Office of the Comptroller of the Currency
Board of Governors of the Federal Reserve System
Federal Deposit Insurance Corporation
Office of Thrift Supervision

Supervisory guidance to assist in the determination of the appropriate risk-based capital treatment to be applied to direct credit substitutes issued in connection with asset-backed commercial paper programs

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PURPOSE

The purpose of this guidance is to:

- Provide supervisory guidance that allows banking organizations to assess whether their internal risk rating system used in measuring risk exposures in asset-backed commercial paper (ABCP) programs is adequate and reasonably corresponds to the external rating categories set forth in the banking agencies' risk-based capital standards.

- Provide a framework for supervisors to determine the risk-based capital treatment for unrated direct credit substitutes, including program-wide credit enhancements, provided to ABCP programs.

INTRODUCTION

On November 29, 2001, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision (the Agencies) amended their risk-based capital standards by adopting a new capital framework for banking organizations engaged in securitization activities ("Securitization Capital Rule" or the "Rule").[1]

The Securitization Capital Rule permits banking organizations with qualifying internal risk rating systems to use those systems to apply the internal ratings approach to their unrated direct credit substitutes[2] extended to ABCP programs[3] that they sponsor by mapping internal risk ratings to external ratings equivalents. These external credit rating equivalents are organized into three ratings categories: investment grade credit risk, high non-investment grade (BB+ through BB-) credit risk, and low non-investment grade (below BB-) credit risk. These rating categories can then be used to determine whether a direct credit substitute provided to an ABCP program should be assigned to a risk weight of 100 percent, 200 percent, or be subject to the "gross-up" treatment, as summarized in the table below.[4] (See Appendix A for a more detailed description of ABCP programs.)

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[1] See 66 Fed. Reg. 59614 (November 29, 2001). See also 12 CFR Part 3, appendix A, Section 4 (OCC); 12 CFR Parts 208 and 225, appendix A, Section III.B.3 (FRB); 12 CFR Part 325, appendix A, Section II.B.5 (FDIC); and 12 CFR 567.6(b) (OTS).

[2] Direct credit substitute means an arrangement in which a banking organization assumes, in form or in substance, credit risk associated with an on- or off-balance sheet credit exposure that it did not previously own (i.e., a third-party asset) and the risk it assumes exceeds the pro rata share of its interest in the third-party asset. If the banking organization has no claim on the third-party asset, then the organization's assumption of any credit risk with respect to the third-party asset is a direct credit substitute.

[3] ABCP programs include multi-seller ABCP conduits, credit arbitrage ABCP conduits, and structured investment vehicles.

[4] The rating designations (e.g., "BBB-," "BB+") used in the table are illustrative only and do not indicate any preference for, or endorsement of, any particular rating designation system.

Internal Risk Rating Equivalent	Ratings Category	Risk Weighting
BBB- or better	Investment Grade	100%
BB+ to BB-	High Non-Investment Grade	200%
Below BB-	Low Non-Investment Grade	Gross-up treatment

As the table above indicates, the minimum risk weight available under the internal risk ratings approach is 100 percent, regardless of the internal rating.[5] Conversely, positions rated below BB- receive the "gross-up" treatment. That is, the banking organization holding the position must maintain capital against the amount of the position plus all more senior positions.[6] Application of "gross-up" treatment, in many cases, will result in a full dollar-for-dollar capital charge (the equivalent of a 1,250 percent risk-weight) on direct credit substitutes that fall into the low non-investment grade category. In addition, the risk-based capital requirement applied to a direct credit substitute is subject to the low-level exposure rule. Under this rule, the amount of required risk-based capital would be limited to the lower of a full dollar-for-dollar capital charge against the direct credit substitute or the effective risk-based capital charge (for example, 8 percent) for the entire amount of assets in the ABCP program.[7]

The use of internal risk ratings under the Securitization Capital Rule is limited to determining the risk-based capital charge for unrated direct credit substitutes that banking organizations provide to ABCP programs. Thus, banking organizations may not use the internal ratings approach to derive the risk-based capital requirement for unrated direct credit substitutes extended to other transactions. Approved use of the internal rating based approach for ABCP programs under the Securitization Capital Rule will have no bearing on the overall appropriateness of a banking organization's internal risk rating system for other purposes, such as for the advanced internal ratings-based approach set forth in the Basel II Capital Framework.

This guidance provides an analytical framework to broadly assess the risk characteristics of direct credit substitutes that banking organizations provide to ABCP programs sponsored by the organization.[8] Also, this guidance provides specific information on evaluating direct credit substitutes issued in the form of program-wide credit enhancements, as well as an approach to determine a risk-based capital charge for these enhancements.

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[5] Exposures externally rated by a nationally recognized statistical rating organization (NRSRO) above BBB+ are eligible for lower risk weights (i.e., 20 percent for AAA and AA, 50 percent for A).

[6] "Gross-up" treatment means that a position is combined with all more senior positions in the transaction. The resulting amount is then risk-weighted based on the obligor or, if relevant, the guarantor or the nature of the collateral.

[7] The low-level exposure rule provides that the dollar amount of risk-based capital required for a recourse obligation or direct credit substitute should not exceed the maximum dollar amount for which a banking organization is contractually liable. See 12 CFR Part 3, appendix A, Section 4(h)(1) (OCC); 12 CFR Parts 208 and 225, appendix A, Section III.B.3.g.i. (FRB); 12 CFR Part 325, appendix A, Section II.B.5(h)(1) (FDIC); and 12 CFR Part 567, Section 567.6(b)(7)(i) (OTS).

[8] Liquidity facilities that, in substance, act as a credit enhancement to an ABCP program, e.g., facilities designed to purchase deteriorating assets from the underlying pools, would be considered direct credit substitutes for purposes of the Rule and this guidance.

Most rated commercial paper issued out of an ABCP program is supported by program-wide credit enhancement, which is a direct credit substitute. Often the sponsoring banking organization provides, in whole or in part, program-wide credit enhancement to the ABCP program. Program-wide credit enhancement may take a number of different forms, including an irrevocable loan facility, standby letter of credit, financial guarantee, or subordinated debt.

This guidance introduces the weakest-link approach for calculating the risk-based capital requirement, which assumes that the risk of the program-wide credit enhancement is directly dependent on the quality (i.e., internal rating) of the riskiest transaction(s) within the ABCP program. (See Step 9.) More specifically, the weakest-link concept presupposes the probability that the program-wide credit enhancement that will be drawn is equal to the probability of default of the transaction(s) with the weakest transaction risk rating.

This guidance provides a process designed to aid in determining the regulatory capital treatment for program-wide credit enhancements, provided to an ABCP program. The key underlying principles are as follows:

- The determination of the credit quality of the program-wide credit enhancement shall be based on the risk of draw and subsequent loss, which depends directly on the quality of the credit-enhanced assets funded through the ABCP program.

- An estimate of the risk of draw for the program-wide credit enhancement is derived from the quality (rating) of the riskiest credit(s) within the ABCP program, which is often indicated by the internal rating a banking organization assigns to a transaction's pool-specific liquidity facility. Other credit risks (e.g., seller/servicer risk) to the program-wide credit enhancement may also be considered.

- The weakest-link approach assigns risk-based capital against the program-wide credit enhancement in rank order of the internal ratings starting with the lowest rated positions supported by the program-wide credit enhancement. Therefore, if all of the positions supported by the program-wide credit enhancement are internally rated investment grade, the banking organization would risk-weight the notional amount of the program-wide credit enhancement at 100 percent and there would be no need to proceed further. However, for positions supported by the program-wide credit enhancement that are non-investment grade, banking organizations can use the formula-driven weakest-link approach illustrated in step 9 to generate the appropriate amount of risk-based capital to be assessed against an unrated position.

ASSESSMENT OF INTERNAL RATING SYSTEMS

This guidance is organized in the form of a decision tree that provides an outline of the key decisions that examiners and sponsoring banking organizations should consider when reviewing internal risk rating systems for ABCP programs, and provides supervisors with more specific information on how to assess the adequacy of these systems. Many of the

qualitative and quantitative factors used to evaluate risk in this guidance are comparable with rating agency criteria (e.g., criteria from S&P, Moody's, and Fitch) because the ABCP program sponsors generally use the rating methodologies of nationally recognized statistical rating organizations (NRSROs) when assessing the credit quality of their risk exposures to ABCP programs. This guidance has two primary goals:

- Providing information to banking organizations to ensure the accuracy and consistency of the ratings assigned to transactions in an ABCP program, and

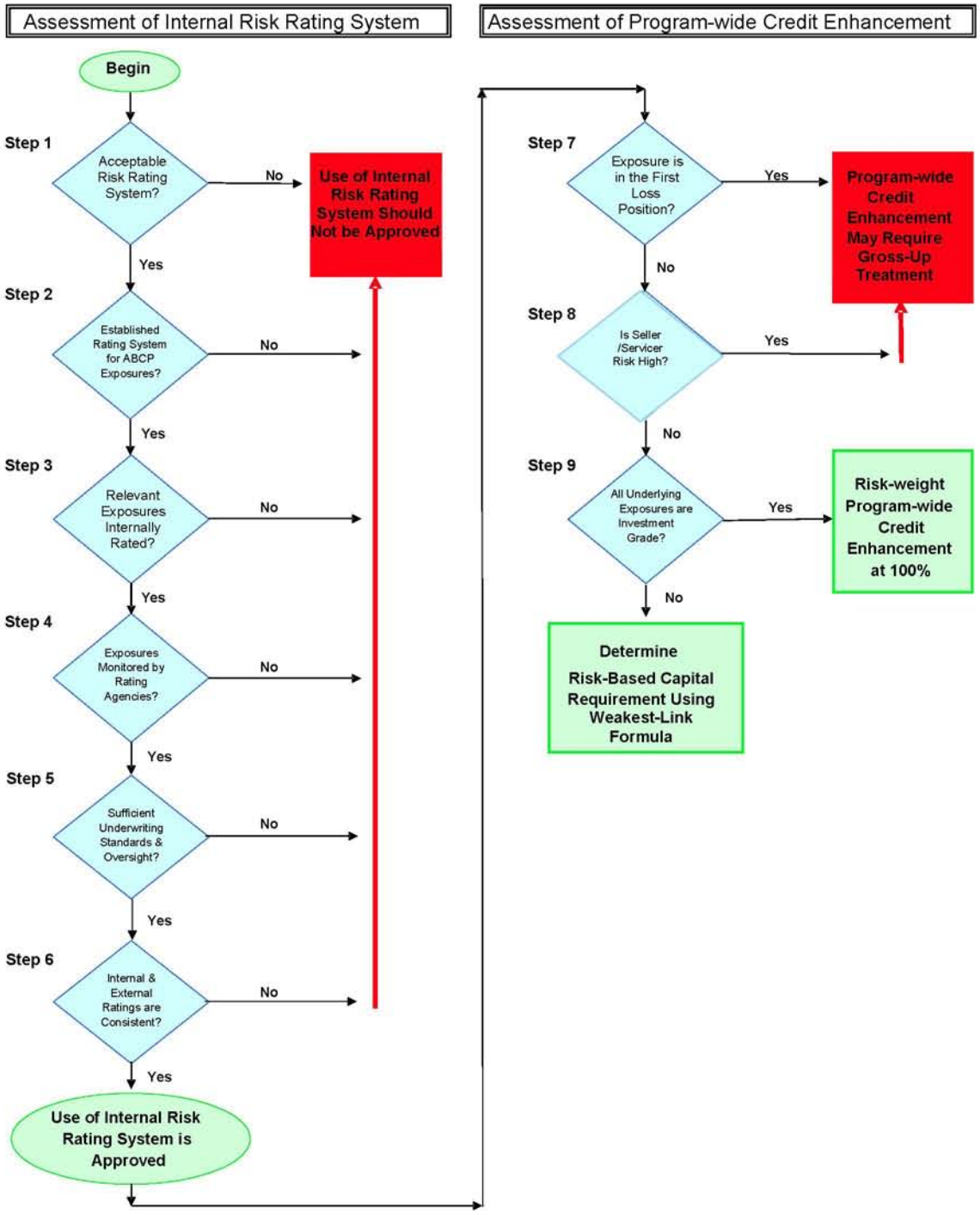
- Assist supervisors in assessing the adequacy of a banking organization's internal risk rating system based on the nine key criteria set forth in the Securitization Capital Rule.[9]

DECISION TREE

The following decision tree is intended to assist examiners in determining the adequacy of the internal rating systems used for rating direct credit substitutes extended to ABCP programs. If examiners consider a banking organization's internal rating system adequate, then the institution may use the internal ratings assigned to calculate the risk-based capital charge for unrated direct credit substitutes, including program-wide credit enhancements. The determination process can essentially be broken down into individual steps that start by answering broad fundamental risk questions and end with examining more detailed ABCP program-specific characteristics.

The first six steps (1-6) of the process focus on evaluating the institution's risk rating system, while the final three steps (7-9) are used to determine the amount of risk-based capital to be assessed against program-wide credit enhancements.

[9] See 12 CFR 3, appendix A, 4(g) (1) (OCC); 12 CFR 208 and 225, appendix A, III.B.3.f.i. (FRB); 12 CFR 325, appendix A, II.B.5.g (1) (FDIC); and 12 CFR 567.6(b)(4)(ii)(A) (OTS).


Assessment of Internal Risk Rating System
Assessment of Program-wide Credit Enhancement
Begin
Step 1
Acceptable Risk Rating System?
No
Use of Internal Risk Rating System Should Not be Approved
Yes
Step 2
Established Rating System for ABCP Exposures?
No
Yes
Step 3
Relevant Exposures Internally Rated?
No
Yes
Step 4
Exposures Monitored by Rating Agencies?
No
Yes
Step 5
Sufficient Underwriting Standards & Oversight?
No
Yes
Step 6
Internal & External Ratings are Consistent?
No
Yes
Use of Internal Risk Rating System is Approved
Step 7
Exposure is in the First Loss Position?
Yes
Program-wide Credit Enhancement May Require Gross-Up Treatment
No
Step 8
Is Seller /Servicer Risk High?
Yes
No
Step 9
All Underlying Exposures are Investment Grade?
Yes
Risk-weight Program-wide Credit Enhancement at 100%
No
Determine Risk-Based Capital Requirement Using Weakest-Link Formula

EXAMINATION PROCEDURES

The following section sets forth in more detail the examination objectives and supervisory expectations behind the steps in the decision tree process. Examiners should be mindful that evaluating the adequacy of internal risk rating systems generally depends on both subjective judgments and objective information generated in each step of the process. Unless otherwise specified, while going through the steps, examiners should weigh the importance and significance of the objectives being assessed in determining the final conclusion. For example, in selected steps, observed weaknesses in meeting specific supervisory expectations may not necessarily be severe enough for the examiner to conclude that the internal risk rating system is inadequate. In some cases, compensating strengths in components of the risk rating system may offset observed weaknesses. However, examiners should take such weaknesses into consideration in formulating their overall conclusion and consider them when developing recommendations to improve the internal risk rating process. Failure to meet supervisory expectations typically is an indication of unsafe and unsound banking practices in the risk management of ABCP programs. Where failures are observed, examiners should conclude that use of the internal ratings approach for exposures to ABCP programs is inappropriate for purposes of the Securitization Capital Rule.

While this guidance has been designed to address common industry underwriting and risk management practices, it may not sufficiently address all circumstances. For unique cases not adequately addressed by the guidance, examiners should review the specific facts and circumstances with the national office staff of the institution's primary Federal regulator before rendering a final conclusion.

ORGANIZING THE EXAMINATION PROCESS

In organizing the examination, examiners should note that banking organizations may operate multiple ABCP conduits. In some cases, banking organizations may manage individual ABCP conduits out of different legal entities or lines of business and each conduit may focus on different business strategies. Before initiating the examination process, examiners should determine the number of ABCP conduits sponsored by the banking organization, which ones have direct credit substitutes provided by the institution, and from what areas within the institution these activities are conducted. Where multiple ABCP conduits exist, examiners should assess whether the banking organization applies the internal risk rating system consistently to each program with identical policies, procedures, and controls. If the banking organization operates ABCP program activities out of different legal entities or lines of business, or if the application of an internal rating system varies from program to program, then examiners should evaluate the adequacy of each unique application. Examiners may consider limiting any approval of the use of internal ratings to those programs that have been examined and determined to meet the requirements outlined in this guidance.

Banking organizations may have established ABCP lines of business from which they coordinate client relationships, transaction origination activities, funding activities, and

ABCP conduit management. Examination of such "front office" operations can provide important insight into the unique characteristics of a banking organization's ABCP program. Nevertheless, examiners should focus their review on the areas of the institution where credit decisions and credit risk management are housed and where oversight of the internal risk rating system is maintained.

SUPERVISORY CONSIDERATIONS

While going through the examination process, examiners should consider the factors listed below. Observation of any of these factors will necessitate a more thorough review of internal controls, risk management, and potential weaknesses before approving the use of a banking organization's internal risk rating system. Although observation of a single factor may not be compelling enough for withholding approval, an examiner that observes one or more of these factors should adopt a more conservative bias in assessing the various supervisory expectations as outlined in the examination procedures. If examiners observe a combination of the risk factors identified below, the examiner may reasonably conclude that the internal risk rating system should not be relied upon for assessing the risk-based capital treatment for direct credit substitutes provided to ABCP programs.

- The sponsoring banking organization has a short track record and is inexperienced in the management of an ABCP program.
- The transaction-specific credit enhancement is solely in the form of excess spread.
- There exist significantly higher ABCP program costs for program-wide credit enhancement as compared with the internal and/or external benchmarks for investment grade risk.
- The sponsoring banking organization fails to maintain historical ratings migration data or the migration data of required credit enhancement levels.
- There is an excessive number of transaction rating migrations (both internal and external) or excessive collateral calls necessary to enhance transaction-level credit enhancement to maintain an internal risk rating.
- The transactional due diligence, approval, or execution documentation are poorly prepared.
- There are a significant number of problem transactions taken out of the ABCP program through liquidity draws.
- There is no independent review or oversight of the internal rating system or the assigned transaction ratings. A review conducted by internal parties within the sponsoring/administrating banking organization may still be considered independent

so long as the business unit conducting the review does not report to the unit that is responsible for the ABCP program's transactions.

- The transaction underwriting and/or risk management functions of an ABCP program sponsor/administrator, other than routine outside audit reviews, are delegated to unaffiliated third parties.

- The ABCP conduit commercial paper is not rated on an ongoing basis by the rating agencies.

As outlined in the decision tree below, if examiners observe either of the following two factors, then the banking organization should not be approved to use the internal ratings approach (see examination procedures for more detail).

- The banking organization does not have, in the examiners view, an established or acceptable internal risk rating system to assess the credit quality of its exposures to its ABCP programs.

- Relevant direct credit substitutes and/or liquidity facilities are not internally risk rated.

STEP BY STEP DECISION TREE EXAMINATION PROCEDURES

A banking organization should demonstrate to the satisfaction of its primary Federal regulator how its internal risk rating system corresponds with the rating agencies' standards used as the framework for the Securitization Capital Rule. This is necessary so that the mapping of credit ratings to risk weight categories in the ratings-based approach can be applied to internal ratings.

Step 1

Does the institution have an acceptable risk rating system?

Examination Objectives

- Determine if the banking organization has a robust internal risk rating system.

- Determine if the banking organization generally has sound risk management practices and principles.

Typically, a separate supervisory team will have already conducted a detailed evaluation of the robustness and effectiveness of the banking organization's overall internal ratings system. Examiners should, therefore, utilize this previous examination work when assessing the application of internal ratings specific to ABCP programs and should consider reducing the procedures outlined under Step 1 to a quick review of the previous examination findings. If there was no previous evaluation of the banking organization's

risk rating system or if documentation of the evaluation findings is unavailable, then examiners should perform a full review of the organization's risk rating system.

Under Step 1, examiners should ascertain whether the banking organization's overall risk rating process is generally consistent with the fundamental elements of sound risk management and with the rating assumptions and methodologies of the rating agencies. For instance, internal ratings should be incorporated into the credit approval process and be considered in the pricing of credit. In addition, internal lending and exposure limits should be linked to internal ratings.

Supervisory Expectations

As set forth in the Agencies' risk-based capital standards, a sound internal risk rating system for ABCP programs usually contains the following nine criteria:

1. The internal credit risk system is an integral part of the banking organization's risk management system, which explicitly incorporates the full range of risks arising from a banking organization's participation in securitization activities;

2. Internal credit ratings are linked to measurable outcomes, such as the probability that the position will experience any loss, the position's expected loss given default, and the degree of variance in losses given default on that position;

3. The banking organization's internal credit risk system must separately consider the risk associated with the underlying loans or borrowers, and the risk associated with the structure of a particular securitization transaction;

4. The banking organization's internal credit risk system must identify gradations of risk among ''pass'' assets and other risk positions;

5. The banking organization must have clear, explicit criteria, including subjective factors, that are used to classify assets into each internal risk grade;

6. The banking organization must have independent credit risk management or loan review personnel assigning or reviewing the credit risk ratings;

7. The banking organization must have an internal audit procedure that periodically verifies that internal risk ratings are assigned in accordance with the organization's established criteria;

8. The banking organization must monitor the performance of the internal credit risk ratings assigned to nonrated, nontraded direct credit substitutes over time to determine the appropriateness of the initial credit risk rating assignment and adjust individual credit risk ratings, or the overall internal credit risk ratings system, as needed; and

9. The internal credit risk system must make credit risk rating assumptions that are consistent with, or more conservative than, the credit risk rating assumptions and methodologies of NRSROs.

If all of the above supervisory expectations are not substantially met, the use of internal ratings under the Securitization Capital Rule should not be approved.

Step 2

Does the institution use an established internal risk rating system tailored to ABCP securitization exposures?

Examination Objectives

- Determine the extent to which the banking organization integrates its ABCP internal risk rating process with its credit risk management framework.

- Qualitatively assess the suitability of the institution's risk rating process relative to the transactions and type of assets securitized.

- Assess the adequacy of the credit approval process.

Supervisory Expectations

- An internal rating system exists that assesses exposures (e.g., liquidity facilities) provided to ABCP programs.

- Evidence should exist that the ABCP internal risk rating process is an integrated component of the enterprise-wide credit risk management process.
  - Risk ratings should be a fundamental portfolio management tool.
  - Internal ratings should be considered in credit and pricing decisions.

- The management team and staff should be experienced with the types of assets and facilities internally rated for the ABCP program.

- There should be meaningful differentiation of risk.
  - Separate ratings are applied to borrowers and facilities that separately consider the risk associated with the underlying loans and borrowers, as well as the risk associated with the specific positions in a securitization transaction.
  - A distinct set of rating criteria exists for each grade – banking organizations should classify assets into each risk grade using clear, explicit criteria, even for subjective factors.

- Risk ratings criteria for ABCP transactions should be documented with specific methodologies detailed for different asset types.

- The banking organization should include a transaction summary[10] as part of the credit approval process. The transaction summary usually includes a description of the following: transaction structure, seller/servicer's risk profile,[11] relevant underwriting criteria, asset eligibility criteria, collection process, asset characteristics, dilution and historical loss rates, and trigger and termination events. (See Appendix B for a more detailed description of the above transaction summary categories.)

Examiners should consult with other examiners who have conducted reviews of other risk rating systems in the banking organization, including the corporate risk rating system, before reaching a final assessment for this step.

Step 3

Are the relevant exposures internally rated?

Examination Objectives

- Determine whether the banking organization applies its internal risk rating system to liquidity facilities and credit enhancements extended to ABCP programs.

- Determine whether the assigned internal ratings incorporate all of the risks associated with rated exposures extended to ABCP programs.

Supervisory Expectations

- Banking organizations are expected to internally rate all relevant exposures to ABCP programs, such as pool-specific liquidity facilities.

- Banking organizations are expected to map their internal ratings to the full scale of external ratings provided by the NRSROs. Therefore, the internal rating of a pool-specific liquidity facility should map to investment grade or non-investment grade equivalent external ratings provided by rating agencies.

Step 4

Are the ABCP programs monitored by rating agencies?

Examination Objectives

- Confirm that the commercial paper issued by the ABCP program is rated by one or more NRSROs.

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[10] The transaction summary may not be specifically identified, but its elements would be part of the credit approval process.

[11] The seller/servicer risk profile may be developed by a group within the banking organization other than the ABCP program group and incorporated into the transaction summary by reference.

- Confirm that NRSROs are monitoring the ABCP programs to ensure maintenance of minimum standards for the respective ABCP program's rating.

Supervisory Expectations

- The commercial paper issued by the ABCP program is expected to be rated in the second highest short-term rating category (A2, P2 or F2) or higher.

- There should be evidence that rating agencies are actively monitoring the structuring methodologies and credit quality of the transactions purchased by the ABCP conduit.
  - Pre-Screened Programs: NRSROs should pre-screen each new transaction placed in the ABCP program.
  - Post Review Programs: ABCP program transactions should be monitored by the NRSROs via monthly or quarterly reports. Banking organizations forward information on new transactions and transactions experiencing deterioration to the NRSROs in a timely manner (e.g., through monthly reports).

Step 5

Are there sufficient underwriting standards and management oversight?

Examination Objectives

- Assess the quality and robustness of the underwriting process.

Supervisory Expectations

- The banking organization should have internal policies addressing underwriting standards applicable to ABCP programs.

- For each ABCP transaction, well managed institutions typically will consider the following factors in their underwriting process:

  I. General Portfolio Characteristics

  - Understanding of the operations of the businesses that originate the assets being securitized.
  - Review of the general terms offered to the customer.
  - Determination of the quality of assets and from which legal entity assets are originated.
  - Determination of customer, industry, and geographic concentrations.
  - Understanding of recent trends in business that may affect historical information about the assets.

II. Legal Structure of the Transaction

- Transactions generally should be structured as "bankruptcy remote" via a legal "true sale" of assets instead of secured loans. This reduces the likelihood that a creditor of the seller can successfully challenge the security interest in the asset pool in the event of seller insolvency. Banking organizations should maintain copies of true sale opinions in the facility file or as a part of the facility's legal documents.
- An appropriate level of management in the credit approval hierarchy should review transactions without a bankruptcy-remote "true sale" structure.
- Examiners should look for uniform commercial code (UCC) filings and searches on securitized assets. UCC filings are often needed to ensure that asset transfers resist third-party attack (i.e., are "perfected"). UCC searches often ensure that asset transfers are not subject to a higher-priority security interest (i.e., that the banking organization's interests are "first priority"). If such filings and searches have not been performed, examiners should make further inquiry. Sometimes there may be a satisfactory reason for not using the UCC filing system.
- Transactions should include a contractual representation or a legal opinion to ensure that there are no provisions, such as negative pledges or limitations on the sale of assets, that would prohibit the securitization transaction.

III. Transaction-Specific Credit Enhancements

Transaction-specific credit enhancement takes a variety of forms depending upon the asset type. For instance, credit enhancement relating to trade receivables may consist of the following three kinds of reserves:

- Loss Reserve – reserves related to obligor default risk
- Dilution Reserve – reserves related to non-cash reductions of balances
- Servicing Reserve – reserves related to fees for servicing and trustees

The loss reserve and dilution reserve typically account for most of the reserves.

Reserves may take a number of different forms, including recourse to the seller (if the seller is of high credit quality), funded cash reserves, and overcollateralization. The credit approval chain should carefully scrutinize transactions in which reserves are in the form of recourse to a seller with weak credit quality. The banking organization's criteria for structuring the appropriate reserve levels should generally be consistent with rating agency criteria for a particular asset class. In all cases, examiners should consider the relevant rating agency methodology when evaluating reserves for any particular transaction.

IV. Eligibility Criteria

Eligibility criteria are structured into securitization transactions to restrict (or limit) the inclusion of certain categories of receivables as appropriate to the particular transaction. Examples of such restricted categories may include:

- Delinquent receivables (based on a stated aging policy, such as 30 days past due)
- Receivables of bankrupt obligors
- Foreign receivables
- Affiliate receivables
- Receivables of obligors with delinquent balances above a certain amount
- Bill and hold receivables
- Unearned receivables
- Non-US dollar denominated receivables
- Receivables subject to offset
- Disputed receivables
- Receivables with a payment date beyond a specified time horizon
- Post-petition receivables

The above list is illustrative and should not be considered comprehensive. The lack of any specific eligibility criteria warrants further analysis to determine whether the banking organization has taken appropriate measures to alleviate any particular risk arising from the lack of a specific feature.

V. Concentrations

Examiners should analyze obligor, industry, and geographic concentrations. Appropriate concentration limits should be established within transaction documents, often within the eligibility criteria.

VI. Trigger Events and Termination Events

The inclusion of trigger and termination events plays a critical role in securitization structures. It is standard practice to have trigger and/or termination events related to the performance of the assets and, depending upon the asset type, to the seller/servicer. Trigger events are comparable to performance covenants in corporate debt and provide a lender with the ability to accelerate a transaction, when appropriate. In addition, such triggers create incentives that allow the seller and the banking organization to negotiate higher levels of credit enhancement or add further restrictions to eligibility criteria when the receivables' performance metrics indicate deterioration beyond an established trigger level. In a similar way, termination events are established to begin the early termination of the transaction when the receivable performance deteriorates. Typical trigger events are based on one or more of the following performance metrics:

- asset coverage ratio
- delinquencies
- losses
- dilution

Termination events may include these same metrics but may also include the bankruptcy, insolvency, change of control of the seller/servicer, or the failure of the servicer to perform its responsibilities in full.

VII. Due Diligence Reviews

A banking organization should conduct a due diligence review prior to closing its ABCP transactions. Such reviews are tailored to the asset type being securitized and the availability of audit information. A frequent public ABS issuer that accesses conduit funding or a seller that has strong credit quality may be eligible for a post-closing review, provided recent audit results are obtained. If not, it should be subject to pre-closing review. For example, a review tailored to trade receivables should focus on most of the following:

- Confirming the receivable information (balances, sales, dilution, write-offs, etc.) previously provided by the seller, with the seller's books and records over at least two reporting periods. Such a review might be performed by a third-party auditor.
- Sampling invoices against the seller's aged trial balance to test the accuracy of agings.
- Sampling past invoices to determine ultimate resolution (paid, credited, written-off, etc.)
- Sampling credits against their respective invoices to test the dilution horizon.
- Sampling write-offs to determine timing and reasons for write-offs.
- Reviewing significant customer concentrations, including delinquent balances.
- Determining systems capability with respect to transaction reporting and compliance.
- Reviewing credit files for completeness and conformity with credit policies.
- Reviewing collection systems and determining the portion of cash going into segregated lockboxes or bank accounts.
- Reviewing internal and external auditor reports to the extent that such documents are available for review.
- Noting any unusual items that may complicate the receivable transaction.

In general, transactions should be reviewed at least annually. The focus of the periodic review is to confirm the accuracy of the monthly servicer's reports and compliance with sale and servicing requirements. Increased frequency of review is

recommended for issues raised in prior reviews, transactions with higher risk sellers, and transactions serviced out of multiple locations.

VIII. Cash Management

Examiners should assess a seller's cash management practices. Commingling of cash collections can cause a loss in the perfected security interest of cash flows, particularly in the event of seller insolvency. Ideally, all collections would flow into a single, segregated lockbox account. However, ideal situations rarely exist and certain structural safeguards need to be in place to minimize this risk. For trade receivables, a requirement to reinvest cash in new receivables eliminates the cash commingling risk. For higher risk sellers, a banking organization could establish an account in the name of the trust or SPV into which collections could be swept on a daily basis. In addition, a banking organization could also require that settlement be done weekly, or daily, to ensure that there are always sufficient receivables to cover investment and reserves.

IX. Reporting

When underwriting a portfolio, it is important to decide what information should be required in the monthly report. Typically, quarterly reports for a trade receivable transaction should include the following:

- Beginning Balances
- Sales
- Cash Collections
- Dilution or Credits
- Write-offs
- Ending Balances
- Delinquencies by Aging Bucket
- Ineligible Assets
- Total Eligible Receivables
- Excess Concentrations
- Net Receivable Balance
- Conduit Investment
- Conduit's Purchased Interest
- Calculation of Receivable Performance Termination Events
- Top 10 Obligor Concentrations

Banking organizations should consider other special reporting requirements based on the particular pool of receivables being securitized.

X. Receivable Systems

Because of the significant reporting requirements in a securitization transaction, a banking organization should assess the seller's receivable systems to determine if

they will be sufficient to provide the information required. In addition, the seller's data backup and disaster recovery systems should be included in the assessment.

XI. Quality of Seller/Servicer

In addition to assessing the creditworthiness of the seller, which should be conducted from the relationship side, a banking organization should also conduct a more focused assessment on the seller/servicer's management team that is involved in the day-to-day receivables operation (i.e., credit, accounting, sales, servicing, etc.).

XII. Performance Monitoring

A banking organization should prepare a performance monitoring plan that periodically monitors the portfolio. Appropriate monitoring will allow an administrator to review relevant pool performance in order to determine the level of available funding under the asset quality tests in the related liquidity facility. The banking organization should test these conditions when the seller reports performance data relating to an underlying transaction (usually monthly or quarterly). Typically, a liquidity facility has a funding condition based on asset quality whereby the liquidity provider will not advance against any receivable that is considered defaulted. A performance monitoring plan may entail monitoring the run rate of defaulted assets so that the potential losses do not exceed the loss protection.

XIII. Post Closing Monitoring

The underwriting team should assist the portfolio management team in developing all of the items that should be tracked on the transaction, including the development of a spreadsheet that ensures the capture and calculation of appropriate information.

XIV. Underwriting Exceptions

If a banking organization approves a transaction only after it has agreed to an exception from standard underwriting procedures, the policy exception should be closely monitored and periodically evaluated.

Banking organizations may utilize variations of the underwriting standards listed above. Examiners should start by evaluating the robustness of the underwriting process and determining if it is comparable to stated rating agency criteria. If weaknesses in the underwriting process are found, examiners may consider any compensating strengths that exist in determining the overall assessment. After considering all relevant factors, if the above supervisory expectations generally are not met, the use of internal ratings under the Securitization Capital Rule should not be approved.

Step 6

Are internal ratings of ABCP program exposures consistent with ratings issued by the rating agencies?

Examination Objectives

- Confirm that whenever ABCP program transactions are externally rated, internal ratings are consistent with, or more conservative than, those issued by NRSROs.

Supervisory Expectations

- Underlying transactions funded through ABCP programs are sometimes externally rated by one or more rating agencies. The mapping of the internal ratings assigned to these transactions should confirm that internal ratings are consistent with, or more conservative than, those issued by NRSROs.

- In cases where underlying transactions are split rated by two or more rating agencies, internal ratings should be consistent with the most conservative (lowest) external rating.

- Exceptions to the above supervisory expectations should represent no more than a small fraction of the total number of transactions externally rated. If such exceptions exist, then there generally should also be an equal or larger percentage of externally rated transactions where internal ratings are more conservative than the external rating.

If supervisory expectations are not met, then the internal risk rating system may not be appropriately mapped to the external ratings of a NRSRO. In such cases, further review of the adequacy of the banking organization's risk rating system must be undertaken before the use of internal ratings under the Securitization Capital Rule can be approved.

DETERMINE ADEQUACY OF INTERNAL RATINGS SYSTEMS

If, through the examination process, the internal risk rating system utilized for ABCP exposures is found to be inadequate, then the banking organization may not apply the internal risk ratings approach to ABCP exposures for risk-based capital purposes until such time as the organization has remedied the deficiencies. Banking organizations that have adequate risk rating systems that are well integrated into risk management processes applied to ABCP programs may be approved for use of the internal risk ratings approach.

Once a banking organization's internal rating system is deemed adequate, the organization may use its internal ratings to slot ABCP exposures, including pool-specific liquidity facilities, into the appropriate rating category (investment grade, high non-investment grade, and low non-investment grade), and apply the corresponding risk weights. However, due to the unique nature of program-wide credit enhancements,

further guidance is provided in steps 7 through 9 to help establish the appropriate capital requirement.

DETERMINATION OF THE RISK-BASED CAPITAL REQUIREMENT FOR PROGRAM-WIDE CREDIT ENHANCEMENTS

In Step 9 this guidance outlines the weakest-link approach that determines the amount of risk-based capital against the program-wide credit enhancement. This approach assumes that the risk of the program-wide credit enhancement is directly dependent on the quality (i.e., internal rating) of the riskiest transaction(s) within the ABCP program.[12] The last three steps of this guidance provide a process designed to determine the regulatory capital treatment for program-wide credit enhancements. The key underlying principles are as follows:

- The determination of the credit quality of the program-wide credit enhancement and any other direct credit substitutes is based on the riskiness of draw and subsequent loss, which depends directly on the quality of the credit-enhanced assets funded through the ABCP program. When assessing the enhancement's credit quality, examiners should ignore a banking organization's ability to actively "manage" the risk of deteriorating assets by removing them from the ABCP program via liquidity facilities.

- An estimate of the risk of draw for the program-wide credit enhancement is derived from the quality (rating) of the riskiest transaction(s) within the ABCP program, which is often determined by the internal rating a banking organization assigns to a transaction's pool-specific liquidity facility. Other credit risks (e.g., seller/servicer risk) to the program-wide credit enhancement may also be considered.

- Determination of the risk-based capital requirement for the program-wide credit enhancement should be supported by written documentation.

Step 7

Is program-wide credit enhancement in the first loss position?

Examination Objectives

- Determine the rank order, if possible, of the risk assumed by the various direct credit substitutes and liquidity facilities in the ABCP program by determining the order in which various exposures would absorb losses.

- Determine if third-party investors provide program-wide credit enhancement to the ABCP conduit.

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[12] In reality, in the case of program-wide credit enhancements, the probability of loss (or draw) is generally greater than the probability of default of the riskiest underlying transaction. However, the weakest link method provides a close approximation of this risk.

- Determine if the spread that third-party investors and/or the banking organization charge for taking program-wide credit enhancement risk generally is within the market's investment grade pricing range.

Supervisory Expectations

- ABCP program documentation should confirm that the program-wide credit enhancement is not the first loss credit enhancement for any transaction in the ABCP program and is, at worst, in the second economic loss position, usually after transaction-specific credit enhancements.

- The spread charged for the program-wide credit enhancement should be in the spread range of investment grade exposures of a term securitization. Examiners should consider other factors that may influence pricing, such as availability of the credit enhancement.

- Financial guarantee providers such as AMBAC, FSA, and FGIC may participate in a program-wide credit enhancement tranche either on a senior position or on a pari-passu position with other providers. The risk taken by these institutions is usually investment grade. The examiner should compare the price of the guarantee charged by these institutions to the pricing ranges of non-investment grade and investment grade exposures of the sponsoring banking organization, the loan syndication market, and the bond market. This can provide a gauge as to whether a third party considers the risk as investment grade or non-investment grade. Some sources to review market pricing include Loan Pricing Corporation's "Gold Sheets" and Bloomberg (for bond spreads). A range and/or average pricing for both investment grade and non-investment grade syndicated loans can be found in the Gold Sheets. Similarly, the examiner should also review the price the sponsor/bank is charging for its respective portion of the program-wide credit enhancement.

Step 8

Do concentrations of non-investment grade seller/servicers pose an excessive level of risk?

Examination Objectives

- Determine if the sponsoring banking organization is exposed to an inordinate amount of seller/servicer risk.

Supervisory Expectations

- Examiners should confirm that banking organizations' internal risk rating systems properly account for the existence of seller/servicer risk.

- An asset originator (i.e., the entity selling the assets to the ABCP program) typically is the servicer and essentially acts as the portfolio manager for the ABCP program's investment. The servicer identifies receivables eligible for the ABCP program and manages to preserve the investment on behalf of the banking organization sponsoring the ABCP program. As indicated earlier, servicer risk can be partially mitigated through seller allocation and structuring payments to protect against commingling of cash. However, despite having specific transaction structures in place to mitigate servicer risk, exposure to an excessive number of non-investment grade servicers may adversely affect the overall credit quality of the ABCP program by exposing the conduit to the higher bankruptcy risk that inherently exists with non-investment grade obligors.

- The grid below provides a useful benchmark for examiners and bankers in determining seller/servicer concentrations in an ABCP program. Examiners may use the benchmarks to assess the potential exposures to non-investment grade seller/servicers. Depending upon the facts and circumstances, examiners may consider concentrations exceeding these benchmarks as unsafe and unsound banking practices. Therefore, based on the grid below, it is suggested that securitized assets from non-investment grade servicers should represent a smaller percentage of the total outstandings of an ABCP program that has a lower weighted average rating of all the transactions in the program. For example, if the ABCP program transactions have a weighted average rating equivalent to "BBB," no more than 30 percent of the total outstandings of the ABCP program should be represented by non-investment grade seller/servicers. However, an ABCP program that has transactions structured to a higher weighted average rating such as a single "A" equivalent, could have up to 60 percent of the outstandings originated by non-investment grade seller/servicers without causing undue concerns.

Weighted Average Rating Equivalent of Transactions	Servicer Percentage Below Investment Grade
AA	90%
AA-	80%
A+	70%
A	60%
A-	50%
BBB+	40%
BBB	30%
BBB-	20%
BB+	10%

Step 9

What portion of the underlying assets of the ABCP program is structured to investment grade risk?

Examination Objectives

- Obtain the internal rating for the program-wide credit enhancement to determine the banking organization's assessment of the credit quality of the risk exposure.

- Rank order the underlying transactions in the ABCP program based on internal risk ratings to determine the notional amount of transactions falling in each of the three ratings categories: investment grade (BBB- or better), high non-investment grade (BB+ to BB-), and low non-investment grade (Below BB-).

- Determine a risk-based capital requirement for the program-wide credit enhancement. If all underlying transactions are rated investment grade, risk-weight the notional amount of the program-wide credit enhancement at 100 percent. If underlying transactions exist with non-investment grade ratings, then the Weakest-Link approach should be used to determine the risk-based capital requirement for the program-wide credit enhancement.

Supervisory Expectations

- This last step allows the examiner to determine the appropriate amount of risk-based capital to assess against the program-wide credit enhancement based on the internal risk ratings of the underlying transactions in the ABCP program. This is a relatively simple process if <u>all</u> of the underlying transactions have been assigned an investment grade rating. However, if one or more of the underlying transactions are internally rated below investment grade, then the calculation becomes more complex. The following approach is offered as a means to help examiners calculate an appropriate risk-based capital charge for the program-wide credit enhancement. The approach takes into account the internal ratings assigned to each underlying transaction in an ABCP program. These transaction-level ratings are typically based on the internal assessment of a transaction's pool-specific liquidity facility and the likelihood of it being drawn. The transactions are rank ordered by their internal rating and then bucketed into the three ratings categories: investment grade, high non-investment grade, and low non-investment grade. The program-wide credit enhancement is then assigned an appropriate risk weight based upon the notional amount of transactions in each ratings bucket.

- Under the weakest-link approach, the risk of loss corresponds first to the weakest transactions to which the program-wide credit enhancement is exposed. Banking organizations should begin with the lowest bucket (low non-investment grade) and then move to the next highest rating bucket until the entire amount of the program-wide credit enhancement has been assigned. The assigned risk weights and their

associated capital charges are then aggregated. However, if the risk-based capital charge for the non-investment grade asset pools equals or exceeds the 8 percent charge against the entire amount of assets in the ABCP program, then the risk-based capital charge is limited to the 8 percent against the program's assets.

- Banking organizations that sponsor ABCP programs may have other methodologies to quantify risk across multiple exposures. For example, collateralized debt obligation (CDO) ratings methodology takes into account both the probability of loss on each underlying transaction and correlations between the underlying transactions. This and other methods may generate capital requirements equal to or more conservative than those arrived at via the weakest-link method. Regardless of the approach used, well-managed institutions should be able to support their risk-based capital calculations.

Weakest Link Formula

IF [(0.16 * NI1) + NI2] ≥ (0.08 * PROG), THEN RBC = (0.08 x PROG)**

ELSE

Capital = [0.08 * (PWC - (NI1 + NI2))] + [0.16 * NI1] + [NI2]**

**Although the term NI2 should reflect a gross-up charge under the Rule (i.e., an effective 1,250 percent risk weight), for the sake of simplicity a dollar-for-dollar charge is used here. The reason for using dollar-for-dollar is based on the assumption that the NI2 portion of an ABCP pool is typically smaller than the gross-up charge would be on the entire pool. Thus, instead of grossing-up the NI2 portion and then applying the low-level exposure rule (which, if NI2 is less than the gross-up charge, will yield a dollar-for-dollar capital charge), the term just assumes the dollar-for-dollar amount.

In any event, the risk-based capital charge on the program-wide credit enhancement will never exceed the maximum contractual amount of that program-wide credit enhancement (i.e., the low-level exposure rule).

RBC = Risk-Based Capital
PROG = Notional Amount of All Underlying Exposures in the Program
PWC = Notional Amount of Program Wide Credit Enhancement
IG = Notional Amount of Exposures Rated BBB- or better
NI1 = Notional Amount of Exposures Rated between BB+ and BB-
NI2 = Notional Amount of Exposures Rated below BB-

Example 1
ABCP program size (PROG) = $1,000 MM
Program-Wide Credit Enhancement (PWC) = $100 MM
Total Amount of Investment Grade (IG) = $995 MM
Total Amount of High Non-Investment Grade (NI1) = $4 MM
Total Amount of Low Non-Investment Grade (NI2) = $1 MM

Weakest-Link

RBC = IF [(0.16 * 4) + 1] $\geq$ (0.08 * 1,000), THEN RBC = (0.08 * 1,000)
= (0.64 + 1) = $1.64 MM < $80 MM

ELSE

RBC = [(0.08 * (100 – (4 + 1))] + (0.16 * 4) + (1)
= (7.60) + (0.64) + (1)
= $ **9.24** MM

Example 2
ABCP program size (PROG) = $1,000 MM
Program-Wide Credit Enhancement (PWC) = $150 MM
Total Amount of Investment Grade (IG) = $940 MM
Total Amount of High Non-Investment Grade (NI1) = $50 MM
Total Amount of Low Non-Investment Grade (NI2) = $10 MM

Weakest-Link

RBC = IF [(0.16 * 50) + 10] $\geq$ (0.08 * 1,000), THEN RBC = (0.08 * 1,000)
= (8 + 10) = $18 MM < $80 MM

ELSE

RBC = [(0.08 * (150 – (50+10))] + (0.16 * 50) + (10)
= (7.20) + (8.00) + (10)
= $ **25.2**MM

Example 3
ABCP program size (PROG) = $1,000 MM
Program-Wide Credit Enhancement (PWC) = $150 MM
Total Amount of Investment Grade (IG) = $0 MM
Total Amount of High Non-Investment Grade (NI1) = $500 MM
Total Amount of Low Non-Investment Grade (NI2) = $500 MM

Weakest-Link

RBC = IF [(0.16 * 500) + 500] $\geq$ (0.08 * 1,000), THEN RBC = (0.08 * 1,000)
= (80 + 500) = $580 MM > $80 MM

Therefore,

RBC = (0.08 * 1,000) = $80 MM

Because $580 MM is greater than the $80 MM capital charge that would apply if all of the assets supported by the PWC were on-balance sheet, the maximum risk-based capital charge is $80 MM.

When the sum of all non-investment grade asset pools (i.e., NI1 + NI2) exceeds the amount of the program-wide credit enhancement, the weakest-link formula would result in too much risk-based capital being assessed. If this situation arises, banking organizations should first apply the gross-up treatment to the NI2 asset pools and then assess 16 percent risk-based capital against an amount of the NI1 asset pools, that when added with the NI2 asset pools, would equal the amount of the program-wide credit enhancement. For example, if the program-wide credit enhancement is $100 on underlying transactions totaling $1,000, and the underlying exposures are $10 low non-investment grade, $100 high non-investment grade, and $890 investment grade, then risk weighting will be based on the gross-up approach for $10 and assigning the remaining $90 to the 200 percent risk weight category, as shown below:

$10 * 1,250% * 8% = $10.00
$90 * 200% * 8% = $14.40

$10.00 + $14.40 = $24.40

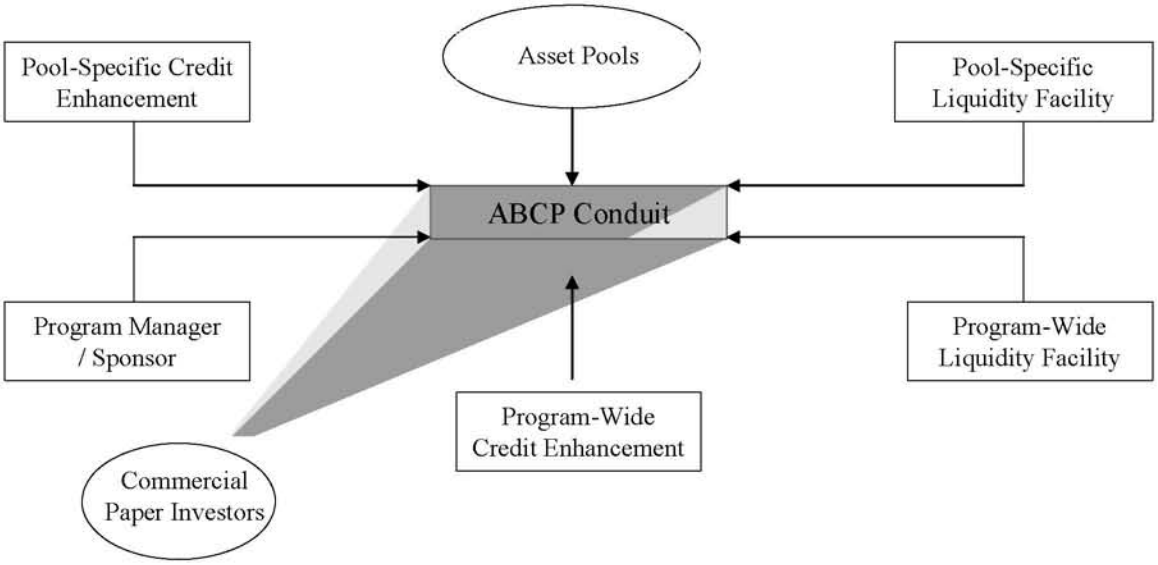
Finally, the aggregate capital charge, $24.40 in this case, is then compared to the capital charge imposed on the underlying transactions if all the program assets were on the banking organization's balance sheet (i.e., 0.08 * $1,000 = $80); the lower amount prevails. This establishes the capital charge for the program-wide credit enhancement.

APPENDIX A

OVERVIEW OF ABCP PROGRAMS

ABCP programs provide a means for corporations to obtain relatively low cost funding by selling or securitizing pools of homogenous assets (e.g., trade receivables) to special purpose entities (SPEs/ABCP programs). The ABCP program raises funds for purchase of these assets by issuing commercial paper into the market place. The commercial paper investors are protected by structural enhancements provided by the seller (e.g., overcollateralization, spread accounts, early amortization triggers, etc.) and by credit enhancements (e.g., subordinated loans, guarantees) provided by bank sponsors of the ABCP program and by other third parties. In addition, liquidity facilities are also present to ensure the rapid and orderly repayment of commercial paper should cash flow difficulties emerge. ABCP programs are nominally capitalized special purpose entities that issue commercial paper. A sponsoring bank establishes the ABCP program but usually does not own the conduit's equity, which is often held by unaffiliated third-party management companies that specialize in owning such entities, and are structured to be bankruptcy remote.

- **Key characteristics** of an ABCP program include the following**:**



Typical Structure

ABCP programs are funding vehicles that banks and other intermediaries establish to provide an alternative source of funding to themselves or their customers. In contrast to term securitizations, which tend to be amortizing, ABCP programs are ongoing entities that usually issue new commercial paper to repay maturing commercial paper. The majority of ABCP programs in the capital markets are established and managed by major international commercial banks. As with traditional commercial paper, which has a

maximum maturity of 270 days, ABCP is short-term debt that may either pay interest or be issued at a discount.

Types of ABCP Programs

Multiseller programs generally provide working capital financing by purchasing or advancing against receivables generated by multiple corporate clients of the sponsoring bank. These programs are generally well diversified across both sellers and asset types.

Single seller programs are generally established to fund one or more types of assets originated by a single seller. The lack of diversification is generally compensated for by increased program-wide credit enhancement.

Loan backed programs fund direct loans to corporate customers of the ABCP program's sponsoring bank. These loans are generally closely managed by the bank, and have a variety of covenants designed to reduce credit risk.

Securities arbitrage programs invest in securities that generally are rated AA- or higher. They generally have no additional credit enhancement at the seller/transaction level because the securities are highly rated. These programs are typically well diversified across security types. The arbitrage is mainly due to the difference between the yield on the securities and the funding cost of the commercial paper.

Structured investment vehicles (SIVs) are a form of a securities arbitrage program. These ABCP programs invest in securities typically rated AA- or higher. SIVs operate on a market-value basis similar to market value CDOs in that they must maintain a dynamic overcollateralization ratio determined by analysis of the potential price volatility on securities held in the portfolio. SIVs are monitored on a daily basis, and must meet strict liquidity, capitalization, leverage, and concentration guidelines established by the rating agencies.

Key Parties and Roles

Key parties for an ABCP program include:

- Program Management / Administrators
- Credit Enhancement Providers
- Liquidity Facility Providers
- Seller / Servicers
- Commercial Paper Investors

Program Management

The sponsor of an ABCP program initiates the creation of the program but typically does not own the equity of the ABCP program, which is provided by unaffiliated third party investors. Despite not owning the equity of the ABCP program, sponsors usually retain a

financial stake in the program by providing credit enhancement, liquidity support, or both, and play a very active role in managing the program. Sponsors typically earn fees such as credit enhancement fees, liquidity facility fees, and program management fees for services provided to their ABCP programs.

Typically, an ABCP program makes arrangements with various agents/servicers to conduct the administration and daily operation of the ABCP program. This includes purchasing and selling assets, maintaining operating accounts, monitoring the ongoing performance of each transaction, as well as other activities. The sponsor is also actively engaged in the management of the ABCP program, including underwriting the assets purchased by the ABCP program and the type/level of credit enhancements provided to the ABCP program.

Credit Enhancement Providers

The sponsoring bank typically provides pool-specific and program-wide liquidity facilities, and program-wide credit enhancements, all of which are usually unrated (pool-specific credit enhancement, such as over-collateralization, is provided by the seller of the assets). These enhancements are fundamental for obtaining high investment grade ratings on the commercial paper issued to the market by the ABCP program. Seller provided credit enhancement may exist in various forms, and is generally sized based on the type and credit quality of the underlying assets as well as the quality and financial strength of seller/servicers. Higher quality assets may only need partial support to achieve a satisfactory rating for the commercial paper. Lower quality assets may need full support.

- Partially Supported Credit Enhancement < 100% of Notional Amount of ABCP Program
- Fully Supported Credit Enhancement = 100% of Notional Amount of ABCP Program

Liquidity Facility Providers

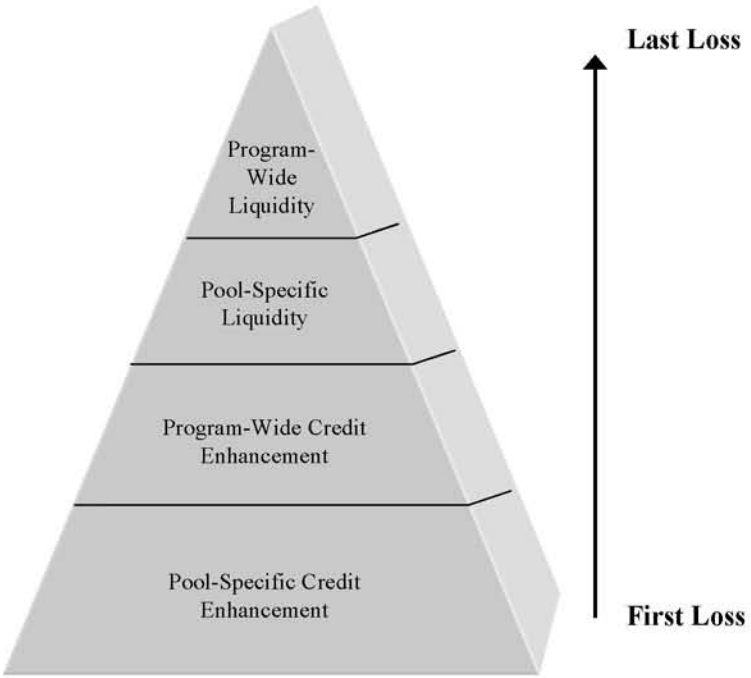
The sponsoring bank, and in some cases, unaffiliated third parties, provide pool-specific and/or program-wide liquidity facilities. These back-up liquidity facilities assure the timely repayment of commercial paper under certain conditions, such as financial market disruptions or if cash flow timing mismatches occur, but generally not under conditions associated with the credit deterioration of the underlying assets or the seller/servicer to the extent such deterioration is beyond that permitted under the related asset quality test.

Commercial Paper Investors

Commercial paper investors are typically institutional investors such as pension funds, money market mutual funds, bank trust departments, foreign banks, and investment companies. Commercial paper maturities range from 1 day to 270 days, but most frequently is issued for 30 days or less. There is a limited secondary market for commercial paper, since issuers can closely match the maturity of the paper to the

investors' needs. Commercial paper investors are generally repaid from the reissuance of new commercial paper or from cash flows stemming from the underlying asset pools purchased by the program. In addition, in order to ensure timely repayment in the event that new commercial paper cannot be issued or if anticipated cash flows from the underlying assets do not occur, ABCP programs utilize backup liquidity facilities. Pool-specific and program-wide credit enhancements also protect commercial paper investors from deterioration of the underlying asset pools.

- **The Loss Waterfall** for the exposures of a typical ABCP program generally has four legally distinct layers:



However, most legal documents do not specify which form of credit or liquidity enhancement is in a priority position after pool-specific credit enhancement is exhausted due to defaults. For example, an ABCP program sponsor may purchase assets out of the conduit using pool specific liquidity, after becoming aware of weakness in the seller/servicer or in asset performance. Liquidity agreements must be subject to a valid asset quality test that prevents the purchase of defaulted or highly delinquent assets. Liquidity facilities that are not limited by such an asset quality test are to be viewed as credit enhancement, and subject to the risk-based capital requirements applicable to direct credit substitutes.

Pool-Specific Credit Enhancement – The form and size of credit enhancement for each particular asset pool is dependent upon the nature and quality of the asset pool and the seller/servicer's risk profile. In determining the level of credit enhancement, consideration is given to the seller/servicer's financial strength, quality as a servicer, obligor concentrations, obligor credit quality, and the historic performance of the asset

pool. Credit enhancement is generally sized to cover a multiple level of historical losses and dilution for the particular asset pool. Pool-specific credit enhancement can take several forms including over collateralization, cash reserves, seller/servicer guarantees (for only highly rated seller/servicers), and subordination. Credit enhancement can either be dynamic (i.e., increases as the asset pool's performance deteriorates) or static (i.e., fixed percentage). Pool-specific credit enhancement is generally provided by the seller/servicer (or carved out of the asset pool in the case of over collateralization), but may be provided by other third parties.

The ABCP program sponsor or administrator will generally set strict eligibility requirements for the receivables to be included in the purchased asset pool. For example, receivable eligibility requirements will establish minimum credit ratings or credit scores for the obligors and the maximum number of days the receivable can be past due.

Usually the purchased asset pools are structured (credit enhanced) to achieve a credit quality equivalent of investment grade (i.e., BBB or higher). The sponsoring bank will typically utilize established rating agency criteria and structuring methodologies to achieve the desired internal rating level. In certain instances, such as when ABCP programs purchase asset-backed securities (ABS), the pool-specific credit enhancement is already built into the purchased ABS and is reflected in the security's credit rating. The internal rating on the pool-specific liquidity facility provided to support the purchased asset pool will reflect the inclusion of the pool-specific credit enhancement and other structuring protections.

Program-Wide Credit Enhancement – The second level of contractual credit protection is the program-wide credit enhancement, which may take the form of an irrevocable loan facility, standby letter of credit, a surety bond from a monoline insurer, or subordinated debt. Program-wide credit enhancement protects commercial paper investors if one or more of the underlying transactions exhaust the pool-specific credit enhancement and other structural protections. The sponsoring bank and/or third party guarantors are providers of this type of credit protection. The program-wide credit enhancement is generally sized by the rating agencies to cover the potential of multiple defaults in the underlying portfolio of transactions within ABCP conduits, and takes into account concentration risk among seller/servicers and industry sectors.

Pool- Specific Liquidity – Pool-specific liquidity facilities are an important structural feature in ABCP programs because they ensure investors of timely payments on the issued commercial paper by smoothing timing differences in the payment of interest and principal on the pooled assets and ensuring payments in the event of market disruptions. The types of liquidity facilities may differ among various ABCP programs and may even differ among asset pools purchased by a single ABCP program. For instance, liquidity facilities may be structured either in the form of an asset purchase agreement (APA), which provides liquidity to the ABCP program by purchasing nondefaulted assets from a specific asset pool, or a loan to the ABCP program, which is repaid solely by the cash

flows from the underlying assets.[13] Some older ABCP programs may have both pool-specific liquidity and program-wide liquidity coverage, while more recent ABCP program programs tend to utilize only pool-specific facilities. Typically, the seller-provided credit enhancement continues to provide credit protection on an asset pool that is purchased by a liquidity banking organization so that the institution is protected against credit losses that may arise due to subsequent deterioration of the pool.

Pool-specific liquidity, when drawn prior to the ABCP program's credit enhancements, is subject to the credit risk of the underlying asset pool. However, the liquidity facility does not provide direct credit enhancement to the commercial paper holders. Thus, the pool-specific liquidity facility generally is in an economic second loss position after the seller-provided credit enhancements and prior to the program-wide credit enhancement even when the legal documents state that the program-wide credit enhancement would absorb losses prior to the pool-specific liquidity facilities. This is because the sponsor of the ABCP program would most likely manage the asset pools in such a way that deteriorating portfolios or assets would be put to the liquidity banking organizations prior to any defaults that would require a draw against the program-wide credit enhancement.[14] While the liquidity banking organization is exposed to the credit risk of the underlying asset pool, the risk is mitigated by the seller-provided credit enhancement and the "asset quality test."[15] At the time that the asset pool is put to the liquidity banking organization, the facility is usually fully drawn, because the entire amount of the pool that qualifies under the asset quality test is purchased by the banking organization. However, with respect to revolving transactions (such as credit card securitizations) it is possible to average less than 100 percent of the commitment.

Program-Wide Liquidity – The senior most position in the waterfall, program-wide liquidity, is provided in an amount sufficient to support that portion of the face amount of all the commercial paper that is issued by the ABCP program that is necessary to achieve the desired external rating on the issued paper. In some cases, a liquidity bank that extends a direct liquidity loan to a ABCP program may be able to access the program-wide credit enhancement to cover losses while funding the underlying asset pool.

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[13] Direct liquidity loans to an ABCP program may be termed a "commissioning agreement," most likely in a foreign bank program, and may share in the security interest in the underlying assets when commercial paper ceases to be issued due to deterioration of the asset pool.

[14] In fact, according to the contractual provisions of some conduits, a certain level of draws on the program-wide credit enhancement is a condition for unwinding the conduit program, which means that this enhancement is never meant to be used.

[15] An asset quality test or liquidity funding formula determines how much funding the liquidity banking organization will extend to the conduit based on the quality of the underlying asset pool at the time of the draw. Typically, liquidity banking organizations will fund against the conduit's purchase price of the asset pool less the amount of defaulted assets in the pool.

APPENDIX B

The credit approval memorandum typically should include a description of the following:

I. Transaction Structure

In the beginning of the credit approval memorandum, the sponsoring banking organization will outline the structure of the transaction, which includes a discussion of the asset type that would be purchased by the ABCP program and the liquidity facilities (and possibly credit enhancements) that the sponsoring banking organization is providing to the transaction. Generally, the sponsoring banking organization indicates the type and dollar volume of the liquidity facility the institution is seeking to extend to the transaction, such as a $250 million short-term pool-specific liquidity facility, as well as the type of first loss credit enhancement that is provided by the seller, such as overcollateralization. The asset purchase by the ABCP conduit from the seller may be described as a two-step sale that first involves the sale of the assets (e.g., trade receivables) to a special purpose vehicle (SPV) on a true-sale basis and then the sale of the assets by the SPV to the ABCP program. Other features of the structure should be described, such as if the transaction is a revolving transaction with a one-year revolving period.

In addition, the sponsoring banking organization typically obtains true sale and non-consolidation opinions from the seller's external legal counsel. The opinions should identify the various participants in the transaction, including the seller, servicer, and trustee, as appropriate. For instance, the seller of the assets is identified as the party that would act as the servicer of the assets and who is responsible for all the representations and warranties associated with the sold assets.

II. Asset Seller's Risk Profile

The assessment of the asset seller's risk profile should consider its past and expected future financial performance, its current market position and expected competitiveness going forward, as well as its current debt ratings. For example, the sponsor may review the seller's leverage, generation of cash flow, interest coverage ratios, and whether the seller is at least investment grade. Also, the sponsoring banking organization may attempt to anticipate the seller's ability to continue to perform under more adverse economic conditions. In addition, some sponsors may take other information into account, such as KMV ratings, to confirm their internal view of the seller's financial strength.

III. Underwriting standards

A discussion of the seller's current and historical underwriting standards should be included in the transaction summary. For certain types of assets, such as auto loans, the sponsoring banking organization should consider the seller's use of credit scoring and the minimum acceptable loan score that may be included in the asset pool. In addition, an

indication of whether the underwriting standards have remained relatively constant over time or whether there has been a recent tightening or loosening may be provided.

IV. Asset Eligibility Criteria

In order to reduce the ABCP program's exposure to higher-risk assets, an ABCP program generally specifies minimum asset eligibility criteria. This is particularly true for revolving transactions since the seller's underwriting standards may change so that the credit quality of the assets purchased by the ABCP program can be adversely affected. While eligibility criteria may be designed for specific transactions, there is a common set of criteria that are generally applicable, including those that exclude the purchase of defaulted assets or assets past due more than a specified number of days appropriate for the specific transaction; limiting excess concentration to an individual obligor; excluding the purchase of assets of obligors that are affiliates of the seller; or limiting the tenor of the assets to be purchased. Other criteria also may require that the obligor be a resident of a certain country and that the asset is payable in a particular currency. All of these criteria are intended to reduce the credit risk inherent in the asset pool to be purchased by the ABCP program. A strong set of eligibility criteria may reduce the necessary credit enhancement provided by the selling organization.

V. Collection Process

Often, if the seller/servicer has a senior unsecured debt rating of at least BBB-, cash collections may be commingled with the seller/servicer's cash until such time as periodic payments are required to be made to the ABCP program. Documentation should provide an ABCP program with the ability to take steps to control the cash flows when necessary, and include covenants to redirect cash flows or cause the segregation of funds into a bankruptcy-remote special purpose entity upon the occurrence of certain triggers. A description of how checks, cash, and debit payments are to be handled may be discussed. For instance, documentation may state that payments by check must be processed on the same day they are received by the lockbox and that after the checks clear, the cash is deposited in a segregated collection account at the sponsoring banking organization. Also, the documents may describe the types of eligible investments in which the cash may be invested, which are usually highly rated, liquid investments such as government securities and A1/P1+ commercial paper.

VI. Assets' Characteristics

Usually, a transaction summary will provide a description of the assets that will be sold into the program and outline relevant pool statistics. For instance, there likely will be a discussion of the weighted average loan balance, weighted average credit score (if appropriate), weighted average original term, and weighted average coupon, as well as the ranges of each characteristic. In addition, the portfolio may be segmented by the sponsoring banking organization's internal rating grades to give an indication of each segment's average credit quality (as evidenced by an average credit score) and share of

the portfolio's balances. Many times, the sponsor will identify concentrations to individual obligors or geographic areas, such as states.

VII. Dilution

Certain asset types (e.g., trade receivables) purchased by ABCP programs may be subject to dilution, which is the evaporation of the asset due to customer returns of sold goods, warranty claims, disputes between the seller and its customers, as well as other factors. For instance, the seller of the assets to the ABCP program may permit its customers to return goods at which point the receivables cease to exist. The likelihood of this risk varies by asset type and is typically addressed in the transaction summary. For instance, in sales of credit card receivables to an ABCP program, the risk of dilution is small due to the underlying diversity of the obligors and merchants. While the pool-specific liquidity facilities often absorb dilution initially, the seller generally is required to establish a reserve to cover a multiple of expected dilution, which is based on historical information. The adequacy of the dilution reserve is reviewed at the inception of the transaction and may or may not be incorporated in the seller-provided credit enhancement that is provided on the pool of assets sold to the ABCP program.

VIII. Historical Performance

As a prelude to sizing the pool-specific credit enhancement provided by the seller, the sponsoring banking organization will review the historical performance of the seller's portfolio, including consideration of losses (i.e., loss rate and loss severity), delinquencies, dilutions, and the turnover rate.[16] An indication of the direction of losses and delinquencies, and the reasons behind any increase or decrease are often articulated. For instance, an increase in losses may reflect losses due to specific industry related problems and general economic downturns. Typically, the rating agencies prefer at least three years worth of historical information on the performance of the seller's asset pools, although the rating agencies periodically permit transactions to have less information. As a result, a sponsoring banking organization likely will require the same degree of information as a rating agency whether this is a full three year history or a lesser amount, as appropriate, when assessing the credit quality of its liquidity and credit enhancement exposures.

IX. Termination Events

ABCP programs usually incorporate commercial paper stop-issuance or wind-down triggers to mitigate losses that may result from a deteriorating asset pool or some event that may hinder the ABCP programs' ability to repay maturing commercial paper. Such triggers may be established at either the pool level or program-wide level, and may, if hit, require the ABCP program to immediately stop issuing commercial paper to fund new purchases from a particular seller, or to fund any new purchases regardless of the seller.

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[16] The turnover rate of a receivables portfolio is a measure of how fast the outstanding assets are paid off. For example, if a seller had sales of $4,000 in the prior year and an average portfolio balance of $1,000, then the turnover rate of the portfolio is four.

In addition, such triggers may require the ABCP program to begin liquidating specific asset pools or its entire portfolio.

The rating agencies consider these structural safeguards, which are designed to protect the ABCP program from credit deterioration over time, in determining the rating on an ABCP program's commercial paper. In many ABCP programs, there may be a provision that requires the program to wind down if a certain percentage of the program-wide credit enhancement has been used to cover losses (e.g., 25 percent).

Examples of pool-specific triggers include the insolvency or bankruptcy of the seller/servicer; downgrade of the seller's credit rating below a specific rating grade; or deterioration of the asset pool to the point where chargeoffs, delinquencies, or dilution rises above predetermined levels. Program-wide triggers may include the ABCP program's failure to repay maturing commercial paper or if draws reduce the program-wide credit enhancement below a stated threshold.