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This chapter surveys current initiatives of the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) for the supervision and regulation of derivatives activities of banks and other financial institutions. It further highlights the efforts of representatives of financial trade groups, under the coordination of the Federal Reserve Bank of New York, to develop the Principles and Practices for Wholesale Financial Market Transactions, as well as initiatives of the Derivatives Policy Group, the Federal Financial Institutions Examination Council, and the Bank for International Settlements to promote enhanced disclosure and supervision of derivatives activities. The chapter concludes with a review of other significant federal initiatives.

Current U.S. Bank Supervisory Initiatives

Board of Governors of the Federal Reserve System

The staff of the Board of Governors of the Federal Reserve System (Board staff) issued guidelines for examiners on Examining Risk Management and Internal Controls for Trading Activities of Banking Organizations (the Trading Activities Examiner Guidelines) and the Trading Activities Manual. The Trading Activities Examiner Guidelines, which parallel provisions of the Trading Activities Manual, target trading, market-making, and customer-accommodation activities in cash and derivatives instruments at state member banks, branches and agencies of foreign banks, and Edge Act corporations. Principles of the Trading Activities Examiner Guidelines also apply to risk management of bank holding companies on a consolidated basis and can be applied to banks' use of derivatives as end users when appropriate. Board staff also issued complementary examiner guidelines specifically applicable to these institutions' end-user derivatives activities entitled Evaluating the Risk Management and Internal Controls of Securities and Derivatives Contracts Used in Nontrading Activities (Nontrading Activities Examiner Guidelines). The Nontrading Activities Examiner Guidelines are direct-
ed at the use of cash securities and off-balance-sheet derivatives contracts to achieve earnings and risk-management objectives involving longer time horizons than typical for trading activities.

Most recently, Board staff issued examiner guidelines entitled *Rating the Adequacy of Risk Management Processes and Internal Controls at State Member Banks and Bank Holding Companies (Risk Management Examiner Guidelines)*. The *Risk Management Examiner Guidelines* are specifically directed at the risk-management processes and internal controls at state member banks and bank holding companies, and supplement both the trading and nontrading examiner guidelines. Furthermore, the written agreement entered into by the Federal Reserve Bank of New York and Bankers Trust New York Corporation and its subsidiaries regarding the conduct of the leveraged derivatives transaction business by these companies provides additional information regarding the application of the rules set forth in these materials. The following is a summary of the significant provisions of the *Trading Activities Examiner Guidelines*, the *Nontrading Activities Examiner Guidelines*, and the *Risk Management Examiner Guidelines* related to derivatives activities, and on related guidance.

**Trading Activities Examiner Guidelines and Trading Activities Manual**

*Provisions on customer appropriateness.* The provisions on customer appropriateness in the *Trading Activities Examiner Guidelines* are not consumer protection provisions, especially if the customer is sophisticated. The purpose of the provisions is to protect the bank from credit risk, legal risk, and the risk of loss of its reputation. A financial intermediary may act as a broker, dealer, or end user. This guidance applies to banks that are dealers, not to those banks that are end users.

First, a bank must ensure that the counterparty has sufficient authority to enter into the transaction. The purpose of this guidance is to ensure that a bank ascertains that the counterparty has authority to enter into and, thus will be legally bound to, the transaction. One type of authority is the authority of an individual to sign agreements on behalf of the institution and to bind the institution to certain levels of exposure. Another type of authority is that of an organization to enter into a particular transaction. For example, does a municipality have statutory authority to engage in a particular derivatives transaction, or is this an *ultra vires* act? Other types of entities, such as pension plans and insurance companies, may need specific regulatory approval to engage in derivatives transactions. In order to determine whether or not these kinds
of authority exist, it is common for banks to look to authorizations of boards of directors or trustees to enter into specific types of transactions.

Second, a bank should take steps to ascertain the character and financial sophistication of the counterparty, including ensuring that the counterparty understands the nature of, and the risks inherent in, the agreed transaction. If the counterparty is unsophisticated, the bank should take additional steps to ensure that the counterparty is made aware of attendant risks. In this regard, the following questions arise: When a bank acts as an advisor regarding a derivatives transaction, does the bank have a fiduciary relationship to the other party? When a bank acts as agent or broker in a swap, what fiduciary duties does it have?  

Third, “while counterparties are ultimately responsible for the transactions into which they choose to enter,” when recommending specific transactions to an unsophisticated counterparty, a bank “should ensure that it has adequate information regarding its counterparty on which to base its recommendation.” However, an end user may not want to disclose all of its positions to a dealer.

Fourth, in its evaluation of the counterparty’s creditworthiness, the bank should consider, in addition to the counterparty’s overall financial strength and ability to perform on its obligation, the counterparty’s ability to understand and manage the risks inherent in a derivative product. In general, this provision raises the question of whether or not there are classes of counterparties that should be treated differently or will have different informational needs. Moreover, prudent credit management also entails making a judgment about whether a particular transaction is consistent with the counterparty’s business and financial strategy and its stated risk appetite.

Provisions on netting agreements. First, banks should have guidelines and procedures in place to determine the enforceability of netting and all other agreements before consummating a transaction. Second, banks should ascertain that netting agreements are adequately documented and have been executed properly. Third, banks should determine the enforceability of netting arrangements in all relevant jurisdictions, notwithstanding the counterparty’s insolvency. The Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries, known as the Lamfalussy Report, specifies jurisdictions relevant to a netting arrangement. Consistent with the Lamfalussy Report, as well as the proposed and enacted provisions of the risk-based capital guidelines of the Board of Governor’s Regulations H and Y, a legal opinion normally would cover: (i) the law of the jurisdiction in which the counterparty is chartered or, in the case of noncorporate entities, the equivalent location; (ii) if a branch of the counterparty is involved, the
law of the jurisdiction in which the branch is located; (iii) the law that governs the individual derivatives contracts covered by the netting agreement; and (iv) the law that governs the netting agreement.

**Provisions on board of directors and management oversight.** The provisions on board of directors and management oversight deal with several issues. First, the risk-taking activities of an institution should be governed by policies approved by the board of directors. The board of directors should regularly be informed of risk exposure and risk-management issues, and periodically should review and approve significant risk-management policies and procedures, particularly those that define risk tolerance. Accordingly, the board of directors should conduct discussions with senior management regarding the risk-management process and risk exposure.

Second, senior management should oversee trading operations and ensure that relevant policies and procedures are adequate. This function includes regular evaluation of policies and procedures for conducting trading operations; discussion of risk-management functions with the board of directors, staff, and traders; and ensuring that derivatives activities are allocated sufficient resources to manage and control risks.

Third, management must create a risk-management function that is fully independent of trading management. This function should report trading risks, profits, and losses at least daily to managers who supervise but do not themselves conduct trading activities. Reports should be provided to senior managers and directors with a frequency and in a form that will enable them to judge the changing nature of the institution’s risk profile. The personnel staffing the risk-management function should understand the risks associated with derivatives and other instruments that are traded, and their compensation should not be tied too closely to the profitability of trading, in order to avoid potential incentives for excessive risk taking. In addition, the head of the risk-management function should have sufficient authority and stature to provide an effectively independent assessment of the level of risk exposure.

The objective of the guidelines on senior management and board of directors oversight of derivatives activities is to ensure that the board of directors provides the policies and guidance and exercises the overall supervision requisite to management’s operation of the bank’s derivatives business effectively and in a safe and sound manner, while leaving to management the responsibility for day-to-day operations and operational oversight. The board may delegate to senior management, to the extent consistent with the *Trading Activities Examiner Guidelines* and the *Trading Activities Manual*, authority to determine what markets to enter and which derivatives products to offer, to implement and enforce broad
risk-management policies and overall limits that the board has approved, to review internal controls, and to otherwise supervise the bank’s derivatives operations.

It follows that a bank’s board of directors should review the overall strategy and nature of a bank’s derivatives activities and risk-management policies that senior management presents to the board. The board also should receive periodic reports from senior management, at intervals established by the board, on the level and nature of the bank’s derivatives activities, resulting exposures, and other matters that management believes should be brought to the attention of, or approved by, the board. Although these supervisory guidelines refer to a risk-management function, in practice they also apply to banks that separate out market risk and credit-risk-management functions.

Provisions on risk management. Generally, the risk-management process for trading activities should be integrated into the overall risk-management system to the fullest extent possible. Risk measurement should be comprehensive. All material risks should be measured, and all trading operations should be covered. The Trading Activities Examiner Guidelines provide specific guidance on management of credit, market, liquidity, operational, and legal risks involved in derivatives trading.

Derivatives serve a necessary and constructive purpose in helping to manage risk. One objective of the supervisory guidelines is to ensure that banks manage risks posed by derivatives so that derivatives will be used safely and soundly. Key components of risk management are an independent risk-management system; a strong internal control environment; and an integrated, institutionwide system for measuring and limiting risk. Integral to a strong internal control environment is sufficient separation of duties, complete separation of front-office (trading) and back-office operations, a daily revaluation of trading positions independent of trading personnel and management, and an independent validation process for each step of the risk-management process.

This means that institutions need to hire highly skilled personnel not only for their trading floors and risk-management staffs, but also for their back offices and risk-management and internal audit functions. The Trading Activities Examiner Guidelines also highlight that risk management is a corporate management issue—the board of directors is responsible for knowing in what derivatives activities the institution is involved and for understanding attendant risks. When considering the importance of complex derivatives, there is also “intellectual risk,” How well educated are personnel regarding derivatives, from the trader on the desk up to the board of directors? How can exposures be managed if key personnel from an area are hired away?
An important aspect of risk management is the ability to mark to market and to measure risk. The Trading Activities Examiner Guidelines are directed at trading activities. Thus, they do not differentiate between instruments used for hedging purposes and those used for position-taking purposes with respect to measurement of risk.

First, banks should have the ability to mark to market derivatives and all other trading positions on a daily basis.

Second, banks actively dealing in foreign exchange, derivatives, and other traded instruments should monitor credit exposures, market risk exposures, trading positions, and market movements at least daily. Banks should strive to monitor more active instruments on a "real-time" basis, as appropriate.

Third, banks should calculate market risk exposures at least daily using a measure such as value at risk (VAR). VAR measures the potential gain or loss in a position, portfolio, or institution that is associated with a price movement of a given probability over a specified time horizon. Although a bank may use a risk measure other than VAR, the measure must be comparably accurate and rigorous.

Fourth, stress tests should be quantitative and also contain qualitative analyses, such as contingency plans. Analyses of stress situations should not only assess the probability of adverse events, but also address plausible worst-case scenarios on an institutionwide basis, which consider the effects of unusual price changes or the default of a large counterparty across both derivatives and cash-trading portfolios, and loan and funding portfolios.

What is the purpose of a stress test? A stress test should demonstrate to an institution both where it may have too much exposure in a particular risk dimension or with respect to a particular counterparty, or where it may be relying on assumed relationships between prices, volatility, or liquidity conditions that could break down. Management should take appropriate action, for example, by scaling back its activities with respect to that risk dimension or counterparty. The stress test should help the bank identify genuine potential threats and how it might manage itself in these scenarios.

Another aspect of risk management is limiting risks. A system of integrated, institutionwide limits and risk-taking guidelines should set boundaries for risk taking and ensure that positions exceeding predetermined levels receive prompt management attention. There should be global limits for each type of risk that are integrated with institutionwide limits on those risks as they arise in other activities, as well as limits that are allocable to individual business units.
Finally, risk management requires management evaluation and review. Banks with significant trading and derivatives activities should internally review methods of risk measurement at least annually. Internal evaluations may be supplemented by reviews by external auditors or consultants. Assumptions used to measure risk and limit exposures should be evaluated on a continual basis. Moreover, banks should have a formal process for the review of new products. Before a new product is traded, senior management, risk management, internal control, legal, accounting, auditing, and traders should understand it, develop appropriate policies and controls, and integrate the product into risk measurement and control systems.

Nontrading Activities Examiner Guidelines

Provisions on board of directors and senior management oversight. Active oversight of end-user derivatives activities by the board of directors and senior management of banks is also called for in the Nontrading Activities Examiner Guidelines. In general, the familiarity, technical knowledge, and awareness of directors and senior management should be commensurate with the level and nature of the bank’s derivatives positions. Specifically, the board of directors should first approve and periodically review overall business strategies and significant risk-management policies, particularly policies on managerial oversight, risk tolerances, and exposure limits. The board also should actively monitor the bank’s performance and risk profile and its derivatives portfolios. Minutes of the board’s meetings should clearly demonstrate fulfillment of these responsibilities.

Second, directors should understand credit, market, and liquidity risks facing the bank as a whole and its derivatives positions in particular. If the directors do not have detailed technical knowledge of the risk-management process and risk exposures, they must ensure that they have access to independent legal and professional advice regarding the bank’s derivatives holdings and strategies.

Third, senior management should ensure that there are adequate policies and procedures for conducting nontrading derivatives activities on a long-range and day-to-day basis. These policies and procedures include clear lines of authority and responsibility for acquiring instruments and managing risk, appropriate limits on risk taking, adequate systems for measuring risk, acceptable standards for valuing positions and measuring performance, effective internal controls, and a comprehensive risk reporting and management review process. To provide adequate oversight, management should understand fully the bank’s risk profile, even when information and risk analyses are obtained from outside sources.
Fourth, banks with significant holdings of complex instruments should ensure that risk managers or risk-management functions are fully independent of those with authority to conduct transactions. Banks with less complex holdings should have a mechanism (in management or a board committee) for independent review of the level of, and process used in, managing resulting risks. In all banks, back-office, settlement, and transaction reconciliation responsibilities must be conducted and managed by personnel independent of those initiating risk-taking positions.

Provisions on written policies and procedures. Written policies and procedures should clearly outline the bank’s approach to the management of end-user derivatives activities. Such policies should be consistent with the bank’s broader business strategies, capital adequacy, technical expertise, and risk appetite, and should address the following areas:

- objectives (for example, generating earnings, hedging, or taking risk positions), at the portfolio and institutional levels, to guide acquisition of derivatives instruments and provide benchmarks for evaluating the bank’s holdings, strategies, and programs;

- institutional risk tolerance, with a statement of authorized derivatives instruments and activities identifying objectives for their use, their permissible credit, and their market, and the liquidity risk characteristics of these instruments and portfolios consistent with the bank’s overall risk limits (specified either as guidelines within overall policies or in management operating procedures);

- risk limits that implement overall risk tolerances and constraints;

- prior review by senior management and all relevant personnel of “new products” in which the bank intends to acquire a “meaningful position,” as these terms are defined in the policies, and integration of such products into the bank’s risk-measurement and control systems; and

- accounting treatment for derivatives holdings that is generally consistent with objectives and reporting requirements, and reflects the economic substance of off-balance-sheet derivatives transactions.

Provisions on risk measurement. The risk-measurement provisions of the Nontrading Activities Examiner Guidelines highlight that the failure of a bank that is an end user of derivatives to understand adequately the risks involved in its positions constitutes an unsafe and unsound banking practice, whether occurring due to lack of internal expertise or inadequate outside advice. Regardless of any responsibility, legal or otherwise, assumed by the dealer, a bank acting as an end user ultimately is responsible for understanding and managing risks posed by its derivatives transactions.
First, banks must conduct in-house preacquisition risk analyses or make use of specific third-party analyses that are independent of the seller or counterparty. Analyses provided by the originating dealer or counterparty should be used only when there is a clearly defined investment advisory relationship. Second, banks should obtain preacquisition price quotes and risk analyses from more than one dealer and, in doing so, assume that each party is dealing at arm’s length for its own account, absent a written agreement to the contrary. As a generally sound practice, unless the dealer or counterparty is acting under a specific investment advisory relationship, banks should not enter into a transaction if its fair value or analyses required to assess its risk cannot be determined independently of the originating dealer or counterparty. Third, banks relying on third parties for market risk-measurement systems and analyses should ensure that they fully understand the techniques and assumptions used.

Other provisions of the Nontrading Activities Examiner Guidelines. The Appendix to the Nontrading Activities Examiner Guidelines highlights specific considerations in evaluating key elements of sound risk-management systems as they relate to credit, market, liquidity, operating, and legal risks associated with nontrading derivatives activities. Examiners are directed to (i) determine whether the bank’s use of derivatives represents a prudent activity in light of the purposes for which they are used, management’s ability to evaluate and control risks, and the capital positions of the institution; (ii) ensure that banks adopt adequate policies related to derivatives transactions and that all levels of management provide sufficient oversight of the risk-management process; and (iii) pay special attention to significant changes in the nature of derivatives instruments acquired, risk-measurement methodologies, limits, and internal controls, as well as in the earnings, size of positions, or VAR associated with derivatives activities.

Risk-Management Examiner Guidelines

Changes in the nature of the banking markets have made the risk-management process as important as the quality of the assets of a banking institution’s balance sheet.

Active oversight by board of directors and senior management. First, the board of directors of an institution is ultimately responsible for the level of risk taken by that institution. The board of directors should approve all overall business strategies and significant policies for risk taking. The level of technical knowledge required by the board of directors may vary, based on the activities of the institution. If the institution engages in technically complex activities, the board of directors need not know the full details of the activities or the precise methods by which risks are
measured and controlled. The board of directors should, however, clearly understand the types of risk to which the institution is exposed and receive regular reports that detail the size and significance of the risks. On the other hand, if the institution engages in traditional and less complicated activities, the board of directors should be more involved in the day-to-day decision-making processes that determine risk taking.

Second, the board of directors should provide clear guidance on the acceptable level of risk exposure for the institution. The board of directors is also responsible for making sure that senior management follows this guidance.

Third, senior management is responsible for implementing strategies to limit risks and ensure compliance with all applicable laws and regulations. Senior management must possess sufficient knowledge of the major business lines of the institution to ensure that risk-management policies, controls, and systems are in place. It also must ensure that lines of authority and accountability are clearly delineated.

Fourth, examiners are directed to review the following:

- whether the board of directors and senior management have identified and understand the risks inherent in their institution's activities, and whether they have attempted to remain informed of potential risks from future developments;

- whether the board of directors has set up policies to limit the risks inherent in lending, investing, trading, trust and fiduciary, and other significant activities;

- whether the board of directors and senior management use adequate record keeping and reporting systems to measure and monitor major sources of risk;

- whether the board of directors periodically reviews and approves risk exposure limits in reaction to strategic changes, market conditions, or newly introduced products and activities, and whether all management responds to changing risks and market innovations that are relevant to the institution's activities;

- whether senior management ensures staffing by personnel with knowledge, experience, and expertise consistent with the nature and scope of the institution's activities, and ensures that employees have integrity and ethical values;

- whether senior management ensures that staff resources are adequate to operate and manage the institution's activities soundly;
• whether senior management identifies and reviews risks from new activities or products prior to authorizing them, to ensure that the current infrastructure and internal controls are adequate to manage the new risks; and

• whether all management provides day-to-day supervision of activities.

Adequate controls, procedures, and limits. First, the board of directors and senior management should tailor risk-management policies and procedures to the particular risks facing an institution. They should provide detailed guidance for daily implementation of business strategies and generally limit the institution’s exposure to excessive or imprudent risks.

Second, the coverage and level of detail of the policies and procedures may vary based upon the size of the institution. Smaller and less complex institutions with effective and involved management need only have basic policies that address the significant areas of coverage with limited requirements and procedures. However, larger institutions with more complex business lines need to have more detailed policies.

Third, senior management must ensure that policies address areas of material risk and are modified as necessary.

Finally, examiners are directed to review the following:

• whether the policies, procedures, and prudential limits in place adequately identify, measure, monitor, and control risks arising from lending, investing, trading, trust and fiduciary, and other significant activities. Also, whether the policies and limits are consistent with the experience of management, the goals of the institution, and the institution’s overall financial strength;

• whether policies clearly delineate lines of authority and accountability; and

• whether policies provide for prior review of new activities or products.

Adequate risk monitoring and management information systems. The board of directors and senior management must identify and measure all material risk exposures. Institutions must have information systems support that gives the board of directors and senior management timely reports on the financial condition, operating performance, and risk exposure of the consolidated institution. Line managers in charge of day-to-day management should receive detailed regular reports.

The sophistication of the risk monitoring and management systems should be consistent with the complexity and diversity of the institution’s activities. Smaller institutions with less complicated activities only need a limited set of reports for the board of directors and senior management
that include daily or weekly balance sheets, income statements, troubled loan watch lists, past-due loan reports, sample interest rate reports, and other similar reports. On the other hand, larger institutions with more complex activities need more comprehensive reporting and monitoring systems for more frequent reporting, tighter monitoring of complex trading activities, and aggregation of consolidated risk for all activities. In addition, parent institutions that centrally manage subsidiary banks should have more comprehensive, detailed, and developed risk-management systems. Furthermore, all institutions must have systems that give the board of directors and senior management a clear understanding of the banking institution’s positions and risk exposures.

Examiners are directed to review the following:

- whether an institution’s risk-monitoring practices and reports address all material risks;

- whether ongoing reliability tests are conducted for key assumptions and data sources that are used in measuring and monitoring risks;

- whether generated reports are consistent with the institution’s activities; whether they monitor risk exposure and compliance with relevant limits, goals, and objectives; and whether they compare expected performance with actual performance; and

- whether reports to the board of directors and senior management are timely, accurate, and sufficiently informative to identify adverse trends and adequately evaluate the risk level of the organization.

*Adequate internal controls.* Internal controls are critical to the safe and sound functioning of an institution’s risk-management system. They are a fundamental and essential management function. They must be established and maintained, with enforcement of official lines of authority and separation of duties. Trading, custodial, and back-office booking functions must be strictly separated. Failure to separate functions can be an unsafe and unsound banking practice that may lead to losses and financially compromise the institution. Failure of separation also may warrant a supervisory action or formal enforcement action against the institution.

Internal controls should promote effective operations, and reliable financial and regulatory reporting, safeguard assets, and ensure compliance with appropriate laws, regulations, and policies. Institutions should have an independent internal auditor that tests internal controls and reports to the board of directors or a delegated audit committee. Institutions with small or traditional activities do not need a full-scale
audit but may engage in regular reviews of essential internal controls that are done by institution personnel. The reviewing personnel must be independent of the function being reviewed. All audits and reviews must be adequately documented with any management response.

With regard to internal controls, examiners are directed to look at the following:

- whether the system of internal controls is appropriate for the risks from the institution's activities;
- whether there are clear lines of authority and responsibility that ensure compliance with the institution's policies, procedures, and prudential limits;
- whether the lines of reporting are independent from the business areas, and whether there is a mandated and actual effective separation of duties between the trading, custodial, and back-office functions;
- whether there are accurate, timely, and reliable financial, operational, and regulatory reports, and whether exceptions noted in the reports are promptly investigated;
- whether there are procedures in place to ensure compliance with laws and regulations;
- whether the internal audit or control review is independent and objective;
- whether the review or test of internal controls and information systems is sufficient;
- whether there is adequate documentation of response to audits and high-level attention to material weaknesses and appropriate solutions implemented; and
- whether the board of directors and senior management regularly review the effectiveness of internal audits and control reviews.

**Other guidance.** The *Risk Management Examiner Guidelines* are intended to assist examiners in their evaluation of risk-management controls. Examiners are to give them considerable weight in their overall evaluation of an institution's management. The management rating will be an important factor in determining an institution's CAMEL supervisory rating. Examiners are also directed to determine whether lack of risk-management oversight at an institution indicates a further level of noncompliance with safety and soundness regulations. Examiners will rate an institution's risk management on a five-point scale ranging from strong (1) to unsatisfactory (5).
Risk-Based Capital Guidelines for Interest Rate Risk

The Board of Governors, in conjunction with the OCC and FDIC, issued a final rule\(^\text{16}\) that revises its risk-based capital guidelines for state member banks for better assessment of interest rate risk.\(^\text{17}\) The final rule was promulgated under Section 305 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA),\(^\text{18}\) which directed federal bank supervisors to revise risk-based capital standards to take into account banks' financial vulnerability to shifts in interest rates. The final rule revises the risk-based capital guidelines to include explicit consideration of banks' exposure to declines in the economic value of their capital due to changes in interest rates.\(^\text{19}\) The guidelines help ensure that banks have sufficient capital on hand to cover potential losses incurred due to interest rate risk exposure. The final rule does not establish thresholds above which a bank's interest rate exposure is considered too high.

Risk-Based Capital Guidelines for Market Risk

The Board of Governors, in conjunction with the OCC and the FDIC, requested comment on a proposed amendment to its risk-based capital requirements that would incorporate measures for market risk arising from trading, foreign exchange, and commodity activities.\(^\text{20}\) The Board of Governors' proposal applies to banks and bank holding companies with relatively large trading operations.\(^\text{21}\) Under the proposal, banks could measure and contain market risk, which is risk from the possibility that market conditions may cause the price of an investment to vary, through the use of one of two different procedures.

The first procedure proposed by the Board of Governors owes its derivation to, but is different from, the Basle Committee's recently adopted procedures for determining capital standards for market risk.\(^\text{22}\) This procedure would rely on a bank's internal models to ensure that sufficient capital is held to cover potential trading activity losses. This procedure uses standard parameters to calculate the VAR of a trading portfolio and then applies a multiplication factor to determine the amount of capital necessary to cover that portfolio.

The federal bank supervisors have issued a proposed amendment to their July 24, 1995 proposal to allow for internal model backtesting.\(^\text{23}\) The amendment is based on a proposal by the Basle Committee on Banking Supervision published in January 1996,\(^\text{24}\) and covers only large banks with significant trading activities. The proposal provides additional guidance to banking institutions on how backtesting results will be directly linked to an institution's potential capital charge.
Backtesting, which is comparing VAR amounts generated by internal models (institutions must use VAR amounts generated for internal risk-measurement purposes, not the daily VAR generated for supervisory capital purposes) against actual profits and losses on a daily basis, will be used to generate the multiplication factor used to calculate the market-risk capital requirements. The more inaccurate an institution's internal model is, the greater that institution's capital charge will be. This proposal is currently scheduled to be implemented by January 1999.

In contrast, the second procedure proposed by the Board of Governors, called the precommitment approach, would allow a bank to specify its desired level of capital to be held in reserve to support its trading activities. The bank would then commit to manage its trading activities so as to limit, over a specified interval, its market risk to the capital held. Should the bank fail to manage its market risk appropriately, penalties, such as civil fines, punitive capital charges, or supervisory sanctions, could be imposed. The Board has received public comments on its proposals and is reviewing the comments and the recent action by the Basle Committee.25 The precommitment approach is being tested with a group of banks.

**Risk-Based Capital Guidelines for Netting Bilateral Financial Contracts and Assessing the Credit Risk of Long-Term Financial Contracts**

The Board of Governors, in conjunction with similar actions by the OCC and the FDIC, amended its risk-based capital guidelines for state member banks26 and bank holding companies27 to recognize in derivatives contracts the effects of netting arrangements in the calculation of potential future risk exposure, and to revise conversion factors used in estimating future credit exposure to recognize the differing credit risk among derivatives contracts with differing maturities.28 Under the amendments, institutions are required to have reasoned legal opinions concluding that bilateral netting arrangements are legally enforceable in all relevant jurisdictions.29 In many cases, the amendments may allow institutions using eligible derivatives contracts to hold less capital against future credit exposure.

Pursuant to the final revisions to the risk-based-capital guidelines, state member banks and bank holding companies may reduce the amount of risk-based capital that they are required to hold, through the use of bilateral netting arrangements, to offset future credit risk exposure.30 These revisions are based on revisions to the Basle Capital Accord approved on April 10, 199531 and apply to future exposure of financial institutions to interest rate, exchange rate, commodities (including precious metals),
and equity contracts. The revisions also recognize the increased credit risk to institutions from derivatives with longer maturities by increasing the capital requirements on such contracts and revising the conversion factors used to estimate potential future credit exposure accordingly.

The Board of Governors adopted a final rule under which state member banks and bank holding companies may net positive and negative mark-to-market values of interest rate and exchange rate contracts subject to qualifying bilateral netting arrangements, in order to calculate a single current exposure for the netting contract. The final rule is consistent with a revision to the Basle Capital Accord announced on July 15, 1994.

**Regulation EE**

The Board of Governors adopted Regulation EE to expand the application of the netting provisions of FDICIA to a broader range of financial market participants and thereby provide further support for netting under U.S. law. FDICIA states that payment obligations for institutions covered by Regulation EE can be netted. Regulation EE expands the coverage of FDICIA beyond netting contracts between and among depository institutions, federally regulated or supervised broker-dealers, and futures commission merchants to include all major derivatives dealers, including affiliates of broker-dealers and insurance companies. Under Regulation EE, any legal entity would qualify as a financial institution for purposes of the provisions of FDICIA, protecting netting arrangements if it represents that it will engage in financial contracts as a counterparty on both sides of one or more financial markets and if it meets one of the quantitative thresholds in section 231.3(a) of Regulation EE. Representations by a counterparty may be made orally. Thus, firms normally thought of as end users can qualify as dealers through Regulation EE's function test. If an end user carries out the functions of a dealer, it will receive the benefits of Regulation EE.

**Regulation Q**

On August 22, 1994, Board staff issued an opinion that a transaction, in which a depository institution would enter into an off-market interest rate swap agreement with a demand deposit customer and in which the notional principal amount would be determined by reference to demand deposit balances, would involve a device for the payment of interest on a demand deposit in violation of Regulation Q. This regulation prohibits the payment of interest on demand deposits by regulated institutions, including U.S. branches and agencies of foreign banks with
worldwide consolidated assets in excess of $1 billion. For purposes of Regulation Q, "interest" is "any payment to or for the account of any depositor as compensation for the use of funds constituting a deposit" excluding "absorption of expenses incident to providing a normal banking function" and "forbearance from charging a fee in connection with such a service. . . ." Board staff concluded that any net payment of the bank to the customer under the swap would constitute a rebate that is a payment of interest prohibited by Regulation Q.

Office of the Comptroller of the Currency

Risk Management of Financial Derivatives: OCC Banking Circular No. 277

OCC Banking Circular No. 277 (Circular No. 277) is addressed to and provides guidance to national banks and federally licensed branches and agencies of foreign banks that engage in derivatives activities.

Provisions on customer appropriateness.

- Senior management of banks that act as dealers of derivatives should establish procedures necessary to ensure that traders are able to identify instances in which a customer may not fully understand the risks associated with a particular transaction.

- Management must identify whether the proposed transaction is consistent with the counterparty's policies and procedures as they are known to the bank.

- Credit officers must analyze the effect of proposed derivatives activities on the financial condition of the counterparty.

- The bank must periodically update its assessment of the creditworthiness of the counterparty. The bank must implement a risk-management system that measures, monitors, and controls changes in the credit quality of counterparties.

- Credit officers must understand the applicability of derivatives to the risks that the customer is attempting to manage.

- When the bank believes a particular transaction may not be appropriate for a customer but the customer wishes to proceed, management should document its own analysis and the information provided to the customer.

- Before engaging in the transaction, the bank must "reasonably satisfy" itself that the counterparty has the legal and regulatory authority to proceed.
**Provisions on netting agreements.** The bank should reasonably satisfy itself that the terms of any contract governing derivatives activities are legally sound and consistent with regulatory authority. Banks should use master closeout netting agreements to the broadest extent legally enforceable, including in the event of the counterparty’s insolvency. However, only when the bank has a high degree of certainty concerning enforceability should banks monitor their credit and liquidity risks and account for derivatives transactions on a net basis. Multilateral netting arrangements should be entered into only if cleared through a facility meeting the conditions set forth in the Lamfalussy Report.\(^4^3\)

**Provisions on board of directors and management oversight.** The board of directors should approve of senior management’s proposal to undertake derivatives activities. The board of directors or board-designated senior management should approve of new derivatives activities or significant changes in current activities, such as entry into a product line or market and use of derivatives instruments with different risk characteristics, for different purposes, or with cash flows dependent on markets in different geographic regions. Senior management should initiate and review at least annually policies and procedures that will apply to derivatives activities. The board of directors should initially endorse and periodically approve of significant policies and changes thereto. In addition, senior management should create an independent function to measure and report risk and monitor compliance. The risk monitoring unit should ensure that senior management and the board of directors receive information about credit exposure on a periodic basis.

**Provisions on management and measurement of risk.** Circular No. 277 offers specific guidance on market, credit, liquidity, operations, and system risk management and measurement. With respect to risk measurement, Circular No. 277 provides that a bank active in derivatives transactions should have a system to determine potential credit risk. Limited end users may rely on estimates of such risk from dealers or other third-party sources independent of the counterparty.

**Provisions on hedging of physical commodities.** A bank may engage in the hedging of physical commodity derivatives with physical commodities only under the following conditions:

- the commodities transactions supplement and constitute a nominal percentage of the bank’s risk-management activities;
- the commodities transactions are used to hedge otherwise permissible customer-driven banking activities;
- the commodities transactions are not entered into for speculative purposes; and
prior to entering into the commodities transactions, the bank’s board of directors and the OCC have approved of a detailed plan for the hedging activity.

Derivatives transactions with respect to bank-eligible precious metals (gold, silver, and platinum) are not subject to this guideline.

Additional guidance. First, the OCC released additional guidance in the form of frequently asked questions about Circular No. 277.44 Although not all types of derivatives are technically subject to Circular No. 277, because it focuses principally on over-the-counter (OTC) derivatives transactions, Circular No. 277 should be applied to all of a bank’s risk-management activities, to the extent practicable. The OCC did not adopt a suitability standard for bank derivatives activities in Circular No. 277. The suitability guidelines in Circular No. 277 generally do not apply to a bank’s transactions with other dealers or sophisticated market participants, nor do they require banks to request specific information or make a judgment about suitability before recommending a transaction. Rather, Circular No. 277 presumes, consistent with safe and sound banking practices, that a bank dealer will not recommend transactions it knows, or has reason to know, would be inappropriate for the customer on the basis of available information. Although a bank would not be prohibited from executing such a transaction, it must advise the customer of this determination, document it, and consider the customer’s ability to perform the contract in making a credit decision. Furthermore, the OCC will require a legal opinion to support bilateral netting agreements for the purpose of calculating credit exposure with respect to transactions with many foreign counterparties, U.S. branches, or offices of some foreign counterparties. An industry legal opinion will satisfy this requirement, provided that the applicable standard agreement is used.

Second, the OCC issued an advisory letter to clarify and emphasize the duties national banks have to manage prudently their interest rate exposures.45 National banks that have significant medium- and long-term positions should be especially careful to assess accurately the longer-term impact of changes in interest rates. Appropriate methods of measuring interest rate risk may range from gap reports (simple repricing reports) covering the full maturity range of the bank’s activities to the economic value systems and simulation models. The goal of risk measurement should be to determine the direction and magnitude of exposure. The board of directors and senior management are responsible for understanding and controlling their institution’s interest rate exposure. Risk tolerance should be clearly communicated and clear lines of responsibility established. Risk management should be implemented consistent with the national bank’s level of exposure and its predicted exposure. Of par-
ticular concern to the OCC are instruments that contain an options feature, such as "the possibility of loan prepayments or the withdrawal of deposit funds."\textsuperscript{46} Also of concern are such financial instruments as collateralized mortgage obligations, structured notes, credit card lines, indexed CDs, and off-balance-sheet derivative instruments.

Third, the OCC has released additional guidance in the form of frequently asked questions about AL 95-1.\textsuperscript{47} Although the OCC still considers credit risk to be the most significant risk facing banks today, it believes that interest rate risk has grown due to changes in the structure of bank balance sheets and increased use of more complex products. The OCC is most concerned with long-term (length of over five years) products that contain embedded options. These products focus mostly on residential real estate and contain options that can be difficult to measure and control using customary short-term analysis. Embedded options associated with nonmaturity deposits and residential mortgages are very susceptible to changes in interest rates. Interest rate risk should be measured and evaluated by both the earnings and the economic perspectives. While the earnings perspective will show how interest rate changes will affect a bank's accrued or reported earnings, the economic perspective will show the potential impact of interest rate changes on the present value of the bank's future cash flows. The OCC expects all banks to understand the impact of interest rate changes on earnings, at a minimum. Banks with significant interest rate exposure should adopt VAR measurements as well as earnings-at-risk measurements. An economic value of equity calculation is not mandated but is recommended.

Fourth, the OCC has documented the compliance of many national banks that are active users of financial derivative instruments with Section C.1 of Circular No. 277.\textsuperscript{48} Section C.1 imposes on national banks various duties by which they must determine whether a particular financial derivative instrument is appropriate for a customer. The OCC Sales Review lists the best practices that have been developed by national banks to comply with Section C.1.

Most national banks comply with Section C.1. No national banks have incurred major problems due to customer default, complaints, or lawsuits related to banks' compliance with Section C.1. National banks have used credit policies to comply with Section C.1. Credit officers implement the credit policies by developing an understanding of a customer's financial condition. Customers may be reluctant to provide necessary information. National banks evaluate customer appropriateness by developing a framework to understand a customer's needs for financial derivative instruments. This framework determines the appropriate level of involvement
for senior management, as well as the customer’s sophistication and understanding of the transaction. In addition, national banks require appropriate written assurance that counterparties have all necessary authority to enter into the proposed transaction.

Finally, the OCC has published its examiner guidelines under Circular No. 277.49

**Supervision by Risk**

The OCC announced plans to implement a revised system under which its examiners will evaluate risk in national banks. Under the new system called supervision by risk, OCC examiners will use newly defined, specific categories of risk to assess risk exposure. The goal of supervision by risk is to evaluate the quantity of risk exposure and determine the quality of risk-management systems in place to control that risk. The OCC will use risk as an organizing principle for all safety and soundness supervision.

Supervision by risk reflects a judgment by the OCC that risk assessment must be more fully and evenly incorporated into bank supervision. Therefore, the nine identified risks will be treated the same throughout all national banks, all products, and all activities. The nine identified risks are: (i) credit risk; (ii) interest rate risk; (iii) liquidity risk; (iv) price risk; (v) foreign exchange risk; (vi) transaction risk; (vii) compliance risk; (viii) strategic risk; and (ix) reputation risk. While different products or activities may create risk in more than one of these categories, the OCC feels that these nine identified risks are flexible enough to capture the present-day risk exposure of national banks.

Under supervision by risk, examiners will make and record judgments of risk exposure and the ability of the particular national bank to manage that risk exposure. Examiners will then prepare a summary that measures the national bank’s aggregate risk judgment and determines the areas of potential future risk. This summary will help to focus future examinations on high-risk areas and limit examinations of low-risk areas. Examinations will no longer be focused by a transactional approach or an approach based upon product line.

The OCC implemented part of the supervision by risk program through its procedures for small (assets less than $250 million), non-complex community banks. These procedures focus examiners on the most important risk for these banks, credit risk. However, the procedures also advise examiners to test the banks’ trading activities and risk monitoring and management systems for interest rate risk.

The OCC has also released its examiner guidelines for large national banks. Examiners are directed to employ a risk-assessment system under
which they will custom-tailor a risk profile to each institution under examination, weighing the quantity of risk against the quality of risk management. Ratings will be assigned for a bank’s exposure to each of the nine risks and for its monitoring of the risks. Examiners will then determine an aggregate risk rating that indicates the direction of that bank’s risk (growing versus ebbing). Examiners will use these ratings to focus future exams on specific problem areas.

**Derivatives Guidance for Future Commission Merchants Activities**

The OCC released News Release 95–122 (FCM Guidance) to provide guidance for examiners on derivatives instruments related to futures brokerage activities for bank subsidiaries acting as future commission merchants (FCMs). The FCM Guidance outlines procedures for determining the adequacy of oversight of the FCM by the board of directors and senior management, and the parent institution’s ability to monitor and manage various risks associated with futures activities. Highlights of the FCM Guidance are as follows:

- FCMs must have a unit for risk control and assessment that is separate from the derivatives trading unit and that reports its findings directly to the board of directors and senior management.

- The board of directors and senior management of the parent company should consider the interrelationship of the risks of the FCM subsidiary and the risks of other affiliates when establishing the FCM’s risk limitations. The board of directors of the parent company should approve aggregate risk limits at least annually. These limits should relate directly to the nature of the parent company’s strategies, historical performance, and overall level of earnings and risk-based capital. Capital directed to support FCM risk exposure should reflect the level and complexity of FCM risk, rather than the minimum regulatory requirements.

- Actions by the FCM directly impact the reputation risk faced by the parent company. The FCM’s policies and procedures should be in line with the parent company’s risk profile. Policies and procedures should include standards for disclosing risk to customers.

- The FCM should have at least one designated compliance officer.

**Emerging Market Country Products and Trading Activities**

The OCC released News Release 95–139 to provide guidance for examiners on derivatives instruments from emerging markets. Banks should have written policies and procedures for emerging market activi-
ties for identifying, monitoring, and controlling risk, commensurate with their activity in those areas, and they should handle these activities in the same manner in which they treat other trading activities. Activities in these countries raise both specific country risk and interconnected risk from doing business in several emerging markets. The OCC has released the related examiner guidelines.55

Federal Deposit Insurance Corporation

The goal of FDIC guidance is to ensure that appropriate capital levels, expertise, and management controls are maintained by insured institutions engaging in derivatives activities and off-balance-sheet activities in general. The guidelines focus, however, on the examination of institutions that are end users of derivatives. FDIC examiners review the risks associated with derivatives activities to determine whether a full examination of an institution’s activities is necessary.

Provisions on customer appropriateness. First, regardless of any counterparty duties, institutions that are end users are responsible for fully understanding the derivative instruments and the attendant risks in a transaction. Such an end user has the duty to determine the suitability and appropriateness of its involvement with an activity. Second, institutions must have a testing process in place to ensure that counterparties have the necessary legal authorization to engage in a particular derivatives transaction and that individuals who enter into derivatives transactions for organizations are specifically authorized to do so. Even when standard netting agreements are used, there should be a legal review of the individual contract. Third, examiners should consider whether the institution has limited credit risk exposure by entering into transactions with financially strong counterparties.

Provisions on netting agreements. Legal opinions are required for netting agreements with foreign counterparties or when using unconventional netting agreements with any counterparty. A testing process should be in place for individual review of master netting agreements to determine enforceability in all relevant jurisdictions and in bankruptcy proceedings. Examiners should consider whether the institution has limited credit risk exposure by using bilateral closeout master netting agreements.

Provisions on board of directors and management oversight. The board of directors and senior management must be fully cognizant of derivatives strategies, the extent of current activities, and the attendant risks. Management should prepare, for review at meetings of the board of directors, documentation detailing the institution’s planned involvement in derivatives activities and risk potential. Examiners should use the board of directors’ meeting minutes and supporting documentation to measure
board involvement in and awareness of derivatives activities. Examiners should also look at management’s ability to measure, monitor, and manage risk in all bank activities in order to determine management’s handling of risks from derivatives activities.

Provisions on management and measurement of risk.

- Examiners should consider the type of instrument employed and the purpose behind the investment in determining risk exposure. Derivatives portfolios should be analyzed in the context of the related asset or liability positions of end users or the offsetting derivatives positions of dealers.

- Institutions that are significant users of derivatives should use a management reporting system that provides valuations for their entire portfolio and compares outstanding positions against risk and position limits. More sophisticated risk-management systems should include quantitative and qualitative assessments of scenario stress testing.

- Management reporting systems should include pricing data. The amount of data produced by institutions may vary in relation to the volume and purpose of the institution’s derivatives activities.

- Dealers, active participants, and those trading for their own account should have internal pricing systems or another method for obtaining current market values. End users of only a limited number of contracts may rely on periodic prices provided by the dealer-counterparty. Institutions using derivatives solely for risk-management purposes may be able to rely on mark-to-market values provided by brokers. Institutions with substantial portfolios or those trading to take advantage of short-term price movements should update their mark-to-market positions frequently or establish market averages on a daily or intraday basis.

- Prior to the use of new products or entry into a new market, an institution should investigate the market, the number of market makers, the volume of transactions in the market, and the overall liquidity of the specific contract.

Provisions on scope of review. Examiners are directed to tailor their review of an institution to the intended use by the institution of the particular derivative product. Examiners should identify and review in detail institutions that appear to be speculating in derivatives contracts by taking unhedged or unmatched positions in anticipation that future price movements will be advantageous. Examiners should refer to reports, such as call reports and the Office of Capital Market’s quarterly monitoring
report, to determine which banks experienced rapid growth in holdings or large positions as a percentage of capital or assets. On-site examinations will be more detailed in instances where management oversight and audit programs are less well developed.


Representatives from various financial trade groups, including the Emerging Markets Traders Association, the Foreign Exchange Committee of the Federal Reserve Bank of New York, the International Swaps and Derivatives Association, the New York Clearing House Association, the Public Securities Association, and the Securities Industry Association, joined together under the coordination of the Federal Reserve Bank of New York to prepare the Principles and Practices for Wholesale Financial Market Transactions (Principles).

The Principles are proposed for voluntary adoption and implementation by participants in the OTC financial markets. The Principles are not intended to create or modify any legally enforceable obligations or duties. Rather, the purpose of the Principles is to define the relationship between participants in the OTC financial markets and to articulate a set of sound practices to be followed in connection with OTC financial market transactions between these participants. Participants in the OTC financial markets generally include financial institutions, institutional buyers, and other brokers, dealers, and end users that engage in significant and regular OTC financial market activities.

The provisions of the Principles include guidance on areas important to OTC trading activities, such as appropriate financial resources, internal policies and procedures, fair dealing and professional standards, risk-management considerations relating to relationships between participants, and the mechanics of the standards for OTC financial market transactions. The Principles affirm the arm’s-length nature of OTC financial market transactions and encourage each participant either to seek independent financial advice or to enter into a written agreement defining the advisory nature of the relationship whenever a participant is unwilling or unable to take responsibility for its own decisions relating to OTC or financial market transactions.

**Derivatives Policy Group’s Framework for Voluntary Oversight**

The Derivative Policy Group (DPG), which includes representatives of six broker-dealers with affiliates that are major OTC derivatives market
participants, with the cooperation of the Securities Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC), released in March 1995 a voluntary framework for the OTC derivatives activities of unregulated securities firm affiliates of SEC-registered broker-dealers and CFTC-registered futures commission merchants. The report, entitled *Framework for Voluntary Oversight*, notes that dealers generally have no affirmative disclosure obligations to their counterparties. The framework suggests that dealers should systematically disclose to new, nonprofessional counterparties the principal generic risks associated with OTC derivatives transactions. The framework further notes that when a dealer becomes aware that a counterparty incorrectly believes that the dealer is acting in an advisory or fiduciary manner with respect to a prospective OTC derivatives transaction, it would be prudent for the dealer to clarify the nature of the transactional relationship. When dealers do provide materials such as valuations, quotations, or scenario analyses, the dealers should make a good faith effort to provide accurate materials.

The DPG has also proposed to develop a generic disclosure statement that is intended to address risks particular to OTC derivatives transactions and to clarify the nature of the counterparties’ relationships. The statement would discuss the need for each counterparty to be aware of certain aspects of the market, credit, and pricing risks of OTC derivatives transactions. The Basle Committee on Banking Supervision report on the state of public disclosure of derivatives activities has cited the DPG’s report and its implementation for the report’s positive impact in the United States. The SEC has also issued a proposal calling for further disclosure of information on derivatives activities relating to accounting policies, and quantitative and qualitative information on market risk.

**Federal Financial Institutions Examination Council**

The Federal Financial Institutions Examination Council (FFIEC) has implemented its proposal for the disclosure of additional information about off-balance-sheet derivatives in the commercial banks’ consolidated reports of condition and income (call reports) of March 31, 1995. The required information involves further breakdowns of notional amounts of outstanding contracts by instrument type, by risk exposure underlying the contract, and by whether the contract is traded on an exchange or OTC. Requirements for reporting gross fair value data for derivatives also apply to banks with foreign offices or total assets of $100 million or more. The Board of Governors of the Federal Reserve System has approved consistent revisions to consolidated financial statements for bank holding companies.
The FFIEC also announced that the use of new schedules to account for interest rate risk would be delayed.64 At the same time, it announced that banks will be required in their March 1996 call reports to report on the results of their required internal capital analysis for Tier 1 capital and Tier 2 capital of total risk-based capital.65 This change is designed to make the call reports more useful to end users. A new memo item was added to capture credit losses from derivatives contracts, whether they are charged directly to operating income or another account. Instructions were also added to require quicker accounting of replacement costs for derivatives counterparties in default.

Bank for International Settlements

The Group of Ten central bank governors have been considering a range of issues related to derivatives activities and market trading activities in general. The Committee on Banking Supervision (Committee) and the International Organization of Securities Commissions (IOSCO) each issued in July 1994 documents providing risk-management guidelines for derivatives to banks and securities firms and their supervisors.66 The guidelines stress the importance of sound internal risk management by dealers and end users of derivatives instruments, with key elements including: (i) oversight by boards of directors and senior management through timely reporting under an independent risk-management function; (ii) a risk-management process involving prudent risk limits, sound measurement procedures and information systems, and continuous risk monitoring and reporting; and (iii) comprehensive internal controls and audit procedures.67 The guidelines also present sound practices for the management of credit, market, liquidity, and operational and legal risks involved in derivatives activities.

A working group of the Eurocurrency Standing Committee of the Group of Ten central banks issued on September 29, 1994 a discussion paper on Public Disclosure of Market and Credit Risks by Financial Intermediaries (Fisher Report). The Fisher Report identifies as problematic the gap that has grown between the increasing precision with which a firm’s management can assess financial risks posed by derivatives and other instruments, and the public information available to outsiders, including clients and shareholders, to evaluate the riskiness of the firm’s activities.68 The report states that this asymmetry in information leads to the inefficient allocation of capital, excessive fluctuation of asset prices, and possible increases in systemic risk.69 To help close this gap, the Fisher Report recommends that all financial intermediaries, regulated and unregulated, periodically disclose to the public quantitative information already generated for internal risk-management purposes and provides examples illustrative of its recommendations.70
As a companion piece to the Fisher Report and to help shape the debate on public disclosure of quantitative information on market risk, the Federal Reserve Bank of New York issued a discussion paper, *Public Disclosure of Risks Related to Market Activity* (McCurdy Paper). The McCurdy Paper proposes that financial and nonfinancial firms engaged extensively in market making or trading in derivatives or on-balance-sheet securities or both disclose associated risks in a statement separate from the balance sheet, income statement, and cash flow statement. The new statement would include data on the firm's approach to risk management and control, market risk, credit risk, income, and risks related to options. The McCurdy Paper also proposes that end users disclose in a separate statement risks involved in their holdings of on- and off-balance-sheet financial instruments at levels of detail proportional to the amount of risk taken.

On December 11, 1995, the governors of the Group of Ten central banks endorsed a proposal by the Committee to amend the 1988 Basle Capital Accord to take account of market risk. The proposal is intended to be implemented fully by bank supervisors by the end of 1997. The Committee released a detailed supplement to the Capital Accord in January 1996. The capital standards apply to market risks associated with foreign exchange, commodities, options, and trading activities (including trading in interest rate and equity derivatives) of internationally active banks. The amendment allows banks to choose between two methods with which to comply with market risk capital standards.

The first method is the standardized approach. Under this approach, bank supervisors prescribe procedures for measuring risk and calculating capital standards based on their own analysis, and banks are required to set aside appropriate amounts of capital to comply.

Under the second method, banks may use their own internal models to measure market risk and calculate regulatory capital requirements. The models-based approach builds on a measure of VAR and provides banks with flexibility on the general structure and detailed operations of their models. To use their own models, banks must meet certain quantitative standards to ensure that measures of market risk are sufficiently robust and consistent across institutions, as well as qualitative standards for their risk-management systems. Furthermore, banks must apply the multiple factor assigned by the Committee. The amendment lists the following qualitative standards that banks must meet:

- The board of directors and senior management must be actively involved in the risk-control process.
- There must be an independent risk-control unit.
- The model used must be integrated into day-to-day risk management.
The model must involve vigorous stress testing.

- Banks must have a routine for ensuring compliance with documented internal controls and procedures.
- There must be regular independent reviews of risk management and measurement.
- Procedures should involve internal and external validation of the risk-measurement process.\(^{76}\)

The amendment also lists the following quantitative standards that must be met:

- VAR computations must be done daily using a 99th percentile, one-tailed confidence interval.
- A minimum price shock holding period of 10 trading days must be used.
- Models must incorporate a historical observation period of at least one year.\(^{77}\)

Once banks using the VAR method determine their capital at risk, they must translate it into a capital charge by multiplying it by the higher of (i) the previous day's VAR, or (ii) three times the average of the daily VAR of the preceding 60 business days. This charge is deemed necessary to provide a sufficient cushion for cumulative losses from extended adverse market conditions and is also designed to account for weaknesses in the model process. A bank also may be required to add a "plus" to its multiple factor based on how accurately its model is performing. If the model performs well, the plus will be zero. Therefore, banks have an incentive to develop and employ high-quality models.

Also adopted was a proposal to allow banks to recognize the correlation effects on risk not only within but across risk factor categories, so long as the appropriate bank supervisor approves the bank's system for measuring risk categories.\(^{78}\) For example, banks may net risk from the drop in market value of one set of securities by the rise in market value of certain derivatives contracts. This move allows the diversification of trading activities, which acts to reduce risk.

The Committee released a supervisory framework in January 1996 describing the use of backtesting in determining capital charges for market risk.\(^{79}\) This framework is similar to one proposed by the federal bank supervisors.\(^{80}\)

On May 16, 1995, the Committee and the Technical Committee of IOSCO issued to bank and securities firm supervisors worldwide a joint
framework for supervisory information on the derivatives activities of banks and securities firms. The proposal calls for improved access of supervisors to comprehensive and timely information, both qualitative and quantitative, on the OTC and exchange-traded derivatives activities of these institutions through various channels, such as on-site examinations, regulatory reports, special surveys, reports of external auditors, and regular discussions with firms' managements. It presents a broad catalog of data on derivatives activities in the areas of credit risk, liquidity risk, market risk, and earnings for supervisors to draw on as they expand their reporting systems, develop consistent approaches to evaluating derivatives risks, and discuss with institutions the types of information they should have available as part of overall risk management and control processes.

The proposal also recommends that supervisors implement a common minimum framework designed to provide a baseline of information, primarily on credit risk, market liquidity risk, and overall market activity, for large, internationally active institutions with significant derivatives activities. The Committee intends to review the minimum framework in light of the current initiative of the Eurocurrency Standing Committee for the Group of Ten central banks to collect globally and on a regular basis aggregate statistics on OTC and exchange-traded derivatives activities of larger banks and securities firms.

On November 15, 1995, the Committee and the Technical Committee of IOSCO issued a joint report on the Public Disclosure of the Trading and Derivatives Activities of Banks and Securities Firms. The report reviews disclosures made by select large international banks and securities firms in their 1994 annual reports, compares the disclosures with the same 1993 reports, and makes recommendations for further disclosure. In general, voluntary disclosure has improved. Several innovations recommended in the Fisher Report have been implemented, with the result of a greater dissemination of quantitative information on market and credit risks and associated risk management. Increased disclosure has contributed to a better public understanding of the risks and risk-management practices of leading banks and securities firms.

Benefits of enhanced disclosure included the creation of a foundation of information for the public and market participants. The report stated that institutions not providing information could be susceptible to market rumors in times of stress, resulting in a loss of counterparties, higher capital costs, and funding difficulties.

The report makes several recommendations under which institutions should increase disclosure. First, institutions should better provide qualitative information that gives an overview of business objectives, risk-taking philosophy, and principle internal controls.
Second, institutions should provide better quantitative information on credit risk and market liquidity to give a clear picture of their overall involvement in the OTC and exchange derivatives markets. Market risk disclosure should use a VAR approach, although the report notes that, due to rapidly changing methods of measuring market risk, no current uniform standard is recommended.

Third, the report recommends that institutions continue to follow the Fisher Report approach, which states that banks and securities firms should draw from their own internal measurement systems when disclosing information on material risks. Such a procedure will lower costs while ensuring that disclosure keeps pace with risk-measurement innovations. The report also recommends that the common minimum framework from the May 16, 1995 report issued by the Committee and the Technical Committee of IOSCO be used as a minimum standard for measuring the proper amount of information to disclose.

Other Significant Federal Initiatives


In Financial Derivatives: Actions Needed to Protect the Financial System (GAO Report), the U.S. Government Accounting Office (GAO) made recommendations to Congress, the federal bank supervisory agencies, the Financial Accounting Standards Board, and the SEC to strengthen the regulation and supervision of derivatives activities. The GAO Report identifies the board of directors and senior management of institutions that participate in the derivatives market as primarily responsible for risk management, and cites the internal control and independent audit committee requirements of FDICIA as a model to be applied to major U.S. OTC derivatives dealers. The GAO Report recommends that Congress require federal regulation of the safety and soundness of the major U.S. OTC derivatives dealers and suggests that the SEC be assigned responsibility for currently unregulated dealers. It also emphasizes the need for consistency and comprehensiveness in the regulation of derivatives; calls for the development of comprehensive accounting rules for all financial instruments; and recommends that federal supervisors and regulators develop initiatives with industry representatives and regulators from other countries to harmonize disclosure, capital, legal, examination, and accounting standards for derivatives. Many of the GAO Report's recommendations are being addressed by supervisors and regulators in the form
of guidelines, pressure for increased disclosure and improved accounting measures, and initiatives for international coordination. A follow-up report of the GAO is expected.

**Recommendations of the President’s Working Group on Financial Markets**

The President’s Working Group on Financial Markets was reactivated in August 1993 to review the current state of supervision of derivatives activities. The Working Group consists of the chairs of the Federal Reserve, the SEC, the Treasury Department, and the CFTC.

The Working Group proposed an amendment to the U.S. Bankruptcy Code to clarify that spot foreign exchange agreements are included in the definition of “swap agreement” under the Code. The enacted amendment provides for spot foreign exchange transactions the protections afforded forward and option foreign exchange transactions under the Code. The Working Group will continue to consider such useful clarifications of current law.

The Working Group released an initial report on derivatives instruments on October 20, 1994. The report outlines nearly 80 actions taken by federal supervisors and regulators during the prior two years to reduce risks that derivatives pose to the financial market. The report notes federal supervisory and regulatory initiatives directed at derivatives in areas including risk management, capital adequacy, accounting and disclosure, and the OTC markets. The Working Group concluded that, in light of these and other actions, the federal supervisors and regulators did not need new legislative authority to reduce risks of derivatives activities. Rather, the report notes that loss or failure is a necessary discipline for market efficiency and urges the federal supervisors and regulators to work with private market participants to ensure that a balance is struck between market discipline and governmental action. The Working Group will continue to evaluate the progress that the supervisors, regulators, and market participants have made and will consider whether further legislation is required.