
RISK-BASED CAPITAL: RISK-WEIGHTED ASSETS (GENERAL RULES)¹**General Description**

Under the general risk-based capital requirements (sometimes referred to as Basel I-based rules), a savings association determines its risk-weighted assets by allotting assets among four standard risk-weight categories: 0 percent, 20 percent, 50 percent, and 100 percent.² The risk weight assigned depends upon the nature of the assets, obligors, and collateral. In general, if a particular item can be placed in more than one risk category, a savings association may assign it to the category that has the lower risk weight. However, as discussed in detail below, the following procedures apply:

- Each on-balance sheet asset is assigned to an appropriate risk weight category. Risk-weighted on-balance sheet assets are computed by multiplying the on-balance sheet asset amount by the appropriate risk weight.
- Risk-weighted off-balance sheet assets are determined in a two-step process. First, a savings association must convert the off-balance sheet commitment or exposure to an on-balance sheet credit equivalent amount by using a prescribed conversion factor. The savings association then risk weights the credit equivalent amount in accordance with the rules used for on-balance sheet assets.
- Certain traded and non-traded positions (such as asset or mortgage backed securities, recourse obligations, direct credit substitutes, and qualifying residual interests) may be eligible for the ratings-based approach (RBA) where the risk weight assigned to the exposure or obligation is determined by its credit rating.
- The risk-weighted assets amount for recourse exposures and direct credit substitutes that are not eligible for the RBA is determined by multiplying the full amount of the credit-enhanced asset for which the savings associations directly or indirectly retains or assumes credit risk by 100 percent conversion factor and assigning this credit equivalent amount to a risk weight category used for on-balance sheet assets as appropriate based on the obligor to the underlying transaction.
- Certain residual interests and low-level recourse obligations receive a dollar-for-dollar capital treatment.

¹ The general risk-based capital rules apply to all savings associations except those that have been approved, following a successful parallel run period, to begin using the Basel II Advanced Approaches.

² There is also a 200 percent risk weight-category used in the ratings-based approach. In addition, certain items receive a dollar-for-dollar capital treatment, equivalent to a risk weighting of 1250 percent (the reciprocal of 8 percent). See the Recourse section later in this Appendix.

- Total risk-weighted assets equal the sum of risk-weighted on-balance sheet assets, risk-weighted off-balance sheet amounts, risk-weighted recourse obligations, direct credit substitutes, and certain other positions.³

Assuming the PCA category of adequately capitalized, the effect of this risk weighting approach is the following:

Risk Weight Category	Effective Capital Charge (rw% * 8%)
0%	No capital charge
20%	1.6%
50%	4.0%
100%	8.0%
200%	16.0%
Dollar-for dollar	100.0%

This appendix discusses how risk-weighted assets are determined for on-balance sheet assets; for off-balance sheet exposures; and for recourse obligations, direct credit substitutes, and residual interests. (Refer to 12 CFR Part 567.) Asset types not specifically addressed in the regulation automatically receive a 100 percent risk weight unless OTS determines that a different risk-weight, or a different capital treatment, is appropriate.

Risk Weights: On-Balance Sheet Assets⁴

Every on-balance sheet asset is assigned to a risk-weight category. Risk-weighted on-balance sheet assets are computed by multiplying the on-balance sheet asset amount times the appropriate risk-weight category. Below is a **general** summary of the risk weight categories to which various on-balance sheet

³ OTS has not yet adopted a Market Risk Rule. However, if adopted, in the future, OTS regulated institutions subject to this rule will include market risk equivalent assets in their calculation of RWA.

⁴ Statement of Financial Accounting Standard (SFAS) Nos. 166 and 167 made substantive changes to how financial institutions account for many items, including securitized assets. Savings associations affected by these new accounting standards will be subject to higher risk-based capital requirements. Because of this, the federal banking agencies issued an interagency rule on January 28, 2010 (75 FR 4636) that allows financial institutions, including savings associations, an optional four quarter transition period to account for the impact on risk-weighted assets and also on ALLL in Tier 2 capital. The optional treatment provides a two quarter exclusion period and a two quarter phase-in period for assets reported on-balance sheet due to these new accounting standards, and therefore, provides some regulatory capital relief. Specific relief is also provided to certain ALLL. This temporary treatment is explained at 12 CFR 567.0 (c).

assets are assigned in order to determine an equivalent risk-weighted assets amount (refer to 12 CFR § 567.6 for a full listing of assets subject to the different risk weight categories):

0 Percent Risk-Weight Category

This category is for the lowest risk assets. These assets receive a zero percent risk-weight, which means there is no capital charge against these assets. This category includes:

- Cash, including the amount of currency owned and held, or in transit, in all the savings associations' offices.
- Securities issued by or other direct claims on the United States Government or its agencies (includes most GNMA securities) and unconditionally backed by the full faith and credit of the US government, or the central government of an OECD country (e.g., U.S. Treasury Securities) (OECD country is defined at 12 CFR § 567.1) .
- That portion of assets directly and unconditionally guaranteed by the United States Government or its agencies or the central government of an OECD country.
- Covered assets that were initiated under the Federal Savings and Loan Insurance Corporation (FSLIC) (even if assumed by a successor agency such as the FDIC).
- Deposit reserves at, claims on, and balances from Federal Reserve Banks.
- Temporary Liquidity Guarantee Program (TLGP) nondeposit debt obligations.
- FDIC pre-paid insurance assessments.

20 Percent Risk-Weight Category

This category is for very high credit-quality assets. The 20 percent risk-weight category includes:

- Securities issued or guaranteed by, or that portion of assets guaranteed by government sponsored agencies (including most FannieMae and FreddieMac mortgage-related securities, *except for their principal only securities (POs), interest-only securities (IOs), and their equity securities.*
- That portion of assets collateralized by the current market value of U.S. Government securities or securities issued or guaranteed by U.S. government sponsored agencies.
- That portion of assets conditionally guaranteed by the U.S. Government or its agencies.
- Loss-sharing agreements, unless there is some specific arrangement in which you should consult with the Regional office to determine the appropriate risk-based capital treatment.
- General obligations of state and local governments.

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- Claims on Federal Home Loan Banks (FHLB), including the book value of FHLB stock; deposits with a FHLB; securities, bonds and notes issued by the FHLB.
 - Items collateralized by cash held in a segregated deposit account at the savings association (i.e., loans and other obligations collateralized by deposits).
 - Balances due from and all claims on domestic depository institutions.
 - All claims on depository institutions incorporated in an OECD country, and all assets backed by the full faith and credit of depository institutions incorporated in an OECD country.
 - Mortgage- and asset-backed securities rated AAA or AA eligible for the RBA, but excluding stripped securities.⁵
 - Certain claims on, or guaranteed by, qualifying securities firms.

A *qualifying securities firm* in the United States is a broker-dealer registered with the Securities and Exchange Commission (SEC) that complies with the SEC's net capital regulations. A different definition applies to foreign-based firms (12 CFR § 567.1).

In order for a claim on- or guarantee by- a qualifying securities firm to qualify for 20 percent risk weight, the securities firm must have a long-term issuer credit rating, or a rating on at least one issue of long-term unsecured debt, from a nationally recognized statistical rating organization (NRSRO). The rating must be in one of the three highest investment grade categories used by the NRSRO. If two or more NRSROs assign ratings to the firm, the savings association must use the lowest rating to determine whether it meets the rating requirement. The securities firm may rely on the rating of its parent consolidated company *if the parent guarantees the claim*.

A collateralized claim on a qualifying securities firm does not have to comply with the rating requirement if it meets all of the following other requirements:

- It is a reverse repurchase/repurchase agreement or securities lending/borrowing transaction executed using standard industry documentation.
- It is collateralized by debt or equity securities that are liquid and readily marketable.
- It is marked to market daily.
- It is subject to a daily margin maintenance requirement under the standard industry documentation.
- It can be liquidated, terminated, or accelerated immediately in bankruptcy or similar proceeding, and the security or collateral agreement will not be stayed or voided under applicable law.

⁵ See discussion on the Ratings Based Approach in this Appendix.

50 Percent Risk-Weight Category

This risk-weight category is for high credit-quality assets. The 50 percent risk-weight category includes:

- Qualifying mortgage loans:⁶ A qualifying mortgage loan is defined at 12 CFR § 567.1. A qualifying mortgage loan is a loan that is:
 - Fully secured by a first lien on a one-to-four (1-to-4) family residential property.
 - Is underwritten in accordance with prudent underwriting standards including standards relating the ratio of the loan amount to the value of the property (LTV ratio) (refer to the Real Estate Lending Guidelines at 12 CFR § 560.101). The real estate lending standards state the prudently underwritten real estate loans should reflect all relevant credit factors, including the capacity of the borrower to adequately service the debt. Those loans, particularly no documentation loans, some low documentation loans, and stated income loans that do not reflect all relevant credit factors or support the borrower's ability to repay the loan, would not be eligible for the more favorable risk weighting and will receive a 100 percent risk weighting. Further supplemental guidance on prudent underwriting practices, including the assessment of a borrower's ability to repay a loan, is set forth in various agency issuances, including OTS [Examination Handbook Section 212](#); the October 4, 2006, Interagency Guidance on Nontraditional Mortgage Products; the July 10, 2007 Interagency Statement on Subprime Lending; and Interagency Guidelines Establishing Standards for Safety and Soundness (12 CFR Part 570).
 - Maintains an appropriate LTV ratio (calculated at origination) based on the amortization of the loan.⁷ Note that mortgage loans above 90 percent LTV will not typically qualify for 50 percent risk weight unless they have acceptable private mortgage insurance or other appropriate credit enhancement to effectively reduce their LTV to 90 percent or less.⁸
 - Is performing and is not more than 90 days past due.

Note: If a savings association holds the first and junior lien(s) on a property, and no other party holds an intervening lien, you treat the transaction as a single loan secured by a first lien.

- Qualifying multifamily mortgage loans: To qualify for the 50 percent risk weight, multifamily mortgage loans must meet the specific criteria of the regulation that tracks a federal statute. (Refer to the definition in 12 CFR § 567.1.)

⁶ Qualifying mortgage loans include first lien 1-to-4 family residential mortgage loans on houses, condominiums, cooperative units, and manufactured homes titled as real property (see discussion in [Examination Handbook Section 212](#)). Loans on mixed-use properties that are primarily one- to four-family may also be considered qualifying if they meet the regulatory criteria. Qualifying mortgage loans do not include loans on boats, motor homes, and time-share properties, even if they are a primary residence. (See [Appendix D](#) to this handbook entitled "Q & A on 1-4 Family Residential Mortgage Loans").

⁷ If the loan negatively amortizes such that the principal balance of the loan exceeds 90 percent of the value of the loans (at origination), then the loan may no longer qualify for a 50 percent risk weighting.

⁸ Does not include pool PMI.

- Qualifying residential construction loans. To qualify for the 50 percent risk weight, residential construction loans must meet the specific criteria of the regulation (12 CFR § 567.1).
- Privately issued securities (excluding stripped securities) backed by qualifying 1-to-4 family or multifamily mortgage loans – where the underlying loans are eligible for 50 percent risk weight.
- Most state and local revenue bonds.
- Mortgage and asset-backed securities rated “A” eligible for the RBA, but excluding stripped securities.

100 Percent Risk Weight Category

This is the standard risk weight category. Assets not assigned another risk weighting in this category (excluding assets deducted from capital and residual interests which have a dollar-for-dollar capital requirement) are included in this category. Institutions include the following in the 100 percent risk-weight category:

- Commercial loans and commercial real estate loans.
- Consumer loans.
- Second mortgage and home equity loans (except where you combine them with a qualifying first mortgage – see qualifying mortgage loan explanation above).
- Single-family and multifamily housing loans that do not qualify for the 50 percent risk-weight category.
- Construction loans.
- Mortgage-backed securities not qualifying for a lower risk-weight category, including most stripped securities (POs and IOs) issued by government sponsored agencies.
- Corporate debt securities.
- Bonds issued by a state or local government where a private party is responsible for payment.
- Repossessed assets and loans 90 days past due.
- Mortgage and asset-backed securities rated “BBB” eligible for the RBA, but excluding stripped securities.
- Investments in fixed assets and premises.

Ownership in Mutual Funds (and other pooled assets)

The capital rules risk-weight mutual funds based on the investment objectives in the portfolio and the investment limits set forth in the prospectus:

- You may assign the entire investment to the risk-weight category applicable to the highest risk-weighted asset that the fund is permitted to hold in accordance with the investment objectives set forth in its prospectus.
- You may assign different risk weights to the fund on a pro-rata basis, according to the investment limits for the different investment categories in the fund's prospectus.

However, if the mutual fund now includes assets that do not meet the investment limits of the prospectus, including particular securities that have been downgraded to below investment grade, the entire fund must be risk-weighted at 100 percent. Assets received through a redemption-in-kind (RIK) provision should be risk-weighted individually, based on the obligor and the rating. On a case-by-case basis, under 12 CFR § 567.11(c) (Reservation of Authority) provides that the OTS may require or permit a savings association to apply a different risk weight where the assigned risk weight for an asset does not appropriately reflect the risks imposed on the savings association.

Off-Balance Sheet Risk Exposures

You determine risk weights for most off-balance sheet items in a two-step process:

First, you multiply the face amount of the exposure by the appropriate credit conversion factor to get the balance sheet credit equivalent amount. You then assign the on-balance sheet credit equivalent amount to the appropriate risk weight category based on the nature of the obligors, guarantors, and collateral listed above for on-balance sheet assets.

There are five credit conversion factor groups: 0 percent, 10 percent, 20 percent, 50 percent, and 100 percent.

0 Percent Credit Conversion Factor Group

There is no on-balance sheet credit equivalent amount (and thus no risk weighted asset amount) for off-balance sheet assets assigned a zero percent credit conversion factor. This group includes:

- Unused commitments with an original maturity of one year or less.
- Unused commitments with an original maturity of greater than one year:
 - That you may unconditionally cancel at any time, and
 - You have the contractual right to make, and you do make, either:
 - ✓ A separate credit decision based upon the borrower's current financial condition before each draw, or

- ✓ An annual, or more frequent credit review, based upon the borrower's current financial condition to determine whether or not to continue the lending arrangement.
- Unused portions of retail credit card lines of credit that you may unconditionally cancel to the extent allowed by applicable law.
- Unused portion of home equity lines of credit:
 - That you may unconditionally cancel at any time to the extent fully permitted by relevant federal law, and
 - You have the contractual right to make, and you do make, either:
 - ✓ A separate credit decision based upon the borrower's current financial condition before each draw, or
 - ✓ An annual, or more frequent credit review, based upon the borrower's current financial condition to determine whether to continue the lending arrangement.
- A commitment to make a permanent loan, where either the balance sheet or off-balance sheet includes the construction loan. If the commitment to make the permanent loan exceeds the construction loan, treat the excess as a separate commitment and convert it to an on-balance sheet equivalent.

10 Percent Credit Conversion Factor Group

Savings associations may exclude from their risk-weighted asset base asset-backed commercial paper programs that are consolidated onto a sponsoring organization's balance sheet under FASB Interpretation No. 46, Consolidation of Variable Interest Entities, as revised (FIN 46R).⁹

20 Percent Credit Conversion Factor Group

This group is for a narrow set of trade-related contingencies. That is, short-term, self-liquidating instruments used to finance the movement of goods and collateralized by the underlying shipment. A commercial letter of credit is an example of such an instrument.

50 Percent Credit Conversion Factor Group

This group includes:

- Unused portions of commitments, including home equity lines of credit, with an original maturity exceeding one year or that are unconditionally cancellable (see 0 Percent Credit Conversion Factor above).

⁹ However, a 10 percent conversion factor is imposed on unused eligible liquidity facilities with an original maturity of one year or less that provide liquidity support to ABCP programs. Eligible liquidity facilities with an original maturity exceeding one year remain subject to the current 50 percent credit conversion factor below. Those that fail to meet certain asset quality tests are treated as direct credit substitutes or as recourse obligations.

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- Most LIP commitments with an original maturity over one year.
 - Transaction-related contingencies such as performance bonds and performance-based standby letters of credit related to a particular transaction. For example, arrangements backing subcontractors' and suppliers' performance, labor and materials contracts, and construction bids.
 - Unused eligible ABCP liquidity facilities with an original maturity exceeding one year.
 - Revolving underwriting facilities, note issuance facilities, and other similar arrangements pursuant to which the savings association's customer can issue short-term debt obligations in its own name, but for which the savings association has a legally binding commitment to either: (1) purchase the obligations the customer is unable to sell by a stated date or (2) advance funds to its customer if the obligations cannot be sold.

100 Percent Credit Conversion Factor Group

This group includes:

- Guarantees or financial guarantee-type standby letters of credit.
- Recourse obligations and direct credit substitutes.
- Forward agreements with a certain drawdown. For example, legally binding agreements to purchase assets at a specified future date.
- Risk participations purchased in bankers acceptances.
- Indemnifications of customers whose securities the savings association has lent as agent.

Off-balance Sheet Derivative Contracts: Interest-Rate and Foreign Exchange-Rate Contracts¹⁰

A savings association must determine the credit equivalent amount of its off-balance sheet interest-rate and foreign exchange-rate contracts that are not subject to qualifying bilateral netting contracts. The credit equivalent amount of an interest-rate or exchange-rate contract is the sum of the current credit exposure (that is, the replacement cost of the contract) and the potential future credit exposure of the contract. You calculate this as follows:

$$\text{Credit Equivalent Amount} = \text{Current Exposure Amount} + \text{Potential Future Credit Exposure}^{11}$$

Current Exposure Amount: Replacement value of the contract, that is, the fair value or mark-to-market value of the contract, but not less than zero.

¹⁰ Unlike the other banking agencies, the OTS regulatory capital requirements do not address Commodity and Equity-linked derivative contracts. Credit derivative contracts that are considered recourse obligations or direct credit substitutes are discussed in the next section.

¹¹ Credit Equivalent Amount is measured in U.S. dollars

Potential Future Credit Exposure:¹² The notional principal amount of the contract multiplied by the appropriate credit conversion factor:

Remaining Maturity	Interest Rate Contracts	Foreign Exchange Rate Contracts
One year or less	0.0%	1.0%
Over one year	0.5%	5.0%

Once you determine the credit equivalent amount, you assign it to the risk-weight category appropriate to the counterparty, or if relevant, to the nature of any collateral or guarantee. However, the maximum risk weight is 50 percent.

Exceptions: There are certain exceptions to the above calculation for foreign exchange contracts with an original maturity of less than 14 days, and for interest-rate and exchange-rate contracts traded on an exchange requiring the daily payment of variations in the market value of the contracts (e.g., exchange traded futures contracts and options contracts.) Savings associations may use bilateral netting to compute the net replacement value for multiple contracts with the *same* counterparty under certain conditions specified in the regulation (12 CFR § 567.6(a)(2)(vi)(B)).

RISK-BASED CAPITAL TREATMENT FOR RECOURSE, DIRECT CREDIT SUBSTITUTES, AND RESIDUAL INTERESTS

On November 29, 2001, OTS and the other federal banking agencies issued a capital rule for recourse, direct credit substitutes, and residual interests including those resulting from asset securitizations. This section outlines and highlights some of the more important aspects of the rule.

Through the rule’s reservation of authority, OTS looks to the substance of a transaction regardless of how others categorize the allocation of risk. OTS may find that the proposed capital treatment by the savings association does not appropriately reflect risk to the association. OTS may then require the association to apply another risk weight, conversion factor, or treatment that OTS deems appropriate.

This part contains four sections:

- Capital Treatment for Recourse.
- Capital Treatment for Direct Credit Substitutes.
- Capital Treatment for Residual Interests.

¹² Savings associations, subject to examiner review, should use the effective rather than the apparent or state notional amount. Where notional principal is equivalent to cash flows (e.g., foreign exchange contracts) total notional principal is defined as the net receipts to each party falling due on each value date in each currency.

- The Ratings-based Approach (RBA).

Capital Treatment for Recourse Obligations

What is a Recourse Obligation?

The term recourse refers to a savings association's retention, in form or in substance, of any credit risk directly or indirectly associated with an asset it has sold. A recourse obligation typically arises when a savings association transfers an asset in a sale (a sale according to generally accepted accounting principles (GAAP)) that exceeds a pro rata share of that savings association's claim on the asset. If the savings association has no claim on the assets it has sold, then the retention of any credit risk is recourse. A recourse obligation typically arises when a savings association transfers assets in a sale and retains an explicit obligation to repurchase the asset or to otherwise absorb losses on the asset due to default on the payment of principal or interest or any other deficiency in the performance of the underlying obligor or some other party. Examples of recourse obligations include:

- Assets sold under an agreement to repurchase.
- Credit-enhancing representations and warranties related to sold assets. Early default clauses and similar warranties (including premium refund clauses) that, for a period not to exceed 120 days from the date of transfer, permit the return of qualifying mortgage loans are not considered recourse. See [CEO Memo 344](#), Risk Weighting of Early Default Provisions.
- Retained loan servicing with an agreement under which the savings association is responsible for losses associated with the loans serviced (except for servicer cash advances as defined in 12 CFR § 567.1).
- Retained subordinated interests that absorb more than their pro rata share of losses from the underlying assets.
- Clean-up calls on assets sold (except for clean-up calls that are 10 percent or less of the original pool balance and that are exercisable at the option of the savings association).
- Credit derivatives that absorb more than the savings association's pro rata share of losses on transferred assets.
- Loan strips sold where the maturity of the transferred portion of the loan is shorter than the commitment under which the loan is drawn.
- Liquidity facilities that provide support to asset-backed commercial paper (other than eligible ABCP liquidity facilities).

Recourse can exist explicitly and implicitly. Implicit recourse arises when a savings association repurchases assets, absorbs losses, or otherwise supports assets that it has sold, in instances where it is *not contractually required* to do so. The existence of implicit recourse can trigger the requirement for additional capital commensurate with that additional risk. Moreover, on a case-by-case basis, it can taint

future similar transactions and lead to the assumption of greater risk and higher capital requirements. Refer also to [CEO Memo 162](#).

Capital for Recourse Obligations

One of three approaches is generally used for determining the amount of capital to be held against a recourse obligation: the general approach, the RBA (where applicable), and the low-level exposure approach (where applicable). The RBA is discussed in detail beginning on page 16 below. If the position is not eligible for the RBA, then one of the two following approaches will be used:

General Approach:

Generally, a savings association retains a recourse exposure that is limited in dollar amount or as a percentage of assets transferred, but is designed to absorb the first losses that occur for the entire pool of transferred assets. The recourse exposure thus absorbs *more than its pro rata share of losses*. As a result, under the general capital treatment for recourse exposures the savings association must hold capital against the full amount of the transferred assets as if they were still on the balance sheet. OTS applies this relatively rigorous capital treatment because the recourse exposure receives more than its pro rata share of risk with both a transferred loan and the risk of all of the assets senior to it in a securitization transaction.

Therefore, using the general approach, you obtain the credit equivalent amount by multiplying the *full amount of the transferred assets* for which the savings association directly or indirectly retains or assumes credit risk by a *100 percent conversion factor*. You assign this credit equivalent amount to the risk-weight category appropriate to the obligor in the underlying transaction after considering any associated guarantees or collateral:

Example: Recourse sale of loans

Assume a savings association has sold \$100,000 in qualifying mortgage loans (that is, 50 percent risk weight 1-to-4 family loans) with an agreement to repurchase them for up to 180 days. Until the recourse period expires, total risk-weighted assets must include: $(\$100,000) \times (100 \text{ percent conversion factor}) \times (50 \text{ percent risk weight}) = \$50,000$. Thus, the capital requirement is: $\$50,000 \times 8 \text{ percent} = \$4,000$.

Note: if the sales agreement limits recourse to 120 days or less, no capital is required. See [CEO Memo 344](#), Risk Weighting of Early Default Provisions.

Low Level Recourse Approach

There is an exception to the general approach for low-level exposures where recourse is legally and contractually limited to an amount less than the on-balance sheet capital requirement. OTS limits the capital requirement to the maximum exposure rather than the full ordinary capital requirement.

Example: Low-level Recourse

A savings association contractually limits its maximum recourse exposure to less than the normal on-balance sheet capital requirement for the assets sold with recourse. For example, if a savings association sells a \$100,000 mortgage loan with 1 percent recourse, it is liable for \$1,000 in losses. OTS requires the association to deduct \$1,000 in computing the numerator for risk-based capital.

(This is in lieu of the savings association holding \$4,000 in capital - assuming the loan qualifies for 50 percent risk weight).

The savings association may report this capital requirement in either of two ways: (1) a simplified/direct deduct approach where the association deducts the amount for computing total risk-based capital; or (2) a risk-weighted approach where the association multiplies the exposure by 12.5 (the reciprocal of 8 percent). In the risk-weighted method the savings association multiplies the \$1,000 capital requirement by 12.5 for a risk-weighted asset of \$12,500. Then, when the association multiplies \$12,500 times the 8 percent risk-based capital requirement, the result is a \$1,000 capital charge.

Direct Credit Substitutes**What is a Direct Credit Substitute?**

The term direct credit substitute means an arrangement in which a savings association assumes, in form or in substance, credit risk associated with an on- or off-balance sheet asset or exposure that was not previously owned by the savings association (third-party asset) and the risk assumed by the savings association exceeds the pro rata share of the savings associations interest in the third-party asset. If the savings association has no claim on the third-party asset, then the savings association's assumption of any credit risk is direct credit substitute. Direct credit substitutes can be on- or off-balance sheet. Examples of direct credit substitutes include:

- Financial standby letters of credit that support financial claims on a third-party that exceed the savings association's pro rata share of the financial claim.
- Guarantees, surety arrangements, credit derivatives, and similar instruments banking financial claims that exceed a savings association's pro rata share in the financial claim.
- Purchased subordinated interests that absorb more than their pro rata share of losses from the underlying assets (e.g., mezzanine securities).

- Credit derivative contracts under which the savings association assumes more than its pro rata share of credit risk on a third-party asset or exposure.
- Loans or lines of credit that provide credit enhancement for the financial obligations of a third party.

Example: Direct credit substitute – Non-subordinated Position

A savings association has provided a financial letter of credit of \$5,000 to support a third party's claim of \$100,000. The savings association has no claim on the third-party assets. The savings association must use the general approach for risk weighting direct credit substitutes and multiply the full amount of the third party assets for which it has assumed credit risk by a 100 percent conversion factor and then assign that amount to the risk weight category of the obligor on whose behalf it issued the letter of credit. Thus, the savings association must convert the \$5,000 to an on-balance sheet asset at a 100 percent conversion factor (\$5,000 x 100 percent). Then, the savings association risk weights the \$5,000 letter of credit at 100 percent, resulting in \$5,000 in risk-weighted assets. The capital requirement for the \$5,000 in risk weighted assets is \$400 (\$5,000 x 8 percent).

Capital for Direct Credit Substitutes

As with recourse obligations, unless a nonsubordinated position is eligible for the RBA, the savings association generally must multiply the *full amount of the transferred assets* for which the association directly or indirectly retains or assumes credit risk by a *100 percent conversion factor*. For a subordinated position that is ineligible for the RBA, the savings association must “gross-up” the risk exposure associated with the direct credit substitute in order to determine the capital requirement. This means, for example, in the case of a subordinated asset backed security that the savings association must hold capital against the total amount of the subordinated security plus all assets senior to it. However, the low-level recourse rule can apply to direct credit substitutes.

Example: Direct credit substitute – gross-up treatment

A savings association has purchased the first dollar loss subordinated interest of \$5,000 in a securitization of \$100,000 in qualifying mortgage loans (1-to-4 family 50 percent risk weight loans). The savings association using the gross-up treatment must gross-up its exposure to include all exposures that are more senior to the security that it owns. Thus, the association must convert the \$100,000 balance of the pool to an on-balance sheet asset at a 100 percent conversion factor (\$100,000 x 100 percent). The association must add its position of \$5,000 to the \$100,000 for a total of \$105,000. Then, it risk weights the \$105,000 at 50 percent, resulting in \$52,500 in risk-weighted assets. The capital requirement for the \$52,500 in risk-weighted assets is \$4,200 (\$52,500 x 8 percent).

Residual Interests

What is a residual interest?

The term residual interest means any on-balance sheet asset that:

- Represents an interest (including a beneficial interest) created by a transfer of financial assets that qualifies as a sale in accordance with GAAP, whether through a securitization or otherwise; and
- Exposes the savings association to credit risk directly or indirectly that exceeds a pro rata share of that savings association's claim on the asset, whether through subordination provisions or other credit enhancement techniques.

Residual interests do not include interests purchased from a third party, except for credit-enhancing interest-only (CEIO) strips. A primary example of a residual is a *retained* subordinated interest in assets formerly owned by the savings association.

Capital treatment for residual interests

The standard capital treatment for most residual interests, except some CEIO strips, is *dollar-for-dollar*. That is, the savings association must hold one dollar in capital for every one dollar in residual interests.

Example: Residual interests

A savings association has retained the first dollar loss subordinated interest of \$5,000 *on the sale of its own loans* of \$100,000 in qualifying mortgage loans (50 percent risk weight 1-to-4 family). The risk-based capital requirement is \$5,000, that is, \$1 of capital for \$1 of residual interests – dollar-for-dollar capital.

Similar to the low-level recourse example, the savings association may report this capital requirement in either of two ways:

- A simplified/direct deduction approach where the savings association deducts the amount for computing total risk-based capital.
- A risk-weighted approach where the savings association multiplies the exposure by 12.5 (the reciprocal of 8 percent).

In the risk-weighted approach, the savings association multiplies the \$5,000 capital requirement by 12.5 for a risk-weighted asset of \$62,500. Then, when the savings association multiplies \$62,500 times the 8 percent risk-based capital requirement, the result is a \$5,000 capital charge.

Example: CEIO Strip

A savings association has the first dollar loss subordinated interest (whether retained or purchased) that is a CEIO strip of \$15 in a securitization of subprime auto loans. Tier 1 capital is \$40. The association does not have any other CEIOs. The capital requirement is calculated as follows:

- 25 percent of Tier 1 capital is \$10 ($\40×25 percent). The \$15 CEIO exceeds the \$10 limit by \$5, so the savings association must deduct \$5 in excess CEIO when computing Tier 1 capital.
- New Tier 1 capital is thus \$35 ($\$40 - \$5 = \35).
- The savings association must also hold dollar-for-dollar risk-based capital against the remaining balance of CEIO, or \$10.

THE RATINGS-BASED APPROACH¹³

A savings association may use the RBA to calculate the risk-weighted asset amount for *certain* eligible positions: an asset- or mortgage-backed security, a recourse obligation, a direct credit substitute, or a residual interest, but not a CEIO strip.

To be *eligible* for the RBA, a position must:

- Be a traded position.
- Have a long-term NRSRO rating of one grade below investment grade or better, or a short-term NRSRO rating of investment grade.

A position that is not traded may be eligible for the rating-based approach if:

- The position is an asset- or mortgage-backed security extended in connection with a securitization, a recourse obligation, a direct credit substitute, or a residual interest arising from an asset securitization, and is not a CEIO strip.
- The position has an external rating by more than one NRSRO.
- The minimum rating assigned by each NRSRO that meets all of the following:
 - Long-term: no worse than one category below investment grade.

¹³ The Dodd-Frank Wall Street Reform and Consumer Protection Act (the Act) enacted into law on July 21, 2010, requires the removal of references to or requirements of reliance on the use of credit ratings issued by national recognized statistical rating organizations (NRSROs) in all Federal Agency Regulations, including those of the banking agencies. The agencies are required to remove such requirements that refer to or rely upon credit ratings, and to substitute in their place standards of credits worthiness.

- Short term: investment grade.
- Rating must be publicly available.
- Rating must be based on the same criteria as for traded positions.

The following positions are never eligible for the RBA:

- CEIO strips.
- Bonds not in security form.
- Bonds not backed by assets.

A savings association may calculate the risk-weighted asset amount for an **eligible** position under the RBA (as opposed to the general approach for calculation of capital for mortgage-backed and asset-backed securities, recourse obligations, direct credit substitutes, and qualifying residual interests) by multiplying the face amount of the position¹⁴ by the appropriate risk weight determined in accordance with Tables A and B below:

TABLE A

Long-Term Rating Category	Examples	Risk Weight
Highest or second highest investment grade	AAA or AA	20%
Third highest investment grade	A	50%
Lowest investment grade	BBB	100%
One category below investment grade	BB	200%
More than one category below investment grade, or unrated	B or unrated	Not eligible for RBA

¹⁴ For risk-based capital purposes, the “face amount” of an available-for-sale (AFS) and a held-to-maturity (HTM) security is its amortized cost. (If a security has been written down to fair value because of an other-than-temporary impairment, the write-down establishes a new cost basis for the security.) The “face amount” of a trading security is its fair value. The “face amount” of an off-balance sheet item is the notational principal amount of the item.

TABLE B

Short-Term Rating Category	Examples	Risk Weight
Highest investment grade	A-1 or P-1	20%
Second highest investment grade	A-2 or P-2	50%
Lowest investment grade	A-3 or P-3	100%
Below investment grade or unrated		Not eligible

Unrated Senior Positions

If the recourse obligation, direct credit substitute, residual interest, or asset- or mortgage-backed security is not rated by an NRSRO, but is senior or preferred in all features to a rated, traded position, the savings association may risk-weight the face amount of the senior position based on the rating of the traded position. This may occur only if the savings association satisfies the OTS that such treatment is appropriate and if the traded position provides substantive credit support to the unrated position until it matures.

Positions that are not Rated by NRSROs

Under certain circumstances, a savings association may use *internal or program ratings* for certain risk exposures. A savings association may make use of internal rating *after* it has demonstrated to the OTS that its internal credit risk rating system is adequate (as set forth in 12 CFR § 567.6(b)(4)), or may make sure of its program rating after OTS has reviewed the nature of the program and accepts, under specific conditions, a rating assigned to a particular risk exposure that the savings association retains. The rating must correspond credibly and reliably with an NRSRO rating, for example AA.

Downgraded Positions

An eligible position that has been downgraded to more than one grade below investment grade in the case of a long-term rating and below investment grade in the case of a short-term rating is no longer eligible to use the RBA and must use the general approach for calculating capital. Thus, for downgraded securities the following rules apply:

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- for **senior securities**, use the risk weight applicable to the underlying obligor or collateral;
 - for **recourse obligations and direct credit substitutes (including mezzanine¹⁵ securities)**, apply the “gross-up” treatment—in cases where the savings association owns the entire mezzanine piece, or “proportional gross-up” treatment – in cases where the savings association owns only a portion of the mezzanine piece of the securitization (see [CEO Memo 307](#), “Risk Weighting Down Graded Securities,” June 25, 2009); and
 - for **residual interests**, apply the “dollar-for-dollar” treatment.

ALTERNATIVE CAPITAL COMPUTATION FOR SMALL BUSINESS OBLIGATIONS

With respect to the transfer of a small business¹⁶ loan or lease that is a sale under GAAP, a qualified savings association¹⁷ may elect to include only the amount of its recourse in its risk-weighted assets. The total outstanding amount of such recourse retained and included in risk-weighted assets may not exceed 15 percent of the association’s total capital computed under 567.5(c). To qualify for this election, the savings association must establish and maintain a reserve under GAAP sufficient to meet the reasonable estimated liability of the savings association under the recourse obligation.

¹⁵ A mezzanine security refers to a security that is not the most senior class and not the most subordinate class in a structured securitization. However, be aware that some securitization structures, especially collateralized mortgage obligations, have multiple senior tranches that receive different timing of payments, but are nonetheless senior for credit risk purposes.

¹⁶ Small business means a business that meets the criteria for a small business concern established by the Small Business Administration in 13 CFR Part 121 pursuant to 15 USC 632.

¹⁷ Qualified Savings Association means a savings association that is well capitalized without applying this alternative capital treatment; or is adequately capitalized without applying this alternative capital treatment, and has received permission from the OTS to apply this alternative capital treatment.