

Date of Exam: Prepared By:

## #13 – INVESTMENT SECURITIES (Risk Focused)

### **ASSIGNMENT OVERVIEW**

Investment decisions affect the asset quality, earnings performance, capital adequacy, and liquidity of a bank. With few exceptions, the investment securities constitute a significant part of a bank's total resources, generally acting as a secondary source of liquidity. Like loans, investment securities are extensions of credit involving risks that carry commensurate rewards. However, risks in the investment portfolio should be minimized to ensure that liquidity and marketability are maintained. Each type of investment security carries one or more type of risk: credit, liquidity, market, and interest rate. Management should evaluate each of these factors when making investment decisions to ensure that overall portfolio objectives, and an appropriate balance between safety and rate of return, are achieved. Management cannot rely exclusively on credit agency ratings (as per the rules which became applicable for all existing and future bond holdings on January 1, 2013). Factors which should be considered in performing a review of investment securities include: the complexity and liquidity of the bank's portfolio; the adequacy of policies and procedures given the circumstances; trends and effect of investment activity; and the propriety of accounting systems. For additional information, refer to Section 3.3-Securities and Derivatives in the FDIC Risk Management Manual of Examination Policies, the Capital Markets Examination Handbook (found on the CSBS Examiner Reference CD), FDIC Capital Markets Resource Center, and FRB Trading and Capital-Markets Activities Manual. Refer to the DOB's Reference Material documents for a list of reference materials applicable to #13– Investment Securities.

## **INSTRUCTIONS**

Examiners must follow the requirements in the Examiner Bulletin addressing Guidelines for Procedures and Work Paper Documentation for Commercial Examinations.

All examiners performing these procedures must be listed above in the "Prepared By" section. Comments and findings for each step should be made in the comment box below each question. Reference to work paper documentation should also be included here. Documentation should be enough to create an audit trail of the examiner's thought process and all significant findings. Indicate compliance by selecting a response from the list in the dropdown box. Any response other than "YES" will require a comment.

Based on any weaknesses or risks noted in the CORE ANALYSIS PHASE or as directed by the EIC, the applicable SUPPLEMENTAL ASSESSMENT PHASE (SAP) should also be performed. Responses should be entered in the SAP. Summarize conclusions in the corresponding CORE ANALYSIS comment section.

Information on the Summary of Findings page must tie back to the findings noted within the procedure. The SEIC/EIC will determine which information in the Summary of Findings will be included in the Report of Examination.



The LPAQ icon indicates that this section focuses on Law, Policy and Asset Quality (LPAQ) elements within the procedure. This approach was developed to better utilize examiner resources by streamlining the procedures in a more risk-based approach. Examiners may perform the

designated sections which address LPAQ when no significant issues are indicated in the prior examination or

internal/external audits or identified during the planning and scoping of the examination. An examiner (FE II or higher) who is considered proficient in this area is eligible to perform the LPAQ review. Performing the LPAQ steps does not mean that other areas are to be ignored. As always, if at any time it becomes apparent that the scope of the work performed should be expanded, then do not hesitate to do so.

For the LPAQ review, perform the steps with the LPAQ icon; otherwise complete the CORE ANALYSIS PHASE and SUPPLEMENTAL ASSESSMENT PHASE as applicable. The SOF page should be completed and a summary rating assigned.

The EIC/AEIC should review this procedure when complete. Acknowledgement that this procedure has been reviewed by the EIC/AEIC will be noted on the SCOPE FORM.

EXAMINERS ARE RESPONSIBLE FOR EXERCISING SOUND JUDGMENT AND UTILIZING REASONABLE INVESTIGATIVE AND ANALYTICAL SKILLS TO ARRIVE AT AN ACCURATE ASSESSMENT OF THE RISK PROFILE OF THIS SEGMENT OF THE INSTITUTION'S OPERATIONS. PERFORMING ALTERNATE PROCEDURES NOT LISTED WITH THESE GUIDELINES MAY BE NECESSARY TO COMPLETE THIS RISK ANALYSIS.

# CORE ANALYSIS PHASE

<ul> <li>Prior Criticisms</li> <li>Determine whether deficiencies noted in the last examination and most recent ternal/external audit have been addressed and/or corrected by management. Detail how officiencies were corrected.</li> <li>aclude copy of exam and/or audit exceptions and management response in work papers, or unmarize exceptions/criticisms below or indicate the page number in the last examination export where deficiencies are noted, if applicable.</li> <li>omment:</li> <li>Balance and reconcile the investment portfolio and verify to Call Report schedules RC-B, C-B Memoranda, and RC_F (and related accrued interest). Comment on any deficiencies.</li> <li>any material differences (generally, more than 1% of total assets) are noted between eneral ledger and Call Report, notify the AEIC/EIC. Include copy of reconcilements in 13-of the work papers.</li> </ul>
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<ul> <li><i>immarize exceptions/criticisms below or indicate the page number in the last examination eport where deficiencies are noted, if applicable.</i></li> <li><b>omment:</b></li> <li><b>Reconcilement</b></li> <li>Balance and reconcile the investment portfolio and verify to Call Report schedules RC-B, C-B Memoranda, and RC_F (and related accrued interest). Comment on any deficiencies.</li> <li>any material differences (generally, more than 1% of total assets) are noted between eneral ledger and Call Report, notify the AEIC/EIC. <i>Include copy of reconcilements in 13-</i></li> </ul>
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omment:
. Investment Strategy & Policy
<b>a</b> . Utilizing the UBPR, evaluate the mix, volume, and yield for any substantial changes. omment to the extent of why the changes occurred, whether they are suitable practices, and ow they impact the bank. Refer to the FDIC Risk Management Manual and <i>FFIEC Joint upervisory Statement</i> issued in 1998. This joint statement provides guidance on sound ractices for managing the risks of investment activities, with a particular emphasis on market risk (primarily interest rate risk).
ee also: <u>Supervisory Policy Statement on Investment Securities and end-User Derivatives</u> <u>ctivities</u> .
omment:
a. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

	#13 Investments				
	Comment:				
LPAQ	<b>3c.</b> Review the Investment Policy and note any deficiencies in the policy or exceptions that have not been approved by the Board or their designee. Refer to <u>Appendix A</u> for Investment Policy guidance, and the primary guidance provided by the Office of the Comptroller of the Currency ( <u>OCC 2012-18</u> ), per its assigned responsibilities under the Dodd Frank Act, and followed by the FDIC and FRB.				
	Consider the following:				
	• Is the policy consistent with the requirements of the OCC rule issued June 13, 2012, <i>Alternatives to the Use of External Credit Ratings in the Regulations of the OCC?</i> See OCC Bulletin <u>OCC 2012-18</u> and related <u>Guidance</u> .				
	• Do bank policies establish criteria or benchmarks (by security type) that must be met to satisfy the investment-grade standard?				
	• Are the due diligence procedures specified in the investment policy sufficiently comprehensive for the identification, measurement, and monitoring of credit risk?				
	• Are credit risk limits reasonable?				
	Comment:				
	4. Management Oversight				
	<b>4.</b> Determine the adequacy of Board/committee oversight of investment activities considering committee minutes, if available, and the accuracy and adequacy of the reports submitted to the Board to include: transactions, composition, maturity distributions, ratings, average yield, WAL, appreciation/depreciation, policy and strategy compliance.				
	Comment:				
	5. Portfolio Risks				
LPAQ	<b>5a</b> . Since banks can no longer rely exclusively on external credit ratings, determine if management performs additional due diligence and analysis to determine whether a particular security is a permissible and appropriate investment and that this analysis is documented. Consider the following:				
	• Management adequately identifies the risks associated with each security prior to acquisition and periodically thereafter, consistent with the bank's policies. Ensure that the bank's policies and procedures specifically reflect the new post-Dodd Frank regulatory guidance, OCC Bulletin <u>OCC 2012-18</u> .				
	• Management adequately assesses whether the instrument's cash flows, risks, and potential returns continue to fit within the bank's investment strategy. Set forth the bank's credit expectations (ratios, ranges) for different types of bonds.				
	• Documentation is sufficient for management to make an informed investment decision. Bank management should have documentation on hand that reflects both				

	#13 Investments			
	the receipt of raw financial data, and the banks own analysis of it. Document both pre-purchase analysis, and post-purchase periodic monitoring. Spreadsheet-type presentation of credit analysis is acceptable, so long as the parameters outlined in the bank's policies and procedures are reflected therein. A narrative explanation and/or mitigation of any ratios not meeting the bank's approved limits is recommended.			
	• It is still permissible to refer to outside ratings (S&P, Moody's), as long as the bank's own documented analyses have been performed. See <u>Appendix E</u> for informational purposes only.			
	• It is permissible to delegate credit analysis to a third party firm, as long as the bank tests (audits) the work done, similar to the way loan review samples the loan portfolio.			
	Refer to <u>Appendix D</u> for additional guidance.			
	Comment:			
LPAQ	<b>5b</b> . Evaluate the portfolio for securities that may require further analysis, which may include reviews of bank-prepared analyses, prospectuses, trade confirmations, and accounting. Securities that may require further analysis include those instruments that have unusual, leveraged, or potentially highly variable cash flows, and embedded options (such as structured notes or CMO/REMIC, MBS, CDOs, ABS). Complete the respective <b>SAP</b> for any of these investments identified in the evaluation and summarize findings.			
	Performed 1 or more SAPs? Yes 🔲 No 🗌			
	Comment:			
LPAQ	<b>5c</b> . Ensure that any securities transfers between AFS/HTM or any sales out of the HTM category have occurred according to FAS 115 (FASB ASC Topic 320-Investments).			
	Compliant with ASC Topic 320? Choose an item. A response other than "YES" requires a comment.			
	Comment:			
LPAQ	5d. Determine if management is conducting trading activities. Ascertain whether trading activity is being conducted out of the AFS portfolio, rather than being appropriately reported and accounted for within a trading account. It can be difficult to tell the difference between active portfolio management, repositioning, gains trading, and outright trading. The final determinants are normally whether: management can explain and support their strategy; the approved investment policy and strategy concur; and the facts support the approved policy and strategy. Describe the bank's activities and whether the board and management monitor the activity, have the needed expertise to understand and manage the risks and rewards, and have			

	#13 Investments			
	appropriate policies, procedures, and controls in place. Refer to the <u>FRB Trading and Capital</u> <u>Markets Activity Manual</u> for Guidance. Also, the <u>FDIC Capital Markets Resource Center</u> for additional guidance on Trading Activities.			
	Comment:			
LPAQ	<b>5e.</b> Verify compliance with applicable investment limits if the portfolio contains Corporate bonds or notes, Municipal revenue bonds, privately issued mortgage-backed securities not fully backed by government guaranteed loans, other asset-backed securities, residual interests, mutual funds not invested completely in U.S. Government or Government-sponsored agency issues, adjustable-rate preferred stock, or money-market auction-rate preferred stock. Verify that all mutual funds and other permissible equity holdings are carried as available for sale, not held to maturity. Refer to Texas Finance Code §34.101 (Securities) and §34.104 (Mutual Funds), and the instructions for the Report of Condition, Schedule RC-B.			
	Compliance with TFC § 34.101: Choose an item.			
	Compliance with TFC § 34.104: Choose an item.			
	A response other than "YES" requires a comment.			
	Comment:			
LPAQ	<b>5f.</b> If the bank has a direct equity investment in a bank service corporation, agricultural credit corporation, small business investment corporation, banker's bank, or a housing corporation, evaluate compliance with investment limits specified in the Texas Finance Code §34.105. If the bank has a direct equity investment in a type other than those listed above, this statute prohibits the investment in equity securities except as necessary to avoid or minimize a loss on a loan or investment previously made in good faith. Verify that all permissible equity holdings are carried as available for sale, not held to maturity. Refer to Texas Finance Code §34.105 (Other Direct Equity Investments), and the instructions for the Report of Condition, Schedule RC-B.			
	Compliance with TFC § 34.105: Choose an item.			
	A response other than "YES" requires a comment.			
	Comment:			
LPAQ	<b>5g.</b> Determine if the bank engages in standby contracts, dollar rolls, securities lending or borrowing, or other nontraditional investment activities. If any of these activities are applicable to the bank, complete the <u>SAP</u> . If any hedging activities are noted within the investment portfolio, pass this information along to the examiner performing Funds Management.			

	<b>#13 Investments</b>			
	Performed SAP? Yes 🔲 No 🗌			
	Comment:			
	<b>5h</b> . Verify that management performs adequate due diligence when selecting securities firms/brokers and that existing firms are reviewed and approved annually. Refer to <u>Appendix B</u> – Securities Firm Selection for guidance.			
	Comment:			
	6. Internal Controls			
LPAQ	6. Ensure that no one individual has total control over the purchase, booking, and sales of investment securities. Compare safekeeping confirmations to bank records. Comment on bank practices and any significant deficiencies. Refer to <u>Appendix C</u> for a list of practices which cause supervisory concern.			
	Comment:			
	7. Concentrations			
LPAQ	<b>7a.</b> Comment on key concentrations of risk in the securities portfolio (i.e. securities by individual security/single issuer, by industry, geographic location, with similar characteristics, the same credit enhancer, etc.)			
	Comment:			
LPAQ	<ul> <li>7b. Provide a list of securities considered for classification to the AEIC/EIC.</li> <li>For guidance, refer to the following:</li> <li>The Department's Supervisory Memorandum 1007-Investment Securities;</li> </ul>			
	• Joint Agency Release on October 29, 2013 <u>"Uniform Agreement on the Classification</u> and Appraisal of Securities Held by Depository Institution" (see FIL-51-2013) which revises the 2004 -Uniform Agreement on the Classification of Assets and Appraisal of Securities Held by Banks and Thrifts; and			
	• FDIC Manual for Examination Procedures - Investment Securities.			
	Comment:			
	8. Final Analysis			
LPAQ	<b>8.</b> Assess overall management of the investment function, and its potential impact on the overall condition of the bank. Complete the <b><u>Summary of Findings</u></b> .			

## **SUMMARY OF FINDINGS**

#13 - INVESTMENTS				
Describe all strengths evident from the evaluation.				
Describe all weaknesses evident from evaluation, including violations of law/regulation/rules; noncompliance with Departmental policies/guidelines; internal policy deficiencies/ noncompliance; internal control weaknesses; MIS problems; and deficiencies in management supervision.				
Determine why weaknesses exist and comment on management's response and plan of action. Identify bank personnel making the response.				
SUMMARY RATING: Choose a rating				

Ratings: 1-Strong; 2-Satisfactory; 3-Less than satisfactory; 4-Deficient; 5-Critically deficient; NR-Not Rated



Provide copy of this page to EIC/AEIC. Receipt and review of this form by the EIC/AEIC will be evidenced by his/her initials in the appropriate column for this procedure on the SCOPE AND WAIVER FORM.

**Return to Core Analysis** 

# SUPPLEMENTAL ASSESSMENT PHASE

	SAP			
Document	t findings in the SAP. Summarize conclusions in the corresponding CORE ANALYSIS.			
Portfolio	o Risk (Q5b.)			
	STRUCTURED NOTES			
	A structured note is a derivative instrument based on the movement of an underlying index, stock price, interest rate benchmark, or other financial asset.			
	Refer to FDIC <u>FIL 59-2004</u> for detailed guidance. Also, consult Section 3.3 of the <u>FDIC</u> <u>Risk Management Manual</u> , the <u>FDIC Capital Markets Resource Center</u> , and the <u>FRB</u> <u>Trading and Capital-Markets Activities Manual</u> .			
LPAQ	1. Determine the following for Structured Notes purchased since the last examination:			
LIAQ	• Is there evidence that appropriate pre-purchase analysis was performed?			
	• Is there evidence that management understood the risks inherent in the bonds prior to purchase?			
	• How did the purchase fit into the bank's investment strategy at the time?			
LPAQ	2. Does the bank have sufficient information in file to determine the coupon and characteristics of the securities?			
LPAQ	3. Are any issues at, or approaching, nonaccrual due to index performance?			
LPAQ	4. Are any issues subject to principal loss due an index amortizing or other feature?			
	Comments:			
	Return to Core Analysis			
	STRUCTURED CREDIT			
	A structured credit investment is a bond that is backed by a pool of assets such as residential or commercial mortgage loans, bank loans or a variety of other consumer loans. The asset pools are structured into classes with varying maturities, payment schedules and levels of risk. Examples include residential mortgage-backed securities, commercial mortgage-backed securities, consumer asset-backed securities and collateralized debt obligations.			
	<b>CMO/REMIC</b> NOTE: Completion of supplemental section is not required for investments in Priority Bonds or Planned Amortization Classes (PACS), and Targeted Amortization Class (TAC) structures,			

	<ul> <li>which generally have less prepayment or volatility risk than Companion, Support and Shifting PAC bonds which have senior/subordinate prepayment structure.</li> <li>For more information on CMO/REMIC, consult Section 3.3 of the <u>FDIC Risk Management</u> <u>Manual</u>, the <u>FDIC Capital Markets Resource Center</u>, and the <u>FRB Trading and Capital-Markets Activities Manual</u>.</li> </ul>
LPAQ	1. For CMO purchased since last exam, verify that:
	• there is evidence of appropriate pre-purchase analysis performed;
	• there is evidence that management understood the risks inherent in the bonds prior to purchase; and
	• the purchase fits into the bank's investment strategy at the time.
LPAQ	2. Does the bank have a monitoring and reporting system in place to evaluate the expected and actual performance of any mortgage derivatives/mortgage-backed securities that appear to be of high volatility? (This may be covered under the bank's interest rate sensitivity report.)
	Comments:
	Return to Core Analysis

	SAP			
Document	Document findings in the SAP. Summarize conclusions in the corresponding CORE ANALYSIS.			
Portfolio Risks (Q5g)				
	NONTRADITIONAL INVESTMENTS			
LPAQ	<ol> <li>Are recordkeeping systems adequate to indicate that stated policy guidelines are being followed?</li> </ol>			
LPAQ	2. Does the bank maintain general ledger memorandum accounts which include the type, amount, maturity, market price, and cost of each contract?			
LPAQ	<b>3.</b> Are these activities reasonably correlated to the bank's other activities and business needs?			
LPAQ	<b>4.</b> Does management demonstrate adequate knowledge and expertise to sufficiently control the use of these activities?			

LPAQ	5. Does the bank engage in securities lending or borrowing? If so, then evaluate compliance with the FDIC's <u>FIL 81-97</u> regarding Securities Lending and <u>FIL 17-2006</u> regarding the Joint Final Rule on Securities Borrowing Transactions.		
	Compliance with:		
	FIL-81-97 Securities Lending: Choose an item.		
	FIL-17-20016 Securities Borrowing Transactions: Choose an item.		
	A response of "NO" requires a comment.		
	Comments:		
	Return to Core Analysis		

### **APPENDiX** A

## **Investment Policy Guidance**

The board is responsible for adopting comprehensive, written investment policies that clearly express the board's investment goals and risk tolerance. Policies should be tailored to the bank's needs. Consider the following in relation to the scope of investment activities:

- 1. Has the policy been reviewed / revised by the board of directors within the last year?
- 2. Does the policy address the following as appropriate:
  - Investment objectives
  - Types of permissible investments
  - Risk diversification guidelines
  - Maturity parameters
  - Independent credit analysis of investment securities, both pre-purchase and on a periodic basis post-purchase (Refer to <u>Appendix D</u> for further guidance)
  - Minimum quality ratings
  - Documentation requirements
  - Valuation procedures and frequency
  - Guidelines for pledging securities
  - Guidelines for other money market instruments such as due from time deposits, federal funds sold, commercial paper, securities purchased under agreements to resale, etc.
  - Hedging, swaps, caps, repos, or other nontraditional investment activities, or the prohibition thereof, if applicable
  - Accounting guidelines for securities
  - Periodic review of the securities portfolio to determine that investment objectives and FASB 115 (FASB ASC Topic 320-Investments) strategies remain appropriate, and objectives are being achieved
  - Trading limits and guidelines, if applicable
  - Personnel authorized to initiate transactions
  - Investment authority limitations
  - Guidelines for selecting and monitoring securities firms and salespersons to be utilized
  - Analytical data to be provided to the board/investment committee
  - Conflict of interest guidelines for employees who are directly involved in purchasing and selling securities, to the extent they also engage in personal securities transactions with these same securities firms

• Guidelines regarding the receipt of gifts, gratuity, or travel expenses by directors, officers, and employees from approved securities dealer firms and their employees.

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## **APPENDIX B**

#### **Securities Firm Selection**

Management's due diligence should consider the following:

- The ability of the securities firm to fulfill commitments as evidenced by capital strength, liquidity, and operating results (based on current financial statements, annual reports, etc.);
- The firm's general reputation for financial stability and fair and honest dealings (based upon general inquiries);
- The salesperson's general reputation, including background check (or resume); and
- Information available from state or federal securities regulators and securities self-regulatory organizations, such as National Association of Securities Dealers, regarding formal enforcement actions against the brokerage firm, salesperson, and affiliates.

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## **APPENDIX C**

#### **Internal Controls**

Activities that create supervisory concern include:

- Gains trading, when-issued trading, pair-offs, extended settlements, repositioning repurchase agreements, short sales, or adjusted trading.
- Incomplete transaction documentation.
- Contravention of policy limits for transaction amounts or types with individual dealers.
- Inaccurate reporting or accounting.
- Failure to monitor personal investment activities of staff with securities activities responsibilities.
- Transactions completed by unauthorized personnel.
- Transactions which are prohibited by regulation or statute due to being excessive in amount, or of an impermissible type of instrument.

These may be determined through activity reviews and file sampling.

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#### **APPENDiX D**

#### **Portfolio Risks**

#### **Determination of Permissible Investments**

#### (Excerpt from OCC's <u>Guidance on Due Diligence Requirements in Determining Whether Securities Are Eligible</u> <u>for Investment</u> issued June 13, 2012 as part of OCC Bulletin <u>OCC 2012-18</u>

Financial institutions are expected to be well acquainted with fundamental credit analysis as this is central to a well-managed loan portfolio. The foundation of a fundamental credit analysis – character, capacity, collateral, and covenants – applies to investment securities just as it does to the loan portfolio. Accordingly, banks should conduct an appropriate level of due diligence to understand the inherent risks and determine that a security is a permissible investment. The extent of the due diligence should be sufficient to support the institution's conclusion that a security meets the investment grade standards. This may include consideration of internal analyses, third party research and analytics including external credit ratings, internal risk ratings, default statistics, and other sources of information as appropriate for the particular security. Some institutions may have the resources to do most or all of the analytical work internally. Some, however, may choose to rely on third parties for much of the analytical work. While analytical support may be delegated to third parties, management may not delegate its responsibility for decision-making and should ensure that prospective third parties are independent, reliable, and qualified. The board of directors should oversee management to assure that an appropriate decision-making process is in place.

The depth of the due diligence should be a function of the security's credit quality, the complexity of the structure, and the size of the investment. The more complex a security's structure, the more credit-related due diligence an institution should perform, even when the credit quality is perceived to be very high. Management should ensure it understands the security's structure and how the security may perform in different default environments, and should be particularly diligent when purchasing structured securities. For example, a bank should be able to demonstrate an understanding of the effects on cash flows of a structured security assuming varying default levels in the underlying assets.

Banks are expected to consider a variety of factors relevant to the particular security when determining whether a security is a permissible and sound investment. The range and type of specific factors an institution should consider will vary depending on the particular type and nature of the securities. As a general matter, a bank will have a greater burden to support its determination if one factor is contradicted by a finding under another factor.

The following matrix provides examples of factors for banks to consider as a part of a robust credit risk assessment framework for designated types of instruments. The types of securities included in the matrix require a credit-focused pre-purchase analysis to meet the investment grade or safety and soundness standards. Again, the matrix is provided as a guide to better inform the credit risk assessment process. Individual purchases may require more or less analysis dependent on the security's risk characteristics, as previously described.

Key Factors	Corporate Bonds	Municipal Govt General Obligations	Revenue Bonds	Structured Securities
Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	х	х	х	х
Confirm risk of default is low and consistent with bonds of similar credit quality	х	х	х	х
Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security	х	х	х	x
Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues. Consider debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority, and management experience		х		
Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values		х	х	
Assess the source and strength of revenue structure for municipal authorities. Consider obligor's financial condition and reserve levels, annual debt service and debt coverage ratio, credit enhancement, legal covenants, and nature of project			х	
Understand the class or tranche and its relative position in the securitization structure				х
Assess the position in the cash flow waterfall				Х
Understand loss allocation rules, specific definition of default, the potential impact of performance and market value triggers, and support provided by credit and/or liquidity enhancements				х
Evaluate and understand the quality of the underwriting of the underlying collateral as well as any risk concentrations				х
Determine whether current underwriting is consistent with the original underwriting underlying the historical performance of the collateral and consider the effect of any changes.				х
Assess the structural subordination and determine if adequate given current underwriting standards.				х
Analyze and understand the impact of collateral deterioration on tranche performance and potential credit losses under adverse economic conditions				х

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## **APPENDIX E**

For Informational Purposes Only: Credit Ratings Utilized by Outside Rating Services			
Investment Quality			
<u>Moody's</u> Aaa Aa A-1 A Baa-1 Baa	Standard & Poors AAA AA A BBB		
Sub-Invest	ment Quality		
<u>Moody's</u> Ba B Caa Ca C	Standard & Poors BB B CCC CC C DDD DD D D		

(Return to Core Analysis-5a)