a securitization exposure that is not a retained CRT exposure or an acquired CRT exposure or using the credit risk transfer approach (CRTA) in accordance with § 1240.44 for a retained CRT exposure, and in either case, subject to the limitation under paragraph (e) of this section.

(3) If a securitization exposure does not require deduction under paragraph (a)(1) of this section and the Enterprise cannot, or chooses not to apply the SSFA or the CRTA to the exposure, the Enterprise must assign a risk weight to the exposure as described in § 1240.45.

(4) If a securitization exposure is a derivative contract (other than protection provided by an Enterprise in the form of a credit derivative) that has a first priority claim on the cash flows from the underlying exposures (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments), an Enterprise may choose to set the risk-weighted asset amount of the exposure equal to the amount of the exposure as determined in paragraph (c) of this section.

(b) *Total risk-weighted assets for securitization exposures.* An Enterprise's total risk-weighted assets for securitization exposures equals the sum of the risk-weighted asset amount for securitization exposures that the Enterprise risk weights under § 1240.41(d), § 1240.42(a)(1), § 1240.43, § 1240.44, or § 1240.45, and paragraphs (e) through (h) of this section, as applicable.

(c) *Exposure amount of a CRT or other securitization exposure*—(1) *On-balance sheet securitization exposures.* Except as provided for retained CRT exposures in § 1240.44(f), the exposure amount of an on-balance sheet securitization exposure (excluding a repo-style transaction, eligible margin loan, OTC derivative contract, or cleared transaction) is equal to the carrying value of the exposure.

(2) *Off-balance sheet securitization exposures.* Except as provided in paragraph (h) of this section or as provided for retained CRT exposures in § 1240.44(f), the exposure amount of an off-balance sheet securitization exposure that is not a repo-style transaction, eligible margin loan, cleared transaction (other than a credit derivative), or an OTC derivative contract (other than a credit derivative) is the notional amount of the exposure.

(3) *Repo-style transactions, eligible margin loans, and derivative contracts.* The exposure amount of a securitization exposure that is a repo-style transaction, eligible margin loan, or derivative contract (other than a credit derivative) is the exposure amount of the transaction as calculated under § 1240.36 or § 1240.39, as applicable.

(d) *Overlapping exposures.* If an Enterprise has multiple securitization exposures that provide duplicative coverage to the underlying exposures of a securitization, the Enterprise is not required to hold duplicative risk-based capital against the overlapping position. Instead, the Enterprise may apply to the overlapping position the applicable risk-based capital treatment that results in the highest risk-based capital requirement.

(e) *Implicit support.* If an Enterprise provides support to a securitization (including a CRT) in excess of the Enterprise's contractual obligation to provide credit support to the securitization (implicit support):

(1) The Enterprise must include in risk-weighted assets all of the underlying exposures associated with the securitization as if the exposures had not been securitized and must deduct from common equity tier 1 capital any after-tax gain-on-sale resulting from the securitization; and

(2) The Enterprise must disclose publicly:

(i) That it has provided implicit support to the securitization; and

(ii) The risk-based capital impact to the Enterprise of providing such implicit support.

(f) *Interest-only mortgage-backed securities.* Regardless of any other provisions in this subpart, the risk weight for a non-credit-enhancing interest-only mortgage-backed security may not be less than 100 percent.

(g) *Nth-to-default credit derivatives*—(1) *Protection provider.* An Enterprise may assign a risk weight using the SSFA in § 1240.43 to an nth-to-default credit derivative in accordance with this paragraph (g). An Enterprise must determine its exposure in the nth-to-default credit derivative as the largest notional amount of all the underlying exposures.

(2) A*ttachment and detachment points.* For purposes of determining the risk weight for an nth-to-default credit derivative using the SSFA, the Enterprise must calculate the attachment point and detachment point of its exposure as follows:

(i) The attachment point (parameter *A*) is the ratio of the sum of the notional amounts of all underlying exposures that are subordinated to the Enterprise's exposure to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one. In the case of a first-to-default credit derivative, there are no underlying exposures that are subordinated to the Enterprise's exposure. In the case of a second-or-subsequent-to-default credit derivative, the smallest (n-1) notional amounts of the underlying exposure(s) are subordinated to the Enterprise's exposure.

(ii) The detachment point (parameter *D*) equals the sum of parameter *A* plus the ratio of the notional amount of the Enterprise's exposure in the nth-to-default credit derivative to the total notional amount of all underlying exposures. The ratio is expressed as a decimal value between zero and one.

(3) *Risk weights.* An Enterprise that does not use the SSFA to determine a risk weight for its nth-to-default credit derivative must assign a risk weight of 1,250 percent to the exposure.

(4) *Protection purchaser*—(i) *First-to-default credit derivatives.* An Enterprise that obtains credit protection on a group of underlying exposures through a first-to-default credit derivative that meets the rules of recognition of § 1240.38(b) must determine its risk-based capital requirement for the underlying exposures as if the Enterprise synthetically securitized the underlying exposure with the smallest risk-weighted asset amount and had obtained no credit risk mitigant on the other underlying exposures. An Enterprise must calculate a risk-based capital requirement for counterparty credit risk according to § 1240.36 for a first-to-default credit derivative that does not meet the rules of recognition of § 1240.38(b).

(ii) *Second-or-subsequent-to-default credit derivatives.* (A) An Enterprise that obtains credit protection on a group of underlying exposures through a nth-to-default credit derivative that meets the rules of recognition of § 1240.38(b) (other than a first-to-default credit derivative) may recognize the credit risk mitigation benefits of the derivative only if:

(*1*) The Enterprise also has obtained credit protection on the same underlying exposures in the form of first-through-(n-1)-to-default credit derivatives; or

(*2*) If n-1 of the underlying exposures have already defaulted.

(B) If an Enterprise satisfies the requirements of paragraph (i)(4)(ii)(A) of this section, the Enterprise must determine its risk-based capital requirement for the underlying exposures as if the Enterprise had only synthetically securitized the underlying exposure with the nth smallest risk-weighted asset amount and had obtained no credit risk mitigant on the other underlying exposures.

(C) An Enterprise must calculate a risk-based capital requirement for counterparty credit risk according to § 1240.36 for a nth-to-default credit derivative that does not meet the rules of recognition of § 1240.38(b).

(h) *Guarantees and credit derivatives other than nth-to-default credit derivatives*—(1) *Protection provider.* For a guarantee or credit derivative (other than an nth-to-default credit derivative) provided by an Enterprise that covers the full amount or a pro rata share of a securitization exposure's principal and interest, the Enterprise must risk weight the guarantee or credit derivative as if it holds the portion of the reference exposure covered by the guarantee or credit derivative.

(2) *Protection purchaser.* (i) An Enterprise that purchases a guarantee or OTC credit derivative (other than an nth-to-default credit derivative) that is recognized under § 1240.46 as a credit risk mitigant (including via collateral recognized under § 1240.39) is not required to compute a separate counterparty credit risk capital requirement under § 1240.31, in accordance with § 1240.36(c).

(ii) If an Enterprise cannot, or chooses not to, recognize a purchased credit derivative as a credit risk mitigant under § 1240.46, the Enterprise must determine the exposure amount of the credit derivative under § 1240.36.

(A) If the Enterprise purchases credit protection from a counterparty that is not a securitization SPE, the Enterprise must determine the risk weight for the exposure according to this subpart D.

(B) If the Enterprise purchases the credit protection from a counterparty that is a securitization SPE, the Enterprise must determine the risk weight for the exposure according to § 1240.42, including § 1240.42(a)(4) for a credit derivative that has a first priority claim on the cash flows from the underlying exposures of the securitization SPE (notwithstanding amounts due under interest rate or currency derivative contracts, fees due, or other similar payments).

### § 1240.43 Simplified supervisory formula approach (SSFA).

(a) *General requirements for the SSFA.* To use the SSFA to determine the risk weight for a securitization exposure, an Enterprise must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the securitization require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. An Enterprise that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the exposure.

(b) *SSFA parameters.* To calculate the risk weight for a securitization exposure using the SSFA, an Enterprise must have accurate information on the following five inputs to the SSFA calculation:

(1) $K_G$ is the weighted-average (with unpaid principal used as the weight for each exposure) adjusted total capital requirement of the underlying exposures calculated using this subpart. $K_G$ is expressed as a decimal value between zero and one (that is, an average risk weight of 100 percent represents a value of KG equal to 0.08).

(2) Parameter *W* is expressed as a decimal value between zero and one. Parameter *W* is the ratio of the sum of the dollar amounts of any underlying exposures of the securitization that meet any of the criteria as set forth in paragraphs (b)(2)(i) through (vi) of this section to the balance, measured in dollars, of underlying exposures:

(i) Ninety days or more past due;

(ii) Subject to a bankruptcy or insolvency proceeding;

(iii) In the process of foreclosure;

(iv) Held as real estate owned;

(v) Has contractually deferred payments for 90 days or more, other than principal or interest payments deferred on:

(A) Federally-guaranteed student loans, in accordance with the terms of those guarantee programs; or

(B) Consumer loans, including non-federally-guaranteed student loans, provided that such payments are deferred pursuant to provisions included in the contract at the time funds are disbursed that provide for period(s) of deferral that are not initiated based on changes in the creditworthiness of the borrower; or

(vi) Is in default.

(3) Parameter *A* is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Except as provided in § 1240.42(g) for nth-to-default credit derivatives, parameter *A* equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the Enterprise to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the Enterprise's securitization exposure may be included in the calculation of parameter *A* to the extent that cash is present in the account. Parameter *A* is expressed as a decimal value between zero and one.

(4) Parameter *D* is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Except as provided in § 1240.42(g) for nth-to-default credit derivatives, parameter *D* equals parameter *A* plus the ratio of the current dollar amount of

the securitization exposures that are *pari passu* with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter *D* is expressed as a decimal value between zero and one.

(5) A supervisory calibration parameter, *p,* is equal to 0.5 for securitization exposures that are not resecuritization exposures and equal to 1.5 for resecuritization exposures (except *p* is equal to 0.5 for resecuritization exposures secured by MBS guaranteed by an Enterprise).

(c) Mechanics of the SSFA. $K_G$ and *W* are used to calculate $K_A$, the augmented value of $K_G$, which reflects the observed credit quality of the underlying exposures. $K_A$ is defined in paragraph (d) of this section. The values of parameters *A* and *D,* relative to $K_A$ determine the risk weight assigned to a securitization exposure as described in paragraph (d) of this section. The risk weight assigned to a securitization exposure, or portion of a securitization exposure, as appropriate, is the larger of the risk weight determined in accordance with this paragraph (c) or paragraph (d) of this section and a risk weight of 20 percent.

(1) When the detachment point, parameter *D,* for a securitization exposure is less than or equal to $K_A$, the exposure must be assigned a risk weight of 1,250 percent.

(2) When the attachment point, parameter *A,* for a securitization exposure is greater than or equal to $K_A$, the Enterprise must calculate the risk weight in accordance with paragraph (d) of this section.

(3) When *A* is less than $K_A$ and *D* is greater than $K_A$, the risk weight is a weighted-average of 1,250 percent and 1,250 percent times $K_{SSFA}$ calculated in accordance with paragraph (d) of this section. For the purpose of this weighted-average calculation:

(i) The weight assigned to 1,250 percent equals

$$\frac{K_A - A}{D - A}.$$

(ii) The weight assigned to 1,250 percent times $K_{SSFA}$ equals

$$\frac{D - K_A}{D - A}.$$

(iii) The risk weight will be set equal to:

$$RW = \left[\left(\frac{K_A - A}{D - A}\right) * 1{,}250\ percent\right] + \left[\left(\frac{D - K_A}{D - A}\right) * 1{,}250\ percent * K_{SSFA}\right]$$

(d) *SSFA equation.* (1) The Enterprise must define the following parameters:

$$K_A = (1 - W) * K_G + (0.5 * W)$$

$$a = -\frac{1}{\rho * K_A}$$

$$u = D - K_A$$

$$l = \max(A - K_A, 0)$$

*e* = 2.71828, the base of the natural logarithms.

(2) Then the Enterprise must calculate $K_{SSFA}$ according to the following equation:

$$K_{SSFA} = \frac{e^{a*u} - e^{a*l}}{a * (u - l)}$$

(3) The risk weight for the exposure (expressed as a percent) is equal to $K_{SSFA}$ * 1,250.

(e) *Limitations.* Notwithstanding any other provision of this section, an Enterprise must assign a risk weight of not less than 20 percent to a securitization exposure.

**§ 1240.44 Credit risk transfer approach (CRTA).**

(a) *General requirements for the CRTA.* To use the CRTA to determine the risk weighted assets for a retained CRT exposure, an Enterprise must have data that enables it to assign accurately the parameters described in paragraph (b) of this section. Data used to assign the parameters described in paragraph (b) of this section must be the most currently available data; if the contracts governing the underlying exposures of the credit risk transfer require payments on a monthly or quarterly basis, the data used to assign the parameters described in paragraph (b) of this section must be no more than 91 calendar days old. An Enterprise that does not have the appropriate data to assign the parameters described in paragraph (b) of this section must assign a risk weight of 1,250 percent to the retained CRT exposure.

(b) *CRTA parameters.* To calculate the risk weighted assets for a retained CRT exposure, an Enterprise must have accurate information on the following ten inputs to the CRTA calculation.

(1) Parameter *A* is the attachment point for the exposure, which represents the threshold at which credit losses will first be allocated to the exposure. Parameter *A* equals the ratio of the current dollar amount of underlying exposures that are subordinated to the exposure of the Enterprise to the current dollar amount of underlying exposures. Any reserve account funded by the accumulated cash flows from the underlying exposures that is subordinated to the Enterprise's exposure may be included in the calculation of parameter *A* to the extent that cash is present in the account. Parameter *A* is expressed as a value between 0 and 100 percent.

(2) Parameter $AggUPB_{\$}$ is the aggregate unpaid principal balance of the underlying mortgage exposures.

(3) Parameter $CM_{\%}$ is the percentage of a tranche sold in the capital markets. $CM_{\%}$ is expressed as a value between 0 and 100 percent.

(4) Parameter $Collat_{\%RIF}$ is the amount of financial collateral posted by a counterparty under a loss sharing contract expressed as a percentage of the risk in force. For multifamily lender loss sharing transactions where an Enterprise has the contractual right to receive future lender guarantee-fee revenue, the Enterprise may include up to 12 months of estimated lender retained servicing fees in excess of servicing costs on the multifamily mortgage exposures subject to the loss sharing contract. $Collat_{\%RIF}$ is expressed as a value between 0 and 100 percent.

(5) Parameter *D* is the detachment point for the exposure, which represents the threshold at which credit losses of principal allocated to the exposure would result in a total loss of principal. Parameter *D* equals parameter *A* plus the ratio of the current dollar amount of the exposures that are *pari passu* with the exposure (that is, have equal seniority with respect to credit risk) to the current dollar amount of the underlying exposures. Parameter *D* is expressed as a value between 0 and 100 percent.

(6) Parameter $EL_{\$}$ is the remaining lifetime net expected credit risk losses of the underlying mortgage exposures. $EL_{\$}$ must be calculated internally by an Enterprise. If the contractual terms of the CRT do not provide for the transfer of the counterparty credit risk associated with any loan-level credit

enhancement or other loss sharing on the underlying mortgage exposures, then the Enterprise must calculate $EL_{\$}$ assuming no counterparty haircuts. Parameter $EL_{\$}$ is expressed in dollars.

(7) Parameter *HC* is the haircut for the counterparty in contractual loss sharing transactions.

(i) For a CRT with respect to single-family mortgage exposures, the counterparty haircut is set forth in table 12 to paragraph (e)(3)(ii) in § 1240.33, determined as if the counterparty to the CRT were a counterparty to loan-level credit enhancement (as defined in § 1240.33(a)) and considering the counterparty rating and mortgage concentration risk of the counterparty to the CRT and the single-family segment and product of the underlying single-family mortgage exposures.

(ii) For a CRT with respect to multifamily mortgage exposures, the counterparty haircut is set forth in table 1 to this paragraph (b)(7)(ii), with counterparty rating and mortgage concentration risk having the meaning given in § 1240.33(a).

**TABLE 1 TO PARAGRAPH (b)(7)(ii): HAIRCUTS FOR MULTIFAMILY LOSS SHARING CRTS**

| Counterparty Rating | Mortgage Concentration Risk: Not High | Mortgage Concentration Risk: High |
|---|---|---|
| 1 | 2.1% | 3.4% |
| 2 | 5.3% | 8.5% |
| 3 | 6.0% | 9.6% |
| 4 | 12.7% | 19.2% |
| 5 | 16.2% | 22.9% |
| 6 | 22.5% | 28.5% |
| 7 | 41.2% | 45.1% |
| 8 | 48.2% | 48.2% |

(8) Parameter $LS_{\%}$ is the percentage of a tranche that is either insured, reinsured, or afforded coverage through lender reimbursement of credit losses of principal. $LS_{\%}$ is expressed as a value between 0 and 100 percent.

(9) Parameter $LTF_{\%}$ is the loss timing factor which accounts for maturity differences between the CRT and the underlying mortgage exposures. Maturity differences arise when the maturity date of the CRT is before the maturity dates of the underlying mortgage exposures. $LTF_{\%}$ is expressed as a value between 0 and 100 percent.

(i) An Enterprise must have the following information to calculate $LTF_{\%}$ for a CRT with respect to multifamily mortgage exposures:

(A) The remaining months to the contractual maturity of the CRT ($CRT_{RMM}$).

(B) The UPB-weighted-average remaining months to maturity of the underlying multifamily mortgage exposures that have remaining months to maturity greater than $CRT_{RMM}$ ($MME_{RMM}$). If the underlying multifamily mortgage exposures all have maturity dates less than or equal to $CRT_{RMM}$, $MME_{RMM}$ should equal $CRT_{RMM}$.

(C) The sum of UPB on the underlying multifamily mortgage exposures that have remaining loan terms less than or equal to $CRT_{RMM}$ expressed as a percent of total UPB on the underlying multifamily mortgage exposures (*LTFUPB%*).

(D) An Enterprise must use the following method to calculate LTF% for multifamily CRTs:

$$LTF_{\%} = (LTFUPB_{\%}) * 100\% + 50\% * (1 - LTFUPB_{\%}) \frac{CRT_{RMM}}{MME_{RMM}}$$

(ii) An Enterprise must have the following information to calculate *LTF%* for a newly issued CRT with respect to single-family mortgage exposures:

(A) The original closing date (or effective date) of the CRT and the maturity date on the CRT.

(B) UPB share of single-family mortgage exposures that have original amortization terms of less than or equal to 189 months (*CRTF15%*).

(C) UPB share of single-family mortgage exposures that have original amortization terms greater than 189 months and OLTVs of less than or equal to 80 percent (*CRT80NotF15%*).

(D) The duration of seasoning.

(E) An Enterprise must use the following method to calculate $LTF_{\%}$ for single-family CRTs: Calculate CRT months to maturity (*CRTMthstoMaturity*) using one of the following methods:

(*1*) For single-family CRTs with reimbursement based upon occurrence or resolution of delinquency, *CRTMthstoMaturity* is the difference between the CRT's maturity date and original closing date, except for the following:

(*i*) If the coverage based upon delinquency is between one and three months, add 24 months to the difference between the CRT's maturity date and original closing date; and

(*ii*) If the coverage based upon delinquency is between four and six months, add 18 months to the difference between the CRT's maturity date and original closing date.

(*2*) For all other single-family CRTs, *CRTMthstoMaturity* is the difference between the CRT's maturity date and original closing date.

(*i*) If *CRTMthstoMaturity* is a multiple of 12, then an Enterprise must use the first column of Table 2 to paragraph (b)(9)(ii)(E)(*2*)(*iii*) of this section to identify the row matching *CRTMthstoMaturity* and take a weighted average of the three loss timing factors in columns 2, 3, and 4 as follows:

$LTF_{\%}$ = (*CRTLT*15 * $CRTLT15_{\%}$) + (*CRTLT*80*Not*15 * $CRTLT80NotF15_{\%}$) + (*CRTLTGT*80*Not*15 * (1 − $CRT80NotF15_{\%}$ − $CRTF15_{\%}$))

(*ii*) If *CRTMthstoMaturity* is not a multiple of 12, an Enterprise must use the first column of Table 2 to paragraph (b)(9)(ii)(E)(*2*)(*iii*) of this section to identify the two rows that are closest to *CRTMthstoMaturity* and take a weighted average between the two rows of loss timing factors using linear interpolation, where the weights reflect *CRTMthstoMaturity*.

(*iii*) For seasoned single-family CRTs, the *LTF%* is calculated:

$$LTF_{\%} = \left(\frac{CRTLT_M - CRTLT_s}{100\% - CRTLT_s}\right)$$

where:

$CRTLT_M$ is the loss timing factor calculated under (ii) of this subsection.

$CRTLT_S$ is the loss timing factor calculated under (ii) of this subsection replacing *CRTMthstoMaturity* with the duration of seasoning.

*CRTMthstoMaturity* is calculated as per (E) of this section.

*CRTLT*15 is the CRT loss timing factor for pool groups backed by single-family mortgage exposures with original amortization terms <= 189 months.

*CRTLT*80*Not*15: is the CRT loss timing factor for pool groups backed by single-family mortgage exposures with original amortization terms > 189 months and OLTVs <=80 percent.

*CRTLTGT*80*Not*15 is the CRT loss timing factor for pool groups backed by single-family mortgage exposures with original amortization terms > 189 months and OLTVs > 80 percent.

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**TABLE 2 TO PARAGRAPH (b)(9)(ii)(E)(*2*)(*iii*): SINGLE-FAMILY CRT LOSS TIMING FACTORS**

| *CRTMthstoMaturity* (#1) | *CRTLT*15 (#2) | *CRTLT*80*Not*15 (#3) | *CRTLTGT*80*Not*15 (#4) |
|---|---|---|---|
| 0 | 0% | 0% | 0% |
| 12 | 1% | 0% | 0% |
| 24 | 6% | 3% | 2% |
| 36 | 21% | 13% | 11% |
| 48 | 44% | 31% | 26% |
| 60 | 66% | 49% | 43% |
| 72 | 82% | 65% | 58% |
| 84 | 90% | 74% | 68% |
| 96 | 94% | 80% | 76% |
| 108 | 96% | 85% | 81% |
| 120 | 98% | 88% | 86% |
| 132 | 99% | 91% | 89% |
| 144 | 99% | 93% | 92% |
| 156 | 100% | 94% | 94% |
| 168 | 100% | 96% | 95% |
| 180 | 100% | 96% | 96% |
| 192 | 100% | 97% | 97% |
| 204 | 100% | 98% | 98% |
| 216 | 100% | 98% | 98% |
| 228 | 100% | 98% | 98% |
| 240 | 100% | 99% | 99% |
| 252 | 100% | 99% | 99% |
| 264 | 100% | 99% | 99% |
| 276 | 100% | 99% | 99% |
| 288 | 100% | 99% | 99% |
| 300 | 100% | 100% | 100% |
| 312 | 100% | 100% | 100% |
| 324 | 100% | 100% | 100% |
| 336 | 100% | 100% | 100% |
| 348 | 100% | 100% | 100% |
| 360 | 100% | 100% | 100% |

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(10) Parameter $RWA_{\$}$ is the aggregate credit risk-weighted assets associated with the underlying mortgage exposures.

(11) Parameter $CntptyRWA_{\$}$ is the aggregate credit risk-weighted assets due to counterparty haircuts from loan-level credit enhancements. $CntptyRWA_{\$}$ is the difference between:

(i) Parameter $RWA_{\$}$; and

(ii) Aggregate credit risk-weighted assets associated with the underlying mortgage exposures where the counterparty haircuts for loan-level credit enhancements are set to zero.

(c) *Mechanics of the CRTA.* The risk weight assigned to a retained CRT exposure, or portion of a retained CRT exposure, as appropriate, is the larger of *RW*% determined in accordance with paragraph (d) of this section and a risk weight of 10 percent.

(1) When the detachment point, parameter *D,* for a retained CRT exposure is less than or equal to the sum of $K_A$ and *AggEL*%, the exposure must be assigned a risk weight of 1,250 percent.

(2) When the attachment point, parameter *A,* for a retained CRT exposure is greater than or equal to or equal to the sum of $K_A$ and $AggEL_{\%}$, determined in accordance with paragraph (d) of this section, the exposure must be assigned a risk weight of 10 percent.

(3) When parameter *A* is less than or equal to the sum of $K_A$ and $AggEL_{\%}$, and parameter *D* is greater than the sum of $K_A$ and $AggEL_{\%}$, the Enterprise must calculate the risk weight as the sum of:

(i) 1,250 percent multiplied by the ratio of (A) the sum of $K_A$ and $AggEL_{\%}$

minus parameter *A* to (B) the difference between parameter *D* and parameter *A*; and

(ii) 10 percent multiplied by the ratio of (A) parameter *D* minus the sum of $K_A$ and $AggEL_{\%}$ to (B) the difference between parameter *D* and parameter *A*.

(d) *CRTA equations.*

$$RW_{\%,Tranche} = \begin{cases} 1{,}250\% \ if \ K_A + AggEL_{\%} \geq D \\ 10\% \ if \ K_A + AggEL_{\%} \leq A \\ 1250\% * \left(\frac{K_A + AggEL_{\%} - A}{D - A}\right) + 10\% * \left(\frac{D - (K_A + AggEL_{\%})}{D - A}\right) \ if \ A < K_A + AggEL_{\%} < D \end{cases}$$

$$AggEL_{\%} = 100\% * \frac{EL\$}{AggUPB_{\$}}$$

If the contractual terms of the CRT do not provide for the transfer of the counterparty credit risk associated with any loan-level credit enhancement or other loss sharing on the underlying mortgage exposures, then the Enterprise shall calculate $K_A$ as follows:

$$K_A = 100\% * \frac{(RWA_{\$} - CntptyRWA_{\$}) * 8\%}{AggUPB_{\$}}$$

Otherwise the Enterprise shall calculate $K_A$ as follows:

$$K_A = 100\% * \frac{RWA_{\$} * 8\%}{AggUPB_{\$}}$$

(e) *Limitations.* Notwithstanding any other provision of this section, an Enterprise must assign an overall risk weight of not less than 10 percent to a retained CRT exposure.

(f) *Adjusted exposure amount (AEA)*—(1) *In general.* The adjusted exposure amount (AEA) of a retained CRT exposure is equal to:

$$AEA_{\$,Tranche} = EAE_{\%,Tranche} * AggUPB_{\$} * (D - A) \ * \left(1 - \left(\frac{ELS_{\%,Tranche}}{RW_{\%,Tranche} * 8\%}\right)\right)$$

(2) *Inputs*—(i) *Enterprise adjusted exposure.* The adjusted exposure (EAE) of an Enterprise with respect to a retained CRT exposure is as follows:

$EAE_{\%,\text{Tranche}} = 100\% - (CM_{\%,\text{Tranche}} * LTEA_{\%,\text{Tranche,CM}} * OEA_{\%}) - (LS_{\%,\text{Tranche}} * LSEA_{\%,\text{Tranche}} * LTEA_{\%,\text{Tranche,LS}} * OEA_{\%})$,

Where the loss timing effectiveness adjustments (LTEA) for a retained CRT exposure are determined under paragraph (g) of this section, the loss sharing effectiveness adjustment (LSEA) for a retained CRT exposure is determine under paragraph (h) of this section, and the overall effectiveness adjustment (OEA) is determined under paragraph (i) of this section.

(ii) *Expected loss share.* The expected loss share is the share of a tranche that is covered by expected loss (ELS):

$$ELS_{\%,Tranche} = \begin{cases} 100\% \ if \ AggEL_{\%} \geq D \\ 0\% \ if \ AggEL_{\%} \leq A \\ 100\% * \left(\frac{AggEL_{\%} - A}{D - A}\right) \ if \ A < AggEL_{\%} < D. \end{cases}$$

(iii) *Risk weight.* The risk weight of a retained CRT exposure is determined under paragraph (d) of this section.

(g) *Loss timing effectiveness adjustments.* The loss timing effectiveness adjustments (LTEA) for a retained CRT exposure is calculated according to the following calculation:

*if* $(SLS_{\%,\text{Tranche}} - ELS_{\%,\text{Tranche}}) > 0$ *then* $LTEA_{\%,Tranche,CM}$

$$= \frac{100\% * \max\left(0, \min\left(1, \frac{LTK_{A,CM} + AggEL_{\%} - A}{D - A}\right)\right) - ELS_{\%,Tranche}}{\left(SLS_{\%,Tranche} - ELS_{\%,Tranche}\right)}$$

$LTEA_{\%,Tranche,LS}$

$$= \frac{100\% * \max\left(0, \min\left(1, \frac{LTK_{A,LS} + AggEL_{\%} - A}{D - A}\right)\right) - ELS_{\%,Tranche}}{\left(SLS_{\%,Tranche} - ELS_{\%,Tranche}\right)}$$

*Otherwise* $LTEA_{\%,Tranche,CM} = 100\%$ *and* $LTEA_{\%,Tranche,LS} = 100\%$

where $K_A$ adjusted for loss timing ($LTK_A$) is as follows:

$LTK_{A,CM} = \max((K_A + AggEL_{\%}) * LTF_{\%,CM} - AggEL_{\%}, 0\%)$

$LTK_{A,LS} = \max((K_A + AggEL_{\%}) * LTF_{\%,LS} - AggEL_{\%}, 0\%)$

and

$LTF_{\%,CM}$ is $LTF_{\%}$ calculated for the capital markets component of the tranche,

$LTF_{\%,LS}$ is $LTF_{\%}$ calculated for the loss sharing component of the tranche, and the share of the tranche that is covered by expected loss (ELS) and the share of the tranche that is covered by stress loss (SLS) are as follows:

$$ELS_{\%,Tranche} = \begin{cases} 100\% \; if \; AggEL_{\%} \geq D \\ 0\% \; if \; AggEL_{\%} \leq A \\ 100\% * \left(\frac{AggEL_{\%} - A}{D - A}\right) \; if \; A < AggEL_{\%} < D \end{cases}$$

$$SLS_{\%,Tranche} = \begin{cases} 100\% \; if \; K_A + AggEL_{\%} \geq D \\ 0\% \; if \; K_A + AggEL_{\%} \leq A \\ 100\% * \left(\frac{K_A + AggEL_{\%} - A}{D - A}\right) \; if \; A < K_A + AggEL_{\%} < D. \end{cases}$$

(h) *Loss sharing effectiveness adjustment.* The loss sharing effectiveness adjustment (LSEA) for a retained CRT exposure is calculated according to the following calculation:

*if* $(RW_{\%,Tranche} - ELS_{\%,Tranche} * 1250\%) > 0$ *then*

$$LSEA_{\%,Tranche} = max\left(\left(1 - HC * \frac{\left(UnCollatUL_{\%,Tranche} * 1250\% + SRIF_{\%,Tranche} * 10\%\right)}{\left(RW_{\%,Tranche} - ELS_{\%,Tranche} * 1250\%\right)}\right), 0\%\right)$$

*Otherwise*

$LSEA_{\%,Tranche} = 100\%$

*where*

$UnCollatUL_{\%,Tranche} = max(0\%, SLS_{\%,Tranche} - max(Collat_{\%RIF,Tranche}, ELS_{\%,Tranche}))$

$SRIF_{\%,Tranche} = 100\% - max(SLS_{\%,Tranche}, Collat_{\%RIF,Tranche})$

and the share of the tranche that is covered by expected loss (ELS) and the share of the tranche that is covered by stress loss (SLS) are as follows:

$$ELS_{\%,Tranche} = \begin{cases} 100\% \; if \; AggEL_{\%} \geq D \\ 0\% \; if \; AggEL_{\%} \leq A \\ 100\% * \left(\frac{AggEL_{\%} - A}{D - A}\right) \; if \; A < AggEL_{\%} < D \end{cases}$$

$$SLS_{\%,Tranche} = \begin{cases} 100\% \; if \; K_A + AggEL_{\%} \geq D \\ 0\% \; if \; K_A + AggEL_{\%} \leq A \\ 100\% * \left(\frac{K_A + AggEL_{\%} - A}{D - A}\right) \; if \; A < K_A + AggEL_{\%} < D. \end{cases}$$

(i) *Overall effectiveness adjustment.* The overall effectiveness adjustment (OEA) for a retained CRT exposure is calculated according to the following calculation:

$$OEA_{\%} = \begin{cases} 100\% \; if \; K_A \leq 1.6\% \\ 100\% * (1.06667 - 4.16667 * K_A) \; if \; 1.6\% < K_A < 4\% \\ 90\% \; if \; K_A \geq 4\% \end{cases}$$

(j) *RWA supplement for retained loan-level counterparty credit risk.* If the Enterprise elects to use the CRTA for a retained CRT exposure and if the contractual terms of the CRT do not provide for the transfer of the counterparty credit risk associated with any loan-level credit enhancement or other loss sharing on the underlying mortgage exposures, then the Enterprise must add the following risk-weighted assets supplement ($RWASup_{\$}$) to risk weighted assets for the retained CRT exposure.

$RWASup_{\$,Tranche} = CntptyRWA_{\$} * (D - A)$

Otherwise the Enterprise shall add an $RWASup_{\$,Tranche}$ of $0.

(k) *Retained CRT Exposure.* Credit risk-weighted assets for the retained CRT exposure are as follows:

$RWA_{\$,Tranche} = AEA_{\$,Tranche} * RW_{\%,Tranche} + RWASup_{\$,Tranche}$

#### § 1240.45 Securitization exposures to which the SSFA and the CRTA do not apply.

An Enterprise must assign a 1,250 percent risk weight to any acquired CRT exposure and all securitization exposures to which the Enterprise does not apply the SSFA under § 1240.43 or the CRTA under § 1240.44.

#### § 1240.46 Recognition of credit risk mitigants for securitization exposures.

(a) *General.* (1) An originating Enterprise that has obtained a credit risk mitigant to hedge its exposure to a synthetic or traditional securitization that satisfies the operational criteria provided in § 1240.41 may recognize the credit risk mitigant under § 1240.38 or § 1240.39, but only as provided in this section.

(2) An investing Enterprise that has obtained a credit risk mitigant to hedge a securitization exposure may recognize the credit risk mitigant under § 1240.38 or § 1240.39, but only as provided in this section.

(b) *Mismatches.* An Enterprise must make any applicable adjustment to the protection amount of an eligible guarantee or credit derivative as required in § 1240.38(d) through (f) for any hedged securitization exposure. In the context of a synthetic securitization, when an eligible guarantee or eligible credit derivative covers multiple hedged exposures that have different residual maturities, the Enterprise must use the longest residual maturity of any of the hedged exposures as the residual maturity of all hedged exposures.

### Risk-Weighted Assets for Equity Exposures

#### § 1240.51 Introduction and exposure measurement.

(a) *General.* (1) To calculate its risk-weighted asset amounts for equity exposures, an Enterprise must use the Simple Risk-Weight Approach (SRWA) provided in § 1240.52.

(2) An Enterprise must treat an investment in a separate account (as defined in § 1240.2) as if it were an equity exposure to an investment fund.

(b) *Adjusted carrying value.* For purposes of §§ 1240.51 and 1240.52, the adjusted carrying value of an equity exposure is:

(1) For the on-balance sheet component of an equity exposure, the Enterprise's carrying value of the exposure;

(2) [Reserved]

(3) For the off-balance sheet component of an equity exposure that is not an equity commitment, the effective notional principal amount of the exposure, the size of which is equivalent to a hypothetical on-balance sheet position in the underlying equity instrument that would evidence the same change in fair value (measured in dollars) given a small change in the price of the underlying equity instrument, minus the adjusted carrying value of the on-balance sheet component of the exposure as calculated in paragraph (b)(1) of this section; and

(4) For a commitment to acquire an equity exposure (an equity commitment), the effective notional principal amount of the exposure is multiplied by the following conversion factors (CFs):

(i) Conditional equity commitments with an original maturity of one year or less receive a CF of 20 percent.

(ii) Conditional equity commitments with an original maturity of over one year receive a CF of 50 percent.

(iii) Unconditional equity commitments receive a CF of 100 percent.

#### § 1240.52 Simple risk-weight approach (SRWA).

(a) *General.* Under the SRWA, an Enterprise's total risk-weighted assets for equity exposures equals the sum of the risk-weighted asset amounts for each of the Enterprise's individual equity exposures as determined under this section.

(b) *SRWA computation for individual equity exposures.* An Enterprise must determine the risk-weighted asset amount for an individual equity exposure by multiplying the adjusted carrying value of the equity exposure by the lowest applicable risk weight in this section.

(1) *Community development equity exposures.* A 100 percent risk weight is assigned to an equity exposure that was acquired with the prior written approval of FHFA and is designed primarily to promote community welfare, including the welfare of low- and moderate-income communities or families, such as by providing services or employment, and excluding equity exposures to an unconsolidated small business investment company and equity exposures held through a small business investment company described in section 302 of the Small Business Investment Act of 1958 (15 U.S.C. 682).

(2) *Other equity exposures.* A 400 percent risk weight is assigned to an equity exposure to an operating company or an investment in a separate account.

#### §§ 1240.53–1240.60 [Reserved]

## Subpart E—Risk-Weighted Assets—Internal Ratings-Based and Advanced Measurement Approaches

#### § 1240.100 Purpose, applicability, and principle of conservatism.

(a) *Purpose.* This subpart establishes:

(1) Minimum requirements for using Enterprise-specific internal risk measurement and management processes for calculating risk-based capital requirements; and

(2) Methodologies for the Enterprises to calculate their advanced approaches total risk-weighted assets.

(b) *Applicability.* (1) This subpart applies to each Enterprise.

(2) An Enterprise must also include in its calculation of advanced credit risk-weighted assets under this subpart all covered positions, as defined in subpart F of this part.

(c) *Principle of conservatism.* Notwithstanding the requirements of this subpart, an Enterprise may choose not to apply a provision of this subpart to one or more exposures provided that:

(1) The Enterprise can demonstrate on an ongoing basis to the satisfaction of FHFA that not applying the provision would, in all circumstances, unambiguously generate a risk-based capital requirement for each such exposure greater than that which would otherwise be required under this subpart;

(2) The Enterprise appropriately manages the risk of each such exposure;

(3) The Enterprise notifies FHFA in writing prior to applying this principle to each such exposure; and

(4) The exposures to which the Enterprise applies this principle are not, in the aggregate, material to the Enterprise.

**§ 1240.101 Definitions.**

(a) Terms that are set forth in § 1240.2 and used in this subpart have the definitions assigned thereto in § 1240.2.

(b) For the purposes of this subpart, the following terms are defined as follows:

*Advanced internal ratings-based (IRB) systems* means an Enterprise's internal risk rating and segmentation system; risk parameter quantification system; data management and maintenance system; and control, oversight, and validation system for credit risk of exposures.

*Advanced systems* means an Enterprise's advanced IRB systems, operational risk management processes, operational risk data and assessment systems, operational risk quantification systems, and, to the extent used by the Enterprise, the internal models methodology, advanced CVA approach, double default excessive correlation detection process, and internal models approach (IMA) for equity exposures.

*Backtesting* means the comparison of an Enterprise's internal estimates with actual outcomes during a sample period not used in model development. In this context, backtesting is one form of out-of-sample testing.

*Benchmarking* means the comparison of an Enterprise's internal estimates with relevant internal and external data or with estimates based on other estimation techniques.

*Business environment and internal control factors* means the indicators of an Enterprise's operational risk profile that reflect a current and forward-looking assessment of the Enterprise's underlying business risk factors and internal control environment.

*Dependence* means a measure of the association among operational losses across and within units of measure.

*Economic downturn conditions* means, with respect to an exposure held by the Enterprise, those conditions in which the aggregate default rates for that exposure's exposure subcategory (or subdivision of such subcategory selected by the Enterprise) in the exposure's jurisdiction (or subdivision of such jurisdiction selected by the Enterprise) are significantly higher than average.

*Eligible operational risk offsets* means amounts, not to exceed expected operational loss, that:

(i) Are generated by internal business practices to absorb highly predictable and reasonably stable operational losses, including reserves calculated consistent with GAAP; and

(ii) Are available to cover expected operational losses with a high degree of certainty over a one-year horizon.

*Expected operational loss (EOL)* means the expected value of the distribution of potential aggregate operational losses, as generated by the Enterprise's operational risk quantification system using a one-year horizon.

*External operational loss event data* means, with respect to an Enterprise, gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at organizations other than the Enterprise.

*Internal operational loss event data* means, with respect to an Enterprise, gross operational loss amounts, dates, recoveries, and relevant causal information for operational loss events occurring at the Enterprise.

*Operational loss* means a loss (excluding insurance or tax effects) resulting from an operational loss event. Operational loss includes all expenses associated with an operational loss event except for opportunity costs, forgone revenue, and costs related to risk management and control enhancements implemented to prevent future operational losses.

*Operational loss event* means an event that results in loss and is associated with any of the following seven operational loss event type categories:

(i) Internal fraud, which means the operational loss event type category that comprises operational losses resulting from an act involving at least one internal party of a type intended to defraud, misappropriate property, or circumvent regulations, the law, or company policy excluding diversity- and discrimination-type events.

(ii) External fraud, which means the operational loss event type category that comprises operational losses resulting from an act by a third party of a type intended to defraud, misappropriate property, or circumvent the law. All third-party-initiated credit losses are to be treated as credit risk losses.

(iii) Employment practices and workplace safety, which means the operational loss event type category that comprises operational losses resulting from an act inconsistent with employment, health, or safety laws or agreements, payment of personal injury claims, or payment arising from diversity- and discrimination-type events.

(iv) Clients, products, and business practices, which means the operational loss event type category that comprises operational losses resulting from the nature or design of a product or from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements).

(v) Damage to physical assets, which means the operational loss event type category that comprises operational losses resulting from the loss of or damage to physical assets from natural disaster or other events.

(vi) Business disruption and system failures, which means the operational loss event type category that comprises operational losses resulting from disruption of business or system failures.

(vii) Execution, delivery, and process management, which means the operational loss event type category that comprises operational losses resulting from failed transaction processing or process management or losses arising from relations with trade counterparties and vendors.

*Operational risk* means the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events (including legal risk but excluding strategic and reputational risk).

*Operational risk exposure* means the 99.9th percentile of the distribution of potential aggregate operational losses, as generated by the Enterprise's operational risk quantification system over a one-year horizon (and not incorporating eligible operational risk

offsets or qualifying operational risk mitigants).

*Risk parameter* means a variable used in determining risk-based capital requirements for exposures, such as probability of default, loss given default, exposure at default, or effective maturity.

*Scenario analysis* means a systematic process of obtaining expert opinions from business managers and risk management experts to derive reasoned assessments of the likelihood and loss impact of plausible high-severity operational losses. Scenario analysis may include the well-reasoned evaluation and use of external operational loss event data, adjusted as appropriate to ensure relevance to an Enterprise's operational risk profile and control structure.

*Unexpected operational loss (UOL)* means the difference between the Enterprise's operational risk exposure and the Enterprise's expected operational loss.

*Unit of measure* means the level (for example, organizational unit or operational loss event type) at which the Enterprise's operational risk quantification system generates a separate distribution of potential operational losses.

**§ 1240.121 Minimum requirements.**

(a) *Process and systems requirements.* (1) An Enterprise must have a rigorous process for assessing its overall capital adequacy in relation to its risk profile and a comprehensive strategy for maintaining an appropriate level of capital.

(2) The systems and processes used by an Enterprise for risk-based capital purposes under this subpart must be consistent with the Enterprise's internal risk management processes and management information reporting systems.

(3) Each Enterprise must have an appropriate infrastructure with risk measurement and management processes that meet the requirements of this section and are appropriate given the Enterprise's size and level of complexity. The Enterprise must ensure that the risk parameters and reference data used to determine its risk-based capital requirements are representative of long run experience with respect to its credit risk and operational risk exposures.

(b) *Risk rating and segmentation systems for exposures.* (1) An Enterprise must have an internal risk rating and segmentation system that accurately, reliably, and meaningfully differentiates among degrees of credit risk for the Enterprise's exposures. When assigning an internal risk rating, an Enterprise may consider a third-party assessment of credit risk, provided that the Enterprise's internal risk rating assignment does not rely solely on the external assessment.

(2) If an Enterprise uses multiple rating or segmentation systems, the Enterprise's rationale for assigning an exposure to a particular system must be documented and applied in a manner that best reflects the obligor or exposure's level of risk. An Enterprise must not inappropriately allocate exposures across systems to minimize regulatory capital requirements.

(3) In assigning ratings to exposures, an Enterprise must use all relevant and material information and ensure that the information is current.

(c) *Quantification of risk parameters for exposures.* (1) The Enterprise must have a comprehensive risk parameter quantification process that produces accurate, timely, and reliable estimates of the risk parameters on a consistent basis for the Enterprise's exposures.

(2) An Enterprise's estimates of risk parameters must incorporate all relevant, material, and available data that is reflective of the Enterprise's actual exposures and of sufficient quality to support the determination of risk-based capital requirements for the exposures. In particular, the population of exposures in the data used for estimation purposes, the underwriting standards in use when the data were generated, and other relevant characteristics, should closely match or be comparable to the Enterprise's exposures and standards. In addition, an Enterprise must:

(i) Demonstrate that its estimates are representative of long run experience, including periods of economic downturn conditions, whether internal or external data are used;

(ii) Take into account any changes in underwriting practice or the process for pursuing recoveries over the observation period;

(iii) Promptly reflect technical advances, new data, and other information as they become available;

(iv) Demonstrate that the data used to estimate risk parameters support the accuracy and robustness of those estimates; and

(v) Demonstrate that its estimation technique performs well in out-of-sample tests whenever possible.

(3) The Enterprise's risk parameter quantification process must produce appropriately conservative risk parameter estimates where the Enterprise has limited relevant data, and any adjustments that are part of the quantification process must not result in a pattern of bias toward lower risk parameter estimates.

(4) The Enterprise's risk parameter estimation process should not rely on the possibility of U.S. government financial assistance.

(5) Default, loss severity, and exposure amount data must include periods of economic downturn conditions, or the Enterprise must adjust its estimates of risk parameters to compensate for the lack of data from periods of economic downturn conditions.

(6) If an Enterprise uses internal data obtained prior to becoming subject to this subpart or external data to arrive at risk parameter estimates, the Enterprise must demonstrate to FHFA that the Enterprise has made appropriate adjustments if necessary to be consistent with the Enterprise's definition of default. Internal data obtained after the Enterprise becomes subject to this subpart must be consistent with the Enterprise's definition of default.

(7) The Enterprise must review and update (as appropriate) its risk parameters and its risk parameter quantification process at least annually.

(8) The Enterprise must, at least annually, conduct a comprehensive review and analysis of reference data to determine relevance of the reference data to the Enterprise's exposures, quality of reference data to support risk parameter estimates, and consistency of reference data to the Enterprise's definition of default.

(d) *Operational risk*—(1) *Operational risk management processes.* An Enterprise must:

(i) Have an operational risk management function that:

(A) Is independent of business line management; and

(B) Is responsible for designing, implementing, and overseeing the Enterprise's operational risk data and assessment systems, operational risk quantification systems, and related processes;

(ii) Have and document a process (which must capture business environment and internal control factors affecting the Enterprise's operational risk profile) to identify, measure, monitor, and control operational risk in the Enterprise's products, activities, processes, and systems; and

(iii) Report operational risk exposures, operational loss events, and other relevant operational risk information to business unit management, senior management, and the board of directors (or a designated committee of the board).

(2) *Operational risk data and assessment systems.* An Enterprise must

have operational risk data and assessment systems that capture operational risks to which the Enterprise is exposed. The Enterprise's operational risk data and assessment systems must:

(i) Be structured in a manner consistent with the Enterprise's current business activities, risk profile, technological processes, and risk management processes; and

(ii) Include credible, transparent, systematic, and verifiable processes that incorporate the following elements on an ongoing basis:

(A) *Internal operational loss event data.* The Enterprise must have a systematic process for capturing and using internal operational loss event data in its operational risk data and assessment systems.

(*1*) The Enterprise's operational risk data and assessment systems must include a historical observation period of at least five years for internal operational loss event data (or such shorter period approved by FHFA to address transitional situations, such as integrating a new business line).

(*2*) The Enterprise must be able to map its internal operational loss event data into the seven operational loss event type categories.

(*3*) The Enterprise may refrain from collecting internal operational loss event data for individual operational losses below established dollar threshold amounts if the Enterprise can demonstrate to the satisfaction of FHFA that the thresholds are reasonable, do not exclude important internal operational loss event data, and permit the Enterprise to capture substantially all the dollar value of the Enterprise's operational losses.

(B) *External operational loss event data.* The Enterprise must have a systematic process for determining its methodologies for incorporating external operational loss event data into its operational risk data and assessment systems.

(C) *Scenario analysis.* The Enterprise must have a systematic process for determining its methodologies for incorporating scenario analysis into its operational risk data and assessment systems.

(D) *Business environment and internal control factors.* The Enterprise must incorporate business environment and internal control factors into its operational risk data and assessment systems. The Enterprise must also periodically compare the results of its prior business environment and internal control factor assessments against its actual operational losses incurred in the intervening period.

(3) *Operational risk quantification systems.* The Enterprise's operational risk quantification systems:

(i) Must generate estimates of the Enterprise's operational risk exposure using its operational risk data and assessment systems;

(ii) Must employ a unit of measure that is appropriate for the Enterprise's range of business activities and the variety of operational loss events to which it is exposed, and that does not combine business activities or operational loss events with demonstrably different risk profiles within the same loss distribution;

(iii) Must include a credible, transparent, systematic, and verifiable approach for weighting each of the four elements, described in paragraph (d)(2)(ii) of this section, that an Enterprise is required to incorporate into its operational risk data and assessment systems;

(iv) May use internal estimates of dependence among operational losses across and within units of measure if the Enterprise can demonstrate to the satisfaction of FHFA that its process for estimating dependence is sound, robust to a variety of scenarios, and implemented with integrity, and allows for uncertainty surrounding the estimates. If the Enterprise has not made such a demonstration, it must sum operational risk exposure estimates across units of measure to calculate its total operational risk exposure; and

(v) Must be reviewed and updated (as appropriate) whenever the Enterprise becomes aware of information that may have a material effect on the Enterprise's estimate of operational risk exposure, but the review and update must occur no less frequently than annually.

(e) *Data management and maintenance.* (1) An Enterprise must have data management and maintenance systems that adequately support all aspects of its advanced systems and the timely and accurate reporting of risk-based capital requirements.

(2) An Enterprise must retain data using an electronic format that allows timely retrieval of data for analysis, validation, reporting, and disclosure purposes.

(3) An Enterprise must retain sufficient data elements related to key risk drivers to permit adequate monitoring, validation, and refinement of its advanced systems.

(f) *Control, oversight, and validation mechanisms.* (1) The Enterprise's senior management must ensure that all components of the Enterprise's advanced systems function effectively and comply with the minimum requirements in this section.

(2) The Enterprise's board of directors (or a designated committee of the board) must at least annually review the effectiveness of, and approve, the Enterprise's advanced systems.

(3) An Enterprise must have an effective system of controls and oversight that:

(i) Ensures ongoing compliance with the minimum requirements in this section;

(ii) Maintains the integrity, reliability, and accuracy of the Enterprise's advanced systems; and

(iii) Includes adequate governance and project management processes.

(4) The Enterprise must validate, on an ongoing basis, its advanced systems. The Enterprise's validation process must be independent of the advanced systems' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the advanced systems;

(ii) An ongoing monitoring process that includes verification of processes and benchmarking; and

(iii) An outcomes analysis process that includes backtesting.

(5) The Enterprise must have an internal audit function or equivalent function that is independent of business-line management that at least annually:

(i) Reviews the Enterprise's advanced systems and associated operations, including the operations of its credit function and estimations of risk parameters;

(ii) Assesses the effectiveness of the controls supporting the Enterprise's advanced systems; and

(iii) Documents and reports its findings to the Enterprise's board of directors (or a committee thereof).

(6) The Enterprise must periodically stress test its advanced systems. The stress testing must include a consideration of how economic cycles, especially downturns, affect risk-based capital requirements (including migration across rating grades and segments and the credit risk mitigation benefits of double default treatment).

(g) *Documentation.* The Enterprise must adequately document all material aspects of its advanced systems.

**§ 1240.122 Ongoing qualification.**

(a) *Changes to advanced systems.* An Enterprise must meet all the minimum requirements in § 1240.121 on an ongoing basis. An Enterprise must notify FHFA when the Enterprise makes

any change to an advanced system that would result in a material change in the Enterprise's advanced approaches total risk-weighted asset amount for an exposure type or when the Enterprise makes any significant change to its modeling assumptions.

(b) *Failure to comply with qualification requirements.* (1) If FHFA determines that an Enterprise fails to comply with the requirements in § 1240.121, FHFA will notify the Enterprise in writing of the Enterprise's failure to comply.

(2) The Enterprise must establish and submit a plan satisfactory to FHFA to return to compliance with the qualification requirements.

(3) In addition, if FHFA determines that the Enterprise's advanced approaches total risk-weighted assets are not commensurate with the Enterprise's credit, market, operational, or other risks, FHFA may require such an Enterprise to calculate its advanced approaches total risk-weighted assets with any modifications provided by FHFA.

**§ 1240.123 Advanced approaches credit risk-weighted asset calculations.**

(a) An Enterprise must use its advanced systems to determine its credit risk capital requirements for each of the following exposures:

(1) General credit risk (including for mortgage exposures);

(2) Cleared transactions;

(3) Default fund contributions;

(4) Unsettled transactions;

(5) Securitization exposures;

(6) Equity exposures; and

(7) The fair value adjustment to reflect counterparty credit risk in valuation of OTC derivative contracts.

(b) The credit-risk-weighted assets calculated under this subpart E equals the aggregate credit risk capital requirement under paragraph (a) of this section multiplied by 12.5.

**§§ 1240.124—1240.160 [Reserved]**

**§ 1240.161 Qualification requirements for incorporation of operational risk mitigants.**

(a) *Qualification to use operational risk mitigants.* An Enterprise may adjust its estimate of operational risk exposure to reflect qualifying operational risk mitigants if:

(1) The Enterprise's operational risk quantification system is able to generate an estimate of the Enterprise's operational risk exposure (which does not incorporate qualifying operational risk mitigants) and an estimate of the Enterprise's operational risk exposure adjusted to incorporate qualifying operational risk mitigants; and

(2) The Enterprise's methodology for incorporating the effects of insurance, if the Enterprise uses insurance as an operational risk mitigant, captures through appropriate discounts to the amount of risk mitigation:

(i) The residual term of the policy, where less than one year;

(ii) The cancelation terms of the policy, where less than one year;

(iii) The policy's timeliness of payment;

(iv) The uncertainty of payment by the provider of the policy; and

(v) Mismatches in coverage between the policy and the hedged operational loss event.

(b) *Qualifying operational risk mitigants.* Qualifying operational risk mitigants are:

(1) Insurance that:

(i) Is provided by an unaffiliated company that the Enterprise deems to have strong capacity to meet its claims payment obligations and the Enterprise assigns the company a probability of default equal to or less than 10 basis points;

(ii) Has an initial term of at least one year and a residual term of more than 90 days;

(iii) Has a minimum notice period for cancellation by the provider of 90 days;

(iv) Has no exclusions or limitations based upon regulatory action or for the receiver or liquidator of a failed depository institution; and

(v) Is explicitly mapped to a potential operational loss event;

(2) In evaluating an operational risk mitigant other than insurance, FHFA will consider whether the operational risk mitigant covers potential operational losses in a manner equivalent to holding total capital.

**§ 1240.162 Mechanics of operational risk risk-weighted asset calculation.**

(a) If an Enterprise does not qualify to use or does not have qualifying operational risk mitigants, the Enterprise's dollar risk-based capital requirement for operational risk is its operational risk exposure minus eligible operational risk offsets (if any).

(b) If an Enterprise qualifies to use operational risk mitigants and has qualifying operational risk mitigants, the Enterprise's dollar risk-based capital requirement for operational risk is the greater of:

(1) The Enterprise's operational risk exposure adjusted for qualifying operational risk mitigants minus eligible operational risk offsets (if any); or

(2) 0.8 multiplied by the difference between:

(i) The Enterprise's operational risk exposure; and

(ii) Eligible operational risk offsets (if any).

(c) The Enterprise's risk-weighted asset amount for operational risk equals the greater of:

(1) The Enterprise's dollar risk-based capital requirement for operational risk determined under paragraphs (a) or (b) multiplied by 12.5; and

(2) The Enterprise's adjusted total assets multiplied by 0.0015 multiplied by 12.5.

(d) After January 1, 2022, and until the compliance date for this section under § 1240.4, the Enterprise's risk weighted amount for operational risk will equal the Enterprise's adjusted total assets multiplied by 0.0015 multiplied by 12.5.

## Subpart F—Risk-weighted Assets—Market Risk

**§ 1240.201 Purpose, applicability, and reservation of authority.**

(a) *Purpose.* This subpart F establishes risk-based capital requirements for spread risk and provides methods for the Enterprises to calculate their measure for spread risk.

(b) *Applicability.* This subpart applies to each Enterprise.

(c) *Reservation of authority.* Subject to applicable provisions of the Safety and Soundness Act:

(1) FHFA may require an Enterprise to hold an amount of capital greater than otherwise required under this subpart if FHFA determines that the Enterprise's capital requirement for spread risk as calculated under this subpart is not commensurate with the spread risk of the Enterprise's covered positions.

(2) If FHFA determines that the risk-based capital requirement calculated under this subpart by the Enterprise for one or more covered positions or portfolios of covered positions is not commensurate with the risks associated with those positions or portfolios, FHFA may require the Enterprise to assign a different risk-based capital requirement to the positions or portfolios that more accurately reflects the risk of the positions or portfolios.

(3) In addition to calculating risk-based capital requirements for specific positions or portfolios under this subpart, the Enterprise must also calculate risk-based capital requirements for covered positions under subpart D or subpart E of this part, as appropriate.

(4) Nothing in this subpart limits the authority of FHFA under any other provision of law or regulation to take supervisory or enforcement action, including action to address unsafe or unsound practices or conditions,

deficient capital levels, or violations of law.

**§ 1240.202 Definitions.**

(a) Terms set forth in § 1240.2 and used in this subpart have the definitions assigned in § 1240.2.

(b) For the purposes of this subpart, the following terms are defined as follows:

*Backtesting* means the comparison of an Enterprise's internal estimates with actual outcomes during a sample period not used in model development. For purposes of this subpart, backtesting is one form of out-of-sample testing.

*Covered position* means, any asset that has more than *de minimis* spread risk (other than any intangible asset, such as any servicing asset), including:

(i) Any NPL, RPL, reverse mortgage loan, or other mortgage exposure that, in any case, does not secure an MBS guaranteed by the Enterprise;

(ii) Any MBS guaranteed by an Enterprise, MBS guaranteed by Ginnie Mae, reverse mortgage security, PLS, commercial MBS, CRT exposure, or other securitization exposure, regardless of whether the position is held by the Enterprise for the purpose of short-term resale or with the intent of benefiting from actual or expected short-term price movements, or to lock in arbitrage profits; and

(iii) Any other trading asset or trading liability (whether on- or off-balance sheet).[1]

*Market risk* means the risk of loss on a position that could result from movements in market prices, including spread risk.

*Private label security (PLS)* means any MBS that is collateralized by a pool or pools of single-family mortgage exposures and that is not guaranteed by an Enterprise or by Ginnie Mae.

*Reverse mortgage* means a mortgage loan secured by a residential property in which a homeowner relinquishes equity in their home in exchange for regular payments.

*Reverse mortgage security* means a security collateralized by reverse mortgages.

*Spread risk* means the risk of loss on a position that could result from a change in the bid or offer price of such position relative to a risk free or funding benchmark, including when due to a change in perceptions of performance or liquidity of the position.

[1] Securities subject to repurchase and lending agreements are included as if they are still owned by the Enterprise.

**§ 1240.203 Requirements for managing market risk.**

(a) *Management of covered positions*—(1) *Active management.* An Enterprise must have clearly defined policies and procedures for actively managing all covered positions. At a minimum, these policies and procedures must require:

(i) Marking covered positions to market or to model on a daily basis;

(ii) Daily assessment of the Enterprise's ability to hedge position and portfolio risks, and of the extent of market liquidity;

(iii) Establishment and daily monitoring of limits on covered positions by a risk control unit independent of the business unit;

(iv) Routine monitoring by senior management of information described in paragraphs (a)(1)(i) through (iii) of this section;

(v) At least annual reassessment of established limits on positions by senior management; and

(vi) At least annual assessments by qualified personnel of the quality of market inputs to the valuation process, the soundness of key assumptions, the reliability of parameter estimation in pricing models, and the stability and accuracy of model calibration under alternative market scenarios.

(2) *Valuation of covered positions.* The Enterprise must have a process for prudent valuation of its covered positions that includes policies and procedures on the valuation of positions, marking positions to market or to model, independent price verification, and valuation adjustments or reserves. The valuation process must consider, as appropriate, unearned credit spreads, close-out costs, early termination costs, investing and funding costs, liquidity, and model risk.

(b) *Requirements for internal models.* (1) A risk control unit independent of the business unit must approve any internal model to calculate its risk-based capital requirement under this subpart.

(2) An Enterprise must meet all of the requirements of this section on an ongoing basis. The Enterprise must promptly notify FHFA when:

(i) The Enterprise plans to extend the use of a model to an additional business line or product type;

(ii) The Enterprise makes any change to an internal model that would result in a material change in the Enterprise's risk-weighted asset amount for a portfolio of covered positions; or

(iii) The Enterprise makes any material change to its modeling assumptions.

(3) FHFA may determine an appropriate capital requirement for the covered positions to which a model would apply, if FHFA determines that the model no longer complies with this subpart or fails to reflect accurately the risks of the Enterprise's covered positions.

(4) The Enterprise must periodically, but no less frequently than annually, review its internal models in light of developments in financial markets and modeling technologies, and enhance those models as appropriate to ensure that they continue to meet the Enterprise's standards for model approval and employ risk measurement methodologies that are most appropriate for the Enterprise's covered positions.

(5) The Enterprise must incorporate its internal models into its risk management process and integrate the internal models used for calculating its market risk measure into its daily risk management process.

(6) The level of sophistication of an Enterprise's internal models must be commensurate with the complexity and amount of its covered positions. An Enterprise's internal models may use any of the generally accepted approaches, including variance-covariance models, historical simulations, or Monte Carlo simulations, to measure market risk.

(7) The Enterprise's internal models must properly measure all the material risks in the covered positions to which they are applied.

(8) The Enterprise's internal models must conservatively assess the risks arising from less liquid positions and positions with limited price transparency under realistic market scenarios.

(9) The Enterprise must have a rigorous and well-defined process for re-estimating, re-evaluating, and updating its internal models to ensure continued applicability and relevance.

(c) *Control, oversight, and validation mechanisms.* (1) The Enterprise must have a risk control unit that reports directly to senior management and is independent from the business units.

(2) The Enterprise must validate its internal models initially and on an ongoing basis. The Enterprise's validation process must be independent of the internal models' development, implementation, and operation, or the validation process must be subjected to an independent review of its adequacy and effectiveness. Validation must include:

(i) An evaluation of the conceptual soundness of (including developmental evidence supporting) the internal models;

(ii) An ongoing monitoring process that includes verification of processes

and the comparison of the Enterprise's model outputs with relevant internal and external data sources or estimation techniques; and

(iii) An outcomes analysis process that includes backtesting.

(3) The Enterprise must stress test the market risk of its covered positions at a frequency appropriate to each portfolio, and in no case less frequently than quarterly. The stress tests must take into account concentration risk (including concentrations in single issuers, industries, sectors, or markets), illiquidity under stressed market conditions, and risks arising from the Enterprise's trading activities that may not be adequately captured in its internal models.

(4) The Enterprise must have an internal audit function independent of business-line management that at least annually assesses the effectiveness of the controls supporting the Enterprise's market risk measurement systems, including the activities of the business units and independent risk control unit, compliance with policies and procedures, and calculation of the Enterprise's measures for spread risk under this subpart. At least annually, the internal audit function must report its findings to the Enterprise's board of directors (or a committee thereof).

(d) *Internal assessment of capital adequacy.* The Enterprise must have a rigorous process for assessing its overall capital adequacy in relation to its market risk.

(e) *Documentation.* The Enterprise must adequately document all material aspects of its internal models, management and valuation of covered positions, control, oversight, validation and review processes and results, and internal assessment of capital adequacy.

### § 1240.204 Measure for spread risk.

(a) *General requirement*—(1) *In general.* An Enterprise must calculate its standardized measure for spread risk by following the steps described in paragraph (a)(2) of this section. An Enterprise also must calculate an advanced measure for spread risk by following the steps in paragraph (a)(2) of this section.

(2) *Measure for spread risk.* An Enterprise must calculate the standardized measure for spread risk, which equals the sum of the spread risk capital requirements of all covered positions using one or more of its internal models except as contemplated by paragraphs (b) or (c) of this section. An Enterprise also must calculate the advanced measure for spread risk, which equals the sum of the spread risk capital requirements of all covered positions calculated using one or more of its internal models.

(b) *Single point approach*—(1) *General.* For purposes of the standardized measure for spread risk, the spread risk capital requirement for a covered position that is an RPL, an NPL, a reverse mortgage loan, or a reverse mortgage security is the amount equal to:

(i) The market value of the covered position; multiplied by

(ii) The applicable single point shock assumption for the covered position under paragraph (b)(2) of this section.

(2) *Applicable single point shock assumption.* The applicable single point shock assumption is:

(i) 0.0475 for an RPL or an NPL;

(ii) 0.0160 for a reverse mortgage loan; and

(iii) 0.0410 for a reverse mortgage security.

(c) *Spread duration approach*—(1) *General.* For purposes of the standardized measure for spread risk, the spread risk capital requirement for a covered position that is a multifamily mortgage exposure, a PLS, or an MBS guaranteed by an Enterprise or Ginnie Mae and secured by multifamily mortgage exposures is the amount equal to:

(i) The market value of the covered position; multiplied by

(ii) The spread duration of the covered position determined by the Enterprise using one or more of its internal models; multiplied by

(iii) The applicable spread shock assumption under paragraph (c)(2) of this section.

(2) *Applicable spread shock assumption.* The applicable spread shock is:

(i) 0.0015 for a multifamily mortgage exposure;

(ii) 0.0265 for a PLS; and

(iii) 0.0100 for an MBS guaranteed by an Enterprise or by Ginnie Mae and secured by multifamily mortgage exposures (other than IO securities guaranteed by an Enterprise or Ginnie Mae).

## Subpart G—Stability Capital Buffer

### § 1240.400 Stability capital buffer.

(a) *Definitions.* For purposes of this subpart:

(1) *Mortgage assets* means, with respect to an Enterprise, the dollar amount equal to the sum of:

(i) The unpaid principal balance of its single-family mortgage exposures, including any single-family loans that secure MBS guaranteed by the Enterprise;

(ii) The unpaid principal balance of its multifamily mortgage exposures, including any multifamily mortgage exposures that secure MBS guaranteed by the Enterprise;

(iii) The carrying value of its MBS guaranteed by an Enterprise, MBS guaranteed by Ginnie Mae, PLS, and other securitization exposures (other than its retained CRT exposures); and

(iv) The exposure amount of any other mortgage assets.

(2) *Residential mortgage debt outstanding* means the dollar amount of mortgage debt outstanding secured by one- to four-family residences or multifamily residences that are located in the United States (and excluding any mortgage debt outstanding secured by commercial or farm properties).

(b) *Amount.* An Enterprise must calculate its stability capital buffer under this section on an annual basis by December 31 of each year. The stability capital buffer of an Enterprise is equal to:

(1) The ratio of:

(i) The mortgage assets of the Enterprise as of December 31 of the previous calendar year; to

(ii) The residential mortgage debt outstanding as of December 31 of the previous calendar year, as published by FHFA;

(2) Minus 0.05;

(3) Multiplied by 5;

(4) Divided by 100; and

(5) Multiplied by the adjusted total assets of the Enterprise, as of December 31 of the previous calendar year.

(c) *Effective date of an adjusted stability capital buffer*—(1) *Increase in stability capital buffer.* An increase in the stability capital buffer of an Enterprise under this section will take effect (*i.e.,* be incorporated into the maximum payout ratio under table 1 to paragraph (b)(5) in § 1240.11) on January 1 of the year that is one full calendar year after the increased stability capital buffer was calculated.

(2) *Decrease in stability capital buffer.* A decrease in the stability capital buffer of an Enterprise will take effect (*i.e.,* be incorporated into the maximum payout ratio under table 1 to paragraph (b)(5) in § 1240.11) on January 1 of the year immediately following the calendar year in which the decreased stability capital buffer was calculated.

(d) *Initial stability capital buffer.* Notwithstanding anything to the contrary in this section, the stability capital buffer of an Enterprise as of January 1, 2021, is equal to—

(1) The ratio of:

(i) The mortgage assets of the Enterprise as of December 31, 2020; to

(ii) The residential mortgage debt outstanding as of December 31, 2020, as published by FHFA;

(2) Minus 0.05;

(3) Multiplied by 5;

(4) Divided by 100; and

(5) Multiplied by the adjusted total assets of the Enterprise as of December 31, 2020.

**Chapter XII—Federal Housing Finance Agency**

**Subchapter C—Safety and Soundness**

## PART 1750—[REMOVED]

■ 6. Under the authority of 12 U.S.C. 4511 and 12 U.S.C. 4526, part 1750 is removed.

**Mark A. Calabria,**

*Director, Federal Housing Finance Agency.*

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