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INTRODUCTION

Investment securities can provide financial institutions with earnings, liquidity, and capital appreciation. However, investments can also involve significant risks. Therefore, comprehensive risk management programs and appropriate board oversight are used by institutions to identify, measure, monitor, and control investment risks. This section describes various risks and common risk management practices associated with investment activities. The section also describes common investment types, trading activities, accounting and reporting standards, and safety and soundness principles.¹

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RISK MANAGEMENT PROGRAMS

Consistent with the Interagency Guidelines Establishing Standards for Safety and Soundness,² effective risk management programs include internal controls that are commensurate with the size of the institution and the nature, scope, and risk of its activities. Effective programs address organizational structures and lines of authority, risk assessments, reporting requirements, and compliance with applicable laws and regulations. Institutions establish policies that typically include internal controls, risk limits, and guidance designed to provide for the identification, measurement, management, and reporting of risk exposures. The *Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities (Policy Statement)*, issued via Financial Institution Letter-45-98, provides information on sound practices for institutions to consider in managing investment risks.

Policy Statement

The Policy Statement describes elements of sound risk management programs for held-to-maturity and available-for-sale securities, certificates of deposit held for investment purposes, and end-user derivative contracts not held in trading accounts.³ Fundamental program components discussed within the Policy Statement include:

- Board oversight and management supervision;
- Policies, procedures, and risk limits;
- Risk identification, measurement, and reporting;
- Internal controls and independent reviews; and
- Accounting systems and procedures.

¹ Section 39 of the Federal Deposit Insurance Act as implemented by Appendix A of Part 364 *Interagency Guidelines Establishing Standards for Safety and Soundness* establishes various safety and soundness standards.

² *ibid.*

Board Oversight

Board oversight is an integral part of effective risk management programs. Oversight activities involve approving investment policies and ensuring management has the expertise to manage the investment function and to establish and enforce approved policies and procedures. To effectively perform its oversight responsibilities, a prudent board regularly reviews management reports about investment activities and risk levels and requires management to demonstrate compliance with approved policy guidelines and risk limits. A competent board understands investment activities. Common oversight activities include:

- Establishing clear investment objectives;
- Maintaining appropriate investment, diversification, and risk management standards;
- Establishing appropriate risk limits and investment authorities for individual officers;
- Reviewing and understanding investment activities and acting as needed in response to management reports;
- Assessing investment performance;
- Monitoring management's compliance with the board's investment goals, policies, and risk limits;
- Assessing the adequacy of risk management programs; and
- Authorizing independent reviews of investment activities and appraising the review's findings.

Management Supervision

Senior management is responsible for the daily supervision of investment activities. To effectively perform its responsibilities, management needs to understand the nature and level of risks involved in the institution's investments and how such risks may impact the institution's overall business strategies and risk profile. Common management activities include:

- Developing investment strategies that meet board objectives, standards, and risk appetite;
- Implementing policies and procedures that promote strong internal controls;
- Selecting investments consistent with board objectives and risk limits;

³ An example of an end-user derivative contract is a swap contract entered into when the depository institution makes a fixed rate loan but wants to change the income stream from a fixed to floating rate.

- Understanding the institution's investment risks;
- Identifying, measuring, monitoring, and controlling investment risks;
- Reporting investment activities and risks to the board;
- Ensuring investment account reconciliations are conducted by personnel independent of those initiating investments;
- Employing and training competent staff; and
- Evaluating and updating investment programs.

Effective management personnel identify and measure the risks associated with individual investments prior to purchase and periodically thereafter. Ongoing analysis may be performed at the institutional, portfolio, or individual instrument level. Prudent management of investment activities involves assessing the risk profile of particular investments in light of the effect on the institution's overall risk profile. Often, management measures risk exposures for each type of investment and then aggregates those exposures with the exposures arising from other business activities to determine the institution's overall risk profile.

Institutions with complex or extensive investment activities may benefit from using the portfolio approach for managing investment risks. Under this approach, management evaluates an investment's effect on overall portfolio risk and return levels. The process generally requires management to establish board-approved portfolio risk limits and a system for measuring overall portfolio risks and returns. The results of complex portfolio measurements are often incorporated into overall interest rate risk or asset/liability management programs.

Prudent risk management programs preclude management from investing in complex investments or investment strategies if institution staff lacks the expertise to properly understand and manage the risks. Even when adequate staff expertise exists within an organization to manage the risks, effective risk management programs include policies, controls, and limits that govern complex investment activities.

Although management may use external consultants and investment advisors for assistance and advice, it cannot delegate its risk management responsibilities to a third party. Management is ultimately responsible for understanding and managing investment risks and documenting its review and acceptance of a third party's due diligence, portfolio recommendations, and analytical methodologies. When management uses third-party analysis, such as investment-level and portfolio-level risk measurement, prudent risk management includes ensuring independence of the analysis from sellers or counterparties.

Policies

The board is responsible for adopting comprehensive, written investment policies that reflect its investment goals and risk tolerances. Effective policies are tailored to the institution's size, complexity, risk profile, and business model and typically address:

- Investment objectives and performance goals,
- Lines of responsibility and authority for all investment activities,
- Authorized activities and instruments,
- Risk limits,
- Broker/dealer selection criteria,
- Risk and performance measurements,
- Internal controls and independent reviews,
- Reporting requirements, and
- Accounting and taxation considerations.

Effective policies generally include guidelines for the acquisition and ongoing management of securities and derivative instruments. The policies may divide authorized investments into segments based on their similar risk characteristics and describe appropriate pre-purchase analysis for each identified segment.

Effective investment policies define criteria for identifying and measuring the risks associated with individual transactions prior to acquisition and periodically thereafter. Accordingly, institutions often have policies that define the characteristics of authorized instruments and include sufficient detail to identify authorized instruments. For example, a policy that merely authorizes management to purchase federal agency securities ("agency") may not be sufficiently detailed. The risk and return characteristics of agency pass-through securities, step-up structured notes, and callable debt instruments are very different. Therefore, effective policies delineate the specific types of agency securities that may be purchased.

Generally, policies also specify the level of risk analysis to be conducted prior to purchase of a security. The goal of pre-purchase analysis is to identify and quantify material risks and returns. However, not all investments require complex pre-purchase analysis. Relatively low-risk or standardized instruments generally require less in-depth analysis than more complex or volatile instruments. Effective policies delineate the type, depth, and documentation requirements for analyzing each type of investment.

When a prudent management team wishes to purchase an investment not specifically authorized by the board, it analyzes the risks and potential returns of the instrument and

obtains the board's permission to add the instrument to the list of authorized investments. Comprehensive policies include such exception-to-policy procedures for requesting and reporting expedited investment purchases. Such policies typically establish a scope for internal audits or independent reviews that is sufficient relative to the extent, complexity, and risk profile of the investment activities.

Risk Limits

The board is responsible for establishing investment risk limits and ensuring management demonstrates compliance with approved limits. Senior management is responsible for establishing and enforcing policies and procedures, including risk limits, consistent with the board's goals, objectives, and risk appetite. Risk limits may be expressed in relation to the institution's overall risk profile or total portfolio risks, portfolio-segment risks, or individual investment risks.

Boards often set concentration limits for investments that share common risk characteristics or have heightened sensitivity to similar economic, financial, or other risk factors. For example, boards may establish concentration limits for:

- Investments with historically volatile market values or cash flows;
- Structured investments with underlying collateral consisting of higher risk assets or assets that may have limited liquidity in a stress environment;
- Investments that do not have readily determinable market values; and
- Investments that rely on a common risk mitigant, such as bond insurance, and
- Investment maturities and portfolio duration.

Effective boards establish risk limits that are consistent with the institution's strategic plans and overall asset/liability management objectives. Risk limits are often expressed relative to asset, capital, or income levels. General risk limit considerations include:

- Market risk,
- Credit risk,
- Liquidity risk,
- Asset limits, and
- Maturity limits.

Market risk reflects threats to an institution's financial condition resulting from adverse changes in the value of its investment holdings due to external market factors such as interest rates, equity prices, foreign exchange rates, or commodity prices. The three principal types of market risk are price risk, interest rate risk, and basis risk.

Price risk is the possibility that an instrument's price volatility will unfavorably affect income, capital, or risk reduction strategies. Price risk is usually influenced by other risks. For example, a bond's price risk could be a function of rising interest rates, while a currency-linked note's price risk could be a function of devaluation in the linked currency.

Interest rate risk is the possibility that an instrument's value will fluctuate in response to current or expected market interest rate changes. The value of fixed rate investment securities generally decline when interest rates rise, potentially impacting liquidity and capital.

Yield curve risk is the possibility that an instrument's value will fluctuate in response to a nonparallel yield curve shift. Yield curve risk is a form of interest rate risk.

Basis risk is the possibility that an instrument's value will fluctuate at a rate that differs from the change in value of a related instrument. For example, three-month Eurodollar funding is not perfectly correlated with Treasury bill yields. This imperfect correlation between funding cost and asset yield creates basis risk.

Market risk limits often quantify maximum permissible portfolio and individual-instrument price sensitivity as a percentage of capital or earnings. Capital-based risk limits illustrate the threat to the institution's viability, while earnings-based limits reflect potential profitability effects. In addition to capital- or earnings-based limits, the board may choose to establish limits relative to total assets, total investment securities, or other criteria. Such limits may be based on regulatory capital or equity capital pursuant to Generally Accepted Accounting Principles.

Credit risk reflects the possibility that an issuer or counterparty will fail to meet its financial obligations. Prudent institutions assess the creditworthiness of the issuer or counterparty before purchasing investments or entering into derivative contracts. The board may establish minimum acceptable creditworthiness requirements for individual investments or credit risk limits for securities with similar credit risk profiles. Boards often establish credit risk limits that restrict management to acquiring instruments that meet investment grade standards. The board may also restrict credit risk exposure by establishing issuer and counterparty concentration limits.

A security is investment grade if the issuer of the security has adequate capacity to meet the financial commitments under the security for the projected life of the asset or exposure. The definition of investment grade is included in 12 CFR 1 (Title 12, Part 1 of the Code of Federal Regulations). The rules codified in 12 CFR 1 prescribe

standards under which national banks may purchase securities but are also applicable to FDIC-supervised institutions because state chartered banks and savings associations are generally prohibited from engaging in activities and investments that are not permissible for national banks. To meet the standard, management must determine that the risk of default by the obligor is low, and that full and timely repayment of principal and interest is expected. For structured securities (securities that rely on the cash flows and performance of underlying collateral, not the credit of the issuer), the determination that full and timely repayment of principal and interest is expected may be less influenced by the condition of the issuing entity, and influenced more by the quality of the underlying collateral, the structure of the security and the cash flows set out in the governing documents.

Liquidity risk reflects the possibility that an institution cannot immediately convert into cash an investment or offset a particular position at little or no loss of value. Assets that have high market or credit risk or are deeply subordinated will tend to be less liquid. High volatility and lengthy duration, along with difficulty and uncertainty of valuation are all characteristics that may reduce a security's marketability for liquidity purposes. For example, a security whose value is model dependent and conditional on the assumptions applied, will generally be less liquid, especially during times of stress. Less-marketable instruments also include securities such as obscure or thinly traded issues, complex instruments, defaulted securities, and instruments that have large unrealized holding losses.

Asset limits address concentration risk in assets that share similar characteristics, such as specific issuers, market sectors, and instrument types. When appropriately diversified, investment portfolios may have lower risk for a given yield or earn higher yields for a given risk level. Boards generally establish limits commensurate with the institution's individual circumstances, such as limiting total investments in a particular security type (e.g., municipal securities, corporate bonds, and private label mortgage backed securities) to a specific percentage of assets or capital.

Maturity limits balance an investment's maximum stated maturity, weighted average maturity, or duration (at an individual security or portfolio-wide level) with the individual circumstances of the institution. Considerations include items such as the board's risk appetite, current and anticipated loan demand, the stability and mix of deposits and other funding sources, and the risk of higher market interest rates. Prudent maturity limits complement market-risk and liquidity-risk limits and the board's overall investment goals.

Standardized risk-measurement systems and methodologies enhance management's ability to capture material risks and accurately calculate risk exposures. Comprehensive systems provide the board with consistent, accurate risk measurements in a format that directly illustrates compliance with established risk limits.

Internal Control Programs

Internal controls are critical components of effective investment programs and should be carefully evaluated by examiners. Effective internal controls include official lines of authority, appropriate separation of duties, prudent compensation that does not encourage inappropriate risk-taking, and independent reviews of investment activities.

Sound internal control programs are commensurate with the volume and complexity of investment activities, and independent from related operations. Examiners should review the separation of duties between individuals who execute, settle, and account for transactions, as well as those who generate and maintain board and management reports. Effective controls promote efficiency, reliable internal and regulatory reporting, and compliance with laws, regulations, and internal institution policies.

The board is responsible for establishing general internal control guidelines that management translates into clear procedures that govern daily operations. Effective internal control programs are commensurate with the volume and complexity of the institution's investment activity, and generally include procedures for the following:

- Portfolio valuation and monitoring,
- Personnel,
- Compensation,
- Settlement,
- Physical controls and documentation,
- Conflicts of interest,
- Accounting,
- Reporting, and
- Independent review.

A more detailed description of these elements of an effective internal control program follows:

Portfolio valuation and monitoring typically includes independent portfolio pricing. Independent pricing not only helps ensure accurate portfolio accounting and reporting but allows management to assess the liquidity and marketability of specific issues. For thinly traded instruments and other illiquid or complex instruments, independent pricing may be difficult to obtain. In such cases, estimated or modeled values may be used. Prudent management understands and verifies the methods and assumptions used to estimate

values. Pricing provided solely by the broker who sold the security is not considered independent pricing.

Portfolio monitoring helps to inform senior management and the board of investment performance and potential risks on an ongoing basis. Monitoring efforts can focus on updating securities issuer credit risk information and the potential impact of market risk exposure from higher interest rates or other stress. This can help inform management's assessment of liquidity and capital sufficiency.

Personnel guidelines can ensure that sufficient staffing resources and expertise exist for the institution's approved investment activities.

Compensation guidelines concern individuals that can expose the institution to investment risks and are typically designed to ensure that compensation, especially incentive compensation, is balanced and adheres to compensation plans that don't encourage unsafe and unsound risk taking.

Settlement guidelines are designed to limit default and timing risk and provide clear requirements for confirmation, clearance, and settlement practices for specific asset types. As an example of a prudent internal control over settlement activity, supporting documents, such as broker's confirmations and account statements are reviewed by persons who do not also have sole custody of securities or have authorization to execute trades.

Physical controls and documentation guidelines describe requirements regarding the acquisition, recordation, and retention of purchased and sold instruments, and the retention and safeguarding of important documents.

Comprehensive invoice reviews cover all investments sold or purchased. Purchase invoices or confirmations can be compared to delivered securities or safekeeping receipts to determine whether the securities delivered are the securities purchased. Invoices and confirmations display each instrument's original purchase price, which provides a basis to establish book value and identify reporting errors. Invoice reviews can also be helpful to determine whether the institution is involved in any of the following inappropriate activities:

- Engaging one securities dealer or representative for virtually all transactions,
- Purchasing from or selling to the institution's trading department,
- Unsuitable investment practices, or
- Inaccurate reporting.

Conflict of interest guidelines list all applicable employees who are authorized to purchase and sell securities. Effective guidelines are typically designed to ensure that all directors,

officers, and employees act in the institution's best interest. Boards often adopt policies prohibiting institution personnel from engaging in personal security transactions with the institution's approved securities broker/dealers without prior board approval. Comprehensive policies also include guidelines that address when directors, officers, and employees may accept gifts, gratuities, travel expenses, or other benefits, from securities broker/dealers and their representatives.

Accounting practices are designed to follow established accounting standards, opinions, and interpretations such as those listed in the Accounting section below.

Reporting procedures are designed to follow established internal guidelines discussed in the Risk Reporting section.

Independent reviews of the risk management program are generally conducted at regular intervals to ensure the integrity, accuracy, and reasonableness of the program. Independent reviews may encompass internal and external audits. The scope and formality of independent reviews correspond to the size and complexity of the institution's investment activities and are at least commensurate with the independent reviews of other primary institution activities. Effective reviews typically assess:

- Adherence to board policies and risk limits;
- Compliance with laws and regulations;
- The adequacy of internal controls and documentation standards;
- The adequacy and accuracy of risk measurement and monitoring systems;
- The timeliness, accuracy, and usefulness of reporting systems;
- Personnel resources, competencies, and compensation;
- Accounting practices; and
- Conflicts of interest.

For institutions with significant investment activities, internal and external audits are integral to controlling risks. Such institutions generally conduct periodic, independent reviews to ensure the integrity, accuracy, and reasonableness of their risk management program. The reviews consider items such as:

- Compliance with and the appropriateness of investment policies, procedures, and limits;
- The appropriateness of the institution's risk measurement and monitoring system given the nature, scope, and complexity of its activities; and
- The timeliness, integrity, and usefulness of reports to the board of directors and senior management.

Prudent management practices often include the independent testing and validation of sophisticated risk measurement systems, particularly those developed internally. The findings of such reviews are reported directly to the board at least annually. Effective boards review all independent review reports and ensure any reported issues or policy exceptions are appropriately addressed.

Examiners should evaluate the scope and adequacy of all independent reviews and may, when appropriate, place reliance on review findings during examinations. However, if the scope or adequacy of a review appears deficient, examiners should perform independent procedures. When warranted, examiners should conduct a detailed review of all material investment activities and note those items, as appropriate, in the Report of Examination.

Accounting

Accurate accounting is essential to the evaluation of an institution's risk profile and the assessment of its financial condition and capital adequacy. Reporting treatment for securities activities should be consistent with the institution's business objectives, U.S. Generally Accepted Accounting Principles (U.S. GAAP), and regulatory reporting standards. When necessary, examiners should consult regional accounting specialists for additional guidance.

ASC Topic 320, *Investments - Debt Securities*, requires all institutions to categorize debt securities as held-to-maturity (HTM), available-for-sale (AFS), or trading. Different accounting treatment applies to each category. Only debt securities that management has the positive intent and ability to hold to maturity may be designated as HTM and carried at amortized cost.

If a debt security can be contractually prepaid, or otherwise settled in such a way that the institution would not recover substantially all of its recorded investment, the security may not be designated as HTM. Therefore, debt securities with a risk of substantial investment loss in the event of early prepayment, such as interest-only, stripped mortgage-backed securities, should be categorized as either trading or AFS and reported at fair value on the balance sheet.

AFS debt securities are those that management has not designated for trading or as HTM. AFS debt securities are reported at fair value, with unrealized holding gains and losses generally excluded from net income and reported in accumulated other comprehensive income (AOCI), a separate component of equity capital.

Prior credit loss accounting related to other-than-temporary impairment (OTTI) is superseded upon implementation of

ASC Topic 326, *Financial Instruments - Credit Losses*. See the section on *Decline in Fair Value, Accounting for Credit Losses on HTM and AFS Debt Securities under ASC Topic 326* for further information.

Debt securities held principally for selling in the near term must be reported as trading and carried at fair value, with unrealized gains and losses promptly recognized in current earnings and regulatory capital. Refer to the Call Report instructions for additional information.

The substance of management's securities activities determines whether securities reported as HTM or AFS should instead be reported as held for trading. Changes in the fair value of trading assets are reported in current earnings, which differs from the accounting for HTM and AFS securities. Therefore, reporting trading securities as HTM or AFS could be considered an unsafe or unsound banking practice, because the different accounting treatment could misrepresent the institution's financial statements.

ASC Topic 321, *Investments - Equity Securities*, requires all institutions with investments in equity securities with readily determinable fair values (except those accounted for under the equity method and those that result in consolidation) to measure the investments at fair value with the changes in fair value recognized in net income. Institutions with equity securities that do not have readily determinable fair values may elect to measure these securities at cost, minus impairment, if any, plus or minus changes resulting from observable price changes in an orderly transaction for identical or similar investments of the same issuer.

Equity securities (which include investments in mutual funds) may be reported as either held for trading or not held for trading for regulatory reporting purposes. Equity securities not held for trading with readily determinable fair values are reported as such on the balance sheet. But equity securities not held for trading without readily determinable fair values are reported as Other Assets. Federal Home Loan Bank and Federal Reserve Bank stock are not within the scope of ASC Topic 321 and continue to be accounted for at cost and reported in Other Assets.

Premiums and discounts should be accounted for according to the Call Report Instructions. ASC Subtopic 310-20, *Receivables - Nonrefundable Fees and Other Costs*, as amended, requires premiums to be amortized to the earliest call date, with limited exceptions. If the call option is not exercised at its earliest call date, management resets the effective yield using the payment terms of the debt security in accordance with ASC Subtopic 310-20. Inadequately amortized premium amounts should be adversely classified as Loss. The amended accounting guidance does not change the accounting for debt securities

held at a discount (i.e., amortized to maturity). For additional information, refer to the Call Report glossary on *Premiums and Discounts*.

Trade date accounting is preferred to settlement date accounting for Call Report purposes (i.e., regulatory reporting purposes) to report HTM securities, AFS securities, and trading assets (other than derivatives). However, if the reported amounts under settlement date accounting do not materially differ from those under trade date accounting, settlement date accounting is acceptable.

For information on derivatives and hedge accounting, refer to the Call Report Instructions and ASC Topic 815, *Derivatives and Hedging*.

← COMMON INVESTMENTS

U.S. Treasury Obligations (Treasuries) are backed by the full faith and credit of the U.S. government and are generally viewed as possessing little or no credit risk. Treasuries are issued with semi-annual coupon payments or sold at a discount with interest paid at maturity. Maturities for Treasuries range from a few days to 30 years. The most common types are Treasury bills, notes, bonds, and Treasury Inflation Protected Securities.

U.S. Government Agencies are wholly owned or controlled operations of the federal government that may raise funds through the Federal Financing Bank, which is backed by the full faith and credit of the U.S. Government.

Government-Sponsored Enterprises (GSEs) are entities created by acts of Congress to support specific public purposes. The GSEs are separately chartered or incorporated by the federal government and privately owned. Securities issued by the GSEs are not backed by the full faith and credit of the U.S. Government. However, market participants often perceive that there is an implied government guarantee supporting these obligations. For example, in 2008, the U.S. Department of Treasury provided \$190 billion in financial support to the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Additionally, both enterprises were placed into conservatorship by the Federal Housing Finance Agency. The market's perception of a GSE's credit standing may affect the price of such securities.

Municipal obligations are debt instruments issued by states, counties, cities, or their political subdivisions that allow them to borrow money to build, repair, or improve infrastructure such as schools, streets, and bridges. In general, municipal obligations may be a general obligation backed by the full faith, credit, and taxing authority of the

government issuer, or a revenue bond where income generated by a public facility such as a sewer, electrical, or power system is first used to repay the debt. Bank Qualified bonds (BQ bonds) are a type of municipal obligation issued by entities with not more than \$10 million in annual bond issuances. BQ bonds provide institutions that purchase them with certain favorable tax treatment.

Corporate Bonds are debt securities issued by companies to raise funds and can be secured or unsecured. Collateral used in secured issues commonly includes real property, machinery, equipment, accounts receivable, stocks, bonds, or notes. Corporate bonds have a wide range of ratings and yields because of corporations' varying financial strength.

Mortgage-Backed Securities (MBS) are instruments secured by pools of mortgages and issued in the secondary mortgage market. An MBS can be issued by a government agency, GSE, or non-government entity (private-label). The instruments may be *pass-through* securities in which investors own an undivided interest in a pool of mortgages and receive pro-rata shares of cash flows from the underlying mortgage pools. Pass-through mortgage securities are sometimes called single class securities. Conversely, mortgage derivative securities, such as collateralized mortgage obligations (CMOs), are multi-class securities where the cash flows of the assets in the collateral pool are divided among the different classes to create securities with distinctive risk characteristics and different cash flow priority claims.

Asset-Backed Securities (ABS) are secured debt instruments (usually with multi-classes) with underlying collateral consisting of a wide array of assets such as home equity loans, credit card receivables, automobile loans and leases, and trade receivables.

Structured Credit Products is a general term used to describe financial instruments where repayment is derived from the performance of the underlying assets, other reference assets, or third parties that support the instrument. Such products include, but are not limited to, asset-backed commercial paper programs (ABCP); CMOs; ABSs; collateralized loan obligations (CLOs); and collateralized debt obligations (CDOs), including securities backed by trust-preferred securities.

Permissible Activities

Part 362 of the FDIC Rules and Regulations, *Activities and Investments of Insured State Banks*, implements Section 24 of the Federal Deposit Insurance Act. Part 362 generally prohibits, with certain exceptions, insured state banks and their subsidiaries from engaging in activities and investments that are not permissible for national banks. National bank investment activities are governed by the

National Bank Act (12 USC, §21) and Office of the Comptroller of the Currency regulations (12 CFR, Part 1). 12 CFR, Part 1 outlines five general types of investments that are permissible for national banks. The five investment types are as follows.

Type I: Obligations of the United States; general obligations of state or political subdivisions; unsecured debt and pass-through obligations of Federal Home Loan Banks, Government National Mortgage Association, FNMA and FHLMC. Preferred stock issued by FNMA, FHLMC and the Student Loan Marketing Association. Municipal revenue bonds are also considered Type I securities if held by well-capitalized institutions. Type I securities are considered permissible investments regardless of whether they meet the investment grade standard.

Type II: State obligations for housing, university and dormitory purposes, as well as obligations of development banks, the Tennessee Valley Authority, and the U. S. Postal Service.

Type III: An investment security that does not qualify as a Type I, II, IV, or V security, such as corporate bonds and municipal revenue bonds. This category includes most trust-preferred securities.

Type IV: Certain residential and commercial mortgage-related securities, and small business related securities backed by a pool of obligors.

Type V: An investment grade, marketable security that is not a Type IV security and is fully secured by interests in a pool of loans to numerous obligors and in which a national bank could invest directly such as asset-backed securities and certain mortgage-backed securities.

Management's analyses of the type II, III, IV, or V securities will demonstrate that the investments meet the definition of investment grade as required under 12 CFR Part 1 of the Code of Federal Regulations. While investment grade is no longer presumed when a security is rated in the four highest ratings bands by a nationally recognized statistical rating organization (NRSRO), NRSRO ratings can be used as one component in the process management uses to satisfy the investment grade standard. If used, examiners should determine whether management has a basic understanding of the methodologies the rating agencies use, as well as the limitations associated with these methodologies.

In limited circumstances, the FDIC may grant an exception to Part 362, on a case-by-case basis, if the FDIC determines that:

- The activity presents no significant risk to the deposit insurance fund, and
- The institution complies with the FDIC's capital regulations.

While Part 362 contains investment type restrictions, it does not include the investment amount restrictions that apply to national banks. For example, a national bank may invest in Type II securities issued by any one obligor not to exceed 10 percent of the bank's capital and surplus. A state chartered institution, however, is not bound to the percentage restrictions found in 12 CFR Part 1. Note, though, that the state where the bank is chartered may have its own exposure restrictions with which the bank must comply.

Trading activity within the HTM or AFS portfolio is an unsuitable investment activity and deemed an unsafe or unsound banking practice. The following activities are unsuitable and speculative within the HTM or AFS portfolio, and any related security acquisitions should be reported as trading assets in the institution's Call Report. Examiners should scrutinize institutions that show a pattern of trading-like activity within their HTM or AFS portfolios to determine whether some or all of the securities should be redesignated as trading assets. Examiners may consult with their regional accountant for guidance on redesignation. Comprehensive internal control programs are typically designed to prevent such unsuitable investment activities involving:

- Gains trading,
- When-issued securities,
- Pair-offs,
- Extended settlements,
- Repositioning repurchase agreements,
- Short sales, and
- Adjusted trading.

Gains trading is the purchase and subsequent sale of a security at a profit after a short holding period. Securities acquired for this purpose that cannot be sold at a profit are typically retained in the AFS or HTM portfolio. Gains trading might be used to defer loss recognition, as unrealized losses on debt securities in such categories do not directly affect regulatory capital and generally are not reported in income until the security is sold for non-advanced approach banking organizations that made the AOCI opt out election.

When-issued securities trading is the buying and selling of securities in the period between the announcement of an offering and the issuance and payment date of the securities. A purchaser of a when-issued security acquires the risks and rewards of owning a security and may sell the when-issued

security at a profit before having to take delivery and pay for it.

Pair-offs are security purchase transactions that are closed-out or sold at or before the settlement date. In a pair-off, an institution commits to purchase a security. Then, before the predetermined settlement date, management pairs off the purchase with a sale of the same security. Pair-offs involve net settlements when one party to the transaction remits the difference between the purchase and sale price to the counterparty. Pair-offs may also involve the same sequence of events using swaps, options on swaps, forward commitments, options on forward commitments, or other derivative contracts.

Extended settlement involves a securities trade that settles on a date later than the regular-way settlement period. Regular-way settlement is one business day after the trade date for U.S. Government and federal agency securities (except MBSs and derivative contracts). Regular-way settlement for corporate and municipal securities is two business days after the trade date, and for MBSs it can be up to 60 days or more after the trade date. The use of a settlement period in excess of the regular-way settlement period to facilitate speculation is considered a trading activity.

Repositioning repurchase agreements allow an investor to hold a speculative trading position until a security can be sold at a gain. For example, a dealer might allow an institution that entered into a when-issued trade (or a pair-off) that cannot be closed out at a profit on the payment or settlement date, to hold the position until a later date. The institution purchasing the security pays the dealer a small margin that approximates the actual loss in the security. The dealer then agrees to fund the purchase by buying the security back from the purchaser under a resale agreement. Any security acquired through a dealer financing technique such as a repositioning repurchase agreement that is used to fund the speculative purchase of securities should be reported as a trading asset.

Short sales involve the sale of a security that is borrowed, not owned. Generally, the purpose of a short sale is to speculate on a decline in the price of the security or to hedge a long position in the same or similar security. All short sales should be conducted in the trading portfolio. A short sale that involves the delivery of a security sold short by borrowing it from the institution's AFS or HTM portfolio should not be reported as a short sale. It should be reported as a sale of the underlying security with any gain or loss recognized in current earnings.

Adjusted trading involves the sale of a security to a broker or dealer at a price above the prevailing market value and the simultaneous purchase and booking of a different security (frequently with a lower rate, less quality, or a

longer maturity) at a price above its market value. Thus, the dealer is reimbursed for losses on the purchase from the institution and ensured a profit. Such transactions inappropriately defer the recognition of losses on the security sold and establish an excessive cost basis for the newly acquired security. Consequently, such transactions are prohibited and may be in violation of 18 USC, Section 1001 *False Statements or Entries* and Section 1005 *False Entries*.

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RISK ANALYSIS

Investment risk is characterized by the possibility and severity of financial loss, and all investments involve some degree of risk. The level of risk involved depends on the type and extent of an institution's investment activities. This section summarizes methods to identify, measure, and analyze major risk exposures.

Risk Measurement

Financial institutions periodically assess investment risk levels to manage investment activities. Accurate risk measurements help management determine the success of its investment strategies and help the board to determine whether management achieved the board's goals and complied with its policies.

Effective risk measurements are tailored to match the characteristics of each type of investment. For example, mortgage derivative products are generally analyzed more closely than lower risk Treasuries. The analysis considers risks such as exposure levels and price volatility, historical and expected returns, liquidity and tax implications, and compliance with internal investment limits.

Generally, management segregates investments into groups with similar risk characteristics for analytical purposes. Most institutions have groups of relatively simple or standardized instruments, the risks of which are well known to management and require limited pre-purchase analysis. All other authorized instruments generally require more extensive pre-purchase analysis.

Well-defined investment segments facilitate pre-purchase analysis and help management understand the risks of each investment type. For example, it would be ineffective to group complex structured notes with straightforward, pass-through agency products. The characteristics of these instruments are distinct and require different pre-purchase analyses.

In addition to pre-purchase analysis, prudent management conducts on-going monitoring for investment risks. As

with pre-purchase analysis, on-going post-purchase analysis identifies and measures risk characteristics on an individual-investment or total-portfolio basis.

Effective risk measurement systems used to conduct pre-purchase analysis and on-going monitoring procedures are commensurate with the size and nature of the investment portfolio. For detailed comments regarding the types of market risk measurement systems, refer to Manual Section 7.1, *Sensitivity to Market Risk*. Comprehensive risk measurement systems identify and measure all material risks and allow management to compare the results with the board's risk limits. For example, risk measurement systems often:

- Identify and measure the price sensitivity of embedded options (modified and Macaulay duration measures do not capture option risk);⁴
- Use interest rate shocks large enough (such as ± 100 to 400 basis points) to measure realistic, potential market movements on the institution's financial condition including from a liquidity, capital, and earnings perspective;
- Include adjustments (e.g., convexity) to accurately estimate price changes when interest rate movements exceed 100 basis points;⁵
- Subject instruments to nonparallel interest rate shocks when those instruments are exposed to risk from changes in the yield curve's shape;
- Stress test credit sensitive instruments (e.g., non-agency MBS) to identify and measure the level of stress that would give rise to principal loss; and
- Evaluate the liquidity of the investment portfolio, including under possible adverse market conditions.

While management may measure investment risk and performance on an individual instrument basis, broader risk measurements are often beneficial. Management may aggregate individual instrument risk and return measurements to produce risk and return results for the entire investment portfolio. Portfolio results may then be incorporated into the institution's overall interest rate and liquidity risk measurement systems. Aggregation does not necessarily require complex systems. Management may simply combine individual instrument results to conduct portfolio analysis, or use portfolio results to compile whole institution analysis. Examiners should coordinate reviews of risk-aggregation measurements with the liquidity and contingency funding plan reviews and the sensitivity to market risk review.

Credit Risk Analysis

Management assesses the credit risk of individual investments prior to purchase and on an ongoing basis. The frequency and depth of the analysis correlates to the size, risk, and complexity of the investments and portfolio.

When assessing management's pre-purchase and on-going credit risk analysis, examiners should review the offering documents that provide investors details about a security. Offering documents are often referred to as a prospectus, but may also be called an official statement, offering circular, or offering memorandum depending on the specific investment involved. Some key examination considerations regarding various investments are described below.

Corporate Bonds

- Confirm that the spread to Treasuries is consistent with bonds of similar credit quality.
- Confirm that the risk of default is low and consistent with bonds of similar credit quality.
- Assess the issuer's financial and operating performance and capacity to pay through level trend and credit analysis (e.g., debt service coverage ratio analysis), or third-party analytics appropriate for the particular security.

Municipal General Obligation Bonds

- Confirm that the spread to Treasuries is consistent with bonds of similar credit quality.
- Confirm that the risk of default is low and consistent with bonds of similar credit quality.
- Assess the issuer's financial and operating performance and capacity to pay through level, trend, and credit analysis, or third-party analytics appropriate for the particular security.
- Evaluate the soundness of the municipal entity's budgetary position and the stability of its tax revenues.
- Consider the municipal entity's debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority, and management experience.
- Review local demographics and economic factors such as unemployment data, local employers, income indices, and home values.

⁴ Macaulay duration is the weighted average term to maturity of a security's cash flows. Modified duration is a measurement of the change in the value of an instrument in response to a change in interest rates.

⁵ Convexity is a measure of the way duration changes when interest rates change.

Municipal Revenue Bonds

- Confirm that the spread to Treasuries is consistent with bonds of similar credit quality.
- Confirm that the risk of default is low and consistent with bonds of similar credit quality.
- Assess the issuer's financial and operating performance and capacity to pay through level, trend, and credit analysis, or third-party analytics appropriate for the particular security.
- Review local demographics and economic factors such as unemployment data, local employers, income indices, and home values.
- 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 enhancements, legal covenants, and the nature of the related project.

Structured Securities

- Confirm that the spread to Treasuries is consistent with bonds of similar credit quality.
- Confirm that the risk of default is low and consistent with bonds of similar credit quality.
- Assess the performance of the underlying collateral, the quality of the underwriting of the collateral pool, and any risk concentrations.
- Consider the class or tranche and its relative position in the securitization structure.
- Assess the position in the cash flow waterfall and potential changes in the structure of payments under stressed scenarios.
- Consider loss allocation rules, the specific definition of default, and the potential impact of performance and market value triggers.
- Assess the support provided by credit and liquidity enhancements, such as over collateralization, structural subordination, reserves, and insurance wraps.
- Analyze the impact of collateral deterioration on tranche performance and potential credit losses under adverse general economic or sector conditions.
- Determine whether management restricted or set concentration limits on investments in securities backed by collateral with higher risk characteristics such as low credit scores, high loan-to-value ratios, or high delinquency rates.
- When concentrations in structured credit products exist, determine whether management tracks credit risk at the deal level, across securitization exposures, within and across business lines, and whether related risks are aggregated and monitored.
- When credit ratings or other third party credit analytics are used as one factor in assessing credit

risk, determine whether management has a basic understanding of the methodology used, associated limitations, and the independence of the analysis.

Risk Reporting

Boards regularly review investment activities and require management to provide comprehensive investment activity reports. The frequency and substance of the reports are commensurate with a portfolio's complexity and risk profile. Comprehensive management reports to the board normally:

- Summarize all investment activity,
- Clearly illustrate portfolio risks and returns,
- Document management's compliance with investment policy standards and risk limits, and
- List exceptions to internal policies and statutory requirements.

Internal institution policies require management to present policy exceptions to the board or a designated board committee for approval before engaging in an unauthorized activity, and the board usually reviews and documents its decisions regarding each policy exception. Recurring exceptions prompt scrutiny from examiners as well as the board. Additionally, boards might take strong action if management fails to obtain prior approval for an unauthorized activity.

Investment Strategies

Investment strategies involve the plans that management uses to direct daily portfolio operations. To develop sound strategies, management needs to understand the board's goals, risk limits, and related investments and markets. Comprehensive investment strategies are consistent with the institution's:

- Risk appetite,
- Overall strategic goals,
- Capital position,
- Profitability levels,
- Asset/liability structure,
- Earnings composition, and
- Competitive market position.

Investment strategies vary among institutions, ranging from simple to complex. However, all operational strategies need to be documented, reasonable, and supportable. Examiners should evaluate strategies to determine their effect on the institution's risk levels, earnings, capital, liquidity, market sensitivity, asset quality, and overall financial condition.

Delegation of Investment Authority

Investment authority may be delegated to a third party if specifically approved by the board. However, the board and senior management are responsible for identifying and controlling risks arising from third-party relationships to the same extent as if the third-party activities were managed within the institution.

Regardless of whether the board's policies permit management to delegate investment authority to a third party, effective management teams understand each investment's risk, return, and cash flow characteristics. To conduct its independent analysis, management may rely on information and analysis provided by the broker/dealer if the analysis uses sound calculation methods and realistic assumptions and management comprehends the analysis and assumptions.

Institution policies typically preclude investment in instruments or strategies that management does not fully understand. Failure to adequately understand and manage investment risks may constitute an unsafe or unsound banking practice.

Before delegating investment authority to a third party, management evaluates the third party's performance and creditworthiness, and completes regulatory, legal, criminal background, and reference checks. Most third party investment arrangements are governed by a formal written agreement that specifies:

- Compensation,
- Approved broker/dealers,
- Investment goals,
- Approved activities and investments,
- Investment discretion,
- Risk limits,
- Risk and performance measurements,
- Reporting requirements,
- Settlement practices, and
- Independent review requirements.

In addition, written agreements normally require all trade invoices, safekeeping receipts, and investment analyses to be readily available to the institution.

Program Evaluation

Periodic evaluations of an institution's risk management program by its board and management help ensure that investment activities meet the board's goals and strategy. The scope and depth of the evaluation correspond to the institution's size, complexity, business model, and investment activities. At many institutions, annual

evaluations may be sufficient. In larger or more complex institutions, quarterly (or more frequent) evaluation may be necessary.

Boards review management reports, including summaries of investment activity, portfolio risk, return, and performance measures, and independent review findings to identify weaknesses and determine whether:

- Stated goals accurately represent the board's objectives,
- Management is appropriately pursuing the board's objectives,
- Risk limits properly reflect the board's risk tolerance,
- Risk limits reasonably protect the institution's financial condition,
- Internal controls are adequate,
- New activities are approved, monitored, and appropriately reported,
- Policies provide sufficient guidance for management, and
- Concentrated credit or market risk exposures present undue risk to the investment portfolio's marketability or valuation.

After review of the institution's strategy, current and expected financial condition, competitive environment, and the general economic outlook, a board may reassess its portfolio goals and strategy to ensure that they align with the overall institutional strategy, and adjust the portfolio's goals if necessary.

After evaluating its goals, the board may then affirm that the existing risk limits accurately reflect its risk tolerance. When warranted, the board may consider relaxing or tightening the risk limits placed on management. Before altering its risk limits, the board considers the potential risk/return tradeoff of accepting increased or reduced risk.

When evaluating risk management programs, boards assess management success at achieving board goals, adherence to policies and risk limits, and maintenance of an effective control environment. Boards consider the cause of any material deficiencies and obtain management commitment to rectify the deficiencies.

Finally, boards determine whether any changes to policies are warranted. For example, management may request authority to engage in new investment activities. Boards carefully consider such requests and determine whether the proposed activity is consistent with its investment goals and risk tolerance.

Management also periodically reviews the portfolio management program in detail to identify any general or

specific weaknesses. Management responsibilities generally include:

- Measuring portfolio risks and performance;
- Validating the accuracy and adequacy of risk measurement systems;
- Ensuring investment strategies achieve board goals;
- Reporting portfolio activity and performance, policy exceptions, and strategy changes to the board; and
- Correcting policy exceptions and addressing supervisory recommendations.

At many institutions, especially those with non-complex or successful investment programs, the periodic evaluations result in few program alterations. Examiners should assess the periodic evaluations to determine whether the board and management effectively review the portfolio management program.

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EXAMINATION CONSIDERATIONS

Special Mention

Examiners may list securities as Special Mention in the Report of Examination. Special Mention investment securities, similar to other types of assets, are typically based on emerging weaknesses related to the financial condition of the issuer/obligor or value/performance of the underlying collateral that are not well defined at the time of the supervisory evaluation. If the negative trends continue, the issuer of the security may eventually not have the capacity to meet the security's financial commitments. Reasons to list investment securities as Special Mention also rest, in part, on the type of security under review. For example, a corporate bond might be listed Special Mention given the obligor's negative operating trends or use of excess leverage that if not checked could eventually result in the deterioration of repayment capacity. For general obligation municipal bonds, negative operating trends, loss of a significant commercial taxpayer, or deteriorating local economic conditions may support a Special Mention listing. For structured instruments, like private-label mortgage back securities, a Special Mention listing may be supported by emergent negative trends that could eventually jeopardize repayment capacity as signaled by the structure's performance triggers (e.g., trends in overcollateralization tests), in the performance of the underlying collateral (e.g., declining LTVs, increasing delinquencies and defaults), or in the credit support levels backing the bank's tranching position (e.g., initial write-downs of subordinate bonds). Further, failure of bank management to identify and assess weaknesses through its due diligence and ongoing monitoring procedures could be

a key factor in assigning an investment security or securities as Special Mention.

Classifying Investment Securities

Examiners should adversely classify subinvestment quality securities in the Report of Examination referencing the October 29, 2013 *Uniform Agreement on the Classification and Appraisal of Securities Held by Depository Institutions* (Uniform Agreement). The Uniform Agreement addresses the examination treatment for adversely classified assets and:

- Characterizes investment quality versus subinvestment quality securities;
- Defines Substandard, Doubtful, and Loss categories used for classifying assets;
- Presents various scenarios to guide examiners in how to classify securities with credit deterioration;
- Describes securities eligible or ineligible for purchase;
- Provides examiners the discretion to assess credit risk and assign a classification based on current information and circumstances independent of any assigned credit rating; and
- Provides information on upgrading previously classified assets.

Examiners should reference the definitions for classified assets as delineated in the Uniform Agreement when contemplating whether to adversely classify an investment security.

A Substandard asset is inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness or weaknesses that jeopardize liquidation of the debt. They are characterized by the distinct possibility that the institution will sustain some loss if the deficiencies are not corrected.

An asset classified Doubtful has all the weaknesses inherent in one classified Substandard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable.

Assets classified Loss are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value, but rather it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be effected in the future. Amounts classified Loss should be promptly charged off.

The Uniform Agreement defines an investment grade security when the issuer has adequate capacity to meet its financial commitments for the life of the asset. An issuer has adequate capacity to meet its financial commitments if the risk of default is low and the full and timely repayment of principal and interest is expected. Note, however, this is the definition established in 12 CFR Part 1 for national banks. This definition will usually apply to state-chartered banks, but in some states investment grade may be defined differently across its laws and regulations and therefore a state bank may be subject to restrictions on investments that are more stringent than those in 12 CFR Part 1.

Institutions perform initial due diligence commensurate with an instrument's complexity to determine whether securities meet the investment grade standard. Potential investments that do not meet the definition of investment grade are ineligible for purchase. Management conducts ongoing due diligence and monitoring to determine whether securities continue to meet the standard.

A pass rating may be supported by appropriate credit analysis that documents the quality of an investment grade security, as well as an ongoing analysis that demonstrates the obligor's continued repayment capacity. Investment grade securities are generally not subject to adverse classification. Examiners may classify a security when justified by available credit risk information independent of any assigned credit rating.

Any subsequent upgrade in classification should follow a sustained period of performance and be based on improvement in credit conditions and analysis that indicates all future contractual payments will be received. Generally, the performance period should cover multiple payments as determined by the security's payment structure (i.e., monthly, quarterly, annually).

Regardless of a determination of adverse classification, examiners should consider an investment portfolio's depreciation (and the quality and support for its pricing) in their assessment of capital, asset quality, earnings, and liquidity. Significant rising market interest rates can cause significant unrealized losses at institutions with long-duration bond portfolios. Unrealized losses increase financial and liquidity risks and necessitate more robust examination coverage and ongoing monitoring. Among the potential risks facing affected institutions are a reduced stock of unencumbered liquid assets that can be sold or pledged with no or minimal losses incurred or discounts required; potential access limitations from wholesale funds providers such as the Federal Home Loan Bank, municipalities, deposit brokers, and other counterparties; challenges in executing contingency funding plans; and the possibility that depositors, particularly uninsured

depositors, develop doubts about an institution's resilience and solvency, prompting withdrawals. In a rising rate stress scenario, examiners will need to look beyond the HTM and AFS accounting categorizations to the portfolio's economic substance to adequately assess its impact on liquidity, capital, and earnings.

Failure to provide adequate pricing and impairment analysis may also negatively influence the management rating.

Declines in Fair Value

Accounting for credit losses on HTM and AFS debt securities under ASC Topic 326

ASC Topic 326, *Financial Instruments - Credit Losses* supersedes previous OTTI guidance. Institutions that have adopted ASC Topic 326 are required to follow its guidance for the measurement of credit losses for HTM and AFS debt securities.

The measurement of credit losses for HTM debt securities falls within the scope of ASC Subtopic 326-20, *Financial Instruments - Credit Losses – Measured at Amortized Cost*, commonly referred to as the current expected credit losses (CECL) methodology. In accordance with ASC Subtopic 326-20, management will report a provision expense for the amount necessary to adjust the allowance for credit losses (ACL) for the current estimate of expected credit losses. Management may measure expected credit losses on a collective pool basis when similar risk characteristics exist. Otherwise, an ACL on a HTM debt security will be measured on an individual basis.

The measurement of AFS debt securities falls within the scope of ASC Subtopic 326-30, *Financial Instruments - Credit Losses – Available-for-Sale Debt Securities*. Impairment for all AFS debt securities is measured at the individual security level.

The impairment of an AFS debt security occurs when the fair value of that security is below its amortized cost basis. When this occurs, management must determine whether the decline in fair value below the amortized cost basis has resulted from a credit loss or other non-credit factors, such as changes in interest rates or the market liquidity of the instrument. In assessing whether a credit loss exists, management will compare the present value of cash flows expected to be collected from the security with the amortized cost basis of the security. Impairment relating to credit losses is recognized through an ACL, with the credit loss limited by a fair value floor (i.e., the ACL is limited by the amount that the fair value is less than the amortized cost basis). Changes in the ACL are recorded in the period of change as a provision expense or the reversal of a provision expense. The amount of impairment not recorded through

an ACL (i.e., impairment related to non-credit factors) is required to be recorded through other comprehensive income net of tax.

If management intends to sell an AFS debt security, or it is likely that it will be required to sell the debt security before recovery of its amortized cost basis, any ACL should be written off and the amortized cost basis written down to the debt security's fair value at the reporting date, with any incremental impairment (i.e., any decline in fair value since the last reporting date) reported through earnings. Once an individual AFS debt security has been written down, the previous amortized cost basis less write-offs, including non-credit related impairment reported in earnings, becomes the new amortized cost basis of the debt security. The new amortized cost basis is not adjusted for subsequent recoveries of cash flows, but is reflected as a yield adjustment.

Subinvestment Debt Securities

Consistent with ASC Topic 320, AFS debt securities are marked-to-market and carried at their fair value on the balance sheet. The U.S. implementation of Basel III capital measures developed by the Basel Committee on Banking Supervision, reflected in Part 324 of the FDIC Rules and Regulations, gave most banking organizations with total assets below \$250 billion a one-time election to opt out of the requirement to include AOCI components in the calculation of regulatory capital (AOCI opt-out). Therefore, the net unrealized holding gains (losses) on AFS debt securities, net of tax effects, are generally excluded from earnings. For institutions that have adopted ASC Topic 326, an exception to this rule occurs when credit impairment has occurred on an AFS debt security. In this case, only the non-credit impairment (i.e., the depreciation related to other factors) on the individual security is not recognized in earnings. The non-credit portion, net of applicable taxes, is reported in AOCI provided the AFS debt security will not be sold before recovery of the amortized cost basis.

For purposes of determining an institution's regulatory capital under Part 324 when there is an AOCI opt-out election, any net unrealized holding gains (losses) on AFS debt securities, including the non-credit portion of a fair value decline to an AFS debt security in the circumstances described above, that are included in AOCI, are ignored. As a result, the amount reported in AOCI normally is not deducted, but is neutralized (i.e., added back in the case of net unrealized losses) in determining regulatory capital.

To appropriately reflect regulatory capital, the amount of the credit impairment or write-downs recognized in earnings based on U.S. GAAP is classified Loss, with the remaining balance classified Substandard. Therefore, only

the credit loss portion on a subinvestment debt security should be deducted in determining tier 1 capital.

For subinvestment AFS debt securities with fair values below its amortized cost, the amortized cost (rather than the lower amount at which these securities are carried on the balance sheet, i.e., fair value) is classified Substandard. This classification is consistent with the regulatory capital treatment of AFS debt securities when there is an AOCI opt-out election. As mentioned above, under U.S. GAAP, net unrealized holding gains (losses) on AFS debt securities are excluded from earnings, unless a credit loss is recognized, and reported in a separate component of equity capital. In contrast, these net unrealized holding gains (losses) are excluded from regulatory capital. Accordingly, the amount classified Substandard on these subinvestment quality AFS debt securities (i.e., amortized cost) also excludes the balance sheet adjustment for unrealized holding losses.

Determining Fair Value

As currently defined under U.S. GAAP, the fair value of an asset is defined as the price that would be received to sell an asset or the amount paid to transfer a liability in an orderly transaction between willing market participants (i.e., other than in a forced or liquidation sale). Quoted market prices are the best evidence of fair value and must be used, if available, as the basis for measuring fair value. If quoted market prices are not available, the estimate of fair value must be based on the best information available in the circumstances. The estimate of fair value must consider prices for similar assets and the results of valuation techniques, to the extent available in the circumstances.

Examiners must ascertain a security's fair value to properly classify or make needed regulatory capital adjustments. Hence, examiners should review management's fair value measurements for all adversely classified securities. When management's valuation is reasonable, examiners will use that value to classify the security. If unreasonable or unsupported, examiners should discuss their concerns with management and request that management provide a reasonable and supportable valuation. When management cannot provide a reasonable valuation during the examination, examiners should use the information and pricing services provided by RMS Capital Markets to estimate values for examination purposes.

Qualitative Capital Adequacy Considerations

Net unrealized holding gains (losses) on AFS debt securities are not normally recognized in calculating an institution's regulatory capital ratios as discussed. However, examiners should consider the extent of the net unrealized gains or losses, as well as the appreciation and depreciation on HTM debt securities in the overall assessment of the institution's

capital adequacy, liquidity position, and risk management system.

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OTHER ISSUES

Investment Trading Account Risk Management

Trading activities involve strategies or transactions designed to profit from short-term price changes. Trading activities usually employ active strategies, which assume that management can consistently outperform the market. Trading programs can generate earnings, but can expose institutions to different and increased risks.

The FDIC Rules and Regulations (Parts 351 and 324) discuss trading-related requirements and restrictions. Regardless of capital requirements contained in Part 324 and prohibitions contained in Part 351 (Part 351 does not apply to most community and regional institutions), there are risk management considerations for any institution with an investment trading account.

The board and management have the responsibility to identify, measure, monitor, and control trading activity risks. Failure to adequately understand and manage trading activity risks may constitute an unsafe or unsound banking practice. Financial institutions' risk management programs governing trading activities typically address:

- Board oversight, approval, and periodic review requirements;
- Management qualifications;
- Management oversight procedures;
- Policy standards, operational procedures, and risk limits;
- Segregated accounting and reporting requirements;
- Conflict of interest and code of ethics guidelines;
- Compensation practices;
- Internal controls; and
- Risk measurement systems and requirements for reporting material risks such as potential trading losses and performance relative to established benchmarks.

Effective risk measurement systems identify and measure all material risks, including potential trading losses, for defined periods. For example, the system might measure potential one-day trading loss for a given set of statistical assumptions.

The reliability of a risk measurement system is enhanced when management uses reasonable, supportable, and

consistent assumptions and translates system results into terms that evidence compliance with the board's trading risk limits.

When measuring the performance of the institution's trading activities, trading desks, or individual traders, management compares actual results to performance benchmarks that provide realistic comparative values. For example, management may compare actual results against the returns that could have been obtained by adopting a passive investment strategy in a similar class of investments. Additional performance benchmarks may include market indexes such as the Standard & Poor's 500 Index, the Russell 2000 Index, the Barclays Capital Aggregate Bond Index, or the Bloomberg U.S. Treasury Index.