



**BILLING CODE: 8070-01-P**

**FEDERAL HOUSING FINANCE BOARD**

**12 CFR Parts 930 and 932**

**FEDERAL HOUSING FINANCE AGENCY**

**12 CFR Part 1277**

**RIN 2590-AA70**

**Federal Home Loan Bank Capital Requirements**

**AGENCIES:** Federal Housing Finance Board; Federal Housing Finance Agency.

**ACTION:** Proposed rule.

**SUMMARY:** The Federal Housing Finance Agency (FHFA) is proposing to adopt, with amendments, the regulations of the Federal Housing Finance Board (Finance Board) pertaining to the capital requirements for the Federal Home Loan Banks (Banks). The proposed rule would carry over most of the existing regulations without material change, but would substantively revise the credit risk component of the risk-based capital requirement, as well as the limitations on extensions of unsecured credit. The principal revisions to those provisions would remove requirements that the Banks calculate credit risk capital charges and unsecured credit limits based on ratings issued by a Nationally Recognized Statistical Rating Organization (NRSRO), and would instead require that the Banks use their own internal rating methodology. The proposed rule also would revise the percentages used in the tables to calculate the credit risk capital charges for advances and non-mortgage assets. FHFA would retain the percentages used in the existing table to calculate the capital charges for mortgage-related assets, but intends to address the appropriate methodology for determining the credit risk capital charges for residential mortgage assets as part of a subsequent rulemaking.

**DATES:** FHFA must receive written comments on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. For additional information, see SUPPLEMENTARY INFORMATION.

**ADDRESSES:** You may submit your comments, identified by Regulatory Information Number (RIN) 2590–AA70, by any of the following methods:

- Agency Web site: [www.fhfa.gov/open-for-comment-or-input](http://www.fhfa.gov/open-for-comment-or-input).
- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments. If you submit your comment to the Federal eRulemaking Portal, please also send it by email to FHFA at [RegComments@fhfa.gov](mailto:RegComments@fhfa.gov) to ensure timely receipt by the agency. Please include Comments/RIN 2590–AA70 in the subject line of the message.
- Courier/Hand Delivery: The hand delivery address is: Alfred M. Pollard, General Counsel, Attention: Comments/RIN 2590–AA70, Federal Housing Finance Agency, 400 Seventh Street, SW., Eighth Floor, Washington, DC 20219. Deliver the package to the Seventh Street entrance Guard Desk, First Floor, on business days between 9 a.m. and 5 p.m.
- U.S. Mail, United Parcel Service, Federal Express, or Other Mail Service: The mailing address for comments is: Alfred M. Pollard, General Counsel, Attention: Comments/RIN 2590–AA70, Federal Housing Finance Agency, 400 Seventh Street, SW., Eighth Floor, Washington, DC 20219. Please note that all mail sent to FHFA via the U.S. Mail service is routed through a national irradiation facility, a process that may delay delivery by approximately two weeks. For any time-sensitive correspondence, please plan accordingly.

**FOR FURTHER INFORMATION CONTACT:** Scott Smith, Associate Director, Office of Policy Analysis and Research, Scott.Smith@FHFA.gov, 202-649-3193; Julie Paller, Principal Financial Analyst, Division of Bank Regulation, Julie.Paller@FHFA.gov, 202-649-3201; or Neil R. Crowley, Deputy General Counsel, Neil.Crowley@FHFA.gov, 202-649-3055 (these are not toll-free numbers), Federal Housing Finance Agency, 400 Seventh Street, SW., Washington, DC 20219. The telephone number for the Telecommunications Device for the Hearing Impaired is 800-877-8339.

**SUPPLEMENTARY INFORMATION:**

**I. Comments**

FHFA invites comments on all aspects of the proposed rule and will take all comments into consideration before issuing a final rule. Copies of all comments will be posted without change, on the FHFA website at <http://www.fhfa.gov>, and will include any personal information you provide, such as your name, address, email address, and telephone number.

**II. Background**

A. Establishment of the Federal Housing Finance Agency

Effective July 30, 2008, the Housing and Economic Recovery Act of 2008 (HERA)<sup>1</sup> created FHFA as a new independent agency of the Federal Government, and transferred to FHFA the supervisory and oversight responsibilities of the Office of Federal Housing Enterprise Oversight (OFHEO) over the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation (collectively, the Enterprises), the oversight responsibilities of the Finance Board over the Banks and the

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<sup>1</sup> Pub. Law No. 110-289, 122 Stat. 2654.

Office of Finance (OF) (which acts as the Banks' fiscal agent), and certain functions of the Department of Housing and Urban Development.<sup>2</sup> Under the legislation, the Enterprises, the Banks, and the OF continue to operate under regulations promulgated by OFHEO and the Finance Board, respectively, until such regulations are superseded by regulations issued by FHFA.<sup>3</sup> While FHFA has previously adopted regulations addressing the capital structure of the Banks and the Banks' capital plans, the Finance Board regulations establishing the Banks' total, leverage, and risk-based capital requirements continue to apply to the Banks pursuant to this provision, and would be superseded by this rulemaking.<sup>4</sup>

#### B. Federal Home Loan Bank Capital and Capital Requirements

The eleven Banks are wholesale financial institutions organized under the Federal Home Loan Bank Act (Bank Act).<sup>5</sup> The Banks are cooperatives. Only members of a Bank may purchase the capital stock of a Bank, and only members or certain eligible housing associates (such as state housing finance agencies) may obtain access to secured loans, known as advances, or other products provided by a Bank.<sup>6</sup> Each Bank is managed by its own board of directors and serves the public interest by enhancing the availability of residential mortgage and community lending credit through its member institutions.<sup>7</sup>

In 1999, the Gramm-Leach-Bliley Act (GLB Act)<sup>8</sup> amended the Bank Act to replace the subscription capital structure of the Bank System. It required the Banks to

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<sup>2</sup> See 12 U.S.C. 4511.

<sup>3</sup> See 12 U.S.C. 4511, note.

<sup>4</sup> See 80 Fed. Reg. 12755 (March 11, 2015) (FHFA rulemaking); 12 CFR Part 932 (Finance Board capital requirement regulations).

<sup>5</sup> See 12 U.S.C. 1423 and 1432(a). The eleven Banks are located in: Boston, New York, Pittsburgh, Atlanta, Cincinnati, Indianapolis, Chicago, Des Moines, Dallas, Topeka, and San Francisco.

<sup>6</sup> See 12 U.S.C. 1426(a)(4), 1430(a), and 1430b.

<sup>7</sup> See 12 U.S.C. 1427.

<sup>8</sup> Pub. Law No. 106-102, 113 Stat. 1338 (Nov. 12, 1999).

replace their existing capital stock with new classes of capital stock that would have different terms from the stock then held by Bank System members. Specifically, the GLB Act authorized the Banks to issue new Class A stock, which the GLB Act defined as redeemable six months after filing of a notice by a member, and Class B stock, defined as redeemable five years after filing of a notice by a member. The GLB Act allowed Banks to issue Class A and Class B stock in any combination and to establish terms and preferences for each class or subclass of stock issued, consistent with the Bank Act and regulations adopted by the Finance Board.<sup>9</sup> The classes of stock to be issued, as well as the terms, rights, and preferences associated with each class of Bank stock, are governed by a capital structure plan, which is established by each Bank's board of directors and approved by FHFA.

The GLB Act also amended the Bank Act to impose on the Banks new total, leverage, and risk-based capital requirements similar to those applicable to depository institutions and other housing Government Sponsored Enterprises (GSEs) and directed the Finance Board to adopt regulations prescribing uniform capital standards for the Banks.<sup>10</sup> The Finance Board put these regulations in place in 2001 when it published a final capital rule, and later adopted amendments to that rule.<sup>11</sup> In addition to addressing minimum capital requirements, the regulations also established minimum liquidity requirements for each Bank and set limits on a Bank's unsecured credit exposure to

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<sup>9</sup> See 12 U.S.C. 1426, and 12 CFR part 1277.

<sup>10</sup> See 12 U.S.C. 1426(a). In 2008, HERA amended the risk-based capital provisions in the Bank Act to allow FHFA greater flexibility in establishing these requirements. Pub. Law No. 110-289, 122 Stat. 2654, 2626 (July 28, 2008) (amending 12 U.S.C. 1426(a)(3)(A)).

<sup>11</sup> See Final Rule: Capital Requirements for Federal Home Loan Banks, 66 FR 8262 (Jan. 30, 2001) (hereinafter Final Finance Board Capital Rule); and Final Rule: Amendments to Capital Requirements for Federal Home Loan Banks, 66 FR 54097 (Oct. 26, 2001). The Finance Board regulations are found at 12 CFR part 932.

individual counterparties and groups of affiliated counterparties.<sup>12</sup> These Finance Board regulations remain in effect and have not been substantively amended since 2001.

The GLB Act amendments to the Bank Act also defined the types of capital that the Banks must hold – specifically permanent and total capital. Permanent capital consists of amounts paid by members for Class B stock plus the Bank’s retained earnings, as determined in accordance with generally accepted accounting principles (GAAP).<sup>13</sup> Total capital is made up of permanent capital plus the amounts paid by members for Class A stock, any general allowances for losses held by a Bank under GAAP (but not allowances or reserves held against specific assets or specific classes of assets), and any other amounts from sources available to absorb losses that are determined by regulation to be appropriate to include in total capital.<sup>14</sup> As a matter of practice, however, each Bank’s total capital consists of its permanent capital plus the amounts, if any, paid by its members for Class A stock.

The Bank Act requires each Bank to hold total capital equal to at least 4 percent of its total assets. The statute separately requires each Bank to meet a leverage requirement of total capital to total assets equal to 5 percent, but provides that in determining compliance with this leverage requirement, a Bank must calculate its total capital by multiplying the amount of its permanent capital by 1.5 and adding to this product any other component of total capital.<sup>15</sup>

Each Bank also must meet a risk-based capital requirement by maintaining

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<sup>12</sup> See *id.* See also, Final Rule: Unsecured Credit Limits for the Federal Home Loan Banks, 66 FR 66718 (Dec. 27, 2001) (amending 12 CFR § 932.9).

<sup>13</sup> See 12 U.S.C. 1426(a)(5).

<sup>14</sup> *Id.* Neither the Finance Board nor FHFA has approved the inclusion within total capital of any other amounts that are available to absorb losses, and no Bank has any such general allowances for losses as part of its capital.

<sup>15</sup> See 12 U.S.C. 1426(a)(2). See also 12 CFR § 932.2.

permanent capital in an amount at least equal to the sum of its credit risk, market risk, and operational risk charges, as measured under the 2001 Finance Board regulations.<sup>16</sup> Under these rules, a Bank must calculate a credit risk capital charge for each of its assets, off-balance sheet items, and derivatives contracts. The basic charge is based on the book value of an asset, or other amount calculated under the rule, multiplied by a credit risk percentage requirement (CRPR) for that particular asset or item, which is derived from one of the tables set forth in the rule. Generally, the CRPR varies based on the rating assigned to the asset by an NRSRO and the maturity of the asset.<sup>17</sup> The market risk capital charge is calculated separately, as the maximum loss in the Bank's portfolio under various stress scenarios, estimated by an approved internal model, such that the probability of a loss greater than that estimated by the model is not more than one percent.<sup>18</sup> The operational risk capital charge equals 30 percent of the combined credit and market risk charges for the Bank, although the rules allow a Bank to demonstrate that a lower charge should apply if FHFA approves and other conditions are met.<sup>19</sup>

### C. The Dodd-Frank Act and Bank Capital Rules

Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) requires federal agencies to: (i) review regulations that require the use of an assessment of the creditworthiness of a security or money market instrument; and (ii) to the extent those regulations contain any references to, or requirements based on, NRSRO credit ratings, remove such references or requirements.<sup>20</sup> In place of such NRSRO rating-based requirements, agencies are instructed to substitute appropriate

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<sup>16</sup> See 12 U.S.C. 1426(a)(3) and 12 CFR §§ 932.3, 932.4, 932.5, and 932.6.

<sup>17</sup> See 12 CFR § 932.4.

<sup>18</sup> See 12 CFR § 932.5.

<sup>19</sup> See 12 CFR § 932.6.

<sup>20</sup> See § 939A, Pub. L. No. 111-203, 124 Stat. 1887 (July 21, 2010).

standards for determining creditworthiness. The Dodd-Frank Act further provides that, to the extent feasible, an agency should adopt a uniform standard of creditworthiness for use in its regulations, taking into account the entities regulated by it and the purposes for which such regulated entities would rely on the creditworthiness standard.

Several provisions of the Finance Board capital regulations include requirements that are based on NRSRO credit ratings, and thus must be revised to comply with the Dodd-Frank Act provisions related to use of NRSRO ratings.<sup>21</sup> Specifically, as already noted, the credit risk capital charges for certain Bank assets are calculated in large part based on the credit ratings assigned by NRSROs to a particular counterparty or specific financial instrument. In addition, the rule related to the operational risk capital charge allows a Bank to calculate an alternative capital charge if the Bank obtains insurance to cover operational risk from an insurer with an NRSRO credit rating of no lower than the second highest investment grade rating. Finally, the capital rules addressed by this rulemaking also establish unsecured credit limits for the Banks based on NRSRO credit ratings. FHFA is proposing to amend each of these provisions to bring them into compliance with the Dodd-Frank Act requirements.

### **III. The Proposed Rule**

FHFA is proposing to amend part 1277 of its regulations by adopting, with some revisions, the capital requirement regulations of the Finance Board, which are located at 12 CFR part 932.<sup>22</sup> Most of the provisions of the Finance Board regulations would be

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<sup>21</sup> See Advance Notice of Proposed Rulemaking: Alternatives to Use of Credit Ratings in Regulations Governing the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, and the Federal Home Loan Banks, 76 FR 5292, 5294 (Jan. 31, 2011).

<sup>22</sup> FHFA previously transferred the Finance Board requirements related to the Banks' capital stock and capital structure plans and readopted these provisions, subject to certain amendments, as 12 CFR part 1277, subparts C and D. See Final Rule: Federal Home Loan Bank Capital Stock and Capital Plans, 80 FR 12753

adopted without change or with only minor conforming changes. The proposed rule, however, would rescind § 932.1, which required the Banks to obtain the approval of the Finance Board for their market risk models prior to implementing their capital plans, which all Banks have done. The proposed rule also would rescind § 932.8, regarding minimum liquidity requirements for the Banks, because FHFA intends to address liquidity requirements as part of a separate rulemaking.<sup>23</sup> The proposal would adopt the substance of § 932.2 and § 932.3, regarding the total capital requirements and risk-based capital requirements, respectively, without change. FHFA is proposing to make minor revisions to the Finance Board regulations pertaining to market risk, operational risk, and reporting requirements, currently located at §§ 932.5, 932.6, and 932.7, respectively. The proposed rule would make significant revisions to two provisions of the Finance Board regulations: § 932.4, regarding credit risk capital requirements; and § 932.9, regarding limits on unsecured credit exposures, principally by removing requirements that are based on NRSRO credit ratings. In both cases, the proposed rule would replace the current approach with one under which the Banks would develop their own internal credit rating methodology to be used in place of the NRSRO credit ratings. With respect to the credit risk capital charges, the proposed rule also would revise the CRPRs used in the current regulation's tables to calculate the credit risk capital charges for advances and for non-

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(Mar. 11, 2015). At that time, FHFA also transferred a number of definitions relevant to the capital stock and capital plan requirements from 12 CFR § 930.1 to subpart A of part 1277.

<sup>23</sup> The current regulation is not determinative of the amount of the Banks' liquidity portfolios. Instead, Banks maintain liquid assets in accordance with guidelines issued in March 2009 that provide for more liquidity than the regulatory requirements. See Letter from Stephen M. Cross, Deputy Director, Division of FHLBank Regulation, to the FHLBank Presidents, March 6, 2009. Under those guidelines, the Banks maintain positive cash balances that would be sufficient to support their operations if they were unable to issue consolidated obligations for a 5-day period during which they renewed all maturing advances, and for a 15-day period during which all maturing advances were repaid. Until FHFA adopts a new liquidity regulation, the March 2009 guidelines will remain applicable.

mortgage assets, off-balance sheet items, and derivatives contracts. With respect to the unsecured credit limits, the proposed rule would incorporate into the rule text the substance of certain regulatory interpretations that have addressed the application of the unsecured credit limits in particular situations, and would make other changes to account for developments in the marketplace, such as the Dodd-Frank Act's mandate for clearing certain derivatives transactions. The proposed rule would not change the basic percentage limits used to calculate the amount of unsecured credit that a Bank can extend to a single counterparty or group of affiliated counterparties.

A discussion of the specific changes that FHFA proposes to make to the Banks' current capital regulations as part of this rulemaking follows.

#### Proposed § 1277.1 – Definitions

Most of the definitions in proposed § 1277.1 would be carried over without substantive change from current 12 CFR § 930.1. FHFA, however, is proposing to define seven new terms, which are: “collateralized mortgage obligation;” “derivatives clearing organization;” “eligible master netting agreement;” “non-mortgage asset;” “non-rated asset;” “residential mortgage;” and “residential mortgage security.”

Three of the new terms FHFA proposes to define pertain to the mortgage-related assets that a Bank may hold, which are: “collateralized mortgage obligation,” “residential mortgage,” and “residential mortgage security.” These definitions are straightforward and are intended to be mutually exclusive. They will be used to assign the particular asset to the appropriate category of Table 1.4 that would be used to determine the capital charge for that asset. The term “residential mortgage” is intended to include those mortgage loans that the Banks may purchase as acquired member assets

(AMA), and would include both whole loans and participation interests in such loans. These loans must be secured by a residential structure that contains one-to- four dwelling units. The proposed definition would encompass loans on individual condominium or cooperative units, as well as on manufactured housing, whether or not the manufactured housing is considered real property under state law. The definition would not include a loan secured by a multifamily property because the credit risk for such properties differs from loans secured by one-to-four family residences.

The term “residential mortgage security” includes any mortgage-backed security that represents an undivided interest in a pool of “residential mortgages,” i.e., mortgage pass-through securities. Both residential mortgages and residential mortgage securities would be grouped together in Table 1.4 of the proposed rule and would have the same credit risk capital charges, assuming the Bank has given them the same internal credit rating. The term “collateralized mortgage obligation” is intended to include any other type of mortgage-related security that is not structured as a pass-through security, i.e., any such security that has two or more tranches or classes. The capital charges for collateralized mortgage obligations would be derived from a different portion of Table 1.4, and most charges would be higher than those for mortgage pass-through securities. None of these proposed definitions would encompass a commercial mortgage-backed security (CMBS), including one collateralized by mortgage loans on multi-family properties, because the risk characteristics for such securities differ from those on securities representing an interest in, or otherwise backed by, mortgage loans on one-to-four family residential properties. Such CMBS or multi-family property securities would be deemed to be “non-mortgage assets” and the capital charge for them would be

determined by using proposed Table 1.2, which applies to internally rated non-mortgage assets, off-balance sheet items, and derivatives contracts.

FHFA proposes to define “derivatives clearing organization” as an organization that clears derivatives contracts and is registered with either the Commodity Futures Trading Commission (CFTC) or the Securities and Exchange Commission (SEC) or is exempted by one of those two Commissions from such registration. The new definition is needed because, as is discussed below, the proposed credit risk capital provision and the proposed unsecured credit provision impose different requirements on derivatives contracts cleared by a derivatives clearing organization than they impose on those not so cleared.

FHFA proposes to define “non-rated asset” to include those assets that are currently addressed by Table 1.4 of Finance Board regulation 12 CFR § 932.4, which are cash, premises, and plant and equipment, as well as certain investments described in the core mission activities regulation. Under the proposed rule the credit risk capital charges for “non-rated assets” would derive from proposed Table 1.3, which would be identical to Table 1.4 of the current regulation, both in terms of the assets covered by the table and the capital charges assigned to each category of assets within the table.

The proposed rule would define the term “non-mortgage asset” to include any assets held by a Bank other than advances covered by Table 1.1, all types of mortgage-related assets covered by Table 1.4, non-rated assets covered by Table 1.3, or derivatives contracts. As is discussed in much greater detail below, capital charges for “non-mortgage assets” would be calculated based on their stated maturity and a Bank’s internal credit rating for the assets, using new proposed Table 1.2. The charges for all types of

residential mortgage assets also would be calculated based on the Bank’s internal rating of those assets, rather than a rating from an NRSRO, but the credit risk percentage requirements will remain the same as in the current regulation.

The proposed rule also would add a definition for “eligible master netting agreement.” FHFA would define the term by reference to the definition for the term recently adopted in the FHFA rule governing margin and capital requirements for covered swap entities.<sup>24</sup> The term “eligible master netting agreement” would replace the references and definition of “qualifying bilateral netting contract” now found in the credit risk capital provision and would be relevant to how a Bank calculates its credit exposures under multiple derivatives contracts with a single party. As discussed more fully later, the current credit exposures arising from derivatives contracts with a single counterparty and subject to an eligible master netting agreement would be calculated on a net basis, in accordance with proposed § 1277.4(i)(1)(ii). Lastly, the proposed rule would revise the existing Finance Board definition of “operations risk” by changing it to “operational risk” and incorporating the definition of operational risk currently used in FHFA Advisory Bulletin AB-2014-02 (February 18, 2014).

#### Proposed § 1277.2 and § 1277.3 – Total Capital and Risk-based Capital Requirements

As noted above, FHFA proposes to re-adopt current § 932.2 and § 932.3 of the Finance Board regulations as § 1277.2 and § 1277.3 without change. Proposed § 1277.2 is identical to the existing regulation and would set forth the minimum total capital and

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<sup>24</sup> See, Final Rule: Margin and Capital Requirements for Covered Swap Entities, 80 FR 74840 (Nov. 30, 2015) (hereinafter, Final Uncleared Swaps Rule). The specific definition is found at 12 CFR § 1221.2. FHFA does not propose to carry over the current definition for “walkaway clause” in current 12 CFR § 930.1 as the proposed definition of “eligible master netting agreement” already would sufficiently describe a walkaway clause.

leverage ratios that each Bank must maintain under section 6(a)(2) of the Bank Act.<sup>25</sup>

Proposed § 1277.3 also is identical to the existing regulation, apart from cross-references to other regulations, and would set forth a Bank's risk-based capital requirement and require a Bank to hold at all times an amount of permanent capital equal to at least the sum of its credit risk, market risk and operational risk capital requirements.<sup>26</sup> In turn, proposed §§ 1277.4, 1277.5, and 1277.6 would establish, respectively, the requirements for calculating a Bank's credit risk, market risk, and operational risk capital charges, as described below.

#### Proposed § 1277.4 – Credit Risk Capital Requirements

FHFA is proposing changes to the current credit risk capital provision, now set forth at 12 CFR § 932.4 of the Finance Board regulations. The principal revisions include changing how a Bank determines the CRPRs used to calculate capital charges for its internally rated non-mortgage assets, derivatives contracts, and off-balance sheet items (under proposed Table 1.2), and for its residential mortgage assets (under proposed Table 1.4). In both cases, a Bank would no longer base the charge on an NRSRO credit rating, but on a credit rating that the Bank calculates internally. The proposal also would update the CRPRs used to calculate the applicable capital charges for advances and non-mortgage assets, and would change the frequency of a Bank's calculation of its credit risk capital charges from monthly to quarterly.<sup>27</sup> Finally, as discussed in more detail below,

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<sup>25</sup> 12 U.S.C. 1426(a)(2).

<sup>26</sup> FHFA believes that this approach remains consistent with the amendments made by HERA to the risk-based capital requirements in the Bank Act. As amended, the Bank Act provides the Director with broad authority to establish by regulation risk-based capital standards for the Banks that ensure the Banks operate in a safe and sound manner with sufficient permanent capital and reserves to support the risks arising from their operations. See 12 U.S.C. 1426(a)(3)(A).

<sup>27</sup> FHFA also is proposing a similar conforming change for the frequency of the calculation of the market risk capital charge. As a result, under the proposed rule, Banks would re-calculate their risk-based capital requirement quarterly, rather than monthly as under the current regulation.

FHFA is also proposing a number of other changes to the current regulation.

General. Similar to the current regulation, proposed § 1277.4(a) would provide that a Bank's credit risk capital requirement equal the sum of the individual credit risk capital charges for its advances, residential mortgage assets, non-mortgage assets, off-balance sheet items, derivatives contracts, and non-rated assets. Proposed § 1277.4(b) through (e) would set forth the general approach for calculating the credit risk capital charges, respectively, for: residential mortgage assets; advances, non-mortgage assets, and non-rated assets; off-balance sheet items; and derivatives contracts. The calculation of capital charges for residential mortgage assets is discussed below in the section entitled Credit Risk Charge for Residential Mortgage Assets.

Valuation of Assets. For all assets, § 1277.4(c) of the proposed rule generally would require that a Bank determine the capital charge by multiplying the amortized cost of the asset by the CRPR assigned to the asset under the appropriate table. The proposed rule includes an exception to this general approach, which would apply for any asset carried at fair value for which the Bank recognizes the change in that asset's fair value in income. For these assets, the capital charge would equal the fair value of the asset multiplied by the applicable CRPR. The proposed wording represents a change from the current regulation, which bases the capital charge for on-balance sheet assets on the asset's book value. FHFA is proposing this change to provide greater clarity and alignment with the intent of the rule, as amortized cost and fair value are the current financial instrument recognition and measurement attributes used in relevant accounting guidance.

Charge for Off-Balance Sheet Items. Section 1277.4(d) of the proposed rule

would carry over the language from the existing Finance Board regulations regarding the capital charges for off-balance sheet items without change. Thus, the capital charge for such items would equal the credit equivalent amount of the item multiplied by the CRPR assigned to the asset by Table 1.2 of proposed § 1277.4(f)(1). A Bank would calculate the credit equivalent amount for any off-balance sheet item pursuant to proposed § 1277.4(h), which would allow a Bank to calculate the credit equivalent amount by using either an FHFA-approved model or the proposed conversion factors set forth in Table 2. The proposed conversion factors are the same as those in the current regulation. Proposed § 1277.4(d) would retain the existing exception provided by the current regulation for standby letters of credit, under which the CRPR would be the same as that established under Table 1.1 for an advance with the same remaining maturity as the standby letter of credit. A Bank would still need to calculate the credit equivalent amount for the letter of credit pursuant to proposed § 1277.4(h).<sup>28</sup>

Proposed § 1277.4(h), which addresses the calculation of credit equivalent amounts and is substantively the same as § 932.4(f) of the Finance Board regulation, would carry over the treatment for certain off-balance sheet commitments that otherwise would be subject to a credit conversion factor of 20 percent or 50 percent. If such commitments are unconditionally cancelable or effectively provide for cancellation upon deterioration in the borrowers' creditworthiness, then the credit conversion factor would be zero, and no credit risk capital charge would apply to those items.

Derivatives Contracts. Proposed § 1277.4(e) would establish the general requirements for calculating credit risk capital charges for derivatives contracts. The

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<sup>28</sup> Under proposed Table 2, the credit equivalent amount of any letter of credit would equal the face amount of the letter of credit multiplied by 0.5 (i.e., a credit conversion factor of 50 percent).

proposed rule would make a number of changes to the current regulation's treatment of derivatives. These changes reflect developments in derivatives regulations brought about by the Dodd-Frank Act, including the clearing requirement for many standardized over-the-counter (OTC) derivatives contracts and the adoption by FHFA, jointly with other federal regulators, of the Final Rule on Margin and Capital Requirements for covered Swap Entities, which established margin and capital requirements for uncleared swap contracts. The proposed rule also would eliminate the provision from the current regulation that provides special treatment for derivatives with members so that derivatives contracts with members would receive the same treatment as derivatives contracts with non-members. Section 1277.4(e)(4)(i) of the proposed rule, however, would retain the exception in the current regulation that assigns a capital charge of zero to any foreign exchange rate contract (other than gold contracts) that has a maturity of 14 days or less.

First, the proposed rule would add a credit risk capital charge for all cleared derivatives contracts, including exchange-traded futures contracts. Under the current regulation, cleared derivatives contracts have a charge of zero. However, when the Finance Board adopted the current regulation, the only cleared derivatives contracts used by the Banks were exchange-traded futures contracts, and the Banks did not commonly use futures. Given the Dodd-Frank Act clearing requirements, Banks will now clear a significant percentage of their OTC derivatives contracts.<sup>29</sup> Thus, FHFA finds it reasonable to apply a capital charge to such contracts. The credit risk capital charge for cleared derivatives under the proposed rule also would take account of the fact that the

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<sup>29</sup> Because a futures contract is a cleared derivatives contract, the change in the proposed rule with regard to capital charges for cleared derivatives contracts would also apply to futures contracts.

amount of collateral a Bank must post to a derivatives clearing organization will exceed, at most times, the Bank's current obligation to the clearing organization, creating an exposure to potential loss of such excess collateral should the clearing organization fail. Capital rules adopted by federal banking regulators also instituted charges for collateral posted to the derivative counterparties, including derivative clearing organizations.

Specifically, § 1277.4(e)(4)(ii) of the proposed rule would impose a capital charge of 0.16 percent times the sum of a Bank's marked-to-market exposure on the cleared derivatives contract,<sup>30</sup> plus its potential future exposure on the contract, plus the amount of any collateral posted by the Bank and held by the clearing organization that exceeds the amount of the Bank's current obligation to the clearing organization under the contract. The charge in the proposed rule for cleared derivatives contracts is consistent with the minimum total capital charge that would be applicable to cleared derivatives contracts under the standardized approach in the capital rules adopted by federal banking regulators.<sup>31</sup>

For uncleared derivatives contracts, the proposed rule would carry over much of the approach in the current regulation, in that a Bank's charge for a derivatives contract would equal the sum of the Bank's current credit exposure and potential future credit exposure under the derivatives contract, multiplied by the applicable CRPR assigned to the derivatives counterparty under Table 1.2 of proposed § 1277.4(f). As under the current regulation, the proposed rule would deem that for purposes of calculating the charge on the current credit exposure the CRPR should be that associated with an asset

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<sup>30</sup> Given that most clearing organizations effectively settle a cleared derivatives contract at the end of the day, the current exposure would often be zero or a small amount depending on the timing of the daily settlement.

<sup>31</sup> FHFA, however, has not adjusted the charge to account for any additional capital amounts needed to comply with the capital conservation buffer under the federal banking regulators' rules.

with a maturity of one year or less and the Bank's internal rating for the derivatives counterparty. The calculation of the charge for the potential future exposure would be based on the CRPR associated with the maturity category equal to the remaining maturity of the derivatives contract.

The proposed rule, however, also would add to the above amounts an additional credit risk charge for the amount of collateral posted to a counterparty that exceeds the Bank's current, marked-to-market obligation to that counterparty under the derivatives contract.<sup>32</sup> The Bank would calculate the specific charge for the posted excess collateral based on a CRPR related to the Bank's internal rating for the custodian or other party holding such collateral and an applicable maturity deemed to be one year or less. The added charge would account for the possibility that the party holding the collateral may fail, and the Bank may not be able to recover its excess collateral. Capital rules issued by banking regulators also apply a capital charge for collateral posted to a third-party for uncleared derivatives contracts.

The proposed rule would allow the Bank to reduce its credit risk capital charge for derivatives contracts based on collateral posted by the counterparty, but only if the Bank's treatment of collateral posted under the derivatives contract complies with proposed § 1277.4(e)(3). That provision would first require the Bank to hold such collateral itself or in a segregated account consistent with requirements in the uncleared

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<sup>32</sup> Generally, this amount should equal the initial margin that a Bank would post under its derivatives contracts with a particular counterparty. Any amounts paid by a Bank to a derivatives clearing organization with respect to an end-of-day-settlement would not be considered collateral held by the clearing organization for purposes of applying any capital charge. Thus, the capital charge would be the sum of the current credit exposure, the potential future credit exposure, and the exposure related to the amount of collateral that exceeds the Bank's current exposure.

swaps margin and capital rule.<sup>33</sup> The proposed rule also requires a Bank to apply the minimum discounts set forth in the uncleared swaps margin and capital rule to any collateral that is eligible for posting under that rule.<sup>34</sup> The proposed rule, however, would not limit the collateral that a Bank may accept to that meeting the eligibility requirements of the uncleared swaps or margin rule, given that not all Bank derivative counterparties would be subject to these requirements.<sup>35</sup> This is a change from the current regulation, which allows Banks to take account of collateral held against derivatives exposures if a member or affiliate of the member holds the collateral. The current regulation also does not impose specific minimum discounts on any type of collateral but allows a Bank to determine a suitable discount. The proposed rule would carry over requirements from the current regulation that any collateral be legally available to the Bank to absorb losses and be of readily determinable value at which it can be liquidated.

The proposed rule would assure that minimum standards apply before a Bank can reduce its derivatives credit risk capital charge based on the protection offered by collateral. The changes in the proposed rule would impose slightly higher collateral standards than under the current regulation, but would be consistent with the move toward stricter requirements for derivatives that has followed the recent financial crisis.<sup>36</sup>

Proposed § 1277.4(i) would specify the method for calculating the current and

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<sup>33</sup> See 12 CFR § 1221.7(c). The Bank, however, would have to substitute the credit risk capital charge associated with the collateral for that of the derivatives contract. The proposed rule would also allow a Bank to base the calculation of the capital charge on the CRPR applicable to a third-party guarantor that unconditionally guarantees a Bank's counterparty's obligations under a derivatives contract, rather than on the requirement applicable to the counterparty.

<sup>34</sup> See, 12 CFR part 1221, Appendix B.

<sup>35</sup> Thus, under the proposed rule, the Bank would need to apply at least the minimum discount listed in Appendix B of the margin and capital rule for uncleared swaps to any collateral listed in that Appendix but would apply a suitable discount determined by the Bank based on appropriate assumptions about price risk and liquidation costs to collateral not listed in Appendix B.

<sup>36</sup> For any derivatives transactions with swap dealers or major swap participants, the Bank would already have to meet these higher collateral standards under applicable uncleared swaps margin and capital rules, and thus, the proposed change should not affect transactions with these types of counterparties.

potential future credit exposures under a derivatives contract. The proposed rule would require a Bank to calculate the current credit exposure in the same way as under the current regulation. Specifically, the current credit exposure would equal the marked-to-market value if that value is positive and would be zero if that value were zero or negative. The proposed rule would allow a Bank to calculate the current credit exposure for all derivatives contracts subject to an “eligible master netting agreement” on a net basis. As discussed previously, FHFA proposes to align the definition of “eligible master netting agreement” with that in the recently-adopted margin and capital rule for uncleared swaps.

This section of the proposed rule would provide a Bank the option of calculating the potential future credit exposure by using an initial margin model approved for use by the Bank by FHFA under § 1221.8 of the margin and capital rules for uncleared swaps, or that has been approved by another regulator for use by the Bank’s counterparty under standards similar to those in § 1221.8, or by using the standard calculation set forth in Appendix A of the part 1221 rules.<sup>37</sup> Thus, a Bank can rely on the initial margin calculation done by a swap dealer or other counterparty that uses a model approved by the CFTC, other federal banking regulator, or a foreign regulator whose model rules have been found to be comparable to the United States rules.<sup>38</sup> If neither the Bank nor the Bank’s counterparty uses an approved model to calculate initial margin amounts, or if the Bank otherwise chooses, the proposed rule would allow the Bank to calculate the potential future exposure using the method set forth in Appendix A to the margin and

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<sup>37</sup> See 12 CFR § 1221.8 and 12 CFR part 1221, Appendix A. As no Bank is currently a swap dealer or major swap participant that otherwise needs to develop an initial margin model, FHFA expects that the Banks would generally rely on the calculations done by a counterparty using its approved model or using Appendix A to the part 1221 rules.

<sup>38</sup> See 12 CFR § 1221.9.

capital rules for uncleared swaps. The conversion factors and the calculation of relevant potential future credit exposures for derivatives contracts, including the net potential future credit exposure for derivatives subject to an “eligible master netting agreement,” set forth under Appendix A to the margin and capital rules for uncleared swaps, are very similar to the requirements in the current Bank capital regulations for calculating potential future credit exposures on derivatives contracts.<sup>39</sup>

Determination of credit risk percentage requirements. Proposed § 1221.4(f) sets forth the method and criteria by which a Bank would determine the CRPR that it would use to calculate the credit risk capital charges for all of its assets, derivatives contracts, and off-balance sheet items. The applicable CRPRs would be set forth in four separate tables. Table 1.1 would apply for advances. Table 1.2 would apply for internally rated non-mortgage assets, derivatives contracts, and off-balance sheet items. Proposed Table 1.3 would apply for non-rated assets, which are cash, premises, plant and equipment, and certain specific investments. Proposed Table 1.4 would apply for residential mortgages, residential mortgage securities, and collateralized mortgage obligations. Each table is described below.

CRPRs for Advances: Proposed Table 1.1. The proposed rule would carry over the existing Table 1.1, which sets forth the CRPRs for advances. The proposed rule would maintain the same four maturity categories for advances as in the current regulation, but would slightly increase the CRPRs for each maturity category. A comparison of the proposed and current CRPRs for advances follows:

<b>Maturity of Advances</b>	<b>Percentage Applicable to Advances</b>	<b>Percentage Applicable to</b>
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<sup>39</sup> See Final Rule on Margin and Capital Requirements for Covered Swap Entities, 80 FR 74881-882.

	<b>(Proposed)</b>	<b>Advances (Current)</b>
Remaining maturity <= 4 years	0.09	0.07
Remaining maturity > 4 years to 7 years	0.23	0.20
Remaining maturity > 7 years to 10 years	0.35	0.30
Remaining maturity > 10 years	0.51	0.35

The fact that a Bank has never experienced a loss on an advance to a member institution creates challenges in identifying proper CRPRs for advances. When the Finance Board first developed the risk-based capital rule, it determined that appropriate requirements for advances should be greater than zero but less than the requirements for assets of the highest investment grade. Consequently, the Finance Board set the CRPRs for advances within those bounds by using the estimated default rate of assets of the highest investment grade and then applying a loss-given-default rate (LGD) of 10 percent, a much lower rate than the 100 percent LGD rate applied to other assets. The Finance Board justified the low LGD for advances by noting the over-collateralization provided for advances and other protections afforded advances under the Bank Act and Finance Board rules. The Finance Board also adjusted downward the CRPRs for advances for the two longest maturity categories in Table 1.1 to ensure those advances requirements would not exceed the CRPRs for mortgage assets of a similar maturity (as listed in current Table 1.2). It adjusted upward the CRPRs for the shortest maturity category because as calculated, the requirement for advances with a maturity of four years or less would have been zero.<sup>40</sup>

FHFA based the proposed new CRPRs for advances on the same concepts used

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<sup>40</sup> See Final Finance Board Bank Capital Rule, 66 FR at 8284-85.

by the Finance Board, but without any adjustments to the resulting percentage requirements. As discussed below, the proposed rule uses the same default rates for setting the CRPRs for advances as the revised default rate used to calculate the CRPRs for non-mortgage assets of the highest investment category. The proposed rule would apply an LGD of 10 percent, the same rate used under the current regulation, to calculate the CRPRs for advances. Unlike the current regulation, however, the proposed rule would not adjust the calculated CRPR for the longer maturity categories, and it would use the calculated requirement for the shortest maturity category.<sup>41</sup>

Under the proposal, the total capital charges for advances would rise slightly compared to the current regulation. For example, as of year-end 2016, the proposed CRPRs would result in an increased credit risk charge for advances, although the dollar amount of the change would not be significant given the Banks' overall level of capitalization. Specifically, the aggregate credit risk capital charges for System-wide advances would increase from approximately 0.071 percent of the Banks' total assets to approximately 0.087 percent of total assets – an increase in dollar terms from \$749 million to approximately \$920 million. To put this increase in perspective, System-wide permanent capital available to meet the risk-based capital requirements exceeded \$54 billion in the fourth quarter of 2016. Further, given that advances represented over 66 percent of the Bank System's total assets as of year-end 2016, the absolute amount of credit risk capital charge required for advances under the proposed rule would remain modest and in keeping with the very low risk posed by advances.

CRPRs for Internally Rated Assets: Proposed Table 1.2. Proposed Table 1.2

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<sup>41</sup> The proposed CRPR for the shortest maturity category is not zero as calculated because it is based on default data that was updated from what the Finance Board used for the current regulation.

would replace Table 1.3 from the current regulation, and would set forth the CRPRs to be used to calculate the capital charges for internally rated non-mortgage assets, off-balance sheet items, and derivatives contracts.<sup>42</sup> The current regulation assigns CRPRs for these assets, items, and contracts by use of a look-up table that delineates the CRPRs by NRSRO rating and maturity range. The proposed rule would retain the simplicity of this approach, but would replace the NRSRO rating categories with FHFA Credit Ratings categories. Specifically, proposed Table 1.2 would establish the CRPRs by using seven separate “FHFA Credit Rating” categories, each of which would be subdivided into five maturity categories. The maturity categories in proposed Table 1.2 would remain the same as those in current Table 1.3. The FHFA Credit Ratings categories are intended to achieve the same purpose served by the NRSRO credit ratings in the current regulation, which is to create a hierarchy of credit risk exposure categories, to which a Bank would assign each of the assets, items, and contracts covered by proposed Table 1.2. The FHFA Credit Ratings categories, like the NRSRO ratings categories that they replace, would base the relative creditworthiness of each category on historical loss experience. Thus, current Table 1.3 and proposed Table 1.2 both contain CRPRs structured to correspond to the historical loss experience of financial instruments, categorized by NRSRO ratings. Accordingly, the historical loss experience for the “highest investment grade” category in current Table 1.3 would correspond to the historical loss experience for the FHFA 1 Credit Rating category in proposed Table 1.2, and so on. To provide some guidance to the Banks about the breadth of these categories, the rule would make clear that each of the FHFA 1 through 4 categories would be generally comparable to the credit risk associated with items that could qualify as “investment quality,” as that term is

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<sup>42</sup> See 12 CFR § 932.4.

defined in FHFA’s investment regulation.<sup>43</sup> For example, a rating of FHFA 1 would suggest the highest credit quality and the lowest level of credit risk; FHFA 2 would suggest high quality and a very low level of credit risk; and FHFA 3 would suggest an upper-medium level of credit quality and low credit risk. FHFA 4 would suggest medium quality and moderate credit risk. Categories FHFA 5 through 7 would include assets and items that have risk characteristics that are comparable to instruments that could not qualify as “investment quality” under the FHFA investment regulation.

The proposed rule, however, differs from the current regulation by requiring the Bank to determine the appropriate FHFA Credit Rating category for each instrument covered by proposed Table 1.2. The Bank would do so by conducting its own internal calculation of a credit rating for that instrument, rather than assigning it a CRPR based on an NRSRO rating. Thus, each Bank also would need to establish a mapping of its internal credit ratings to the various FHFA Credit Rating categories in proposed Table 1.2. Given the similarity in structure and basis between proposed Table 1.2 and current Table 1.3, and the historical data connection of both tables to historical loss rates, as experienced by financial instruments categorized by the NRSRO ratings, the Banks should be able to map their internal credit ratings to the appropriate categories in proposed Table 1.2 in a straightforward manner. Because the proposed rule would rely on a Bank’s internal credit ratings and its mapping of those ratings to the appropriate FHFA Credit Rating category, it is possible that the CRPR for a particular instrument or counterparty determined under the proposed rule would differ from the CRPR that is

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<sup>43</sup> 12 CFR part 1267.1. Generally speaking, the term “investment quality” includes those instruments for which a Bank has determined that full and timely payment of principal and interest is expected, and that there is minimal risk that the timely payment of principal or interest will not occur because of adverse changes in economic and financial conditions during the life of the instrument.

assigned under the current regulations.

As discussed above, the proposed rule would require the Banks to develop a method for assigning a rating to a counterparty or instrument and then map that rating to an FHFA Credit Rating category. The proposed rule would not require a Bank to obtain FHFA approval of either its method of calculating the internal credit rating or of its mapping of such ratings to the FHFA Credit Ratings categories. Instead, the proposed rule would specify that a Bank's rating method must involve an evaluation of counterparty or asset risk factors, which may include measures of the counterparty's scale, earnings, liquidity, asset quality, and capital adequacy, and could incorporate, but not rely solely upon, credit ratings available from an NRSRO or other sources.

FHFA intends to rely on the examination process to review the Banks' internal rating methodologies and mapping processes. FHFA finds that approach appropriate because the Banks have been using internal rating methodologies for some time, and any adjustments to those methodologies that FHFA may direct a Bank to undertake in the future based on its supervisory review would not likely have a material effect on a Bank's overall credit risk capital requirement. That said, the proposed rule also includes a provision that would allow FHFA, on a case-by-case basis, to direct a Bank to change the calculated credit risk capital charge for any non-mortgage asset, off-balance sheet item, or derivatives contract, as necessary to remedy for any deficiency that FHFA identifies with respect to a Bank's internal credit rating methodology for such instruments.

Calculation of Proposed Table 1.2 CRPRs. To generate the CRPRs in proposed Table 1.2, FHFA updated both the data and the methodology that the Finance Board had used to develop the CRPRs in current Table 1.3. As a result, the requirements in

proposed Table 1.2 differ from, and in most cases are higher than, those in current Table 1.3. FHFA derived the CRPRs in proposed Table 1.2 using a modified version of the Basel internal ratings-based (IRB) credit risk model.<sup>44</sup>

Both the previous Finance Board approach underlying current Table 1.3 and the current Basel credit risk model use historical default data to determine a distribution of potential default rates, and then identify a stress level of default consistent with a selected confidence level of the default rate distribution. The prior Finance Board approach differs from the Basel credit risk model in the methods used to identify both the mean and variance of the default rate distribution. The prior Finance Board approach relied on a number of key assumptions arrived at judgmentally, whereas the later-developed Basel credit risk model relies on a sound and internally consistent theoretical construct. Thus, the Basel credit risk model represents a more sound and consistent approach than the Finance Board approach.

The application of the Basel credit risk model has two key data inputs – probability of default (PD) and LGD, grouped by segments that have homogeneous risk characteristics. To ensure consistent determinations of PDs and LGDs for the CRPR calculation, FHFA selected the PDs and LGDs from historical cumulative corporate default data. FHFA selected PDs from a sample period of 1970-2005 and grouped them by asset credit quality and maturity categories.<sup>45</sup> These data represent the closest data in terms of risk characteristics to the variety of exposures held by the Banks that would be subject to proposed Table 1.2.

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<sup>44</sup> The FDIC used this model for calculating risk weights in its advanced IRB approach for addressing Risk-Weighted Assets for General Credit Risk. See 12 CFR part 324, Subpart E.

<sup>45</sup> To generate current Table 1.3, the Finance Board used similar data covering 1970-2000.

The corporate default data that FHFA used to set PDs came from Moody's Investor Service. The Moody's data are very similar to historically comparable data provided by other rating agencies. More recent default rate data were available, but any data set that included the period post 2006 would reflect the abnormally high default rates that occurred during the recent financial crisis, and represent an exceptionally stressful period. Including the more recent data as an input to the Basel credit risk model would result in overstating required capital.<sup>46</sup> The Basel model requires use of "average" PDs that reflect expected default rates under normal business conditions and mathematically converts the average PDs to the equivalent of stressed PDs for a given confidence level (selected at 99.9 percent) as applied to an assumed normal distribution of default rates.

The Basel credit risk model requires already stressed LGDs as inputs. FHFA used the same LGD for all PD categories, and arrived at a stressed LGD by examining Moody's recovery rate (one minus LGD) data from 1982 through 2011. The recovery rates were measured based on 30-day post-default trading prices.<sup>47</sup> The data indicated the highest actual annual LGD was nearly 80 percent, but annual LGD rates reached this level just twice in 30 years. A more commonly observed stress level of LGD is about 65 percent, which occurred nearly nine times during that period. Hence, FHFA selected an LGD of 65 percent as an input to the Basel credit risk model.

The Basel II IRB application of the Basel credit risk model uses a confidence

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<sup>46</sup> See An Explanatory Note on the Basel II IRB Risk Weight Functions, July 2005, Bank for International Settlements, page 5. Dr. Donald R. van Deventer (Chairman and CEO of Kamakura Corporation, a financial risk management firm) points to rapidly rising default rates following the peak of the 2007-2010 financial crises and warns that these high recent rates will not meet the standards required for application of the credit model under the new Basel Capital Accords in his March 15, 2009 blog, "The Ratings Chernobyl." Moreover, even if FHFA had included some additional post-crisis years in the PD data set, the resulting refinements to the capital CRPRs would have been immaterial.

<sup>47</sup> This represents a commonly used market-based measure of recovery and was the only measure readily available in literature.

level or severity of the imposed stress of 99.9 percent.<sup>48</sup> FHFA also concluded that 99.9 percent is an appropriate confidence level, after comparing the Basel model calculated default rates, which are based on stressed PD rates, to actual default history. FHFA found that across all ratings, the calculated default rates at the 99.9 percent confidence level were equal to or greater than annual issuer-weighted (and withdrawal adjusted)<sup>49</sup> corporate default rates observed for all years since the Great Depression, with one exception.<sup>50</sup> Thus, FHFA proposes to adopt the 99.9 percent confidence level in implementing the credit risk model. However, FHFA proposes to use the version of the Basel model that accounts for both expected and unexpected loss, rather than the version that accounts only for unexpected loss. FHFA believes this choice is conservative, but may be of little consequence, as typically expected losses for Bank held instruments that are subject to Table 1.2 are minimal.

Updating the methodology behind proposed Table 1.2 would result in proposed CRPRs generally higher than current charges. Specifically, based on actual System-wide data for year-end 2016, the proposed new methodology would raise required credit risk capital, when compared to that calculated under the current regulation for non-advance, non-mortgage assets, from about 0.095 percent of assets to about 0.139 percent of assets, or by 47 percent.<sup>51</sup> The result reflects more the shortcomings with the prior methodology

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<sup>48</sup> The model adopted by the FDIC also uses a 99.9 percent confidence level.

<sup>49</sup> Issuer-weighted refers to default rates based on the proportion of issuers who defaulted, not the proportion of dollars issued that default. Withdrawal adjusted corrects the bias in the default rate that would otherwise result from the fact that some issuers are likely to disappear from the market and effectively default through means other than bankruptcy, e.g., being merged or acquired.

<sup>50</sup> The exception was for actual default rates observed in 1989 for double-A corporate bond issuers. The actual default rate was 0.627 and the calculated default rate was 0.570.

<sup>51</sup> FHFA based this comparison on data provided in each Bank's 10-K filed with the SEC. FHFA did not include a Bank's derivatives holdings or off-balance sheet items in this calculation. FHFA, however, estimates that derivatives and off-balance sheet items account for less than 2 percent of the Banks' total

than any heightened concern about the credit quality of the assets or items subject to new Table 1.2. Overall, the increase under the proposed rule for the Bank System in total required risk-based capital related to credit risk charges for rated non-mortgage, non-advance assets would be from \$1.006 billion to about \$1.476 billion as of December 31, 2016, an increase of less than one percent of permanent capital as of that date.

Proposed Table 1.3: Non-Rated Assets. Proposed Table 1.3 would set forth the CRPRs for non-rated assets, which term would be defined to include each of the categories of assets currently included within Table 1.4 of the current credit risk capital rule – cash, premises, plant and equipment, and investments list in 12 CFR § 1265.3(e) and(f). The proposed CRPRs for these items also would remain unchanged from the current regulation.<sup>52</sup>

Reduced Charges for non-mortgage assets. The rule would carry over in proposed § 1277.4(f)(2) the provisions from the current regulation that allow a Bank to substitute the CRPR associated with collateral posted for, or an unconditional guarantee of, performance under the terms of any non-mortgage asset. FHFA is not proposing any substantive changes to the current provision, although, as already discussed above, FHFA is proposing to adopt different collateral standards applicable to derivatives contracts and to non-mortgage assets.<sup>53</sup>

Proposed § 1277.4(j) would carry over the special provisions for calculation of

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credit risk capital charges, and therefore, believes the exclusion of these from the comparison calculation does not materially affect the conclusion drawn from the comparison.

<sup>52</sup> See, Final Finance Board Capital Rule, 66 FR at 8288-89.

<sup>53</sup> As already noted, the proposed definition of non-mortgage asset specifically excludes derivatives contracts so the standards governing collateral posted for, or unconditional guarantees of, non-mortgage assets under proposed § 1277.4(f)(2) would not apply to derivatives contracts. The rule sets forth the collateral and third-party guarantee standards for derivatives contracts in proposed § 1277.4(e)(2), although the standards applicable to third-party guarantors are basically the same under both proposed § 1277.4(e)(2) and proposed § 1277.4(f)(2).

the capital charge on non-mortgage assets hedged with certain credit derivatives, if a Bank so chooses. The proposed provision would not alter the substance of the current provision as to the criteria that must be met for the special provision to apply or the method of calculating the capital charges. Generally, under the proposed provision, a Bank would be able to substitute the capital charge associated with the credit derivatives (as calculated under proposed § 1277.4(e)) for all or a portion of the capital charge calculated for the non-mortgage assets, if the hedging relationships meet the criteria in the proposed provision.<sup>54</sup>

Charge for Non-Mortgage-Related Obligations of the Enterprises. Section 1277.4(f)(3) of the proposed rule would apply a capital charge of zero to any non-mortgage debt security or obligation issued by either of the Enterprises, but only if the Enterprise is operating with capital support or other form of direct financial assistance from the U.S. Government that would enable the Enterprise to repay those obligations. The financial support currently provided by the U.S. Department of the Treasury under the Senior Preferred Stock Purchase Agreements (PSPAs) would be included in this provision. FHFA believes a capital charge of zero for such obligations of the Enterprises is appropriate given the PSPAs and the financial support they provide for the Enterprises with regard to their ability to cover their obligations. Section 1277.4(g)(2) of the proposed rule provides the same treatment for mortgage-related assets that are guaranteed by the Enterprises. The proposed rule would require that the Banks treat obligations issued by other GSEs, including debt obligations of the Banks, the same as other investments in calculating the capital charges. Therefore, each Bank must determine an FHFA Credit Rating for the GSE obligations, based on its internal credit ratings, and then

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<sup>54</sup> See Final Finance Board Capital Rule, 66 FR at 8292-94.

use Table 1.2 to calculate the appropriate credit risk capital charge.

Credit Risk Charge for Residential Mortgage Assets. Section 1277.4(g)(1) of the proposed rule would establish a capital charge for residential mortgage assets that would be equal to the amortized cost of the asset multiplied by the CRPR assigned to the asset under Table 1.4 of proposed § 1277.4(g). The proposed rule would include an exception to this approach for any residential mortgage asset carried at fair value where the Bank recognizes the change in that asset's fair value in income. For these residential mortgage assets, the capital charge would be based on the fair value of the asset, which would be multiplied by the applicable CRPR. This fair value provision is the same as that to be used when calculating the CRPRs for assets, items, and contracts subject to Table 1.2, and represents a change from the current regulation, which bases the capital charge for on-balance sheet assets on the asset's book value.

Proposed Table 1.4 would replace Table 1.2 from the current regulation, and would set forth the CRPRs to be used to calculate the capital charges for three categories of internally rated residential mortgage assets – residential mortgages, residential mortgage securities, and collateralized mortgage obligations – each of which would be a defined term under the proposed rule. The current regulation assigns CRPRs for these assets by use of a look-up table that delineates the CRPRs by NRSRO rating and residential mortgage asset type. The proposed rule would retain this approach, but would replace the NRSRO rating categories with FHFA Credit Ratings categories. Proposed Table 1.4 would include seven categories of FHFA Credit Ratings labeled “FHFA RMA 1 through 7,” which categories would apply to residential mortgages and residential mortgage securities. Table 1.4 would include seven other categories, which would be

labeled “FHFA CMO 1 through 7,” which categories would apply only to collateralized mortgage obligations. As described previously, the term “residential mortgage securities” would include only those instruments that represent an undivided ownership interest in a pool of residential mortgage loans, i.e., instruments that are structured as pass-through securities. The term “collateralized mortgage obligation” would include those mortgage-related instruments that are structured as something other than a pass-through security, i.e., an instrument that is backed or collateralized by residential mortgages or residential mortgage securities, but that include two or more tranches or classes. FHFA also is proposing to replace the subheading within the existing Table 1.2 that refers to “subordinated classes of mortgage assets” with the newly defined term “collateralized mortgage obligations.” The intent of this revision is to avoid any ambiguity about the meaning of the term “subordinated classes,” as used in the current regulation. Under the proposed table, collateralized mortgage obligations in the two highest FHFA CMO credit rating categories would be assigned the same CRPR as mortgage-related securities in the two highest FHFA RMA categories. Collateralized mortgage obligations in lower FHFA CMO categories would be assigned higher CRPRs than those for mortgage-related securities, which reflects the different historical loss experience between the two types of instruments.

Proposed Table 1.4 would carry over all of the CRPRs from the existing Finance Board regulations without change. As under the current regulation, the credit risk associated with assets placed into proposed FHFA Credit Rating categories 1 through 4 in most cases would likely correspond to the credit risk that is associated with assets having an investment grade rating from an NRSRO. Thus, instruments assigned to the

categories of FHFA RMA 1 or FHFA CMO 1 would suggest the highest credit quality and the lowest level of credit risk; categories FHFA RMA 2 or FHFA CMO 2 would suggest high quality and a very low level of credit risk; and categories FHFA RMA 3 or FHFA CMO 3 would suggest an upper-medium level of credit quality and low credit risk. Categories FHFA RMA 4 or FHFA CMO 4 would suggest medium quality and moderate credit risk. The proposed rule provides that all assets assigned to these four categories must have no greater level of credit risk than associated with investments that qualify as “AMA Investment Grade” under FHFA’s AMA regulation,<sup>55</sup> in the case of RMAs, or as “investment quality” under FHFA’s investment regulation,<sup>56</sup> in the case of CMOs. FHFA RMA or CMO categories of 5 through 7 would correspond to instruments that do not qualify as “AMA Investment Grade” or “investment quality” under FHFA’s AMA or investment regulations, with categories 6 and 7 having increasingly greater risk than category 5 of Table 1.4.

The proposed rule, however, would differ from the current regulation by requiring the Bank to assign each of its mortgage-related assets to the appropriate FHFA Credit Rating category based on the Bank’s internal calculation of a credit rating for the asset, rather than on its NRSRO rating. The proposed rule follows the same approach as would be required for non-mortgage assets, off-balance sheet items, and derivatives contracts under Table 1.2, which requires that the Bank develop a methodology to assign an internal credit rating to each of its mortgage-related assets, and then align its various internal credit ratings to the appropriate FHFA Credit Rating categories in proposed Table 1.4. The Bank’s methodology, as applied to residential mortgages, must involve an

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<sup>55</sup> 12 CFR 1268.1

<sup>56</sup> 12 CFR 1267.1.

evaluation of the underlying loans and any credit enhancements or guarantees, as well as an assessment of the creditworthiness of the providers of any such enhancements or guarantees. As applied to residential mortgage securities and collateralized mortgage obligations, the Bank's methodology must involve an evaluation of the underlying mortgage collateral, the structure of the security, and any credit enhancements or guarantees, including the creditworthiness of the providers of such enhancements or guarantees. The Banks' methodologies may incorporate NRSRO credit ratings, provided that they do not rely solely on those ratings. Given that both proposed Table 1.4 and current Table 1.2 have the same structure and are based on historical loss rates, as experienced by financial instruments categorized by the NRSRO rating, the Banks should be able to map their internal credit ratings to proposed Table 1.4 in a straightforward manner. Because the Bank's internal credit ratings will determine the appropriate FHFA Credit Rating category for its residential mortgage assets, it is possible that the internally generated rating will differ from the NRSRO rating for a particular instrument, and that the CRPR assigned under the proposed rule would differ from that assigned under the current Finance Board regulations.

As is the case with respect to the methodology to be used in assigning internal credit ratings to the various FHFA Credit Ratings categories of Table 1.2, the proposed rule would not require a Bank to obtain prior FHFA approval of either its method of calculating the internal credit rating or of its mapping of such ratings to the FHFA Credit Rating categories. FHFA intends to rely on the examination process to review the Banks' internal rating methodologies and mapping processes for these assets. As noted previously, the Banks have been using internal rating methodologies for some time, and

any adjustments to those methodologies that FHFA may direct a Bank to undertake in the future based on its supervisory review would not likely have a material effect on a Bank's overall credit risk capital requirement. Nonetheless, the proposed rule would reserve to FHFA the right to require a Bank to change the calculated capital charges for residential mortgage assets to account for any deficiencies identified by FHFA with a Bank's internal residential mortgage asset credit rating methodology, which is identical to the provision relating to assets covered by Table 1.2.

The proposed rule includes two exceptions that provide for a capital charge of zero for two categories of mortgage assets. First, the proposed rule would apply a capital charge of zero to any residential mortgage, residential mortgage security, or collateralized mortgage obligation (or any portion thereof) that is guaranteed as to the payment of principal and interest by one of the Enterprises, but only if the Enterprise is operating with capital support or other form of direct financial assistance from the United States government that would enable the Enterprise to cover its guarantee. The financial support currently provided by the United States Department of the Treasury under the Senior Preferred Stock Purchase Agreements qualifies under this provision. This exception is identical in substance to proposed § 1277.4(f)(3), which pertains to non-mortgage-related debt instruments issued by an Enterprise. Second, the proposed rule would apply a capital charge of zero to any residential mortgage, residential mortgage security, or collateralized mortgage obligation that is guaranteed or insured by a United States government agency or department and is backed by the full faith and credit of the United States.

Frequency of Calculation. FHFA proposes to reduce the frequency with which a

Bank would have to calculate its credit risk capital charges from monthly to quarterly. Thus, proposed § 1277.4(k) would require each Bank to calculate its credit risk capital requirement at least quarterly based on assets, off-balance sheet items, and derivatives contracts held as of the last business day of the immediately preceding calendar quarter, unless otherwise instructed by FHFA. The Bank would be expected to meet the calculated capital charge throughout the quarter.<sup>57</sup> In the past, a Bank's total credit risk capital charge has not varied so greatly that the change in frequency should raise any safety or soundness concerns. FHFA, therefore, proposes to reduce the operational burdens on the Banks by reducing the frequency of calculation. The proposed rule would reserve FHFA's right to require more frequent calculations if it determined that particular circumstances warranted such a change.

#### Proposed § 1277.5 – Market Risk Capital Requirement

FHFA proposes to readopt the existing market risk capital requirements with only the minor revisions described below.<sup>58</sup> The proposed rule would include a new provision, § 1277.5(d)(2), which would confirm that any market risk model or material adjustments to a model that FHFA or the Finance Board had previously approved remain valid unless FHFA affirmatively amends or revokes the prior approval. Section 1277.5(e) of the proposed rule also would change the frequency of a Bank's calculation date of its market risk capital requirement from monthly to quarterly so that it would correspond to the frequency of calculation for the Bank's credit risk capital requirement.

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<sup>57</sup> For example, early in the second calendar-year quarter, a Bank would need to calculate its credit risk capital charge based on assets, off-balance sheet items, and derivatives contracts held as of the last business day of the first calendar-year quarter. The capital charge so calculated would apply for the whole of the second calendar-year quarter.

<sup>58</sup> FHFA believes the overall approach to market risk adopted by the Finance Board remains valid and continues to provide a reasonable estimate of a Bank's market risk exposure. See Final Finance Board Bank Capital Rule, 66 FR at 8294-99.

Thus, each Bank would calculate its market risk capital requirement at least quarterly, based on assets held as of the last business day of the immediately preceding calendar quarter, unless otherwise instructed by FHFA. The Bank would be expected to meet the calculated capital charge throughout the quarter.

FHFA proposes to repeal the additional capital requirement that applies whenever a Bank's market value of capital is less than 85 percent of its book value of capital (85 Percent Test), which is located at 12 CFR 932.5 of the Finance Board regulations. This provision has become superfluous because FHFA can monitor a Bank's market value of capital and has other authority to impose additional capital requirements on a Bank if necessary.<sup>59</sup> Hence, FHFA has no reason to retain the provision in the rule. Furthermore, as applied under the current regulation, the 85 Percent Test has proven to be both very pro-cyclical (requiring additional capital during a market downturn, when the Bank is least able to raise capital) and inflexible. FHFA can more effectively address a Bank under stress by considering a broader set of facts and measures prior to making any determination as to when and how much additional capital should be required. FHFA also has additional authority to deal with Banks that become undercapitalized, which the Finance Board did not possess when it adopted the 85 Percent Test.<sup>60</sup>

#### Proposed § 1277.6 – Operational Risk Capital Requirement

FHFA proposes to carry over the current approach set forth in § 932.6 of the Finance Board regulations for calculating a Bank's operational risk capital requirement.

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<sup>59</sup> See 12 U.S.C. 4612(c), (d), and (e); 12 CFR part 1225. The Director of FHFA has the authority to adopt regulations establishing a higher minimum capital limit for the Banks, if necessary to ensure that they operate in safe and sound manner, as well as to order temporary increases in the minimum capital level for a particular Bank, and by order or regulation to establish such capital or reserve requirements with respect to any product or activity of a Bank.

<sup>60</sup> See 12 U.S.C. 4614, 4615, 4616, and 4617.

As a consequence, proposed § 1277.6 provides that a Bank's operational risk capital requirement shall equal 30 percent of the sum of the Bank's credit risk and market capital requirements. The Finance Board originally based the requirement on a statutory requirement applicable to the Enterprises, noting that given the difficulties of empirically measuring operational risk, it was reasonable to rely on the statutorily mandated provisions for guidance.<sup>61</sup> Congress has since repealed the specific operational risk capital provision related to the Enterprises and replaced it with a provision giving the Director of FHFA broad authority to establish risk-based capital charges that ensure the Enterprises operate in a safe and sound manner and maintain sufficient capital and reserves against their risks.<sup>62</sup> Nevertheless, FHFA believes that the 30 percent operational risk charge has provided a reasonable capital cushion for the Banks against operational risk losses and has not proven excessively burdensome.

FHFA also proposes to carry forward the current provisions in the regulation that allows a Bank to reduce the operational risk charge to as low as 10 percent of the combined market and credit risk charges if the Bank presents an alternative methodology for assessing or quantifying operational risk that meets with FHFA's approval. The proposed rule also would retain the provision that allows a Bank, subject to FHFA approval, to reduce the operational risk charge to as low as 10 percent if the Bank obtains insurance against such risk. However, to be consistent with the Dodd-Frank Act, the proposed rule would replace the current requirement that any such insurer have a credit rating from an NRSRO no lower than the second highest investment category with a requirement that FHFA find the insurance provider acceptable.

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<sup>61</sup> See Final Finance Board Bank Capital Rule, 66 FR at 8299 (citing 12 U.S.C. 4611(c) (2000)).

<sup>62</sup> See 12 U.S.C. 4611(a).

Proposed § 1277.7 – Limits on Unsecured Extensions of Credit; reporting requirements

With the exception of the revisions described below, FHFA proposes to carry over the substance of the current Finance Board regulations pertaining to a Bank's unsecured extensions of credit to a single counterparty or group of affiliated counterparties. Section 1277.7 of the proposed rule would include most of the provisions now found at 12 CFR § 932.9 of the Finance Board regulations. The principal revision to the existing regulation would be to determine unsecured credit limits based on a Bank's internal credit rating for a particular counterparty and the corresponding FHFA Credit Rating category for such exposures, rather than on NRSRO credit ratings. This change would bring the rule into compliance with the Dodd-Frank Act mandate that agencies replace regulatory provisions that rely on NRSRO credit ratings with alternative standards to assess credit quality.

FHFA Credit Ratings. Under the proposed rule, a Bank would apply the unsecured credit limits based on the same FHFA Credit Ratings categories used in proposed Table 1.2 for determining CRPRs for non-mortgage assets, off-balance sheet items, and derivatives contracts. Thus, a Bank would develop a methodology for assigning an internal rating for each counterparty or obligation, and would align its various credit ratings to the appropriate FHFA Credit Rating categories for determining the applicable unsecured credit limit. The proposed amendments also would remove from the current regulation all distinctions between short- and long-term ratings. The Finance Board regulations distinguished between those ratings because the regulations relied on NRSRO ratings, and those distinctions have proven to create certain complications in applying and monitoring the regulation. Therefore, under the proposed

rule, a Bank would determine a single rating for a specific counterparty or obligation when applying the unsecured credit limits, regardless of the term of the underlying unsecured credit obligations. Because the proposed rule would require a Bank to use the same methodology to arrive at an internal credit rating, and to align to the FHFA Credit Rating categories as used under Table 1.2, the end result would be that a Bank would use the same FHFA Credit Rating category for a specific counterparty or obligation in calculating both the credit risk capital charge under proposed § 1277.4 and the unsecured credit limit under proposed § 1277.7.

Limits on Exposure to a Single Counterparty. As under the current regulation, the general limit on unsecured credit to a single counterparty would be calculated under the proposed rule by multiplying a percentage maximum capital exposure limit associated with a particular FHFA Credit Rating category by the lesser of either the Bank's total capital, or the counterparty's Tier 1 capital, or total capital, in each case as defined by the counterparty's primary regulator. In cases where the counterparty does not have a regulatory Tier 1 capital or total capital measure, the Bank would determine a similar capital measure to use, as under the current regulations.

Proposed Table 1 to § 1277.7 sets forth the applicable maximum capital exposure limits used to calculate the relevant unsecured credit limit. These limits are: (i) 15 percent for a counterparty determined to have an FHFA 1 rating; (ii) 14 percent for a counterparty with an FHFA 2 rating; (iii) nine percent for a counterparty with an FHFA 3 rating; (iv) three percent for a counterparty with an FHFA 4 rating; and (v) one percent for any counterparty rated FHFA 5 or lower. The numerical limits are the same as those in the current regulation, with the differences in proposed Table 1 to § 1277.7 being the

use of the FHFA Credit Rating categories in place of the NRSRO ratings.<sup>63</sup> As part of its oversight of the Banks, FHFA monitors the role of the Banks in the unsecured credit markets and may propose additional amendments to these exposure limits if circumstances warrant.

As under the current regulation, the general unsecured credit limit, i.e., the appropriate percentage of the lesser of the Bank or counterparty's capital, would apply to all extensions of unsecured credit to a single counterparty that arise from a Bank's on- and off-balance sheet and derivatives transactions, other than sales of federal funds with a maturity of one day or less and sales of federal funds subject to continuing contract.<sup>64</sup> Similarly, the proposed rule would retain a separate overall limit, which would apply to all unsecured extensions of unsecured credit to a single counterparty that arise from a Bank's on- and off-balance sheet and derivatives transactions, but which would include sales of federal funds with a maturity of one day or less and sales of federal funds that are subject to a continuing contract. The amount of the overall limit would remain unchanged at twice the amount of the general limit.<sup>65</sup>

The proposed rule also would retain, with some revisions, the approach used by the current regulation with respect to NRSRO rating downgrades of a counterparty or

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<sup>63</sup> The Finance Board explained its reasons for setting these maximum capital exposure limits when it proposed the current unsecured credit regulation. See Proposed Rule: Unsecured Credit Limits for the Federal Home Loan Banks, 66 FR 41474, 41478-80 (Aug. 8, 2001) (hereinafter, Finance Board Proposed Unsecured Credit Rule).

<sup>64</sup> The proposed rule would carry over the definition of "sales of federal funds subject to a continuing contract" from § 930.1 without change.

<sup>65</sup> The Finance Board explained its reasons for adopting a special limit for sales of federal funds with a maturity of one day or less and sales of federal funds subject to continuing contract when it adopted the current unsecured credit regulation. The Finance Board stated that Banks have financial incentives to lend into the federal funds markets, i.e., the GSE funding advantage and fewer permissible investments than are available to commercial banks, and that permitting such lending without limits would be imprudent. See Final Rule: Unsecured Credit Limits for the Federal Home Loan Banks, 66 FR 66718, 66720-21 (Dec. 27, 2001) (hereinafter, Finance Board Final Unsecured Credit Rule). See also, Finance Board Proposed Unsecured Credit Rule, 66 FR at 41476.

obligation. The proposed rule would not use the term “downgrade” because that term is more appropriately associated with an action taken by a third-party ratings organization, such as an NRSRO. Instead, the proposed rule would provide that if a Bank revises its internal credit rating for a particular counterparty or obligation, it shall thereafter assign the counterparty or obligation to the appropriate FHFA Credit Rating category based on that revised internal rating. The proposed rule further provides that if the revised rating results in a lower FHFA Credit Rating category, then any subsequent extension of unsecured credit must comply with the new limit calculated using the lower credit rating. The proposed rule makes clear, however, that a Bank need not unwind any existing unsecured credit exposures as a result of the lower limit, provided they were originated in compliance with the unsecured credit limits in effect at that time. The proposed rule would continue to consider any renewal of an existing unsecured extension of credit, including a decision not to terminate a sale of federal funds subject to a continuing contract, as a new transaction, which would be subject to the recalculated limit.

Affiliated Counterparties. The proposed rule would readopt without substantive change the current provision limiting a Bank’s aggregate unsecured credit exposure to groups of affiliated counterparties. Thus, in addition to being subject to the limits on individual counterparties, a Bank’s unsecured credit exposure from all sources, including federal funds transactions, to all affiliated counterparties under the proposed rule could not exceed 30 percent of the Bank’s total capital. The proposed rule would also readopt the current definition of affiliated counterparty.

State, Local, or Tribal Government Obligations. The proposed rule also carries over without substantive change the special provision in the current regulation applicable

to calculating limits for certain unsecured obligations issued by state, local, or tribal governmental agencies. This provision, which would be located at § 1277.7(a)(3), would allow the Banks to calculate the limit for these covered obligations based on Bank capital – rather than on the lesser of the Bank or counterparty’s capital – and the rating assigned to the particular obligation. As under the current regulation, all obligations from the same issuer and having the same assigned rating may not exceed the limit associated with that rating, and the exposure from all obligations from that issuer cannot exceed the limit calculated for the highest rated obligation that a Bank actually has purchased. As explained by the Finance Board when it adopted the current regulation, this special provision reflected the fact that the state, local, or tribal agencies at issue often had low capital, their obligations had some backing from collateral but were not always fully secured in the traditional sense, and the Banks’ purchase of these obligations had a mission nexus.<sup>66</sup>

GSE Provision. FHFA proposes to amend the special limit that the current regulation applies to GSEs. Specifically, proposed § 1277.7(c) would apply a special limit only if the GSE counterparty were operating with capital support or other form of direct financial assistance from the U.S. government that would enable the GSE to repay its obligations. In such a case, the proposed rule would set the Bank’s unsecured credit limit, including all federal funds transactions, at 100 percent of the Bank’s capital. That limit is the same as the one that applies to the Banks’ exposures to the Enterprises, as calculated under the current regulation pursuant to FHFA Regulatory Interpretation 2010-

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<sup>66</sup> See Finance Board Final Unsecured Credit Rule, 66 FR at 66723-24.

RI-05, which the proposed rule would codify into the regulations.<sup>67</sup> A Bank would calculate its unsecured credit limit for any other GSE (other than another Bank) that does not meet these criteria the same way that it would for any other counterparty.<sup>68</sup>

Reporting. Proposed § 1277.7(e) would carry over the provisions from the current regulation that require a Bank to report certain unsecured exposures and violations of the unsecured credit limits. FHFA would expect a Bank to make these reports in accordance with any instructions in FHFA Data Reporting Manual or in applicable related guidance issued by FHFA.<sup>69</sup>

Calculation of Credit Exposures. Proposed § 1277.7(f) would establish the requirements for measuring a Bank's unsecured extensions of credit. For on-balance sheet transactions, other than derivative transactions, the rule would provide that the unsecured extension of credit would equal the amortized cost of the transaction plus net payments due the Bank, subject to an exception for those transactions or obligations that the Bank carries at fair value where any change in fair value is recognized in income. For these items, the unsecured extension of credit would equal the fair value of the item. This approach is similar to the approach applied under proposed § 1277.4 for calculating credit risk capital charges for non-mortgage assets. FHFA believes that this approach best captures the amount that a Bank has at risk should a counterparty default on any unsecured credit extended by the Bank.

For non-cleared derivatives transactions, the total unsecured credit exposure

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<sup>67</sup> See <https://www.fhfa.gov/SupervisionRegulation/LegalDocuments/Documents/Regulatory-Interpretations/2010-RI-05.pdf>

<sup>68</sup> This approach for GSEs is similar to the approach adopted jointly by FHFA and other prudential regulators in the margin and capital rules for uncleared swaps. In the margin and capital rules, agencies provide different treatment for collateral issued by a GSE operating with explicit United States government support from that issued by other GSEs. See, Final Rule: Margin and Capital Requirements for Covered Swap Entities, 80 FR 74840, 74870-71 (Nov. 30, 2015).

<sup>69</sup> See, Advisory Bulletin: FHLBank Unsecured Credit Exposure Reporting, AB 2015-04 (July 1, 2015).

would equal the Bank's current and future potential credit exposures calculated in accordance with the proposed credit risk capital provision, plus the amount of any collateral posted by the Bank that exceeds the amount the Bank owes to its counterparty, but only to the extent such excess posted collateral is not held by a third-party custodian in accordance with FHFA's margin and capital rule for uncleared swaps.<sup>70</sup> Similar to determining a credit exposure for a derivatives contract under the credit risk capital provision, the Bank would not count as an unsecured extension of credit any portion of the current and future potential credit exposure that is covered by collateral posted by a counterparty and held by or on behalf of the Bank, so long as the collateral is held in accordance with the requirements in proposed § 1277.4(e)(2) and (e)(3).

For off-balance sheet items, the unsecured extension of credit would equal the credit equivalent amount for that item, calculated in accordance with proposed § 1277.4(g). As with the current regulation, proposed § 1277.7(f) also provides that any debt obligation or debt security (other than a mortgage-backed or other asset-backed security or acquired member asset) shall be considered an unsecured extension of credit. Also consistent with the current regulation, this provision provides an exception for any amount owed to the Bank under a debt obligation or debt security for which the Bank holds collateral consistent with the requirements of proposed § 1277.4(f)(2)(ii) or any other amount that FHFA determines on a case-by-case basis should not be considered an unsecured extension of credit.

Exceptions to the unsecured credit limits. Section 1277.7(g) of the proposed rule

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<sup>70</sup> See 12 CFR § 1221.7(c) and (d). Thus, the amount of collateral that is posted by a Bank and is segregated with a third-party custodian consistent with the requirements of the swaps margin and capital rule would not be included in the Bank's unsecured credit exposure arising from a particular derivatives contract.

would include four separate exceptions to the regulatory limits on extensions of unsecured credit. Two of these exceptions, pertaining to obligations of or guaranteed by the U.S. and to extensions of credit from one Bank to another Bank, are being carried over without change from the current Finance Board regulations. The proposed rule would add a third exception, which would apply to any derivatives transaction accepted for clearing by a derivatives clearing organization. FHFA proposes to exclude cleared derivatives transactions from the rule given the Dodd-Frank Act mandates that parties clear certain standardized derivatives transactions. When a Bank submits a derivatives contract for clearing, the derivatives clearing organization becomes the counterparty to the contract. Given that a limited number of derivatives clearing organizations, or in some cases only a single organization, may clear specific classes of contracts, imposing the unsecured limits on cleared derivatives contracts may make it difficult for the Banks to fulfill the legal requirement to clear these contracts and frustrate the intent of the Dodd-Frank Act. In addition, the derivatives clearing organizations are subject to comprehensive federal regulatory oversight including regulations designed to protect the customers that use the clearing services. Even though FHFA proposes to exclude cleared derivatives contracts from coverage under this rule, it would expect Banks to develop internal policies to address exposures to specific clearing organizations that take account of the Bank's specific derivatives activity and clearing options. The proposed rule would add a fourth exception, which would incorporate the substance of a Finance Board regulatory interpretation, 2002-RI-05, pertaining to certain obligations issued by state housing finance agencies. Under that provision, a bond issued by a state housing finance agency would not be subject to the unsecured credit limits if the Bank documents that the

obligation principally secured by high-quality mortgage loans or mortgage-backed securities or by payments on such assets, is not a subordinated tranche of a bond issuance, and the Bank has determined that it has an internal credit rating of no lower than FHFA 2.

#### Proposed § 1277.8 – Reporting Requirements

Proposed § 1277.8 provides that each Bank shall report information related to capital or other matters addressed by part 1277 in accordance with instructions provided in the Data Reporting Manual issued by FHFA, as amended from time to time.

#### **IV. Considerations of Differences between the Banks and the Enterprises**

When promulgating regulations relating to the Banks, section 1313(f) of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 requires the Director of FHFA (Director) to consider the differences between the Banks and the Enterprises with respect to the Banks' cooperative ownership structure; mission of providing liquidity to members; affordable housing and community development mission; capital structure; and joint and several liability.<sup>71</sup> FHFA, in preparing this proposed rule, considered the differences between the Banks and the Enterprises as they relate to the above factors. FHFA requests comments from the public about whether these differences should result in any revisions to the proposed rule.

#### **V. Paperwork Reduction Act**

The proposed rule amendments do not contain any collections of information pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Therefore, FHFA has not submitted any information to the Office of Management and Budget for review.

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<sup>71</sup> See 12 U.S.C. 4513.

## **VI. 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 the agency has certified 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 proposed rule under the Regulatory Flexibility Act, and certifies that the proposed rule, if adopted as a final rule, would not have a significant economic impact on a substantial number of small entities because the proposed rule is applicable only to the Banks, which are not small entities for purposes of the Regulatory Flexibility Act.

### **List of Subjects**

#### 12 CFR Parts 930 and 932

Capital, Credit, Federal home loan banks, Investments, Reporting and recordkeeping requirements.

#### 12 CFR Part 1277

Capital, Credit, Federal home loan banks, Investments, Reporting and recordkeeping requirements.

Accordingly, for reasons stated in the **PREAMBLE**, and under the authority of 12 U.S.C. 1426, 1436(a), 1440, 1443, 1446, 4511, 4513, 4514, 4526, 4612, FHFA proposes to amend subchapter E of chapter IX and subchapter D of chapter XII of title 12 of the Code of Federal Regulations as follows:

## **CHAPTER IX—FEDERAL HOUSING FINANCE BOARD**

**Subchapter E—[Removed and Reserved]**

1. Subchapter E, consisting of parts 930 and 932 is removed and reserved.

**CHAPTER XII—FEDERAL HOUSING FINANCE AGENCY**

**Subchapter D—Federal Home Loan Banks**

**PART 1277—FEDERAL HOME LOAN BANK CAPITAL REQUIREMENTS,  
CAPITAL STOCK AND CAPITAL PLANS**

2. The authority citation for part 1277 continues to read as follows:

**Authority:** 12 U.S.C. 1426, 1436(a), 1440, 1443, 1446, 4511, 4513, 4514, 4526,  
and 4612.

**Subpart A—Definitions**

3. Amend § 1277.1 by adding in alphabetical order definitions for “affiliated counterparty,” “charges against the capital of a Bank,” “commitment to make an advance (or acquire a loan) subject to certain drawdown,” “collateralized mortgage obligation,” “credit derivative,” “credit risk,” “derivatives clearing organization,” “derivatives contract,” “eligible master netting agreement,” “exchange rate contracts,” “Government Sponsored Enterprise,” “interest rate contracts,” “market risk,” “market value at risk,” “non-mortgage asset,” “non-rated asset,” “operational risk,” “residential mortgage,” “residential mortgage security,” “sales of federal funds subject to a continuing contract,” and “total assets” to read as follows:

**§ 1277.1 Definitions.**

\* \* \* \* \*

Affiliated counterparty means a counterparty of a Bank that controls, is controlled by, or is under common control with another counterparty of the Bank. For the purposes

of this definition only, direct or indirect ownership (including beneficial ownership) of more than 50 percent of the voting securities or voting interests of an entity constitutes control.

Charges against the capital of the Bank means an other than temporary decline in the Bank's total equity that causes the value of total equity to fall below the Bank's aggregate capital stock amount.

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Collateralized mortgage obligation means any instrument backed or collateralized by residential mortgages or residential mortgage securities, that includes two or more tranches or classes, or is otherwise structured in any manner other than as a pass-through security.

Commitment to make an advance (or acquire a loan) subject to certain drawdown means a legally binding agreement that commits the Bank to make an advance or acquire a loan, at or by a specified future date.

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Credit derivative means a derivatives contract that transfers credit risk.

Credit risk means the risk that the market value, or estimated fair value if market value is not available, of an obligation will decline as a result of deterioration in creditworthiness.

Derivatives clearing organization means an organization that clears derivatives contracts and is registered with the Commodity Futures Trading Commission as a derivatives clearing organization pursuant to section 5b(a) of the Commodity Exchange Act of 1936 (7 U.S.C. 7a-1(a)), or that the Commodity Futures Trading Commission has

exempted from registration by rule or order pursuant to section 5b(h) of the Commodity Exchange Act of 1936 (7 U.S.C. 7a-1(h)), or is registered with the SEC as a clearing agency pursuant to section 17A of the 1934 Act (15 U.S.C. 78q-1), or that the SEC has exempted from registration as a clearing agency under section 17A of the 1934 Act (15 U.S.C. 78q-1).

Derivatives contract means generally a financial contract the value of which is derived from the values of one or more underlying assets, reference rates, or indices of asset values, or credit-related events. Derivatives contracts include interest rate, foreign exchange rate, equity, precious metals, commodity, and credit contracts, and any other instruments that pose similar risks.

Eligible master netting agreement has the same meaning as set forth in § 1221.2 of this chapter.

Exchange rate contracts include cross-currency interest-rate swaps, forward foreign exchange rate contracts, currency options purchased, and any similar instruments that give rise to similar risks.

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Government Sponsored Enterprise, or GSE, means a United States Government-sponsored agency or instrumentality originally established or chartered to serve public purposes specified by the United States Congress, but whose obligations are not obligations of the United States and are not guaranteed by the United States.

Interest rate contracts include single currency interest-rate swaps, basis swaps, forward rate agreements, interest-rate options, and any similar instrument that gives rise to similar risks, including when-issued securities.

Market risk means the risk that the market value, or estimated fair value if market value is not available, of a Bank's portfolio will decline as a result of changes in interest rates, foreign exchange rates, or equity or commodity prices.

Market value at risk is the loss in the market value of a Bank's portfolio measured from a base line case, where the loss is estimated in accordance with § 1277.5 of this part.

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Non-mortgage asset means an asset held by a Bank other than an advance, a non-rated asset, a residential mortgage, a residential mortgage security, a collateralized mortgage obligation, or a derivatives contract.

Non-rated asset means a Bank's cash, premises, plant and equipment, and investments authorized pursuant to § 1265.3(e) and (f).

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

\* \* \* \* \*

Residential mortgage means a loan secured by a residential structure that contains one-to-four dwelling units, regardless of whether the structure is attached to real property. The term encompasses, among other things, loans secured by individual condominium or cooperative units and manufactured housing, whether or not the manufactured housing is considered real property under state law, and participation interests in such loans.

Residential mortgage security means any instrument representing an undivided interest in a pool of residential mortgages.

Sales of federal funds subject to a continuing contract means an overnight federal funds loan that is automatically renewed each day unless terminated by either the lender

or the borrower.

Total assets mean the total assets of a Bank, as determined in accordance with GAAP.

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4. Add Subpart B, consisting of §§1277.2 through 1277.8 to read as follows:

**Subpart B – Bank Capital Requirements**

Sec.

1277.2 Total capital requirement.

1277.3 Risk-based capital requirement.

1277.4 Credit risk capital requirement.

1277.5 Market risk capital requirement.

1277.6 Operational risk capital requirement.

1277.7 Limits on unsecured extensions of credit; reporting requirements.

1277.8 Reporting requirements.

**§ 1277.2 Total capital requirement.**

Each Bank shall maintain at all times:

(a) Total capital in an amount at least equal to 4.0 percent of the Bank's total assets; and

(b) A leverage ratio of total capital to total assets of at least 5.0 percent of the Bank's total assets. For purposes of determining this leverage ratio, total capital shall be computed by multiplying the Bank's permanent capital by 1.5 and adding to this product all other components of total capital.

**§ 1277.3 Risk-based capital requirement.**

Each Bank shall maintain at all times permanent capital in an amount at least equal to the sum of its credit risk capital requirement, its market risk capital requirement, and its operational risk capital requirement, calculated in accordance with §§ 1277.4, 1277.5, and 1277.6 of this part, respectively.

**§ 1277.4 Credit risk capital requirement.**

(a) General requirement. Each Bank's credit risk capital requirement shall equal the sum of the Bank's individual credit risk capital charges for all advances, residential mortgage assets, non-mortgage assets, non-rated assets, off-balance sheet items, and derivatives contracts, as calculated in accordance with this section.

(b) Credit risk capital charge for residential mortgage assets. The credit risk capital charge for residential mortgages, residential mortgage securities, and collateralized mortgage obligations shall be determined as set forth in paragraph (g) of this section.

(c) Credit risk capital charge for advances, non-mortgage assets, and non-rated assets. Except as provided in paragraph (j) of this section, each Bank's credit risk capital charge for advances, non-mortgage assets, and non-rated assets shall be equal to the amortized cost of the asset multiplied by the credit risk percentage requirement assigned to that asset pursuant to paragraphs (f)(1) or (f)(2) of this section. For any such asset carried at fair value where any change in fair value is recognized in the Bank's income, the Bank shall calculate the capital charge based on the fair value of the asset rather than its amortized cost.

(d) Credit risk capital charge for off-balance sheet items. Each Bank's credit risk

capital charge for an off-balance sheet item shall be equal to the credit equivalent amount of such item, as determined pursuant to paragraph (h) of this section, multiplied by the credit risk percentage requirement assigned to that item pursuant to paragraph (f)(1) and Table 1.2 to § 1277.4, except that the credit risk percentage requirement applied to the credit equivalent amount for a standby letter of credit shall be that for an advance with the same remaining maturity as that of the standby letter of credit, as specified in Table 1.1 to § 1277.4.

(e) Derivatives contracts. (1) Except as provided in paragraph (e)(4), the credit risk capital charge for a derivatives contract entered into by a Bank shall equal, after any adjustment allowed under paragraph (e)(2), the sum of:

(i) The current credit exposure for the derivatives contract, calculated in accordance with paragraph (i)(1) of this section, multiplied by the credit risk percentage requirement assigned to that derivatives contract pursuant to Table 1.2 of paragraph (f)(1) of this section, provided that a Bank shall deem the remaining maturity of the derivatives contract to be less than one year for the purpose of applying Table 1.2; plus

(ii) The potential future credit exposure for the derivatives contract, calculated in accordance with paragraph (i)(2) of this section, multiplied by the credit risk percentage requirement assigned to that derivatives contract pursuant to Table 1.2 of paragraph (f)(1) of this section, where a Bank uses the actual remaining maturity of the derivatives contract for the purpose of applying Table 1.2 of paragraph (f)(1) of this section; plus

(iii) A credit risk capital charge applicable to the amount of collateral posted by the Bank with respect to a derivatives contract that exceeds the Bank's current payment obligation under that derivatives contract, where the charge equals the amount of such

excess collateral multiplied by the credit risk percentage requirement assigned under Table 1.2 of paragraph (f)(1) of this section for the custodian or other party that holds the collateral, and where a Bank deems the exposure to have a remaining maturity of one year or less when applying Table 1.2.

(2)(i) The credit risk capital charge calculated under paragraph (e)(1) of this section may be adjusted for any collateral held by or on behalf of the Bank in accordance with paragraph (e)(3) of this section against an exposure from the derivatives contract as follows:

(A) The discounted value of the collateral shall first be applied to reduce the current credit exposure of the derivatives contract subject the capital charge;

(B) If the total discounted value of the collateral held exceeds the current credit exposure of the contract, any remaining amounts may be applied to reduce the amount of the potential future credit exposure of the derivatives contract subject to the capital charge; and

(C) The amount of the collateral used to reduce the exposure to the derivatives contract is subject to the applicable credit risk capital charge required by paragraphs (b) or (c) of this section.

(ii) If a Bank's counterparty's payment obligations under a derivatives contract are unconditionally guaranteed by a third-party, then the credit risk percentage requirement applicable to the derivatives contract may be that associated with the guarantor, rather than the Bank's counterparty.

(3) The credit risk capital charge may be adjusted as described in paragraph (e)(2)(i) for collateral held against the derivatives contract exposure only if the collateral

is:

(i) Held by, or has been paid to, the Bank or held by an independent, third-party custodian on behalf of the Bank pursuant to a custody agreement that meets the requirements of § 1221.7(c) and (d) of this chapter;

(ii) Legally available to absorb losses;

(iii) Of a readily determinable value at which it can be liquidated by the Bank;

and

(iv) Subject to an appropriate discount to protect against price decline during the holding period and the costs likely to be incurred in the liquidation of the collateral, provided that such discount shall equal at least the minimum discount required under Appendix B to part 1221 of this chapter for collateral listed in that Appendix, or be estimated by the Bank based on appropriate assumptions about the price risks and liquidation costs for collateral not listed in Appendix B to part 1221.

(4) Notwithstanding any other provision in this paragraph (e), the credit risk capital charge for:

(i) A foreign exchange rate contract (excluding gold contracts) with an original maturity of 14 calendar days or less shall be zero;

(ii) A derivatives contract cleared by a derivatives clearing organization shall equal 0.16 percent times the sum of the following:

(A) The current credit exposure for the derivatives contract, calculated in accordance with paragraph (i)(1) of this section;

(B) The potential future credit exposure for the derivatives contract calculated in accordance with paragraph (i)(2) of this section; and

(C) The amount of collateral that the Bank has posted to, and is held by, the derivatives clearing organization, but only to the extent the amount exceeds the Bank’s current credit exposure to the derivatives clearing organization.

(f) Determination of credit risk percentage requirements. (1) General. (i) Each Bank shall determine the credit risk percentage requirement applicable to each advance and each non-rated asset by identifying the appropriate category from Tables 1.1 or 1.3 to § 1277.4, respectively, to which the advance or non-rated asset belongs. Except as provided in paragraphs (f)(2) and (f)(3) of this section, each Bank shall determine the credit risk percentage requirement applicable to each non-mortgage asset, off-balance sheet item, and derivatives contract by identifying the appropriate category set forth in Table 1.2 to § 1277.4 to which the asset, item, or contract belongs, given its FHFA Credit Rating category, as determined in accordance with paragraph (f)(1)(ii) of this section, and remaining maturity. Each Bank shall use the applicable credit risk percentage requirement to calculate the credit risk capital charge for each asset, item, or contract in accordance with paragraphs (c), (d), or (e) of this section, respectively. The relevant categories and credit risk percentage requirements are provided in the following Tables 1.1 through 1.3 to § 1277.4 –

<b>TABLE 1.1 TO § 1277.4 REQUIREMENT FOR ADVANCES</b>	
<b>Maturity of Advances</b>	<b>Percentage Applicable to Advances</b>
Advances with:	
Remaining maturity <= 4 years	0.09
Remaining maturity > 4 years to 7 years	0.23
Remaining maturity > 7 years to 10 years	0.35
Remaining maturity > 10 years	0.51

**TABLE 1.2 TO § 1277.4**  
**REQUIREMENT FOR INTERNALLY RATED NON-MORTGAGE ASSETS, OFF-**  
**BALANCE SHEET ITEMS, AND DERIVATIVES CONTRACTS**

(Based on Remaining Maturity)

FHFA Credit Rating	Applicable Percentage				
	<= 1 year	>1 yr to 3 yrs	>3 yrs to 7yrs	>7 yrs to 10 yrs	> 10 yrs
U.S. Government Securities	0.00	0.00	0.00	0.00	0.00
FHFA 1	0.20	0.59	1.37	2.28	3.32
FHFA 2	0.36	0.87	1.88	3.07	4.42
FHFA 3	0.64	1.31	2.65	4.22	6.01
FHFA 4	3.24	4.79	7.89	11.51	15.64
<b>FHFA Ratings Corresponding to Below FHFA Investment Quality</b> “FHFA Investment Quality” has the meaning provided in 12 CFR 1267.1					
FHFA 5	9.24	11.46	15.90	21.08	27.00
FHFA 6	15.99	18.06	22.18	26.99	32.49
FHFA 7	100.00	100.00	100.00	100.00	100.00

**TABLE 1.3 TO § 1277.4**  
**REQUIREMENT FOR NON-RATED ASSETS**

Type of Unrated Asset	Applicable Percentage
Cash	0.00
Premises, Plant and Equipment	8.00
Investments Under 12 CFR 1265.3(e) & (f)	8.00

(ii) Each Bank shall develop a methodology to be used to assign an internal credit risk rating to each counterparty, asset, item, and contract that is subject to Table 1.2 to § 1277.4. The methodology shall involve an evaluation of counterparty or asset risk factors, and may incorporate, but must not rely solely upon, credit ratings prepared by credit rating agencies. Each Bank shall align its various internal credit ratings to the

appropriate categories of FHFA Credit Ratings included in Table 1.2 to § 1277.4. In doing so, each Bank shall ensure that the credit risk associated with any asset assigned to FHFA Categories 1 through 4 is no greater than that associated with an instrument that would be deemed to be of “investment quality,” as that term is defined by §1267.1 of this chapter. FHFA Categories 3 through 1 shall include assets of progressively higher credit quality than Category 4, and FHFA Credit Rating categories 5 through 7 shall include assets of progressively lower credit quality. After aligning its internal credit ratings to the appropriate categories of Table 1.2 to § 1277.4, each Bank shall assign each counterparty, asset, item, and contract to the appropriate FHFA Credit Rating category based on the applicable internal credit rating.

(2) Exception for assets subject to a guarantee or secured by collateral. (i) When determining the applicable credit risk percentage requirement from Table 1.2 to § 1277.4 for a non-mortgage asset that is subject to an unconditional guarantee by a third-party guarantor or is secured as set forth in paragraph (f)(2)(ii) of this section, the Bank may substitute the credit risk percentage requirement associated with the guarantor or the collateral, as appropriate, for the credit risk percentage requirement associated with that portion of the asset subject to the guarantee or covered by the collateral.

(ii) For purposes of paragraph (f)(2)(i) of this section, a non-mortgage asset shall be considered to be secured if the collateral is:

(A) Actually held by the Bank or an independent, third-party custodian on the Bank’s behalf, or, if posted by a Bank member and permitted under the Bank’s collateral agreement with that member, by the Bank’s member or an affiliate of that member where the term “affiliate” has the same meaning as in § 1266.1 of this chapter;

(B) Legally available to absorb losses;

(C) Of a readily determinable value at which it can be liquidated by the Bank;

(D) Held in accordance with the provisions of the Bank's member products policy established pursuant to § 1239.30 of this chapter, if the collateral has been posted by a member or an affiliate of a member; and

(E) Subject to an appropriate discount to protect against price decline during the holding period and the costs likely to be incurred in the liquidation of the collateral.

(3) Exception for obligations of the Enterprises. A Bank may use a credit risk capital charge of zero for any non-mortgage-related debt instrument or obligation issued by an Enterprise, provided that the Enterprise receives capital support or other form of direct financial assistance from the United States government that enables the Enterprise to repay those obligations.

(4) Exception for methodology deficiencies. FHFA may direct a Bank, on a case-by-case basis, to change the calculated credit risk capital charge for any non-mortgage asset, off-balance sheet item, or derivatives contract, as necessary to account for any deficiency that FHFA identifies with respect to a Bank's internal credit rating methodology for such assets, items, or contracts.

(g) Credit risk capital charges for residential mortgage assets—(1) Bank determination of credit risk percentage. (i) Each Bank's credit risk capital charge for a residential mortgage, residential mortgage security, or collateralized mortgage obligation shall be equal to the asset's amortized cost multiplied by the credit risk percentage requirement assigned to that asset pursuant to paragraphs (g)(1)(ii) or (g)(2) of this section. For any such asset carried at fair value where any change in fair value is

recognized in the Bank's income, the Bank shall calculate the capital charge based on the fair value of the asset rather than its amortized cost.

(ii) Each Bank shall determine the credit risk percentage requirement applicable to each residential mortgage and residential mortgage security by identifying the appropriate FHFA RMA category set forth in Table 1.4 to § 1277.4 to which the asset belongs, and shall determine the credit risk percentage requirement applicable to each collateralized mortgage obligation by identifying the appropriate FHFA CMO category set forth in Table 1.4 to § 1277.4 to which the asset belongs, with the appropriate categories being determined in accordance with paragraph (g)(1)(iii) of this section.

(iii) Each Bank shall develop a methodology to be used to assign an internal credit risk rating to each of its residential mortgages, residential mortgage securities, and collateralized mortgage obligations. For residential mortgages, the methodology shall involve an evaluation of the residential mortgages and any credit enhancements or guarantees, including an assessment of the creditworthiness of the providers of such enhancements or guarantees. In the case of a residential mortgage security or collateralized mortgage obligation, the methodology shall involve an evaluation of the underlying mortgage collateral, the structure of the security, and any credit enhancements or guarantees, including an assessment of the creditworthiness of the providers of such enhancements or guarantees. Such methodologies may incorporate, but may not rely solely upon, credit ratings prepared by credit ratings agencies. Each Bank shall align its various internal credit ratings to the appropriate categories of FHFA Credit Ratings included in Table 1.4 to § 1277.4. In doing so, each Bank shall ensure that the credit risk associated with any asset assigned to categories FHFA RMA 1 through 4 or FHFA CMO

1 through 4 is no greater than that associated with an instrument that would be deemed to be of “investment quality,” as that term is defined by 12 CFR 1267.1. FHFA Categories 3 through 1 shall include assets of progressively higher credit quality than Category 4, and FHFA Categories 5 through 7 shall include assets of progressively lower credit quality. After aligning its internal credit ratings to the appropriate categories of Table 1.4 to § 1277.4, each Bank shall assign each of its residential mortgages, residential mortgage securities, and collateralized mortgage obligation to the appropriate FHFA Credit Ratings category based on the Bank’s internal credit rating of that asset.

<b>TABLE 1.4 TO § 1277.4—INTERNALLY RATED RESIDENTIAL MORTGAGE ASSETS</b>	
Categories For Residential Mortgages and Residential Mortgage Securities	Percentage applicable
Ratings Above “AMA Investment Grade”*	
FHFA RMA 1	0.37
FHFA RMA 2	0.60
FHFA RMA 3	0.86
FHFA RMA 4	1.20
Ratings Below “AMA Investment Grade”	
FHFA RMA 5	2.40
FHFA RMA 6	4.80
FHFA RMA 7	34.00
Categories For Collateralized Mortgage Obligations	
Ratings Above “FHFA Investment Quality”**	
FHFA CMO 1	0.37
FHFA CMO 2	0.60
FHFA CMO 3	1.60
FHFA CMO 4	4.45
Ratings Below “FHFA Investment Quality”	
FHFA CMO 5	13.00

FHFA CMO 6	34.00
FHFA CMO 7	100.00
**“AMA Investment Grade” has the meaning provided in 12 CFR 1268.1. **“FHFA Investment Quality” has the same meaning as “investment quality” as provided in 12 CFR 1267.1.	

(2) Exceptions to Table 1.4 to § 1277.4 credit risk percentages. (i) A Bank may use a credit risk capital charge of zero for any residential mortgage, residential mortgage security, or collateralized mortgage obligation, or portion thereof, guaranteed by an Enterprise as to payment of principal and interest, provided that the Enterprise receives capital support or other form of direct financial assistance from the United States government that enables the Enterprise to repay those obligations;

(ii) A Bank may use a credit risk capital charge of zero for a residential mortgage, residential mortgage security, or collateralized mortgage obligation, or any portion thereof, guaranteed or insured as to payment of principal and interest by a department or agency of the United States government that is backed by the full faith and credit of the United States; and

(iii) FHFA may direct a Bank, on a case-by-case basis, to change the calculated credit risk capital charge for any residential mortgage, residential mortgage security, or collateralized mortgage obligation, as necessary to account for any deficiency that FHFA identifies with respect to a Bank’s internal credit rating methodology for residential mortgages, residential mortgage securities, or collateralized mortgage obligations.

(h) Calculation of credit equivalent amount for off-balance sheet items. (1) General requirement. The credit equivalent amount for an off-balance sheet item shall be determined by an FHFA-approved model or shall be equal to the face amount of the instrument multiplied by the credit conversion factor assigned to such risk category of

instruments, subject to the exceptions in paragraph (h)(2) of this section, provided in the following Table 2 to § 1277.4:

<b>TABLE 2 TO § 1277.4— CREDIT CONVERSION FACTORS FOR OFF-BALANCE SHEET ITEMS</b>	
<b>Instrument</b>	<b>Credit Conversion Factor (in percent)</b>
Asset sales with recourse where the credit risk remains with the Bank	100
Commitments to make advances subject to certain drawdown	
Commitments to acquire loans subject to certain drawdown	
Standby letters of credit	50
Other commitments with original maturity of over one year	
Other commitments with original maturity of one year or less	20

(2) Exceptions. The credit conversion factor shall be zero for Other Commitments With Original Maturity of Over One Year and Other Commitments With Original Maturity of One Year or Less, for which Table 2 to § 1277.4 would otherwise apply credit conversion factors of 50 percent or 20 percent, respectively, if the commitments are unconditionally cancelable, or effectively provide for automatic cancellation, due to the deterioration in a borrower’s creditworthiness, at any time by the Bank without prior notice.

(i) Calculation of credit exposures for derivatives contracts. (1) Current credit exposure. (i) Single derivatives contract. The current credit exposure for derivatives

contracts that are not subject to an eligible master netting agreement shall be:

(A) If the mark-to-market value of the contract is positive, the mark-to-market value of the contract; or

(B) If the mark-to-market value of the contract is zero or negative, zero.

(ii) Derivatives contracts subject to an eligible master netting agreement. The current credit exposure for multiple derivatives contracts executed with a single counterparty and subject to an eligible master netting agreement shall be calculated on a net basis and shall equal:

(A) The net sum of all positive and negative mark-to-market values of the individual derivatives contracts subject to the eligible master netting agreement, if the net sum of the mark-to-market values is positive; or

(B) Zero, if the net sum of the mark-to-market values is zero or negative.

(2) Potential future credit exposure. The potential future credit exposure for derivatives contracts, including derivatives contracts with a negative mark-to-market value, shall be calculated:

(i) Using an internal initial margin model that meets the requirements of § 1221.8 of this chapter and is approved by FHFA for use by the Bank, or that has been approved under regulations similar to § 1221.8 of this chapter for use by the Bank's counterparty to calculate initial margin for those derivatives contracts for which the calculation is being done; or

(ii) By applying the standardized approach in Appendix A to Part 1221 of this chapter.

(j) Credit risk capital charge for non-mortgage assets hedged with credit

derivatives. (1) Credit derivatives with a remaining maturity of one year or more. The credit risk capital charge for a non-mortgage asset that is hedged with a credit derivative that has a remaining maturity of one year or more may be reduced only in accordance with paragraph (j)(3) or (j)(4) of this section and only if the credit derivative provides substantial protection against credit losses.

(2) Credit derivatives with a remaining maturity of less than one year. The credit risk capital charge for a non-mortgage asset that is hedged with a credit derivative that has a remaining maturity of less than one year may be reduced only in accordance with paragraph (j)(3) of this section and only if the remaining maturity on the credit derivative is identical to or exceeds the remaining maturity of the hedged non-mortgage asset and the credit derivative provides substantial protection against credit losses.

(3) Capital charge reduced to zero. The credit risk capital charge for a non-mortgage asset shall be zero if a credit derivative is used to hedge the credit risk on that asset in accordance with paragraph (j)(1) or (j)(2) of this section, provided that:

(i) The remaining maturity for the credit derivative used for the hedge is identical to or exceeds the remaining maturity for the hedged non-mortgage asset, and either:

(A) The asset referenced in the credit derivative is identical to the hedged non-mortgage asset; or

(B) The asset referenced in the credit derivative is different from the hedged non-mortgage asset, but only if the asset referenced in the credit derivative and the hedged non-mortgage asset have been issued by the same obligor, the asset referenced in the credit derivative ranks pari passu to, or more junior than, the hedged non-mortgage asset and has the same maturity as the hedged non-mortgage asset, and cross-default clauses

apply; and

(ii) The credit risk capital charge for the credit derivatives contract calculated pursuant to paragraph (e) of this section is still applied.

(4) Capital charge reduction in certain other cases. The credit risk capital charge for a non-mortgage asset hedged with a credit derivative in accordance with paragraph (j)(1) of this section shall equal the sum of the credit risk capital charges for the hedged and unhedged portion of the non-mortgage asset provided that:

(i) The remaining maturity for the credit derivative is less than the remaining maturity for the hedged non-mortgage asset and either:

(A) The non-mortgage asset referenced in the credit derivative is identical to the hedged asset; or

(B) The asset referenced in the credit derivative is different from the hedged non-mortgage asset, but only if the asset referenced in the credit derivative and the hedged non-mortgage asset have been issued by the same obligor, the asset referenced in the credit derivative ranks pari passu to, or more junior than, the hedged non-mortgage asset and has the same maturity as the hedged non-mortgage asset, and cross-default clauses apply; and

(ii) The credit risk capital charge for the unhedged portion of the non-mortgage asset equals:

(A) The credit risk capital charge for the hedged non-mortgage asset, calculated as the book value of the hedged non-mortgage asset multiplied by that asset's credit risk percentage requirement assigned pursuant to paragraph (f)(1) of this section where the appropriate credit rating is that for the hedged non-mortgage asset and the appropriate

maturity is the remaining maturity of the hedged non-mortgage asset; minus

(B) The credit risk capital charge for the hedged non-mortgage asset, calculated as the book value of the hedged non-mortgage asset multiplied by that asset's credit risk percentage requirement assigned pursuant to paragraph (f)(1) of this section where the appropriate credit rating is that for the hedged non-mortgage asset but the appropriate maturity is deemed to be the remaining maturity of the credit derivative; and

(iii) The credit risk capital charge for the hedged portion of the non-mortgage asset is equal to the credit risk capital charge for the credit derivative, calculated in accordance with paragraph (e) of this section.

(k) Frequency of calculations. Each Bank shall perform all calculations required by this section at least quarterly, unless otherwise directed by FHFA, using the advances, residential mortgages, residential mortgage securities, collateralized mortgage obligations, non-rated assets, non-mortgage assets, off-balance sheet items, and derivatives contracts held by the Bank, and, if applicable, the values of, or FHFA Credit Ratings categories for, such assets, off-balance sheet items, or derivatives contracts as of the close of business of the last business day of the calendar period for which the credit risk capital charge is being calculated.

**§ 1277.5 Market risk capital requirement.**

(a) General requirement. (1) Each Bank's market risk capital requirement shall equal the market value of the Bank's portfolio at risk from movements in interest rates, foreign exchange rates, commodity prices, and equity prices that could occur during periods of market stress, where the market value of the Bank's portfolio at risk is determined using an internal market risk model that fulfills the requirements of paragraph

(b) of this section and that has been approved by FHFA.

(2) A Bank may substitute an internal cash flow model to derive a market risk capital requirement in place of that calculated using an internal market risk model under paragraph (a)(1) of this section, provided that:

(i) The Bank obtains FHFA approval of the internal cash flow model and of the assumptions to be applied to the model; and

(ii) The Bank demonstrates to FHFA that the internal cash flow model subjects the Bank's assets and liabilities, off-balance sheet items, and derivatives contracts, including related options, to a comparable degree of stress for such factors as will be required for an internal market risk model.

(b) Measurement of market value at risk under a Bank's internal market risk model. (1) Except as provided under paragraph (a)(2) of this section, each Bank shall use an internal market risk model that estimates the market value of the Bank's assets and liabilities, off-balance sheet items, and derivatives contracts, including any related options, and measures the market value of the Bank's portfolio at risk of its assets and liabilities, off-balance sheet items, and derivatives contracts, including related options, from all sources of the Bank's market risks, except that the Bank's model need only incorporate those risks that are material.

(2) The Bank's internal market risk model may use any generally accepted measurement technique, such as variance-covariance models, historical simulations, or Monte Carlo simulations, for estimating the market value of the Bank's portfolio at risk, provided that any measurement technique used must cover the Bank's material risks.

(3) The measures of the market value of the Bank's portfolio at risk shall include

the risks arising from the non-linear price characteristics of options and the sensitivity of the market value of options to changes in the volatility of the options' underlying rates or prices.

(4) The Bank's internal market risk model shall use interest rate and market price scenarios for estimating the market value of the Bank's portfolio at risk, but at a minimum:

(i) The Bank's internal market risk model shall provide an estimate of the market value of the Bank's portfolio at risk such that the probability of a loss greater than that estimated shall be no more than one percent;

(ii) The Bank's internal market risk model shall incorporate scenarios that reflect changes in interest rates, interest rate volatility, option-adjusted spreads, and shape of the yield curve, and changes in market prices, equivalent to those that have been observed over 120-business day periods of market stress. For interest rates, the relevant historical observations should be drawn from the period that starts at the end of the previous month and goes back to the beginning of 1978;

(iii) The total number of, and specific historical observations identified by the Bank as, stress scenarios shall be:

(A) Satisfactory to FHFA;

(B) Representative of the periods of the greatest potential market stress given the Bank's portfolio, and

(C) Comprehensive given the modeling capabilities available to the Bank; and

(iv) The measure of the market value of the Bank's portfolio at risk may incorporate empirical correlations among interest rates.

(5) For any consolidated obligations denominated in a currency other than U.S. Dollars or linked to equity or commodity prices, each Bank shall, in addition to fulfilling the criteria of paragraph (b)(4) of this section, calculate an estimate of the market value of its portfolio at risk resulting from material foreign exchange, equity price or commodity price risk, such that, at a minimum:

(i) The probability of a loss greater than that estimated shall not exceed one percent;

(ii) The scenarios reflect changes in foreign exchange, equity, or commodity market prices that have been observed over 120-business day periods of market stress, as determined using historical data that is from an appropriate period;

(iii) The total number of, and specific historical observations identified by the Bank as, stress scenarios shall be:

(A) Satisfactory to FHFA;

(B) Representative of the periods of greatest potential stress given the Bank's portfolio; and

(C) Comprehensive given the modeling capabilities available to the Bank; and

(iv) The measure of the market value of the Bank's portfolio at risk may incorporate empirical correlations within or among foreign exchange rates, equity prices, or commodity prices.

(c) Independent validation of Bank internal market risk model or internal cash flow model. (1) Each Bank shall conduct an independent validation of its internal market risk model or internal cash flow model within the Bank that is carried out by personnel not reporting to the business line responsible for conducting business transactions for the

Bank. Alternatively, the Bank may obtain independent validation by an outside party qualified to make such determinations. Validations shall be done periodically, commensurate with the risk associated with the use of the model, or as frequently as required by FHFA.

(2) The results of such independent validations shall be reviewed by the Bank's board of directors and provided promptly to FHFA.

(d) FHFA approval of Bank internal market risk model or internal cash flow model. (1) Each Bank shall obtain FHFA approval of an internal market risk model or an internal cash flow model, including subsequent material adjustments to the model made by the Bank, prior to the use of any model. Each Bank shall make such adjustments to its model as may be directed by FHFA.

(2) A model and any material adjustments to such model that were approved by FHFA or the Federal Housing Finance Board shall meet the requirements of paragraph (d)(1) of this section, unless such approval is revoked or amended by FHFA.

(e) Frequency of calculations. Each Bank shall perform any calculations or estimates required under this section at least quarterly, unless otherwise directed by FHFA, using the assets, liabilities, and off-balance sheet items, including derivatives contracts, and options held by the Bank, and if applicable, the values of any such holdings, as of the close of business of the last business day of the calendar period for which the market risk capital requirement is being calculated.

#### **§ 1277.6 Operational risk capital requirement.**

(a) General requirement. Except as authorized under paragraph (b) of this section, each Bank's operational risk capital requirement shall at all times equal 30 percent of the

sum of the Bank's credit risk capital requirement and market risk capital requirement.

(b) Alternative requirements. With the approval of FHFA, each Bank may have an operational risk capital requirement equal to less than 30 percent but no less than 10 percent of the sum of the Bank's credit risk capital requirement and market risk capital requirement if:

(1) The Bank provides an alternative methodology for assessing and quantifying an operational risk capital requirement; or

(2) The Bank obtains insurance to cover operational risk from an insurer acceptable to FHFA.

**§ 1277.7 Limits on unsecured extensions of credit; reporting requirements.**

(a) Unsecured extensions of credit to a single counterparty. A Bank shall not extend unsecured credit to any single counterparty (other than a GSE described in and subject to the requirements of paragraph (c) of this section) in an amount that would exceed the limits of this paragraph. If a third-party provides an irrevocable, unconditional guarantee of repayment of a credit (or any part thereof), the third-party guarantor shall be considered the counterparty for purposes of calculating and applying the unsecured credit limits of this section with respect to the guaranteed portion of the transaction.

(1) General Limits. All unsecured extensions of credit by a Bank to a single counterparty that arise from the Bank's on- and off-balance sheet and derivatives transactions (but excluding the amount of sales of federal funds with a maturity of one day or less and sales of federal funds subject to a continuing contract) shall not exceed the product of the maximum capital exposure limit applicable to such counterparty, as

determined in accordance with Table 1 of paragraph (a)(4) of § 1277.7, multiplied by the lesser of:

(i) The Bank's total capital; or

(ii) The counterparty's Tier 1 capital, or if Tier 1 capital is not available, total capital (in each case as defined by the counterparty's principal regulator) or some similar comparable measure identified by the Bank.

(2) Overall limits including sales of overnight federal funds. All unsecured extensions of credit by a Bank to a single counterparty that arise from the Bank's on- and off-balance sheet and derivatives transactions, including the amounts of sales of federal funds with a maturity of one day or less and sales of federal funds subject to a continuing contract, shall not exceed twice the limit calculated pursuant to paragraph (a)(1) of this section.

(3) Limits for certain obligations issued by state, local, or tribal governmental agencies. The limit set forth in paragraph (a)(1) of this section, when applied to the marketable direct obligations of state, local, or tribal government units or agencies that are excluded from the prohibition against investments in whole mortgage loans or other types of whole loans, or interests in such loans, by § 1267.3(a)(4)(iii) of this chapter, shall be calculated based on the Bank's total capital and the internal credit rating assigned to the particular obligation, as determined in accordance with paragraph (a)(5) of this section. If a Bank owns series or classes of obligations issued by a particular state, local, or tribal government unit or agency, or has extended other forms of unsecured credit to such entity falling into different rating categories, the total amount of unsecured credit extended by the Bank to that government unit or agency shall not exceed the limit

associated with the highest-rated obligation issued by the entity and actually purchased by the Bank.

(4) Bank determination of applicable maximum capital exposure limits. (i) Except as set forth in paragraph (a)(4)(ii) of this section, a Bank shall determine the maximum capital exposure limit for each counterparty by assigning the counterparty to the appropriate FHFA Credit Rating category of Table 1 to § 1277.7, based upon the Bank’s internal counterparty credit rating, as determined in accordance with paragraph (a)(5) of this section, and the Bank’s alignment of its counterparty credit ratings to each of the FHFA Credit Rating categories provided in the following Table 1 to § 1277.7:

**Table 1 to § 1277.7—Maximum Limits on Unsecured Extensions of Credit to a Single Counterparty by FHFA Credit Rating Category**

FHFA Credit Rating of Counterparty	Maximum capital exposure limit (in percent)
FHFA 1	15
FHFA 2	14
FHFA 3	9
FHFA 4	3
Ratings Below “FHFA Investment Quality” (“FHFA Investment Quality” has the same meaning as “investment quality” as provided by 12 CFR 1267.1)	
FHFA 5 and Below	1

(ii) If a Bank determines that a specific debt obligation issued by a counterparty has a lower FHFA Credit Rating category than that applicable to the counterparty, the total amount of the lower-rated obligation held by the Bank may not exceed a sub-limit calculated in accordance with paragraph (a)(1) of this section. The Bank shall use the lower credit rating associated with the specific obligation to determine the applicable

maximum capital exposure sub-limit. For purposes of this paragraph, the internal credit rating of the debt obligation shall be determined in accordance with paragraph (a)(5) of this section.

(5) Bank determination of applicable credit ratings. A Bank shall determine an internal credit rating for each counterparty, and shall align each such credit rating to the FHFA Credit Rating categories of Table 1 to § 1277.7, using the same methodology for calculating the internal ratings and aligning such ratings to the FHFA Credit Rating categories as the Bank uses for calculating the credit risk capital charge for a counterparty or asset under Table 1.2 of § 1277.4(f). As a consequence, the Bank shall use the same FHFA Credit Rating category for a particular counterparty for purposes of applying the unsecured credit limit under this section as used for calculating the credit risk capital charge for obligations issued by that counterparty under Table 1.2 of § 1277.4.

(b) Unsecured extensions of credit to affiliated counterparties. (1) In general. The total amount of unsecured extensions of credit by a Bank to a group of affiliated counterparties that arise from the Bank's on- and off-balance sheet and derivatives transactions, including sales of federal funds with a maturity of one day or less and sales of federal funds subject to a continuing contract, shall not exceed 30 percent of the Bank's total capital.

(2) Relation to individual limits. The aggregate limits calculated under paragraph (b)(1) shall apply in addition to the limits on extensions of unsecured credit to a single counterparty imposed by paragraph (a) of this section.

(c) Special limits for certain GSEs. Unsecured extensions of credit by a Bank that arise from the Bank's on- and off-balance sheet and derivatives transactions, including

from the purchase of any debt or from any sales of federal funds with a maturity of one day or less and from sales of federal funds subject to a continuing contract, with a GSE that is operating with capital support or another form of direct financial assistance from the United States government that enables the GSE to repay those obligations shall not exceed the Bank's total capital.

(d) Extensions of unsecured credit after reduced rating. If a Bank revises its internal credit rating for any counterparty or obligation, it shall assign the counterparty or obligation to the appropriate FHFA Credit Rating category based on the revised rating. If the revised internal rating results in a lower FHFA Credit Rating category, then any subsequent extensions of unsecured credit shall comply with the maximum capital exposure limit applicable to that lower rating category, but a Bank need not unwind or liquidate any existing transaction or position that complied with the limits of this section at the time it was entered. For the purposes of this paragraph, the renewal of an existing unsecured extension of credit, including any decision not to terminate any sales of federal funds subject to a continuing contract, shall be considered a subsequent extension of unsecured credit that can be undertaken only in accordance with the lower limit.

(e) Reporting requirements. (1) Total unsecured extensions of credit. Each Bank shall report monthly to FHFA the amount of the Bank's total unsecured extensions of credit arising from on- and off-balance sheet and derivatives transactions to any single counterparty or group of affiliated counterparties that exceeds 5 percent of:

(i) The Bank's total capital; or

(ii) The counterparty's, or affiliated counterparties' combined, Tier 1 capital, or if Tier 1 capital is not available, total capital (in each case as defined by the counterparty's

principal regulator), or some similar comparable measure identified by the Bank.

(2) Total secured and unsecured extensions of credit. Each Bank shall report monthly to FHFA the amount of the Bank's total secured and unsecured extensions of credit arising from on- and off-balance sheet and derivatives transactions to any single counterparty or group of affiliated counterparties that exceeds 5 percent of the Bank's total assets.

(3) Extensions of credit in excess of limits. A Bank shall report promptly to FHFA any extension of unsecured credit that exceeds any limit set forth in paragraphs (a), (b), or (c) of this section. In making this report, a Bank shall provide the name of the counterparty or group of affiliated counterparties to which the excess unsecured credit has been extended, the dollar amount of the applicable limit which has been exceeded, the dollar amount by which the Bank's extension of unsecured credit exceeds such limit, the dates for which the Bank was not in compliance with the limit, and, if applicable, a brief explanation of any extenuating circumstances which caused the limit to be exceeded.

(f) Measurement of unsecured extensions of credit. (1) In general. For purposes of this section, unsecured extensions of credit will be measured as follows:

(i) For on-balance sheet transactions (other than a derivatives transaction addressed by paragraph (f)(1)(iii)) of this section, an amount equal to the sum of the amortized cost of the item plus net payments due the Bank. For any such item carried at fair value where any change in fair value would be recognized in the Bank's income, the Bank shall measure the unsecured extension of credit based on the fair value of the item, rather than its amortized cost;

(ii) For off-balance sheet transactions, an amount equal to the credit equivalent amount of such item, calculated in accordance with § 1277.4(g); and

(iii) For derivatives transactions not cleared by a derivatives clearing organization, an amount equal to the sum of:

(A) The Bank's current and potential future credit exposures under the derivatives contract, where those values are calculated in accordance with § 1277.4(i)(1) and (i)(2) respectively, adjusted by the amount of any collateral held by or on behalf of the Bank against the credit exposure from the derivatives contract, as allowed in accordance with the requirements of § 1277.4(e)(2) and (e)(3); and

(B) The value of any collateral posted by the Bank that exceeds the current amount owed by the Bank to its counterparty under the derivatives contract, where the collateral is not held by a third-party custodian in accordance with § 1221.7(c) and (d) of this chapter.

(2) Status of debt obligations purchased by the Bank. Any debt obligation or debt security (other than mortgage-backed or other asset-backed securities or acquired member assets) purchased by a Bank shall be considered an unsecured extension of credit for the purposes of this section, except for:

(i) Any amount owed the Bank against which the Bank holds collateral in accordance with § 1277.4(f)(2)(ii); or

(ii) Any amount which FHFA has determined on a case-by-case basis shall not be considered an unsecured extension of credit.

(g) Exceptions to unsecured credit limits. The following items are not subject to the limits of this section:

- (1) Obligations of, or guaranteed by, the United States;
- (2) A derivatives transaction accepted for clearing by a derivatives clearing organization;
- (3) Any extension of credit from one Bank to another Bank; and
- (4) A bond issued by a state housing finance agency if the Bank documents that the obligation in question is:
  - (i) Principally secured by high quality mortgage loans or high quality mortgage-backed securities (or funds derived from payments on such assets or from payments from any guarantees or insurance associated with such assets);
  - (ii) The most senior class of obligation, if the bond has more than one class; and
  - (iii) Determined by the Bank to be rated no lower than FHFA 2, in accordance with this section.

**§ 1277.8 Reporting requirements.**

Each Bank shall report information related to capital and other matters addressed by this part 1277 in accordance with instructions provided in the Data Reporting Manual issued by FHFA, as amended from time to time.

Dated: June 22, 2017.

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Melvin L. Watt,  
Director, Federal Housing Finance Agency.

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