Office of Thrift Supervision **April 23, 1998**

Department of the Treasury

Transmittal

TR–197

Federal Register, Vol. 63, No.78, pp. 20252-20256 **Number: TR–197**

The three attached documents provide guidance on improving risk management practices of savings associations. In the first two documents, the Office of Thrift Supervision (OTS) has proposed comprehensive guidance to improve the risk management practices at savings associations. The guidance also explains OTS's implementation plan for the third document, the final interagency Federal Financial Institutions Examination Council's (FFIEC) "Supervisory Statement on Investment Securities and End-User Derivative Activities."

The proposed guidance covers three major risk management areas – interest rate risk, investment securities, and use of financial derivatives -- is consolidated into a single comprehensive bulletin under a common conceptual framework. The proposed Thrift Bulletin 13a, "Management of Interest Rate Risk, Investment Securities, and Derivatives Activities," would replace seven existing OTS thrift bulletins.

OTS is also proposing to replace three outmoded regulations on forward commitments, futures transactions, and financial options transactions that have remained virtually unchanged since they were first adopted during the period of 1979 to 1982. In their place, OTS would adopt a single regulation establishing general requirements applicable to all derivative instruments. The proposed regulation and bulletin are designed to work together, with the bulletin providing the kind of specific guidance that previously had been contained in the regulations.

The proposed derivatives rule would allow federal savings associations to continue to engage in transactions using derivative instruments, if the association is authorized to invest in the assets underlying the instrument and the transaction is otherwise safe and sound. State-chartered associations could continue to use derivative instruments to the extent permitted by their charter and state law, provided the transaction is otherwise safe and sound. The proposed rule makes it clear that reducing risk exposure generally should be the reason thrifts enter into a transaction using a derivative instrument. It also sets forth responsibilities of the board of directors and management with respect to financial derivatives.

The proposed bulletin also describes the guidelines examiners would use to rate an institution's exposure to interest rate risk – the Sensitivity to Market Risk (S) component of the CAMELS rating system . Since the "S" component rating reflects an assessment of both an institution's current exposure to interest rate changes and its ability to manage that exposure effectively, OTS will use the results of its Net Portfolio Value Model, where available, to measure the institution's current exposure. Such guidelines should remove a degree of uncertainty on the part of institutions about what to expect from OTS examiners in this area.

The proposed bulletin calls for thrifts' boards of directors to frame their interest rate risk limits in terms of their institutions' capital position (their economic capital-to-assets ratios). Investment securities and derivatives – particularly those having the potential to alter an institution's risk profile significantly – should be evaluated in terms of their impact on the interest rate sensitivity of the institution's economic capital. Under the proposed bulletin, institutions with greater capacity to absorb potential losses, as measured in terms of the impact on their economic capital, would have greater latitude in using derivatives and other complex financial instruments than those with lower levels. In addition, such institutions would, all else being equal, generally receive better "S" component ratings.

The guidance in TB 13a and the new regulation would replace:

- regulations governing forward commitments (12 CFR 563.173)
- regulations governing futures (12 CFR 563.174)
- regulations governing options (12 CFR 563.175)
- Thrift Bulletin 13 -- Responsibilities of the Board of Directors and Management with Respect to Interest Rate Risk
- Thrift Bulletin 13-1 (Implementation of Thrift Bulletin 13)
- Thrift Bulletin 13-2 (Implementation of Thrift Bulletin 13)
- Thrift Bulletin 52 (Supervisory Statement of Policy on Securities Activities)
- Thrift Bulletin 52-1 ("Mismatched" Floating Rate CMOs),
- Thrift Bulletin 65 (Structured Notes), and
- New Directions Bulletin 95-10

Although OTS may revise some of the guidance currently in TB 13a in response to industry comments, the OTS will expect institutions to observe the guidelines contained in Part III (Investment Securities and Financial Derivatives) of the bulletin in order to implement the FFIEC Supervisory Statement on Investment Securities and End-User Derivatives. Examiners will allow institutions a reasonable amount of time to establish and implement suitable procedures and systems.

The notice of proposed rulemaking and the proposed thrift bulletin were published in the April 23, 1998, edition of the Federal Register, Vol. 63, No. 78, pp. 20252-20256. Written comments must be received on or before June 22, 1998, and should be addressed to: Manager, Dissemination Branch, Records Management and Information Policy Division, Office of Thrift Supervision, 1700 G Street, N.W., Washington, DC 20552. Comments may be mailed or hand-delivered, faxed to 202/906-7755 or e-mailed to: public.info@ots.treas.gov. All commenters should include their name and telephone number.

The Supervisory Statement on Investment Securities and End-User Derivative Activities was published by the Federal Financial Institutions Examination Council (FFIEC) in the April 23, 1998, edition of the Federal Register, pp. 20191-20197.

For further information contact:

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federal register

Thursday
April 23, 1998

Part II

Department of the Treasury

Office of Thrift Supervision

12 CFR Part 563

Financial Management Policies, Financial Derivatives; Proposed Rule and Financial Management Policies; Notice

DEPARTMENT OF THE TREASURY

Office of Thrift Supervision

12 CFR Part 563

[No. 98–37]

RIN 1550–AB13

Financial Management Policies; Financial Derivatives

ACTION: Notice of proposed rulemaking.

SUMMARY: The Office of Thrift Supervision (OTS) is proposing to issue a regulation that would apply to all financial derivatives and would replace its existing regulations on forward commitments, futures transactions, and financial options transactions. The proposal would continue to permit a savings association to engage in transactions involving financial derivatives to the extent that these transactions are authorized under applicable law and are otherwise safe and sound. In addition, the proposed rule would describe the responsibilities of a savings association's board of directors and management with respect to financial derivatives. Elsewhere in today's **Federal Register**, OTS is seeking public comment on a proposed Thrift Bulletin which would, among other things, provide supplemental supervisory guidance on the use of financial derivatives. Finally, the Federal Financial Institutions Examination Council (FFIEC) is issuing additional guidance in a supervisory policy statement addressing this area that appears elsewhere in this issue of the **Federal Register**.

DATES: Comments must be received on or before June 22, 1998.

ADDRESSES: Send comments to: Manager, Dissemination Branch, Records Management and Information Policy, Office of Thrift Supervision, 1700 G Street, N.W., Washington, D.C. 20552, Attention Docket No. 98–37. These submissions may be hand-delivered to 1700 G Street, N.W., from 9:00 a.m. to 5:00 p.m. on business days; they may be sent by facsimile transmission to FAX number (202) 906–7755; or by e-mail: public.info@ots.treas.gov. Those commenting by e-mail should include their name and telephone number. Comments will be available for inspection at 1700 G Street, N.W., from 9:00 a.m. until 4:00 p.m. on business days.

FOR FURTHER INFORMATION CONTACT: Anthony G. Cornyn, Director of Risk Management, (202/906–5727), Ed Irmler, Senior Project Manager, (202/906–5730), Jonathan D. Jones, Senior Economist (202/906–5729), Risk Management; or Vern McKinley, Senior Attorney (202/906–6241), Regulations and Legislation Division, Office of the Chief Counsel, Office of Thrift Supervision, 1700 G Street, N.W., Washington, DC 20552.

SUPPLEMENTARY INFORMATION:

I. Background

OTS's current regulations on financial derivatives were first adopted over fifteen years ago.[1] These regulations have remained virtually unchanged, notwithstanding the development of new financial derivative instruments. Today, OTS is proposing a comprehensive revision of these outmoded regulations.

One of the goals of this proposed rule is to address the broad range of financial derivatives transactions in which thrifts may currently engage. The current regulations address three types of financial derivatives: forward commitments, futures transactions, and financial options transactions. *See* 12 CFR 563.173, 563.174, and 563.175. These regulations, thus, do not address all of the derivative instruments that have been developed over the past twenty years. Significantly, the current regulations do not address interest rate swaps, a derivative instrument thrifts commonly use to address interest rate risk. The proposed rule would continue to permit savings associations to use financial derivatives transactions to manage and control risk.

The overriding goal of this regulatory initiative is to ensure the safe and sound management of the risks associated with financial derivatives. Accordingly, the proposed regulation emphasizes that derivatives activities must be conducted in a safe and sound manner, and sets forth the responsibilities of the board of directors and management with respect to financial derivatives.

OTS is simultaneously issuing comprehensive proposed guidance regarding savings associations' risk management practices, including those pertaining to derivatives transactions. Elsewhere in today's issue of the **Federal Register**, OTS is issuing for comment Thrift Bulletin 13a (TB 13a) ("Management of Interest Rate Risk, Investment Securities, and Derivatives Activities"). One of the purposes of TB 13a is to provide specific guidance on how thrifts should implement the FFIEC's "Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities" (FFIEC policy statement).[2] The FFIEC policy statement provides general guidance on sound practices for managing the risks of investment securities and derivatives activities.

The proposed rule would also reduce regulatory burden consistent with statutory requirements for safe and sound operations. The current regulations at §§ 563.173, 563.174 and 563.175 impose many regulatory restrictions on forward commitments, futures transactions, and financial options transactions. After reviewing each of these existing regulatory requirements, OTS proposes to delete those requirements that it no longer considers essential for safety and soundness; to incorporate others into guidance; and to convert the remainder into broader and more flexible regulatory requirements for all types of financial derivative transactions. OTS's proposed approach, which relies more on guidance than detailed regulations, more closely resembles the bank regulatory agencies' approach with regard to banks' use of financial derivatives.[3]

II. Proposed Rule

Because OTS's concerns about the risks institutions incur from the various types of derivatives are not unique to one type of derivative, the proposed regulation would treat all financial derivatives within a common conceptual framework. Proposed § 563.172(a) would define a financial derivative as a financial contract whose value depends on the value of one or more underlying assets, indices or reference rates. This definition would specifically include the three types of financial derivatives addressed by the current rule (forward commitments, financial futures transactions, and financial options transactions), as well as swaps. The proposed definition is based on the Office of the Comptroller of the Currency definition of derivative contract. *See* 12 CFR Part 3, Appendix A, Section 1(a)(10) (1997). Under the proposed definition, a mortgage derivative security, such as a collateralized mortgage obligation or a real estate mortgage investment conduit, is not a financial derivative. To avoid any confusion, OTS has explicitly excluded mortgage derivative securities from the proposed definition.

[1] 44 FR 29870 (May 23, 1979) (Forward commitments); 46 FR 36832 (July 16, 1981) (Futures transactions); 47 FR 36625 (August 23, 1982) (Financial options).

[2] Published elsewhere in this issue of the **Federal Register**.

[3] *See e.g.*, OCC Banking Circular 277 (October 27, 1993).

Proposed § 563.172(b) would allow a federal savings association to engage in a transaction involving a financial derivative if the association is authorized to invest in the assets underlying the financial derivative, and the transaction is otherwise safe and sound. A state-chartered savings association may engage in a transaction involving a financial derivative to the extent that the transaction is authorized under its charter and applicable state law, and the transaction is otherwise safe and sound. However, institutions engaging in derivatives activities generally should do so to reduce their overall exposure to risk.

Proposed § 563.172(c) would address the responsibilities of the board of directors with respect to financial derivatives. Under the proposed rule, the board would be responsible for effective oversight of financial derivatives activities. The board would be required to establish written policies and procedures governing authorized financial derivatives before the association may engage in any transactions involving these instruments. In adopting these policies and procedures, the board should review and be guided by TB 13a and other applicable agency guidance on establishing a sound risk management program. The proposed rule would also require the board to periodically review compliance with its policies and procedures, and review the adequacy of the policies and procedures to ensure that they continue to be appropriate to the nature and scope of the savings association's operations and the existing market conditions. Finally, the proposed rule would require the board to ensure that management establishes an adequate system of internal controls for transactions involving financial derivatives.

Paragraph (d) of the proposed rule would address management's responsibilities with respect to financial derivatives. Management would be responsible for daily oversight and management of financial derivatives activities, including implementing the board's policies and procedures and establishing a system of internal controls. Generally, this system of internal controls must be designed to ensure safe and sound operations, reliable financial and regulatory reporting including periodic reporting to the board, and compliance with relevant law. Finally, management would be required to ensure that derivatives activities are conducted in a safe and sound manner, and should review TB 13a and other applicable agency guidance on implementing a sound risk management program.

Proposed § 563.172(e) would prescribe the recordkeeping requirements for financial derivatives transactions. Under the proposed rule, an association would be required to maintain records adequate to demonstrate compliance with the requirements in § 563.172, and compliance with the board's policies and procedures on financial derivatives.

As noted above, OTS is also issuing proposed TB 13a for public comment. Proposed TB 13a provides additional guidance on what OTS considers safe and sound risk management practices with regard to financial derivatives, and gives institutions more flexibility in addressing risk management concerns than the current regulations. Much of the proposed guidance addresses the evaluation of derivatives as a component of the institution's overall exposure to interest rate risk.

III. Proposed Disposition of Existing Regulations

OTS proposes to eliminate existing §§ 563.173 through 563.175. Instead, OTS would rely on the new rule on derivatives and on agency guidance. The section-by-section analysis below describes the topics addressed by the existing rules and the reasons OTS proposes to modify these rules.

Section 563.173 Forward Commitments

Section 563.173(a) defines various terms used in the regulation, and would be eliminated. As noted above, the proposed rule defines financial derivatives to include forward commitments. Proposed TB 13a would provide additional definitions implementing OTS guidelines regarding financial derivatives.[4]

Section 563.173(b) requires the board of directors of a savings association to include in the board minutes certain information regarding forward commitment transactions. Under the current rule, the minutes must identify thrift personnel that may engage in forward commitment transactions, set the limits of these employees' authority, identify the brokerage firms through which transactions may be conducted, and set a dollar limit on transactions that may be conducted with each brokerage firm.

OTS believes that institutions should continue to perform these functions. Under proposed § 563.172(c)(2), the board would be required to adopt policies and procedures governing authorized financial derivatives activities. In adopting these policies, the board should review and be guided by TB 13a, which addresses the content of the board's policies and procedures, including the matters specified in existing § 563.173(b). Specifically, proposed TB 13a states that an institution's policies and procedures should "identify the staff authorized to conduct * * * derivatives activities, their lines of authority, and their responsibilities [and] * * * identify dealers, brokers, and counterparties that the board * * * has authorized the institution to conduct business with and identify credit exposure limits for each authorized entity."[5]

Section 563.173(c) imposes restrictions on savings associations that engage in forward commitments. The regulation states a general requirement that forward commitments must be conducted in a safe and sound manner and includes examples of unsafe and unsound practices. This existing regulation also states that outstanding forward commitments plus short put options not exceed specified limits based on a percentage of total assets.

While the proposed rule at § 563.172(b) would continue to require that all financial derivative transactions must be safe and sound, OTS does not believe that a regulatory percentage of assets limit is appropriate. Instead, such transactions are best evaluated based upon how they affect the interest rate risk of an institution's total portfolio. Accordingly, the proposed rule would eliminate specific limitations on forward commitments as a percentage of assets. Instead, proposed § 563.172(b)(3) would state that an association should generally engage in a transaction involving a financial derivative to reduce risk exposure. Moreover, in establishing a sound risk management program, the board should review and be guided by TB 13a, which indicates that before engaging in a derivatives transaction, the savings association should evaluate the derivative's interest rate sensitivity in the context of the institution's overall exposure to interest rate risk.[6]

Section 563.173(d) requires recognition of all profit or loss upon disposal or modification of a forward

[4] *See* OTS Thrift Bulletin 13a, Part III, Section A and Appendix D.

[5] *See* OTS Thrift Bulletin 13a, Appendix B, Section B. This section also includes other relevant guidance. *e.g.*, the board's policies and procedures should "[d]efine, where appropriate, position limits and other constraints on each type of authorized investment and derivative instrument, including constraints on the purpose(s) for which such instruments may be used."

[6] *See* OTS Thrift Bulletin 13a, Part III, Section A.

commitment. Since this regulation was first enacted, OTS's accounting requirements have been significantly updated, removing the need for this specific requirement. OTS expects thrifts to compute gain and loss consistent with instructions to the Thrift Financial Report, which incorporates the requirements of generally accepted accounting principles and the regulatory reporting standards under 12 CFR Part 562.

Section 563.173(e) imposes detailed recordkeeping requirements on savings associations engaging in forward commitments. Under this provision, a savings association must maintain a contract register recording specific information on outstanding forward commitments and maintain documentation of its ability to fund all outstanding commitments when they are due. OTS believes that the level of detail specified in the existing regulation is unnecessary. Under proposed § 563.172(e), a savings association would be required to maintain records sufficient to demonstrate compliance with the regulation and with the board's policies and procedures. Proposed TB 13a would provide additional guidance on appropriate documentation,[7] including a contract register containing key information on all outstanding contracts and positions.[8]

Section 563.174 Futures Transactions

Section 563.175 Financial Options Transactions

Because §§ 563.174 and 563.175 address substantially the same subjects and impose many identical requirements on futures transactions and financial options transactions, these sections are discussed together below.

Sections 563.174(a) and 563.175(a) set forth definitions relevant to futures and financial options transactions, respectively. The proposed rule would specifically include futures and financial options within the definition of financial derivative. In addition, proposed TB 13a would provide appropriate additional definitions governing derivatives transactions. One of the existing definitions at § 563.175(a)(13) restricts who may be a permissible counterparty in financial options transactions. OTS believes it is more appropriate for the board to approve counterparties, as a part of its policies and procedures. Accordingly, proposed TB 13a states that the board should identify approved counterparties with which the institution may conduct business, as well as credit risk limits for each approved counterparty.[9]

Sections 563.174(b) and 563.175(b) detail permissible transactions for savings associations. Section 563.174(b) permits a savings association to engage in a futures transaction only to the extent that the transaction reduces net interest rate risk exposure and sets other limits on these transactions. Under § 563.175(b), a thrift may enter into a financial option that is a long position or short call without any limits, but may enter into short put options only on a limited basis. OTS does not propose to place specific limitations on the ability of institutions to enter into any positions in futures or options contracts. As discussed previously, the proposed rule stipulates that, in general, institutions engaging in derivatives activities should do so to reduce their overall risk exposure. The proposed TB 13a provides extensive guidance on the management of interest rate and other risks incurred by savings associations engaging in financial derivative transactions.

Sections 563.174(c) and 563.175(c) authorize savings associations to engage in futures and financial options transactions using contracts designated by the Commodity Futures Trading Commission (CFTC). Section 563.175(c) also authorizes savings associations to engage in financial options contracts approved by the Securities and Exchange Commission (SEC), or financial options contracts entered into with a permissible counterparty. OTS proposes to delete these requirements. The guidance in proposed TB 13a states that an institution should adequately evaluate the enforceability of its derivatives agreement before an individual transaction is consummated. As a part of this review, the institution should, among other things, ensure that the counterparty has authority to enter into the transaction and establish credit exposure limits for each counterparty.[10]

Sections 563.174(d) and 563.175(d) impose extensive requirements for board authorization of interest rate futures and financial options transactions. Under the existing rules, a savings association's board must authorize such activities before the savings association engages in any financial derivatives transactions. These sections also address implementation plans, written policies regarding these transactions, policy objectives regarding permissible transactions, and internal control procedures. Furthermore, the rule requires that board minutes must list limits for such transactions, identify personnel authorized to engage in such transactions, and specify the duties, responsibilities and limits of these personnel. The board must also review the institution's position at each regular board meeting.

The proposed rule would retain those requirements essential for developing and maintaining safe and sound risk management practices, but would provide institutions more flexibility in designing management systems for achieving safe and sound practices. As discussed above, proposed § 563.172(c) would continue to require the board to adopt policies and procedures before the association may engage in any financial derivatives transaction. This section would also require the board to monitor compliance with the policies and procedures and to ensure that management establishes an adequate system of internal control. Moreover, proposed TB 13a would provide guidance on the board's establishment of objectives, strategies and major policies,[11] as well as the other areas of board oversight addressed by the current regulation.[12]

Sections 563.174(e) and 563.175(e) require a savings association to notify the appropriate OTS Regional Director following board authorization to engage in financial futures and options transactions. Furthermore, § 563.175(e) requires counterparties engaging in over-the-counter financial options transactions with savings associations to notify the appropriate OTS Regional Director. Long over-the-counter financial options transactions with permissible counterparties in excess of a specified limit are subject to the prior approval of the Regional Director. These detailed requirements governing OTS notification and approval of

[7] *See* OTS Thrift Bulletin 13a, Part III, Section B. "[F]or each type of financial derivative instrument authorized by the board of directors, the institution should maintain records containing: (a) the names, duties, responsibilities, and limits of authority (including position limits) of employees authorized to engage in transactions involving the instrument; (b) a list of approved counterparties with which transactions may be conducted; (c) a list showing the credit risk limit for each approved counterparty; and (d) a contract register containing key information on all outstanding contracts and positions."

[8] *Id.* "The contract registers should specify the type of contract, the price of each open contract, the dollar amount, the trade and maturity dates, the date and manner in which contracts were offset, and the total outstanding positions."

[9] *See* OTS Thrift Bulletin 13a, Appendix B, Section B.

[10] *See* OTS Thrift Bulletin 13a, Appendix B and the FFIEC policy statement (Legal Risk).

[11] *See* OTS Thrift Bulletin 13a, Appendix B, Section A (addressing the board of directors' approval of broad objectives and strategies and major policies relating to interest rate risk management).

[12] *See* the discussion of existing § 563.173(b) above.

counterparties are not essential to safe and sound risk management. Accordingly, OTS proposes to delete this subsection. We note, however, that proposed TB 13a would state that institutions should establish a list of approved counterparties, as well as record-keeping requirements related to counterparties, including individual credit risk limits.[13]

Sections 563.174(f) and 563.175(f) require a savings association to maintain records of futures and financial options transactions, including a contract register containing specified information and other documentation. Section 563.174(f) specifically requires a savings association to retain documents and records for ten years. As discussed above, proposed § 563.172 would require a savings association to maintain records sufficient to demonstrate compliance with the regulation and with the board policy and procedures. Proposed TB 13a, which supplements this recordkeeping requirement includes, as an example of appropriate documentation, a contract register containing information on all outstanding contracts and positions.[14]

IV. Executive Order 12866

OTS has determined that this proposed rule does not constitute a "significant regulatory action" for the purposes of Executive Order 12866.

V. Regulatory Flexibility Act Analysis

Pursuant to section 605(b) of the Regulatory Flexibility Act, OTS has determined that this proposed rule would not have a significant economic impact on a substantial number of small entities. The proposed rule would reduce the burden of complying with detailed regulations and allow for more flexible treatment of derivatives activities for all institutions, including small institutions.

VI. Paperwork Reduction Act

The recordkeeping requirements contained in this notice of proposed rulemaking have been submitted to the Office of Management and Budget for review in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)). Comments on all aspects of this information collection should be sent to Office of Management and Budget, Paperwork Reduction Project (1550), Washington, D.C. 20503 with copies to the Office of Thrift Supervision, Regulations and Legislation Division, Chief Counsel's Office, 1700 G Street, NW., Washington, D.C. 20552.

The information collection requirements currently found in 12 CFR 563.173, 563.174, and 563.175 have been modified and moved to 12 CFR 563.172. The burden for these requirements would be reduced from 120,500 hours to 2,880 hours.

OTS invites comment on:

(1) Whether the proposed information collection contained in this proposed regulation is necessary for the proper performance of OTS's functions, including whether the information has practical utility;

(2) The accuracy of OTS's estimate of the burden of the proposed information collection;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected;

(4) Ways to minimize the burden of the information collection on respondents, including through the use of automated collection techniques or other forms of information technology; and

(5) Estimate of capital and start-up costs of operation, maintenance and purchases of services to provide information.

Recordkeepers are not required to respond to this collection of information unless it displays a currently valid OMB control number.

The information collection requirements contained in this regulation are found at 12 CFR 563.172. OTS requires this information for the proper supervision of interest rate risk for its regulated savings associations. The likely respondents/recordkeepers are OTS-regulated savings associations. The burden estimates found below reflect the burden found in 12 CFR 563.172:

Estimated average annual burden hours per recordkeeper: 36.

Estimated number of recordkeepers: 80.

Estimated total annual recordkeeping burden: 2,880.

Start up costs to respondents: None.

VII. Unfunded Mandates Reform Act of 1995

Section 202 of the Unfunded Mandates Reform Act of 1995, Pub. L. 104–4 (Unfunded Mandates Act) requires that an agency prepare a budgetary impact statement before promulgating a rule that includes a Federal mandate that may result in expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year. If a budgetary impact statement is required, section 205 of the Unfunded Mandates Act also requires an agency to identify and consider a reasonable number of regulatory alternatives before promulgating a rule. As discussed above, this proposed rule would reduce regulatory burden by eliminating unnecessarily restrictive regulations. OTS has, therefore, determined that the effect of the proposed rule will not result in expenditures by State, local, or tribal governments or by the private sector of $100 million or more. Accordingly, OTS has not prepared a budgetary impact statement or specifically addressed the regulatory alternatives considered.

List of Subjects in 12 CFR Part 563

Accounting, Advertising, Crime, Currency, Investments, Reporting and recordkeeping requirements, Savings associations, Securities, Surety bonds.

Accordingly, the Office of Thrift Supervision proposes to amend part 563, chapter V, title 12, Code of Federal Regulations as set forth below:

PART 563—OPERATIONS

1. The authority citation for part 563 continues to read as follows:

Authority: 12 U.S.C. 375b, 1462, 1462a, 1463, 1464, 1467a, 1468, 1817, 1820, 1828, 3806, 42 U.S.C. 4106.

§§ 563.173, 563.174, 563.175 [Removed]

2. Sections 563.173, 563.174, and 563.175 are removed.

3. Section 563.172 is added to read as follows:

§ 563.172 Financial derivatives.

(a) *What is a financial derivative?* A financial derivative is a financial contract whose value depends on the value of one or more underlying assets, indices, or reference rates. The most common types of financial derivatives are futures, forward commitments, options, and swaps. A mortgage derivative security, such as a collateralized mortgage obligation or a real estate mortgage investment conduit, is not a financial derivative under this section.

(b) *May I engage in transactions involving financial derivatives?* (1) If you are a federal savings association, you may engage in a transaction involving a financial derivative if you are authorized to invest in the assets underlying the financial derivative, the transaction is safe and sound, and you otherwise meet the requirements in this section.

(2) If you are a state-chartered savings association, you may engage in a transaction involving a financial derivative if your charter or applicable

[13] *See* OTS Thrift Bulletin 13a, Part III, Section B (recordkeeping) and Appendix B, Section B (identification of counterparties).

[14] *See* OTS Thrift Bulletin 13a, Part III, Section B.

state law authorizes you to engage in such transactions, the transaction is safe and sound, and you otherwise meet the requirements in this section.

(3) In general, if you engage in a transaction involving a financial derivative, you should do so to reduce your risk exposure.

(c) *What are my board of directors' responsibilities with respect to financial derivatives?* (1) Your board of directors is responsible for effective oversight of financial derivatives activities.

(2) Before you may engage in any transaction involving a financial derivative, your board of directors must establish written policies and procedures governing authorized financial derivatives. Your board of directors should review Thrift Bulletin 13a, "Management of Interest Rate Risk, Investment Securities, and Derivatives Activities," (available at the address listed in § 516.1 of this chapter) and other applicable agency guidance on establishing a sound risk management program.

(3) Your board of directors must periodically review:

(i) Compliance with the policies and procedures established under paragraph (c)(2) of this section; and

(ii) The adequacy of these policies and procedures to ensure that they continue to be appropriate to the nature and scope of your operations and existing market conditions.

(4) Your board of directors must ensure that management establishes an adequate system of internal controls for transactions involving financial derivatives.

(d) *What are management's responsibilities with respect to financial derivatives?* (1) Management is responsible for daily oversight and management of financial derivatives activities. Management must implement the policies and procedures established by the board of directors and must establish a system of internal controls. This system of internal controls should, at a minimum, provide for periodic reporting to the board of directors and management, segregation of duties, and internal review procedures.

(2) Management must ensure that financial derivatives activities are conducted in a safe and sound manner and should review Thrift Bulletin 13a, "Management of Interest Rate Risk, Investment Securities, and Derivatives Activities," and other applicable agency guidance on implementing a sound risk management program.

(e) *What records must I keep on financial derivative transactions?* You must maintain records adequate to demonstrate compliance with this section and with your board of directors' policies and procedures on financial derivatives.

By the Office of Thrift Supervision.

Dated: April 9, 1998.

Ellen Seidman,

Director.

[FR Doc. 98–9881 Filed 4–22–98; 8:45 am]

BILLING CODE 6720–01–P

DEPARTMENT OF THE TREASURY

Office of Thrift Supervision

[No. 98–38]

Financial Management Policies

AGENCY: Office of Thrift Supervision.

ACTION: Notice and request for comment.

SUMMARY: The Office of Thrift Supervision (OTS) is proposing to adopt a Thrift Bulletin that provides guidance on the management of interest rate risk, investment securities, and derivatives activities. The proposed Bulletin also describes the guidelines OTS examiners will use in assigning the "Sensitivity to Market Risk" component rating.

DATES: Comments must be received on or before June 22, 1998.

ADDRESSES: Send comments on the proposed Thrift Bulletin to: Manager, Dissemination Branch, Records Management and Information Policy, Office of Thrift Supervision, 1700 G Street, N.W., Washington, D.C. 20552, Attention Docket No. 98–38. These submissions may be hand-delivered to 1700 G Street, N.W., from 9:00 a.m. to 5:00 p.m. on business days; they may be sent by facsimile transmission to FAX number (202) 906–7755; or by e-mail: public.info@ots.treas.gov. Those commenting by e-mail should include their name and telephone number. Comments will be available for inspection at 1700 G Street, N.W., from 9:00 a.m. until 4:00 p.m. on business days.

FOR FURTHER INFORMATION CONTACT: Ed Irmler, Senior Project Manager, (202) 906–5730 or Anthony Cornyn, Director, Risk Management Division, (202) 906–5727.

SUPPLEMENTARY INFORMATION: The Office of Thrift Supervision is publishing for public comment the attached document, which it proposes to issue as Thrift Bulletin 13a (TB 13a), Management of Interest Rate Risk, Investment Securities, and Derivatives Activities. This proposed bulletin would provide guidance on a wide range of topics in the area of interest rate risk management, including several on which the Federal Financial Institutions Examination Council (FFIEC) has issued related guidance. OTS believes that adoption of the proposed bulletin would simultaneously improve its supervision of interest rate risk management and reduce regulatory burden on thrift institutions.

The proposed bulletin would update OTS's minimum standards for thrift institutions' interest rate risk management practices with regard to board-approved risk limits and interest rate risk measurement systems. The guidance in this bulletin would, thus, replace Thrift Bulletin 13 (Responsibilities of the Board of Directors and Management with Regard to Interest Rate Risk), Thrift Bulletin 13–1 (Implementation of Thrift Bulletin 13), and Thrift Bulletin 13–2 (Implementation of Thrift Bulletin 13). The proposed bulletin would make several significant changes. First, under TB 13a, institutions would no longer set board-approved limits or provide measurements for the plus and minus 400 basis point interest rate scenarios prescribed by the original TB 13. The proposed bulletin would also change the form in which those limits are expressed. Second, the bulletin would provide guidance on how OTS will assess the prudence of an institution's risk limits. Third, the proposed bulletin would raise the size threshold above which institutions would be responsible for calculating their own estimates of the interest rate sensitivity of Net Portfolio Value (NPV) from $500 million to $1 billion in assets. Fourth, the proposed bulletin would specify a set of desirable features that an institution's risk measurement methodology should utilize. Finally, the proposed bulletin provides an extensive discussion of "sound practices" for interest rate risk management.

The proposed TB 13a also contains guidance on thrifts' investment and derivatives activities. As described in the FFIEC's Supervisory Statement on Investment Securities and End-User Derivative Activities, published elsewhere in this issue of the **Federal Register**, the FFIEC-member agencies will be discontinuing use of the three-part test for suitability of investment securities. Accordingly, the proposed bulletin describes the types of analysis OTS would expect institutions to perform prior to purchasing securities or financial derivatives. The proposed bulletin also provides guidelines on the use of certain types of securities and financial derivatives for purposes other than reducing portfolio risk. The proposed regulation on financial derivatives, published elsewhere in this issue of the **Federal Register**, as supplemented by the guidance in proposed TB 13a, would replace existing regulations governing futures (12 CFR 563.173), forward commitments (12 CFR 563.174), and options (12 CFR 563.175). TB 13a would also replace guidance presently contained in Thrift Bulletin 52 (Supervisory Statement of Policy on Securities Activities), Thrift Bulletin 52–1 ("Mismatched" Floating Rate CMOs), and Thrift Bulletin 65 (Structured Notes).

Finally, TB 13a would provide detailed guidelines for implementing part of the Announcement of the Revision for the Uniform Financial Institutions Rating System, published by the FFIEC on December 19, 1996. That publication announced revised interagency policies, that among other things, established the Sensitivity to Market Risk component rating (the "S" rating). TB 13a would provide quantitative guidelines for assessing an institution's level of interest rate risk, although examiners would have considerable discretion in implementing those guidelines. It would also provide guidelines detailing the factors examiners would consider in assessing the quality of an institution's risk management systems and procedures. Guidance on the topic of assigning the "S" rating is largely new, though TB 13a would replace the rather limited guidelines currently contained in New Directions Bulletin 95–10.

Request for Comment

OTS requests comments on all aspects of proposed TB 13a, including the following questions:

(1) The proposed Thrift Bulletin and the proposed regulation on financial derivatives are integral parts of OTS's approach to supervision of derivatives transactions. OTS does not intend to finalize one without the other. Do you support this approach?

(2) Does the revised format for the board of directors' limits on the interest rate sensitivity of net portfolio value (described in Part II.A.1) impose an unnecessary regulatory burden? Do you believe that specifying the limits in this form would cause more, or less, work for your institution?

(3) Should the discussion of prudent limits in Part II.A.3 and Appendix A be modified? Do you agree with the approach described in those sections?

(4) For institutions that will be responsible for producing their own NPV estimates, does your institution have the sophistication to meet the methodological guidelines described in Part II.B.2?

(5) Do you support the guidelines in Part II.B.3 regarding the integration of risk measurement and operations?

(6) Given the announced elimination of the FFIEC three-part test for investment security suitability, do the guidelines in Part III.A.1 regarding pre-purchase portfolio sensitivity analyses for any significant transactions in securities or financial derivatives provide a good balance between burden and regulatory prudence. Similarly, are

the guidelines, in Part III.A.2, calling for pre-purchase price analyses for complex securities and financial derivatives reasonable?

(7) Are the definitions of complex securities and financial derivatives understandable and adequate? Are the guidelines, in Part III.A.3(b), regarding the use of complex securities and financial derivatives reasonable?

(8) Is the use of explicit guidelines for assigning the Sensitivity to Market Risk component rating (described in Part IV) a sound approach for providing greater ratings consistency and transparency?

(9) Do the quantitative guidelines shown in Part IV.A.3 provide examiners an adequate starting point for assessing the level of interest rate risk? Do the guidelines described in Part IV.A.4, provide adequate opportunity for the use of institutions' internal results in the risk assessment?

(10) Do the criteria for assessing the quality of an institution's risk management practices (described in Part IV.B) provide an adequate framework for such an evaluation?

(11) Are the guidelines for the Sensitivity to Market Risk component rating (shown in Table 2 of Part IV.C) a reasonable implementation of the criteria described in the interagency Uniform Financial Institutions Rating System (see Appendix C)?

(12) Do the "Sound Practices for Market Risk Management," listed in Appendix B, provide a sufficiently good frame of reference that examiners may evaluate an institution's risk management practices against them? Are any elements missing from that Appendix? Should any be deleted?

The proposed Thrift Bulletin is set forth below.

Office of Thrift Supervision **April 23, 1998**
Department of the Treasury

Proposed Thrift Bulletin
TB 13a

Handbooks: **Thrift Activities** **Section: 520 (TA)**
Subject: **Interest Rate Risk; Investment Securities; and Derivatives Activities**

Management of Interest Rate Risk, Investment Securities, and Derivatives Activities

Summary: This Thrift Bulletin provides guidance to management and boards of directors of thrift institutions on the management of interest rate risk, including the management of investment and derivatives activities. In addition, it describes the framework examiners will use in assigning the "Sensitivity to Market Risk" (or "S") component rating. Thrift Bulletin 13a replaces Thrift Bulletins 13, 13-1, 13-2, 52, 52-1, and 65, and New Directions Bulletin 95-10.

For Further Information Contact: Your OTS Regional Office or the OTS Risk Management Division, Washington, DC, (202) 906-6861.

Thrift Bulletin 13a

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Part I: Background

An effective interest rate risk (IRR) management process that maintains interest rate risk within prudent levels is important for the safety and soundness of any financial institution. This is especially true for thrift institutions, which by the nature of their business, are particularly prone to IRR. In recognition of that fact, 12 CFR 563.176 requires institutions to implement proper IRR management procedures. In January 1989, OTS issued Thrift Bulletin 13 (TB 13), *Responsibilities of the Board of Directors and Management with Regard to Interest Rate Risk,* to provide guidance in

the area of IRR management. Since TB 13 was first issued, a great deal of progress has been made in the areas of IRR measurement technology and IRR management. The present Thrift Bulletin, TB 13a, updates the guidelines contained in the original TB 13. It also provides guidance implementing the Federal Financial Institutions Examination Council's *Supervisory Policy Statement on Investment Securities and End-User Derivative Activities* and OTS's proposed rule at Section 563.172, both of which are published elsewhere in this issue of the *Federal Register*. The following Thrift Bulletins are hereby rescinded:

TB 13: *Responsibilities of the Board of Directors and Management with Regard to Interest Rate Risk*;

TB 13-1: *Implementation of Thrift Bulletin 13*;

TB 13-2: *Implementation of Thrift Bulletin 13*;

TB 52: *Supervisory Statement of Policy on Securities Activities*;

TB 52-1: *"Mismatched" Floating Rate CMOs*; and

TB 65: *Structured Notes*.

Also rescinded is New Directions Bulletin 95-10, *Interim Policy On Supervisory Action to Address Interest Rate Risk*.

A. Definition and Sources of Interest Rate Risk

The term "interest rate risk" refers to the vulnerability of an institution's financial condition to movements in interest rates. Although interest rate risk is a normal part of financial intermediation, excessive interest rate risk poses a significant threat to an institution's earnings and capital. Changes in interest rates affect an institution's earnings by altering interest-sensitive income and expenses. Changes in interest rates also affect the underlying value of an institution's assets, liabilities, and off-balance sheet instruments because the present value of future cash flows (and in some cases, the cash flows themselves) change when interest rates change.

Savings associations confront interest rate risk from several sources. These include repricing risk, yield curve risk, basis risk, and options risk.

1. Repricing Risk. The primary form of interest rate risk arises from timing differences in the maturity and repricing of assets, liabilities, and off-balance sheet positions. While such repricing mismatches are fundamental to the business, they can expose a savings association's income and economic value fluctuations as interest rates vary. For example, a thrift that funded a long-term fixed rate loan with a short-term deposit could face a decline in both the future income arising from the position and its economic value if interest rates increase. These declines occur because the cash flows on the loan are fixed, while the interest paid on the funding is variable, and therefore increases after the short-term deposit matures.

2. Yield Curve Risk. Repricing mismatches can also expose a thrift to changes in both the slope and shape of the yield curve. Yield curve risk arises when unexpected shifts of the yield curve have adverse effects on an institution's income or economic value. For example, suppose an institution has variable-rate assets whose interest rate is indexed to the 1-year Treasury rate and which are funded by variable-rate liabilities having the same repricing date but indexed to the 3-month Treasury rate. A flattening of the yield curve will have an adverse impact on the institution's income and economic value, even though a parallel movement in the yield curve might have no effect.

3. Basis Risk. Another source of interest rate risk arises from imperfect correlation in the adjustment of the rates earned and paid on different financial instruments with otherwise similar repricing characteristics. When interest rates change, these differences can cause changes in the cash flows and earnings spread between assets, liabilities and off-balance sheet instruments of similar maturities or repricing frequencies. For example, a strategy of funding a three-year loan that reprices quarterly based on the three- month U.S. Treasury bill rate, with a three-year deposit that reprices quarterly based on three-month LIBOR, exposes the institution to the risk that the spread between the two index rates may change unexpectedly.

4. Options Risk. Interest rate risk also arises from options embedded in many financial instruments. An option provides the holder the right, but not the obligation, to buy, sell, or in some manner alter the cash flows of an instrument or financial contract. Options may be stand alone instruments such as exchange-traded options and over-the-counter (OTC) contracts, or they may be embedded within standard instruments. Instruments with embedded options include bonds and notes with call or put provisions, loans which give borrowers the right to prepay balances, adjustable rate loans with interest rate caps or floors that limit the amount by which the rate may adjust, and various types of non-maturity deposits which give depositors the right to withdraw funds at any time, often without any penalties. If not adequately managed, the asymmetrical payoff characteristics of instruments with option features can pose significant

risk, particularly to those who sell them, since the options held, both explicit and embedded, are generally exercised to the advantage of the holder.

Part II: OTS Minimum Guidelines Regarding Interest Rate Risk

OTS has established specific minimum guidelines for thrift institutions to observe in two areas of interest rate risk management. The first guideline concerns establishment and maintenance of board-approved limits on interest rate risk. The second, concerns institutions' ability to measure their risk level.

A. Interest Rate Risk Limits

Effective control of interest rate risk begins with the board of directors, which defines the institution's tolerance for risk. OTS regulation §563.176 requires all institutions to establish board-approved interest rate risk limits.

1. Limits on Change in Net Portfolio Value. All institutions should establish and demonstrate quarterly compliance with board-approved limits on interest rate risk that are defined in terms of net portfolio value (NPV).[1] These limits should specify the minimum NPV Ratio[2] the board is willing to allow under current interest rates and for a range of six hypothetical interest rate scenarios. These six scenarios are represented by immediate, permanent, parallel movements in the term structure of interest rates of plus and minus 100, 200, and 300 basis points from the actual term structure observed at quarter end.[3]

Two illustrations of such limits are provided in Exhibits 1 and 2. (The numerical limits shown in these exhibits are examples only and should not be interpreted as appropriate limits or regulatory requirements.)

Exhibit 1
ABC Savings Association IRR Limits

[a} Change in Market Interest Rates	[b] Minimum Permissible NPV Ratio
+300 b.p.	10%
+200	11
+100	12
0	13
-100	14
-200	15
-300	16

Exhibit 2
XYZ Savings Association IRR Limits

[a} Change in Market Interest Rates	[b] Minimum Permissible NPV Ratio
+300 b.p.	10%
+200	10
+100	10
0	10
-100	10
-200	10
-300	10

In Exhibit 1, the board of directors of ABC Savings Association has specified that the institution's risk be limited so that for each interest rate change listed in column [a] the institution's NPV Ratio would fall to no less than the level shown in column [b]. The limits set by the board in this example are more demanding in falling interest rate scenarios than in rising ones to reflect the board's expectation that the institution should perform better in the former than in the latter. Because each rate scenario has a different minimum allowable NPV Ratio, this set of limits will likely require frequent review and adjustment by the board. For example, if market interest rates have risen since ABC's limits were established, and ABC's NPV Ratio has fallen significantly, the NPV limits may well require adjustment.

In Exhibit 2, the board of XYZ Savings Association has indicated an unwillingness to allow the institution's NPV Ratio to fall below 10 percent in any of the interest rate scenarios. While such a set of limits will not require attention

[1] Net portfolio value (NPV) is defined as the net present value of an institution's existing assets, liabilities, and off-balance sheet contracts. In the original TB 13, this measure was referred to as the "market value of portfolio equity" (MVPE). A detailed description of how OTS defines and calculates NPV is provided in the manual entitled, *The OTS Net Portfolio Value Model.*

[2] An institution's NPV Ratio for a given interest rate scenario is calculated by dividing the net portfolio value that would result in that scenario by the present value of the institution's assets in that same scenario and is expressed in percentage terms. The NPV ratio is analogous to the capital-to-assets ratio used to measure regulatory capital, but NPV is measured in terms of economic values (or present values) in a particular rate scenario. These limits represent a change in format from those called for by the original TB 13. They will provide a greater degree of comparability across institutions and will mesh better with the OTS guidelines for the Sensitivity to Market Risk component rating, described later in this Bulletin.

[3] Institutions that do not file Schedule CMR of the Thrift Financial Report and do not have a means of calculating NPV should have suitable alternative limits.

as frequently as those in Exhibit 1, they should still be reviewed periodically, particularly if market interest rates change substantially. In both exhibits, management would be responsible for structuring the institution's portfolio so that an immediate increase in interest rates of 300 basis points would reduce the institution's NPV Ratio to no less than 10 percent.

2. Limits on Earnings Sensitivity. Many institutions also set risk limits expressed in terms of the interest rate sensitivity of projected earnings. Such limits can provide a useful supplement to the NPV-based limits. Although institutions are not required by OTS to establish limits and conduct analysis in terms of earnings sensitivity, OTS considers it a good management practice for institutions to estimate the interest rate sensitivity of their earnings and to incorporate this analysis into their business plan and budgeting process. The institution has total discretion over the type of earnings sensitivity analysis and all details of how that analysis is performed. However, OTS encourages institutions to develop earnings simulations utilizing base case and adverse interest rate scenarios and to compare results to actual earnings on a quarterly basis.

3. Prudence of IRR Limits. In assessing the prudence of their institution's NPV limits, as well as in evaluating their institution's current level of risk relative to the rest of the industry, the board of directors will find it useful to refer to the quarterly OTS publication, *Thrift Industry Interest Rate Risk Measures.*[4] This publication contains statistical data about key interest rate risk measures for the industry.

Examiners will consider all pertinent facts in their analysis, but will usually consider an institution's interest rate risk limits to be imprudent if they permit the institution to exhibit a Post-shock NPV Ratio and Interest Rate Sensitivity Measure that would warrant an "S" component rating of 3 or worse. (See Part IV.B.2, *Prudent Limits*, and Appendix A, *Identifying Prudent Interest Rate Risk Limits*, for discussion of this topic.) Imprudent NPV limits may result in examiner criticism or an adverse "S" component rating.

4. Revision of IRR Limits. Interest rate risk limits reflect the board of directors' risk tolerance. Although the board should periodically re-evaluate the appropriateness of the institution's interest rate risk limits, particularly after a significant change in market interest rates, any changes should receive careful consideration and be documented in the minutes of the board meeting.

If the institution's level of risk at some point does violate the board's limits, that fact should be recorded in the minutes of the board meeting, along with management's explanation for that occurrence. Depending on the circumstances and the board's tolerance for risk, the board may elect to revise the risk limits. Alternatively, the board may wish to retain the existing limits and direct management to adopt an acceptable plan for an orderly return to compliance with the limits.

Recurrent changes to interest rate risk limits for the purpose of accommodating instances in which the limits have been, or are about to be, breached may be indicative of inadequate risk management practices and procedures.

B. Systems for Measuring Interest Rate Risk

The ability to identify, measure, and monitor interest rate risk are key elements in risk management. To ensure compliance with its board's IRR limits and to comply with OTS regulation §563.176, each institution must have a way of measuring its interest rate risk. OTS guidelines for interest rate risk measurement systems are as follows, though examiners have broad discretion to require more less rigorous systems.

1. Interest Rate Sensitivity of NPV for Institutions below $1 Billion in Assets. Unless otherwise directed by their OTS Regional Director, *institutions below $1 billion in assets* may usually rely on the quarterly NPV estimates produced by OTS and distributed in the *Interest Rate Risk Exposure Report*. If such an institution owns complex securities whose recorded investment exceeds 5 percent of total assets, the institution should be able to measure or have access to measures of the economic value of those securities under the range of interest rate scenarios described in Part II.A.1, *Limits on Change in Net Portfolio Value*. The institution may rely on the OTS estimates for the other financial instruments in its portfolio, unless examiners direct otherwise.

2. Interest Rate Sensitivity of NPV for Institutions above $1 Billion in Assets. Those *institutions with more than $1 billion in assets* should measure their own NPV and its interest rate sensitivity. OTS examiners will look for the following desirable methodological features in evaluating the quality of such institutions' NPV measurement systems:

[4] *Thrift Industry Interest Rate Risk Measures* is published for a particular quarter approximately seven weeks after the end of that quarter. It may be retrieved using the OTS PubliFax system, at (202) 906-5660, or from the OTS World Wide Web site, http://www.ots.treas.gov

(a) The institution's NPV estimates utilize information on its financial holdings that are generally more detailed than the information reported on Schedule CMR.

(b) Value is ascribed only to financial instruments currently in existence or for which commitments or other contracts currently exist (*i.e.*, future business is not included in NPV).

(c) Values are, where feasible, based directly or indirectly on observed market prices.

(d) Zero-coupon (spot) rates of the appropriate maturities are used to discount cash flows.

(e) Implied forward interest rates are used to model adjustable rate cash flows.

(f) Cash flows are adjusted for reasonable non-interest costs the institution will incur in servicing both its assets and liabilities.

(g) Valuations take account of embedded options using, at least, the static discounted cash flow technique, but preferably using more rigorous options pricing techniques (which normally produce a value greater than zero even for out-of-the-money options).

(h) Valuation of deposits is based, at least in part, on institution-specific data regarding retention rates of existing deposit accounts and the rates offered by the institution on deposits. Preferably, the institution would base these valuations on sound econometric research into such data.

Examiners may determine an institution should use more sophisticated measurement techniques for individual financial instruments or categories of instruments where they believe it to be warranted (*e.g.*, because of the volume and price sensitivity of a group of financial instruments; because of concern that the institution's results may materially misstate the level of risk; because of the combination of a low Post-shock NPV Ratio and high Sensitivity Measure; *etc.*). In any case, the institution should be familiar with the details of the assumptions, term structure, and logic used in performing the measurements. Measures obtained from financial screens or vendors may, therefore, not always be adequate.

In addition to the prescribed parallel shock interest rate scenarios described above, OTS recommends that institutions evaluate the effects of other stressful market conditions (*e.g.*, non-parallel movements in the term structure, basis changes, changes in volatility), as well as the effects of breakdowns in key assumptions (*e.g.*, prepayment and core deposit attrition rates).

3. Integration of Risk Measurement and Operations. As part of their assessment of the quality of an institution's risk management practices, examiners will consider the extent to which the institution's risk measurement process is integrated with management decision-making. Examiners will evaluate whether, in making significant operational decisions (*e.g.*, changes in portfolio structure, investments, business planning, derivatives activities, funding decisions, pricing decisions, *etc.*), the institution considers their effect on the level of interest rate risk. Institutions may do this using an earnings sensitivity approach, one based on NPV sensitivity, or any other reasonable approach. The institution has discretion over all aspects of such analysis. The analysis, however, should not be merely *pro forma* in nature, but rather should be an active factor in the institution's decision-making process. If evidence of such integration is not apparent, examiner criticism or an adverse rating may result.

Part III: Investment Securities and Financial Derivatives

A. Analysis and Stress Testing

Management should understand the various risks associated with investment securities and financial derivatives. As a matter of sound practice, prior to taking an investment position or initiating a derivatives transaction, an institution should:

(a) ensure that the proposed transaction is legally permissible for a savings institution;

(b) review the terms and conditions of the security or financial derivative;

(c) ensure that the proposed transaction is allowable under the institution's investment or derivatives policies;

(d) ensure that the proposed transaction is consistent with the institution's portfolio objectives and liquidity needs;

(e) exercise diligence in assessing the market value, liquidity, and credit risk of the security or financial derivative;

(f) conduct a pre-purchase portfolio sensitivity analysis for *any* significant transaction involving securities or financial derivatives (as described below in *Significant Transactions*);

(g) conduct a pre-purchase price sensitivity analysis of any complex security[5] or financial derivative[6] prior to taking a position (as described below in *Complex Securities and Financial Derivatives*).

1. Significant Transactions. A "significant transaction" is any transaction (including one involving instruments other than complex securities) that might reasonably be expected to increase an institution's Sensitivity Measure by more than 25 basis points. Prior to undertaking any significant transaction, management should conduct an analysis of the incremental effect of the proposed transaction on the interest rate risk profile of the institution. The analysis should show the expected change in the institution's net portfolio value (with and without the proposed transaction) that would result from an immediate parallel shift in the yield curve of plus and minus 100, 200, and 300 basis points. In general, an institution should conduct its own analysis. It may, however, rely on analysis conducted by an independent third-party (*i.e.,* someone other than the seller or counterparty) provided management understands the analysis and its key assumptions.

Institutions with less than $1 billion in assets that do not have the internal modeling capability to conduct such an incremental analysis may use the most recent quarterly NPV estimates for their institution provided by OTS to estimate the incremental effect of a proposed transaction on the sensitivity of its net portfolio value.[7]

2. Complex Securities and Financial Derivatives. Prior to taking a position in any complex security or financial derivative, an institution should conduct a price sensitivity analysis (*i.e.*, pre-purchase analysis) of the instrument. At a minimum, the analysis should show the expected change in the value of the instrument that would result from an immediate parallel shift in the yield curve of plus and minus 100, 200, and 300 basis points. Where appropriate, the analysis should encompass a wider range of scenarios (*e.g.*, non-parallel changes in the yield curve, changes in interest rate volatility, changes in credit spreads, and in the case of mortgage-related securities, changes in prepayment speeds). In general, an institution should conduct its own in-house pre-acquisition analysis. An institution may, however, rely on an analysis conducted by an independent third-party (*i.e.*, someone other than the seller or counterparty) provided management understands the analysis and its key assumptions.

Investments in complex securities and the use of financial derivatives by institutions that do not have adequate risk measurement, monitoring, and control systems may be viewed as an unsafe and unsound practice.

3. Risk Reduction. In general, the use of financial derivatives or complex securities with high price sensitivity[8] should be limited to transactions and strategies that *lower* an institution's interest rate risk as measured by the sensitivity of net portfolio value to changes in interest rates. An institution that uses financial derivatives or invests in such securities for a purpose other than that of reducing portfolio risk should do so in accordance with safe and sound practices and should:

(a) obtain written authorization from its board of directors to use such instruments for a purpose other than to reduce risk; and

(b) ensure that, after the proposed transaction(s), the institution's Post-Shock NPV Ratio would not be less than 6 percent.

The use of financial derivatives or complex securities with high price sensitivity for purposes other than to reduce risk by institutions that do not meet the conditions set forth above may be viewed as an unsafe and unsound practice.

B. Record-Keeping

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[5] For purposes of the pre-purchase analysis, the term "complex security" includes any collateralized mortgage obligation ("CMO"), real estate residential mortgage conduit ("REMIC"), callable mortgage pass-through security, stripped-mortgage-backed-security, structured note, and any security not meeting the definition of an "exempt security." An "exempt security" includes: (1) standard mortgage-pass-through securities, (2) non-callable, fixed-rate securities, and (3) non-callable, floating-rate securities whose interest rate is (a) not leveraged (*i.e.*, the rate is not based on a multiple of the index), and (b) at least 400 basis points from the lifetime rate cap at the time of purchase.

[6] The following financial derivatives are exempt from the pre-purchase analysis called for above: commitments to originate, purchase, or sell mortgages. To perform the pre-purchase analysis for derivatives whose initial value is zero (*e.g.*, futures, swaps), the institution should calculate the change in value as a percentage of the notional principal amount.

[7] Institutions that are exempt from filing Schedule CMR and that choose not to file voluntarily, should ensure that *no transaction* – whether involving complex securities, financial derivatives, or any other financial instruments – causes the institution to fall out of compliance with its board of directors' interest rate risk limits.

[8] For purposes of this Bulletin, "complex securities with high price sensitivity" include those whose price would be expected to decline by more than 10 percent under an adverse parallel change in interest rates of 200 basis points.

Institutions must maintain accurate and complete records of all securities and derivatives transactions in accordance with 12 CFR 562.1. Institutions should retain any analyses (including pre- and post-purchase analyses) relating to investments and derivatives transactions and make such analyses available to examiners upon request.

In addition, for each type of financial derivative instrument authorized by the board of directors, the institution should maintain records containing:

(a) the names, duties, responsibilities, and limits of authority (including position limits) of employees authorized to engage in transactions involving the instrument;

(b) a list of approved counterparties with which transactions may be conducted;

(c) a list showing the credit risk limit for each approved counterparty; and

(d) a contract register containing key information on all outstanding contracts and positions.

The contract registers should specify the type of contract, the price of each open contract, the dollar amount, the trade and maturity dates, the date and manner in which contracts were offset, and the total outstanding positions.

Where deferred gains or losses on derivatives from hedging activities have been recorded consistent with generally accepted accounting principles (GAAP), the institution should maintain appropriate supporting documentation.[9]

C. Supervisory Assessment of Investment and Derivatives Activities
Examiners will assess the overall quality and effectiveness of the institution's risk management process governing investment and derivatives activities. In making such assessments, examiners will take into account compliance with the guidelines set forth above and the quality of the institution's risk management process. The quality of the institution's risk management process will be evaluated in the context of Appendix B, *Sound Practices for Market Risk Management.*

Part IV: Guidelines for the "Sensitivity to Market Risk" Component Rating
Consistent with the interagency Uniform Financial Institutions Rating System, or CAMELS rating system, of which an excerpt is attached as Appendix C, the "Sensitivity to Market Risk" component rating (*i.e.*, the "S" rating) is based on examiners' conclusions about two dimensions: (1) an institution's *level of market risk* and (2) the *quality of its practices for managing market risk.* This section discusses the guidelines that examiners will use in assessing the two dimensions and combining those assessments into a component rating. Because few thrift institutions have significant exposure to foreign exchange risk or commodity or equity price risks, interest rate risk will generally be the only form of market risk to be assessed under this component rating.

A. Assessing the Level of Interest Rate Risk
Examiners will base their conclusions about an institution's level of interest rate risk -- the first dimension for determining the "S" component rating -- primarily on the interest rate sensitivity of the institution's net portfolio value. The two specific measures of risk that will receive examiners' primary attention are the Interest Rate Sensitivity Measure and the Post-shock NPV Ratio (see *Glossary* for definitions).

OTS uses risk measures based on NPV for several reasons. First, the NPV measures are more readily comparable across institutions than internally generated measures of earnings sensitivity. Second, NPV focuses on a longer-term analytical horizon than institutions' internally generated earnings sensitivity measures. (The interest rate sensitivity of earnings is typically measured over a short-term horizon such as a year, while NPV is based on all future cash flows anticipated from an institution's existing assets, liabilities, and off-balance sheet contracts.) Third, the NPV-based measures take better account of the embedded options present in the typical thrift institution's portfolio.

1. Interest Rate Sensitivity Measure. In assessing the level of interest rate risk, a high (*i.e.*, risky) Interest Rate Sensitivity Measure, by itself, may not give cause for supervisory concern when the institution has a strong capital position. Because an institution's risk of failure is inextricably linked to capital and, hence, to its ability to absorb adverse economic shocks, an institution with a high level of economic capital (*i.e.*, NPV) may be able safely to support a high Sensitivity Measure.

[9] At the time of this writing, it was anticipated that the FASB's proposed standard, "Accounting for Derivative and Similar Financial Instruments and for Hedging Activities," would be issued in 1998, to be effective in 1999. Under that proposal, all "derivative financial instruments," as defined, including those used for hedging purposes, would be accounted for at fair value. Accordingly, under the FASB's proposal, deferred gains and losses on "derivative financial instruments" from hedging activities would no longer be recorded.

2. Post-Shock NPV Ratio. The Post-shock NPV Ratio is a more comprehensive gauge of risk than the Sensitivity Measure because it incorporates estimates of the current economic value of an institution's portfolio, in addition to the reported capital level and interest rate risk sensitivity. There are three potential causes of a low (*i.e.*, risky) Post-shock NPV Ratio: (*i*) low reported capital; (*ii*) significant unrecognized depreciation in the value of the portfolio; or (*iii*) high interest rate sensitivity. Although the first two of these, low reported capital and significant unrecognized depreciation in portfolio value, may cause supervisory concern (and receive attention under the portions of the examination devoted to evaluating Capital Adequacy, Asset Quality, or Earnings), they do not necessarily represent an "interest rate risk problem." Only when an institution's low Post-shock Ratio is, in whole or in part, caused by high interest rate sensitivity is an interest rate risk problem suggested. That condition is reflected in the guidelines discussed below.

3. Guidelines for Determining the Level of Interest Rate Risk. In describing the five levels of the "S" component rating, the interagency uniform ratings system established several qualitative levels of risk: "minimal," "moderate," "significant," "high," and "imminent threat." The following interest rate risk levels are ordinarily indicated for OTS-regulated institutions, based on the combination of each institution's Post-shock NPV Ratio and Interest Rate Sensitivity Measure. (These guidelines are summarized in Table 1 below.) *These risk levels are for guidance, they are not mandatory; examiners have discretion to exercise judgment in a number of respects* (see Part IV.D, *Examiner Judgment*).

An institution with a Post-shock NPV Ratio below 4% and an Interest Rate Sensitivity Measure of:

(a) more than 200 basis points will ordinarily be characterized as having "high" risk. Such an institution will typically receive a 4 or 5 rating for the "S" component.[10]

(b) 100 to 200 basis points will ordinarily be characterized as having "significant" risk. Such an institution will typically receive a 3 rating for the "S" component.

(c) 0 to 100 basis points will ordinarily be characterized as having "moderate" risk. Such an institution will typically receive a rating of 2 for the "S" component. If the institution's sensitivity is extremely low, a rating of 1 may be supportable if the institution is not likely to incur larger losses under rate shocks other than the parallel shocks depicted in the OTS NPV Model.

An institution with a Post-shock NPV Ratio between 4% and 8% and an Interest Rate Sensitivity Measure of:

(a) more than 400 basis points will ordinarily be characterized as having "high" risk. Such an institution will typically receive a 4 or 5 rating for the "S" component.

(b) 200 to 400 basis points will ordinarily be characterized as having "significant" risk. Such an institution will typically receive a 3 rating for the "S" component.

(c) 100 to 200 basis points will ordinarily be characterized as having "moderate" risk. Such an institution will typically receive a 2 rating for the "S" component.

(d) 0 to 100 basis points will ordinarily be characterized as having "minimal" risk. Such an institution will typically receive a rating of 1 for the "S" component.

An institution with a Post-shock NPV Ratio between 8% and 12% and an Interest Rate Sensitivity Measure of:

(a) more than 400 basis points will ordinarily be characterized as having "significant" risk. Such an institution will typically receive a 3 rating for the "S" component.

(b) 200 to 400 basis points will ordinarily be characterized as having "moderate" risk. Such an institution will typically receive a 2 rating for the "S" component.

[10] According to the interagency uniform ratings system, the level of market risk at a 4-rated institution is "high," while that at a 5-rated institution is so high as to pose "an imminent threat to its viability." Under the Prompt Corrective Action regulation, 12 CFR Part 565, supervisory action is tied to regulatory capital. An institution's viability is, therefore, directly dependent on regulatory capital, not on economic capital. Because regulatory capital can remain positive for an extended period of time after economic capital has become zero or negative, the NPV measures are not by themselves indicators of near-term viability. For an institution's level of interest rate risk to constitute an imminent threat to viability, the institution will typically have a high level of risk *and* will be critically undercapitalized.

(c) less than 200 basis points will ordinarily be characterized as having "minimal" risk. Such an institution will typically receive a rating of 1 for the "S" component.

An institution with a Post-shock NPV Ratio of more than 12% and an Interest Rate Sensitivity Measure of:

(a) more than 400 basis points will ordinarily be characterized as having "moderate" risk. Such an institution will typically receive a 2 rating for the "S" component.

(b) less than 400 basis points will ordinarily be characterized as having "minimal" risk. Such an institution will typically receive a rating of 1 for the "S" component.

Table 1
Summary of Guidelines for the "Level of Interest Rate Risk"

Post-Shock NPV Ratio	Interest Rate Sensitivity Measure			
	0 - 100 b.p.	100-200 b.p.	200-400 b.p.	Over 400 b.p.
Over 12%	Minimal Risk (1)	Minimal Risk (1)	Minimal Risk (1)	Moderate Risk (2)
8% to 12%	Minimal Risk (1)	Minimal Risk (1)	Moderate Risk (2)	Significant Risk (3)
4% to 8%	Minimal Risk (1)	Moderate Risk (2)	Significant Risk (3)	High Risk (4 or 5)
Below 4%	Moderate Risk (2)	Significant Risk (3)	High Risk (4 or 5)	High Risk (4 or 5)

In Table 1 the numbers in parentheses represent the preliminary "S" component ratings that an institution would ordinarily receive barring deficiencies in its risk management practices. *Examiners may assign a different rating based on their interpretation of the facts and circumstances at each institution.*

4. Internal vs. OTS Risk Measures. In applying the guidelines described above, examiners will encounter three general types of situations regarding the availability of risk measures.

First, if the institution does not have internal NPV measures, but does file Schedule CMR, examiners will use the NPV measures produced by OTS. In such instances, examiners must be aware of the importance of accurate reporting by the institution on Schedule CMR, particularly of items for which the institution provides its own market value estimates in the various interest rate scenarios, such as for mortgage derivative securities. They must also be aware of circumstances in which the OTS measures may overstate or understate the sensitivity of an institution's financial instruments.

Second, if the institution does produce its own NPV measures, examiners will have to decide whether to use the institution's or OTS' risk measures.

(a) If the institution's own measures and those produced by OTS are broadly consistent and result in the same risk category (*e.g.*, "minimal risk," "moderate risk," *etc.*), the choice between using the institution's measures or the OTS estimates probably does not matter, though examiners should attempt to ascertain the reasons for any major discrepancies between the two sets of results.

(b) If the institution's NPV measures place it in a different risk category than the OTS measures do, examiners (in consultation with their Regional Capital Markets group or the Washington Risk Management Division) should determine which financial instruments are the source of that discrepancy. If the institution's valuations for those instruments are judged more reliable than OTS', the institution's results will be used to replace the OTS results for those financial instruments in calculating NPV in the various interest rate scenarios.

(c) If examiners have reason to doubt *both* the institution's own measures and those produced by OTS, they may modify (in consultation with their Regional Capital Markets group or the Washington Risk Management Division) either or both measures to arrive at NPV measures they consider reasonable.

In deciding whether to rely on an institution's internal NPV measures, examiners will ensure that the institution's measures are produced in a manner that is broadly consistent with the OTS measures. (The major methodological points to consider are described in Part II.B, *Systems for Measuring Interest Rate Risk.*)

The third situation examiners will encounter is one in which the institution calculates no internal NPV measures and does not report on Schedule CMR. Because no NPV results will be available in such cases, the guidelines are not directly applicable. In addition to reviewing the institution's balance sheet structure in such cases, examiners will review whatever interest rate risk measurement and management tools the institution uses to comply with §563.176. Depending on their findings regarding the institution's general level of risk and its risk management practices, examiners might reconsider the appropriateness of the institution's continued exemption from filing Schedule CMR.

B. Assessing the Quality of Risk Management

In drawing conclusions about the quality of an institution's risk management practices -- the second dimension of the "S" component rating -- examiners will assess all significant facets of the institution's risk management process. To aid in that assessment, examiners will refer to Appendix B of this Bulletin which provides a set of *Sound Practices for Market Risk Management*. These sound practices suggest the sorts of management practices institutions of varying levels of sophistication may utilize. As (*i*) the size of the institution increases, (*ii*) the complexity of its assets, liabilities, or off-balance sheet contracts increases, or (*iii*) the overall level of interest rate risk at the institution increases, its risk management process should exhibit more of the elements included in the Sound Practices and should display a greater degree of formality and rigor. Because there is no formula for determining the adequacy of such systems, examiners will make that determination on a case-by-case basis. Examiners will, however, take the following eight factors, among others, into consideration in assessing the quality of an institution's risk management process.

1. Oversight by Board and Senior Management. Examiners will assess the quality of oversight provided by the institution's board and senior management. That assessment may include many facets, as described in Appendix B, *Sound Practices for Market Risk Management*.

2. Prudent Limits. Examiners will assess whether the institution's board-approved interest rate risk limits are prudent. Ordinarily, examiners will consider a set of IRR limits imprudent if they permit the institution's NPV potentially to exhibit a Post-shock NPV Ratio and Interest Rate Sensitivity Measure that would ordinarily warrant an "S" component rating of 3 or worse (see Table 1, in Part IV.A.3). Imprudent limits may result in examiner criticism or an adverse "S" rating. See Appendix A, *Identifying Prudent Interest Rate Risk Limits*, for examples of how examiners will make that determination.

3. Adherence to Limits. Assuming the institution's interest rate risk limits are considered prudent, examiners will assess the degree to which the institution adheres to those limits. Frequent exceptions to the board's limits may indicate weak interest rate risk management practices. Similarly, recurrent changes to the institution's limits to accommodate *exceptions* to the limits may reflect ineffective board oversight.

4. Quality of System for Measuring NPV Sensitivity. Examiners will consider whether the quality of the institution's risk measurement and monitoring system is commensurate with the institution's size, the complexity of its financial instruments, and its level of interest rate risk. Examiners will generally expect the quality of an institution's system for measuring the interest rate sensitivity of NPV to be consistent with the descriptions in Part II.B, *Systems for Measuring Interest Rate Risk*.

5. Quality of System for Measuring Earnings Sensitivity. OTS places considerable reliance on NPV analysis to assess an institution's interest rate risk. Other sorts of measures may, however, be considered in evaluating an institution's risk management practices. In particular, utilization of a well-supported earnings sensitivity analysis may be viewed as a favorable factor in determining an institution's component rating. In fact, all institutions are encouraged to measure the interest rate sensitivity of projected earnings. Despite inherent limitations,[11] such analyses can provide useful information to an institution's management.

Methodologies used in measuring earnings sensitivity vary considerably among different institutions. To assist the examiner in reviewing the earnings modeling process, institutions should have clear descriptions of the methodologies and assumptions used in their models. Of particular importance are the type of rate scenarios used (*e.g.*, instantaneous or gradual, consistent with forward yield curve) and assumptions regarding new business (*i.e.*, type of assets, dollar amounts, and interest rates). In addition, formulas for projecting interest rate changes on existing business (*e.g.*, ARMs, transaction deposits) should be clearly described and any major differences from analogous formulas used in the OTS NPV Model should be explained and supported.

[11] The effectiveness of an earnings sensitivity model to identify interest rate risk depends on the composition of an institution's portfolio. In particular, management should recognize that such models generally do not fully take account of longer-term risk factors.

6. Integration of Risk Management with Decision-Making. Examiners will consider the extent to which the results of an institution's risk measurement system are used by management in making operational decisions (*e.g.*, changes in portfolio structure, investments, derivatives activities, business planning, funding decisions, pricing decisions). This is of particular significance if the institution's Post-shock NPV Ratio is relatively low, and thus provides less of an economic buffer against loss.

Examiners will evaluate whether management considers the effect of significant operational decisions on the institution's level of interest rate risk. The form of analysis used for measuring that effect (earnings sensitivity, NPV sensitivity, or any other reasonable approach) and all details of the measurement are up to the institution. That analysis should be an active factor in management's decision-making and not be generated solely to avoid examiner criticism. In the absence of such a decision-making process, examiner criticism or an adverse rating may be appropriate.

7. Investments and Derivatives. Examiners will consider the adequacy of the institution's risk management policies and procedures regarding investment and derivatives activities. See Part III of this Bulletin, *Investment Securities and Financial Derivatives*, for a detailed discussion.

8. Size, Complexity, and Risk Profile. Under the interagency uniform ratings descriptions, an institution's risk management practices are evaluated relative to its "size, complexity, and risk profile." Thus, a small institution with a simple portfolio and a consistently low level of risk may receive an "S" rating of 1 even if its risk management practices are fairly rudimentary. A large institution with these same characteristics would be expected to have more rigorous risk management practices, but would not be held to the same risk management standards as a similarly sized institution with either a higher level of risk or a portfolio containing complex securities or financial derivatives. An institution making a conscious business decision to maintain a low risk profile by investing in low risk products or maintaining a high level of capital may not require elaborate and costly risk management systems.

C. Combining Assessments of the Level of Risk and Risk Management Practices

Guidelines examiners will use in assessing an institution's level of risk and the quality of its risk management practices have been described in the two previous sections. This section provides guidelines for combining those two assessments into an "S" component rating for the institution.

The interagency uniform ratings descriptions specify the criteria for the "S" component ratings in terms of the level of risk and the quality of risk management practices (see Appendix C). For example:

> A rating of 1 indicates that market risk sensitivity is *well controlled* and that there is *minimal* potential that the earnings performance or capital position will be adversely affected. ... [*emphasis added*]

Thus, if market risk is less than "well controlled" (*i.e.*, "adequately controlled," "in need of improvement," or "unacceptable") the institution does not qualify for a component rating of 1. Likewise, if the level of market risk is more than "minimal" (*i.e.*, "moderate," "significant," or "high") the institution similarly does not qualify for a rating of 1.

Applying the same logic to the descriptions of the 2, 3, 4, and 5 levels of the "S" component rating results in the ratings guidelines shown in Table 2. That table summarizes how various combinations of examiner assessments about an institution's "level of interest rate risk" and "quality of risk management practices" translate into a suggested rating.[12]

Two important caveats must be noted about this table. First, the two dimensions are not totally independent of one another, because the quality of risk management practices is evaluated relative to an institution's level of risk (among other things). Thus, for example, an institution's risk management practices are more likely to be assessed as "well controlled" if the institution has minimal risk than if it has a higher level of risk. Second, as described further in the next section, the ratings shown in Table 2 are provisional and subject to examiner discretion.

[12] Some of the combinations of risk management quality and level of risk shown in the table will rarely, if ever, be encountered (*e.g.*, an institution with "unacceptable" risk management practices, but a "minimal" level of risk). For the sake of completeness, however, all cells of the matrix are shown.

Table 2
"S" Component-Rating Guidelines in Matrix Form

Quality of Risk Management Practices*	Level of Interest Rate Risk			
	Minimal Risk	Moderate Risk	Significant Risk	High Risk**
Well Controlled	S=1	S=2	S=3	S=4 or 5
Adequately Controlled	S=2	S=2	S=3	S=4 or 5
Needs Improvement	S=3	S=3	S=3	S=4 or 5
Unacceptable	S=4	S=4	S=4	S=4 or 5

* The Quality of Risk Management Practices is evaluated relative to an institution's size, complexity, and level of interest rate risk.

** To receive a component rating of 5, an institution's level of interest rate risk must be an "imminent threat to its viability." Such an institution will typically have a high level of risk and be critically undercapitalized.

D. Examiner Judgment

Examiners have a responsibility to exercise judgment in assigning ratings based on the facts they encounter at each institution. This section provides a non-exhaustive list of factors examiners may consider in applying the "S" rating guidelines to a particular institution.

1. Judgment in Assessing the Level of Risk. In assessing the level of interest rate risk, the likelihood that examiners will deviate from the guidelines in Table 1 is heightened in cases where the Post-shock NPV Ratio and the Interest Rate Sensitivity Measure are both near cell boundaries. For example, there is no material difference between an institution whose Post-shock Ratio and Sensitivity Measure are, respectively, 4.01% and 199 b.p. and one where they are 3.99% and 201 b.p., yet the guidelines in Table 1 suggest a 2 rating for the former and a 4 for the latter. Clearly, the boundaries of the cells in the table must be interpreted as transition zones, rather than precise cut-off points, between suggested ratings. As such, examiners will more commonly deviate from the stated guidelines in the vicinity of cell borders than in their interior.

In applying the guidelines in Table 1 generally, but especially in such borderline cases, many considerations may cause an examiner to reach a different conclusion than suggested by the guidelines. Such considerations include the following:

(a) the trend in the institution's risk measures during recent quarters.

(b) the trend in the institution's risk measures compared with those of the rest of the industry in recent quarters. (Comparison with the results for the industry as a whole often provides a useful backdrop for evaluating an institution's results, particularly during a period of volatile interest rates.)

(c) the examiner's level of comfort with the overall accuracy of the available risk measures as applied to the particular products of the institution.

(d) the existence of items with particularly volatile or uncertain interest rate sensitivity for which the examiner wants to allow an added margin for possible error.

(e) the effect of any restructuring that may have occurred since the most recently available risk measures.

(f) other available evidence that causes the examiner to favor a higher or lower risk assessment than that suggested by the guidelines.

2. Judgment in Assessing the Quality of Risk Management Practices. Conclusions about the quality of risk management practices should be based, in part, on the institution's level of risk, with less risky institutions requiring less rigorous risk management practices. Considerations listed in the *Judgment in Assessing the Level of Risk,* above, may therefore cause the examiner to modify his or her assessment of the institution's risk management practices. In addition, if changes have occurred in the institution's level of risk since the last evaluation, the examiner may wish to reassess the quality of the institution's risk management practices in light of these changes.

Part V: Supervisory Action

If supervisory action to address interest rate risk is needed, examiners will discuss the problem with management and obtain their commitment to correct the problem as quickly as practicable.

If deemed necessary, examiners will request a written plan from the board and management to reduce interest rate sensitivity, increase capital, or both. The plan should include specific risk measure targets. If the initial plan is inadequate, examiners will require amendment and re-submission. Examiners will document the corrective strategy and results in the Regulatory Plan, and review progress at case review meetings.

For institutions with composite ratings of 4 or 5, the presumption of formal enforcement action generally requires a supervisory agreement, cease and desist order, prompt corrective action directive, or other formal supervisory action.

If an institution's interest rate risk increases between examinations, examiners will consider whether a downgrade of the "S" component rating or the composite rating is warranted. Examiners will obtain quarterly progress reports (more frequently if the situation is severe). Where appropriate, examiners may require the institution to develop the capacity to conduct its own modeling.

Appendix A: Identifying Prudent Interest Rate Risk Limits

The basic principle examiners will use in determining whether an institution's risk limits are prudent is that the limits should not permit NPV to reach such a level that the Post-shock NPV Ratio and Sensitivity Measure would suggest an "S" component rating of 3 or worse under the guidelines for the Level of Risk (reproduced here as Table 1).

Table 1
Summary of Guidelines for the "Level of Interest Rate Risk"

Post-Shock NPV Ratio	Interest Rate Sensitivity Measure			
	0 - 100 b.p.	100-200 b.p.	200-400 b.p.	Over 400 b.p.
Over 12%	Minimal Risk (1)	Minimal Risk (1)	Minimal Risk (1)	Moderate Risk (2)
8% to 12%	Minimal Risk (1)	Minimal Risk (1)	Moderate Risk (2)	Significant Risk (3)
4% to 8%	Minimal Risk (1)	Moderate Risk (2)	Significant Risk (3)	High Risk (4 or 5)
Below 4%	Moderate Risk (2)	Significant Risk (3)	High Risk (4 or 5)	High Risk (4 or 5)

Examples of Evaluating the Prudence of Interest Rate Risk Limits.
The following examples illustrate how OTS examiners will evaluate whether an institution's interest rate risk limits are prudent. In each example, the interest rate risk limits approved by the institution's board of directors are shown in column [b]. These specify a minimum NPV Ratio for each of the interest rate scenarios shown in column [a]. The NPV Ratios currently estimated for the institution for each rate scenario are shown in column [c].

Example Institution A

Institution A
Limits and Current NPV Ratios:

[a] Rate Shock (in basis points)	[b] Board Limits (Minimum NPV Ratios)	[c] Institution's Current NPV Ratios
+300	6.00%	10.00%
+200	7.00	11.50
+100	8.00	12.50
0	9.00	13.00
-100	10.00	13.25
-200	11.00	13.50
-300	12.00	13.75

To determine whether Institution A's interest rate risk limits are prudent, examiners will evaluate the risk measures permitted under those limits relative to the guidelines for the Level of Risk in Table 1. The Post-shock NPV Ratio permitted by the institution's board limits is 7.00% (from the +200 b.p. scenario in column [b], above). The Sensitivity Measure permitted by the limits is not known; it depends on the *actual* level of the base case NPV Ratio which will probably be higher than the *limit* for the base case scenario. Examiners will, therefore, use the institution's *current* Sensitivity Measure (based on OTS' results or those of the institution) in performing their evaluation. Institution A's current Sensitivity Measure is 150 basis points (*i.e.*, [13.00% - 11.50%], the NPV Ratios in the 0 b.p. and +200 b.p. scenarios in column [c], above).

Referring to Table 1, the Post-shock NPV Ratio allowed by the institution's limits falls into the "4% to 8%" row and its current Sensitivity Measure falls into the "100 to 200 b.p." column. The rating suggested by Table 1 is, therefore, a 2, and Institution A's risk limits would, thus, probably be considered prudent.[13]

[13] This example assumes there are no significant deficiencies in the institution's risk management practices.

Example Institution B

Institution B
Limits and Current NPV Ratios:

[a] Rate Shock (in basis points)	[b] Board Limits (Minimum NPV Ratios)	[c] Institution's Current NPV Ratios
+300	6.00%	6.00%
+200	7.00	8.50
+100	8.00	11.00
0	9.00	13.00
-100	10.00	14.00
-200	11.00	14.50
-300	12.00	15.00

Institution B has identical interest rate risk limits as Institution A, but is considerably more interest rate sensitive than Institution A. Institution B's Sensitivity Measure is 450 b.p. (*i.e.*, [13.00% - 8.50%]).

For purposes of applying the guidelines in Table 1 to the limits, the Post-shock NPV Ratio of 7.00% permitted by the institution's board limits falls into the "4% to 8%" row. Its *current* Sensitivity Measure, however, falls into the "Over 400 b.p." column of Table 1. The rating suggested by the guidelines is therefore a 4, and Institution B's risk limits would probably *not* be considered prudent. Even though its limits are identical to those of Institution A, its much higher *current* Sensitivity Measure requires the support of a higher Post-shock NPV Ratio than the minimum permitted by the board limits.

Example Institution C

Institution C
Limits and Current NPV Ratios:

[a] Rate Shock (in basis points)	[b] Board Limits (Minimum NPV Ratios)	[c] Institution's Current NPV Ratios
+300	6.00%	6.00%
+200	6.00	8.50
+100	6.00	11.00
0	6.00	13.00
-100	6.00	14.00
-200	6.00	14.50
-300	6.00	15.00

Institution C has the same current NPV Ratios as Institution B, but its board limits are a uniform 6.00% in all rate scenarios. In judging the prudence of its limits, the Post-shock NPV Ratio permitted by the limits is, therefore, 6.00%. Its *current* Sensitivity Measure, like that of Institution B, is 450 b.p.

In applying the Table 1 guidelines to the limits, Institution C's Post-shock NPV Ratio is in the "4% to 8%" row and its Sensitivity Measure in the "Over 400 b.p." column of Table 1, so the rating suggested by the table is a 4, just like Institution B. Thus, Institution C's risk limits would also probably *not* be considered prudent.

Example Institution D

Institution D
Limits and Current NPV Ratios:

[a] Rate Shock (in basis points)	[b] Board Limits (Minimum NPV Ratios)	[c] Institution's Current NPV Ratios
+300	3.50%	2.50%
+200	3.50	3.25
+100	3.50	3.75
0	3.50	4.00
-100	3.50	4.25
-200	3.50	4.50
-300	3.50	4.75

Institution D has a relatively low base case level of economic capital, and its board limits recognize that fact by permitting relatively low NPV Ratios. Furthermore, the institution's level of interest rate risk currently exceeds the board limits (*i.e.,* the current NPV Ratios in the +200 and +300 scenarios are below the 3.50% minimums). While examiners would be very likely to express concern about that aspect of the institution's risk management process, the limits themselves might still be prudent.

To determine whether the institution's limits *are* prudent, examiners will use the Post-shock NPV Ratio of 3.50% permitted by the limits and the institution's current Sensitivity Measure of 75 basis points (*i.e.*, [4.00% - 3.25%]). In applying Table 1, the Post-shock NPV Ratio permitted by the limits falls into the "Below 4%" row and the *current* Sensitivity Measure falls into the "0 to 100 b.p." column. The rating suggested by Table 1 is therefore a 2, and assuming that Institution A's Sensitivity Measure has been consistently low, its risk limits would probably be considered prudent. Because of the critical importance of the Sensitivity Measure in this determination, examiners might well arrive at a different conclusion if they lack assurance that the institution has the ability to maintain that measure at its current, low level. Thus, if the Sensitivity Measure has been volatile in the past or if examiners have concerns about the quality of the institution's risk management practices, they may probably conclude that the risk limits are not prudent.

Appendix B: Sound Practices for Market Risk Management

This section describes the key elements for effective management of market risk exposures. These key elements encompass sound practices for both interest rate risk management and the management of investment and derivatives activities.

The degree of formality and rigor with which an institution implements these elements in its own risk management system should be consistent with the institution's size, the complexity of its financial instruments, its tolerance for risk, and the level of market risk at which it actually operates.

A. Board and Senior Management Oversight

Effective oversight is an integral part of an effective risk management program. The board and senior management should understand their oversight responsibilities regarding interest rate risk management and the management of investment and derivatives activities conducted by their institution.

Board of Directors. The board of directors should approve broad strategies and major policies relating to market risk management and ensure that management takes the steps necessary to monitor and control market risk. The board of directors should be informed regularly of the institution's risk exposures.

The board of directors has ultimate responsibility for understanding the nature and level of risk taken by the institution. Board oversight need not involve the entire board, but may be carried out by an appropriate subcommittee of the board. The board, or an appropriate subcommittee of board members, should:

- Approve broad objectives and strategies and major policies governing interest rate risk management and investment and derivatives activities.
- Provide clear guidance to management regarding the board's tolerance for risk.
- Ensure that senior management takes steps to measure, monitor, and control risk.
- Review periodically information that is sufficient in timeliness and detail to allow it to understand and assess the institution's interest rate risk and risks related to investment and derivatives activities.
- Assess periodically compliance with board-approved policies, procedures, and risk limits.
- Review policies, procedures and risk limits at least annually.

Although board members are not required to have detailed technical knowledge, they should ensure that management has the expertise needed to understand the risks incurred by the institution and that the institution has personnel with the expertise needed to manage interest rate risk and conduct investment and derivative activities in a safe and sound manner.

Senior Management. Senior management should ensure that the institution's operations are effectively managed, that appropriate risk management policies and procedures are established and maintained, and that resources are available to conduct the institution's activities in a safe and sound manner.

Senior management is responsible for the daily oversight and management of the institution's activities, including the implementation of adequate risk management polices and procedures. To carry out its responsibilities, senior management should:

- Ensure that effective risk management systems are in place and properly maintained. An institution's risk management systems should include (1) systems for measuring risk, valuing positions, and measuring performance, (2) appropriate risk limits, (3) a comprehensive reporting and review process, and (4) effective internal controls.
- Establish and maintain clear lines of authority and responsibility for managing interest rate risk and for conducting investment and derivatives activities.
- Ensure that the institution's operations and activities are conducted by competent staff with technical knowledge and experience consistent with the nature and scope of their activities.
- Provide the board of directors with periodic reports and briefings on the institution's market-risk related activities and risk exposures.
- Review periodically the institution's risk management systems, including related policies, procedures, and risk limits.

Lines of Responsibility and Authority for Managing Market Risk. Institutions should identify the individuals and/or committees responsible for risk management and should ensure there is adequate separation of duties in key elements of the risk management process to avoid potential conflicts of interest. Institutions should have a risk management function (or unit) with clearly defined duties that is sufficiently independent from position-taking functions.

Institutions should identify the individuals and/or committees responsible for conducting risk management. Senior management should define lines of authority and responsibility for developing strategies, implementing tactics, and conducting the risk measurement and reporting functions.

The risk management unit should report directly to both senior management and the board of directors, and should be separate from, and independent of, business lines. The function may be part of, or may draw its staff from, more general operations (*e.g.*, the audit, compliance, or Treasury units). Large institutions should, however, have a separate risk management unit, particularly if the Treasury unit is also a profit center. Smaller institutions with limited resources and personnel should provide additional oversight by outside directors in order to compensate for the lack of separation of duties.

Management should ensure that sufficient safeguards exist to minimize the potential that individuals initiating risk-taking positions may inappropriately influence key control functions of the risk management process such as the development and enforcement of policies and procedures, the reporting of risks to senior management, and the conduct of back-office functions.

B. Adequate Policies and Procedures

Institutions should have clearly defined risk management policies and procedures. The board of directors has ultimate responsibility for the adequacy of those policies and procedures; senior management and the institution's risk management function have immediate responsibility for their design and implementation. Policies and procedures should be reviewed periodically and revised as needed.

Interest Rate Risk. Institutions should have written policies and procedures for limiting and controlling interest rate risk. Such policies and procedures should be consistent with the institution's strategies, financial condition, risk-management systems, and tolerance for risk. An institution's policies and procedures (or documentation issued pursuant to such policies) should:

- Address interest rate risk at the appropriate level(s) of consolidation. (Although the board will generally be most concerned with the consolidated entity, it should be aware that accounting and legal restrictions may not permit gains and losses occurring in different subsidiaries to be netted.)
- Delineate lines of responsibility and identify individuals or committees responsible for (1) developing interest rate risk management strategies and tactics, (2) making interest rate risk management decisions, and (3) conducting oversight.
- Identify authorized types of financial instruments and hedging strategies.
- Describe a clear set of procedures for controlling the institution's aggregate interest rate risk exposure.
- Define quantitative limits on the acceptable level of interest rate risk for the institution.
- Define procedures and conditions necessary for exceptions to policies, limits, and authorizations.

Investment and Derivatives Activities. Institutions should have written policies and procedures governing investment and derivatives activities. Such policies and procedures should be consistent with the institution's strategies, financial condition, risk-management systems, and tolerance for risk. An institution's policies and procedures (or documentation issued pursuant to such policies) should:

- Identify the staff authorized to conduct investment and derivatives activities, their lines of authority, and their responsibilities.
- Identify the types of authorized investment securities and derivative instruments.
- Specify the type and scope of pre-purchase analysis that should be conducted for various types or classes of investment securities and derivative instruments.
- Define, where appropriate, position limits and other constraints on each type of authorized investment and derivative instrument, including constraints on the purpose(s) for which such instruments may be used.

- Identify dealers, brokers, and counterparties that the board or a committee designated by the board (*e.g.*, a credit policy committee) has authorized the institution to conduct business with and identify credit exposure limits for each authorized entity.
- Ensure that contracts are legally enforceable and documented correctly.
- Establish a code of ethics and standards of professional conduct applicable to personnel involved in investment and derivatives activities.
- Define procedures and approvals necessary for exceptions to policies, limits, and authorizations.

Policies and procedures governing investment and derivatives activities may be embedded in other policies, such as the institution's interest rate risk policies, and need not be stand-alone documents.

C. Risk Measurement, Monitoring, and Control Functions

Interest Rate Risk Measurement. Institutions should have interest rate risk measurement systems that capture all material sources of interest rate risk. Measurement systems should utilize accepted financial concepts and risk measurement techniques and should incorporate sound assumptions and parameters. Management should understand the assumptions underlying their systems. Ideally, institutions should have interest rate risk measurement systems that assess the effects of interest rate changes on both earnings and economic value.

An institution's interest rate risk measurement system should address all material sources of interest rate risk including repricing, yield curve, basis and option risk exposures. In many cases, the interest rate sensitivity of an institution's mortgage portfolio will dominate its aggregate risk profile. While all of an institution's holdings should receive appropriate treatment, instruments whose interest rate sensitivity may significantly affect the institutions overall results should receive special attention, as should instruments whose embedded options may have a significant effect on the results.

The usefulness of any interest rate risk measurement system depends on the validity of the underlying assumptions and accuracy of the methodologies. In designing interest rate risk measurement systems, institutions should ensure that the degree of detail about the nature of their interest-sensitive positions is commensurate with the complexity and risk inherent in those positions.

Management should assess the significance of the potential loss of precision in determining the extent of aggregation and simplification used in its measurement approach.

Institutions should ensure that all material positions and cash flows, including off-balance-sheet positions, are incorporated into the measurement system. Where applicable, these data should include information on the coupon rates or cash flows of associated instruments and contracts. Any adjustments to underlying data should be documented, and the nature and reasons for the adjustments should be understood. In particular, any adjustments to expected cash flows for expected prepayments or early redemptions should be documented.

Key assumptions used to measure interest rate risk exposure should be re-evaluated at least annually. Assumptions used in assessing the interest rate sensitivity of complex instruments should be documented and reviewed periodically.

Management should pay special attention to those positions with uncertain maturities, such as savings and time deposits, which provide depositors with the option to make withdrawals at any time. In addition, institutions often choose not to change the rates paid on these deposits when market rates change. These factors complicate the measurement of interest rate risk, since the value of the positions and the timing of their cash flows can change when interest rates vary. Mortgages and mortgage-related instruments also warrant special attention due to the uncertainty about the timing of cash flows introduced by the borrowers' ability to prepay.

IRR Limits. Institutions should establish and enforce risk limits that maintain exposures within prudent levels.

Management should ensure that the institution's interest rate risk exposure is maintained within self-imposed limits. A system of interest rate risk limits should set prudent boundaries for the level of interest rate risk for the institution and, where appropriate, should also provide the capability to set limits for individual portfolios, activities, or business units.

Limit systems should also ensure that positions exceeding limits or predetermined levels receive prompt management attention.

Senior management should be notified immediately of any breaches of limits. There should be a clear policy as to how senior management will be informed and what action should be taken. Management should specify whether the limits

are absolute in the sense that they should never be exceeded or whether, under specific circumstances, breaches of limits can be tolerated for a short period of time.

Limits should be consistent with the institution's approach to measuring interest rate risk.

Interest rate risk limits should be tied to specific scenarios for movements in market interest rates and should include "high stress" interest rate scenarios.

Limits may also be based on measures derived from the underlying statistical distribution of interest rates, using "earnings-at-risk" or "value-at-risk" techniques.

Stress Testing. Institutions should measure their risk exposure under a number of different scenarios and consider the results when establishing and reviewing their policies and limits for interest rate risk.

Institutions should use interest rate scenarios that are sufficiently varied to encompass different stressful conditions.

Stress tests should include "worst case" scenarios in addition to more probable scenarios. Possible stress scenarios might include abrupt changes in the general level of interest rates, changes in the relationships among key market rates (*i.e.*, basis risk), changes in the slope and the shape of the yield curve (*i.e.*, yield curve risk), changes in the liquidity of key financial markets or changes in the volatility of market rates. In conducting stress tests, special consideration should be given to instruments or positions that may be difficult to liquidate or offset in stressful situations. Management and the board of directors should periodically review both the design and the results of such stress tests and ensure that appropriate contingency plans are in place.

Market Risk Monitoring and Reporting. Institutions should have accurate, informative, and timely management information systems, both to inform management and to support compliance with board policy. Reports for monitoring and controlling market risk exposures should be provided on a timely basis to the board of directors and senior management.

The board of directors and senior management should review market risk reports (*i.e.*, interest rate risk reports and reports on investment and derivatives activities) on a regular basis (at least quarterly). While the types of reports prepared for the board and various levels of management will vary, they should include:

- Summaries of the institution's aggregate interest rate risk and other market risk exposures including results of stress tests.
- Reports on the institution's compliance with risk management policies, procedures, and limits.
- Reports comparing the institution's level of interest rate risk with other savings associations using industry data provided by OTS.
- A summary of any major differences between the results of the OTS Net Portfolio Value Model and the institution's own results.
- Summaries of internal and external reviews of the institution's risk management framework, including reviews of policies, procedures, risk measurement and control systems, and risk exposures.

D. Internal Controls

Institutions should have an adequate system of internal controls over their interest rate risk management process. A fundamental component of the internal control system involves regular independent reviews and evaluations of the effectiveness of the system.

Internal controls should be an integral part of an institution's risk management system. The controls should promote effective and efficient operations, reliable financial and regulatory reporting, and compliance with relevant laws, regulations, and institutional policies. An effective system of internal control for interest rate risk should include:

- effective policies, procedures, and risk limits
- an adequate process for measuring and evaluating risk
- adequate risk monitoring and reporting systems
- a strong control environment
- continual review of adherence to established policies and procedures

Institutions are encouraged to have their risk measurement systems reviewed by knowledgeable outside parties. Reviews of risk measurement systems should include assessments of the assumptions, parameter values, and methodologies used. Such a review should evaluate the system's accuracy and recommend solutions to any identified weaknesses. The results of the review, along with any recommendations for improvement, should be reported to senior management and the board, and acted upon in a timely manner.

Institutions should review their system of internal controls at least annually. Reviews should be performed by individuals independent of the function being reviewed. Results should be reported to the board. The following factors should be considered in reviewing an institution's internal controls:

- Are risk exposures maintained at prudent levels?
- Are the risk measures employed appropriate to the nature of the portfolio?
- Are board and senior management actively involved in the risk management process?
- Are policies, controls, and procedures well documented?
- Are policies and procedures followed?
- Are the assumptions of the risk measurement system well documented?
- Are data accurately processed?
- Is the risk management staff adequate?
- Have risk limits been changed since the last review?
- Have there been any significant changes to the institution's system of internal controls since the last review?
- Are internal controls adequate?

E. Analysis and Stress Testing of Investments and Financial Derivatives

Management should undertake a thorough analysis of the various risks associated with investment securities and derivative instruments prior to making an investment or taking a significant position in financial derivatives and periodically thereafter. Major initiatives involving investments and derivatives transactions should be approved in advance by the board of directors or a committee of the board.

As a matter of sound practice, prior to taking an investment position or initiating a derivatives transaction, an institution should:

- ensure that the proposed investment or derivative transaction is legally permissible for a savings institution;
- review the terms and conditions of the investment instrument or derivative contract;
- ensure that the proposed transaction is allowable under the institution's investment or derivatives policies;
- ensure that the proposed transaction is consistent with the institution's portfolio objectives and liquidity needs;
- exercise diligence in assessing the market value, liquidity, and credit risk of any investment security or derivative instrument;
- conduct a price sensitivity analysis of the security or financial derivative prior to taking a position, and
- conduct an analysis of the incremental effect of any proposed transaction on the overall interest rate sensitivity of the institution.

Prior to taking a position in any complex securities or financial derivatives, it is important to have an understanding of how the future direction of interest rates and other changes in market conditions could affect the instrument's cash flows and market value. In particular, management should understand:

- the structure of the instrument;
- the best-case and worst-case interest rates scenarios for the instrument;
- how the existence of any embedded options or adjustment formulas might affect the instrument's performance under different interest rate scenarios;
- the conditions, if any, under which the instrument's cash flows might be zero or negative;
- the extent to which price quotes for the instrument are available;

- the instrument's universe of potential buyers; and
- the potential loss on the instrument (*i.e.,* the potential discount from its fair value) if sold prior to maturity.

F. Evaluation of New Products, Activities, and Financial Instruments

Involvement in new products, activities, and financial instruments (assets, liabilities, or off-balance sheet contracts) can entail significant risk, sometimes from unexpected sources. Senior management should evaluate the risks inherent in new products, activities, and instruments and ensure that they are subject to adequate review procedures and controls.

Products, activities, and financial instruments that are new to the organization should be carefully reviewed before use or implementation. The board, or an appropriate committee, should approve major new initiatives involving new products, activities, and financial instruments.

Prior to authorizing a new initiative, the review committee should be provided with:

- a description of the relevant product, activity, or instrument
- an analysis of the appropriateness of the proposed initiative in relation to the institution's overall financial condition and capital levels
- a description of the procedures to be used to measure, monitor, and control the risks of the proposed product, activity, or instrument

Management should ensure that adequate risk management procedures are in place in advance of undertaking any significant new initiatives.

Appendix C: Excerpt from Interagency Uniform Financial Institutions Rating System

Sensitivity to Market Risk

The sensitivity to market risk component reflects the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or economic capital. When evaluating this component, consideration should be given to: management's ability to identify, measure, monitor, and control market risk; the institution's size; the nature and complexity of its activities; and the adequacy of its capital and earnings in relation to its level of market risk exposure.

For many institutions, the primary source of market risk arises from non-trading positions and their sensitivity to changes in interest rates. In some larger institutions, foreign operations can be a significant source of market risk. For some institutions, trading activities are a major source of market risk.

Market risk is rated based upon, but not limited to, an assessment of the following evaluation factors:

- The sensitivity of the financial institution's earnings or the economic value of its capital to adverse changes in interest rates, foreign exchange rates, commodity prices, or equity prices.
- The ability of management to identify, measure, monitor, and control exposure to market risk given the institution's size, complexity, and risk profile.
- The nature and complexity of interest rate risk exposure arising from non-trading positions.
- Where appropriate, the nature and complexity of market risk exposure arising from trading and foreign operations.

Ratings

1 A rating of 1 indicates that market risk sensitivity is *well controlled* and that there is *minimal* potential that the earnings performance or capital position will be adversely affected. Risk management practices are strong for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide substantial support for the degree of market risk taken by the institution.

2 A rating of 2 indicates that market risk sensitivity is *adequately controlled* and that there is only *moderate* potential that the earnings performance or capital position will be adversely affected. Risk management practices are satisfactory for the size, sophistication, and market risk accepted by the institution. The level of earnings and capital provide adequate support for the degree of market risk taken by the institution.

3 A rating of 3 indicates that control of market risk sensitivity *needs improvement* or that there is *significant* potential that the earnings performance or capital position will be adversely affected. Risk management practices need to be improved given the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital may not adequately support the degree of market risk taken by the institution.

4 A rating of 4 indicates that control of market risk sensitivity is *unacceptable* or that there is *high* potential that the earnings performance or capital position will be adversely affected. Risk management practices are deficient for the size, sophistication, and level of market risk accepted by the institution. The level of earnings and capital provide inadequate support for the degree of market risk taken by the institution.

5 A rating of 5 indicates that control of market risk sensitivity is *unacceptable* or that the level of market risk taken by the institution is an *imminent threat to its viability*. Risk management practices are wholly inadequate for the size, sophistication, and level of market risk accepted by the institution. *[Emphasis added]*.

Source: *Uniform Financial Institutions Rating System*, December 1996, pp. 12-13.

Appendix D: Glossary

Alternate Interest Rate Scenarios: Scenarios that depict hypothetical shocks to, or movements in, the current term structure of interest rates. As currently utilized in the OTS NPV Model, there are eight alternate interest rate scenarios, depicting shocks in which the term structure has been changed by the same amount at all maturities. The changes currently depicted in the alternate scenarios range from -400 basis points to +400 basis points. (Institutions need only provide board limits for scenarios ranging from -300 to +300 basis points.)

Base Case: A term sometimes used for the prevailing term structure of interest rates (*i.e.,* the current interest rate scenario). Also known as the "pre-shock" or "no shock" scenario, one not subjected to a change in interest rates. This is in contrast to, say, the plus or minus 100 basis point rate shock scenarios.

CAMELS Rating System: A uniform ratings system, applied to all banks, thrifts, and credit unions, which provides an indication of an institution's overall condition.. The six factors of the CAMELS rating system represent Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, and Sensitivity to Market Risk. Quantitative and qualitative factors are used to establish a rating, ranging from 1 to 5 for each CAMELS component rating. A rating of 1 represents the best rating and least degree of concern, while a 5 rating represents the worst rating and greatest degree of concern. The six CAMELS component ratings are used in developing the overall Composite Rating for an institution.

Complex Securities: The term "complex security" includes any collateralized mortgage obligation ("CMO"), real estate mortgage investment conduit ("REMIC"), callable mortgage pass-through security, stripped-mortgage-backed-security, structured note, and any security not meeting the definition of an "exempt security." An "exempt security" includes: (1) standard mortgage-pass-through securities, (2) non-callable, fixed-rate securities, and (3) non-callable, floating-rate securities whose interest rate is (a) not leveraged (*i.e.,* the rate is not based on a multiple of the index), and (b) at least 400 basis points from the lifetime rate cap at the time of purchase.

Composite Rating: A rating that summarizes an institution's overall condition under the CAMELS rating system. This overall rating is expressed through a numerical scale of 1 through 5, with 1 representing the best rating and least degree of concern, and 5 representing the worst rating and highest degree of concern.

Financial Derivative: Any financial contract whose value depends on the value of one or more underlying assets, indices, or reference rates. The most common types of financial derivatives are futures, forward commitments, options, and swaps. A mortgage derivative security, such as a collateralized mortgage obligation or a real estate mortgage investment conduit, is not a financial derivative under this definition.

Interest Rate Risk: The vulnerability of an institution's financial condition to movements in interest rates. Changes in interest rates affect an institution's earnings and economic value.

Interest Rate Risk Exposure Report: A quarterly report, sent by OTS to all institutions that file Schedule CMR, presenting the results of the OTS NPV Model for each institution.

Interest Rate Sensitivity Measure: The magnitude of the decline in an institution's NPV Ratio that occurs as a result of an adverse rate shock of 200 basis points. The measure equals the difference between an institution's Pre-shock NPV Ratio and its Post-shock NPV Ratio and is expressed in basis points. In general, institutions that have significant imbalances between the interest rate sensitivity (*i.e.*, duration) of their assets and liabilities tend to have high Interest Rate Sensitivity Measures.

MVPE: The abbreviation for Market Value of Portfolio Equity, a term previously used for Net Portfolio Value. This term is no longer used by OTS because some of the factors used to determine NPV may not be market based.

NPV: The abbreviation for Net Portfolio Value which equals the present value of expected net cash flows from existing assets *minus* the present value of expected net cash flows from existing liabilities *plus* the present value of net expected cash flows from existing off-balance sheet contracts.

Post-shock NPV Ratio: Along with the Sensitivity Measure, one of the two primary measures of interest rate risk used by OTS. The ratio is determined by dividing an institution's NPV by the present value of its assets, where both the numerator and denominator are measured after a 200 basis point increase or decrease in market interest rates, whichever produces the smaller ratio. A *higher* Post-shock Ratio indicates a *lower* level of interest rate risk. Also sometimes referred to as the "Exposure Measure."

Pre-shock NPV Ratio: Ratio determined by dividing an institution's NPV by the present value of its assets, where both the numerator and denominator are measured in the base case. The ratio is a measure of an institution's economic capitalization. It is also referred to as the "Base Case NPV Ratio.

Prompt Corrective Action: A system of enforcement actions, established under the Federal Deposit Insurance Corporation Improvement Act of 1991, that regulators are required to take against insured institutions whose capital falls below certain critical thresholds.

"S" Component Rating: see "Sensitivity to Market Risk Component Rating."

Schedule CMR: A section of the Thrift Financial Report that is used by OTS to collect financial data for the OTS NPV Model.

Sensitivity Measure: see "Interest Rate Sensitivity Measure."

"Sensitivity to Market Risk" Component Rating: The component rating in the CAMELS rating system designed to express the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or economic capital. The rating is based on two components: an institution's level of market risk and the quality of its practices for managing market risk. The "S" component rating.

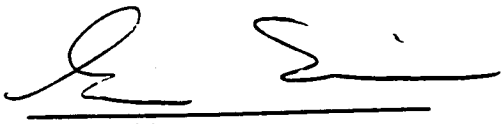
Shocked Rate Scenarios: see "Alternate Interest Rate Scenarios."

Uniform Financial Institutions Rating System: see "CAMELS Rating System" and "Composite Rating."

Value-at-risk: A measure of market risk. An estimate of the maximum potential loss in economic value over a given period of time for a given probability level.

DATED: April 9, 1998

By the Office of Thrift Supervision.



Ellen Seidman
Director

FEDERAL FINANCIAL INSTITUTIONS EXAMINATION COUNCIL

Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities

AGENCY: Federal Financial Institutions Examination Council.

ACTION: Statement of policy.

SUMMARY: The Board of Governors of the Federal Reserve System (FRB), the Federal Deposit Insurance Corporation (FDIC), the Office of the Comptroller of the Currency (OCC), the Office of Thrift Supervision (OTS), and the National Credit Union Administration (NCUA) (collectively referred to as the agencies), under the auspices of the Federal Financial Institutions Examination Council (FFIEC), have approved the Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities (1998 Statement) which provides guidance on sound practices for managing the risks of investment activities. By this issuance of the 1998 Statement, the agencies have rescinded the Supervisory Policy Statement on Securities Activities published on February 3, 1992 (1992 Statement). Many elements of that prior statement are retained in the 1998 Statement, while other elements have been revised or eliminated. In adopting the 1998 Statement, the agencies are removing the specific constraints in the 1992 Statement concerning investments by insured depository institutions in "high risk" mortgage derivative products. The agencies believe that it is a sound practice for institutions to understand the risks related to all their investment holdings. Accordingly, the 1998 Statement substitutes broader guidance than the specific pass/fail requirements contained in the 1992 Statement. Other than for the supervisory guidance contained in the 1992 Statement, the 1998 Statement does not supersede any other requirements of the respective agencies' statutory rules, regulations, policies, or supervisory guidance. Because the 1998 Statement does not retain the elements of the 1992 Statement addressing the reporting of securities activities (Section II of the 1992 Statement), the agencies intend to separately issue supervisory guidance on the reporting of investment securities and end-user derivatives activities. Each agency may issue additional guidance to assist institutions in the implementation of this statement.

EFFECTIVE DATE: May 26, 1998.

FOR FURTHER INFORMATION CONTACT:

FRB: James Embersit, Manager, Capital Markets, (202) 452–5249, Charles Holm, Manager, Accounting Policy and Disclosure (202) 452–3502, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System. For the hearing impaired only, Telecommunication Device for the Deaf (TDD), Dorothea Thompson, (202) 452–3544, Board of Governors of the Federal Reserve System, 20th and C Streets, NW, Washington, DC 20551.

FDIC: William A. Stark, Assistant Director, (202) 898–6972, Miguel D. Browne, Manager, (202) 898–6789, John J. Feid, Chief, Risk Management, (202) 898–8649, Lisa D. Arquette, Senior Capital Markets Specialist, (202) 898–8633, Division of Supervision; Michael B. Phillips, Counsel, (202) 898–3581, Legal Division, Federal Deposit Insurance Corporation, 550 17th Street, NW, Washington, DC 20429.

OCC: Kurt Wilhelm, National Bank Examiner, (202) 874–5670, J. Ray Diggs, National Bank Examiner, (202) 874–5670, Treasury and Market Risk; Mark J. Tenhundfeld, Assistant Director, (202) 874–5090, Legislative and Regulatory Activities Division, Office of the Comptroller of the Currency, 250 E Street, SW, Washington, DC 20219.

OTS: Robert A. Kazdin, Senior Project Manager, (202) 906–5759, Anthony G. Cornyn, Director, (202) 906–5727, Risk Management; Vern McKinley, Senior Attorney, (202) 906–6241, Regulations and Legislation Division, Chief Counsel's Office, Office of Thrift Supervision, 1700 G Street, NW, Washington, DC 20552.

NCUA: Daniel Gordon, Senior Investment Officer, (703) 518–6360, Office of Investment Services; Michael McKenna, Attorney, (703) 518–6540, National Credit Union Administration, 1775 Duke Street, Alexandria, VA 22314–3428.

SUPPLEMENTARY INFORMATION: In 1992, the agencies implemented the FFIEC's Supervisory Policy Statement on Securities Activities (57 FR 4028, February 3, 1992). The 1992 Statement addressed: (1) selection of securities dealers, (2) portfolio policy and strategies (including unsuitable investment practices), and (3) residential mortgage derivative products (MDPs).

The final section of the 1992 Statement directed institutions to subject MDPs to supervisory tests to determine the degree of risk and the investment portfolio eligibility of these instruments. At that time, the agencies believed that many institutions had demonstrated an insufficient understanding of the risks associated with investments in MDPs. This occurred, in part, because most MDPs were issued or backed by collateral guaranteed by government sponsored enterprises. The agencies were concerned that the absence of significant credit risk on most MDPs had allowed institutions to overlook the significant interest rate risk present in certain structures of these instruments. In an effort to enhance the investment decision making process at financial institutions, and to emphasize the interest rate risk of highly price sensitive instruments, the agencies implemented supervisory tests designed

to identify those MDPs with price and average life risks greater than a newly issued residential mortgage pass-through security.

These supervisory tests provided a discipline that helped institutions to better understand the risks of MDPs prior to purchase. The 1992 Statement generally provided that institutions should not hold high risk MDPs in their investment portfolios.[1] A high risk MDP was defined as a mortgage derivative security that failed any of three supervisory tests. The three tests included: an average life test, an average life sensitivity test, and a price sensitivity test.[2]

These supervisory tests, commonly referred to as the "high risk tests," successfully protected institutions from significant losses in MDPs. By requiring a pre-purchase price sensitivity analysis that helped institutions to better understand the interest rate risk of MDPs, the high risk tests effectively precluded institutions from investing in many types of MDPs that resulted in large losses for other investors. However, the high risk tests may have created unintended distortions of the investment decision making process. Many institutions eliminated all MDPs from their investment choices, regardless of the risk versus return merits of such instruments. These reactions were due, in part, to concerns about regulatory burden, such as higher than normal examiner review of MDPs. By focusing only on MDPs, the test and its accompanying burden indirectly provided incentives for institutions to acquire other types of securities with complex cash flows, often with price sensitivities similar to high risk MDPs. The emergence of the structured note market is just one example. The test may have also created the impression that supervisors were more concerned with the type of instrument involved (i.e., residential mortgage products), rather than the risk characteristics of the instrument, since only MDPs were subject to the high risk test. The specification of tests on individual securities may have removed the incentive for some institutions to apply more comprehensive analytical techniques at the portfolio and institutional level.

As a result, the agencies no longer believe that the pass/fail criteria of the high risk tests as applied to specific instruments constitutes effective supervision of investment activities. The agencies believe that an effective risk management program, through which an institution identifies, measures, monitors, and controls the risks of investment activities, provides a better framework. Hence, the agencies are eliminating the high risk tests as binding constraints on MDP purchases in the 1998 Statement.

Effective risk management addresses risks across all types of instruments on an investment portfolio basis and ideally, across the entire institution. The complexity of many financial products, both on and off the balance sheet, has increased the need for a more comprehensive approach to the risk management of investment activities.

The rescission of the high risk tests as a constraint on an institution's investment activities does not signal that MDPs with high levels of price risk are either appropriate or inappropriate investments for an institution. Whether a security, MDP or otherwise, is an appropriate investment depends upon a variety of factors, including the institution's capital level, the security's impact on the aggregate risk of the portfolio, and management's ability to measure and manage risk. The agencies continue to believe that the stress testing of MDP investments, as well as other investments, has significant value for risk management purposes. Institutions should employ valuation methodologies that take into account all of the risk elements necessary to price these investments. The 1998 Statement states that the agencies believe, as a matter of sound practice, institutions should know the value and price sensitivity of their investments prior to purchase and on an ongoing basis.

Summary of Comments

The 1998 Statement was published for comment in the **Federal Register** of October 3, 1997 (62 FR 51862). The FFIEC received twenty-one comment letters from a variety of insured depository institutions, trade associations, Federal Reserve Banks, and financial services organizations. Overall, the comments were supportive of the 1998 Statement. The comments generally approved of: (i) the rescission of the high risk test as a constraint on investment choices in the 1992 Statement; (ii) the establishment by institutions of programs to manage market, credit, liquidity, legal, operational, and other risks of investment securities and end-user derivatives activities; (iii) the implementation of sound risk management programs that would include certain board and senior management oversight and a comprehensive risk management process that effectively identifies, measures, monitors, and controls risks; and (iv) the evaluation of investment decisions at the portfolio or institution level, instead of the focus of the 1992 Statement on limiting an institution's investment decisions concerning specific securities instruments.

The following discussion provides a summary of significant concerns or requests for clarifications that were presented in the aforementioned comments.

1. Scope

The guidance covers a broad range of instruments including all securities in held-to-maturity and available-for-sale accounts as defined in the Statement of Financial Accounting Standards No.115 (FAS 115), certificates of deposit held for investment purposes, and end-user derivative contracts not held in trading accounts.

Some comments focused on the 1998 Statement's coverage of "end-user derivative contracts not held in trading accounts." According to these comments, the 1998 Statement appears to cover derivative contracts not traditionally viewed as investments including: (i) Swap contracts entered into when the depository institution makes a fixed rate loan but intends to change the income stream from a fixed to floating rate, (ii) swap contracts that convert the interest rates on certificates of deposit from fixed to floating rates of interest, and (iii) swap contracts used for other asset-liability management purposes. Those commenters objected to the necessity of additional guidance for end-user derivatives contracts given current regulatory guidance issued by the agencies with respect to derivative contracts.

The guidance contained in the 1998 Statement is consistent with existing agency guidance. The agencies believe that institutions should have programs to manage the market, credit, liquidity, legal, operational, and other risks of both investment securities and end-user derivative activities. Given the similarity of the risks in those activities and the similarity of the programs needed to manage those risks, especially when end-user derivatives are used as investment vehicles, the agencies believe that covering both activities

[1] The only exceptions granted were for those high risk securities that either reduced interest rate risk or were placed in a trading account. Federal credit unions were not permitted these exceptions.

[2] Average Life: Weighted average life of no more than 10 years; Average Life Sensitivity: (a) weighted average life extends by not more than 4 years (300 basis point parallel shift in rates), (b) weighted average life shortens by no more than 6 years (300 basis point parallel shift in rates); Price Sensitivity: price does not change by more than 17 percent (increase or decrease) for a 300 basis point parallel shift in rates.

within the scope of the 1998 Statement is appropriate.

2. Board Oversight

Some commenters stated that the 1998 Statement places excessive obligations on the board of directors. Specifically, comments indicated that it is unnecessary for an institution's board of directors to: (i) Set limits on the amounts and types of transactions authorized for each securities firm with whom the institution deals, or (ii) review and reconfirm the institution's list of authorized dealers, investment bankers, and brokers at least annually. These commenters suggested that it may be unnecessary for the board—particularly for larger institutions—to review and specifically authorize each dealer. They indicated that it should be sufficient for senior management to ensure that the selection of securities firms is consistent with board approved policies, and that establishment of limits for each dealer is a credit decision that should be issued pursuant to credit policies.

The agencies believe that the board of directors is responsible for supervision and oversight of investment portfolio and end-user derivatives activities, including the approval and periodic review of policies that govern relationships with securities dealers. Especially with respect to the management of the credit risk of securities settlements, the agencies encourage the board of directors or a subcommittee chaired by a director to actively participate in the credit decision process. The agencies understand that institutions will have various approaches to the credit decision process, and therefore that the board of directors may delegate the authority for selecting dealers and establishing dealer limits to senior management. The text of the 1998 Statement has been amended to clarify the obligation of the board of directors.

3. Pre-Purchase Analysis

The majority of the commenters were in full support of eliminating the specific constraints on investing in "high risk" MDPs. Some commenters expressed opposition with respect to the 1998 Statement's guidance concerning pre-purchase analysis by institutions of their investment securities. Those commenters felt that neither pre-acquisition stress testing nor any specific stress testing methodology should be required for individual investment decisions. Some commenters involved in the use of securities for collateral purposes emphasized the benefits of pre-and post-purchase stress testing of individual securities.

The agencies wish to stress that institutions should have policies designed to meet the business needs of the institution. These policies should specify the types of market risk analyses that should be conducted for various types of instruments, including that conducted prior to their acquisition and on an ongoing basis. In addition, policies should specify any required documentation needed to verify the analysis. Such analyses will vary with the type of investment instrument.

As stated in Section V of the 1998 Statement, not all investment instruments need to be subjected to a pre-purchase analysis. Relatively simple or standardized instruments, the risks of which are well known to the institution, would likely require no or significantly less analysis than would more volatile, complex instruments. For relatively more complex instruments, less familiar instruments, and potentially volatile instruments, institutions should fully address pre-purchase analysis in their policies. In valuing such investments, institutions should ensure that the pricing methodologies used appropriately consider all risks (for example, caps and floors in adjustable-rate instruments). Moreover, the agencies do not believe that an institution should be prohibited from making an investment based solely on whether that instrument has a high price sensitivity.

4. Identification, Measurement, and Reporting of Risks

Some commenters questioned whether proposed changes by the agencies concerning Schedule RC–B of the Consolidated Reports of Condition and Income ("Call Reports") conflicted with the 1998 Statement's elimination of the high risk test for mortgage derivative products. The proposed changes to the Call Reports would require the disclosure of mortgage-backed and other securities whose price volatility in response to specific interest rate changes exceeds a specified threshold level. (*See* 62 FR 51715, October 2, 1997.)

The banking agencies have addressed the concerns presented in these comments within the normal process for changing the Call Reports. For the 1998 Call report cycle, there will be no changes to the high risk test reporting requirement in the Call Reports.

5. Market Risk

One commenter suggested that the agencies enhance the 1998 Statement by discussing and endorsing the concept of total return. The agencies agree that the concept of total return can be a useful way to analyze the risk and return tradeoffs for an investment. This is because the analysis does not focus exclusively on the stated yield to maturity. Total return analysis, which includes income and price changes over a specified investment horizon, is similar to stress test analysis since both examine a security under various interest rate scenarios. The agencies' supervisory emphasis on stress testing securities has, in fact, implicitly considered total return. Therefore, the agencies endorse the use of total return analysis as a useful supplement to price sensitivity analysis for evaluating the returns for an individual security, the investment portfolio, or the entire institution.

6. Measurement System

One respondent stated that the complexity and sophistication of the risk measurement system should not be a factor in determining whether pre- and post-acquisition measurement of interest rate risk should be performed at the individual investment level or on an institutional or portfolio basis. The agencies agree that this statement may be confusing and are amending the Market Risk section.

The text of the statement of policy follows.

Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities

I. Purpose

This policy statement (Statement) provides guidance to financial institutions (institutions) on sound practices for managing the risks of investment securities and end-user derivatives activities.[3] The FFIEC agencies—the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the National Credit Union Administration—believe that effective management of the risks associated with securities and derivative instruments represents an essential component of safe and sound practices. This guidance describes the practices that a prudent manager normally would follow and is not intended to be a checklist. Management should establish practices and maintain documentation appropriate to the institution's

[3] The 1998 Statement does not supersede any other requirements of the respective agencies' statutory rules, regulations, policies, or supervisory guidance.

individual circumstances, consistent with this Statement.

II. Scope

This guidance applies to all securities in held-to-maturity and available-for-sale accounts as defined in the Statement of Financial Accounting Standards No.115 (FAS 115), certificates of deposit held for investment purposes, and end-user derivative contracts not held in trading accounts. This guidance covers all securities used for investment purposes, including: money market instruments, fixed-rate and floating-rate notes and bonds, structured notes, mortgage pass-through and other asset-backed securities, and mortgage-derivative products. Similarly, this guidance covers all end-user derivative instruments used for nontrading purposes, such as swaps, futures, and options.[4] This Statement applies to all federally-insured commercial banks, savings banks, savings associations, and federally chartered credit unions.

As a matter of sound practice, institutions should have programs to manage the market, credit, liquidity, legal, operational and other risks of investment securities and end-user derivatives activities (investment activities). While risk management programs will differ among institutions, there are certain elements that are fundamental to all sound risk management programs. These elements include board and senior management oversight and a comprehensive risk management process that effectively identifies, measures, monitors, and controls risk. This Statement describes sound principles and practices for managing and controlling the risks associated with investment activities.

Institutions should fully understand and effectively manage the risks inherent in their investment activities. Failure to understand and adequately manage the risks in these areas constitutes an unsafe and unsound practice.

III. Board and Senior Management Oversight

Board of director and senior management oversight is an integral part of an effective risk management program. The board of directors is responsible for approving major policies for conducting investment activities, including the establishment of risk limits. The board should ensure that management has the requisite skills to manage the risks associated with such activities. To properly discharge its oversight responsibilities, the board should review portfolio activity and risk levels, and require management to demonstrate compliance with approved risk limits. Boards should have an adequate understanding of investment activities. Boards that do not, should obtain professional advice to enhance its understanding of investment activity oversight, so as to enable it to meet its responsibilities under this Statement.

Senior management is responsible for the daily management of an institution's investments. Management should establish and enforce policies and procedures for conducting investment activities. Senior management should have an understanding of the nature and level of various risks involved in the institution's investments and how such risks fit within the institution's overall business strategies. Management should ensure that the risk management process is commensurate with the size, scope, and complexity of the institution's holdings. Management should also ensure that the responsibilities for managing investment activities are properly segregated to maintain operational integrity. Institutions with significant investment activities should ensure that back-office, settlement, and transaction reconciliation responsibilities are conducted and managed by personnel who are independent of those initiating risk taking positions.

IV. Risk Management Process

An effective risk management process for investment activities includes: (1) policies, procedures, and limits; (2) the identification, measurement, and reporting of risk exposures; and (3) a system of internal controls.

Policies, Procedures, and Limits

Investment policies, procedures, and limits provide the structure to effectively manage investment activities. Policies should be consistent with the organization's broader business strategies, capital adequacy, technical expertise, and risk tolerance. Policies should identify relevant investment objectives, constraints, and guidelines for the acquisition and ongoing management of securities and derivative instruments. Potential investment objectives include: generating earnings, providing liquidity, hedging risk exposures, taking risk positions, modifying and managing risk profiles, managing tax liabilities, and meeting pledging requirements, if applicable. Policies should also identify the risk characteristics of permissible investments and should delineate clear lines of responsibility and authority for investment activities.

An institution's management should understand the risks and cashflow characteristics of its investments. This is particularly important for products that have unusual, leveraged, or highly variable cashflows. An institution should not acquire a material position in an instrument until senior management and all relevant personnel understand and can manage the risks associated with the product.

An institution's investment activities should be fully integrated into any institution-wide risk limits. In so doing, some institutions rely only on the institution-wide limits, while others may apply limits at the investment portfolio, sub-portfolio, or individual instrument level.

The board and senior management should review, at least annually, the appropriateness of its investment strategies, policies, procedures, and limits.

Risk Identification, Measurement and Reporting

Institutions should ensure that they identify and measure the risks associated with individual transactions prior to acquisition and periodically after purchase. This can be done at the institutional, portfolio, or individual instrument level. Prudent management of investment activities entails examination of the risk profile of a particular investment in light of its impact on the risk profile of the institution. To the extent practicable, institutions should measure exposures to each type of risk and these measurements should be aggregated and integrated with similar exposures arising from other business activities to obtain the institution's overall risk profile.

In measuring risks, institutions should conduct their own in-house pre-acquisition analyses, or to the extent possible, make use of specific third party analyses that are independent of the seller or counterparty. Irrespective of any responsibility, legal or otherwise, assumed by a dealer, counterparty, or financial advisor regarding a transaction, the acquiring institution is ultimately responsible for the appropriate personnel understanding and managing the risks of the transaction.

Reports to the board of directors and senior management should summarize the risks related to the institution's investment activities and should address compliance with the investment policy's objectives, constraints, and

[4] Natural person federal credit unions are not permitted to purchase non-residential mortgage asset-backed securities and may participate in derivative programs only if authorized by the NCUA.

legal requirements, including any exceptions to established policies, procedures, and limits. Reports to management should generally reflect more detail than reports to the board of the institution. Reporting should be frequent enough to provide timely and adequate information to judge the changing nature of the institution's risk profile and to evaluate compliance with stated policy objectives and constraints.

Internal Controls

An institution's internal control structure is critical to the safe and sound functioning of the organization generally and the management of investment activities in particular. A system of internal controls promotes efficient operations, reliable financial and regulatory reporting, and compliance with relevant laws, regulations, and institutional policies. An effective system of internal controls includes enforcing official lines of authority, maintaining appropriate separation of duties, and conducting independent reviews of investment activities.

For institutions with significant investment activities, internal and external audits are integral to the implementation of a risk management process to control risks in investment activities. An institution should conduct periodic independent reviews of its risk management program to ensure its integrity, accuracy, and reasonableness. Items that should be reviewed include:

(1) Compliance with and the appropriateness of investment policies, procedures, and limits;

(2) The appropriateness of the institution's risk measurement system given the nature, scope, and complexity of its activities;

(3) The timeliness, integrity, and usefulness of reports to the board of directors and senior management.

The review should note exceptions to policies, procedures, and limits and suggest corrective actions. The findings of such reviews should be reported to the board and corrective actions taken on a timely basis.

The accounting systems and procedures used for public and regulatory reporting purposes are critically important to the evaluation of an organization's risk profile and the assessment of its financial condition and capital adequacy. Accordingly, an institution's policies should provide clear guidelines regarding the reporting treatment for all securities and derivatives holdings. This treatment should be consistent with the organization's business objectives, generally accepted accounting principles (GAAP), and regulatory reporting standards.

V. The Risks of Investment Activities

The following discussion identifies particular sound practices for managing the specific risks involved in investment activities. In addition to these sound practices, institutions should follow any specific guidance or requirements from their primary supervisor related to these activities.

Market Risk

Market risk is the risk to an institution's financial condition resulting from adverse changes in the value of its holdings arising from movements in interest rates, foreign exchange rates, equity prices, or commodity prices. An institution's exposure to market risk can be measured by assessing the effect of changing rates and prices on either the earnings or economic value of an individual instrument, a portfolio, or the entire institution. For most institutions, the most significant market risk of investment activities is interest rate risk.

Investment activities may represent a significant component of an institution's overall interest rate risk profile. It is a sound practice for institutions to manage interest rate risk on an institution-wide basis. This sound practice includes monitoring the price sensitivity of the institution's investment portfolio (changes in the investment portfolio's value over different interest rate/yield curve scenarios). Consistent with agency guidance, institutions should specify institution-wide interest rate risk limits that appropriately account for these activities and the strength of the institution's capital position. These limits are generally established for economic value or earnings exposures. Institutions may find it useful to establish price sensitivity limits on their investment portfolio or on individual securities. These sub-institution limits, if established, should also be consistent with agency guidance.

It is a sound practice for an institution's management to fully understand the market risks associated with investment securities and derivative instruments prior to acquisition and on an ongoing basis. Accordingly, institutions should have appropriate policies to ensure such understanding. In particular, institutions should have policies that specify the types of market risk analyses that should be conducted for various types or classes of instruments, including that conducted prior to their acquisition (pre-purchase analysis) and on an ongoing basis. Policies should also specify any required documentation needed to verify the analysis.

It is expected that the substance and form of such analyses will vary with the type of instrument. Not all investment instruments may need to be subjected to a pre-purchase analysis. Relatively simple or standardized instruments, the risks of which are well known to the institution, would likely require no or significantly less analysis than would more volatile, complex instruments.[5]

§ 703.90. Sec 62 FR 32989 (June 18, 1997).

For relatively more complex instruments, less familiar instruments, and potentially volatile instruments, institutions should fully address pre-purchase analyses in their policies. Price sensitivity analysis is an effective way to perform the pre-purchase analysis of individual instruments. For example, a pre-purchase analysis should show the impact of an immediate parallel shift in the yield curve of plus and minus 100, 200, and 300 basis points. Where appropriate, such analysis should encompass a wider range of scenarios, including non-parallel changes in the yield curve. A comprehensive analysis may also take into account other relevant factors, such as changes in interest rate volatility and changes in credit spreads.

When the incremental effect of an investment position is likely to have a significant effect on the risk profile of the institution, it is a sound practice to analyze the effect of such a position on the overall financial condition of the institution.

Accurately measuring an institution's market risk requires timely information about the current carrying and market values of its investments. Accordingly, institutions should have market risk measurement systems commensurate with the size and nature of these investments. Institutions with significant holdings of highly complex instruments should ensure that they have the means to value their positions. Institutions employing internal models should have adequate procedures to validate the models and to periodically review all elements of the modeling process, including its assumptions and risk measurement techniques. Managements relying on third parties for market risk measurement systems and analyses should ensure that they fully understand the assumptions and techniques used.

[5] Federal credit unions must comply with the investment monitoring requirements of 12 C.F.R. § 703.90. *See* 62 FR 32989 (June 18, 1997).

Institutions should provide reports to their boards on the market risk exposures of their investments on a regular basis. To do so, the institution may report the market risk exposure of the whole institution. Alternatively, reports should contain evaluations that assess trends in aggregate market risk exposure and the performance of portfolios in terms of established objectives and risk constraints. They also should identify compliance with board approved limits and identify any exceptions to established standards. Institutions should have mechanisms to detect and adequately address exceptions to limits and guidelines. Management reports on market risk should appropriately address potential exposures to yield curve changes and other factors pertinent to the institution's holdings.

Credit Risk

Broadly defined, credit risk is the risk that an issuer or counterparty will fail to perform on an obligation to the institution. For many financial institutions, credit risk in the investment portfolio may be low relative to other areas, such as lending. However, this risk, as with any other risk, should be effectively identified, measured, monitored, and controlled.

An institution should not acquire investments or enter into derivative contracts without assessing the creditworthiness of the issuer or counterparty. The credit risk arising from these positions should be incorporated into the overall credit risk profile of the institution as comprehensively as practicable. Institutions are legally required to meet certain quality standards (i.e., investment grade) for security purchases. Many institutions maintain and update ratings reports from one of the major rating services. For non-rated securities, institutions should establish guidelines to ensure that the securities meet legal requirements and that the institution fully understands the risk involved. Institutions should establish limits on individual counterparty exposures. Policies should also provide credit risk and concentration limits. Such limits may define concentrations relating to a single or related issuer or counterparty, a geographical area, or obligations with similar characteristics.

In managing credit risk, institutions should consider settlement and pre-settlement credit risk. These risks are the possibility that a counterparty will fail to honor its obligation at or before the time of settlement. The selection of dealers, investment bankers, and brokers is particularly important in effectively managing these risks. The approval process should include a review of each firm's financial statements and an evaluation of its ability to honor its commitments. An inquiry into the general reputation of the dealer is also appropriate. This includes review of information from state or federal securities regulators and industry self-regulatory organizations such as the National Association of Securities Dealers concerning any formal enforcement actions against the dealer, its affiliates, or associated personnel.

The board of directors is responsible for supervision and oversight of investment portfolio and end-user derivatives activities, including the approval and periodic review of policies that govern relationships with securities dealers.

Sound credit risk management requires that credit limits be developed by personnel who are as independent as practicable of the acquisition function. In authorizing issuer and counterparty credit lines, these personnel should use standards that are consistent with those used for other activities conducted within the institution and with the organization's over-all policies and consolidated exposures.

Liquidity Risk

Liquidity risk is the risk that an institution cannot easily sell, unwind, or offset a particular position at a fair price because of inadequate market depth. In specifying permissible instruments for accomplishing established objectives, institutions should ensure that they take into account the liquidity of the market for those instruments and the effect that such characteristics have on achieving their objectives. The liquidity of certain types of instruments may make them inappropriate for certain objectives. Institutions should ensure that they consider the effects that market risk can have on the liquidity of different types of instruments under various scenarios. Accordingly, institutions should articulate clearly the liquidity characteristics of instruments to be used in accomplishing institutional objectives.

Complex and illiquid instruments can often involve greater risk than actively traded, more liquid securities. Oftentimes, this higher potential risk arising from illiquidity is not captured by standardized financial modeling techniques. Such risk is particularly acute for instruments that are highly leveraged or that are designed to benefit from specific, narrowly defined market shifts. If market prices or rates do not move as expected, the demand for such instruments can evaporate, decreasing the market value of the instrument below the modeled value.

Operational (Transaction) Risk

Operational (transaction) risk is the risk that deficiencies in information systems or internal controls will result in unexpected loss. Sources of operating risk include inadequate procedures, human error, system failure, or fraud. Inaccurately assessing or controlling operating risks is one of the more likely sources of problems facing institutions involved in investment activities.

Effective internal controls are the first line of defense in controlling the operating risks involved in an institution's investment activities. Of particular importance are internal controls that ensure the separation of duties and supervision of persons executing transactions from those responsible for processing contracts, confirming transactions, controlling various clearing accounts, preparing or posting the accounting entries, approving the accounting methodology or entries, and performing revaluations.

Consistent with the operational support of other activities within the financial institution, securities operations should be as independent as practicable from business units. Adequate resources should be devoted, such that systems and capacity are commensurate with the size and complexity of the institution's investment activities. Effective risk management should also include, at least, the following:

- Valuation. Procedures should ensure independent portfolio pricing. For thinly traded or illiquid securities, completely independent pricing may be difficult to obtain. In such cases, operational units may need to use prices provided by the portfolio manager. For unique instruments where the pricing is being provided by a single source (e.g., the dealer providing the instrument), the institution should review and understand the assumptions used to price the instrument.
- Personnel. The increasingly complex nature of securities available in the marketplace makes it important that operational personnel have strong technical skills. This will enable them to better understand the complex financial structures of some investment instruments.
- Documentation. Institutions should clearly define documentation requirements for securities transactions, saving and safeguarding important documents, as well as maintaining

possession and control of instruments purchased.

An institution's policies should also provide guidelines for conflicts of interest for employees who are directly involved in purchasing and selling securities for the institution from securities dealers. These guidelines should ensure that all directors, officers, and employees act in the best interest of the institution. The board may wish to adopt policies prohibiting these employees from engaging in personal securities transactions with these same securities firms without specific prior board approval. The board may also wish to adopt a policy applicable to directors, officers, and employees restricting or prohibiting the receipt of gifts, gratuities, or travel expenses from approved securities dealer firms and their representatives.

Legal Risk

Legal risk is the risk that contracts are not legally enforceable or documented correctly. Institutions should adequately evaluate the enforceability of its agreements before individual transactions are consummated. Institutions should also ensure that the counterparty has authority to enter into the transaction and that the terms of the agreement are legally enforceable. Institutions should further ascertain that netting agreements are adequately documented, executed properly, and are enforceable in all relevant jurisdictions. Institutions should have knowledge of relevant tax laws and interpretations governing the use of these instruments.

Dated: April 17, 1998.

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[FR Doc. 98–10744 Filed 4–22–98; 8:45 am]

BILLING CODES FRB: 6210–01–P 20%, OTS: 6720–01–P 20%, FDIC: 6714–01–P 20%, OCC: 4810–33–P 20%, NCUA: 7535–01–P 20%