IX REGULATORY CAPITAL

INTRODUCTION

While asset securitizations can enhance both credit availability and a bank's profitability, managing the risks associated with this activity can pose significant challenges. The risks involved, while not new, may be less obvious and more complex than the risks of traditional lending. Specifically, securitizations can involve credit, liquidity, operational, legal, and reputation risks in concentrations and forms that might not be fully recognized by management or adequately incorporated into a bank's risk management systems. The regulatory capital rule provides one important way of addressing the credit risk presented by securitization activities; however, compliance with capital standards should be complemented by effective risk management strategies.

On November 29, 2001, the Federal banking agencies published a final rule revising the regulatory capital treatment of recourse arrangements and direct credit substitutes, including residual interests and credit-enhancing interest-only strips (CE IO strips). This chapter discusses the main components of the current regulatory capital rule, but examiners should refer to Part 325 of the FDIC Rules and Regulations, the Report of Condition and Income (Call Report) instructions, and FIL-99-2001 *Final Rule to Amend the Regulatory Capital Treatment of Recourse Arrangements, Direct Credit Substitutes, Residual Interests in Asset Securitizations, and Asset-Backed and Mortgage-Backed Securities* for additional guidance. Examiners may also want to refer to FIL-54-2002, *Interagency Questions and Answers on the Capital Treatment of Recourse, Direct Credit Substitutes, and Residual Interests in Asset Securitizations*, which clarifies several issues arising from the agencies' final rule on those exposures and provides some examples.

The regulatory capital rule with regard to the treatment of recourse, residual interests, and direct credit substitutes, as amended in November 2001, contains the following broad standards:

- It defines the terms recourse, residual interest and related terms, and direct credit substitute. These definitions are provided later in this chapter.
- It varies the capital requirements for positions in securitization transactions according to their relative risk exposure, using credit ratings from rating agencies to measure the level of risk.
- It permits the limited use of a bank's qualifying internal risk rating system to determine the capital requirement for certain unrated direct credit substitutes.
- It permits the limited use of a rating agency's review of the credit risk of positions in structured programs and qualifying software to determine the capital requirement for certain unrated direct credit substitutes and recourse exposures (but not residual interests).
- It requires a banking organization to deduct CE IO strips, whether retained or purchased, that are in excess of 25 percent of Tier 1 capital from Tier 1 capital and from assets (concentration limit).
- It requires a bank to maintain risk-based capital in an amount equal to the face amount of a residual interest that does not qualify for the ratings-based approach (including CE IO strips that have not been deducted from Tier 1 capital). This is referred to as dollar-for-dollar capital.
- It permits each agency to modify a stated risk-weight, credit conversion factor, or credit equivalent amount, if warranted, on a case-by-case basis.

Examiners should apply this rule to the substance, rather than the form, of a securitization transaction. Regulatory capital should be assessed based on the risks inherent in a position within a securitization, regardless of the risks' characterization.

DEFINITIONS

Recourse

Recourse arises from an arrangement in which a bank retains, in form or in substance, the credit risk in connection with an asset sale in accordance with GAAP, if the credit risk exceeds a pro-rata share of the banks claim on the assets. Examples of recourse include off-balance sheet contractual agreements to repurchase assets, spread accounts, cash collateral accounts, retained subordinated certificates, and retained subordinated IO strips.

Direct Credit Substitute

Direct credit substitutes arise from an arrangement in which a bank 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 bank (third-party asset), and the risk assumed exceeds the pro rata share of the bank's interest in the third-party asset. Examples of direct credit substitutes include purchasing a subordinated certificate of another bank's securitization, guaranteeing a mezzanine certificate of another bank's securitization, or providing a letter of credit to an asset-backed commercial paper program.

Residual Interest

Residual interest refers to any on-balance sheet asset that represents an interest (including a beneficial interest) created by a transfer that qualifies as a sale (in accordance with GAAP) of financial assets, whether through a securitization or otherwise, and that exposes a bank to any credit risk directly or indirectly associated with the transferred asset that exceeds a pro-rata share of that bank'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 CE IO strips. When the bank provides credit enhancements internally, as part the securitization structure, through the use of CE IO strips, spread accounts, over collateralization, retained subordinated interests, or other similar on-balance sheet assets, these enhancements are deemed residual interests for regulatory capital purposes and represent a form of recourse.

Credit-Enhancing Interest-Only Strip (CE IO Strip)

A CE IO strip is an on-balance sheet asset that, in form or in substance, (1) represents the contractual right to receive some of all of the interest due on transferred assets; and (2) exposes the bank to credit risk that exceeds its pro-rata claim on the underlying assets whether through subordination provisions or other credit-enhancing techniques.

CE IO strips are generally carried on the balance sheet at the present value of the expected net cash flow that the bank reasonably expects to receive in future periods on the credit card receivables it has securitized and discounted at an appropriate market discount rate. The accounting requirement for recording the CE IO strip typically results in a gain on the sale of the sold assets since the selling bank is allowed to recognize future expected cash flows at the time of sale. This gain is recognized as income, thus increasing the bank's capital position. In determining whether a particular interest cash flow functions as a CE IO strip, examiners should look to the economic substance of the transaction and determine if other cash flows or spread-related assets represent CE IO strips. For example, including some principal payments with interest and fee cash flows will not otherwise negate the regulatory capital treatment of that asset as a CE IO strip. CE IO strips include both purchased and retained IO strips that serve in a credit-enhancing capacity, even though purchased IO strips generally do not result in the creation of capital on the purchaser's balance sheet.

Credit-Enhancing Representations and Warranties

To the extent a bank's representations and warranties function as credit enhancements to protect asset purchasers or investors from credit risk, the rule treats them as recourse or direct credit substitutes. However, some warranties are unrelated to ongoing performance or credit quality. Rather, they entail operational risk as opposed to credit risk inherent in a financial guaranty and are excluded from the definitions of recourse and direct credit substitutes.

Clean-up Calls

A clean-up call is an option that permits a servicer or its affiliate (which may be the originator) to take investors out of their positions in a securitization before all of the transferred loans have been repaid. Under the final rule, an agreement that permits a bank that is a servicer or an affiliate of the servicer to elect to purchase loans in a pool is not recourse or a direct credit substitute if the agreement permits the bank to purchase the remaining loans in a pool when the balance of those loans is equal to or less than 10 percent of the original pool balance. The exemption from recourse or direct credit substitute treatment for a clean-up call of 10 percent or less recognizes the real market need to be able to call a transaction when the costs of keeping it outstanding are burdensome. However, to minimize the potential for using such a feature as a means of providing support for a troubled portfolio, a bank that exercises a clean-up call should not repurchase any loans in the pool that are 30 days or more past due. Alternatively, the bank should repurchase the loans at the lower of their estimated fair value or their par value plus accrued interest. Regardless of the size of the clean-up call, examiners should closely scrutinize any transaction where the bank repurchases deteriorating assets for an amount greater than a reasonable estimate of their fair value.

RATINGS-BASED APPROACH

The ratings-based approach to assess capital requirements on recourse obligations, residual interests (except CE IO strips), direct credit substitutes, and senior and subordinated certificates in credit card securitizations is based on their relative exposure to credit risk. CE IO strips are excluded from the ratings-based approach because of their higher-risk profile. The rating must be for a securitization exposure; a triple-A rated insurance company providing a guarantee on a securitization tranche does not count as a rating. The ratings-based approach typically uses credit ratings from the rating agencies to measure relative exposure to credit risk and determine the associated risk-based capital requirement, but the rule allows for the use of a bank's qualifying internal risk-rating system and qualifying rating software mapped to public ratings standards. Each of these approaches is discussed in this section.

Rating Agency Credit Ratings

When using rating agency credit ratings, the capital requirement for a residual interest is computed by multiplying the face amount of the residual interest by the appropriate risk weight determined in accordance with the following table:

Long-Term Rating Category	Examples	Risk Weight (percent)
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	B or unrated	([40])

[40] Not eligible for ratings-based approach.

Short-Term Rating Category	Examples	Risk weight (In percent)
Highest investment grade	A-1, P-1	20
Second highest investment grade	A-2, P-2	50
Lowest investment grade	A-3, P-3	100
Below investment grade	Not prime	([41])

The rating agencies do not assign short-term ratings using the same methodology as long-term ratings. Each short-term rating category covers a range of longer-term rating categories. For example, a P-1 rating could map to a long-term rating as high as Aaa or as low as A3. As a result of this distinction, a separate chart with differing criteria is used for short-term ratings.

While the ratings-based approach is available for both traded and un-traded positions, the rule applies different requirements to each. A traded position, for example, is only required to be rated by one rating agency. A position is defined as traded if, at the time it is rated by an external rating agency, there is a reasonable expectation that in the near future: (1) The position may be sold to unaffiliated investors relying on the rating; or (2) an unaffiliated third party may enter into a transaction (e.g., a loan or repurchase agreement) involving the position in which the third party relies on the rating of the position.

Rated, but un-traded, positions may also be eligible for the ratings-based approach if they meet certain conditions. To qualify, the position must be rated by more than one rating agency, the ratings must be one category below investment grade or better for long-term positions (or investment grade or better for short-term positions) by all rating agencies providing a rating, the ratings must be publicly available, and the ratings must be based on the same criteria used to rate securities that are traded. If the ratings are different, the lowest rating will determine the risk-weight category.

An un-rated position that is senior or preferred in all respects (including collateralization and maturity) to a rated, traded position is treated as if it had the rating assigned to the rated position. Senior un-rated positions qualify for the risk weighting of the subordinated rated positions in the same securitization transaction as long as the subordinated rated position (1) is traded and (2) remains outstanding for the entire life of the un-rated position, thus providing full credit support for the term of the un-rated position. If examiners identify a bank that is using the ratings-based approach for an un-rated position, they should review the regulation and the Federal Register for additional information regarding the specific requirements the bank must meet to support its position.

Use of Internal Risk Ratings

A bank with a qualifying internal risk rating system may use this system to apply the ratings-based approach to the bank's un-rated direct credit substitutes in asset-backed commercial paper programs. Internal risk ratings could be used to qualify such a credit enhancement for a risk weight of 100 or 200 percent under the ratings-based approach, but not for a risk weight of less than 100 percent. This relatively limited use of internal risk ratings for risk-based capital purposes is a step toward the expected broader use of internal risk ratings as discussed in Basel II. More than likely, institutions that apply this approach will also be mandatory or opt-in Basel II institution so the discussion of this topic in this manual is limited. Examiners should refer to the Federal Register and/or the ultimate rule and guidance governing Basel II for further guidance.

Qualifying Rating Software

Banks, particularly those with limited involvement in securitization activities, can rely on qualifying credit assessment computer programs that the rating agencies have developed to rate otherwise

[41] Not eligible for ratings-based approach.

un-rated direct credit substitutes and recourse obligations (but not residual interests) in asset securitizations.

In order to qualify for use by a bank for risk-based capital purposes, a computer program's credit assessments must correspond credibly and reliably to the rating agencies' rating standards for traded positions in securitizations. A bank must demonstrate to the examiners the credibility of the computer program in the financial markets, which would generally be shown by the significant use of the computer program by investors and other market participants for risk assessment purposes. Examiners should also expect the bank to demonstrate the reliability of the program in assessing credit risk. Furthermore, examiners must be satisfied with the bank's ability to demonstrate that the program results in credit risk assessments that credibly and reliably correspond with the rating agencies' ratings of traded positions. Examiners should also expect management to demonstrate that the program was designed to apply to its particular direct credit substitute or recourse exposure and that it has properly implemented the computer program.

Sophisticated banking organizations with extensive securitization activities generally should use this approach only if it is an integral part of their risk management systems and their systems fully capture the risks from its securitization activities. This approach can be used to qualify a direct credit substitute or recourse obligation (but not a residual interest) for a risk weight of 100 percent or 200 percent of the face value of the position, but not for a risk weight of less than 100 percent. Residual interests that are not eligible for the ratings-based approach will receive dollar-for-dollar treatment, which is discussed in the next section.

CAPITAL CHARGES FOR RESIDUAL INTERESTS

The capital rule imposes a concentration limit on CE IO strips and a dollar-for-dollar capital charge on residual interests. In no event will this combined capital charge exceed the face amount of a bank's residual interests (**low-level exposure rule**).

Concentration Limit

For regulatory capital purposes, CE IO strips, whether retained or purchased, are limited to 25 percent of Tier 1 capital. Any amount of CE IO strips that exceeds the 25 percent limit is deducted from Tier 1 capital and from assets for regulatory capital purposes. CE IO strips that are not deducted from Tier 1 capital, along with all other residual interests not subject to the concentration limit, are subject to the dollar-for-dollar capital requirement (as described later). In this manner, banks will not be required to hold capital for more than 100 percent of the amount of the residual interest. The following example illustrates the concentration calculation required for banks that hold CE IO strips.

A bank has purchased and retained CE IO strips with a face amount of $100 on its balance sheet and has Tier 1 capital of $320 (before any disallowed servicing assets, disallowed purchased credit card relationships, disallowed CE IO strips, and disallowed deferred tax assets). To determine the amount of CE IO strips that fall within the concentration limit, the bank would multiply the Tier 1 capital of $320 by 25 percent, which is $80. The amount of CE IO strips that exceeds the concentration limit, in this case $20, is deducted from Tier 1 capital and from assets. For risk-based capital purposes (but not for leverage capital purposes), the remaining $80 is then subject to the dollar-for-dollar capital charge discussed later.

Only CE IO strips are subject to the concentration limitation in recognition of the fact that these assets generally serve in a first loss capacity and are typically the most vulnerable to significant write-downs due to changes in valuation assumptions. In addition, CE IO strips are the asset type most often associated with the creation of capital as a result of gain-on-sale accounting, which allows a bank to leverage the capital created based on the current recognition of uncertain future cash flows.

Dollar-for-Dollar Capital Charge

The current minimum regulatory capital standard more closely aligns capital with risk, and it, along with supervisory reviews, is viewed as the appropriate course of action in dealing with residual interests. Elevated credit risk exposure is associated with deeply-subordinated assets, particularly sub-investment grade and un-rated residual interests. In addition, the lack of an active market makes these assets difficult to value and relatively illiquid. As a result of these elevated risk exposures, all residual interests that do not qualify for the ratings-based approach (including retained and purchased CE IO strips that have not been deducted from Tier 1 capital) are assessed a dollar-for-dollar capital charge for risk-based capital purposes (but not for leverage capital purposes).

This charge requires that banks hold one dollar in capital for every dollar in residual interests, even if this capital requirement exceeds the full risk-based capital charge on the assets transferred. In many cases, the relative size of the retained exposure reveals additional market information about the quality of the securitized assets. To facilitate a transaction in a manner that meets with market acceptance, the securitization sponsor will often increase the size of the residual interests. This practice is often indicative of the quality of the underlying asset pool. In other words, large residual positions (total credit enhancements as a percentage of the total deal) often signal lower credit quality of the sold assets. Further a bank's use of gain-on-sale accounting affords it the opportunity to create capital, the amount of which is related to a residual interest that may not be worth its reported carrying value. Thus, to mitigate the effects of these gains, the capital rules require banks to hold dollar-for-dollar capital against the related assets.

Because these assets are a subordinated interest in the future cash flows of the securitized assets, they have a concentration of credit risk that, depending upon the life of the underlying asset, makes them vulnerable to sudden and sizeable impairment. In addition, when given sale accounting recognition, certain residuals, such as retained CE IO strips, have the effect of creating capital, which may not be available to support these assets if write-downs become necessary. Recent experience has shown that residual interests can be among the riskiest assets on the balance sheet and, therefore, most deserving of a higher capital charge.

Continuing the illustration for CE IO strips from the Concentration Limit section, once a bank deducts the $20 in disallowed CE IO strips, it must hold $80 in total capital for the $80 that represents the CE IO strips not deducted from Tier 1 capital. The $20 deducted from Tier 1 capital, plus the $80 in total risk-based capital required under the dollar-for-dollar treatment, equals $100, the face amount of the CE IO strips. In certain instances, banks may end up holding more capital against the residual interests than it would have held if the receivables had not been securitized. For example, assume a bank sells $100 of credit card receivables and deposits $14 into a cash collateral account which helps protect investors from losses. The bank books this cash collateral account at its fair market value of $12 on its balance sheet. The total minimum risk-based capital requirement is $12, which in this example is more capital than what the bank was required to hold prior to securitizing the receivables, which was $8.

Banks may apply a net-of-tax approach to any CE IO strips that have to be deducted from Tier 1 capital, as well as to the remaining residual interests subject to the dollar-for-dollar treatment. Under this method, a bank is permitted, but not required, to net the deferred tax liabilities recorded on its balance sheet, if any, that are associated with the residual interests. This method may result in a bank holding less than 100 percent capital against residual interests.

The risk-based capital standards include a low-level exposure rule, which states that if the maximum exposure to loss retained or assumed by a bank in connection with a recourse arrangement, a direct credit substitute, or a residual interest is less than the effective risk-based capital requirement for the credit-enhanced assets (generally eight percent for credit card receivables), the risk-based capital requirement is limited to the bank's maximum contractual exposure, less any recourse liability account established in accordance with GAAP. The

instructions for schedule RC-R-Regulatory Capital in the Report of Condition provides further explanations and an example of the two methods used to calculate risk-based capital requirements, the **direct reduction method** and the **gross-up method**.

When using the direct reduction method, a bank includes an institution-specific amount in its risk-weighted assets for its maximum contractual dollar amount of exposure that is calculated using the actual amount of the bank's total risk-based capital. This institution-specific calculation produces the effect of directly reducing Tier 1 and total risk-based capital by the maximum contractual dollar amount of exposure without lowering the bank's Tier 1 leverage capital ratio. For a bank whose risk-based capital ratios exceed the required minimums, it is normally preferable to use the direct reduction method. When using the gross-up method, a bank includes an amount in its risk-weighted assets for its maximum contractual dollar amount of exposure that is calculated under the assumption that the bank's total risk-based capital ratio equals the eight percent minimum requirement.

IMPLICIT RECOURSE

If the selling institution provides credit support, beyond contractual obligations, to receivables considered sold under GAAP, it may be providing implicit recourse. As discussed in the Credit Enhancement and Early Amortization Chapter, the originating or selling institution usually retains significant credit risk through credit enhancements, which represent contractual obligations that protect the investors from some level of credit losses. For regulatory capital purposes, and as discussed earlier in this section, these contractual obligations are characterized as residual interests or as other recourse obligations.

In contrast to contractual recourse exposures, implicit recourse arises when the selling bank provides post-sale support to the securitization in excess of its contractual obligation. If a bank is providing such support, it is generally required to hold capital against the entire outstanding amount of receivables sold for risk-based capital purposes. To address implicit recourse, the Federal banking agencies issued FIL-52-2002, *Interagency Guidance on Implicit Recourse in Asset Securitizations*. The document provides practical interpretative guidance on non-contractual recourse determinations.

A bank can provide implicit recourse in a variety of ways; however, the following post-sale actions typically point to implicit recourse:

- Selling assets to the securitization vehicle at a discount from the price specified in the securitization documents.
- Purchasing assets from the securitization vehicle at an amount greater than fair value.
- Exchanging performing assets for nonperforming assets.
- Funding credit enhancements beyond contractual requirements.

As noted in the Accounting chapter, if any of the above situations were allowed at the time the transaction took place, the transaction would not qualify as a sale under GAAP. However, if a bank is providing such support after the initial sale, it stands to reason that the underlying receivables should not be treated as sold for regulatory capital purposes, and that the bank should hold capital against these assets as if they were still on the bank's balance sheet.

Banks have an incentive to provide implicit recourse, thus avoiding early amortization and protecting its reputation and access to the ABS market (**moral recourse**). Given this incentive, examiners should, at a minimum:

- Be alert for securitizations that are approaching early amortization triggers, such as a decrease in the excess spread below the required threshold.
- Review the pooling and servicing agreement to determine what post-sale support, if any, these documents require the seller to provide.

- Review a sample of receivables transferred between the seller and the securitization vehicle to ensure the transfers were conducted in accordance with the contractual terms of the securitization, particularly when overall credit quality of the securitized receivables has deteriorated.

While banks are not prohibited from providing implicit recourse, such support will generally result in higher capital requirements. The FDIC will take supervisory action when implicit recourse is identified. To determine the appropriate action, examiners must fully understand the bank's reasons for providing support and the extent of the actual or potential impact of this support on the bank's earnings and capital. If implicit recourse is deemed to exist, the FDIC may take any number of actions, including, but not limited to, the following:

- Requiring the bank to bring all securitized receivables "back on the balance sheet" for risk-based capital purposes and to increase its minimum capital ratios.
- Preventing a bank from removing assets from its risk-weighted asset base on future transactions until the bank demonstrates its intent and ability to transfer risk to the marketplace.
- Taking other actions to ensure that the risks associated with implicit recourse are adequately reflected in the capital ratios. For example, the FDIC may require the bank to deduct residual interests from Tier 1 capital as well as hold risk-based capital on the underlying assets.

Because of the case-specific nature of implicit recourse, FIL-52-2002 includes illustrative questions and answers about a variety of post-sale actions. The examples are intended to provide guidance on whether the selected actions would give rise to a determination of implicit recourse but are by no means all-inclusive of facts and circumstances that could lead to a determination of implicit recourse. The use of common sense and judgment are critical in determining the potential existence of implicit recourse. A key factor in any scenario is evaluating whether the bank's post-sale actions expose its earnings or capital to actual or potential greater losses from the assets that have been sold than would have been the case had the bank not taken these actions. Examiners should contact the respective case manager, capital markets specialist, or accounting specialist when potential cases of implicit recourse are evident. Ideally, examiners should encourage management to discuss the facts and circumstances with regulators prior to taking any action that might be perceived as non-contractual support. Proactive communication aids in developing a common understanding of the potential regulatory capital and supervisory consequences of the contemplated action. Even if an action is not determined to be implicit recourse, it may likely still present risk to the bank.

Accrued Interest Receivable (AIR)

In general, the AIR asset represents a subordinated residual interest in cash flows that are initially allocated to the investors' portion of a credit card securitization. The AIR is subject to higher capital requirements under the agencies' capital standards. FIL-48-2002, *Interagency Advisory on the Regulatory Capital Treatment of Accrued Interest Receivable Related to Credit Card Securitizations*, clarifies the appropriate risk-based capital treatment for the AIR. This section focuses on the risk-based capital treatment of this asset whereas the Accounting chapter discusses the appropriate accounting treatment and the Residual Interest Valuation and Modeling chapter discusses valuation of the AIR.

The guidance discusses the reasons why the AIR is considered a subordinated interest with the main reason being that if and when the bank collects any portion of the AIR, the cash collected is included in the cash flow that runs through the securitization vehicle. The seller is entitled to excess cash flow only after all trust expenses, including investor-principal losses, have been paid.

The seller's right to the excess cash flows related to the AIR asset serves as a credit enhancement to protect third-party investors in the securitization from credit losses. Since the AIR represents a subordinated residual interest in the transferred assets, it meets the definition of a recourse exposure for risk-based capital purposes, and as such, the bank must hold risk-based capital against the full, risk-weighted amount of the assets transferred with recourse, subject to the low-level recourse rule. Further, the AIR asset also meets the definition of a residual interest, which requires dollar-for-dollar capital even if that amount exceeds the full equivalent risk-based capital charge on the transferred assets.