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FINANCIAL DERIVATIVES

Actions Taken or Proposed Since May 1994





United States
General Accounting Office
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General Government Division

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The Honorable Patrick J. Leahy
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The Honorable John D. Dingell
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The Honorable Jack Fields
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Subcommittee on Telecommunications
and Finance
Committee on Commerce
House of Representatives

This report is a follow-up to a report we issued in May 1994 that responded to your requests concerning derivative products. Our 1994 report identified a number of risks, both to individual firms and to the financial system as a whole, associated with those products. We initiated this follow-up review to determine what progress has been made by financial regulators and industry participants to address the areas of concern we identified in 1994 and to determine what still needs to be done. In particular, we examined what actions were taken or proposed to (1) strengthen corporate governance and internal controls for derivatives dealers and major end-users, (2) improve regulation of major U.S. derivatives dealers, (3) provide federal oversight of major derivatives dealers that are unregulated affiliates of securities firms and insurance companies, (4) promulgate comprehensive and consistent accounting and disclosure requirements for derivatives, and (5) harmonize regulatory and accounting standards internationally.

We are sending copies of this report to other appropriate congressional committees; executive branch agencies, including the Secretary of the Treasury, the Chairman of the Securities and Exchange Commission, the Chairperson of the Commodity Futures Trading Commission, the Chairman of the Federal Reserve Board, the Comptroller of the Currency, the Chairman of the Federal Deposit Insurance Corporation, and the Acting Director of the Office of Thrift Supervision; and other interested parties. We will also make copies available to others on request.

Major contributors to this report are listed in appendix X. I may be reached on (202) 512-8678 if you or your staff have any questions.



James L. Bothwell
Director, Financial Institutions
and Markets Issues

Executive Summary

Purpose

In May 1994, GAO issued its report on financial derivatives that identified a number of risks, both to individual firms and to the financial system as a whole, associated with those products.¹ The report made a series of recommendations to federal financial regulators and to Congress to improve the monitoring and management of these risks and to close certain regulatory gaps that GAO identified. The report also recommended that the Financial Accounting Standards Board (FASB) promulgate comprehensive and consistent accounting and disclosure standards for derivatives.

The volume of derivatives activity has continued to grow rapidly since 1994, which indicates that derivatives are increasingly viewed by market participants as valuable and important risk management tools. The Bank for International Settlements (BIS)² estimated that the total outstanding, global notional/contract amount of derivative products as of March 31, 1995, was about \$55.7 trillion.³ In addition, after GAO's report was issued, some major banks, commercial corporations, and local governments experienced major losses attributed to their use of derivatives. Such losses underscored the risks that GAO identified in its report.

GAO initiated this follow-up review to determine what progress has been made by financial regulators and industry participants to address the areas of concern identified by GAO in its May 1994 report and to determine what still needs to be done. In particular, GAO examined what actions were taken or proposed to (1) strengthen corporate governance and internal controls for derivatives dealers and major end-users, (2) improve regulation of major U.S. derivatives dealers, (3) provide federal oversight of major derivatives dealers that are unregulated affiliates of securities firms and insurance companies, (4) promulgate comprehensive and consistent accounting and disclosure requirements for derivatives, and (5) harmonize regulatory and accounting standards internationally.

¹Derivatives are financial products whose value is determined from an underlying reference rate, index, or asset. The underlying include stocks, bonds, commodities, interest rates, foreign currency exchange rates, and indexes that reflect the collective value of various financial products. See *Financial Derivatives: Actions Needed to Protect the Financial System* (GAO/GGD-94-133, May 18, 1994).

²BIS was established in 1930 in Basle, Switzerland, by European central banks. The objectives of BIS are to promote the cooperation of central banks, to provide additional facilities for international operations, and to act as trustee for international financial settlements.

³In 1995, central banks in 26 countries conducted a global survey of derivatives markets. BIS coordinated the survey and aggregated the data to produce global market statistics. The notional/contract amounts are one way derivatives activity is measured. However, while notional/contract amounts are indicators of volume, they are not necessarily meaningful measures of the actual risk involved. The actual amounts at risk for many derivatives vary both by the type of product and the type of risk being measured.

Background

Derivatives serve an important function in the global financial marketplace and, appropriately managed, can provide effective ways to reduce financial risks, lower financing costs, or generate profits. Controlling the risks derivatives pose to market participants and the financial system is primarily the responsibility of boards of directors and senior managers of dealers and end-users, as well as financial regulators.

Carrying out this responsibility effectively is important because derivatives can contribute to catastrophic losses if they are not properly managed and controlled. In 1994 and 1995, banks, commercial corporations, and local governments reported billions of dollars in losses involving derivatives and related financial products. These losses also resulted in enforcement actions brought by regulators against Bankers Trust New York Corporation (and two of its subsidiaries), a major U.S. derivatives dealer; the filing for bankruptcy by California's Orange County, one of the largest and wealthiest U.S. counties; and the failure of Baring Brothers & Co., Ltd., a U.K. merchant bank with a 200-year history.

GAO focused its 1994 report on four basic types of derivatives—forwards, futures, options, and swaps. This report addresses these four types of derivatives and also discusses losses attributed to structured notes and a type of mortgaged-backed security called collateralized mortgage obligations (CMO). These financial products have characteristics and risks similar to those of derivatives. As shown in table 1, some derivatives are standardized contracts traded on organized exchanges. Others, called over-the-counter (OTC) derivatives, are customized contracts that are not traded on exchanges. They include negotiated terms, such as amount, payment timing, and interest or currency rates.

Table 1: Definitions of Financial Products

Type of financial product	Definition
Derivatives	
Forwards (OTC)	Forwards and futures obligate the holder to buy or sell a specific amount or value of an underlying asset, reference rate, or index at a specified price on a specified future date.
Futures (must be exchange-traded in the United States unless specifically exempted)	
Options (OTC or exchange-traded)	Options grant the purchaser the right but not the obligation to buy or sell a specific amount of the underlying at a particular price within a specified period.
Swaps (generally OTC)	Swaps are agreements between counterparties to make periodic payments to each other for a specified period.
Other financial products	
Structured notes (OTC)	Structured notes are a type of debt security whose cash-flow characteristics depend upon one or more indexes. They may have added features such as embedded options.
Collateralized mortgage obligations (OTC)	CMOs entitle their purchasers to receive a share of the cash flows from a pool of home mortgages.

Source: GAO.

The markets for these products vary in size. The \$55.7 trillion in total notional/contract amounts outstanding reported by BIS represents the results of the first comprehensive central bank survey to measure the size of the global derivatives market. Of this total amount, the four basic types of OTC derivatives totaled \$47.5 trillion and exchange-traded derivatives totaled \$8.2 trillion, both adjusted for double counting. BIS also reported gross market values for OTC derivatives outstanding, which provide a better measure of the economic significance of these derivatives contracts than do the notional/contract amounts.⁴ These values were about \$2.2 trillion dollars, or 4.6 percent of the \$47.5 trillion in notional/contract amounts outstanding of OTC derivatives. To our knowledge, directly comparable data for structured notes and CMOs do not exist. The best available data show the amounts of these products issued by U.S. government-sponsored enterprises each year. These data indicate that the

⁴Gross market values were defined as the costs that would have been incurred if the outstanding contracts had been replaced at market prices prevailing as of March 31, 1995. They equal gross positive plus gross negative market values.

total amounts of these products issued in calendar year 1995 were about \$10 billion for structured notes and about \$23 billion for CMOs.

OTC derivatives dealing in the United States continued to be concentrated in seven banks, five securities firms, and three insurance companies or their affiliates, some of which were federally regulated and some of which were not. Derivatives dealers and markets have also remained extensively linked internationally, as illustrated by the Barings failure, which involved regulators and market participants around the world.

GAO focused this review on the derivatives oversight activities of federal financial regulators in the United States and selected foreign financial regulators. In addition, GAO reviewed regulatory and auditor reports related to selected losses associated with derivatives. GAO also reviewed the accounting practices of a judgmentally selected sample of banks and thrifts, determined whether they had established relevant internal control systems to manage the risks of derivatives, and analyzed what the potential effects of proposed accounting standards would be on these and other institutions. Finally, GAO assessed derivatives disclosure practices and initiatives to improve those practices. GAO recognizes that many of the derivatives-related issues addressed in this report, such as risk management and corporate governance, have broader applications to firms' overall activities.

Results in Brief

Market participants, regulators, and others have taken or proposed a number of actions to improve the management, oversight, and disclosure of derivatives risks consistent with GAO's prior recommendations. For example, many U.S. derivatives dealers and end-users indicated in industry surveys that they have strengthened their corporate governance systems and improved risk management and internal controls.⁵ Market participants and others have also developed and refined recommended practices intended to improve internal controls over derivatives activities.

Federal bank regulators are (1) requiring capital that more accurately reflects derivatives risks, (2) collecting more extensive information on bank derivatives activities, and (3) examining banks using guidelines that

⁵Governance systems involve the internal functioning of organizations through which economic activity is conducted. These systems have to do with transactions and relationships within the organization itself, including who controls what, who makes decisions, and who has what responsibilities for what claims against the revenues and assets of a company or government. While this report refers to these systems as corporate governance, the systems discussed also apply generally to governmental entities.

are better focused on derivatives risks. The Securities and Exchange Commission (SEC), in cooperation with the Commodity Futures Trading Commission (CFTC), is also collecting more extensive information and working with securities firms that have major OTC derivatives affiliates in a voluntary program to provide some federal oversight to these large, unregulated nonbank dealers.

FASB has issued enhanced disclosure rules, as GAO recommended, and has proposed an accounting standard for derivatives that should help stem misleading accounting practices and, for the first time, would require that all derivatives be recorded in financial statements. SEC has also proposed more qualitative and quantitative disclosures about derivatives use by public companies.

Internationally, there has been progress toward greater regulatory harmonization and coordination, as evidenced by major international regulatory initiatives and information-sharing agreements. These include the joint guidance on sound risk management practices issued by the Basle Committee on Banking Supervision⁶ and the International Organization of Securities Commissions (IOSCO), and an international agreement among regulators of futures markets intended to improve their coordination and communication in the wake of the Barings collapse.

Although market participants, regulators, and others have acted to improve the management, oversight, and disclosure of derivatives risks, many of the concerns that GAO identified in its 1994 report still remain. For example, in the cases GAO reviewed, each of the derivatives dealers and end-users that suffered major losses had serious weaknesses in their risk management, internal control, and corporate governance systems. Compliance with guidelines and recommended risk management practices is essentially voluntary for derivatives dealers and end-users other than regulated entities, and some surveys have shown that firms using derivatives are not involving their boards of directors in risk management. SEC has acknowledged that there may be benefits associated with management or auditor reports on internal control systems of SEC registrants that are major dealers and end-users of complex derivative products as GAO recommended. In fact, SEC receives these types of reports through a voluntary program with securities firms that have affiliates that

⁶The Basle Committee on Banking Supervision is a committee of banking supervisory authorities that was established by the Central Bank Governors of the Group of Ten countries in 1975. It meets under the auspices of BIS in Basle, Switzerland. The Group of Ten consists of 11 major industrialized member countries—Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United States, and the United Kingdom.

are major OTC derivatives dealers. However, SEC has stated that it is focusing on accounting for and providing greater disclosure of market risk for derivative products, which it views as a more appropriate priority at this time. In addition, the OTC derivatives dealing activities of securities firm and insurance company affiliates, which are still growing, continue to be largely unregulated. Finally, FASB has proposed, but still has not issued, comprehensive accounting standards for derivatives that would provide financial statement users with appropriate, consistent financial information on which to base their investment, management, or oversight decisions. FASB's proposal faces much opposition. The public comment period on the proposal ended October 11, 1996.

The actions regulators, market participants, and others have taken or proposed to improve the management, disclosure, and regulatory oversight of derivatives risk are consistent with GAO's 1994 report recommendations. However, many of the concerns expressed in GAO's 1994 report are still valid; it is too soon to determine the effectiveness of many of the actions taken or proposed to date; and some of GAO's recommendations have yet to be fully implemented.

Principal Findings

Weaknesses in Corporate Governance and Internal Controls Contributed to Major Losses

Given the risks associated with derivative products, weaknesses in corporate governance systems and inattention to the importance of effective internal controls can leave major derivatives end-users and dealers particularly vulnerable to significant losses. During 1994 and 1995, a number of entities sustained major losses associated with derivatives and related financial products that were attributed largely to flawed corporate governance systems that did not establish effective risk-management and internal controls. In some cases the losses were so severe that the entities filed for bankruptcy or failed. For example, in December 1994, Orange County, California, filed for bankruptcy after losing an estimated \$1.7 billion on the county Treasurer's large and highly leveraged investments. After the bankruptcy filing, reports by auditors and others indicated that the county's Board of Supervisors failed to act on its responsibilities. The losses reportedly occurred in an atmosphere of inadequate risk management and poor supervision of the county Treasurer's investment strategies. Other reports raised concerns about the county's reliance on investment income to fund a significant portion of the

budget and warned that it was not fiscally responsible to continue budgeting in this manner.

Similarly, in February 1995, Barings failed as a result of over \$1 billion in futures and options trading losses incurred by one of its employees. According to the British Board of Banking Supervision Inquiry, Barings' management failed at various levels to institute a proper system of internal controls; to enforce accountability for all profits, risks, and operations; and to adequately follow up on a number of warning signals over a prolonged period. Of the many internal control weaknesses cited, one of the most basic inadequacies was the employee's responsibility for both initiating and recording trades on the bank's books. This control weakness allowed him to hide losses and continue trading until those losses exceeded the bank's capital. This control weakness had been reported by the bank's internal auditors, but Barings' management took no action and did not follow up on the internal audit reports' findings.

Industry surveys, which GAO did not verify, show that some market participants have reported making improvements in their corporate governance systems and internal controls over derivatives. According to a follow-up survey of derivatives dealers and end-users conducted by the Group of Thirty in 1994, more dealers and end-users are including their directors and senior managers in risk-management decisions.⁷ Other market participants, however, have indicated in different surveys that firms using derivatives are not involving their boards of directors in derivatives risk management. Adherence to any set of recommended or benchmark derivatives risk-management practices is essentially voluntary, except for regulated entities such as banks, and this is reflected in the mixed results of the surveys.

Formal assessments of internal controls similar to those required of large U.S. banks and thrifts under the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) can provide a model for improving corporate governance and internal controls.⁸ Five securities firms that have major OTC derivatives dealer affiliates voluntarily provide SEC these types of assessments. However, SEC's general approach has been to focus on providing enhanced accounting for and disclosure of market risk

⁷The Group of Thirty is an international financial policy organization whose members include representatives of central banks, international banks and securities firms, and academia.

⁸FDICIA requires (1) management of large banks and thrifts to perform annual, comprehensive assessments of financial institutions' systems of internal controls over financial reporting; (2) the institutions' independent external auditor to review management's assessment; and (3) management to report the results of these assessments to federal regulators.

inherent in derivative products. SEC has proposed requiring additional public disclosures regarding dealer and end-user risk exposures, objectives, general strategies, and instruments specifically used to manage risks. These proposed disclosures, however, may not provide sufficient assurance that appropriate risk management policies are in fact being followed. Without denying the importance of internal controls over activities involving financial instruments and assurances that these controls are working, SEC has stated that its focus on additional market risk information may be a more appropriate priority at this time. GAO continues to believe that periodic assessments of internal controls, accompanied by public reporting on the results of those assessments, would make boards of directors and senior managers more accountable to shareholders, regulators, and the general public about the effectiveness of the system of controls and, thereby, help to prevent large losses.

Federal Bank Regulators Have Acted to Improve Derivatives Oversight

Federal bank regulators have taken several steps to improve their oversight of U.S. banks' derivatives activities that are consistent with GAO's prior recommendations. As required by FDICIA, bank regulators strengthened their risk-based capital standards by incorporating concentration of credit risk, risk of nontraditional activities, and interest rate risk. In September 1996, final rules were issued that would also incorporate market risk into bank capital standards. Banks deemed to have inadequate controls for these risks may be required to hold capital above the minimum requirements. In addition, federal bank regulators have expanded bank reporting requirements designed to better enable them to monitor and oversee banks' derivatives activities. For example, banks are now required to report separately the notional/contract amounts for their OTC and exchange-traded derivatives contracts, and certain banks must report information on revenues from their trading activities. Federal bank regulators, however, disagreed with GAO's recommendation that they collect information on the concentration of counterparty credit exposures for those banks that are major OTC derivatives dealers. They said that this information is available through their ongoing monitoring and surveillance activities and changes too frequently to be useful if collected periodically. GAO continues to believe that such information would enable regulators to identify credit concentrations across the industry and manage potential threats to the financial system that could arise if counterparties were to fail or experience financial difficulties.

In addition to improving bank capital standards and reporting requirements, federal bank regulators have also implemented new

procedures to better focus their examination activities on specific risks and on the way banks manage these risks. For example, the Office of the Comptroller of the Currency has begun implementing a risk-based approach to supervising certain large national banks. This new supervisory approach revolves around nine categories of risk and is designed to determine how well these banks measure, monitor, and manage those risks. In addition, GAO reviewed a total of 12 bank examination reports for the period 1992 to 1994 for the 7 largest U.S. bank derivatives dealers and found improvements in the way federal examiners reviewed these banks' derivatives risks.

SEC and CFTC Have Worked to Address Regulatory Gaps

Since 1994, CFTC has implemented risk-assessment rules that are generally equivalent to the risk-assessment rules SEC implemented in 1992. These rules give CFTC and SEC access to information about the activities of OTC derivatives dealers that are unregulated affiliates of registered futures commission merchants and registered broker-dealers, respectively. Further, SEC initiated the Derivatives Policy Group (DPG), comprising the six U.S. broker-dealers with the highest volume OTC derivatives affiliates and worked with this group, in cooperation with CFTC, to develop a voluntary framework for oversight of broker-dealers' unregulated OTC derivatives activities.⁹

The DPG framework explicitly addressed some of GAO's concerns about the lack of federal oversight of these large, nonbank OTC derivatives dealers. Specifically, the DPG members volunteered to abide by internal control guidance they, SEC, and CFTC agreed would enhance their risk management practices. Five of the six members also agreed to have their external auditors provide reports to SEC and CFTC on their compliance with the internal control guidance and to provide additional information to SEC and CFTC about the OTC derivatives activities of their unregulated affiliates. Accordingly, since the first quarter of 1995, SEC and CFTC have received quarterly information from each of the five DPG members on their OTC derivatives affiliates' trading revenues, individual counterparty exposures, credit concentrations, and estimated amounts of capital at risk. Although the DPG framework was not intended to serve as a means of imposing capital standards, the information provided to SEC and CFTC gives regulators a basis for assessing the adequacy of capital.

⁹The six DPG members are CS First Boston, Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley, and Salomon Brothers. While CS First Boston is a DPG member, it has an OTC derivatives affiliate that reports to, and is regulated by, the Bank of England. Therefore, it does not report information to SEC or CFTC.

Although the DPG framework is a positive step toward having some federal oversight of the large, OTC derivatives dealers that are affiliates of securities firms, compliance with it is voluntary and has been limited to the six DPG member firms. Furthermore, neither SEC nor CFTC has the explicit authority to enforce operational changes, conduct examinations, or impose capital requirements on the unregistered OTC derivatives affiliates of broker-dealers and futures commission merchants.

A regulatory gap remains for the three insurance companies that are OTC derivatives dealers. While the National Association of Insurance Commissioners has recommended improvements in derivatives disclosures and examinations for insurance companies, these recommendations do not apply to the activities of the OTC derivatives dealer affiliates of insurance companies.

Accounting Issues Continue To Be of Concern

Accounting standards for derivatives continue to be insufficient, thus inhibiting the quality of information reported in derivatives end-users' financial statements. Required financial statement disclosures about derivatives, while improved, are not adequate to make up for the lack of standards governing how derivatives transactions are to be recorded in end-users' financial statements. GAO's review of 12 banks and thrifts that were end-users of derivatives indicated that over half of these institutions were using deferral hedge accounting for risk-adjusting activities based on anticipated market movements. The deferral hedge accounting practices used by these institutions allowed them to delay recognizing gains or losses on these derivatives transactions. GAO believes that deferral hedge accounting should be limited to activities intended to decrease an entity's exposure to risk of loss and should not be applied to derivatives activity that attempts to profit from or speculate on market movements.

GAO also found that a similar problem existed with accounting for investment securities, particularly structured notes and CMOs. The use of historical cost accounting for these securities has allowed some investment managers to hide losses in the market value of the securities and, in some cases, to mask the resulting weakened financial condition of an entity.

GAO believes that the solution to the accounting problems of both derivatives and investment securities lies in the adoption of comprehensive market value accounting. Comprehensive market value accounting would require that all changes in market values of derivatives,

investment securities, and other financial instruments be recorded in income when they occur, thus advising financial statement users of such changes. GAO recognizes, however, that implementing a comprehensive market value accounting model presents difficult issues, such as determining appropriate values for instruments that are not regularly traded. These issues have generated considerable opposition to this method of accounting and would have to be considered and addressed before comprehensive market value accounting could be adopted.

In March 1996, the Governmental Accounting Standards Board (GASB) issued a proposed standard that would require all investment securities to be carried at fair value.¹⁰ This proposed standard, if adopted, would resolve many of GAO's concerns about state and local governmental entities' accounting for investment securities. However, the proposed standard does not address accounting for off-balance sheet derivatives, which are gaining greater use by state and local governmental entities. In addition, it does not require disclosure of market risk in the entities' financial statements.

In June 1996, FASB issued a proposed standard that would require all derivatives, including structured notes and CMOs, to be recorded at fair value on the balance sheet. The related changes in fair value would be recognized in earnings or a component of equity, depending on the designated reason for holding derivatives. In cases where derivatives were used to hedge existing assets or liabilities, the offsetting gains or losses in fair value of the assets or liabilities would be accelerated and recognized in earnings in the same period. This proposed standard helps address GAO's concerns about the use of deferral hedge accounting for derivatives activities that do not reduce an entity's exposure to risk of loss and about the use of historical cost accounting for investment securities with derivatives-like characteristics. However, because the proposed standard does not provide for market (or fair) value accounting for all financial instruments, it would not resolve issues related to continued use of historical cost accounting for many investment securities and other financial instruments. In addition, because it would require a matching of derivatives transactions with underlying assets or liabilities, the proposed standard has raised concerns among those who use derivatives to hedge on a portfolio-wide, or macro, basis that such hedging activity will not be easily accommodated.

¹⁰GASB establishes accounting standards for state and local governments.

While FASB's proposed standard includes enhanced disclosure requirements, it, like GASB's proposed standard, does not include required disclosures that quantify market risk from derivatives and other investment activities. SEC issued proposed disclosure requirements in December 1995 that would include market risk disclosures. However, these proposed requirements, if adopted, would be required only for public companies.

While FASB's and GASB's proposed standards are a step in the right direction, comprehensive market value accounting for all financial instruments would provide a more viable method to address the issues regarding accounting for financial instruments—including those raised by macrohedgers. Because stemming inappropriate accounting practices is needed now, FASB's current proposed standard would provide an interim solution until the issues surrounding adoption of a comprehensive market value accounting approach can be addressed. In addition, SEC's proposed disclosure requirements would help bolster this interim solution by requiring disclosure of market risk and other useful information. The SEC, GASB, and FASB proposals are controversial, and therefore the final outcome of these proposals is uncertain.

Progress Is Being Made Internationally

Like their U.S. regulatory counterparts, financial regulators in the six foreign countries GAO reviewed used a number of different approaches intended to enhance their oversight of derivatives activities. As GAO recommended in 1994, U.S. regulators have increased their efforts to work cooperatively with foreign regulators to better harmonize international regulatory standards. For example, in July 1994, the Basle Committee on Banking Supervision and IOSCO for the first time concurrently issued guidance to banking and securities regulators worldwide on sound risk management of derivatives activities. U.S. and foreign bank regulators, working through the Basle Committee on Banking Supervision, have also expanded their risk-based capital standards for derivatives. SEC and CFTC have participated in IOSCO working groups discussing capital standards internationally and how to improve regulatory coordination. They have also entered into agreements with foreign regulators to share information and conduct joint examinations of international firms.

Further, the Barings failure motivated CFTC and the British Securities and Investments Board to host a meeting of 16 regulatory authorities responsible for supervising the world's major futures and options

markets.¹¹ The May 1995 meeting resulted in the Windsor Declaration, which proposed that regulatory authorities take steps to improve their coordination and communication. Information sharing agreements were signed nearly a year later in March 1996, with exchanges and clearing organizations signing one agreement and regulators signing a separate, companion agreement. However, some countries could not participate because of legal restrictions, which they are trying to overcome. Further, confidentiality concerns may limit the effectiveness of the agreements for exchanges in some countries. The success of regulators' attempts to overcome these concerns through their companion agreement depends on the willingness of exchanges to go to their regulator to get the needed information to the appropriate parties.

Recommendations

A number of actions have been taken or proposed since 1994 that are consistent with the recommendations that GAO made in its 1994 report. However, GAO notes that its key recommendations to improve corporate governance and internal controls for major derivatives dealers and end-users, close regulatory gaps, establish comprehensive and consistent accounting standards, and harmonize regulatory and accounting standards internationally have yet to be fully implemented. While GAO is making no new recommendations in this report, it believes that regulators, accounting standards-setters, and others need to continue to take actions necessary to completely respond to the intent of its prior recommendations.

Agency Comments

GAO requested comments on a draft of this report from the Chairman, Securities and Exchange Commission; Chairperson, Commodity Futures Trading Commission; Chairman, Board of Governors of the Federal Reserve System; the Comptroller of the Currency; the Chairman, Financial Accounting Standards Board; and the Chairman, Governmental Accounting Standards Board. GAO met with representatives of each of the federal regulators who gave us technical comments on the draft report. Where appropriate, GAO incorporated these comments in the report. GAO discussed the draft report with a FASB staff member who provided technical comments. We also received technical comments from GASB staff. FASB and GASB staff comments were incorporated where appropriate in the report.

¹¹Regulatory authorities from the following countries participated in the meeting: Australia, Brazil, Canada, France, Germany, Hong Kong, Italy, Japan, the Netherlands, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

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Abbreviations

AFS	available-for-sale
AICPA	American Institute of Certified Public Accountants
BIS	Bank for International Settlements
CAD	Capital Adequacy Directive
CFTC	Commodity Futures Trading Commission
CMO	collateralized mortgage obligation
COFI	Cost of Funds Index
COSO	Committee of Sponsoring Organizations of the Treadway Commission
DPG	Derivatives Policy Group
EITF	Emerging Issues Task Force
EU	European Union
FASB	Financial Accounting Standards Board
FCM	futures commission merchant
FDIC	Federal Deposit Insurance Corporation
FDICIA	Federal Deposit Insurance Corporation Improvement Act of 1991
FFIEC	Federal Financial Institutions Examination Council
FIA	Futures Industry Association
GASB	Governmental Accounting Standards Board
GSE	government-sponsored enterprise
IASC	International Accounting Standards Committee
IOSCO	International Organization of Securities Commissions
ISDA	International Swaps and Derivatives Association
LIBOR	London Interbank Offered Rate
MGFI	MG Futures, Inc.
MGR&M	MG Refining and Marketing
NAIC	National Association of Insurance Commissioners
OCC	Office of the Comptroller of the Currency
OTC	over-the-counter
OTS	Office of Thrift Supervision
SEC	Securities and Exchange Commission
SFA	Securities and Futures Authority Ltd.
SFAS	Statements of Financial Accounting Standards

Introduction

Over the past 2 years much attention has been focused on derivative products, most of which has centered on the well-publicized multibillion-dollar losses suffered during this period by major commercial corporations, banks, and local governments. Despite the losses, derivatives use has continued to grow rapidly, reaching about \$55.7 trillion outstanding worldwide by 1995. Although they can be complex, derivatives provide effective ways to manage financial risks, generate profits, and lower financing costs, and the vast majority of the firms using derivatives did so without reporting major unanticipated losses.

The losses attributed to derivatives in 1994 and 1995 focused regulators' and market participants' attention on the importance of sound derivatives risk-management and internal control systems. Some of the losses showed that understanding the risks in how profits are generated can be as important as determining why losses occurred. As pointed out in our May 1994 report, the risks that derivatives pose are not new or unique, but certain derivatives can be more complex and volatile than other financial instruments. The associated risks can be difficult to identify, measure, monitor, and manage. For example, they may contain potential leverage, or leverage multipliers, that can greatly increase an investor's gains or losses.

Background

Derivatives are globally used financial products that essentially unbundle and transfer risks from entities less able or willing to manage them to those more willing or able to do so. The general types of risk associated with derivatives—credit, market, legal, and operations—exist for many financial activities. The values of derivatives are based on, or derived from, the value of an underlying asset, reference rate, or index—called the underlying. Common types of underlying assets are stocks, bonds, and physical commodities, such as wheat, oil, and lumber. An example of an underlying reference rate is the interest rate on the 3-month U.S. Treasury bill. An example of an underlying index is the Standard & Poor's 500 Index, which measures the performance of 500 common stocks.

Derivatives include customized and standardized contracts. Some derivatives are customized contracts between parties (also called counterparties) that include one or more negotiated terms in addition to price. Negotiated terms can include the quality and quantity of the underlying, time and place of delivery, and method of payment. Other derivatives are standardized contracts whose terms are fixed—except for price, which the market determines. Derivatives can be privately

negotiated by the parties; these are called over-the-counter (OTC) derivatives. Derivatives also can be traded through central locations, called organized exchanges, where buyers and sellers or their representatives meet to determine derivatives prices; these are called exchange-traded derivatives.

Derivative products include forwards, futures, options, and swaps. Forwards, futures, and options are typically used to hedge or to speculate. Swaps are typically used to hedge or to obtain more desirable financing. All derivative products can be combined to create more complex derivatives, called hybrid derivatives. Forwards and futures are contracts that obligate the holder to buy or sell a specific underlying at a specified price, quantity, and date in the future. Forwards are commercial, private contracts for the delivery of a commodity where delivery is deferred for convenience. Futures are usually standardized contracts traded on organized exchanges. Option contracts, which can be either customized and privately negotiated or standardized, give the purchaser the right to buy (call option) or sell (put option) a specified quantity of a commodity or financial asset at a particular price (the exercise price) on or before a certain future date.¹ Swaps are generally OTC agreements between counterparties to make periodic payments to each other for a stated time. Some swaps are now exchange traded.

Derivatives market participants include end-users and dealers. End-users include banks, securities firms, insurance companies, governments, mutual and pension funds, and commercial entities worldwide. Certain institutions that use derivatives also act as dealers by quoting prices to, buying derivatives from, and selling derivatives to end-users and other dealers. They also develop customized derivative products for their clients.

Market participants can use derivatives to protect against adverse changes in the values of assets or liabilities, called hedging. Hedgers try to protect themselves from market risk, which is the exposure to financial loss caused by adverse changes in the values of assets or liabilities. They protect themselves by entering into derivatives transactions whose values are expected to change in the opposite direction as the values of their assets or liabilities. For example, a hedger can protect asset values through derivatives transactions that increase in value as the asset values

¹This is the definition of an American-style option. A European-style option can be exercised only on its expiration date.

decline. The increases in value of the derivatives contracts (profits) will offset, or hedge, the decrease in values of the assets (losses).

In contrast, market participants can also use derivatives to take on risk in an attempt to profit from changes in the values of derivatives or their underlyings, called speculating. Rather than purchasing the underlying, speculators can use derivatives to attempt to profit by anticipating movements in market rates and prices. As speculators enter into transactions with hedgers and other speculators, they provide liquidity to the derivatives markets, thereby helping to ensure that high volumes of trading can occur without significantly affecting prices.

Derivatives can be more cost-effective for market participants than transactions in the underlying cash markets because of the reduced transaction costs and the leverage that derivatives provide. For example, instead of buying or selling \$100,000 worth of U.S. Treasury bonds, a market participant can realize the benefits of buying or selling the same amount of bonds by using a derivatives contract and posting a deposit, called a margin, of only about \$1,500, or 1.5 percent of the face amount of the bonds. Likewise, a market participant can achieve a result similar to buying or selling all of the stocks in the Standard & Poor's 500 Index by buying or selling a derivatives contract on this index for as little as 5 to 10 percent of the cost of the underlying stocks.

Structured Notes and Mortgage-Backed Securities

Some of the losses attributed to derivatives have involved either structured notes or a specific type of mortgage-backed security called a collateralized mortgage obligation (CMO). These financial products have characteristics and risks similar to derivatives. We include them in our discussion of losses but focus on the four traditional types of derivatives—forwards, futures, options, and swaps—when we discuss derivatives and derivatives oversight throughout the report, unless otherwise indicated.

Structured notes are debt securities. Their cash flows, which resemble those of derivatives, depend on one or more indexes, and they may have added features such as embedded options. Structured notes are treated similarly to derivatives by banking regulators. Indexes that typically are used to determine the cash flows associated with structured notes include

the Federal Funds Rate, the London Interbank Offered Rate (LIBOR),² and the Cost of Funds Index.³ Some common types of structured notes are

- range bonds that pay investors on the basis of whether a reference rate is between levels of a specific index established at issue,
- index amortizing notes that pay investors on the basis of a predetermined amortization schedule linked to the level of a specific index,
- inverse floaters that have coupon rates that increase as interest rates decline and decrease as rates rise, and
- dual index notes that have coupon rates determined by the difference between two market indexes.

In addition, some analysts consider step-up bonds to be structured notes. The investor in these bonds is paid at an above-market yield for Treasury securities for a short noncall period, and then, if not called, the coupon rate steps up to a higher rate.⁴

Investors in structured notes that are issued by U.S. government-sponsored enterprises (GSE) perceive little, if any, credit risk because of investors' perception of implied U.S. government backing.⁵ The investor, however, is exposed to market risks.

Mortgage-backed securities are financial products whose payments are derived from a pool of home mortgages. CMOs are one of the most common types of multiclass mortgage-backed securities.⁶ By repackaging the mortgage payments, issuers of multiclass mortgage-backed securities can create securities that are customized regarding yield, risk, and maturities. For example, payments to investors can be separated into principal-only and interest-only securities that can be sold separately. The values of these securities are sensitive to mortgage prepayment rates driven largely by changing interest rates. That is, if interest rates decline, mortgagors are

²LIBOR is the rate that banks charge each other for loans of Eurodollars in the London money market.

³The Cost of Funds Index refers to an index for the 11th District of the Federal Home Loan Bank of San Francisco. It reflects the actual interest expenses incurred during a given month by all savings institutions headquartered in Arizona, California, and Nevada.

⁴The issuer of these bonds specifies when the bond can be repaid, or called.

⁵GSEs are privately owned financial corporations that were chartered by Congress to achieve the public purpose of facilitating the flow of credit to certain sectors of the economy, such as housing, agriculture, and higher education. Major GSEs include the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, the Federal Home Loan Bank System, the Farm Credit System, and the Student Loan Marketing Association. The GSE issuing the structured note typically enters into a swap to eliminate its exposure to the customized terms of the note.

⁶Real Estate Mortgage Investment Conduits and CMOs are interchangeable terms.

more likely to prepay their mortgages. These prepayments accelerate the payment of principal-only securities and reduce payments of interest-only securities. Some classes of CMOs and interest-only and principal-only securities are more risky than other classes, because their payments can be especially sensitive to prepayment rates.

Multiclass mortgage-backed securities issuance is dominated by two GSEs: the Federal National Mortgage Association, also called Fannie Mae, and the Federal Home Loan Mortgage Corporation, also called Freddie Mac. These securities are also issued by non-GSE conduits that securitize mortgages not qualified for purchase by Fannie Mae and Freddie Mac.⁷

Volume of Derivatives Activity

In 1996, the Bank for International Settlements (BIS) reported the results of a comprehensive derivatives survey by the central banks of 26 countries.⁸ That survey estimated that total notional/contract amounts of derivatives contracts outstanding worldwide were about \$55.7 trillion as of the end of March 1995.⁹ About \$47.5 trillion of this amount were OTC contracts and \$8.2 trillion were exchange-traded contracts.¹⁰ Although notional/contract amounts are indicators of volume, gross market values, or replacement costs, provide a more accurate measure of the economic significance of the derivatives contracts outstanding.¹¹ BIS reported the gross market values of the OTC derivatives as being \$2.2 trillion, or about 4.6 percent of the notional/contract amounts. To our knowledge, directly comparable data for structured notes and CMOs do not exist. The best available data show the amounts of these products issued by U.S. GSEs each year. These data indicate that the total amounts of these products issued in calendar

⁷For a discussion of Fannie Mae and Freddie Mac, see Housing Enterprises: Potential Impacts of Saving Government Sponsorship GAO/GGD-196-120, May 13, 1996).

⁸BIS was established in 1930 in Basle, Switzerland, by European central banks. The objectives of BIS are to promote the cooperation of central banks, to provide additional facilities for international operations, and to act as trustee for international financial settlements. BIS also provides secretariats for various committees. BIS coordinated the survey and aggregated the data to produce global market statistics.

⁹The notional, or principal, amount of derivatives contracts is one way that derivatives activity is measured. However, it is not a necessarily meaningful measure of the actual risk involved. The actual amount at risk for many derivatives varies by both the type of product and the type of risk being measured.

¹⁰The amount for OTC contracts was adjusted for local and cross-border double counting. The amount for exchange-traded-contracts was halved to adjust approximately for double counting.

¹¹BIS defines gross market value as the cost that would have been incurred if the outstanding contracts had been replaced at market prices prevailing as of March 31, 1995. It equals gross positive plus gross negative market values.

year 1995 were about \$10 billion for structured notes and about \$23 billion for CMOS.

Table 1.1 shows derivatives volumes from the annual reports of the 15 major U.S. OTC derivatives dealers we identified.¹² These volumes increased every year. Among the dealers we identified, bank dealers dominate total derivatives volume, accounting for about 69 percent each year since 1990; securities firms accounted for about 27 percent and insurance companies the remaining 4 percent. The derivatives volumes reported by insurance company affiliates grew more than the volumes reported by either banks or securities firms in 4 of the 5 years we analyzed, from year-end 1990 through year-end 1995. Banks reported the largest growth in 1994. Figure 1.1 shows the percentage of change in derivatives volumes for the 15 major U.S. OTC derivatives dealers from 1990 to 1995.

Table 1.1. Notional/Contract Amounts of Derivatives Reported by the 15 Major U.S. OTC Derivatives Dealers Year-End 1990 Through Year-End 1995

Dollars in billions						
Dealers	1990	1991	1992	1993	1994	1995
Banks (7)	\$5,350	\$5,811	\$ 7,574	\$10,353	\$13,724	\$15,809
Securities firms (5)	1,730	2,188	2,967	4,474	5,880	6,966
Insurance companies (3)	193	257	403	634	798	985
Total (15)	\$7,273	\$8,256	\$10,944	\$15,461	\$20,402	\$23,760

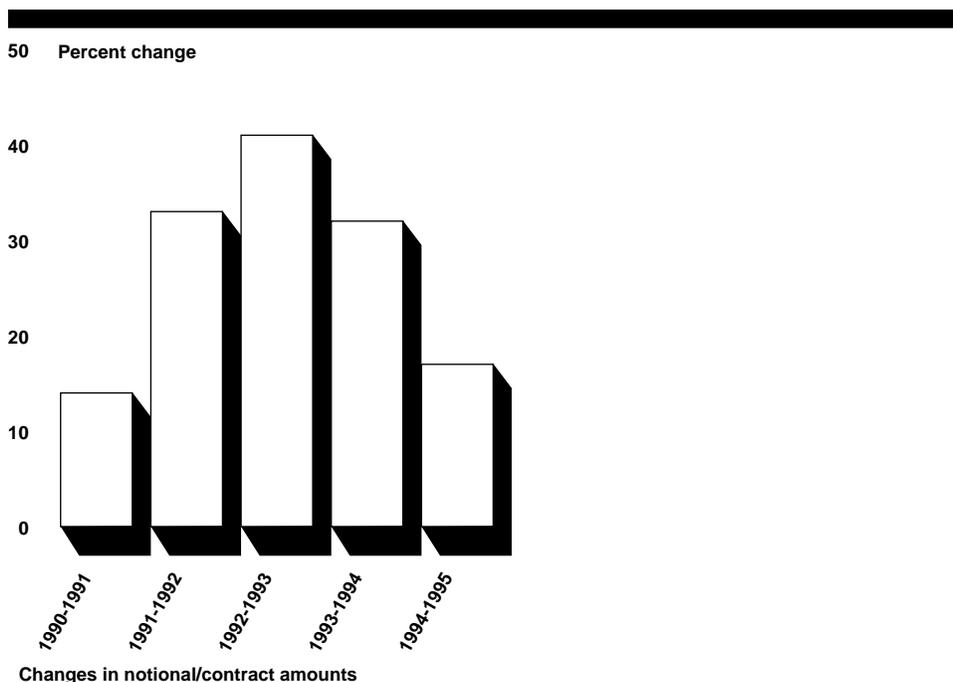
Note 1: These amounts have not been adjusted for double counting.

Note 2: The 15 major U.S. OTC derivatives dealers are The Chase Manhattan Corporation; Citicorp; J.P. Morgan & Co., Inc.; Bankers Trust New York Corporation; BankAmerica Corporation; NationsBank Corporation; First Chicago Corporation; The Goldman Sachs Group, L.P.; Salomon, Inc.; Merrill Lynch & Co., Inc.; Morgan Stanley Group, Inc.; Lehman Brothers; American International Group, Inc.; The Prudential Insurance Company of America; and General Re Corporation.

Source: Annual reports of the 15 dealers.

¹²They are the same dealers we discussed in our 1994 report, except that Chemical Banking Corporation and The Chase Manhattan Corporation merged in 1995, and NationsBank Corporation joined the ranks of the top seven bank dealers.

Figure 1.1: Percent Changes in Derivatives Volume Reported by 15 Major U.S. OTC Derivatives Dealers, Year-End 1990 Through Year-End 1995



Source: Annual reports of the 15 dealers.

Regulatory Framework

Derivatives dealers and end-user financial institutions may be regulated by federal bank regulators, the Securities and Exchange Commission (SEC), and the Commodity Futures Trading Commission (CFTC), depending on how the institutions are organized. State insurance departments are responsible for monitoring the derivatives activities of insurance companies that are both domiciled and licensed to operate in their respective states.

Four federal regulators oversee banks and thrifts, some of which are also subject to state regulatory oversight. The Office of the Comptroller of the Currency (OCC) oversees banks with national charters. The Federal Reserve System (Federal Reserve) oversees all bank holding companies and those banks with state charters that are members of the Federal Reserve. State-chartered banks that are not Federal Reserve members are subject to the oversight of the Federal Deposit Insurance Corporation (FDIC) and state banking authorities. The Office of Thrift Supervision (OTS) oversees federally insured thrifts and thrift holding companies, whether they are state or federally chartered. The Federal Reserve, the lender of

last resort for banks and other financial institutions, has the additional responsibility of ensuring the overall stability of the U.S. financial system. FDIC also has some backup responsibilities for all federally insured depository institutions, even those primarily overseen by the Federal Reserve, OCC, and OTS.

As part of this oversight responsibility, bank regulators assess bank and thrift compliance with the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). FDICIA requires management of large banks and thrifts to annually assess and publicly report on the effectiveness of each institution's internal control system over financial reporting. It also requires an independent external auditor to attest to management's assertions in a separate report. In addition, FDICIA requires large institutions to have an audit committee made up of outside directors who are independent of institution management and to establish a reporting link between the audit committee and external auditors. For the largest institutions, FDICIA requires that audit committees include members with banking or related financial management experience.

SEC regulates activities involving securities and the firms that trade these products, including broker-dealers, which must register with SEC and comply with requirements for regulatory reporting, minimum capital, and examinations. Broker-dealers must also comply with the requirements of the various exchanges and industry associations of which they are members, such as the New York Stock Exchange and National Association of Securities Dealers, which are granted self-regulatory authority under the Securities Exchange Act of 1934. CFTC regulates activities involving futures and the firms that trade these products, including futures commission merchants (FCM)—firms that buy and sell contracts as agents for customers. These firms also must comply with rules imposed by the various futures exchanges and industry associations, such as the Chicago Mercantile Exchange and the Chicago Board of Trade, as well as the National Futures Association, all of which act as self-regulatory organizations under the Commodity Exchange Act. For the most part, neither SEC nor CFTC directly regulates OTC derivative products or the dealers of these products unless their trading is conducted in a regulated entity.

The regulatory approaches of these financial regulators differ. A primary mission of bank regulators is to promote the safety and soundness of the financial system and protect the federal deposit insurance funds—the

Bank Insurance Fund and the Savings Association Insurance Fund.¹³ They address this goal through various actions, including establishing capital requirements, establishing information reporting requirements, conducting periodic examinations, and issuing enforcement actions. SEC's and CFTC's primary purposes are to protect investors or customers in the public securities and futures markets and to maintain fair and orderly markets. Unlike bank regulators, who can regulate all bank activities, SEC and CFTC are authorized to regulate only activities involving securities and futures and only those firms that trade these products. To the extent OTC derivatives are not securities or futures, neither agency directly regulates those products nor the dealers of those products, unless such trading is conducted in a regulated entity.

Federal financial regulators share information and ideas through groups and task forces, such as the President's Working Group on Financial Markets.¹⁴ Individual agencies also work together on various issues. For example, the banking regulators coordinate certain activities through the Federal Financial Institutions Examination Council (FFIEC), which develops uniform principles, standards, and report forms and coordinates the development of uniform reporting systems and regulations. Internationally, U.S. and foreign regulators work together through various committees, such as the Basle Committee on Banking Supervision, which develops capital standards and issues various types of guidance for banks.¹⁵ Likewise, SEC and CFTC participate in the International Organization of Securities Commissions (IOSCO) and their respective staffs regularly serve on its Technical Committee, which issues reports and provides guidance on securities regulation.¹⁶

¹³The Bank Insurance Fund and the Savings Association Insurance Fund are funded primarily through assessments from federally insured banks and thrifts, respectively. Each is administered by FDIC. The proceeds of these funds are used to compensate depositors, if necessary, should a federally insured institution fail.

¹⁴This working group was originally established by Executive Order of the President on March 18, 1988, in response to the October 1987 market decline. It is chaired by the Secretary of the Treasury and includes the chairs of the Federal Reserve Board, SEC, and CFTC. In addition, the meetings often include representatives of other financial regulators, including OCC, OTS, FDIC, and the Federal Reserve Bank of New York.

¹⁵The Basle Committee on Banking Supervision is a committee of banking supervisory authorities that was established by the Central Bank Governors of the Group of Ten countries in 1975. It meets under the auspices of BIS in Basle, Switzerland. The Group of Ten consists of 11 major industrialized member countries—Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United States, and the United Kingdom.

¹⁶As of August 1996, IOSCO had 121 member agencies from 73 countries.

Accounting Standards Setting

Investors, creditors, regulators, and other users of financial reports generally depend upon accounting rules to help ensure the consistency and reliability of information in these reports. The effective functioning of our economy depends upon financial information that is widely used being reliable and clearly understood. Such widespread use, understanding, and confidence in financial statements requires that they be prepared in conformance with established accounting rules. The Financial Accounting Standards Board (FASB) establishes standards of financial accounting and reporting for private sector entities. These standards are referred to as generally accepted accounting principles and are promulgated through the issuance of statements of financial accounting standards (SFAS) by FASB. SFAS are officially regarded as authoritative by SEC and the American Institute of Certified Public Accountants (AICPA). AICPA, through its Accounting Standards Executive Committee, issues accounting guidance on issues not otherwise covered in authoritative literature. SEC has statutory authority to set accounting principles, but as a matter of policy, it generally relies on FASB and AICPA to provide leadership in establishing and improving accounting principles. However, SEC frequently issues accounting and disclosure regulations to supplement guidance provided by FASB and AICPA.

The Governmental Accounting Standards Board (GASB) establishes standards of financial accounting and reporting for state and local governmental entities. GASB pronouncements are recognized as authoritative by AICPA.

Legislative Activity Since Our 1994 Report

Six derivatives-related bills were introduced in Congress in 1994.¹⁷ These bills included proposals to

- regulate derivatives activity and promote uniformity of such regulation;
- require increased disclosure about derivatives activity;
- require that GAO study the speculative uses of derivatives and the feasibility of imposing taxes and margin requirements on speculative derivatives activity;
- establish principles and standards related to accounting, customer suitability, and risk management;
- require derivatives dealers to register with SEC; and
- prohibit depository institutions from using derivatives for speculation.

¹⁷Three of the bills predated our May 1994 report: S. 2123, May 17, 1994; H.R. 3748, Jan. 26, 1994; and H.R. 4170, April 12, 1994. The bills introduced after our report were: S. 2291, July 18, 1994; H.R. 4503, May 26, 1994; and H.R. 4745, July 13, 1994.

None of these bills were passed.

As of June 30, 1996, four new derivatives-related bills were introduced.¹⁸ These bills included proposals to

- establish a federal derivatives commission to set principles and standards for the supervision of derivatives activities;
- authorize the Federal Reserve to create a self-regulatory organization whose members would include derivatives dealers not under the direct regulation of SEC or CFTC;
- require regulatory agencies to jointly establish principles and standards relating to capital, accounting, disclosure, customer suitability, and risk management;
- require financial institutions to have a management plan that ensures appropriate management oversight;
- establish prudent standards for managing risk and provide a framework for internal controls;
- require that all derivatives dealers register and be subject to SEC regulation; and
- prohibit depository institutions and credit unions from engaging in certain derivatives activities.

As of July 1996, all four of the bills had been referred to committee with no further action taken.

Objectives, Scope, and Methodology

Our May 1994 report on derivatives identified the need for (1) strengthened corporate governance and internal controls for derivatives dealers and major end-users, (2) improved regulation of major U.S. derivatives dealers, (3) comprehensive federal oversight of major U.S. derivatives dealers that are unregulated affiliates of securities firms and insurance companies, (4) comprehensive and consistent accounting and disclosure requirements for derivatives, and (5) international harmonization of regulatory and accounting standards. The objectives of this follow-up report were to determine what actions have been taken or proposed to address each of these needs and what still needs to be done, as well as to analyze the causes of large losses attributed to derivatives use.

¹⁸These bills included H.R. 20, H.R. 31, H.R. 1063, and S. 557.

To update actions taken or proposed since our May 1994 report, we reviewed relevant literature and interviewed various regulatory and industry officials. We contacted selected U.S. and foreign financial regulators. We reviewed regulatory and industry data and annual reports. We identified the 15 major U.S. OTC derivatives dealers by using information on derivatives activities from bank regulators, SEC, the Securities Industry Association,¹⁹ and the dealers' annual reports (see table 1.1). These 15 dealers—7 banks, 5 securities firms, and 3 insurance companies—had the highest levels of derivatives activity in their respective industries. The seven banks and five securities firms we focused on had considerably higher levels of derivatives activity than others in their industry; and the three insurance companies were the only U.S. insurance companies we could identify as derivatives dealers.

To update information on activities related to corporate governance and internal controls, we reviewed existing guidance and frameworks issued by regulators, industry participants, and related parties. We also reviewed the causes of reported losses involving derivatives, structured notes, and CMOs for a judgmentally selected sample of corporations, banks, and local governments. To understand the role corporate governance may have played in losses involving Bankers Trust and Gibson Greetings; Orange County, California; Capital Corporate Credit Union (Cap Corp); and Barings PLC (Barings), we reviewed regulatory examination and enforcement documents, court documents, and relevant audit, regulatory, and investigative reports that addressed derivatives use and the reasons behind the losses. We also discussed these reports and conclusions with knowledgeable regulatory and industry individuals.

We reviewed key controls relevant to oversight and management of derivatives at 12 judgmentally selected end-user banks and thrifts.²⁰ To determine whether key controls had been designed into institutions' systems, we compared their controls to a list of key internal controls that all institutions should have in place. We compiled the list of key controls from various sources, which included bank regulators' examination guidance; guidance from AICPA and the Committee of Sponsoring

¹⁹The Securities Industry Association is a trade group that represents broker-dealers that account for about 90 percent of the securities business in North America.

²⁰We selected end-user banks and thrifts that had a minimum of \$1 billion in total assets and notional/contract amounts of derivatives exceeding 25 percent of the amount of total assets. In addition, we ensured that at least two of the selected institutions were examined by each of the four bank and thrift regulatory agencies. We specifically excluded the institutions that were reviewed in our May 1994 report.

Organizations of the Treadway Commission (COSO);²¹ and recommendations from the Group of Thirty (G-30).²² To determine the internal controls in place at each of the 12 institutions, we reviewed bank regulatory examination workpapers and discussed controls with examiners, institution management, and, when possible, internal auditors. We did not test the controls to determine if they were functioning as described. We also discussed FDICIA requirements, such as formal internal control assessments and external auditor attestations, with institution management to determine their usefulness.

To update information on bank regulators, we reviewed their examination guidance, examiner training, special studies, and other relevant documents. Our analysis focused on the Federal Reserve and OCC because they were the primary regulators of the seven major bank derivatives dealers. To evaluate the quality and content of bank regulatory examination activities relative to derivatives, we reviewed a total of 12 bank examination reports from 1992 to 1994 for the 7 largest U.S. bank OTC derivatives dealers and conducted follow-up interviews with examination staff. OCC examiners performed 7 of the 12 examinations we reviewed. Federal Reserve examiners performed the remaining five. As part of our review, we used bank examination guidance and G-30 recommendations as criteria to identify the vital elements of an effective risk-management system. We reviewed examination workpapers and interviewed examiners to determine whether examiners had evaluated bank compliance for each element. The focus of our review of the examinations of the seven bank derivatives dealers was to evaluate the adequacy of the portion of the bank regulators' examination process that involved derivatives activities.

To update activities on the oversight of securities firms and insurance companies with derivatives affiliates, we interviewed SEC and CFTC about their derivatives oversight activities since 1994. In addition, we contacted state regulatory officials in Delaware, New Jersey, and New York about their derivatives oversight activities since our May 1994 report.²³ We also obtained information on industry activities involving derivatives. In addition, we reviewed derivatives-related enforcement actions taken by

²¹COSO issued a framework entitled "Internal Control-Integrated Framework" in September 1992 that has been widely accepted and provides a common basis for assessing the adequacy of internal control systems.

²²The G-30 is an international financial policy organization whose members include representatives of central banks, international banks, securities firms, and academia.

²³In our May 1994 report, we identified three insurance companies that had a major OTC derivatives dealer affiliate or subsidiary. Those three insurance companies were domiciled in Delaware, New Jersey, and New York.

the regulators. We also contacted National Association of Insurance Commissioners (NAIC) officials about its activities.

To determine what impact, if any, current derivatives accounting standards had on financial reporting, we reviewed accounting practices at the 12 selected banks and thrifts. Specifically, we reviewed (1) how they were using and accounting for derivatives labeled as hedges and (2) what effect proposed accounting standards might have on their derivatives activities. We determined the extent and use of derivatives for hedging purposes at each of the 12 banks and thrifts on the basis of data from their Consolidated Reports of Condition and Income (call reports) or their equivalent as of December 31, 1993, and from each institution's 1993 or 1994 regulatory examination. We reviewed the examination workpapers, supplemented by discussions with the examiners and institution management, to understand each institution's extent and use of derivatives, the underlying strategies behind derivatives use, and the accounting methods for these activities. We compared our understanding with the institutions' 1993 and 1994 annual report disclosures. We then used existing accounting standards as a basis to assess the institution's accounting treatment of derivatives for hedging purposes. We met with management at all 12 of the institutions to obtain their opinions and suggestions on current and proposed accounting and disclosure requirements and practices. However, we generally did not discuss our conclusions concerning the institutions' use of hedge accounting with management or their external accountants.

To determine the current accounting standards for derivatives, we reviewed existing and proposed generally accepted accounting principles and other accounting guidance relevant to derivatives. We also had discussions with staff from FASB and GASB and reviewed various discussion papers, correspondence, and memoranda on accounting for derivatives prepared by FASB staff.

In addition, we analyzed existing and proposed disclosure standards, including SFAS No. 119 and SEC's proposal for derivatives disclosures. We discussed SEC's disclosure proposal and other issues associated with accounting for derivatives with SEC's Chief Accountant. Finally, to determine the amount of information disclosed about OTC derivatives, we evaluated the annual report disclosures of a judgmentally selected sample of 37 banks and thrifts.²⁴ Separately, we analyzed the annual report

²⁴The 37 banks and thrifts include 11 of the 12 banks and thrifts whose derivatives accounting practices we reviewed and 26 other financial institutions.

disclosures of the 15 largest OTC derivatives dealers as of December 31, 1994.

To determine the status of progress being made internationally, we reviewed information issued since 1994 by several international organizations—the European Union (EU),²⁵ BIS, the Basle Committee on Banking Supervision, the Euro-currency Standing Committee of the Group of Ten countries, and the Technical Committee of IOSCO. In addition, to determine what actions, if any, had been taken since our 1994 report, we contacted a total of 11 bank and securities regulators in 6 countries—Australia, Germany, Japan, Singapore, Switzerland, and the United Kingdom.²⁶

We recognize that many of the issues addressed in this report have broader application to the overall activities of firms. For example, our discussions of corporate governance, which includes risk management and internal controls, apply to the entire operations of a corporation.

We did our work between April 1994 and August 1996 in accordance with generally accepted government auditing standards.

Agency Comments

We requested comments on a draft of this report from the Chairman, Securities and Exchange Commission; Chairperson, Commodity Futures Trading Commission; Chairman, Board of Governors of the Federal Reserve System; the Comptroller of the Currency; the Chairman, Financial Accounting Standards Board; and the Chairman, Governmental Accounting Standards Board. We met with representatives of each of the federal regulators who gave us technical comments on the draft report. Where appropriate, we incorporated these comments in the report. We met with representatives of both of the boards that set accounting standards. FASB and GASB representatives gave us technical comments on the draft report that we incorporated into the report where appropriate.

(For reader convenience, we have included findings and recommendations from our 1994 report at the beginning of each of the following chapters.)

²⁵The EU includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom. Its purpose is to unite these countries under one system of rules and regulations in all aspects of trade, including financial markets.

²⁶Commission Bancaire in France did not respond to our requests for updated information.

Findings

Strong corporate governance, which includes competent supervision by firms' boards of directors and senior management, can ensure that risk management and internal control systems are in place and functioning as anticipated. The audit committees of the boards of directors can provide oversight of internal and external auditor activity to ensure appropriate focus and to ensure that management is not overriding internal controls. Although accountability for controlling the risks associated with derivatives rests with the boards of directors and senior management, auditors can play a primary role in testing compliance with risk-management policies and controls. Management accountability for internal controls can be enhanced through annual formal assessments and public reporting on the effectiveness of risk-management policies and controls. Review by the external auditor can enhance the reliability of such reports. The likely effect of such assessments and reporting would be to increase the attention given to derivatives risk management by senior management and boards of directors.

Until the publication in 1993 of a report sponsored by the G-30, entities lacked comprehensive guidelines for evaluating their risk-management practices. That report recommended specific derivatives risk-management practices as benchmarks for entities' use. Bank regulators also found some serious weaknesses in major dealers' risk-management systems. However, the 15 major U.S. dealers that we visited described derivatives risk-management systems that generally conformed with the G-30 recommendations.

No regulation exists to bring all major derivatives dealers into compliance with the recommendations of the G-30. To help rectify this weakness, we believed the internal control and audit committee provisions of FDICIA could be used as a model for strengthening corporate governance systems. Applying the type of corporate governance provisions included in FDICIA to all major dealers as well as insured banks would provide needed safeguards for the public's interest. In addition, these corporate governance provisions also are applicable to major end-users of derivatives.

Recommendations

We recommended that SEC ensure that its registrants that are major end-users of complex derivative products establish and implement

corporate requirements for independent, knowledgeable audit committees and public reporting on internal controls. Internal control reporting should include assessments of controls over derivatives risk-management systems. We recommended that such reporting should be attested to by external auditors. We also recommended that the appropriate regulatory authorities establish comparable requirements for all major derivatives dealers.

Strong Corporate Governance Is Critical to Managing Derivatives Risks

Since our 1994 report, some dealers and end-users of derivatives and similar financial instruments reported major financial losses. These entities all had serious weaknesses in their corporate governance systems.¹ Regulators and financial industry groups have responded to these losses, as well as to recommendations we and others have made, by issuing guidelines and recommendations for improving risk management and internal controls—essential elements of strong corporate governance. Various industry surveys, while mixed, generally indicate that many derivatives market participants—both dealers and end-users—have voluntarily improved their risk management and internal control systems. Although these voluntary actions for improving corporate governance and controls are valuable, they may not be adopted by all of those who are vulnerable to the risks associated with derivatives, structured notes, and CMOs. In addition, we continue to be concerned that favorable market conditions may mask the need for further improvements and that the passage of time may lessen the vigilance of entities' directors and senior management.

We discussed the internal control assessments and reporting required under FDICIA with officials from 12 end-user banks and thrifts. They told us that they generally found the assessments and reports useful in enhancing internal controls for these institutions. We continue to believe that internal control assessments and reporting are essential for ensuring that the directors and senior management of major OTC derivatives dealers and end-users exercise their fiduciary responsibilities regarding derivatives and similar financial instruments. SEC has acknowledged that there may be benefits associated with management or auditor reports on internal control systems of SEC registrants that are major dealers and end-users of complex derivative products, as GAO recommended. However, SEC has stated that it is focusing on accounting for and providing greater disclosure of market risk for derivative products, which it views as a more appropriate priority at this time.

¹Governance systems involve the internal functioning of organizations through which economic activity is conducted. These systems concern transactions and relationships within an organization itself, including who controls what, who makes decisions, and who has what responsibilities for what claims against the revenues and assets of a company or government. While this report refers to these systems as corporate governance, the systems discussed also apply generally to governmental entities.

Corporate Governance Weaknesses Contributed to Losses

Since our May 1994 report, some financial institutions, commercial corporations, and local governments have sustained significant losses attributed to activities involving derivatives, structured notes, and CMOs. A common factor in each of the losses was a weak corporate governance system that did not establish, maintain, or monitor effective risk management and internal controls.

Characteristics of an effective corporate governance system include

- a responsible board of directors that approves policies governing the nature and extent of derivatives use in the context of an overall risk-management policy and that provides effective oversight;
- management that properly implements board-approved policies and risk limits and that establishes controls to ensure that the risks of derivatives activities are managed in accordance with the board's authorization;
- qualified personnel and comprehensive systems that match the scope, size, and complexity of derivatives activities and risks;
- established functions for monitoring activities that are independent of trading personnel and allow for effective supervision of risks;
- audits that help ensure that approved policies, procedures, and limits associated with significant risks are effectively implemented, followed, and not circumvented by management; and
- independent and knowledgeable audit committees that provide effective oversight of compliance with internal controls related to derivatives activities.

Although no corporate governance system, however elaborate, can prevent all losses, the following examples of some of the most publicized losses from derivatives activities illustrate that the severe losses that occurred might have been avoided or reduced in severity if the basic principles of sound internal controls and governance systems had been followed. These examples are discussed in more detail in appendix I.

The first example involved losses by a major OTC derivatives dealer, Bankers Trust.² According to the Federal Reserve Bank of New York, Bankers Trust failed to adjust its internal controls in response to a riskier new line of business, marketing and sales of leveraged derivatives. Subsequent investigations by the Federal Reserve, SEC, and CFTC found problems related to this new line of business and failure of the entity's management to reasonably supervise individuals involved. Bankers Trust

²In this report, unless otherwise indicated, Bankers Trust refers to the parent firm, Bankers Trust New York Corporation, a bank holding company, and two of its wholly owned subsidiaries—Bankers Trust Company, a bank, and BT Securities Corporation, a securities broker-dealer.

suffered significant losses because of OTC derivatives when some of its clients decided not to honor their derivatives obligations and sued Bankers Trust.

According to the SEC settlement, Gibson Greetings, one of Bankers Trust's clients that defaulted on its obligations to Bankers Trust and subsequently sued it, also lacked appropriate controls over derivatives activities. Several key Gibson officials did not fully understand either derivatives or the risks involved in the speculative structure of their investments with Bankers Trust and were unable to readily determine the value of Gibson's derivatives holdings. According to an SEC release, Gibson relied totally on Bankers Trust to establish values for use in preparing its financial statements and in periodic reports filed with SEC. As a result, according to SEC's release, representatives of Bankers Trust were able to mislead Gibson about the value of the company's derivatives positions by providing values that significantly understated the magnitude of the losses.

An example of significant derivatives losses concerning a local government occurred in Orange County, California. According to a California State Auditor's report, Orange County filed for bankruptcy when the county Treasurer's flawed investment strategy, which stressed yield over liquidity or security, resulted in about \$1.7 billion in losses. The losses reportedly occurred in an atmosphere of inadequate risk management and poor supervision by the county board. A report by a committee of the California legislature cited a lack of involvement by the County Board of Supervisors as one cause of the bankruptcy filing. Other reports by the County Auditor and an outside consultant identified numerous internal control weaknesses that may have contributed to the collapse of Orange County's investment pool. The outside consultant also noted that the county's investment policy did not define a diversification strategy, establish limits on levels of certain high-risk investments, or prohibit leveraging of the investment portfolio. In addition, the report stated that the Treasurer's office did not periodically report the results, status, or makeup of the investment portfolio, and periodic reviews of securities' market values were not documented and maintained. Because the County Board of Supervisors and management did not perform their basic governance responsibilities, they did not deal effectively with the significant risks of the investment activities being carried out by the Treasurer. This lack of oversight, combined with the basic control weaknesses, resulted in unchecked high-risk investment strategies that proved detrimental to the participants in the Orange County investment pool.

Another example of significant losses involved Cap Corp, which was formerly one of the nation's largest corporate credit unions with reported assets of \$1.6 billion. Cap Corp failed in January 1995 and was placed into conservatorship by the National Credit Union Administration.³ By February 1995, when we testified before the Senate Committee on Banking, Housing, and Urban Affairs, the total loss on Cap Corp's portfolio was about \$61 million.⁴ We said that Cap Corp's failure was, in part, the result of inadequate oversight by the board of directors of a risky investment strategy, no internal audit function, and other weaknesses in internal controls. In particular, Cap Corp lacked a model to test the overall sensitivity of its investment portfolio to potential changes in interest rates. Cap Corp also failed to react readily to the growing mismatch between its assets and liabilities. Cap Corp's board of directors not only failed to ensure that an adequate risk-management system was established and functioning, it also did not appear to adequately oversee Cap Corp's investment activities. Virtually all responsibility for Cap Corp's investment activities was delegated to an investment committee comprising Cap Corp's senior management, and the board showed little interest in the decisions this committee made.

Finally, in February 1995, Barings, a British investment bank, collapsed after losing over \$1 billion trading financial futures and options on exchanges in Singapore and Japan. The Bank of England report issued after the bank's failure indicated that one employee's trading activities apparently were responsible for all the losses.⁵ The regulators said that these losses went undetected as a consequence of failed management oversight and a lack of basic internal controls. For example, Barings' management did not adequately follow up on a number of warning signs, including findings reported by the internal auditors, over a prolonged period. According to the regulators' report, this employee originally was authorized to perform certain limited trading activities for customers. However, he began to generate profits through unauthorized trading for Barings' own account. Despite significant reported profits, Barings' management believed that his activity represented no significant risk to Barings until the large losses suddenly became evident. Until this time, he

³Corporate credit unions are nonprofit cooperatives that are owned by their respective member credit unions. They serve their member credit unions by providing liquidity loans, investment products, and other services.

⁴Credit Unions: The Failure of Capital Corporate Federal Credit Union (GAO/T-GGD-95-107, Feb. 28, 1995).

⁵"Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings," Bank of England, (July 13, 1995).

was able to conceal his losses largely because he was responsible for both initiating and recording trades—a lack of basic separation of duties.⁶ Barings collapsed because of its management’s failure to institute a proper system of internal controls; enforce accountability for profits, risks, and operations; and follow up on warning systems.

The losses experienced by these entities occurred in part because their boards of directors and top management did not effectively monitor derivatives activities or require corrective action to establish controls when significant weaknesses were noted. The Chairman of the Board of Governors of the Federal Reserve, in testimony before the Senate Committee on Banking, Housing, and Urban Affairs on November 27, 1995, stated that conditions such as the concealment of losses by employees and management threaten the integrity of our financial system. In commenting on a loss at a U.S. branch of Daiwa bank,⁷ as well as the loss at Barings, he said:

“The over \$1 billion loss suffered by Daiwa and the catastrophic losses suffered by Barings in Singapore because of a rogue trader illustrate the enormity of the damage that can be incurred by global trading banks when internal control systems are less than adequate. . . . The lesson forcefully taught by these cases is that management must pay as much attention to such seemingly mundane tasks as back office settlement and internal audit functions as to the more exotic high technology front-end trading systems.”

Given the lax corporate governance associated with the losses reported since 1994, we continue to support the wider application of FDICIA-type internal control assessments and reporting to cover more than large insured depository institutions. Losses at these entities clearly illustrate the results that can occur when effective risk-management and internal control systems are not developed, properly implemented, and vigilantly enforced. Management assessments of internal control and risk-management systems could have identified areas where controls were weak or nonexistent and, overall, could have reinforced good management. In addition, required public reporting on these assessments could have motivated the board and management of the affected organizations to improve corporate governance systems.

⁶Trading activities are referred to as “front office” activities, in contrast to administrative activities like bookkeeping that are referred to as “back office” activities.

⁷Daiwa bank, a large Japanese bank, incurred \$1.1 billion in losses at its New York branch from U.S. government bond trading activities over an 11-year period.

Internal Control Guidance Is Consistent With FDICIA Objectives but Is Primarily Voluntary

The recurring linkage between weak corporate governance systems and derivatives losses has focused attention on improving internal controls. Market participants and others have issued various types of guidance and frameworks that represent best practices for improving internal controls over derivatives activities.⁸ As discussed in more detail in chapters 4 and 6, we believe that these best practices provide good ideas for improving internal controls on a voluntary basis. However, we continue to believe that all major OTC derivatives dealers and end-users could benefit from the types of internal control assessments and reporting required under FDICIA. In general, officials of some end-user banks and thrifts, which are subject to FDICIA requirements, told us that the formal assessment of internal controls required by FDICIA was beneficial. We found that many of the corporate governance concepts embodied in FDICIA and our previous recommendations were reflected in recommended practices outlined in the various types of guidance. However, the recommended practices differ in two important ways: (1) they are not mandated, and (2) they do not require public reporting by management on its assessment of the effectiveness of internal controls. Further, only the guidance of the Derivatives Policy Group (DPG)⁹ calls for a periodic assessment of the effectiveness of these controls by auditors, but it does not require public reporting of the results.¹⁰ We are concerned that should market conditions improve, there will be less pressure to mandate these important practices, leaving firms vulnerable to substantial losses when conditions change.

End-User Banks and Thrifts Found FDICIA Requirements Generally Useful

To determine the usefulness of FDICIA's required assessments, we discussed the formal assessments of internal controls over financial reporting with officials of the 12 end-user banks and thrifts that we reviewed. Officials at most of the institutions told us that the formal assessments were beneficial.

Most of the officials told us they used COSO's framework for assessing the adequacy of the internal controls in preparing their FDICIA assessments. We

⁸These include the G-30 recommendations, the Derivatives Policy Group framework, the Futures Industry Association's Global Task Force on Financial Integrity recommendations, and guidance from AICPA, COSO, Government Finance Officers Association, Basle Committee on Banking Supervision, and IOSCO.

⁹DPG was organized in 1994 to address the public policy issues raised by the OTC derivatives activities of unregistered affiliates of SEC-registered broker-dealers and CFTC-registered FCMs and is consistent with the recommendations in our 1994 report. DPG-member firms include CS First Boston, Goldman Sachs, Lehman Brothers, Merrill Lynch, Morgan Stanley, and Salomon Brothers.

¹⁰This aspect of the framework is consistent with IOSCO guidance that suggests that regulators require management assessments and regulatory examinations or auditor's reports on controls (with reports submitted to regulators).

were provided access to and reviewed the documentation of controls over derivatives activities that three of the institutions prepared in conjunction with their internal control assessments and found that these institutions had done a substantial amount of analysis in the form of questionnaires, flowcharts, and risk-evaluation working papers. The use of those kinds of materials is suggested by the COSO framework documents. Management's observations on the FDICIA assessments at the selected banks and thrifts are also discussed in appendix II.

DPG Issued Guidelines to Improve Risk Management

In its March 1995 report, Framework for Voluntary Oversight, DPG developed a self-regulatory framework for voluntary oversight of its members' unregulated OTC derivatives dealer affiliates.¹¹ Although CS First Boston is not a reporting intermediary, the remaining five firms represent over 90 percent of the total U.S. broker-dealer OTC derivatives trading activity.¹² DPG's self-regulatory framework consists of four interrelated components: (1) management controls, (2) enhanced reporting, (3) evaluation of risk in relation to capital, and (4) counterparty relationships. (The last three components are discussed in ch. 4.)

The first component outlines risk-management guidance, including suggestions for the implementation of internal controls for measuring and monitoring the various risks a firm may be exposed to as a result of its dealings in derivative products. This component also establishes that an effective system of internal controls should include (1) the adoption of risk management guidelines at an appropriate level of management; and (2) the implementation of risk monitoring systems to identify, measure, monitor, and report exposure to relevant risks and of risk management processes to control those risks.

Under the framework, SEC and CFTC are to receive external auditors' reports on firms' internal and risk management controls. The external audit reports, which are to be submitted annually, are to address the firm's compliance with its risk-management objectives, guidelines, and internal

¹¹As stated in the framework, DPG contemplated that it would apply to any affiliate of an SEC-registered broker-dealer (1) that is not subject to supervisory oversight with respect to capital; (2) that is primarily engaged in the business of holding itself out to unaffiliated counterparties as a professional intermediary willing to structure and enter into either side of an OTC derivatives transaction as a principal; and (3) whose OTC derivatives activities are likely to have a material impact, directly or indirectly, on its SEC-registered broker-dealer affiliate.

¹²CS First Boston has an OTC derivatives affiliate that is regulated as a bank by the Bank of England. Although it does not report to SEC under the framework, SEC officials told us that under their risk assessment rules, they receive copies of quarterly financial reports the affiliate files with the Bank of England.

procedures, which are called for by the DPG framework. SEC and CFTC have agreed to maintain all information obtained from DPG members, including the reporting on internal controls, on a confidential basis. Independent verification of management's assessment on controls by external auditors could help provide valuable evidence that such controls exist for these firms. However, unlike FDICIA assessments, which are publicly available, maintaining information on a confidential basis does not provide public accountability.

Institutions' Systems of Controls Were Generally Designed to Include Key Controls

In general, we found the 12 banks and thrifts we selected had systems of controls that were designed to include most of the key controls relevant to the types of derivatives activity in which they were engaged.¹³ We reviewed various guidance-related documents, including AICPA audit guides and regulatory guidance, to identify key controls related to derivatives. Most of these controls were included in more than one guidance and were contained in the COSO derivatives guidance.¹⁴ Appendix II includes a table of the key controls for derivatives activities that we developed on the basis of our review of information from the various guidance documents.

Although the 12 banks and thrifts had most of the key controls, we also noted that regulatory examiners and internal auditors found that certain of these controls could be improved. Controls needing improvements included

- management-approved written policies setting risk limits;
- credit limits established for counterparty exposures;¹⁵
- regular committee meetings to oversee the hedging program, to report to the board of directors, and to maintain documentation of decisions and actions; and
- procedures to monitor risk limits and exposures on a daily or regular basis.

¹³For the remaining key controls, we found incomplete data to verify that they were designed into the system.

¹⁴In addition to the 1992 framework established by COSO for assessing the adequacy of internal controls, in June 1996, COSO issued guidance to illustrate how the COSO framework might be applied to derivatives activities. This specific application of the COSO framework recognizes the widespread use and growing importance of derivatives in managing risks and recognizes that many directors and senior executives may request assurance that their organizations could minimize exposure to undue loss from inappropriate derivatives use.

¹⁵Counterparty exposure is the risk of loss that would occur if an entity's counterparty failed to meet its financial obligations.

The fact that these controls needed improvement argues for the importance of regular and effective audit and regulatory oversight. Such oversight plays a critical role in monitoring derivatives risk and in maintaining a strong system of corporate governance.

Industry Surveys Indicate Some Progress on Internal Controls

Several industry surveys that have been completed since our 1994 report assessed internal control practices at derivatives dealers and end-users. A 1994 G-30 survey indicated that derivatives dealers and end-users had made progress in implementing the corporate governance recommendations in its July 1993 derivatives report. However, the survey also showed that not all the G-30 recommendations had been implemented. Other surveys that reported on board of director involvement with derivatives activities showed mixed results. We did not attempt to verify or evaluate the quality of any of the survey data. Although these surveys provide some indication of others' recognition of the importance of corporate governance, formal assessments of and public reporting on internal controls would provide a better gauge of progress in this area.

G-30 Survey Indicates Progress

In December 1994, the G-30 published the results of a survey that showed a high percentage of derivatives dealers and end-users responding had adopted or were planning to adopt many of the G-30's recommended practices regarding corporate governance.¹⁶ Of the 125 dealer and 149 end-user respondents to the survey, the majority acknowledged that they had, or were planning to implement within 12 months, policies relating to corporate governance, including the following:

- The board of directors reviews and approves an entity's overall risk-management and capital policies.
- The board of directors reviews and approves any changes to overall risk-management and capital policies made by senior management in response to changes in business conditions.
- Management establishes and implements clearly defined risk-management policies, procedures, and controls.
- Senior financial management reviews and approves procedures and controls for implementing the entity's risk-management policies governing derivatives trading, operations, accounting, and disclosure.

¹⁶"Derivatives: Practices and Principles, Follow-Up Surveys of Industry Practice," Group of Thirty, (Dec. 1994).

- Senior financial management reviews derivatives policies as business and market circumstances materially change.
- Senior financial management periodically reviews risk-management reports that specifically identify derivatives activities used in the hedging of underlying business exposures (end-user respondents only).
- Policies and procedures governing and controlling risk management and derivatives specifically address the purpose of derivatives transactions and the types of risks that can be taken (end-user respondents only).

Although the results of the G-30 survey are encouraging, many end-users thought that recommendations concerning the assessment of market risk did not apply to them. For example, about 36 percent responded “does not apply” to a question concerning their use of market simulations to test the performance of their portfolios under abnormal market conditions. However, without investigating each respondent’s individual circumstances, we could not determine whether such responses were reasonable. In addition, although the survey indicated a positive trend, it did not request, and its results did not provide, information about how entities ensure that these important policies and procedures are effectively implemented and monitored.

Other Surveys Showed Problems Persist

Other surveys also reported on the involvement of boards of directors in establishing and monitoring derivatives activities. A survey of the use of derivative instruments in multinational companies, conducted by Ernst & Young LLP, showed that boards of directors, executives, and senior management reported establishing policies to monitor and control derivatives activities at 96 percent of the companies responding.¹⁷ In a different survey also conducted by Ernst & Young LLP, nearly two-thirds of investment funds that used derivatives reported that they did not have a supervisory board or a risk-management committee responsible for setting limits on derivatives use.¹⁸ The survey responses showed that only a few boards of directors had a representative familiar with complex financial instruments or risk management.

Another survey, conducted by the Wharton School at the University of Pennsylvania in conjunction with the Canadian Imperial Bank of

¹⁷“The Use of Derivatives Investments in Multinational Companies,” Ernst & Young, LLP, (Feb. 1995). An informal survey of 105 of the world’s largest multinational corporations.

¹⁸“Derivatives Usage by Investment Funds,” Ernst & Young, LLP, (Oct. 1995). Ernst & Young conducted 143 surveys with a judgmentally selected sample of U.S. and foreign investment fund companies in 1995.

Commerce, indicated that fewer than half of the entities surveyed regularly reported to their boards on derivatives usage.¹⁹ This survey also reported that about one-quarter of the entities surveyed did not have a documented policy on derivatives.

SEC Is Continuing to Look at Issues Related to Our May 1994 Recommendation

In our May 1994 report, we recommended that SEC ensure that its registrants that are major dealers and end-users of complex derivative products establish and implement corporate requirements for independent, knowledgeable audit committees and public reporting on internal controls. Internal control reporting by boards of directors, managers, and external auditors should include assessments of derivatives risk-management systems. Despite SEC's recognition that there may be benefits associated with management or auditor reports on internal controls of SEC registrants that are major dealers and end-users of complex derivative products and discussions about an alternative way to meet the intent of this recommendation, SEC has not yet agreed to implement it. Although SEC does not deny the importance of internal controls over activities involving financial instruments and assurances that those controls are working, it has stated that it is focusing on expanding disclosure requirements on market risk as a more appropriate priority for SEC at this time. Although we believe expanded disclosure is valuable, it does not provide the additional accountability for boards of directors and senior managers that would be accomplished through public reporting of internal control assessments.

SEC officials expressed concern about the potential costs of imposing responsibilities for public reporting on internal controls over derivatives, especially if this included a requirement for attestation on such reports by independent public accountants. Their concerns stemmed from the fact that a number of years ago SEC withdrew two proposals for public internal control reporting by management because of substantive public opposition based in part on the claim that the proposals would be too costly. The first proposal would have required auditor attestation; the second did not, recognizing to some extent the cost objection to the first proposal.

In our discussions with these officials, we pointed out that our recommendation was confined to major end-users of derivative products. However, they were still concerned about the cost imposed on even the

¹⁹Wharton/CIBC Wood Gundy Survey of Derivatives Usage Among U.S. Nonfinancial Firms," The Wharton School of the University of Pennsylvania, (Oct. 1995). Questionnaires were mailed to a random probability sample of 2,158 nonfinancial corporations.

limited number of companies that we recommended be required to report publicly. To address this concern, we suggested another less costly way to meet the intent of our recommendation.

Instead of SEC requiring management reports and auditor attestation as recommended in our May 1994 report, we suggested that SEC could issue guidelines for directors' oversight of derivatives activities. Such guidelines could be based on guidance for directors already issued by bank regulators and others. Our list of suggested guidelines appears in appendix III. We reasoned that these guidelines would require that directors carefully review derivatives policies and risk limits and the controls over them. If not satisfied, they could call upon independent auditors to assist them.

At SEC's request, we also prepared and presented a draft prototype report on internal controls over derivatives activities to illustrate the kind of public reporting we were recommending. This report describes an entity's derivative products, the establishment of its risk limits and related controls, and the involvement of the board of directors and the board's audit committee. We stated that the report was only illustrative, that it could well be shortened or simplified, and could be broadened to include a wider range of important internal controls. This prototype draft report is presented as appendix IV.

SEC officials recognized that there may be benefits associated with management or auditors' reports on public companies²⁰ internal control systems but expressed some concerns with our alternative recommendations. They said that SEC issuance of director guidelines would represent unprecedented involvement in corporate governance and expressed concern about the potential for director liabilities that might flow even from nonauthoritative guidelines. SEC is focusing on accounting for and providing greater disclosure of market risk for derivative products, which it views as a more appropriate priority at this time.

In December 1995, SEC released for comment proposed expanded derivatives disclosure requirements for public companies. Under the proposed requirements, additional public disclosures would be made regarding derivatives dealers' and end-users' risk exposures, objectives, general strategies, and financial instruments used to manage risk. We discuss these requirements in more detail in chapter 5.

²⁰We use public companies in this report to mean companies that register their securities with SEC and that are subject to SEC's disclosure requirements.

Conclusions

Recent losses at the entities discussed in this chapter, as well as others, emphasize the need for strong accountability over derivatives activities. The losses also illustrate the potential danger associated with entities that do not embrace the need for sound corporate governance to establish, maintain, and monitor effective internal control systems.

Although voluntary efforts to strengthen corporate governance and internal controls over derivatives can be valuable, they leave stakeholders vulnerable if not uniformly adopted. SEC's proposed requirements begin to address our concerns, but they may not provide sufficient assurance to the public that appropriate risk-management policies are, in fact, being followed. We continue to believe the actions recommended by our May 1994 report for effective corporate governance and management assessment and reporting on internal controls are still appropriate. Periodic assessments of internal controls, accompanied by public reporting on the results of those assessments, would make boards of directors and senior managers more accountable to shareholders, regulators, and the general public about the effectiveness of the systems of controls and, thereby, help to prevent large losses. We believe that regulators at all levels of government should consider the recommendations to facilitate effective actions by management and boards of directors in managing derivatives activities.

Chapter 3 MAY 1994 REPORT SUMMARY

Findings

Bank regulators use three primary means to oversee bank activities: requiring adherence to minimum capital standards;¹ reviewing required reports; and conducting periodic examinations to verify compliance with capital, reporting, and other regulatory requirements. Although regulators had made progress, improvements were still needed in regulatory reporting and examinations. We found that although regulators required banks to report information quarterly, they did not require sufficient information on credit risk and earnings. In addition, capital requirements did not address all risks, focusing instead on credit risk. However, U.S. bank regulators participated in developing a proposal to incorporate market risk through the Basle Committee on Bank Supervision. Other ongoing efforts addressed interest rate risk, credit concentration, risks from nontraditional activities, and broader recognition of bilateral netting.

¹Capital serves as a buffer against unexpected losses that cannot be absorbed from current earnings. As a bank's capital approaches low levels, regulators are warned that a bank's financial health is threatened and that they may have to intervene.

We also found that although bank examinations addressed derivatives, they did not adequately address internal controls.

Recommendations

We recommended that financial regulators take several actions to improve their capability to oversee OTC derivatives activities and respond to any financial crisis involving derivatives. The recommended actions were to develop and adopt a consistent set of capital standards; develop and maintain a centralized repository of information (including information on counterparty concentrations and earnings); and provide leadership in working with industry representatives and regulators internationally to harmonize standards for disclosure, capital, examination, and accounting.

Bank Regulatory Oversight Continues to Improve

OCC, the Federal Reserve, FDIC, and OTS have made progress in improving their oversight of derivatives activities consistent with the recommendations we made to financial regulators in our 1994 report.² They have expanded their risk-based capital standards to more accurately reflect risk exposures and to include market risk. They have also expanded their regulatory reporting requirements to include additional information on derivatives activities. Further, they have improved their examination process by taking several actions to more adequately address risks and risk management. In 1994, the Federal Reserve took an enforcement action against a bank holding company for activities related to its derivatives business.

Risk-Based Capital Standards Were Expanded

Expanding risk-based capital standards continues to be an active area of reform for bank regulators.³ Reforms include efforts to ensure that the major types of risk are reflected in capital requirements. Although some of the reforms apply specifically to derivatives activities, others apply more broadly to nonderivatives activities as well. In December 1994, U.S. bank regulators issued final risk-based capital rules that should result in banks holding capital that more accurately reflects their actual risk exposure. These rules (1) provide broader recognition of offsetting risk exposures by allowing banks to net these exposures and (2) revise the way banks calculate the amount of capital needed to cover potential future changes in derivatives contract values. Also, in December 1994, bank regulators amended their risk-based capital guidance to include concentrations of credit risk and an institution's ability to manage such concentrations as important factors in assessing overall capital adequacy. In August 1995, the regulators issued a final rule requiring that risk-based capital requirements take account of interest rate risk throughout an institution. Further, in September 1996, they issued a joint final rule to incorporate the market risk of the trading activities of internationally active banks into the risk-based capital calculation. Finally, the Federal Reserve has requested comment on an innovative approach to capital that would require banks to set their own capital requirements for their trading risks and would provide incentives in the form of penalties to ensure that the capital is adequate.

²This report focuses on the activities of the Federal Reserve and OCC, because they are the primary regulators responsible for the seven major bank dealers we reviewed. However, FDIC and OTS also have been active participants in improving derivatives oversight.

³Risk-based capital requirements call for capital to be held against on- and off-balance sheet risks in varying amounts according to measures of relative risk assigned by the regulators.

Capital Rules Were
Amended to Allow Broader
Recognition of Bilateral
Netting and to More
Accurately Reflect
Potential Future Credit
Exposure

In response to amendments to the Basle Accord that allowed broader recognition of qualified bilateral netting agreements,⁴ U.S. bank regulators issued a final rule for such netting (effective December 1994).⁵ This risk-based capital rule allows a bank to net, for risk-based capital purposes, negative and positive market values of interest and exchange rate contracts with the same counterparty. The contracts must be subject to qualifying bilateral netting agreements. To ensure that a legal basis exists to support the enforceability of a netting contract, U.S. banks must obtain a written legal opinion that the contract is enforceable in all relevant jurisdictions. The broader recognition of qualifying legally enforceable bilateral netting agreements is significant because such arrangements help to reduce financial institutions' counterparty exposure and settlement risks. Previously, U.S. banks were only allowed to net obligations that were denominated in the same currency and due on the same date on derivatives contracts with other counterparties.⁶

U.S. bank regulators issued a final rule (effective October 1995) to implement amendments to the Basle Accord governing the calculation of potential future credit exposures. The first part of the rule authorized banks to recognize qualifying legally enforceable bilateral netting agreements in calculating potential future exposures for risk-based capital purposes. The other part expanded the coverage and increased the maximum level of the credit conversion factors used to calculate the add-on amount.⁷ The conversion factors in the original Basle Accord ranged from 0 to 5 percent, covered interest rate and exchange rate contracts, and had two maturity categories—1 year or less and over 1 year. According to one regulator, this final rule responded to concerns that these original factors did not cover enough types of products and were not high enough to cover potential exposures on contracts with long-dated maturities. The amended conversion factors range from 0 to 15 percent;

⁴"The International Convergence of Capital Measurement and Capital Standards," also known as the Basle Accord, is a risk-based framework endorsed by bank regulators from the United States and 11 other countries in 1988. Although it is not legally enforceable as a treaty, members regard the framework as binding.

⁵Bilateral netting, for U.S. bank regulatory purposes, is an arrangement between a bank and a counterparty that creates a single legal obligation covering all included individual contracts. This means that a bank's obligation, in the event of the default or insolvency of one of the parties, would be the net sum of all positive and negative fair values of contracts included in the bilateral netting agreement.

⁶This is known as netting by novation.

⁷Conversion factors are used to estimate how much future movements of market rates and prices can increase current amounts owed by a counterparty on derivatives contracts. The factors are expressed as a percentage. Thus, a contract with a notional value of \$1 million that was subject to a 15 percent conversion factor would be calculated as having a potential future credit exposure of \$150,000.

cover six types of derivatives contracts (interest rate, exchange rate, equity, gold, other precious metals, and other commodities); and include maturity categories of 1 year or less, 1 to 5 years, and over 5 years.

U.S. Bank Regulators Issued Final Rules to Address Additional Risks

Section 305 of FDICIA required, among other things, that bank regulators revise their risk-based capital standards to include concentration of credit risk, risks of nontraditional activities, and interest rate risk.⁸ In response, on December 13, 1994, bank regulators amended risk-based capital standards for insured depository institutions to “ensure that those standards take adequate account of concentration of credit risk and the risks of nontraditional activities,” which include derivatives activities. Regulators are to consider the risks from nontraditional activities and management’s ability to monitor and control these risks when assessing the adequacy of a bank’s capital. Similarly, institutions identified through the examination process as having exposure to concentration of credit risk or as not adequately managing their concentration of risk are required to hold capital above the regulatory minimums. Because no generally accepted approach exists for identifying and quantifying the magnitude of risk associated with concentrations of credit, bank regulators determined that including a formula-based calculation to quantify the related risk was not feasible.

U.S. bank regulators addressed the interest rate risk portion of section 305 through a two-step process. Step one consisted of a final rule issued on August 2, 1995, that amended the capital standards to specify that bank regulators will include in their evaluations of a bank’s capital adequacy an assessment of the exposure to declines in the economic value of the bank’s capital due to changes in interest rates. The final rules specify that examiners will also consider the adequacy of the bank’s internal interest rate risk management. Step one also included a proposed joint policy statement that was issued concurrently with the final rule. This joint policy statement described how bank regulators would measure and assess a bank’s exposure to interest rate risk.

Originally, bank regulators intended that step two would be the issuance of a proposed rule based on the August 2, 1995, joint policy statement that would have established an explicit minimum capital requirement for interest rate risk. Subsequently, bank regulators elected not to pursue a standardized measure and explicit capital charge for interest rate risk.

⁸Interest rate risk is the risk of potential loss arising from changes in interest rates. It exists in traditional banking activities, such as deposit-taking and loan provision, as well as in securities and derivatives activities.

According to the bank regulators' June 26, 1996, joint policy statement on interest rate risk, the decision not to pursue an explicit measure reflects concerns about the burden, accuracy, and complexity of developing a standardized model and the realization that interest rate risk measurement techniques continue to evolve. Nonetheless, bank regulators said they will continue to place significant emphasis on the level of a bank's interest rate risk exposure and the quality of its risk-management process when they are evaluating its capital adequacy. The bank regulators have recommended to FFIEC that additional call report information be collected on interest rate risk to improve their ability to monitor banks' exposures. They anticipate that this information will be included in the 1997 call reports.

U.S. Regulators Issued a Final Rule to Address Market Risk

In September 1996, U.S. bank regulators issued a final rule based on the Basle Committee on Banking Supervision's January 1996 amendment to the Basle Accord. The rule developed consistent capital standards for market risk in internationally active dealer banks.⁹ The final rule requires that institutions adjust their risk-based capital ratio to take into account both the general and specific risk of their debt and equity positions in their trading accounts and the general market risk associated with foreign exchange and commodity positions, whether or not they are in the trading account. The rule requires that banks use their own internal models to provide a measure of the institutions' "value at risk," subject to regulatory modeling criteria.¹⁰ According to bank regulators, the elimination of the standardized-model approach suggested in the Basle Committee on Banking Supervision's May 1993 proposed rule to address market risk reflected strong industry opposition to the use of standardized models. Industry officials felt a standardized model approach would be unduly cumbersome, potentially inaccurate, and a disincentive to innovations and improvements in internal models. Bank regulators believe that banks with significant trading activities need to have good internal value-at-risk models and that a standardized model would be inappropriate and inadequate for such firms.

⁹The rules apply to any bank or bank holding company whose trading activity equals 10 percent or more of its total assets or whose trading activity equals \$1 billion or more. In addition, a regulator can include an institution that does not meet the criteria if deemed necessary for safety and soundness purposes or can exclude institutions that meet the applicability criteria. The new rules become effective January 1, 1998, but banks can begin implementing them as of January 1, 1997.

¹⁰Value at risk represents an estimate of the amount by which an institution's positions in a risk category could decline due to general market movements during a given holding period, measured with a specified confidence interval.

In order to adapt banks' internal models for regulatory purposes, the bank regulators have developed minimum qualitative and quantitative requirements that all banks subject to the market risk capital standard will have to use in generating their estimates of value at risk. The qualitative requirements reiterate the basic elements of sound risk management. According to the final rule, quantitative requirements are designed to ensure that an institution has adequate levels of capital and that capital charges are sufficiently consistent across institutions with similar exposures. (See app. V for a detailed discussion of criteria.) A bank's calculation of value at risk, even with the quantitative criteria applied, may not measure the full amount of capital necessary to protect against potential market risk losses. The value-at-risk models, for example, may not capture unusual market events. As a result, regulators require that a bank's value-at-risk capital charge be the larger of the previous day's value at risk, or the average daily value at risk over the last 60 business days multiplied by at least 3.

The final rule also requires banks to conduct periodic backtesting. Banks are to compare daily value-at-risk estimates generated by internal models against actual daily trading results to determine how effectively the value-at-risk measure identified the boundaries of gains or losses, consistent with the predetermined statistical confidence level. Regulators are to use the backtesting results to adjust the multiplication factor (multiplier) that banks use to determine their capital requirement.¹¹

The Federal Reserve Explores a Different Approach to Capital

On July 25, 1995, the Federal Reserve issued a request for comment on a "pre-commitment approach" to capital requirements for market risks in banks' trading activities. Under the pre-commitment approach, the bank would tell the regulator, in advance, how much of its capital was allocated for trading risks during some specified period of time, such as the next quarter. The estimate would determine the bank's regulatory capital requirement. To ensure that a bank's capital commitment was adequate to cover both its trading position risks and its ability to manage those risks, a regulator would provide incentives in the form of penalties for a bank's failure to contain its loss within the committed-capital amount. These penalties could include fines, higher capital requirements, restrictions on trading activities, or public announcement of the bank's delinquency. Further, both the commitment and a bank's risk-management system would be subject to review by regulatory authorities, who would have to

¹¹For example, if a bank exceeds its value-at-risk estimate 10 or more times in the previous 250 business days, its multiplier could be increased from 3 to 4.

be satisfied that the pre-committed amount was consistent with the bank's trading position and risk-management system.

This proposed approach presumes that methods for measuring and managing market risk will continue to evolve. It could encourage development of progressive risk management tools, because the proposed approach would devolve responsibility for setting capital from regulators to banks and provide incentives for banks to set capital prudently. If enacted with carefully designed penalties, it could create incentives for banks to set aside adequate capital for the purpose of meeting unexpected losses. According to a Federal Reserve Bank president, the Federal Reserve recognizes that the penalties cannot be so severe that they impair profitability or push a bank into financial distress. The approach could also encourage banks to implement adequate risk-management systems and internal models. Although no further action had been taken on this approach as of July 1996, industry reactions have been generally favorable. According to a Federal Reserve Bank president, the New York Clearing House Association is organizing a pilot study of pre-commitment that "will provide valuable experience with this innovative approach."¹²

Bank Regulators Have Expanded Regulatory Reporting Requirements

As part of their oversight, bank regulators collect information through quarterly call reports, which include information on derivatives activities. We recommended in our May 1994 report that financial regulators collect information on the extent of major counterparty concentrations and the sources and amounts of their derivatives earnings. Effective March 31, 1995, call report requirements were expanded to include much of the information on derivatives-related activities that we had recommended. Beginning in 1996, the call report was further expanded to include information on credit losses from derivatives.

The expanded call reports require separate reporting of notional/contract amounts for exchange-traded and OTC contracts. For each of the four types of underlying risk exposure—interest rate, foreign exchange, equity derivatives, and commodity and other—notional/contract amounts of off-balance sheet derivatives contracts are reported separately for trading or nontrading activities.¹³ Banks also are required to report the amortized

¹²The New York Clearing House Association, a pioneer American clearinghouse, was organized in 1853. In addition to its operational clearinghouse functions, its objectives are also promotional and self-regulative.

¹³Nontrading activities are further separated between contracts whose values are marked to market for call report purposes and those that are not.

cost and fair value of their high-risk mortgage securities and structured notes that are held in either the held-to-maturity or available-for-sale (AFS) portfolios.

Banks with greater than \$100 million in assets are subject to additional reporting requirements. For example, for each of the four types of underlying risk exposure, these banks are required to report the gross positive and negative fair values separately for (1) contracts held for trading purposes, (2) contracts held for purposes other than trading whose values are marked to market for call reporting purposes, and (3) contracts held for purposes other than trading whose values are not marked to market. In addition, these banks are required to report the combined revenue from trading cash and derivative instruments. They are also required to report the impact that derivatives contracts held for nontrading purposes have on the bank's net income. Further, these banks are required to separately disclose the net effect of derivatives on interest income, interest expense, and noninterest income and expense.

Although bank regulators now collect more derivatives information through call reports, the reports do not include information on individual counterparty exposures. Bank regulators did not view this information-reporting omission as a major concern because they said the information is available to them through their ongoing monitoring and surveillance activities. OCC told us that its examiners obtained and reviewed counterparty information on an ongoing and as-needed basis during the bank examination process, including information on the extent of major OTC dealers' counterparty concentrations. OCC officials also told us that collecting information on counterparty exposures through the call report would create confidentiality problems because of the sensitivity of the information. Federal Reserve officials told us that collecting quarterly individual credit exposure information would not be useful because it is fluid—counterparty exposures change frequently—and collateral is involved. In addition, they said that they are in constant contact with bank officials and have access to management reports, which would include this type of information.

We note, however, that routinely gathering information on individual counterparty credit exposures would enable regulators to identify credit concentrations across the industry. In addition, analyzing industrywide credit concentrations could help regulators manage potential threats to the financial system that could arise if counterparties were to fail or experience financial difficulties. Further, if a large derivatives dealer or

end-user were to fail or develop severe financial problems, regulators could use counterparty credit exposure information to identify and prioritize the institutions that would have to be contacted as part of mitigating a crisis or resolving a failure.

Bank Regulators Have Improved Their Oversight

Bank regulators have improved their oversight examinations of bank derivatives activities. They have improved their on-site examinations by focusing on derivatives risk management and key internal controls. They also have issued improved examiner guidance that includes specific guidance on issues related to risk management, trading, and derivatives activities. Further, they have developed special units and training to enhance examiners' technical expertise, conducted special studies, and increased the extent to which technical and examination-related information is shared among examiners.

Bank Examinations More Clearly Focused on Derivatives Risks

On-site examinations remain regulators' primary means for assessing the quality of management operations and internal controls. As part of the examination process, regulators are to assess the adequacy of internal control systems, specifically identify critical internal control procedures, test these procedures, and evaluate the results of these tests. For three of the seven major U.S. bank derivatives dealers identified in our 1994 report, we compared the examinations done by the Federal Reserve and OCC in 1994 to those they conducted in 1993. We found that the 1994 examinations were more clearly focused on the banks' derivatives risk-management and internal control systems. The extent to which bank regulators had documented the assessments they performed as part of their examinations also had improved. In addition, we compared the 1994 examinations of two of the banks to examinations conducted in 1992 and found the 1994 examinations were generally more comprehensive.

Using bank examination guidance and G-30 recommendations as criteria, we identified elements we believe are vital to an effective risk-management system.¹⁴ We then determined how bank examiners reviewed compliance with those elements. Although examiners reviewed the internal control systems at the seven banks, we found that the extent of internal control testing conducted as part of these examinations was generally limited. Federal Reserve and OCC bank examiners confirmed that they do not extensively test internal controls during on-site examinations.

¹⁴The elements include risk management, senior management and board oversight, capital requirements, internal audits, and control over sales practices.

They told us that one of the reasons they limit their internal control testing is that such testing is done by the banks' internal and external auditors. According to an OCC official, it is the regulators' job to make sure that internal and external auditors perform internal control testing. However, a Federal Reserve official acknowledged that more extensive internal control testing may be necessary and stated that Federal Reserve staff are considering using statistical sampling in their examinations. Supplemental guidance issued by the Federal Reserve in May 1996 stated that the degree of testing conducted during an examination is to depend on the quality of management practices and the materiality of the activities or functions being reviewed.

In addition, bank regulatory officials told us that they review certain key processes during every examination, including the calculation of position valuations, credit approval, adherence to internal position limits, management reporting, and audit coverage. Bank regulatory officials also said they concentrate examiner resources on intensive reviews in those areas where they believe significant weaknesses exist.

We found that bank examiners used FDICIA-required internal control assessment reports to varying degrees in the examination process.¹⁵ Examiners can use the work of management and auditors to supplement their examination procedures as long as they adequately review the work. Examiners at one bank had reviewed the internal control assessment reports and had followed up with bank personnel to determine whether the deficiencies identified in the assessments had been corrected. Examiners at five of the banks had reviewed the internal control assessments but did not use them extensively in conducting their examinations. Examiners at the seventh bank said that the internal control assessment reports did not contain any more information than they obtained from other sources and thus were not used. A Federal Reserve official noted some bank personnel had credited the requirement for accelerating the pace of internal control improvements at their banks.

We found that examiners at all seven banks reviewed internal audit reports, followed up on internal audit report findings, and assessed the qualifications of the banks' internal audit staff. However, we found no evidence that bank examiners had extensively reviewed the workpapers and supporting materials for the internal audit reports. For example, at

¹⁵The 1994 examinations we reviewed were the first examinations completed under FDICIA, which also requires management to annually assess and report on the effectiveness of internal controls over financial reporting. FDICIA further requires an external auditor attestation of management's assertions about the adequacy of controls, which is publicly available.

three of the banks, we found no evidence that examiners had reviewed internal audit workpapers during the 1994 examinations. At the other four banks, we found that examiners had looked at only selected internal audit workpapers. Similarly, examiners noted when external auditors had done relevant work, but we found no evidence that examiners reviewed external auditors' workpapers during these examinations. Such reviews could be an important means for determining the adequacy and scope of the work of internal and external auditors. In addition, auditors' workpapers may provide useful information not included in their reports, which cover only material weaknesses. Since our review of these examinations, bank regulators have undertaken efforts to improve cooperation between external auditors and examiners and have attempted to identify areas in which examiners could better use the work of external auditors, including external audit workpapers.

Bank Regulators Issued New and Updated Examination Guidance

Since our 1994 report, OCC and the Federal Reserve issued various types of detailed guidance, which focused on supervising and examining bank risk-management and internal control systems. Bank regulators told us that most of the guidance issued since our 1994 report simply formalized the approach and procedures that bank examiners had used for some time. Regulators told us they had been moving away from a product-oriented examination approach to a more risk-oriented approach, which is reflected in the guidance issued since 1994. In addition to issuing more detailed guidance and examination procedures for risk management, the Federal Reserve and OCC issued guidance on sales practices,¹⁶ structured notes, FCM activities, and trading activities in emerging markets. OCC unveiled its "supervision by risk" program, which it considers to be a departure from traditional supervision because of its forward-looking nature that focuses on the quality of risk-management systems. The Federal Reserve issued supplemental guidance on risk-focused examinations.

OCC Examination Guidance Focuses on Bank Risk Management

Between May 1994 and August 1996, OCC issued new and expanded guidance to its examiners. In May 1994, OCC issued answers to commonly asked questions about BC 277.¹⁷ In July 1994, OCC issued additional guidance to national bank examiners and banks about the market and

¹⁶This guidance is being examined as part of ongoing GAO work.

¹⁷BC 277, "Risk Management of Financial Derivatives" (Oct. 1993), is guidance that outlines specific components of risk management and generally includes the role of senior management and board oversight; management of various risks; and discussions of relevant legal issues, capital adequacy, and accounting.

liquidity risks associated with structured notes. In October 1994, OCC issued detailed guidance and comprehensive examination procedures to national banks and examiners to accompany BC 277.

In November 1995, OCC issued specific guidance for examinations of CFTC-registered FCMs that are operating subsidiaries of commercial banks. According to an OCC official, the guidance was an outgrowth of concerns created by the failure of Barings due to the activities of its FCM affiliate. The underlying risks associated with FCM activities are not new to banking, although their measurement and control can be more complex than other traditional banking activities. The guidance informs examiners about what controls should be in place, including the role of a bank's board of directors and senior management in developing internal control policies and procedures and risk-management systems. The guidance also identifies nine categories of risk on which examiners should focus.¹⁸ Examiners are also to focus on board of director oversight of the bank's FCM activities by outlining what directors and management must do to ensure adequate oversight of FCM activities. The guidance should help to reinforce the importance of sound risk management and adequate internal controls to bankers, because failure to comply could be considered an unsafe and unsound practice.

In recent years, OCC has been incorporating risk-management assessments into its examination activities. In December 1995, OCC issued examiner guidance on its revised approach to supervision that is designed to expand, enhance, and standardize the way examiners evaluate national banks with assets of at least \$1 billion. This approach, supervision by risk, focuses on evaluating the quantity of risk exposure in an institution and determining the quality of the risk-management system in place to control that risk. To achieve more comprehensive examinations, OCC used the same nine categories of risk identified in the November 1995 guidance for FCM activities. Bank examiners are to use risk profiles prepared for each bank to focus attention on the most serious concerns in a bank. According to the Comptroller of the Currency, supervision by risk will help OCC do a better job of responding to current and future risks to banks and the U.S. financial system. He also noted that this proactive approach is a major departure from the traditional transactional approach or more recent approaches, which examined how banks handled past levels of risk.

¹⁸The nine categories of risk include credit risk, interest rate risk, liquidity risk, price risk, foreign exchange risk, transaction risk, compliance risk, strategic risk, and reputation risk.

Also, in December 1995, OCC issued additional guidance to examiners on emerging market countries' products and trading activities. According to an OCC official, "trading and investment in the emerging countries makes this one of the fastest growing global financial markets." The examiner guidance includes information on written policies and procedures, country exposure, country exposure limits, aged or stale-data inventory controls, compensation, and separation of functions.

The Federal Reserve's
Examination Guidance Also
Focuses on Risk Management

The Federal Reserve also issued new and expanded guidance to its examiners. In March 1994, the Federal Reserve issued a new comprehensive examination manual that addressed trading activities. It included more extensive instructions on evaluating internal control systems than previous guidance. In August 1994, the Federal Reserve issued examination guidance on structured notes, highlighting their risks and the need for examiners to ensure that institutions are using them according to their investment policies and procedures. In addition, in March 1995, the Federal Reserve issued "Evaluating the Risk Management and Internal Controls of Securities and Derivative Contracts Used in Nontrading Activities." It included specific guidance for examiners on evaluating the risk-management practices used by banks for securities and derivatives contracts of nontrading activities and stressed the importance of an active board and senior management.

In November 1995, the Federal Reserve issued new guidelines on rating the adequacy of risk-management processes and internal controls. Examiners were instructed to give sufficient weight to the importance of internal controls and risk management when evaluating management under the bank and bank holding company rating systems. In 1996, according to Federal Reserve officials, examiners began giving a formal supervisory rating to the adequacy of a bank's risk-management processes, including internal controls. Under the bank regulators' Uniform Financial Institutions Rating System, commonly referred to as the CAMEL rating system—which assesses capital adequacy, asset quality, management, earnings, and liquidity—regulators would give risk management and internal controls significant weight when evaluating management on a scale from 1 (strong) to 5 (unsatisfactory). The guidance stressed the fundamentals of sound internal controls discussed previously in this report. In July 1996, FFIEC requested comments on proposed changes to the existing CAMEL rating system that included increasing the emphasis on the quality of risk management in each component and possibly adding a new, sixth component to specifically address market risk sensitivity.

Unlike the Federal Reserve guidance on CAMEL ratings, the FFIEC proposal, if adopted, would be used by all bank regulators.

In May 1996, the Federal Reserve issued additional examination guidelines on “Risk-Focused Safety and Soundness Examinations and Inspections.” The guidance outlines the risk-focused examination process. The Federal Reserve noted that this is a dynamic process because the procedures focus on

“assessing the types and extent of risks to which a banking organization is exposed, evaluating the organization’s methods of managing and controlling its risk exposures, and ascertaining whether management and directors fully understand and are actively monitoring the organization’s exposure to these risks.”

Bank Regulators Have Taken Actions to Increase Expertise, Conducted Special Studies, and Improved Information Sharing

In addition to issuing revised examination guidance, bank regulators have developed special units or expertise to broaden their technical capability, conducted special studies, and enhanced information sharing. OCC officials told us that in June 1994, they established a Risk Analysis Division to, among other things, assist examiners in evaluating the models used by banks to measure and analyze risk. Analyzing the integrity of bank value-at-risk models is increasingly important to regulators because these models are now used to incorporate market risk from trading activities into the risk-based capital calculation. Focusing on banks with over \$20 billion in assets, OCC officials from the Risk Analysis Division told us that they accompany examiners during on-site bank examinations and communicate with examiners on an ongoing basis and with bank personnel as needed.

We found that Federal Reserve examiners also performed technical analysis as part of their examinations. For example, Federal Reserve examiners performed a detailed, technical analysis of one bank’s pricing model for mortgage-backed securities. On the basis of their analysis, examiners suggested several improvements to the model, including discussing weaknesses in the model’s use of a particular mathematical technique. These types of examination activities are critical in light of changes to the Basle Accord to incorporate market risk using internal bank models.

Bank regulators also conducted special studies to improve their oversight of derivatives and trading activities. For example, in May 1994, OCC staff completed a study that compared the methodologies that active bank

derivatives dealers use to measure market risk exposure.¹⁹ This study summarized the banks' market risk-measurement practices and made several recommendations for improving examiner supervision and evaluation of bank risk-management systems. In December 1995, staff from various bank regulators issued a report on an examination of the trading activities of commercial banks.²⁰ The report addressed the growing importance of trading activities and trading revenues at major U.S. banks. It also addresses concerns raised by financial regulators, Congress, and others that trading activities could pose undue risk to both individual banks and the banking system in general. Specifically, the report noted that concerns had been raised about the volatility of trading revenues compared to other banking activities and the possibility of trading activities producing sizeable and sudden losses. Federal Reserve officials told us they were interested in putting trading activities "in the same light as other banking activities." The study found that between June 1984 and June 1995, trading activities resulted in less volatility to dealer banks' earnings than lending activities and that trading revenues were consistently positive for the major dealer banks.²¹

Bank regulators also have taken steps to improve information sharing among examination staff engaged in derivatives and trading activities work. OCC officials told us they hold regular meetings of staff involved with capital markets and periodic conferences where information is shared. Federal Reserve officials also indicated that they conduct information and training sessions for their capital markets examiners at least every 6 months. In addition, in June 1994, the Federal Reserve formed the Capital Markets Coordinators group, which consists of senior Federal Reserve officials, to meet with staff three times a year to discuss current capital markets policy and examination issues.

¹⁹"Market Risk Measurement and Evaluation" (May 1994), Alfred P. Crumlish and Roger Tufts.

²⁰"Trading Activities at Commercial Banks," (Dec, 1995), a paper prepared by the staffs of OCC, FDIC, and the Federal Reserve.

²¹Of the quarterly reports filed during this time frame by the seven largest bank dealers as of June 1995 (Bank of America NT&SA; Bankers Trust Company; Citibank, NA; Chase Manhattan Bank, NA; Chemical Bank; Morgan Guaranty Trust Company; and Nationsbank, NA Carolinas), six instances occurred in which a bank had a loss from trading activities for the quarter, and one bank accounted for four of these instances.

The Federal Reserve Took a Derivatives-Related Enforcement Action

Bank regulators have the authority to implement enforcement actions against an institution that fails to comply with laws and regulations.²² On December 4, 1994, the Federal Reserve Bank of New York entered into a formal written agreement with Bankers Trust New York Corporation, a bank holding company, and two of its subsidiaries concerning leveraged derivatives.²³ This was the first enforcement action taken by the Federal Reserve against a banking organization for its derivatives activities.

The agreement required Bankers Trust to take action in eight areas related to its leveraged derivatives business. Items addressed included enhancing management and supervision, strengthening internal audits, and ensuring that each customer has the capacity to understand the nature and characteristics of any leveraged derivatives transaction entered into with Bankers Trust. The agreement also specified that Bankers Trust hire outside counsel that is acceptable to the Federal Reserve Bank of New York to assist Bankers Trust in reviewing (1) its method for allocating the revenues and expenses of its leveraged derivatives business among Bankers Trust and its affiliates and (2) its compliance with firewalls related to corporate separateness.²⁴ In addition, the agreement required special counsel to review any employee conduct related to the leveraged derivatives business that does not comport with bank policy or applicable law and determine whether disciplinary action is appropriate. As of August 1, 1996, the agreement remained in place.²⁵

Conclusions

Bank regulators have improved their oversight of derivatives activities through expanded risk-based capital standards, more extensive

²²Regulators use both formal and informal enforcement actions. Formal actions are legally enforceable, and regulators can use them to compel banks to take actions to address supervisory concerns. Formal actions range from issuing cease and desist orders and ordering the suspension, removal, or prohibition of individuals from bank operations to assessing civil money penalties and entering into formal agreements with banks. Formal actions are authorized by statute. Therefore, if banks do not consent to a formal action or fail to comply, regulators may enforce the action through administrative or legal proceedings. Informal actions include agreements reached through memorandums of understanding, commitment letters, and board resolutions.

²³Leveraged derivatives transactions are defined in the agreement as “derivative transactions (i) where a market move of two standard deviations in the first month would lead to a reduction in value to the counterparty of the lower of 15 percent of the notional amount or \$10 million, and (ii) for notes or transactions with a final exchange of principal, where counterparty principal (rather than coupon) is at risk at maturity, and (iii) for coupon swaps, where the coupon can drop to zero (or below) or exceed twice the market rate for that market and maturity, and (iv) for spread trades that include an explicit leverage factor, where a spread is defined as the difference in the yield between two asset classes.”

²⁴Firewalls describe the legal separation of banking and broker/dealer operations within a financial institution.

²⁵In July 1996, independent counsel completed its report on Bankers Trust.

information-reporting requirements, and additional supervisory guidance and procedures. These improvements were consistent with the recommendations in our May 1994 report. The Federal Reserve staff's proposed pre-commitment approach could fundamentally change the way the capital requirement for market risk is calculated. Shifting the onus of capital determination to banks could help better ensure that capital reflects current market conditions and the latest measurement methodologies. However, regulators would have to continue to closely scrutinize the bank's risk-management and control systems and carefully craft regulatory penalties that would deter undercapitalization but would not be so excessive as to compromise profitability.

Information-reporting requirements continue to be one of the primary ways regulators monitor bank activities, including derivatives. The expanded call report requirements that include separate reporting of notional/contract amounts for exchange-traded and OTC contracts and related revenue data should enhance bank regulators' oversight capabilities. Although bank regulators now collect more derivatives-related information than they have in the past, they still do not routinely collect and analyze industrywide information on individual counterparty credit exposures. Such information could help regulators monitor potential problems and respond to financial emergencies.

The Federal Reserve and OCC's examination guidance that focuses on risk management and internal controls should help promote sound internal controls. Bank regulators' efforts to increase staff expertise, conduct various studies, and expand information sharing should help improve examiners' abilities to oversee the derivatives activities of banks.

Chapter 4 MAY 1994 REPORT SUMMARY

Findings

SEC's regulatory jurisdiction pertains only to activities related to securities. Therefore, SEC does not regulate affiliates of broker-dealers whose activities involve products that are not securities and who are not registered as broker-dealers. Like SEC, CFTC's authority does not apply to a firm's entire organizational structure. State insurance regulators do not directly oversee the financial condition of affiliates of insurance companies that are OTC derivatives dealers. Derivatives dealer affiliates of insurance companies are subject to minimal reporting requirements and no capital or examination requirements.

Five major U.S. broker-dealers that we identified were conducting their OTC derivatives dealing in one or more affiliates outside the entity regulated by SEC or CFTC. We identified three OTC derivatives dealers that were affiliates of U.S. insurance companies. These eight OTC derivatives dealers constituted a rapidly growing component of the derivatives markets.

Recommendations

We recommended that Congress require federal regulation of the safety and soundness of all major U.S. OTC derivatives dealers. We said the immediate need was for Congress to bring the unregulated OTC derivatives activities of securities firm and insurance company affiliates under the purview of one or more of the existing federal financial regulators and to ensure that derivatives regulation is consistent and comprehensive across regulatory agencies.

SEC and CFTC OTC Derivatives Oversight Has Improved, but Insurance Regulators' Oversight Remains Unchanged

Since our May 1994 report, SEC and CFTC have taken several steps to improve their oversight of the major OTC derivatives dealers that were affiliates of securities firms. First, CFTC adopted risk-assessment rules that allow it to receive periodic information on certain FCM affiliates. Second, DPG's framework for voluntary oversight, which was developed in conjunction with SEC and CFTC, represented an important first step in the evolution of oversight of the major OTC derivatives dealers that are affiliates of U.S. broker-dealers. Third, SEC continued its efforts to explore and evaluate whether capital standards should be modified in light of activities in the derivatives market. In 1995, CFTC began similar efforts to reevaluate its capital standards to determine whether the current method of measuring capital requirements has kept pace with the changing financial environment. Fourth, SEC and CFTC took enforcement actions involving derivatives activities. Although these were positive steps for oversight of securities and futures firms, oversight of insurance companies' derivatives dealer affiliates remained unchanged.

CFTC Implemented Risk-Assessment Rules

On December 31, 1994, CFTC implemented risk-assessment rules that allow it to collect information to assess the risks posed by the activities of FCM affiliates that pose material risks to the FCM.¹ CFTC consulted with SEC, which had adopted similar information risk-assessment rules in 1992, and other financial regulators to develop its risk-assessment rules. The CFTC risk-assessment rules require FCMS to provide certain information about their holding company and affiliates.² Organizational charts and information on risk-management policies are to be provided once with periodic updates as needed, and financial statements are to be provided annually. The rules provide CFTC with the authority to seek additional information as necessary. CFTC and SEC officials credited information acquired from their risk-assessment rules, along with other information available to them, with enabling them to determine whether U.S. firms had any large exposures to Barings. (See chs. 2 and 6 and app. I for additional discussion about Barings.)

CFTC deferred implementing final risk-assessment rules for reporting information on (1) noncustomer accounts, (2) financial position and other information relating to an FCM's material affiliates, and (3) the occurrence

¹The risk-assessment rules generally apply to FCMS that hold customer funds of \$6,250,000 or greater, maintain adjusted net capital in excess of \$5,000,000, or are clearing members of a contract market.

²CFTC's risk-assessment rules provide exemptive provisions for entities that are subject to the regulatory oversight of other domestic and foreign regulatory bodies.

of triggering events.³ However, in May 1996, CFTC incorporated certain of these proposed triggering events into its rule on early warning requirements. For example, the new rule requires FCMs to report to CFTC when a 20 percent or greater reduction in their net capital occurs.⁴ CFTC was still considering implementation of the balance of the deferred risk-assessment proposal as of August 1996.

The DPG Framework Provides for Voluntary Oversight

DPG member firms, in coordination with SEC and CFTC, developed a self-regulatory framework to address public policy issues raised by the OTC derivatives activities of “unregulated affiliates of SEC-registered broker-dealers and CFTC-registered FCMs.” DPG’s voluntary self-regulatory framework consists of four interrelated components. The first component, which is discussed in chapter 2, outlines management controls. The second component is a series of quantitative reports that cover credit risk exposures and related information associated with OTC derivatives activities.⁵ The third component consists of an approach for estimating credit and market risk exposures associated with OTC derivatives activities and an approach for evaluating those risks in relation to capital. The fourth component offers guidelines governing relationships with nonprofessional counterparties. As noted in the framework, this initiative is considered part of a process, not a single event. As DPG member firms and SEC and CFTC gain insights, they anticipate further refinements to the framework. Although the DPG framework is an important step in the evolution of oversight of the major OTC derivatives dealers that are affiliates of U.S. broker-dealers, it does not close the regulatory gaps that exist for these OTC dealers.

³In its proposed final rule, CFTC identified eight events that could have triggered ad hoc reporting.

⁴CFTC Rule 1.12 established financial early warning reporting requirements for FCMs and introducing brokers that are designed to provide advance notice of financial or operational problems. In addition to incorporating the 20-percent reduction in net capital early warning requirement, CFTC also incorporated three additional early warning requirements applicable to all FCMs. FCMs are also to report (1) a planned reduction in excess adjusted net capital of 30 percent or more 2 business days prior to the reduction, (2) a margin call that exceeds an FCM’s excess adjusted net capital that remains unanswered by the close of the business day following the issuance of the call, and (3) whenever excess adjusted net capital is less than 6 percent of the maintenance margin required to support positions of noncustomers carried by the FCM unless the noncustomer itself is subject to CFTC’s minimal financial requirements for an FCM or SEC’s minimum requirements for a securities broker-dealer. These reporting requirements harmonize CFTC’s early warning reporting requirements with industry self-regulatory organizations.

⁵The DPG framework defines OTC derivative products for enhanced reporting purposes as interest rate, currency, equity, and commodity swaps; OTC options; and some currency forwards.

The Voluntary Framework Provides Additional Information to SEC and CFTC

DPG firms voluntarily provide information on their unregulated OTC derivatives affiliates that was not required under SEC and CFTC risk-assessment rules. Since 1995, reporting DPG member firms have provided SEC and CFTC quarterly reports on (1) credit concentrations (specific information on individual counterparty exposures), (2) the credit quality of their portfolios, (3) net revenue data, and (4) consolidated volumes of derivatives activity.⁶ SEC and CFTC had received all agreed-upon reports from the five reporting DPG firms through year-end 1995.⁷ SEC and CFTC officials said that these reports augment the information they receive through their risk-assessment rules and other financial and position information and that the reports are being analyzed and integrated into their risk assessments of broker-dealers and FCMS. These reports, like the information collected by SEC and CFTC under their risk-assessment rules, are confidential and not publicly available.

The credit concentration reports that the reporting DPG firms provided were based on their affiliates' top 20 current net credit exposures by counterparty.⁸ The firms provided the information without identifying individual counterparties, but SEC and CFTC can request the names when necessary. For each of the top 20 current net credit exposures, the firms also reported information on the net replacement value, gross replacement value, and potential additional credit exposure. According to SEC, the DPG firms' reported replacement value information is enhanced by the notional/contract values they report under the risk assessment rules. SEC believes this will provide a better understanding of the risks that the firms incur and their level of trading. However, a CFTC official told us that unnamed counterparty disclosures may not be useful in a market crisis situation when it may be difficult to contact firms quickly.

The five reporting DPG firms also have provided separate quarterly reports on the overall credit quality of their portfolios that includes information on the net exposure, aggregate net replacement value, and gross replacement value for all counterparties in the portfolio. The first report is segmented by credit rating category and industry. The other report is segmented by country for the top 10 geographic exposures. This type of information

⁶As discussed in chapter 2, CS First Boston is not required to submit information to SEC or CFTC because it has an OTC derivatives affiliate that is regulated by the Bank of England. However, SEC officials told us that under their risk assessment rules, they receive copies of quarterly financial reports that the affiliate files with the Bank of England.

⁷SEC and CFTC officials told us that they had received all agreed-upon reports through August 1996.

⁸Current net exposure equals the replacement value, less the effect of legally enforceable netting and application of collateral.

could be a useful monitoring tool if it identified potential vulnerabilities from geographic and industry concentrations. However, industry segments designated by the International Swaps and Derivatives Association (ISDA) for reporting purposes may be too broad to identify credit concentrations within specific industries.⁹ SEC and CFTC officials acknowledged that the specific industry segments were not as useful as they could be because they are so broad, but they said that this is the type of issue they intend to evaluate in revising the DPG framework.

The DPG firms also provided a report to SEC and CFTC on monthly net revenue data—trading profit/loss less interest and dividend income/expense. The report included OTC derivatives and related activities either by generic product type or by business unit categories, incorporating one or more of the product types. The generic product types consisted of four categories: interest rate products, currency and foreign exchange products, equity derivatives, and commodity derivatives. Such periodic revenue data can be useful for regulators when they are monitoring a firm’s risk profile.

Further, the firms provided a report on the consolidated notional/contract amount of outstanding OTC derivatives transactions and current net credit exposures. This report was segmented by product for the holding company group of which the unregulated OTC derivatives affiliate was a member.

The DPG Framework Suggested How to Estimate Capital at Risk but Did Not Establish Capital Standards

The third component of the framework—evaluating risk in relation to capital—has two parts. First, it suggests a way to estimate market and credit exposures associated with OTC derivatives activities. Second, it advocates an approach for evaluating those risks in relation to capital. According to the DPG framework, “capital-at-risk” estimates are imperfect measures of potential losses associated with market and credit risks.¹⁰ However, it noted that managers and supervisors can use them to gauge capital adequacy and have agreed to report the estimates periodically to SEC and CFTC.

Although DPG firms’ estimates of capital at risk for market and credit risks are not intended to be capital standards, the estimates incorporate an

⁹The DPG framework uses ISDA-designated segments, which are ISDA members and non-ISDA members. These are broken down by corporates, financial institutions, government/supranationals, and others.

¹⁰Capital at risk, as defined by DPG, is the maximum loss expected to be exceeded once in every 100 weekly intervals.

approach similar to the one used by bank regulators in calculating capital to incorporate market risk. The capital-at-risk estimate is to be generated by the DPG reporting firm's proprietary model, as is the value-at-risk estimate used by U.S. bank regulators for certain capital calculation purposes. Although DPG used an approach for estimating capital at risk for market risks similar to the bank regulators' value-at-risk approach, it rejected the use of a multiplier to link capital at risk to capital levels. Moreover, DPG firms rejected the use of add-ons to estimate potential future credit risk because the add-on amounts are based on notional/contract amounts, which they do not consider to be meaningful measures of risk. (See ch. 3 for a discussion of such calculations.) The DPG framework used a combination model- and formula-based approach to estimate credit risk. DPG firms consider this to be an interim approach for estimating current and potential credit risk. They noted in the framework that they anticipate cooperating with requests by SEC and CFTC to compute potential credit risk using other methodologies.

The DPG member firms developed minimum standards and audit and verification procedures to ensure that performance characteristics of all models used to estimate capital at risk for market risk are broadly similar and rigorous. Because the potential for risk of loss beyond the capital-at-risk estimate exists, DPG firms agreed to supplement these estimates with other potential loss estimates resulting from defined stress scenarios. The framework also outlines a common approach to audit and verify technical and performance characteristics because it allows the DPG firms to use proprietary models that may be unique. SEC and CFTC have received annual reports from the DPG reporting firms that summarized external auditors' reviews of these models. However, because no generally accepted criteria for modeling exist that would allow an external auditor to assess compliance, the reports contained no opinions. SEC and CFTC have been working with the DPG firms on how best to resolve this issue.

In the second part of the framework's capital-at-risk component, the DPG firms advocate, for a transitional period, an approach for evaluating market- and credit-risk estimates in relation to capital levels. In an evaluation of the adequacy of existing capital levels at DPG-member affiliates, the framework advocates an oversight approach that encourages regulators and senior managers to take into account the following factors: the firm's structure, internal control and risk management systems; quality of management; risk profile and credit standing; actual daily loss experience; ability to manage risks as indicated by the firm's ability to perform and document stress and contingency analysis; and overall

compliance with the framework's policies and procedures. The DPG firms anticipate that as experience is gained with the overall DPG framework, and depending on the evolution of thinking and policies among regulators internationally, this approach may require further refinement or modification.

**DPG Offers Guidelines for
Counterparty
Relationships**

The DPG framework also provides guidelines for its members' relationships with nonprofessional counterparties. The guidelines address a number of subjects, including promotion of public confidence; provision of generic risk disclosure statements; clarification of the nature of the relationship between professional intermediaries and nonprofessional counterparties; and preparation of marketing materials, transaction proposals, scenario or other analyses, and valuations and quotations. The DPG firms agreed to provide new nonprofessional counterparties with a written statement identifying the principal risks associated with OTC derivatives activities and clarifying the nature of the relationship between parties. We are not discussing issues involving counterparty relationships, known as sales practices issues, in detail in this report, because we are addressing them in ongoing work.

**Gaps in Regulation of
Securities and Futures
OTC Derivatives Dealer
Affiliates Remain**

The DPG framework is a positive step toward having some federal oversight of large OTC derivatives dealers that are affiliates of broker-dealers or FCMS. However, compliance with the reporting requirements is voluntary and has been limited to the five reporting DPG member firms. Furthermore, neither SEC nor CFTC has explicit authority to enforce operational changes, conduct routine examinations, or impose capital requirements for the major OTC derivatives dealers that are affiliates of U.S. broker-dealers or FCMS.

Through the DPG framework, the five reporting firms voluntarily report periodic information to SEC and CFTC or have agreed to make available to them certain information upon request. According to SEC, these five firms accounted for over 90 percent of the total derivatives notional/contract value for all U.S. securities derivatives dealers in 1995. The DPG information provided to SEC and CFTC is consistent with our 1994 report recommendation on information reporting. However, the reporting is voluntary, and the framework contains no provisions for addressing noncompliance. Withdrawal of a DPG member firm's endorsement of the framework, or its failure to provide the information agreed upon in a timely manner, could leave SEC and CFTC without this information at

critical times or for a large part of the market. SEC and CFTC officials told us that their oversight of the parent securities and futures firms and the threat of damage to a firm's reputation provide an incentive for DPG members to adhere to the framework.

SEC and CFTC Continued Efforts to Revise Capital Standards

SEC and CFTC have continued efforts to revise their capital standards. SEC officials stated that they were continuing to explore and evaluate whether their capital rules should be modified in light of activities in the derivatives markets and in the OTC market in particular. Likewise, CFTC was in the initial phases of reviewing its capital standards and is considering whether its minimum capital standards have kept pace with the changing financial environment. An additional consideration in revising capital standards is that existing capital standards may create incentives for some broker-dealers and FCMS to conduct certain activities through their unregistered affiliates to avoid capital requirements that apply only to registered broker-dealers and FCMS. For example, under current SEC and CFTC capital requirements, payments that are due a broker-dealer or FCM on interest rate swaps, which are deducted from the firm's net worth, are the equivalent of a 100-percent capital requirement. However, if these swaps were conducted in an unregistered affiliate, they would not be subject to capital requirements.

SEC, with CFTC cooperation, is also exploring whether proprietary models can be incorporated into the capital calculation process. DPG firms use proprietary (internal) models in their capital-at-risk estimates, and regulators plan to monitor the results of these estimates in evaluating whether proprietary models can be used effectively to determine capital adequacy. SEC officials told us that they monitored closely the development of the Basle Accord amendment incorporating market risk into international bank capital standards.

In September 1995, CFTC hosted a roundtable discussion on various issues related to capital requirements. Issues discussed included the purposes of capital requirements, the types of business that should be covered and the degree to which they should be covered, the way risk should be measured, and the way quality of capital should be determined. In addition to reviewing the need for specific revisions to existing capital standards, CFTC identified potential longer term projects that included developing a new risk-based capital standard and aggregating SEC and CFTC capital requirements for firms registered as both broker-dealers and FCMS.

SEC and CFTC Took Enforcement Actions Against Dealer and End-User Activities

SEC and CFTC have the authority to take enforcement actions against institutions that fail to comply with the laws and regulations they are responsible for enforcing.¹¹ SEC and CFTC have worked together and individually to bring actions against dealer and end-user activities involving derivatives. As a result of the four enforcement actions we reviewed, SEC and CFTC collected a total of \$12.25 million in civil penalties.

SEC and CFTC Took Actions Against a Broker-Dealer

On December 22, 1994, BT Securities Corporation settled separate administrative proceedings with SEC and CFTC and agreed to pay a fine of \$10 million. Both proceedings involved the sale of derivative products by BT Securities to Gibson Greetings, Inc. According to CFTC's action, BT Securities, a broker-dealer registered with SEC, also acted as a commodity trading advisor subject to CFTC jurisdiction because of its advisory relationship with Gibson. SEC and CFTC both highlighted their cooperative effort in bringing an action against BT Securities and said that they were sending a strong message that SEC and CFTC will work together to police the market against fraud involving derivatives.

In the SEC proceeding, BT Securities, without admitting or denying the findings, consented to issuance of an SEC order finding that it caused reporting violations by Gibson and violated antifraud provisions of federal securities laws. SEC also found that BT Securities failed to supervise their employees.¹² The violations stemmed from OTC derivatives contracts BT Securities sold to Gibson. The reporting violations were connected with Gibson's 1992 and 1993 financial statements filed with SEC. In preparing those statements, according to SEC, Gibson relied on valuations of its derivatives transactions provided by BT Securities. These valuations understated Gibson's losses by more than 50 percent from the values recorded on Bankers Trust Company's books.¹³ The SEC finding concerning fraud violations involved two derivatives contracts BT Securities sold to Gibson that SEC found were securities within the meaning of the federal

¹¹Their enforcement authorities include court injunctions; temporary restraining orders; and various administrative proceedings and sanctions (such as assessment of civil monetary penalties, censure, suspension and revocation of registration, and issuance of cease and desist orders).

¹²Subsequent to the December 1994 BT Securities case, SEC took administrative actions against two former BT Securities employees involved in the violations.

¹³Bankers Trust Company, a bank affiliate of BT Securities, was the counterparty to each derivative product that BT Securities sold to Gibson. Bankers Trust Company maintained on its books certain information relating to derivatives transactions with Gibson.

securities laws.¹⁴ The finding stated that representatives of BT Securities made material misrepresentations and omissions in the offer and sale of these securities.

To avoid potential short-term dislocation of OTC derivatives markets and direct regulatory consequences for OTC derivatives dealers, SEC issued a temporary exemptive order concurrent with the order citing reporting and antifraud violations of BT Securities. The exemptive order noted that the complexity and rapid proliferation of derivative instruments raised questions in the industry regarding the proper statutory and regulatory designation of certain OTC contracts. These concerns were compounded by a trend among dealers to conduct a range of OTC derivatives activities in unregistered entities. To provide certainty to participants in the OTC derivatives market concerning their registration obligations, the exemptive order provided relief from broker-dealer registration in connection with certain transactions involving individually negotiated, cash-settled OTC options on debt securities or groups of indexes of such securities. The transactions included were those that (1) are documented as swap agreements and (2) satisfy the terms of CFTC’s swap exemptions. The exemption was retroactive to June 6, 1934, the date of the enactment of the Securities Exchange Act of 1934, and was to expire September 30, 1995. SEC subsequently extended this order to September 30, 1996.¹⁵

In the CFTC proceeding, BT Securities, without admitting or denying the allegations, consented to the issuance of a CFTC order finding that BT Securities violated the antifraud provision of the Commodity Exchange Act related to commodity trading advisors in connection with swaps sold to Gibson. From November 1991 to March 1994, BT Securities and Gibson entered into a series of derivatives transactions, all of which were swaps. Over time, the derivatives BT Securities sold to Gibson became increasingly complex, risky, and intertwined. Many had leverage factors that caused Gibson’s losses to increase dramatically with relatively small changes in interest rates. CFTC found that representatives of BT Securities had entered into an advisory relationship with Gibson sufficient to cause BT Securities to have become a commodity trading advisor with respect to

¹⁴In its proceeding, SEC found that a Treasury-linked swap sold to Gibson was a cash-settled put option based on the spread between the price of a Treasury security and the arithmetic average of the bid and offered yields of a Treasury note. Another transaction, a knock-out call option sold to Gibson, was a cash-settled call option based on the yield of a U.S. Treasury security. According to SEC’s proceeding, Gibson entered into several amendments to the Treasury-linked swap and knock-out call option proposed by Bankers Trust, and each “was a security within the meaning of the federal securities laws.”

¹⁵See SEC Release No. 34-36270, CFR, Sept. 22, 1995 (Vol. 60, No. 188).

its derivatives transactions with Gibson. Further, CFTC concluded that BT Securities defrauded Gibson in violation of the Commodity Exchange Act.

In addition to the civil penalty, SEC and CFTC required BT Securities to cease and desist from violating securities and futures laws and hire an independent consultant to conduct a review of the firm's OTC derivatives business. They also required BT Securities to adopt recommendations that the independent consultant made.

SEC Took Enforcement Action Against an End-User

In October 1995, SEC settled administrative proceedings against Gibson Greetings, Inc., and two of its senior officers. SEC found that they violated or caused violations of the securities laws in connection with derivatives transactions between Gibson and BT Securities. Without admitting or denying any wrongdoing, Gibson and the two officers consented to entry of an order requiring them to permanently cease and desist from committing or causing any violations of the reporting and books and records provisions of federal securities laws. SEC found that in 1993 Gibson engaged in a series of derivatives transactions with BT Securities that, for accounting purposes, amounted to trading or speculation. According to SEC, those transactions should have been recorded at market value with changes recognized through the income statement, but instead they were deferred. As a result, Gibson's quarterly reports on SEC's Form 10-Q¹⁶ for the first three quarters of 1993 failed to disclose gains and losses from derivatives to shareholders. SEC also found that Gibson failed to have adequate books, records, and internal controls concerning its derivatives transactions.

CFTC Took Enforcement Action Against an FCM

On July 27, 1995, MG Refining and Marketing (MGR&M) and MG Futures, Inc., (MGFI) agreed to pay \$2.25 million in civil penalties to settle a CFTC complaint that they violated the Commodity Exchange Act and various CFTC regulations.¹⁷ MGFI is an FCM, a member of the New York Mercantile Exchange, and a commodity trading advisor registered with CFTC. According to the enforcement action, CFTC found that material inadequacies in internal control systems at MGFI, as well as the risks associated with its overall business, including its futures positions, threatened the financial condition of MGFI. CFTC also found that MGFI failed to notify it of these material internal control inadequacies and further failed to file certified financial reports required by CFTC regulations. MGFI

¹⁶A quarterly report required by SEC of companies with listed securities.

¹⁷Metallgesellschaft, AG is the ultimate parent company of both MGR&M and MGFI.

and MGR&M agreed to settle without admitting or denying any of the findings. According to a CFTC official, the \$2.25 million civil penalty against MGFI and MGR&M represents the largest fine assessed for violations not involving fraud in CFTC's history. In addition to the fine, MGFI must comply with additional requirements, which include providing certified financial statements, establishing an interim special oversight committee, reforming inadequate internal controls, reporting on internal control improvements, providing an implementation plan, and providing a report by independent auditors on its internal controls.

According to the settlement agreement, from at least December 1991 to December 1993, MGR&M also marketed, offered, and sold illegal off-exchange energy product futures contracts.¹⁸ Some market participants were concerned that the language used in the agreement might implicate contracts previously exempted by CFTC as swaps. However, CFTC maintained that this enforcement case was a response to a serious failure of MGR&M's internal controls, and it was not intended to, nor did it, affect the legality or enforceability of other contracts.

State Insurance Regulatory Oversight Remains Unchanged

Although the financial results of derivatives dealer affiliates are part of consolidated insurance company financial reports to regulators, these affiliates continue to have no capital or examination requirements. Although the volume of derivatives activities of insurance companies was small compared to that of the top seven bank dealers (see ch. 1), the volume of their activities was measured in billions of dollars and increased at a greater rate than either banks or securities firms in 4 of the 5 years that we analyzed. Given the large asset size of these institutions, adequate oversight remains important because of the systemic implications of a loss at any large dealer and the potential loss to policyholders.

State insurance departments, not federal regulators, are responsible for monitoring insurance companies both headquartered and licensed to operate in the state. However, state insurance regulators do not directly oversee the financial condition of affiliates of insurance companies that are OTC derivatives dealers. As we reported in 1994, OTC derivatives dealer affiliates of insurance companies are subject to minimal reporting

¹⁸CFTC deemed the contracts sold by MGR&M to be futures because they contained all the essential elements of a futures contract. They called for making or taking delivery of a commodity in the future at a price or pricing formula based at initiation; they could be satisfied either by delivery of the commodity or by engaging in an offsetting transaction without delivery; and the purpose of the transaction was primarily to speculate or hedge the risk of price change in the commodity without actually acquiring the underlying commodity. CFTC deemed the contracts to be illegal because futures contracts, unless specifically exempted, must be traded on an exchange recognized by CFTC.

requirements, continue to have no capital requirements, and are not examined. According to insurance regulators from Delaware, New Jersey, and New York, they have made no changes in their oversight of derivatives since our 1994 derivatives report. Insurance regulators in these states said that they continue to receive audited consolidated financial statements for the parent company or the holding company of the insurance company and that this information also includes the activities of the derivatives dealer affiliate.

NAIC, an advisory group that comprises insurance regulators from the 50 states, the District of Columbia, and 4 U.S. territories, has been actively revising its suggested policies and procedures to improve derivatives disclosures and examinations. However, NAIC's proposals are not binding, and each state decides the extent to which they will be applied. Further, the three states that supervise insurance companies with derivatives dealer affiliates have no statutory authority over the affiliates. Thus, even if the states adopt the NAIC proposals, the resulting requirements would apply only to the insurance companies, not to their derivatives dealer affiliates.

NAIC included new derivatives disclosure requirements in its recommended standard annual financial statement.¹⁹ NAIC suggested that these requirements be effective with the December 31, 1994, statement prepared by regulated insurers. NAIC has also changed its Financial Examiners Handbook to provide better guidance to state insurance examiners on what to look for when dealing with derivatives. Further, NAIC has made changes that affect accounting for, and valuation of, derivatives to the Accounting Practices and Procedures manuals and the Securities Valuation Office Purposes and Procedures manuals, both used by state insurance departments. The NAIC Life Risk-Based Capital Working Group is also considering refinements to the formula used to calculate capital requirements, which would better account for derivative products. Finally, the NAIC Invested Asset Working Group, a study group that issues guidance on invested assets of insurance companies, provides ongoing monitoring of insurers' derivatives activity.

Conclusions

SEC and CFTC have made efforts to police the markets against fraud involving derivatives as demonstrated by the enforcement actions they have taken against derivatives dealers and end-users. SEC and CFTC have

¹⁹The standard annual statement is an annual report of the financial condition of insurance companies required to be filed with the various state insurance commissioners.

also taken positive steps, consistent with the recommendations in our 1994 report, to address gaps in the oversight of OTC derivatives activities conducted through unregulated affiliates of broker-dealers and FCMS. For example, CFTC's risk assessment rules should provide better information for CFTC to monitor the financial condition of FCMS. More importantly, SEC and CFTC have begun to receive expanded information reported voluntarily by the five reporting DPG members about their unregulated affiliates that are OTC derivatives dealers. This information should allow SEC and CFTC to better oversee the five DPG reporting firms and monitor them for potential problems. Although the DPG framework is an important first step in the evolution of oversight for the major OTC derivatives dealers that we identified in our 1994 report, its voluntary nature does not provide regulators authority to enforce operational changes they might recommend. We also note that neither SEC nor CFTC has the authority to put in place examination and capital requirements for the unregulated affiliates of broker-dealers and FCMS.

Insurance companies' OTC derivatives dealer affiliates remain virtually unregulated. To the extent that states adopt the new NAIC proposals, derivatives disclosures and examinations for insurance companies may improve. However, because the states do not directly oversee insurance companies' derivatives dealer affiliates, the NAIC proposals will not apply to them.

Chapter 5 MAY 1994 REPORT SUMMARY

Findings

Accounting rules for derivatives, particularly those used for hedging purposes by end-users of derivatives, were incomplete and inconsistent and had not kept pace with business practices. FASB standards directly addressed only two of the four basic types of off-balance sheet derivatives—futures and forwards. No specific accounting rules had been established by FASB for swaps or options. In the absence of accounting rules for these derivatives, accounting practices of derivatives market participants had been shaped by common industry practice and by the adaptation of existing rules for similar financial products.

We found that in practice, derivatives used for trading purposes were recorded at market value, while derivatives used for hedging purposes were recorded consistent with the item being hedged, either at market

value or at cost.¹ If the hedged item was recorded at cost, then gains or losses from changes in the market value of the derivatives were deferred until the related gains or losses on the hedged item were realized, which we referred to as deferral hedge accounting. If the hedge operated as planned, the income statement effects of the derivative product and the hedged item would theoretically offset each other. However, we found that determining whether a hedge was operating effectively and thus qualified for hedge accounting was difficult, not only because of the complexities involved but also because of confusion about the definition of hedging. Some believed that hedging meant activities to reduce, or neutralize, exposure to risk of loss from changes in market conditions, while others believed that hedging also encompassed activities that adjust risk to take advantage of anticipated changes in market conditions. Since existing accounting practice allowed for deferral of gains and losses from derivatives activities designated as “hedging,” we stated that the broadening of the definition of hedging to include risk adjustment enabled inappropriate deferral of hedge gains and losses.

With regard to disclosure of derivatives activities in financial statements, we reported that two existing FASB disclosure standards required disclosure of information about the extent and nature of an entity’s financial instruments, including derivative products, with off-balance-sheet risk of accounting losses and about fair values² of financial instruments. We reviewed the 1992 annual reports of 10 large U.S. bank holding companies with significant derivatives activity and found these institutions were generally complying with these standards, although some variances in the extent and methods of disclosures existed. A proposed disclosure standard, which was expected to be issued by the end of 1994, required additional disclosures about derivatives and their fair values. The proposed standard also contained amendments to the prior two disclosure standards and included certain optional disclosure requirements. Although the proposed standard was an improvement over the existing requirements, it was our view that there were additional disclosures that would provide financial statement users with a more complete understanding of derivatives.

We concluded that market value accounting is ultimately the best solution to accounting for all financial instruments, including derivatives, and

¹We use the term “market value” to refer to the amount at which an item could be exchanged between willing parties.

²FASB uses the term “fair value” to avoid the implication that the standards apply only to items traded on active secondary markets.

would result in financial statements being almost completely transparent concerning the effectiveness and impact of financial risk management activities. However, we also recognized that development of a new market value accounting model would take time and thus might not be feasible in the short term because authoritative accounting standards were needed immediately.

Recommendations

As a step forward, we recommended that FASB proceed expeditiously to issue the exposure draft on disclosures of derivatives and fair value of financial instruments. To more effectively deal with accounting and disclosure issues, we also recommended that FASB proceed expeditiously to develop and issue comprehensive and consistent accounting rules for derivatives activities. As the best conceptual approach to accomplish this, we recommended that FASB consider adopting a market value accounting model for all financial instruments, including derivative products.

Accounting and Disclosure Issues Continue to Be of Concern

To address accounting practices for derivatives hedging activities since our 1994 report, we reviewed 12 banks and thrifts that were end-users of derivatives. Our review of these 12 institutions showed that inadequate accounting standards for derivatives hedging activities continued to be a major unresolved problem that adversely affected the quality of information available to users of financial statements. Further, in the case of several entities that reported major losses from investment activities involving securities with derivatives-like characteristics, we found that the application of historical cost accounting rules for investment securities allowed them to delay recording those losses in the financial statements. We continue to believe that the adoption of comprehensive market value accounting for all financial instruments would resolve many of the accounting problems with derivatives and investment securities.

FASB, GASB, and SEC have taken steps to address these issues. FASB has issued a disclosure standard that requires specific disclosures about futures, forwards, swaps, options, and other financial instruments with similar characteristics. FASB also issued a proposed standard that would require all derivatives, including investment securities with derivatives-like characteristics, to be recorded at fair value on the balance sheet. In addition, GASB issued a proposed standard that would require state and local governmental entities to record all investment securities at fair value. Although these proposed standards would help resolve many of the accounting issues we identified, they do not require comprehensive market value accounting for all financial instruments. Therefore, they would not resolve problems surrounding the use of historical cost accounting for other types of financial instruments. In addition, neither FASB nor GASB proposed or adopted standards requiring disclosure of market risk. Such disclosure is key to understanding the impact of interest rate and other market changes on derivatives and other financial instrument holdings. SEC issued proposed reporting requirements that include disclosure of market risk. However, the proposal, if adopted, would be required only for public companies.

Hedging Practices of Banks and Thrifts Varied Considerably and Were Sometimes Speculative

Our review of the derivatives accounting practices at 12 end-user banks and thrifts showed that such practices were inconsistent and, in some cases, inappropriate. The problems we found centered around the use of deferral hedge accounting, whereby gains and losses from these derivatives activities are not recorded in income as they occur. We found that more than half of the institutions used deferral hedge accounting for risk-adjusting or, at least in one case, purely speculative, derivatives

activity that was based on anticipated market movements.³ We believe that deferral hedge accounting should be limited to activities intended to decrease an entity's exposure to risk of loss and should not be used when an entity uses derivatives to attempt to profit or speculate on market movements. Only 5 of the 12 institutions used deferral hedge accounting appropriately for derivatives activities designed to neutralize their exposure to interest or foreign exchange rate risk. Seven used deferral hedge accounting for derivatives activities designed to adjust rather than neutralize their risks and therefore, in our view, inappropriately delayed recording gains and losses on these transactions.

Each of the 12 banks and thrifts we selected for review engaged in activities using derivatives that they defined as "hedging."⁴ Each of the institutions also used deferral accounting for these designated hedging activities. However, we found that the hedging objectives for the group of five risk-reducing institutions differed from those of the group of seven risk-adjusting institutions. The criteria used by these 12 institutions to justify hedge accounting, while reportedly based on the limited accounting standards that do exist for derivatives, also varied significantly.⁵ The specific hedge objectives and related criteria of selected institutions in our sample are described in appendix VII.

The hedging objective of all five risk-reducing institutions was to neutralize the impact of potential loss from changes in interest or foreign exchange rates on their operating income. For example, some employed a hedging strategy to lock in a spread between interest earned on assets and interest paid out on liabilities. Under this type of strategy, changes in the market values of the assets and liabilities involved, when adjusted by changes in market values of the derivatives used as a hedge, would generally be offset, thereby neutralizing the effect of rate changes on the institutions' overall financial position. Changes in the market values of assets and liabilities carried at historical cost are not recorded until they are sold. The offset from changes in the market values of the derivatives is accomplished by similarly deferring any realized hedge gains and losses on the derivatives. The deferred hedge gains and losses would generally be amortized over time and recognized as an adjustment to net interest

³Examples of institutions' use of deferred hedge accounting are included in appendix VII.

⁴For purposes of examining these 12 institutions, we limited our review to their off-balance sheet derivatives activities, primarily futures, forwards, options, and swaps. We did not specifically examine their accounting practices for securities with derivatives-like properties, such as structured notes or CMOs.

⁵Existing accounting standards for derivatives address only futures and some types of forwards. These standards are outlined in appendix VI.

income related to the underlying assets and liabilities being hedged.⁶ Any changes in net interest income caused by changes in interest rates would be offset by amortization of the related hedge gains and losses.

The other seven institutions in our sample used strategies they labeled as hedging that were risk-adjusting activities based on anticipated market movements. For example, if an institution's management believed interest rates were going to decline, they would use derivatives to adjust their exposure to interest rates so that they could profit from a decline in rates. If rates increased rather than declined, such a strategy would generally result in losses for the institution. In either case, neither the changes in market values nor the impact on net interest income from the derivatives would be offset by corresponding changes in the market values or net interest income from the assets or liabilities purportedly being hedged. In other words, the institutions used the derivatives to shift their exposure to changes in interest rates rather than to protect against such changes. Because deferral hedge accounting was applied by these institutions, the gains or losses from these types of risk-adjusting activities were deferred and not recorded in income until a later time.

In some cases it may be appropriate for institutions to position themselves to take advantage of expected changes in interest rates. However, we believe that the resulting gains and losses from these activities should not be afforded deferral hedge accounting. Deferral of such gains and losses can result in large accumulations, particularly of losses, that either get deferred in the balance sheet, with no income statement recognition, or do not show up in the financial statements (as is usually the case with swaps) until the derivatives position is closed. The use of market value accounting for derivatives and related financial instruments would preclude such inappropriate accumulation of losses because changes in their market values would be recognized in income as they occurred.

⁶Hedge accounting for interest rate swaps differs in that the net interest differential paid or received on the swap is amortized into income over the applicable interest period. However, the changes in market value of the swap itself are not recorded on the financial statements.

Accounting Practices for Investment Securities With Derivatives-Like Characteristics Resulted in Delayed Recognition of Losses

Some major losses reported by state and local government entities, a credit union, and others have been the result of investments in securities with characteristics similar to those of derivatives. Changes in market value of these securities can be amplified by leveraging features that can cause entities holding large portfolios to experience severe losses in market value from changes in interest rates. These market value losses are often not recorded by the entity because accounting rules allow many investment securities to be carried at historical cost. In particular, accounting practices followed by state and local governments allow virtually all securities to be carried at historical cost. Further, accounting rules do not require disclosures about the potential effects of changes in interest rates on the market value of the investment portfolio. By recording investment securities at historical cost and not disclosing market risk, entities leave financial statement users without information about the effects of changing market conditions, which could impede their ability to make informed business decisions.

FASB-Issued Standards Require Accounting for Investment Securities on the Basis of Entity Intent

In May 1993, FASB issued SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities, in response to concerns about the use, by some securities holders, of historical cost accounting for investments that were regularly sold and traded.⁷ SFAS No. 115 permits some investment securities to be carried at historical cost on the basis of the intent and ability of an entity's management to hold the instruments to maturity, but other securities are to be carried at fair value. Although SFAS No. 115 does not apply to derivatives, it does apply to investment securities that have derivatives-like characteristics, such as structured notes and CMOs. As stated in our December 1992 comment letter to FASB on the exposure draft for SFAS No. 115, we continue to believe that the standard is too subjective and difficult to verify. Market value accounting for all debt and equity securities would eliminate the judgmental nature of SFAS No. 115 and would provide for early exposure of portfolio declines.⁸ Although market value accounting has been criticized because it can cause earnings volatility based on temporary changes in market values, we believe this volatility, if it occurs, reflects the realities of the marketplace.

⁷The requirements of SFAS No. 115 are outlined in appendix VI.

⁸As discussed in appendix VI, SFAS No. 107 requires entities to disclose the fair value of all financial instruments either in the body of the financial statements or the related footnotes. However, we do not believe disclosure of these values effectively communicates the financial impact of changes in the market value of the financial instruments because it does not result in the changes in the market values being reflected in the financial condition and results of the entities' operations.

We believe that a market value approach to investment securities and related liabilities and hedging instruments would help expose activities that threaten an entity's viability and facilitate more timely corrective actions. In contrast, management's ability to account for investment portfolios and related activities at historical cost has allowed some managers to avoid recognition of problems until they become so severe that they require drastic action. An example of the dangers of such use of historical cost accounting is illustrated by the major losses of Cap Corp.

As discussed in chapter 2 and appendix I, market conditions in 1994, compounded by an aggressive investment and funding strategy, resulted in large declines in the values of CMOs held by Cap Corp. In the fall of 1994, many member credit unions began withdrawing shares they held in Cap Corp. To avoid recording the losses on its CMO portfolio, Cap Corp funded these withdrawals with additional borrowing rather than selling some of its CMO portfolio. Once these borrowings resulted in violation of regulatory borrowing limits, Cap Corp was forced to liquidate some of these investments at substantial losses to fund credit union member withdrawals. Yet, Cap Corp continued to record the vast majority of its portfolio at historical cost, apparently taking advantage of the subjective criteria of SFAS No. 115 that allow entities to carry such securities at cost if they have the ability and intent to hold them to maturity. As of September 30, 1994, Cap Corp's internal reports showed that over 95 percent of its portfolio was carried at historical cost, which was approximately \$35 million greater than the market value of these securities at that time. Had earlier recognition of these market value losses occurred in Cap Corp's financial reports, the negative effects of its investment strategy would have surfaced sooner, perhaps in time for remedial action that could have averted its failure.

**Specific Accounting
Standards for Investments
Held by State and Local
Governments Do Not Exist**

As of September 30, 1996, no specific GASB standards existed that established rules for accounting for most types of investments held by state and local government entities.⁹ While GASB Statement No. 3, Deposits With Financial Institutions, Investments (Including Repurchase Agreements), and Reverse Repurchase Agreements, provides guidance for investment and other disclosures by government entities, we believe disclosures are no substitute for accounting rules that determine how the investments should be recorded in the financial statements. In practice, investment securities are usually recorded and carried on the books at

⁹An exposure draft entitled "Accounting and Financial Reporting for Certain Investments and for External Investment Pools" was issued by GASB on March 13, 1996. The provisions of this exposure draft are summarized later in this chapter.

their original cost, unless it is clear that the original cost cannot be recovered. The lack of accounting standards can result in state and local governments avoiding the recording of losses in market value until well after the book value is permanently impaired.

In Orange County, CA, for example, despite rapidly decreasing values (see ch. 2 and app. I), the county's entire pool of securities was carried at historical cost. This masked the volatility and riskiness of the investments the County Treasurer was making. The severe decline in the value of the portfolio became apparent when the county experienced a severe liquidity squeeze caused primarily by margin calls. The county experienced substantial losses thereafter as it liquidated portions of its investment portfolio. Up until this point, the county continued to carry the portfolio at historical cost.

As with Cap Corp, had earlier recognition of market value losses been required, the county may have taken remedial action because the negative effects of the investment strategy would have been made clear. Also, as discussed later in this chapter, required quantitative disclosure of the market risk being taken on investment securities would have provided further warning of the sensitivity of Cap Corp's and Orange County's investment portfolios to future changes in interest rates. The following sections discuss standards proposed by FASB, GASB, and SEC that if adopted would help resolve many of the accounting and disclosure inadequacies regarding derivatives and other investment activities.

FASB's Proposed Standard Is a Positive Step Toward Addressing Problems in Accounting for Derivatives and Similar Instruments

In June 1996, after considering and rejecting numerous proposals over many years, FASB issued an exposure draft of a proposed standard, Accounting for Derivative and Similar Financial Instruments and for Hedging Activities. The proposed standard provides an approach to accounting for derivatives and similar financial instruments that would require entities to record such instruments in the balance sheet as assets or liabilities measured at fair value. The accounting for gains and losses resulting from changes in the fair value of derivatives would depend on the entity's intended use of the derivatives. The proposed standard has many advantages over current practice and would help eliminate the types of inappropriate practices we noted in our review of the 12 institutions. However, strong opposition to the proposed standard exists that is due, in part, to the fact that it eliminates much of the flexibility in current practice

and does not easily accommodate macro-type hedging strategies.¹⁰ As we have previously stated, we believe the only viable solution to macrohedging issues, and the solution overall, is comprehensive market value accounting for all financial instruments. FASB's proposed standard is a step toward this solution.

Summary of FASB's Proposed Standard

FASB's proposed standard, which is described in detail in appendix IX, applies to traditional derivatives, such as futures, forwards, options, and swaps, and other financial instruments with derivatives-like characteristics. The proposed standard would require all derivatives to be recorded as either assets or liabilities in the balance sheet at their fair value. The accounting for gains and losses resulting from changes in the fair value of the derivatives would depend on the reason for the use of the derivatives.

For derivatives designated as hedges of changes in fair value of existing assets or liabilities, or contractually committed transactions (fair value hedge), the gain or loss would be recognized in earnings along with the offsetting gain or loss on the hedged item. For derivatives designated as hedges of cash flows from forecasted (i.e., expected but not committed) transactions (cash flow hedge), such as expected future inventory purchases, the gains or losses on the derivatives would be reported as a component of equity, called other comprehensive income.¹¹ Cumulative gains or losses on the derivatives would be moved from other comprehensive income to earnings on the preestablished date that the forecasted transaction was projected to occur. In the case of derivatives not designated as hedges, the gain or loss would be recorded in earnings, as is the current practice.

The proposed standard specifies a number of criteria that must be met for derivatives to qualify as fair value or cash flow hedges. These criteria are more restrictive than those used in current practice and are likely to limit the types of activities that qualify for hedge accounting under the proposed standard. All of these criteria are discussed in appendix IX, and a discussion of selected criteria follows.

¹⁰Macrohedging is hedging of an entire portfolio as opposed to individual assets or liabilities. Often this is accomplished by an entity's hedging its net exposure to changes in interest rates or other market factors.

¹¹Comprehensive income is defined as the change in equity of a business entity during a period from transactions and other events and circumstances from nonowner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners. Other comprehensive income represents all components of comprehensive income other than net earnings.

For a derivative to qualify as a fair value hedge, formal documentation of the hedging instrument, the hedged item, and the risk being hedged must exist, and the use of the derivative must be consistent with the entity's established policy for risk management. In addition, the item being hedged must be specifically identified as a single asset or liability or a portfolio of similar items sharing common characteristics; the hedged item must be reliably measurable at fair value, and changes in the fair value must be expected to be substantially offset by changes in the derivative; and the hedged item individually must present an exposure to price changes that could affect reported earnings.

The criteria for a cash flow hedge also require that formal documentation of the hedging instrument, the hedged item, and the risk being hedged exist and that the use of the derivative be consistent with the entity's established policy for risk management. In addition, for a cash flow hedge, the forecasted transaction must be probable, be part of an established business activity, and represent an exposure to price changes that could affect reported earnings. Further, the net cash flows from the derivative must be expected to substantially offset all of the changes in net cash flows of the hedged forecasted transaction that are attributable to the risk being hedged.

The proposed standard also includes specific disclosure requirements for derivatives and similar financial instruments. For all derivatives, each entity is required to distinguish among derivatives designated as fair value hedges, cash flow hedges, hedges of the foreign currency exposure of a net investment in a foreign operation,¹² and all other derivatives. The entity must disclose

- its objectives for holding or issuing the instruments,
- the context needed to understand those objectives,
- its strategies for achieving those objectives, and
- the notional or contract amount of the derivatives when necessary for an understanding of the objectives.

For derivatives designated as hedges, the entity must provide

- a description of the entity's risk-management policy for such hedges, including a description of the items whose risks are being hedged and the classes of derivatives used to hedge those risks;

¹²See appendix IX for discussion of this type of hedge.

- the amount of gains or losses on the derivatives and the items being hedged, if applicable, that were recognized in earnings during the reporting period as well as a description of where those gains and losses and the related hedged items are reported in the financial statements; and
- the cumulative amount of derivatives gains or losses that have not yet been recognized in earnings and a description of where they are reported in the financial statements.

In addition, for fair value hedges, the entity must also disclose the amount of gains and losses recognized in earnings when performance under a hedged-firm commitment is no longer probable. For cash flow hedges, the entity also must disclose the designated reporting periods in which the forecasted transactions are expected to occur and the deferred amounts to be recognized in earnings.

Proposed Standard Has Many Advantages Over Current Practice

The proposed standard has many advantages over current hedge accounting practices. For example, as outlined in appendix VI, current accounting standards for derivatives address only certain types of derivative instruments, while the proposed standard applies to all derivatives and to financial instruments with characteristics similar to derivatives. Derivatives held by end-users for hedging purposes are currently not reflected on the balance sheet. Under the proposed approach, all derivatives would be recorded as assets or liabilities in the financial statements and measured at fair value. Under existing hedge accounting, gains and losses on a qualifying derivative hedging instrument are deferred to offset the change in value of the underlying asset or liability being hedged (the hedged item). These changes in fair values are not recorded in earnings.¹³ Under the proposed standard, gains or losses on a derivative used as a fair value hedge would be included in earnings, and offsetting losses or gains on the hedged item would be accelerated and recognized in earnings in the same period. Accelerating the gain or loss on the hedged item generally has the added benefit of adjusting the historical cost amount of that asset or liability toward its fair value.¹⁴

FASB's proposed standard would help eliminate the inappropriate uses of deferral hedge accounting that we noted among the 12 institutions we

¹³Any realized gain or loss on the derivative is deferred and added to the basis of the underlying asset or liability being hedged on the balance sheet.

¹⁴The amount of gain (or loss) accelerated is limited to the lesser of the loss (or gain) on the derivative or the unrecognized gain (or loss) on the hedged item occurring subsequent to the inception of the hedge. Therefore, the adjusted value of the hedged item will not reflect its actual fair value to the extent that the gains or losses on the hedged item exceed those of the derivative.

reviewed (see app. VII). Many of these institutions incurred large declines in the values of their derivatives, which were not reflected in their financial statements. Had the proposed standard been in place, such derivatives would have been required to be reported on the balance sheet at fair value; the related losses would have been reflected in the financial statements, either in earnings or in other comprehensive income.

We also note in appendix VII that the 12 institutions varied widely in their application of hedge criteria. For example, they differed significantly in how they determined whether there was high correlation between changes in the market value of a derivative and changes in market value of the underlying hedged asset or liability—a requirement under current hedge accounting. Under the proposed standard, calculating correlation becomes essentially unnecessary since both hedge and nonhedge gains and losses are required to be reported in earnings.¹⁵ An ineffective hedge would result in little or no offsetting losses or gains from the hedged item, with the net accounting effect being the same as if the derivative had not been designated as a hedge. In addition, the proposal requires discontinuance of hedge accounting if a hedge fails to meet any of the previously listed criteria.

There also are inconsistencies in the hedge criteria established in the current standards. For example, as described in appendix VI, SFAS No. 52 and SFAS No. 80 differ in the allowed use of hedge accounting for anticipated, or forecasted, transactions. The proposed standard would eliminate such inconsistencies by establishing one set of standards for all derivatives and superseding prior standards that caused such inconsistencies.

**Proposed Standard Would
Not Accommodate
Macrohedging**

The 12 institutions in our sample used both micro- and macrohedging strategies.¹⁶ These strategies are described in detail in appendix VII. FASB's proposed standard requires derivatives to be designated as a hedge of a specific asset, liability, or forecasted transaction or as a hedge of a portfolio of similar assets or liabilities. Because of this, the proposed standard generally does not easily accommodate macrohedging. As many institutions currently use macrohedging strategies, the limitations imposed

¹⁵As previously discussed, cash flow hedge gains and losses are initially reported in comprehensive income but flow through to earnings on the projected date of the forecasted transaction.

¹⁶A microhedge requires linking qualifying derivatives to particular assets or liabilities, while a macrohedge is not necessarily related to identifiable assets or obligations but instead hedges the entity's net risk exposure.

on such strategies under the proposed standard have caused concern and opposition to the proposed approach. In our sample institutions, eight used macrohedging strategies. Of those eight, six were risk-adjusting rather than risk-reducing strategies. As previously discussed, we do not believe risk-adjusting strategies should qualify for special hedge accounting treatment. The proposed standard would help eliminate the ability of entities to inappropriately use hedge accounting for risk-adjusting strategies; however, it would also limit the ability to use hedge accounting for valid macrohedging risk-reducing strategies.

We believe the only viable solution to these macrohedging issues is comprehensive market value accounting of all financial instruments, because it is the only reliable way that offsetting gains and losses in the portfolio and in the derivative instruments can be matched up. Under comprehensive market value accounting, the results of any hedging strategies would be clearly reflected in earnings. Effective risk-reducing macrohedging strategies would generally result in minimal volatility in earnings, while macrohedging risk-adjusting strategies would often result in significant earnings fluctuations.

However, we recognize that adoption of a market value accounting model would require the resolution of significant implementation issues and therefore may not be a feasible solution in the short term. Officials from most of the 12 banks and thrifts in our sample told us they were opposed to market value accounting for all financial instruments. They expressed concerns about how to determine market values for financial instruments with no ready market, the treatment of intangible assets, and the overall volatility in the financial statements that may result from temporary shifts in the financial markets. They also indicated that it would be very burdensome to determine market values for commercial loan portfolios on a regular basis. These and other issues will need to be addressed before full market value accounting can be feasibly implemented.

**Comprehensive Market
Value Accounting Was
Considered by FASB but
Not Adopted**

On the basis of our review of FASB Board minutes leading up to the issuance of the proposed standard as well as the background information accompanying the proposed standard, nearly all FASB members said that, ultimately, a comprehensive market value approach for all financial instruments is the most conceptually sound solution to the problems surrounding derivatives and other financial instruments that FASB has been grappling with for years. In developing the proposed standard, FASB made several fundamental decisions about how to account for derivatives. One

of those decisions was that fair value is the most relevant measure for all financial instruments and the only relevant measure for derivatives. In the background information accompanying the proposed standard, FASB acknowledged its belief that fair values for financial assets and liabilities provide more relevant and understandable information than cost or cost-based measures and that with the passage of time, historical prices become irrelevant. It also acknowledged that a fair value approach would have been simple and readily understandable to financial statement users, would have increased comparability for identical balance sheet positions between entities, and would have eliminated the need for special accounting for hedges of financial instruments.¹⁷

In further reviewing the background information, we noted that in keeping with this belief, FASB considered measuring all financial instruments at fair value in the proposed standard. Some FASB members indicated that changing the accounting model so that all financial instruments are carried at fair value is the only conceptually consistent solution to hedging issues. However, a number of FASB members chose not to pursue such a model for various reasons. In general, many FASB members did not believe that this could be accomplished in one step. Some FASB members were concerned that a substantial amount of time would be needed to fully address and agree upon the implementation issues of such a model. These include conceptual issues about the valuation of financial assets and liabilities and the reliability of measuring the fair value of some financial instruments. In addition, some FASB members were concerned about the significant impact the requirement would have on financial reporting practices. Because many preparers of financial statements oppose FASB's proposed requirement that all financial instruments be measured at fair value and because pressure exists to present a solution to the long-standing derivatives problem, FASB opted to develop an interim solution. However, this interim solution is also facing much resistance due, in part, to the reduced flexibility that entities would have compared with accounting practices used under limited existing standards.

¹⁷A fair value approach for financial instruments would not, however, have addressed the need for special accounting for fair value hedges of nonfinancial assets and liabilities and would not accommodate the current practice of hedging forecasted transactions.

Some Improvements Made in Derivatives Disclosures, but Enhancements Are Needed

Current derivatives disclosures are specifically dictated by SFAS No. 119, Disclosure About Derivative Financial Instruments and Fair Value of Financial Instruments, which was effective for fiscal years ending after December 15, 1994.¹⁸ Although this statement will be superseded by the proposed standard, it continues to be in effect until the proposed standard, if adopted, becomes effective. The effective date of the proposed standard is expected to be for fiscal years beginning after December 15, 1997. We believe that although SFAS No. 119 is an improvement over prior disclosure requirements, it does not provide for adequate disclosure of the nature and risks of derivatives activities.

We reviewed the disclosure practices of 37 banks and thrifts that were active in the derivatives market and found that they generally made disclosures beyond those required by SFAS No. 119. These additional disclosures were prompted, in part, by SEC's request for more disclosures about derivatives by public companies. These SEC-requested disclosures, as well as subsequent formally proposed disclosure requirements by SEC, were in response to the shortfalls in SFAS No. 119. However, the SEC disclosure requirements, if adopted, would apply only to public companies, thus leaving other derivatives market participants without adequate disclosure requirements. FASB's new proposed standard would fill some, but not all, of this void.

FASB's Current Disclosure Requirements Have Improved but Could Be Enhanced

FASB issued a disclosure standard for derivatives, SFAS No. 119, in October 1994. This standard requires disclosures about futures, forwards, swaps, options, and other financial instruments with similar characteristics.¹⁹ It amends two previously existing disclosure standards, SFAS No. 105 and SFAS No. 107, for financial instruments. The required disclosures and the amendments are summarized in appendix VI. Although SFAS No. 119 will be superseded by the proposed standard, if adopted, it continues to be in effect through the end of 1997.

To obtain information on actual derivatives disclosure practices, we reviewed the 1993 and 1994 annual report disclosures of 37 banks and

¹⁸Disclosure requirements of two other standards also affect derivatives disclosures. These two standards, SFAS No. 105 Disclosure of Information About Financial Instruments With Off-Balance-Sheet Risk and Financial Instruments With Concentrations of Credit Risk; and SFAS No. 107, Disclosures About Fair Value of Financial Instruments, are discussed in appendix VI.

¹⁹SFAS No. 119 does not apply to commodity contracts or structured notes.

thrifts that were active in the derivatives market.²⁰ In general, these disclosures complied with generally accepted accounting principles at that time, including SFAS No. 119 requirements, which were effective for fiscal years ending after December 15, 1994.

The one exception to this general level of compliance was the disclosure of the impact of derivatives with leverage features. Only 2 of the 37 institutions provided detailed disclosure about the impact of leveraged instruments, 8 others disclosed that they did not hold any such instruments, and 27 provided no disclosure. FASB also found a similar lack of disclosure of the impact of leveraged derivatives in its December 1995 report on derivatives disclosures in 1994 annual reports.²¹ FASB reported that only 4 of 27 entities reviewed—17 financial institutions and 10 large derivatives dealers—clearly acknowledged the use of derivatives with leverage features. This overall lack of disclosure may have occurred because derivatives with leverage features were not held by the institutions reviewed, or the institution determined they were not material and thus did not disclose them. However, the lack of disclosure may also have resulted from the fact that the requirement is contained in a footnote of SFAS No. 119 and may have been overlooked. We noted that guidance provided by some accounting firms for financial statement preparers did not address the requirement for disclosures on leveraged instruments.

The majority of institutions that we reviewed disclosed information beyond that required by SFAS No. 119, including quantitative market risk information and further distinctions among types of activities. Only 10 institutions, however, provided specific information on the criteria used to justify hedge accounting.

We continue to support FASB's efforts to improve derivatives disclosures. However, additional disclosures not required by SFAS No. 119 but voluntarily provided by some institutions would provide investors more detailed and timely explanations of the risks of firms' derivatives activities. These include

- quantification of interest rate or other market risks of derivative products and related financial instruments (SFAS No. 119 encourages but does not require such disclosures),

²⁰We also compared derivatives disclosure practices of major bank dealers with those of major securities firm and insurance company dealers and found that the banks had the most extensive disclosures (see app. VIII).

²¹Special Report: Review of 1994 Disclosures About Derivative Financial Instruments and Fair Value of Financial Instruments (Financial Accounting Standards Board, Dec. 1995).

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- further distinctions among types of derivatives,
 - the impact of using deferral hedge accounting on the reported balance sheet and income statement amounts, and
 - the criteria used by an entity to justify deferral hedge accounting.

The disclosure requirements in FASB's proposed standard discussed earlier would address some but not all of these additional needed disclosures. Specifically it would require distinguishing the types of activities that derivatives are being used for and the impact of derivatives activities on the financial statements. In addition, it would standardize the criteria used to justify hedge accounting. SEC has also taken steps, which are discussed in the following sections, that would address all of the additional needed disclosures.

SEC Has Requested Additional Disclosures

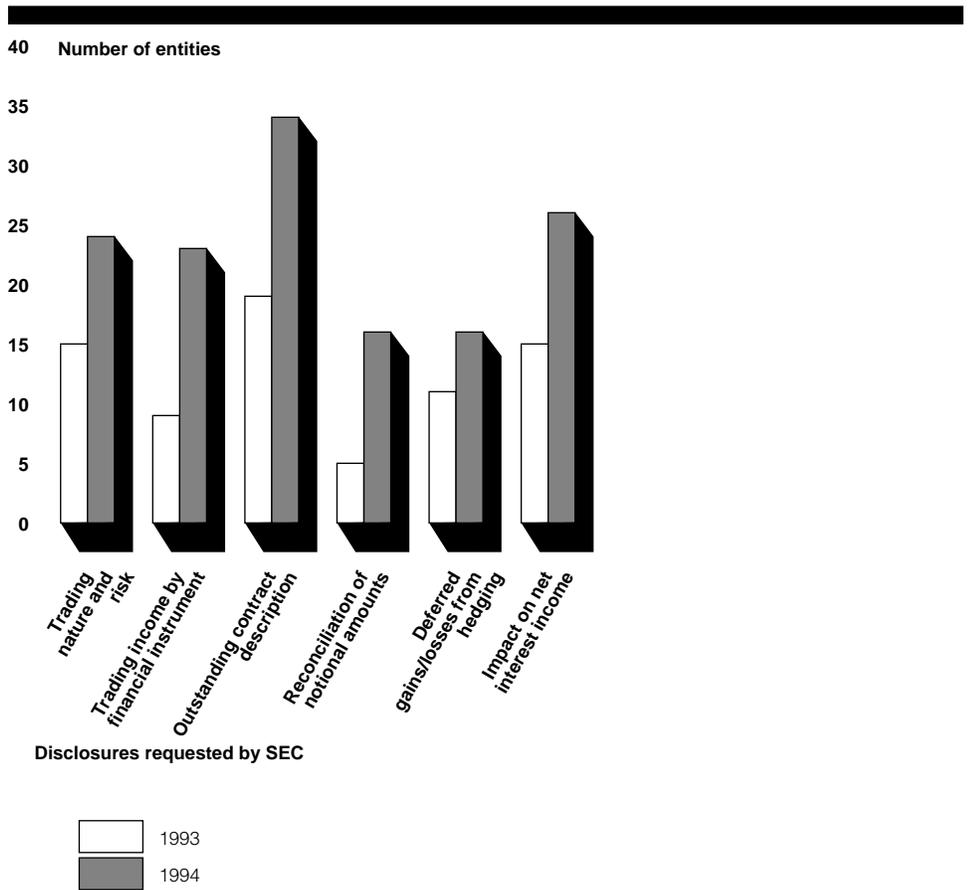
In 1994, SEC specifically requested its public companies to provide certain disclosures in an effort to improve annual report disclosures of derivatives activities. The disclosures requested by SEC included

- a discussion of the nature of trading activities, including the business purpose of trading, the tolerable risk levels, and the types of contracts traded;
- the amount of trading income recognized in the income statement for each major type of financial instrument;
- a disaggregated description of outstanding derivatives contracts held for end-user activities, including a description of the type, amount, expected maturity, and fair value of each class of contract;
- a reconciliation of the notional or contract amounts of derivatives held for end-user activities from the beginning of the period to the end of the period for each income statement presented;
- the amount of deferred gains and losses from hedging or risk-adjusting activities and the expected amortization of such amounts on a period-by-period basis; and
- the impact of derivatives activities on net interest income (for financial institutions or insurance companies) or income from continuing operations (for commercial and industrial entities) for each period for which an income statement is presented.

Figure 5.1 indicates the number of institutions in our sample of 37 banks and thrifts that provided SEC-requested disclosures in their 1993 (prior to request) and 1994 (after request) annual reports. As shown, a number of institutions significantly improved their derivatives disclosures as a result

of SEC's request. The additional disclosures provided useful information for a reader of an entity's financial statements to better understand its derivatives activities.

Figure 5.1: SEC-Requested Disclosures



Source: GAO review of institution annual reports.

SEC Issued Proposed Disclosure Requirements

In continuing its efforts to improve derivatives disclosure practices, SEC reviewed the 1993 and 1994 annual reports of about 500 public companies. As a result of these reviews, SEC staff concluded that although SFAS No. 119 had a positive effect on the quality of disclosures, further requirements were needed.

In December 1995, SEC released for comment proposed derivatives disclosure requirements for public companies to supplement SFAS No. 119. The proposed requirements are intended to clarify and expand disclosures about public companies' accounting policies for derivative products. They also would require disclosure outside the financial statements of qualitative and quantitative information about market risk inherent in derivatives and other financial instruments.²²

SFAS No. 119 requires entities to disclose the related accounting policies used to account for their derivatives. However, SFAS No. 119 does not provide an explicit indication of what entities must disclose in their footnotes on accounting policies. SEC's proposal would require registrants to distinguish between accounting policies for trading derivatives and those for derivatives used for other purposes. It would require disclosure of each method used to account for derivatives by type, the hedge criteria required to be met for each accounting method used, the accounting method used if the criteria are not met, the accounting method for terminated derivatives or terminated hedges, and when and where derivatives and their related gains and losses are reported in the financial statements. It also would extend those requirements to commodity derivatives.

SEC's proposed quantitative and qualitative disclosures are to provide information outside the financial statements about the impact of changes in interest or other market rates on the registrants' financial results. The proposal provides three alternatives for quantitative disclosures, with the expectation that registrants are to develop quantitative disclosures that best reflect the market risk inherent in their business activities. The proposed qualitative information about market risk would include a discussion of the public companies' primary market risk exposures as they existed at the end of the current reporting period. It would also include the way the public companies managed these exposures. In general, this disclosure would include a description of the objectives, strategies, and instruments used to manage the exposures. SEC expects that consensus on the most effective way to portray market risk will evolve on the basis of industry practice.

We believe that the SEC proposed requirements for enhanced qualitative and quantitative disclosures effectively address the shortfalls of SFAS No.

²²The SEC proposal pertains to derivatives and other financial instruments with similar characteristics. It defines derivatives as futures, forwards, swaps, and options. It defines other financial instruments as including investments, loans, structured notes, mortgage-backed securities, indexed debt instruments, interest-only and principal-only obligations, deposits, and other debt obligations.

119. FASB's proposed standard includes similar qualitative disclosure requirements but does not adequately address the quantitative market risk disclosure. Disclosure of market risk continues to be optional under FASB's proposed standard²³ and is not addressed in GASB standards. We believe this is an important disclosure for all entities. However, because SEC requirements apply only to public companies, not all entities would be required to disclose market risk without a change in FASB's and GASB's standards.

GASB Proposed Standard Addresses Accounting for Investments

In response to the Orange County bankruptcy filing and other large investment securities losses reported by state and local governmental entities, GASB issued a proposed standard in March 1996 that provides accounting and disclosure requirements for investments. The investments included under the proposed standard are interest-earning investment contracts; all debt and equity securities, purchased options, stock warrants, and stock rights with readily determinable fair values; and investments in mutual funds and investment pools. With limited exceptions, the proposed standard requires that all investments be valued at fair value. However, investments purchased with remaining maturities of 90 days or less could be valued at amortized cost subject to certain general restrictions. The proposed standard also would require that governmental entities recognize all changes in fair value in the operating statement (or other statement of activity). In addition, the proposed standard would require that the valuation of investment pool participations be based on the pool type. Participants in SEC-registered mutual funds would value their position at current share price and disclose the investment type as an SEC-registered mutual fund. Participants in any pool that is not SEC-registered (whether administered by a government or not) would normally value their position at the fair value per share of the pool's underlying investments.

GASB has scheduled the issuance of the final standard during the fourth quarter of 1996. In conjunction with this project, we have encouraged GASB to consider requiring disclosures that quantify market risk. Even if investments are reported at market value, such disclosure is needed because it provides information about the sensitivity of those market values to future changes in interest rates.

²³The optional disclosure about market risk is included as an amendment to SFAS No. 107 under the proposed standard.

The proposed standard does not address accounting for off-balance sheet derivatives, and no GASB standards currently address this issue. As state and local governmental entities are increasing their involvement with derivatives, it is essential that standards are developed to avoid inconsistent and potentially inappropriate accounting practices for these activities. By extending the market value accounting principle to derivatives, GASB's proposal would include comprehensive market value accounting for virtually all financial instruments used by state and local governments. We have also advised GASB, in a letter dated March 15, 1996, of our views on this matter.

Conclusions

Serious shortcomings in accounting standards continue to be exposed as entities experience major losses from market-sensitive financial instruments, with seemingly little warning. Such losses are often allowed to build without being recorded in an entity's financial statements, because the use of the historical cost accounting model does not require such losses to be recorded. In our 1994 report, we recommended that FASB consider adopting a market value accounting model for all financial instruments, including derivatives. This recommendation is even more important today, for both FASB and GASB, as unexpected losses from investment securities as well as derivatives have caused financial disasters for various entities and a deterioration of investor confidence.

FASB's proposed standard is a significant step in the right direction. For the first time, all derivatives would be recorded in the financial statements at their fair values. Accelerating recognition of the offsetting gains or losses on underlying assets or liabilities and adding them to the basis of these assets or liabilities would also have the effect of adjusting their historical cost toward their fair value.

FASB's inclusion in its proposed standard of financial instruments with characteristics similar to derivatives is also a major positive step. However, FASB has yet to address the problems with the use of historical cost accounting for other financial instruments. It also does not effectively deal with accounting for macrohedging activities. These issues will be resolved only when a comprehensive market value accounting model is adopted for all financial instruments.

We recognize that problems exist in adopting a market value accounting model for all financial instruments. In addition, many financial statement preparers oppose this approach. We also recognize that it will take time to

develop and gain acceptance for a new accounting model and that some type of short-term solution is needed. Therefore, we support FASB's proposed standard as a reasonable interim accounting solution. As part of this interim solution, bolstering disclosure requirements for derivatives and other financial instruments with similar risks, as has been proposed by SEC, would help provide forewarning of potential losses from these types of instruments. However, we continue to believe that market value accounting for all financial instruments would more readily respond to the need for financial information that reflects the realities of today's volatile financial markets.

Chapter 6 MAY 1994 REPORT SUMMARY

Findings

In each of the seven countries we reviewed (Australia, France, Germany, Japan, Singapore, Switzerland, and the United Kingdom), we found that major OTC derivatives dealers were subject to regulation. However, regulators in two countries—Australia and Switzerland—acknowledged that derivatives activities by some financial institutions were not subject to direct regulation. All of the regulators obtained some information about derivatives on a monthly or quarterly basis to assess the volume and risks of derivatives activities, but some regulators collected more detailed information than others. Four of the seven countries—Australia, Japan, Singapore, and the United Kingdom—had different capital requirements for banks and securities firms. In France, Germany, and Switzerland, financial institutions conducting securities activities must also be licensed as banks, requiring all institutions to meet bank capital requirements. Capital requirements for banks in these countries met the Basle requirements, but some regulators had placed additional requirements on banks conducting derivatives activities.

International coordination efforts were generally mixed. Among the most important efforts were the projects to develop minimum capital standards for banks and securities firms. Bank regulators successfully created international capital standards for credit risk, but market risk requirements were not final. Although efforts to develop international capital standards for securities firms had been under way since 1987, securities regulators had not agreed on certain aspects of the standards. The lack of agreement among the securities regulators prevented the harmonization of international capital standards for both banks and securities firms. International accounting organizations had also proposed new accounting and disclosure standards.

Recommendation

We recommended that U.S. financial regulators provide leadership in working with industry representatives and regulators from other major countries to harmonize disclosure, capital, and legal requirements, including netting enforceability, and examination and accounting standards for derivatives.

Efforts to Improve International Coordination Continue

U.S. banking, securities, and futures regulators have been working with their international counterparts, primarily through the Basle Committee on Banking Supervision and the Technical Committee of IOSCO, to improve regulatory harmonization and coordination and have addressed many of the issues raised in our 1994 report. Further, like U.S. regulators, regulators in the six countries we contacted had taken or proposed steps to enhance their oversight of derivatives, through a variety of approaches. Barings' failure directly resulted in various written agreements and guidelines to ensure that all concerned parties have access to the information they need. Barings' failure also focused regulators' attention on the need to formalize international coordination.

International Coordination Efforts Have Continued

Since our May 1994 derivatives report was issued, international banking, securities, and accounting organizations have undertaken major initiatives intended to improve derivatives regulation. The Basle Committee on Banking Supervision and IOSCO have undertaken initiatives that address risk management for OTC derivatives, public disclosure of market and credit risks, and regulatory reporting of derivatives activities. The Basle Committee on Banking Supervision also amended international banking capital standards to include broader recognition of bilateral netting agreements, to adjust the calculation of potential future credit exposures, and to incorporate market risk from trading activities into the risk-based capital calculation for internationally active banks. However, harmonizing capital standards for securities firms has, so far, been unsuccessful. The International Accounting Standards Committee (IASC) approved a new international accounting standard that addresses disclosure and presentation of derivatives activities.¹

International Initiatives Have Addressed Risk Management, Public Disclosure, and Regulatory Reporting

Since May 1994, international coordinating bodies, such as the Basle Committee on Banking Supervision and IOSCO working groups, have issued numerous discussion papers, recommendations, and guidelines specifically related to derivatives. These initiatives addressed the need for overseeing the risk-management process, ensuring adequate public disclosure, collecting information on the global derivatives market, harmonizing regulatory reporting, and providing supervision. These voluntary initiatives represent international efforts to enhance and

¹IASC was formed in 1973. Its role is to contribute to the establishment of sound, internationally comparable accounting principles, especially in developing countries. Professional accountancy groups of about 50 countries are members. However, national standards-setting bodies are independent of IASC and under no obligation to adopt international accounting standards as a requirement within their countries.

harmonize the regulation of derivatives activities as financial markets become more closely linked and international barriers are removed.

In July 1994, the Basle Committee on Banking Supervision and the Technical Committee of IOSCO issued guidelines for regulators on supervising risk-management systems of banks and securities firms involved in OTC derivatives activities.² Although the specifics of these guidelines differ, banking and securities regulators share the common objective of promoting sound internal risk-management practices for managing OTC derivatives. Both sets of guidelines focus on the role of regulators in determining how best to promote the development of sound management control policies and procedures in the banks and securities firms they regulate. The guidelines draw on the best practices of IOSCO and the Basle Committee on Banking Supervision member countries.

In September 1994, a Working Group of the Euro-currency Standing Committee of the Central Banks of the Group of Ten countries released a discussion paper on public disclosure of market and credit risks.³ The paper discusses the need for sufficient information about the risks and returns of derivatives to ensure that investors and counterparties can make informed investment decisions. It warns that if a disconnect exists between the actual trading and risk-management activities of derivatives dealers and what is disclosed to investors, capital misallocation and the potential for heightened market distress can result.⁴ The paper also discusses the possible role of adequate disclosure in correcting and adjusting risk-management procedures.

In February 1995, a working group established by the central banks of the Group of Ten countries issued a report that identified existing derivatives information-reporting requirements of central banks.⁵ The report is part of a larger international effort of regulators to develop a framework for

²These guidelines were: "Risk Management Guidelines For Derivatives," the Basle Committee on Banking Supervision, July 1994; and "Operational and Financial Risk Management Control Mechanisms For Over-the-Counter Derivatives Activities of Regulated Securities Firms," the Technical Committee of IOSCO July 1994.

³"Public Disclosure of Market and Credit Risks by Financial Intermediaries," prepared by a Working Group of the Euro-currency Standing Committee of the Central Banks of the Group of Ten countries, Sept. 1994.

⁴The paper states that during periods of market stress, lack of information transparency can cause rumors alone to impair a firm's market access and funding.

⁵"Issues of Measurement Related to Market Size and Macroprudential Risks in Derivatives Markets," prepared by a working group established by the central banks of the Group of Ten countries, Feb. 1995.

improved regular monitoring of the size and structure of the global derivatives markets. The report identified a broad range of information that bank regulators need and made recommendations about how they should collect this information.

The report recommended two interrelated ways for regulators to collect information that could be used to monitor global OTC derivatives activities. One of these recommendations was for regulators to conduct occasional surveys of a large number of participants. BIS conducted the first survey of derivatives market activity in 26 countries in April 1995. (We discuss some of the results of this survey in ch. 1.) The second recommendation was for regulators to develop a system of regular derivatives market reporting limited to primary institutions. The survey data would be used by regulators to determine the size and distribution of the global derivatives market. Adequate data such as those provided by this survey are vital if regulators are to understand the global financial environment in which regulated institutions operate. In July 1996, a working group developed a proposal for regular collection of derivatives information on a global basis, which is to be implemented at the end of 1997.⁶

In May 1995, the Technical Committee of IOSCO and the Basle Committee on Banking Supervision issued a joint framework on regulatory reporting.⁷ The framework consisted of two parts. The first part was a catalogue of data identified as important for an evaluation of derivatives risks that could be used by regulators as they continue to expand their information-reporting requirements. The second part was a subset of information that should be collected at a minimum for all large internationally active banks and securities dealers that have substantial derivatives activities. If this framework was implemented, harmonization of information reporting among regulators could improve along with oversight of the global derivatives market.

The recommended framework encourages regulators to draw on information that banks and securities firms generate for internal purposes to limit the regulatory burden. The catalogue of information identified by the committees revolved around four broad areas: credit risk, market risk, liquidity risk, and earnings. According to the joint framework, periodic

⁶"Proposals For Improving Global Derivatives Market Statistics," prepared by a working group established by the Euro-currency Standing Committee of the Central Banks of the Group of Ten countries, July 1996.

⁷"Framework for Supervisory Information about the Derivatives Activities of Banks and Securities Firms," the Basle Committee on Banking Supervision and the Technical Committee of IOSCO, May 1995.

information in those four broad areas should include current credit exposure, potential credit exposure, credit enhancements, concentration of credit risk, counterparty credit quality, market liquidity risk, funding risk, value-at-risk, trading activities, nontrading activities, unrealized or deferred losses, and valuation reserves and actual credit losses. While many regulators may already collect some of the information called for in the framework, others do not. In the United States, SEC and CFTC receive detailed quarterly information on the top 20 net credit exposures for individual counterparties from 5 of the 6 firms included in DPG. (See ch. 4.) However, U.S. bank regulators do not collect comparable information on a routine basis.

The framework also lists a subset of information that regulators should collect at a minimum for large internationally active banks and securities firms with significant derivatives activities. This information covers broad risk categories (such as interest rate or foreign exchange risk) by type of contract (such as swaps or forwards). According to the framework, regulators should also collect information on the purpose for holding derivative products, such as trading versus nontrading, as well as information on notional/contract amounts, market values, potential credit exposure, counterparty credit quality, and past-due amounts.

In July 1995, the Tripartite Group of Banks, Securities, and Insurance Regulators issued a report titled "The Supervision of Financial Conglomerates."⁸ The report focuses on supervisory issues and capital adequacy. It identifies broad areas of agreement among participating regulators from the three groups and makes recommendations on ways to improve the supervision of financial conglomerates. It also identifies areas that regulators should focus on in the future. These areas include developing a groupwide perspective on capital adequacy; fostering intensive cooperation among regulators responsible for different entities within a conglomerate; and addressing the need for regulators to obtain adequate information on the conglomerate's structure. The report also identifies numerous other issues, such as regulators' ability to access information about nonregulated entities within a conglomerate.

In November 1995, the Basle Committee on Banking Supervision and the Technical Committee of IOSCO issued a joint report on the public disclosure

⁸The Tripartite Group was formed in 1993 at the initiative of the Basle Committee on Banking Supervision to address issues relating to the supervision of financial conglomerates. It consists of bank, securities, and insurance regulators from 12 countries. The group defines a conglomerate as "any group of companies under common control whose exclusive or predominant activities consist of providing significant services in at least two different sectors (banking, securities, insurance)."

of trading and derivatives activities of a sample of large banks and securities firms worldwide.⁹ The report compared 1993 and 1994 annual report disclosure of trading and derivatives activities in 79 of the largest, internationally active banks and securities firms in the Group of Ten countries. The Basle Committee on Banking Supervision and IOSCO found general improvements and significant voluntary innovation in the annual report disclosures. However, despite encouraging advances in disclosure practices, they found that “many institutions” continued to disclose very little about their trading and derivatives activities. The report recommended that banks and securities firms disclose additional qualitative information about their risks and management controls and their accounting and valuation models. It also recommended greater quantitative disclosure of market activity, credit risk, market liquidity, market risk, and earnings information. While these recommendations were aimed at banks and securities firms, the Basle Committee on Banking Supervision and IOSCO “hope that other financial institutions and non-financial companies with significant trading and derivatives activities will consider the concepts and recommendations presented in the report.”

International Bank Capital Standards Were Amended to Recognize Additional Types of Risk

International bank supervisors’ efforts to expand risk-based capital standards have produced positive results. In December 1994, U.S. and foreign bank regulators amended the Basle Accord to recognize legally enforceable bilateral netting agreements for risk-based capital purposes. Previously, banks were restricted to netting only obligations denominated in the same currency and due on the same date. The amendment allows banks to net together all obligations on their derivatives contracts with each counterparty with whom they have entered into legally enforceable netting agreements. In addition, in April 1995, bank regulators amended the Basle Accord to allow broader recognition of legally enforceable bilateral netting agreements in the calculation of capital for potential future credit exposure amounts. The amendment also expanded the coverage and increased the maximum level of credit conversion factors used to calculate the add-on amount. (See ch. 3 for additional detail on implementation in the United States.)

In addition to finalizing amendments to the Basle Accord on netting and expanding the conversion factors, the Basle Committee on Banking Supervision continued to work on incorporating market risk from trading activities into risk-based capital calculations for large internationally

⁹“Public Disclosure of the Trading and Derivatives Activities of Banks and Securities Firms,” joint report by the Basle Committee on Banking Supervision and the Technical Committee of IOSCO, Nov. 1995.

active banks in major countries. In January 1996, the Committee amended the Basle Accord to incorporate market risks. Specifically, this amendment addressed interest rate and equity-price risk in trading activities and foreign-exchange risk and commodities risk throughout a bank. As stated in the amendment, the new capital standards for market risk should be implemented by the Group of Ten supervisory authorities by year-end 1997, at the latest. In implementing this amendment's capital standards requirement for market risk, central banks can allow the reporting banks to use either a standardized model or their internal model; those banks wishing to use their own models are required to adhere to certain standards.¹⁰ Regulators also are to play a role in ensuring that the internal models used by banks are adequately measuring market risk. The Committee also incorporated backtesting requirements and established a framework for regulators to use when interpreting the results of backtesting. (See ch. 3 for details.)

Efforts to Develop Common Approaches to International Capital Standards for Securities Firms Have Continued

International efforts to develop common minimum capital standards for securities firms, which have been ongoing since 1987, have not produced final results. IOSCO issued a report in June 1995 that discussed the use of value at risk by securities firms. The report proposed that IOSCO conduct additional joint work with the Basle Committee on Banking Supervision to test value-at-risk models for calculating capital for market risk. It also recognized the growing importance of these models for securities firms and the need to explore further the possibility of using such models for capital purposes. However, IOSCO did not set a timetable to incorporate the use of models to calculate market risk for capital standards. The reasons it cited for not rushing such development included (1) the lack of data regarding the reliability of models in practice; (2) the importance of appropriate market risk capital for securities firms; and (3) the need to await the results of current initiatives, such as DPG in the United States.

IASC Issued an Accounting Standard on Disclosure and Presentation of Financial Instruments

In March 1995, the IASC Board approved International Accounting Standard 32, Financial Instruments-Disclosure and Presentation. The new standard applies to all types of entities and covers most types of financial instruments, including derivatives.¹¹ It requires that entities subject to its standards provide information about, among other things, accounting

¹⁰As discussed in chapter 3, U.S. bank regulators require that banks use their internal (proprietary) model.

¹¹International Accounting Standard 32 does not deal with the recognition and measurement issues covered in an exposure draft on financial instruments previously issued by IASC, as the IASC Board has decided those issues require further work.

policies and methods applied, the entities' exposure to interest rate risk and credit risk from financial assets and liabilities, and the fair value of financial assets and liabilities.

The standard provides financial statement preparers with considerable latitude to tailor the format in which information is provided. It also encourages enterprises to provide a discussion of the extent to which they use financial instruments, the associated risks, and the business purposes served. The new standard, effective for financial statements covering periods beginning on or after January 1, 1996, should provide financial statement users better information about the derivatives activities of the preparers.

Derivatives Regulation Continued to Vary Globally

Although differences remained in their oversight of derivatives, each of the 11 regulators we contacted in 6 different countries had taken action or had plans underway to enhance their oversight activities since 1994. These enhancements were consistent with the recommendations we made to U.S. financial regulators in our 1994 report. Regulators in three of the six countries expanded the amount of information they collected on a regular basis. Regulators in all six countries had made revisions to or planned to revise their capital standards to better address the risks derivatives pose. The regulators had also expanded oversight of or guidance for the risk management of derivatives. They also noted that efforts to improve accounting and disclosure guidance for derivatives were ongoing in their respective countries.

Foreign Regulators Expanded Information Collected to Assess the Extent and Risk of Derivatives Activities

As with U.S. regulators, some foreign regulators had begun to collect more information on derivatives for regulatory reporting purposes. As described in table 6.1, we found that regulators in three of the six countries had expanded their required regulatory reporting. In Japan, regulators now receive information on contract amounts and counterparty risk amounts monthly for certain types of derivatives. In Singapore, banks are now required to provide a monthly breakdown by product type, volume, and profit/loss. Previously, they were required to provide only a combined total for exchange-traded and OTC derivatives. In the United Kingdom, the Bank of England, as a result of the EU Capital Adequacy Directive (CAD), required new reporting forms to capture market risk, as well as other risks on all trading instruments—cash and derivatives.¹² The Securities and

¹²CAD sets out the minimum capital requirements for credit institutions and investment firms for the market and other risks associated with their trading activities.

Futures Authority Ltd. (SFA) also changed its reporting standards as a result of CAD. Regulators in the other three countries were in the process of reviewing, or had plans to improve, their regulatory reporting requirements.

Table 6.1: International Changes to Reporting Requirements

Country	Changes in reporting requirements
Australia	No changes; however, reporting requirements are under review.
Germany	No changes, but reporting requirements are likely to be reviewed in the near future in connection with CAD.
Japan	Detailed information on forward rate agreements (contract amounts and counterparty risk amounts) are now to be collected monthly as part of the capital adequacy report. Additional information is also to be reported monthly on forward rate agreements and yen interest rate swaps.
Singapore	Banks are now required to report monthly to their bank regulator the notional/contract amount of their derivatives transactions by type of product, volume, and profit/loss. In addition, Singapore is reviewing its reporting system to capture information in a more standardized format.
Switzerland	Reporting requirements for market risk are likely to be reviewed with the implementation of new capital requirements for market risk.
United Kingdom	The Bank of England introduced new reporting forms to cover market risk when CAD was implemented on January 1, 1996. SFA replaced its position and counterparty risk document and started collecting from some firms more detailed information on the breakdown of profit and loss accounts/turnover from trading activities. By year-end 1997, SFA plans to require reports to be made of all transactions in all financial instruments (cash and derivatives). Eventually, this will include reporting the identity of counterparties.

Source: Compiled from information provided by Australia, the Australian Securities Commission and the Reserve Bank of Australia; Germany, the Deutsche Bundesbank and the Federal Banking Supervisory Office; Japan, the Bank of Japan and the Ministry of Finance; Singapore, the Monetary Authority of Singapore; Switzerland, the Federal Banking Commission; and the United Kingdom, the Bank of England, the Securities and Investments Board, and SFA.

Capital Requirements Have Evolved as Regulators Attempted to Address Additional Types of Risk

International efforts to standardize capital requirements have continued with some countries' capital standards covering more types of risks than others, depending on the type of institution. According to Australian officials, their securities and futures regulator was in the process of reviewing its capital standards, which may result in changes to better address the risks that derivatives pose. In Germany, the central bank plans

to implement CAD. In Japan, regulators amended capital standards to reflect the changes to the Basle Accord concerning bilateral netting and the calculation of potential future credit exposure. Following Barings' failure, Singapore's regulators further tightened the capital requirements for futures brokers. Singapore is in the process of changing its capital requirements for futures brokers from the present system that is based on amounts of customer-segregated funds to a risk-based system in which the regulatory capital maintained should better reflect the risks of positions carried by futures brokers. Effective February 1995, Switzerland revised its capital requirements to bring them in line with the Basle Accord, in general, and to introduce the methods for calculating credit risk equivalents of off-balance sheet items and bilateral netting. The United Kingdom implemented CAD, which resulted in new market risk capital requirements for banks. SFA said that securities and futures firms in the U.K. had been subject to market risk capital requirements for at least 10 years.

New International Guidance Results in Expanded Focus on Risk Management

In all of the countries we contacted, at least one regulator had expanded oversight of or guidance for risk management involving derivatives activities. In Australia, although no new programs were initiated by its securities regulator, securities firms were encouraged to adopt the G-30 recommendations on derivatives risk management. In December 1994, the Reserve Bank of Australia implemented a new program of on-site visits to banks to focus on how the banks measure their market risks. In Germany, the central bank started a program of (1) on-site inspections to review risk-management models for capital purposes; and (2) inspections of trading activities, including derivatives. Its Federal Banking Supervisory Office also issued minimum requirements for trading activities of credit institutions.

In Japan, the Bank of Japan took further measures to set up its on-site examination function to assess banks' risk. For example, it introduced an overall credit exposure review system, which includes derivatives, and established a "Risk Assessment Team" to support the on-site examinations. In April 1995, Singapore's bank regulator issued specific new guidance to banks on ensuring adequate risk management. In Switzerland, the Swiss Bankers Association's "Risk Management Guidelines for Trading and the Use of Derivatives" became effective on July 1, 1996. Although the Swiss Bankers Association is purely self-regulatory, the Federal Banking Commission has decided that external

auditors have to ensure a bank's compliance with these guidelines and report on it in their annual reports to the Federal Banking Commission.

In the United Kingdom, the Bank of England established a team of experts in 1994 before implementing CAD to review the models that banks wish to use in calculating capital requirements. The Bank of England uses detailed questionnaires followed by on-site visits to assess the models and their control environment. SFA already had a similar team that reviewed options and swap pricing models at securities firms. In fall 1994, SFA reorganized the division that monitors compliance with its rules to enhance oversight into five specific groups.¹³ It now focuses more detail on monitoring the specific risks proposed by each type of business. In 1995, the U.K. Securities and Investments Board, along with the U.S. SEC, announced a joint initiative to conduct in-depth studies of financial, operational, and management controls used by selected securities firms that conduct significant cross-border derivatives and securities activities.¹⁴

Efforts to Improve Accounting and Disclosure Guidance Are Ongoing

All of the regulators we contacted noted that efforts to improve accounting and disclosure guidance are ongoing in their respective countries. In Australia, current disclosure standards are being reconsidered by the Australian Accounting Standards Board. In Germany, reporting for derivatives has been further improved by banks, especially through disclosure of value-at-risk estimates that were introduced in Basle Committee on Banking Supervision and IOSCO Technical Committee papers. In Japan, legislation was passed that enabled financial institutions and securities companies to use current value accounting for trading securities and derivatives. In July 1996, regulators in Japan issued a "Ministerial Ordinance," which makes all derivatives transactions subject to disclosure requirements. In April 1995, regulators in Singapore issued guidance that required commercial and merchant banks to disclose the nature, material terms and conditions, and derivatives risks in their risk-disclosure statement. In Switzerland, by revising the Swiss Banking Ordinance, regulators adapted accounting and disclosure requirements to improve derivatives coverage. In addition, regulators now require Swiss

¹³The five groups are: (1) firms that deal mainly in commodities and exchanges traded futures; (2) multinational firms that deal in all types of financial instruments; (3) merchant banks and corporate finance firms; (4) private client stock brokering firms; and (5) other institutional brokers and firms led or regulated by, for example, the Bank of England.

¹⁴This joint initiative builds on the March 1994 joint statement previously issued by SEC, CFTC, and the Securities and Investments Board. The initiative identified several areas where regulators can cooperate in their oversight of the OTC derivatives market. By year-end 1995, several joint reviews had been conducted.

banks to provide replacement cost and notional/contract values for all off-balance-sheet items, including derivatives. Regulators also required banks to provide written comments on business policies and risk management.

In the United Kingdom, new disclosure standards, effective January 1, 1995, require U.K.-listed companies to include in their financial statements acknowledgement by the board of directors that they are responsible for internal controls, an explanation that internal controls offer no absolute assurance against misstatement or loss, a description of key procedures established to provide effective internal control, and confirmation that the effectiveness of internal controls has been reviewed. Directors are also required to comment when internal control weaknesses have resulted, among other things, in material losses. In addition, a statement of recommended accounting practice on derivatives was published for banks in February 1996. This sets out recommendations on the accounting treatment and disclosure of derivatives in U.K. banks' accounts. The Accounting Standards Board also published proposals designed to lead to a new code on disclosure for other companies, as well as banks, by 1998.

Barings' Failure Illustrated the Importance of International Coordination and Sparked Coordination Efforts

The Barings failure focused new attention on the potential for systemic risk and the importance of international coordination. Regulators concerned about containing Barings' losses closely followed the unfolding crisis to determine whether the crisis would spread. Barings' failure did not lead to widespread international failures of other financial institutions. Although the crisis was managed through informal coordination among regulators internationally, Barings spurred additional efforts to enhance international coordination. Futures regulators, acknowledging that more formal coordination was needed, worked to develop the Windsor Declaration, which outlines steps to improve international coordination. Likewise, the industry responded with the Futures Industry Association's (FIA) Global task force on national and cross-border issues related to the structure and operation of the international markets for exchange-traded and/or cleared futures and options. As a result of the Windsor Declaration and FIA task force recommendations, futures exchanges, clearinghouses, and regulators in many major countries signed companion agreements to share large exposure information. In addition, U.S. clearing organizations signed an agreement to promote greater cooperation and information sharing among securities and futures clearing organizations.

The Windsor Declaration Was a Regulatory Response to Barings' Failure

Following the failure of Barings, regulatory authorities responsible for supervising the world's major futures and options markets met in May 1995 in Windsor, England. Regulators from 16 countries attended the meeting hosted by the U.K. Securities and Investments Board and the U.S. CFTC.¹⁵ The regulators outlined steps they proposed to take to improve (1) cooperation between market authorities; (2) protection of customer positions, funds, and assets; (3) default procedures; and (4) regulatory cooperation in emergencies. In addition, the regulators agreed to

- improve communication of information relevant to material exposures and other regulatory concerns;
- review and, as necessary, enhance the adequacy of existing arrangements to minimize the risk of loss through insolvency or misappropriation;
- facilitate the liquidation and/or transfer of positions, funds, and assets from failing members of futures exchanges; and
- improve existing mechanisms for international cooperation and communication among market regulators.

The regulators agreed that the work identified in the Windsor Declaration should be coordinated through various working groups of IOSCO's Technical Committee. IOSCO has been involved in follow-up work relating to the areas identified by the regulators and has issued reports on some of these issues. For example, in March 1996, the Technical Committee issued the "Report on Cooperation Between Market Authorities and Default Procedures."

The FIA Task Force Recommendations Were an Industry Response to Barings' Failure

The events surrounding the Barings failure prompted market participants to consider certain national and cross-border issues related to the structure and operation of the international markets for exchange-traded and/or cleared futures and options. The FIA Global Task Force on Financial Integrity was organized in March 1995 to address these issues. The task force included representatives of major international exchanges/clearinghouses, brokers/intermediaries (including FCMS and other brokers), and customers from 17 jurisdictions.

The objectives of the task force were similar to those of the international regulatory authorities that issued the Windsor Declaration in May 1995. The task force issued 60 recommendations covering financial integrity issues; exchange/clearinghouse risk assessment, reporting, and

¹⁵Regulatory authorities from the following countries participated in the meeting: Australia, Brazil, Canada, France, Germany, Hong Kong, Italy, Japan, the Netherlands, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

coordination; legal/regulatory issues; risk management for exchanges/clearinghouses, clearing brokers, and depositories; risk management for customers; risk management for internal controls; legal relationships with brokers/intermediaries; risk assessment of brokers/intermediaries; risk management of exchanges/clearinghouses; and internal risk-management procedures. According to FIA, the most significant of these issues included the mechanisms that exist for protecting participants' assets; the internal controls and risk-management procedures employed by exchanges/clearinghouses, brokers/intermediaries, and customers; and the communication of information regarding the activities of market participants by exchanges/clearinghouses and regulatory authorities.

U.S. and Foreign Exchanges and Regulators Have Signed Information Sharing Agreements

On March 15, 1996, 49 exchanges and clearing organizations signed a multilateral information-sharing agreement on large exposures. On the same date, 14 regulatory agencies signed a separate companion information-sharing agreement. These agreements could help prevent and manage another crisis similar to that created by the Barings collapse.¹⁶ The agreements were an outgrowth of recommendations outlined in the Windsor Declaration and by the FIA task force. Participating exchanges and regulators agreed to share information on exposures to unusual risks of their common member firms. One objective of the agreements is to reduce threats to the system by enabling regulators to better monitor firms' exposures on multiple markets to reduce threats to the system. As described by a CFTC official, the agreements represent an unprecedented exercise in cooperation among international futures exchanges, clearing organizations, and regulators. However, some countries, such as Switzerland and Japan, have legal restrictions preventing certain regulators from signing such agreements. Therefore, these regulators have not signed the agreement but may sign if the legal restrictions can be overcome.

As written, the terms of the agreements could be triggered by a number of events. For example, an exchange or regulator could request details of a member firm's positions in various markets if that firm has experienced a sizable reduction in its capital, unusually large cash flows in its proprietary trading account or those of its customers, or a concentration of positions in a particular futures contract. However, concerns about protecting the privacy of market participants and their activities in some countries may limit the potential effectiveness of these agreements. Further, exchanges

¹⁶Since March 15, 1996, at least seven exchanges and one regulator have signed on to the agreements.

have varying levels of controls and procedures; therefore, the availability of information varies. Regulators have attempted to address the legal and confidentiality concerns about exchanges sharing information through their agreement, which contains additional provisions that allow regulators to share information if commercial or legal restrictions prohibit exchanges from acting. A CFTC official noted that this is a critical component of the regulators' companion agreement. However, in order for these types of provisions to be effective, the exchanges must be willing to go to their regulator to get the needed information to the appropriate parties.

U.S. Securities and Futures Clearing Organizations Agreed to Greater Cooperation and Information Sharing

On September 7, 1995, clearing organizations for 19 stock, stock options, and futures exchanges in the United States, called the Unified Clearing Group, signed an agreement to foster greater cooperation and information sharing among securities and futures exchanges. According to the Chairman of CFTC, the information-sharing agreement should enable trade clearing officials at major U.S. financial markets to "better assess the risk carried by brokerage firms that buy and sell exchange-listed futures, securities, and stock options." According to the agreement, the purpose of the Unified Clearing Group is to improve the clearance and settlement process of securities and futures transactions; to ensure that securities, futures, funds, and other collateral, which are in the custody or control of members, or for which members are responsible, are safeguarded; remove impediments that prevent prompt and accurate clearance and settlement; and protect investors and public interests. The group plans to meet as needed and to appoint a task force on issues as they arise.

Conclusions

Consistent with recommendations in our 1994 report, U.S. and foreign financial regulators, working independently and through various committees and working groups, have issued guidelines and recommendations that, if adopted by member countries, could help harmonize risk management, disclosure, reporting, and accounting for derivatives. However, many of these initiatives are not legally binding and have not been adopted by all regulators. In addition, most coordination among regulators still occurs informally. The Barings crisis spurred efforts to improve international regulatory coordination, primarily through formal information-sharing agreements. While these agreements may result in greater information sharing, their effectiveness depends on continued cooperation among regulators and market participants, which may be hampered by issues of privacy and confidentiality.

Flawed Corporate Governance Systems Contributed to Significant Losses

We reviewed four highly publicized losses from derivatives activities in recent years. A common factor in each of these losses was a weak corporate governance system that did not establish effective risk management and internal controls. Frequently, those responsible for corporate governance, including boards and senior management, did not

- provide effective oversight of their entities' use of derivatives and monitor the exposure these products represent;
- ensure that effective risk-management and control policies and procedures were established;
- ensure that qualified personnel and comprehensive systems were used to initiate derivatives activities and monitor their exposure; or
- ensure that comprehensive audits and reviews were conducted to independently assess compliance with established policies, limits, and controls.

As a result of these weaknesses, risks and exposures associated with derivatives were not properly managed.

Bankers Trust and Its Client, Gibson Greetings

Bankers Trust had been known among federal regulators for the high quality of its internal control systems over derivative products. However, according to Federal Reserve Bank of New York officials, when Bankers Trust started its new line of leveraged derivative products, it did not treat this line as a new and riskier business and, therefore, did not make any adjustments to its existing internal controls. Subsequently, Bankers Trust's practices were questioned by SEC and CFTC for possible violations of securities and commodities laws related to these leveraged transactions, and Bankers Trust was sued by several clients.

The regulators' inquiries revealed weaknesses in Bankers Trust's risk-management and internal control systems, including improper conduct in the marketing, offer, and sale of its leveraged derivatives transaction business and failure to reasonably supervise its employees involved in this business. In December 1994, Bankers Trust entered into agreements with the Federal Reserve, SEC, and CFTC to enhance internal controls to prevent future violations and to pay a \$10 million fine imposed jointly by SEC and CFTC.¹ In a public release of the agreement with the Federal Reserve Bank of New York, Bankers Trust noted that its control mechanisms needed to be strengthened and agreed to correct them. These

¹These agreements do not affect Bankers Trust's overall derivatives business but are limited specifically to its leveraged derivatives transactions activities.

corrections included enhancing its management and supervision process and establishing a committee of its board of directors to monitor compliance with the agreement.

The leveraged nature of Bankers Trust's derivatives contracts caused one of its clients, Gibson Greetings, Inc., to incur losses that multiplied quickly as interest rates rose in early 1994. Gibson decided not to honor its obligations and sued Bankers Trust. SEC investigated Gibson for possible violations of SEC reporting requirements. The investigation showed that Gibson did not have adequate internal controls associated with its leveraged derivatives contracts. Flaws in Gibson's control environment, including a failure by Gibson officials to establish proper accounting and internal controls over its derivatives activities, allowed Gibson to incur a reported loss of about \$23 million.²

Two Gibson officials initiated its derivatives investments by purchasing interest rate swaps, intending to reduce Gibson's borrowing costs. From November 1991 to March 1994, Gibson, through Bankers Trust, entered into about 30 derivatives transactions, including interest rate swaps and related restructurings that became increasingly complex, risky, and intertwined. Many of the derivatives had leverage factors that caused Gibson's losses to increase dramatically with relatively small changes in interest rates. Gibson's officials were not adequately experienced or trained to fully understand derivatives. The derivatives background of Gibson's primary official responsible for its derivatives activities was limited to a few seminars focused on the use of derivatives and on-the-job training obtained in working with Bankers Trust. Without knowledge of derivatives and lacking systems to value them, Gibson officials were unable to exercise controls over the acquisition of the derivative products or to monitor whether these products were serving the intended purpose of reducing Gibson's debt costs.

SEC's investigation also showed that the derivatives Bankers Trust sold to Gibson were customized contracts that did not trade on any market and thus were difficult to price. Gibson relied totally on Bankers Trust to establish market values for use in preparing Gibson's financial statements and periodic reports filed with SEC. They did not use independent sources to verify the market values that Bankers Trust provided. As a result, Bankers Trust representatives were able to mislead Gibson about the value of the company's derivatives positions by providing values that significantly understated the magnitude of the losses. Gibson remained

²Subsequent litigation by Gibson against Bankers Trust reduced the amount of its loss.

unaware of the actual extent of its losses from derivatives transactions and continued to purchase additional derivatives from Bankers Trust. These conditions could not have existed had Gibson's board and management exercised appropriate oversight of the company's derivatives activities and insisted on having independent means to determine the value of their derivatives holdings.

Orange County, CA

Orange County managed a pool of about \$7.5 billion for 187 separate governmental agencies, including school, water and sewer districts, and other municipalities, as well as about 400 individuals. The County Treasurer managed the pool and historically reported high interest earnings. The Treasurer's investment strategy stressed yield over liquidity or security at a time when the county Board of Supervisors faced increasing budgetary pressure to fund county government services from investment earnings instead of tax increases. The percentage of the budget generated from tax revenues was declining. The Treasurer operated the investment pool with little oversight from the Board of Supervisors.

From January 1991 to November 1994, the Treasurer substantially increased risk by mismatching the investment pools' assets and liabilities. He purchased volatile, long-term structured notes and used short-term liabilities (reverse repurchase agreements) to fund the purchases.³ For example, as of November 30, 1994, the Orange County investment pool included large investments in structured notes that averaged nearly 4 years to maturity.⁴ The Treasurer's strategy made the investment pool even more vulnerable by entering into reverse repurchase agreements at short-term rates. When combined with the volatility of structured notes, this leveraging strategy produced an investment portfolio highly sensitive to interest rate movements. By November 30, 1994, an estimated \$7.5 billion of original investments in the pool had been leveraged to over \$20 billion, a large portion of which was in inverse floaters. Overall, from 1983 to late 1993, this strategy yielded greater returns than most investment funds of the California State Treasurer and other county treasurers.

³A reverse repurchase agreement is an agreement in which the entity transfers securities to the broker in exchange for cash and promises to repay the cash plus interest in exchange for the same securities at a later date certain or on demand by the broker.

⁴Many of these notes provided a rate of return that was equal to a fixed rate minus a floating rate index. These notes are called "inverse floaters" because, as interest rates go down, the amount of interest they pay goes up. For example, if the fixed rate of interest on the note is 32 percent, and the floating rate is the multiple of 4 times LIBOR of 7 percent, the interest to be paid would be 4 percent. If LIBOR goes down to 6 percent, the new interest rate to be paid would be 8 percent.

As rates increased in 1994, the returns on long-term investments no longer exceeded the cost of funds borrowed to acquire them. In addition, the market values of the long-term investments that were used as collateral declined. On December 6, 1994, the county did not meet a substantial obligation under one of its reverse repurchase agreements. This resulted in the liquidation of the county's collateral. Other entities also began selling Orange County's collateral subject to reverse repurchase agreements. These sales resulted in about \$1.7 billion in losses. The losses precipitated Orange County's filing for bankruptcy.

Despite concerns about the county's investment activities and questions about its ability to repay debt securities, which it had also used to fund the investment pool, the Board of Supervisors failed to carry out its public responsibilities to effectively supervise the county's investment activities and to oversee related debt offerings. The Board failed to require the County Treasurer to submit monthly reports on changes in the County's investments, which is required by California law, and failed to ensure that actions were taken to prevent the recurrence of internal control weaknesses in the Treasurer's office.

The county's investment losses were heightened by the control weaknesses in the County Treasurer's office. Similar weaknesses were noted in several County Auditor's reports issued over a period of years before the bankruptcy filing, but these weaknesses continued to occur. In one report, the Auditor characterized one of these weaknesses as creating the perception of a loose control environment and recommended that risky or unusual transactions be prudently entered into with documented decisions made by an investment committee and with advice, if appropriate, from County Counsel. This lack of oversight allowed the Treasurer to invest in risky transactions without accountability to other county officials.

Even though the County Auditor's reports on the Treasurer's office were addressed to the Board of Supervisors, they were routinely marked "not for Board agenda." As a result, the internal control weaknesses in the Treasurer's office did not come up for public discussion. Although questions have been raised in a report on Orange County's bankruptcy filing about this and other practices of the County Auditor, the Auditor's performance does not excuse the county's Board and management from exercising their responsibility to address control weaknesses and prevent their recurrence.

In other reports related to the county's budget, the County Auditor also raised concerns about the county's reliance on investment income to fund a significant portion of its budget and warned in one report that it was not fiscally responsible to continue budgeting in this manner. In addition, the Auditor had informed the Board that investment income projections contained in the budget were based on increased amounts of borrowing. Despite these warnings, on numerous occasions the Board approved requests to issue bonds and notes without public discussion. The Treasurer then used the bond proceeds to increase the investment pool.

After the county's bankruptcy, an outside consultant studied the internal controls and operational effectiveness of the Treasurer's office and continued to identify weaknesses that in our judgment contributed to the collapse of the county's investment pool. For example, the consultant found that the county's investment policy did not define a diversification strategy or establish limits on levels of high-risk investments.

In January 1996, SEC reported that the Board lacked sufficient information on the county's investment pool and the impact of the Treasurer's investment strategy on both the county's financial condition and its ability to repay investors. In addition, SEC found that despite the Board's knowledge that the county's discretionary budget was increasingly dependent on the pool's interest income and that this income was connected to the county's increased debt offerings, the Board failed to ensure that this material information was disclosed to potential investors. SEC concluded that in authorizing the offer and sale of debt in 1994, the Board failed to meet its statutory responsibilities to ensure proper disclosure when it approved the county's misleading disclosure documents.

Orange County's losses illustrate the vulnerability of state and local governments to losses resulting from weaknesses in internal controls. Without a responsible oversight body to develop and implement policies governing the nature and extent of derivatives use and to provide effective oversight of internal controls and derivatives activities, entities have greater vulnerability to significant losses. Both Orange County and the state of California have instituted corrective actions. For example, the Board established a Treasury Oversight Committee, which consists of five financial experts, to assist the Board in improving accountability to the public on county investments and evaluating internal controls in the Treasurer's office. California enacted legislation requiring local treasurers to have oversight committees, annual written investment policies, and

annual compliance audits. It also enacted legislation restricting portfolios to certain types of investments.

Capital Corporate Federal Credit Union

The Capital Corporate Federal Credit Union, which is known as Cap Corp, was formerly one of the nation's largest corporate credit unions. Over the 6-year period 1989 to 1994, Cap Corp invested an increasing portion of its assets in CMOs in an apparent attempt to increase the return paid to its member credit unions. Although Cap Corp's investments in CMOs increased substantially during this 6-year period, Cap Corp did not develop and implement a risk-management system that was capable of effectively monitoring and responding to rapid and unanticipated changes in CMO market values.⁵ In particular, Cap Corp lacked a financial model to test the overall sensitivity of its investment portfolio to potential changes in interest rates and was unable to react readily to the growing mismatch between its assets and liabilities.⁶ In January 1995, the National Credit Union Administration placed Cap Corp into conservatorship because it could not meet its financial obligations to its members. As of February 1995, Cap Corp's losses totaled \$61 million.

Cap Corp's board of directors not only failed to ensure that an adequate risk-management system was established and functioning, it also did not appear to adequately oversee Cap Corp's investment activities. For example, virtually all responsibility for Cap Corp's investment activities was delegated to an investment committee comprising Cap Corp's senior management, and the board showed little interest in the decisions this committee made. Until late 1993, the committee did not maintain minutes of its meetings that would have documented investment decisions. In late 1994, only after National Credit Union Administration examiners insisted, minutes of the investment committee were formally presented to the board on a monthly basis. However, the board did not appear to discuss or question the investment committee's strategy or activities.

In addition, the supervisory committee of the board of directors, which was responsible for oversight of the audit function and related review of internal controls, did not establish an internal audit function at Cap Corp. Instead, the supervisory committee relied solely on the annual financial

⁵The market value of a CMO tends to be more volatile than traditional corporate investments, such as U.S. Treasury obligations, in part because changes in interest rates affect the time pattern of mortgage prepayments. When interest rates rise, people prepay mortgages at a slower rate, and the average maturity of these assets lengthens.

⁶Financial modeling, including stress testing, is important because it shows the sensitivity of asset and liability values to potential changes in interest rates.

statement audit performed by the external auditor to provide information about the status of internal controls. The objective of a financial statement audit is for an external auditor to provide an opinion on the fairness of the information appearing in the financial statements. Therefore, the purpose of these audits is different from audits that focus on the adequacy of internal controls. Although the annual external audit may have contributed to the committee's oversight, it did not take the place of a specific review of controls that an internal or external auditor could have performed to ensure Cap Corp's compliance with established policies and procedures. Without this type of review, the Board of Directors did not have adequate information to understand the seriousness of the risk associated with Cap Corp's investment activities.

Barings PLC

In February 1995, Baring Brothers & Co., Ltd, a British investment bank owned by Barings PLC, collapsed after losing over \$1 billion by trading financial futures on exchanges in Singapore and Japan. According to the British Board of Banking Supervision Inquiry, Barings' management failed at various levels to institute a proper system of internal controls; to enforce accountability for all profits, risks, and operations; and to adequately follow up on a number of warning signals over a prolonged period. For example, a 1994 internal audit report highlighted that one individual had an excessive concentration of power and that this concentration was a significant internal control weakness. That weakness allowed the individual responsible for initiating trading transactions, often referred to as "front" office activities, to also be responsible for recording and reconciling these activities. The latter, referred to as "back" office activities, also included settling any account differences. Permitting one individual to be responsible for both front and back office activities increases the likelihood that unauthorized transactions could occur and go undetected. The employee's unauthorized transactions were concealed by false trading transactions and accounting entries, the submission of falsified reports, and the misrepresentation of trading profitability. Despite the seriousness of this lack of basic separation of duties, Barings' management did not take any action or follow up on the internal audit report.

The Banking Supervision Inquiry also showed that other warning signs existed and were ignored by management. For a relatively risk-free trading strategy to generate such apparently large profits should have raised questions. Further, the trading activities required a high level of funding. In early 1994, the employee had requested some of the funds used to finance

Appendix I
Flawed Corporate Governance Systems
Contributed to Significant Losses

his trading positions from the bank as loans to fund client positions. Because the employee requesting the funds was responsible for both front and back office transactions, he was able to conceal from Barings' credit department the fact that he was characterizing the transactions as loans. Since this department was not informed of the loans, it made no attempt to verify whether any clients existed (none did). Barings' inattention to key internal controls, such as the segregation of duties, demonstrates its lack of effective corporate governance and a generally weak overall control environment.

Results of GAO Review of Key Internal Controls at 12 Banks and Thrifts

We judgmentally selected a sample of 12 banks and thrifts that were large end-users of derivatives to obtain an understanding of their corporate governance, risk management, and internal controls.¹ At each of the institutions, we discussed the formal assessment of internal controls required by FDICIA, whether management perceived benefits from these FDICIA requirements, and the reasons for their perceptions. This appendix also discusses the extent to which certain key controls over derivatives activities were designed into these institutions' systems of internal controls.

Officials at most of the financial institutions told us that the formal assessment was beneficial. Some officials told us the process provided them an opportunity to thoroughly think through their internal control structures or to heighten their awareness of internal controls. Some of the officials noted that the process identified areas needing improvement or increased their staffs' awareness of the importance of controls. Although some officials said that in its first year of application the process was either costly or time-consuming, many others said that it will take less time or effort in subsequent years to update the information previously obtained.

To determine whether key internal controls related to derivatives were designed into the internal control systems at the 12 institutions, we reviewed available documentation and discussed specific controls with management, internal auditors, or regulatory examiners.² The documentation included bank examination working papers and, when available, internal control documentation related to derivatives that had been prepared by management to satisfy FDICIA requirements. We developed the list of key internal controls related to derivatives after reviewing various guidance documents prepared by market participants, regulators, and others. Most of the controls we considered key were included in guidance issued by more than one of these sources and were also contained in derivatives guidance issued by COSO. However, our

¹At the time of selection, the banks and thrifts had at least \$1 billion in total assets and notional amounts of derivatives exceeding 25 percent of the amount of total assets. We selected at least two institutions regulated by each of the four bank and thrift regulatory agencies. We excluded the seven largest bank OTC derivatives dealers discussed in our May 1994 report.

²Subsequent to our review of the 12 banks and thrifts, as discussed in chapter 3, the Federal Reserve issued examination guidance stating that the board of directors, as well as management, should approve risk limits. See Federal Reserve Board Letter SR 95-17 (SUP), "Evaluating the Risk Management and Internal Controls of Securities and Derivatives Contracts Used in Nontrading Activities"; and Federal Reserve Board Letter SR 95-51 (SUP), "Rating the Adequacy of Risk Management Processes and Internal Controls at State Member Banks and Bank Holding Companies."

Appendix II
Results of GAO Review of Key Internal
Controls at 12 Banks and Thrifts

review did not evaluate or test the effectiveness of the key internal controls at the 12 institutions.

Table II.1 summarizes the results of our review of key derivatives controls in the system of internal controls at the 12 institutions. For each key derivatives control, the table identifies the number of institutions that (1) had designed the internal control into their systems; (2) had designed the internal control into their systems, but for which examiners or internal auditors had noted the need for improvements; and (3) had incomplete data with which to verify that the control was designed into the system.

**Appendix II
Results of GAO Review of Key Internal
Controls at 12 Banks and Thrifts**

Table II.1: Summary of Results at 12 End-User Financial Institutions

Key internal control	Key control designed into system	Key control designed into system/but improvements still needed	Incomplete data to verify that key control was designed into system
The overall objective of the hedging program is defined, and this objective is approved by the board of directors.	9	1	2
Written policies clearly set risk limits and are approved by management.	6	6	0
A committee meets regularly to oversee the hedging program, report to the board of directors, and maintain documentation of its decisions and actions.	6	4	2
Trading limits are set for specific market risks.	9	2	1
Credit limits are established for counterparty exposure.	8	4	0
Policies exist to execute trades through authorized brokers.	8	1	3
Policies exist to ensure that persons have appropriate knowledge to manage derivatives activities.	5	2	5
The board of directors has a policy to ensure that sufficient capital is maintained to support risk exposures.	8	3	1
Procedures are designed to segregate the trading function from the credit function in order to separate placing an order, recording the transaction, and verifying the confirmation of the trade.	10	2	0
Policies are established that authorize separate employees to set hedge strategy, change hedge strategy, change trading limits, and execute trades.	11	1	0
Backup procedures exist when key employees are absent.	3	1	8
Procedures exist to monitor risk limits and exposures on a daily or regular basis.	7	3	2
A system of communication exists between the back office management and senior management concerning changes to hedging strategies.	8	0	4
Established subsidiary accounting records exist for futures contracts.	9	0	3
Procedures exist to periodically reconcile subsidiary records to the general ledger.	9	1	2
Documentation exists to support (1) the objective and strategy of each hedge; and (2) key accounting information for options, futures, and swaps transactions.	9	2	1
Sequential numbering of transactions is used.	6	0	6
Procedures exist to require trade verification by (1) agreeing executed trade to broker's confirmation, (2) agreeing key accounting data to broker's statements, and (3) accounting for the sequence of numbered transactions.	9	1	2
Internal audit function exists so that periodic reviews of derivatives activities and policies and procedures established by management could be done.	8	1	3
Management receives reports on a regular basis of the results of hedging and trading activities.	7	3	2

Sources include: OCC Banking Circular BC-277; Federal Reserve Board Letter SR 93-69; Derivatives: Practices and Principles, Global Derivatives Study Group, Group of Thirty, Washington, D.C., July 1993; An Integrated Bank Regulatory Approach to Derivatives Activities, Institute of International Finance, May 1993; and Audits of Savings Institutions, AICPA accounting and audit guide.

Prototype Guidelines for Roles and Responsibilities of Boards of Directors

The following represent suggested guidelines for boards of directors presented by GAO to SEC for its consideration in responding to the recommendations in our May 1994 report. These guidelines were accumulated from existing guidance issued in OCC Banking Circular BC-277; Federal Reserve Board SR 93-69; the Canadian Deposit Insurance Corporation's Interest Rate Risk Management paper; and The CPA Letter article entitled "Questions About Derivatives," issued by AICPA in July/August 1994.

Boards of Directors should

- approve all significant policies and activities relating to derivatives and related risk-management activities; and ensure that these policies and activities are consistent with the organization's broader business strategies, capital adequacy, expertise, and the overall willingness to take risk.

Specifically, the boards should consider and approve

- a description of the relevant financial products, markets, and business strategies;
- the costs of establishing sound and effective risk-management systems and of attracting and retaining professionals with expertise in derivatives transactions;
- an analysis of the reasonableness of the proposed activities in relation to the entity's overall financial condition and capital levels;
- an analysis of the risks that may arise from the activities;
- the procedures the entity will use to measure, monitor, and control risks;
- the relevant accounting guidelines (the appropriateness of such guidelines should be discussed with the external auditors as a basis for approval); and
- an analysis of any legal restrictions and whether the activities are permissible.

In addition, Boards of Directors should

- regularly reassess the adequacy of the financial condition of the entity and the competency of designated professional personnel to support the derivatives and related risk-management activities;
- regularly re-evaluate (at least annually) significant derivatives and related risk-management policies and procedures;
- approve any significant changes in derivatives activities;

Appendix III
Prototype Guidelines for Roles and
Responsibilities of Boards of Directors

- review the appropriateness of established risk limits and controls whenever significant changes occur in the size and scope of the entity's activities or market conditions, or if the entity experiences significant reductions in earnings or capital that were not anticipated at the time the limits and controls were established;
- receive relevant information about credit exposure arising from derivatives activities on a periodic and timely basis;
- receive reports that accurately present the nature and level(s) of risk taken and compliance with approved policies and limits;
- ensure compliance with the risk-management program by receiving sufficient information in periodic reporting by management and internal and external auditors;
- ensure that an internal audit function reviews risk operations to ensure that the entity's risk-management policies and procedures are being adhered to; and
- conduct and encourage discussions between its members and senior management, as well as between senior management and others in the entity, regarding the entity's risk-management process and risk exposure.

Prototype Report on Internal Controls Over Derivatives and Related Risk-Management Activities

At SEC's request, we prepared this prototype report on internal controls over derivatives activities to illustrate the kind of public reporting we were recommending. This report describes an entity's derivative products, the establishment of its risk limits and related controls, and its involvement of the board of directors and the board's audit committee. This report is only illustrative and could well be shortened, simplified, or broadened to include a wider range of important internal controls. We presented this report to SEC for its consideration in responding to the recommendations in our May 1994 report.

As described further in Note XX to the financial statements, the Company uses financial derivatives as an efficient way to manage its various market risks, including adverse changes in interest rates, foreign exchange rates, and commodity prices. The Company uses derivatives to protect against price volatility in the raw materials of the products it manufactures. In addition, the Company uses derivatives and related risk-management products to synthetically alter the interest rate and maturity characteristics of its debt instruments to better match the characteristics of the related assets being funded by those instruments. In certain instances, the Company may use derivatives to protect itself against foreign currency movements in connection with its overseas operations. Derivative instruments used include futures contracts, foreign exchange forwards, options, and interest rate swaps.

The Company's Board of Directors has approved the risk-management policies and procedures that management uses to carry out its risk-management activities. These policies and procedures reflect the Company's objectives to hedge virtually all of its market risk exposure. However, the Board-approved policy allows management to maintain nonhedged market risk exposures not to exceed X percent of the Company's planned gross profit.

Management has established a system of internal control to provide reasonable assurance that the derivatives and related risk-management policies and procedures are being carried out and, in so doing, that reliable financial reporting of these activities is achieved and that assets are protected from losses due to unauthorized acquisition, use, or disposition of derivatives. The control system for derivatives contains self-monitoring mechanisms, including risk-management group reporting directly to senior management and the Board of Directors. As a result, actions are taken to correct deficiencies as they are identified. However, an effective internal control system, no matter how well designed, has inherent limitations—including the possibility of the circumvention or overriding of controls.

Management has assessed the operation of its control system for derivatives as of December 31, 19XX, using the criteria for effective internal control described in "Internal Control - Integrated Framework" issued by COSO. The assessment included an in-depth

**Appendix IV
Prototype Report on Internal Controls Over
Derivatives and Related Risk-Management
Activities**

analysis of all departments of the Company responsible for derivatives and related risk-management activities. A separate task force consisting of members of mid-level management and internal audit had overall responsibility for the assessment and, at the conclusion, reported to senior management. The documentation of the assessment in the form of checklists, flowcharts, and questionnaires provides evidence of this review. In addition, the Company's independent auditors reviewed the assessment in connection with their annual audit procedures but have not been asked to express an opinion on the effectiveness of the system. Management reviewed its assessment of the effectiveness of the control system for derivatives, including the methodology used to perform the assessment, with the Audit Committee of the Board of Directors. Management also reviewed with the Audit Committee all weaknesses identified in the assessment and the corrective actions taken. All identified weaknesses were corrected as of December 31, 19XX.

On the basis of the assessment described, Management believes that as of December 31, 19XX, its approved policies and procedures for risk management using financial derivatives are being carried out and that they provide reasonable assurance that published financial statements reliably report these activities and that Company assets are safeguarded against loss due to unauthorized acquisition, use, and disposition of derivatives.

Quantitative Standards for Market Risk Amendment

In September 1996, U.S. bank regulators issued a final rule to incorporate market risk into risk-based capital standards for internationally active dealer banks and bank holding companies with significant trading activities. The final rule requires that, by January 1, 1998, these banks use their internal (proprietary) value-at-risk models to calculate the amount of regulatory capital to be held for market risk. Banks have used these models primarily as management tools to produce estimates for evaluating their trading positions, limits, and strategies, rather than for evaluating capital adequacy. The final rule imposes several qualitative and quantitative requirements to adapt these models for regulatory capital purposes.

The qualitative requirements include rigorous stress testing, an independent risk control unit, active involvement of senior management, and an independent review of the risk measurement system. The quantitative requirements include

- daily calculation;
- an assumed holding period of 10 business days;¹
- a 99 percent confidence level to estimate maximum loss;²
- allowance for correlations among broad risk categories (interest rates, exchange rates, equity and commodity prices) only if based on empirical analysis and if the regulator agrees that the measurement system is sound;³
- use of at least 1 year of historical data in the models of future price and rate changes;⁴
- updates at least every 3 months of the underlying data used in the models;

¹Most institutions assume a 1-day holding period in estimating value at risk in their trading portfolios. That would cover the amount of adverse price move that might be expected the next day. A longer assumed holding period, such as 10 days, will generate a larger potential price movement and therefore a larger value at risk. Bank regulators do not expect banks to hold losing positions for that period; instead they use the 10-day calculation as a way of ensuring that banks' value-at-risk shows the potential impact of a stressful shock, such as an instantaneous price move of a magnitude that ordinarily might occur only over 10 days.

²This constraint establishes that the value at risk will be set on the basis of an adverse rate or price movement large enough so that in 99 out of 100 10-day periods, price moves are expected to be less adverse than this.

³If two market prices or rates move in a clearly defined relationship to each other, and if this relationship is stable, these market prices or rates are said to have a defined numerical correlation. As an example, if currency A and currency B always move together, then a firm could reduce its value at risk by having an asset position in one and a matching liability position in the other.

⁴Some banks use data from periods as short as 30 to 60 days, while others use periods as long as several years. The regulators' 1-year constraint is intended to make value-at-risk estimates more comparable among banks.

Appendix V
Quantitative Standards for Market Risk
Amendment

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- at least six different maturities of interest rates included in the models of interest rates for each major currency;
 - all material risks measured by the bank's model; and
 - nonlinear price characteristics of options⁵ adequately addressed.

⁵The relationship of the value of an option to the price of the underlying is not constant, and banks' models must allow for the different factors that move options prices.

Current Accounting and Disclosure Standards for Derivatives and Related Financial Instruments

Accounting standards establish the rules that entities must follow in recognizing and measuring transactions for reporting in the body of the financial statements. Disclosure standards establish the rules that entities must follow in providing additional information beyond what is reported in the financial statements, usually in the accompanying footnotes.

Accounting and disclosure standards promulgated by FASB are generally applicable to nongovernmental entities, and those issued by GASB apply to state and local governmental entities. FASB began a financial instruments project in 1986 to develop standards to aid in resolving financial accounting and reporting issues about various financial instruments, including derivatives. Standards affecting derivatives that have been issued since the project began focus on disclosures. No new accounting standards for derivatives have been issued since 1984. However, an accounting standard for certain investments in debt and equity securities was issued in 1993. There are no specific GASB pronouncements that address accounting for derivatives held by state and local governmental entities. The following is a discussion of existing accounting and disclosure standards as well as other guidance from authoritative sources.

Accounting Requirements

Currently, two FASB statements prescribe specific accounting requirements for derivative instruments:

- Statement of Financial Accounting Standards (SFAS) No. 52, Foreign Currency Translation, issued in 1981, applies to foreign currency transactions including foreign currency futures, forwards, and swaps.
- SFAS No. 80, Accounting for Futures Contracts, issued in 1984, applies to futures contracts, except foreign currency futures.

SFAS No. 52 allows the use of hedge accounting treatment, provided the hedging instrument is so designated and is effective as a hedge of a specific commitment or transaction, and the commitment is firm. SFAS No. 80 allows the use of hedge accounting treatment provided (1) the item to be hedged exposes the entity to price or interest rate risk; (2) the hedging instrument and the hedged item, which may be either an individual item or an identifiable group of essentially similar items, are specifically identified by management and the relationship between them is designated as a hedge; and (3) the hedging instrument reduces the entity's exposure to price or interest rate risk and continues to do so throughout the hedge period.

Some similarities exist in the hedge criteria specified in both statements. For example, both require the specific hedging instrument and the hedged item to be identified and designated as a hedge, and both require an ongoing demonstration of effectiveness or correlation to demonstrate the hedge is working as intended. However, there are significant differences between the statements as well. For example, SFAS No. 80 allows the use of hedge accounting when the hedging instrument is designated against an anticipated transaction, provided the significant characteristics and expected terms of the anticipated transaction are identified and occurrence is probable.¹ SFAS No. 52 allows hedging only against firm commitments.² SFAS No. 80 requires the hedging instrument to reduce the entity's overall exposure to interest rate risk, while SFAS No. 52 requires only reducing the risk of the designated hedged item. As a result, these two statements do not provide consistent guidelines to those seeking to apply them to instruments for which there are currently no standards. Although FASB in the past had considered undertaking a project focusing on reconciling both statements, due to questions raised about the appropriateness of hedge accounting in general, it decided instead to address hedging more broadly in its ongoing hedge accounting project.

In May 1993, FASB issued SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities, in response to concerns about the appropriateness of previous accounting practices in which historical cost accounting was used for investments that were regularly being sold and traded. Although SFAS No. 115 does not apply to derivatives, it does apply to financial instruments that may have derivatives-like characteristics. SFAS No. 115 requires most investment securities to be classified in three categories and accounted for as follows:

- Debt securities that the entity has the positive intent and ability to hold to maturity are classified as “held-to-maturity securities” and reported at amortized cost.
- Debt and equity securities that are bought and held principally for the purpose of selling them in the near term are classified as “trading securities” and reported at fair value, with unrealized gains and losses included in earnings.
- Debt and equity securities not classified as either held-to-maturity or trading securities are classified as “available-for-sale securities” and

¹SFAS No. 80 defines an anticipated transaction as one that an entity expects, but is not obligated, to carry out in the normal course of business.

²A firm commitment is an agreement, usually legally enforceable, under which performance is probable because of sufficiently large disincentives for nonperformance.

reported at fair value, with unrealized gains and losses excluded from earnings and reported in a separate component of shareholders' equity.

In addition, SFAS No. 115 requires that for securities classified as available-for-sale or held-to-maturity, an entity must record in income any declines in fair value that are deemed to be other than temporary.

Disclosure Requirements

Since the financial instruments project began in 1986, FASB has issued three disclosure statements:

- SFAS No. 105, Disclosure of Information About Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk, which applies to all financial instruments with the stated risks;
- SFAS No. 107, Disclosures About Fair Value of Financial Instruments, which generally applies to all financial instruments; and
- SFAS No. 119, Disclosure About Derivative Financial Instruments and Fair Value of Financial Instruments.

SFAS No. 105 and SFAS No. 107, which were issued in 1990 and 1991, do not make a distinction between hedge versus nonhedge instruments. SFAS No. 105 established requirements for all entities to disclose information principally about financial instruments that have an off-balance-sheet risk of accounting loss.³ For all applicable financial instruments, entities must disclose the extent, nature, and terms of such instruments, including the credit and market risks they carry, the potential accounting loss that may result from the credit risk regardless of any offsetting collateral or security, and information about the entity's collateral policy and program to better indicate the extent of credit risk. In addition, entities are to disclose all significant concentrations of credit risk arising from all financial instruments.

SFAS No. 107 requires all entities to disclose the fair value of financial instruments, both on-balance sheet and off-balance sheet, for which it is practicable to estimate fair value, as well as the method(s) and significant assumptions used to estimate the fair value in either the body of the financial statements or the related footnotes. If estimating fair value is not practicable, the standard requires disclosure of descriptive information pertinent to estimating the value of a financial instrument.

³SFAS No. 105 defines an off-balance-sheet risk of accounting loss as the risk of loss beyond what is currently recognized in the balance sheet due to credit and/or market risk directly resulting from the rights and obligations of a financial instrument.

SFAS No. 119, issued in October 1994, established new disclosure requirements and included revisions to SFAS No. 105 and SFAS No. 107. Specifically, for all derivative financial instruments, SFAS 119 requires disclosure of the following information either in the body of the financial statements or in the accompanying footnotes:

- the amounts, nature, and terms of derivative financial instruments that are not subject to SFAS No. 105 because they do not result in off-balance-sheet risk of accounting loss;
- average fair value and net trading gains or losses for derivative financial instruments held or issued for trading purposes;
- the objectives for holding or issuing derivative financial instruments held other than for trading, the strategies for achieving those objectives, and how the instruments are reported in the financial statements; and
- information about hedges of anticipated transactions, including firm commitments, such as a description of the classes of derivative financial instruments used to hedge those transactions, the amount of hedging gains and losses deferred, and a description of the transactions or other events that result in recognition of the deferred gains or losses in earnings.

The statement also amended SFAS No. 105 to require disaggregation of information about financial instruments with off-balance-sheet risk of accounting loss by class, business activity, risk, or other category that is consistent with the way the entity manages those instruments. Additionally, the statement amends SFAS No. 107 to require that fair value information be presented without combining, aggregating, or netting the fair value of derivative financial instruments with the fair value of nonderivative financial instruments and be presented together with the related carrying amounts in the body of the financial statements, a single footnote, or a summary table. SFAS No. 119 also encourages, but does not require, quantitative information about market risks of derivative financial instruments and other related assets and liabilities that is consistent with the way the entity manages or adjusts those risks and that is useful for comparing the results of applying the entity's strategies to its objectives for holding or issuing the derivative financial instruments.

Other Guidance

The accounting and financial reporting provisions of AICPA Audit and Accounting Guides generally describe authoritative literature or describe

practices for a specific industry where no such literature exists.⁴ Although the guides describe existing principles and practices, they do not establish accounting standards themselves. One guide—Audits of Investment Companies—contains limited information about the accounting for derivatives by those entities. In general, this guide briefly describes current accounting practice for derivatives by those entities for various derivative products. Another guide, Audits of State and Local Governmental Units, contains limited information on the accounting for investments of governmental funds by these entities but does not specifically address derivatives. A recently issued guide, Banks and Savings Institutions, and a proposed guide, Audits of Brokers and Dealers in Securities, contain more extensive discussion of derivatives and related accounting and auditing guidance. AICPA anticipates issuing the proposed guide in the fourth quarter of 1996.

Additional guidance on derivatives issues is contained in various FASB Emerging Issues Task Force (EITF)⁵ consensus positions concerning hedge accounting. For example, EITF Issue No. 90-17, Hedging Foreign Currency Risk with Purchased Options, addresses the appropriateness of hedge accounting for purchased foreign currency options under various circumstances and EITF Issue No. 91-1, Hedging Intercompany Foreign Currency Risks, addresses whether intercompany transactions present foreign exchange risk that may be hedged for accounting purposes. Although EITF has dealt with a variety of issues related to certain derivatives, it has not dealt with them comprehensively. Instead, EITF decisions generally deal with somewhat narrow accounting issues. Consequently, they do not provide guidance that can be applied universally to derivatives or other transactions.

In 1994 the GASB staff issued Technical Bulletin No. 94-1, Disclosures About Derivatives and Similar Debt and Investment Transactions, to

⁴Statement of Auditing Standards No. 69, The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles in the Independent Auditor's Report, describes the hierarchy of sources of established accounting principles that are generally accepted in the United States. The highest category, officially established accounting principles, includes all FASB and GASB statements, such as SFAS Nos. 52 and 80. AICPA Industry Audit and Accounting Guides, consensus positions of the FASB Emerging Issues Task Force, and GASB Technical Bulletins are described in Statement of Auditing Standards No. 69 as accounting principles but are lower in the hierarchy than FASB and GASB statements. FASB maintains the responsibility for setting principles with broad applications and thus limits the scope of these additional sources. AICPA Issue Papers are listed in the hierarchy as other accounting literature to be considered in the absence of established accounting principles.

⁵FASB established EITF in 1984 to assist FASB in the early identification of emerging issues affecting financial reporting and of problems in implementing authoritative pronouncements. Its membership consists of representatives from the major public accounting firms as well as representatives of major associations of preparers of financial statements, such as the Financial Executives Institute and the Business Roundtable.

**Appendix VI
Current Accounting and Disclosure
Standards for Derivatives and Related
Financial Instruments**

address financial statement disclosures about derivatives and similar transactions. Technical Bulletin No. 94-1 calls for certain disclosures if a governmental entity directly or indirectly uses, holds, or writes (sells) derivatives or similar transactions during the period covered by the financial statements. These disclosures should explain the nature of the transactions and the reasons for entering into them, including relevant discussion of exposure to credit risk, market risk, and legal risk.

Although there are no authoritative accounting standards for option-based derivatives, AICPA Issues Paper 86-2, Accounting for Options, addresses issues related to the accounting for options. However, the 1986 issues paper contains certain viewpoints that differ from the conclusions in SFAS Nos. 52 and 80. For example, the paper states that an option that hedges either an asset stated at cost or a liability stated at proceeds cannot qualify for hedge accounting. However, SFAS No. 80 permits hedge accounting for futures contracts that hedge such assets or liabilities. The advisory conclusions expressed in the issues paper are not authoritative, and FASB has advised that the existing authoritative accounting pronouncements should be followed.

Derivatives Activities of 12 Banks and Thrifts

This appendix describes the use of derivatives by the 12 end-user banks and thrifts we reviewed as well as examples of the hedging strategies of these institutions. The information that follows is based on our analysis of bank examination workpapers, annual reports, regulatory reports, and discussions with regulatory and institution management and staff at each of the 12 institutions. We generally obtained data for each institution as of December 31, 1993. In two cases, however, we obtained detailed derivatives data as of the most recent regulatory examination at those institutions. For institutions F and K, data are as of September 30, 1994, and June 30, 1994, respectively.

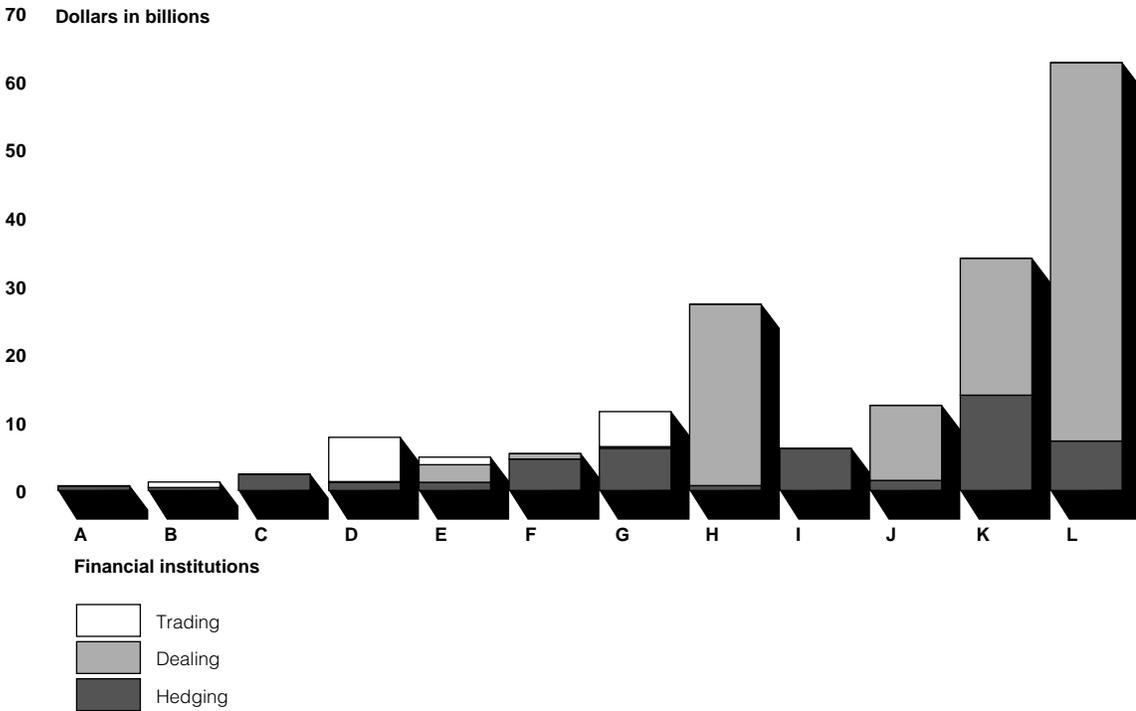
Extent and Use of Derivatives

We found that while all 12 of the institutions we reviewed were using derivatives for what they identified as end-user risk-management or hedging activities,¹ most of them were also using derivatives for dealing and for proprietary trading. As shown in figure VII.1, nine institutions were using derivatives for dealing and/or proprietary trading in addition to their hedging activities.

¹As discussed in chapter 5, some institutions used deferral hedge accounting strictly for risk-reducing activities, while others used deferral hedge accounting for risk-adjusting activities, which some referred to as risk-management activities. Throughout this appendix, we use the term hedging to refer to all transactions for which the institutions are using deferral hedge accounting, where the underlying asset or liability is carried at historical cost, whether the activities are risk-reducing or risk-adjusting. Hedging or hedge accounting also refers to situations where the derivative is used to hedge an underlying asset or liability carried at market value.

**Appendix VII
Derivatives Activities of 12 Banks and
Thrifts**

Figure VII.1: Notional/Contract Amount of Derivatives Held by Purpose of Activity, as of December 31, 1993



Note: Institutions H and J show combined dealing and trading activities under "dealing."

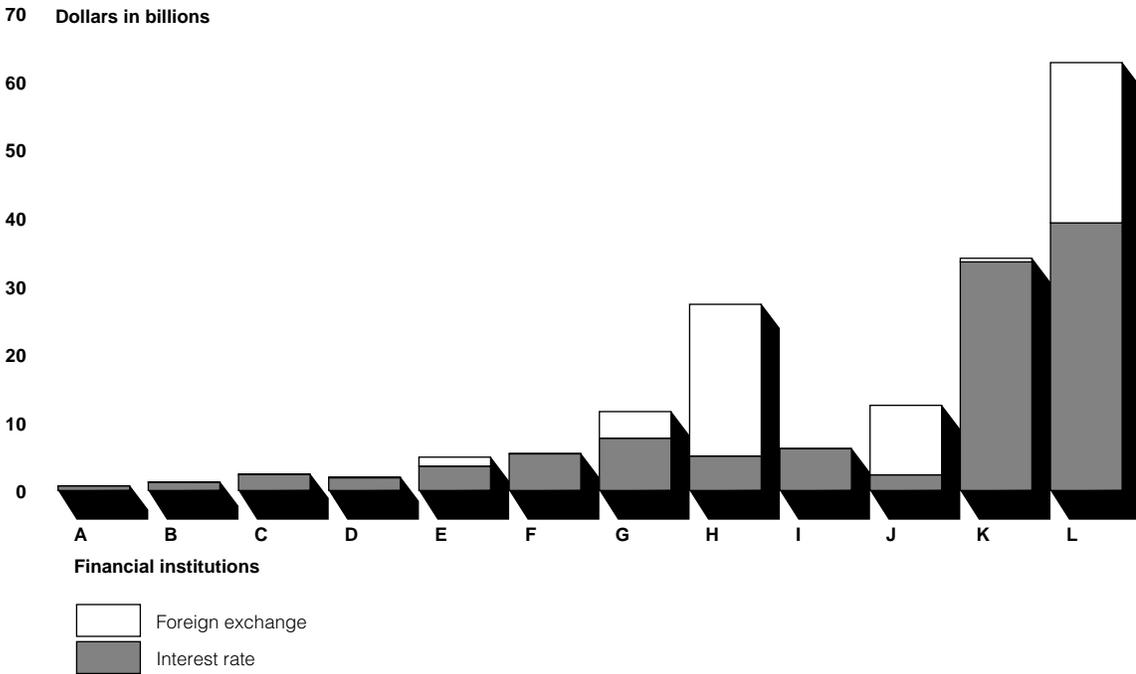
Source: GAO analysis based on reviews of bank and thrift examination reports and workpapers, internal and external financial reports, and discussions with bank and thrift examiners and management.

Although all of the institutions were using derivatives for hedging, the total notional/contract amount of derivatives used for hedging was much less than that used for dealing and trading. Only 27 percent of the total notional/contract amount of derivatives held by these 12 institutions was identified as being used for hedging compared with 73 percent for dealing and/or trading. In all cases the derivatives used for dealing and for trading were carried at market value.

Figure VII.2 shows the extent to which these institutions used interest rate derivatives versus their use of foreign exchange rate instruments.

**Appendix VII
Derivatives Activities of 12 Banks and
Thrifts**

Figure VII.2: Notional/Contract Amounts of Interest and Foreign Exchange Rate Derivatives, as of December 31, 1993



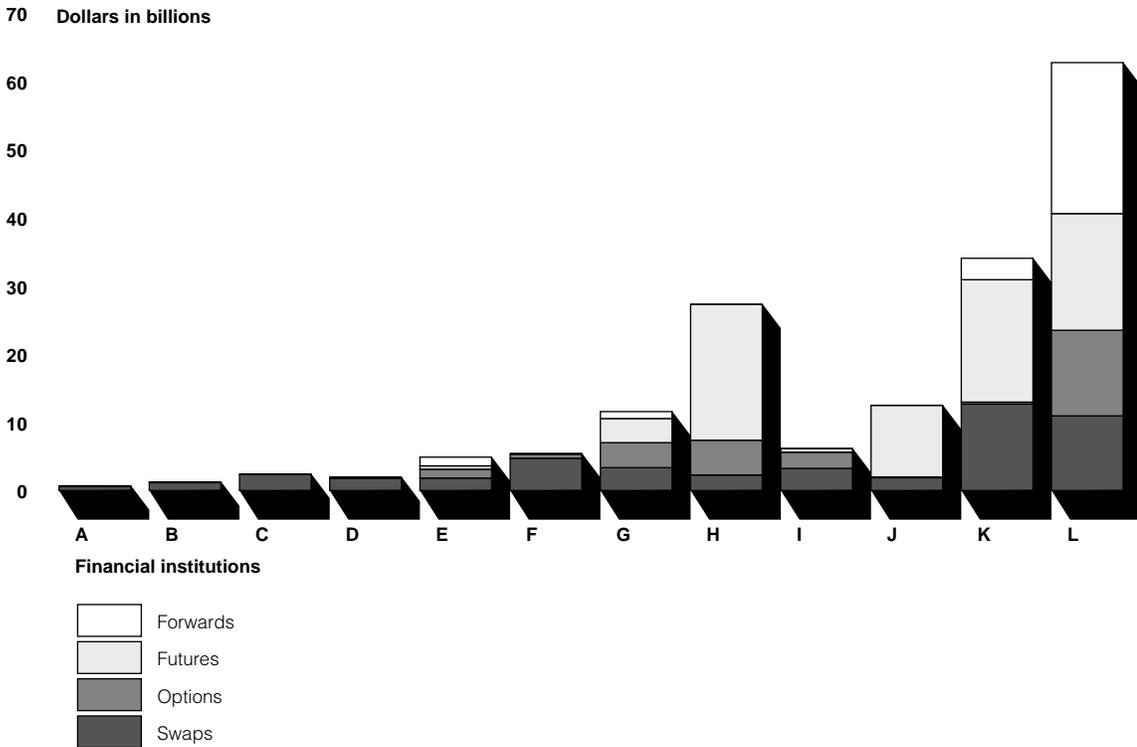
Source: GAO analysis based on reviews of bank and thrift examination reports and workpapers, internal and external financial reports, and discussions with bank and thrift examiners and management.

As a whole, 64 percent of the notional/contract amounts of the derivatives held were interest rate derivatives, and 36 percent were foreign exchange rate instruments. About 42 percent of the interest rate derivatives were used for hedging, while less than 1 percent of the foreign exchange rate derivatives were used for hedging purposes. Only two institutions were hedging with foreign exchange rate instruments. Institution H also used nominal commodity and equity futures for dealing/trading.

As shown in figure VII.3, the institutions we reviewed used a variety of derivative products.

**Appendix VII
Derivatives Activities of 12 Banks and
Thrifts**

Figure VII.3: Notional/Contract Amount of Derivatives by Type of Contract, as of December 31, 1993



Note: Institutions F, H, and J reflect combined futures and forwards amounts under futures.

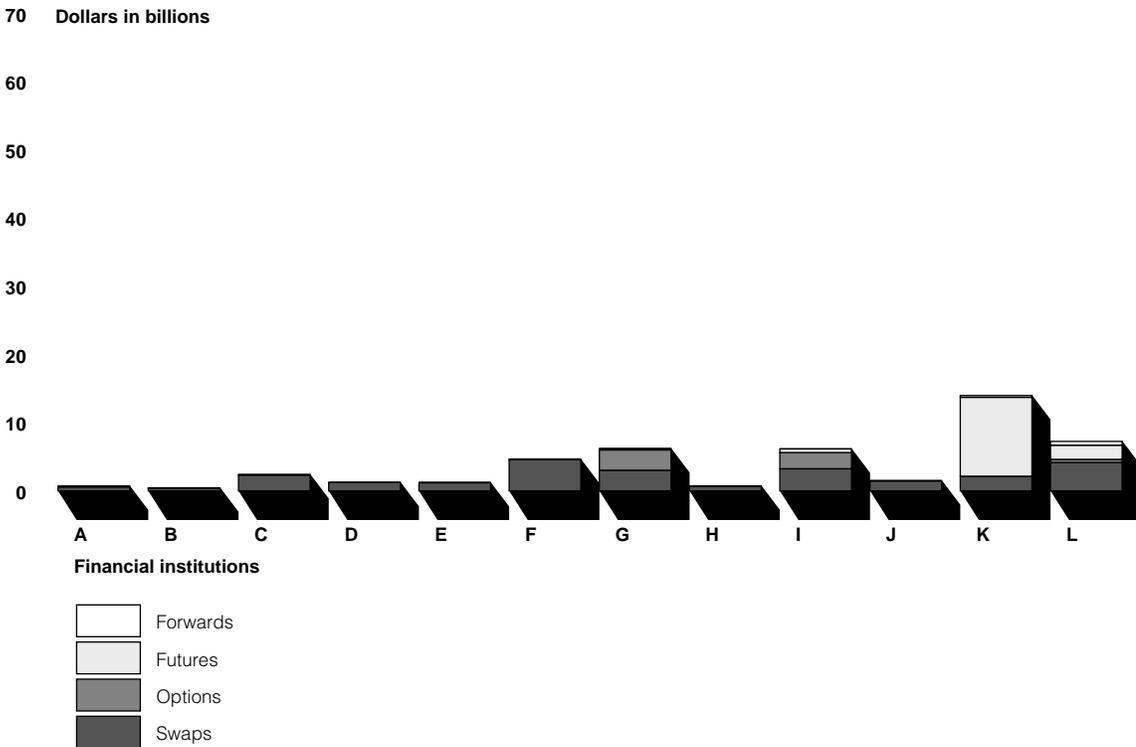
Source: GAO analysis based on reviews of bank and thrift examination reports and workpapers, internal and external financial reports, and discussions with bank and thrift examiners and management.

Swaps were the only type of derivatives used by all 12 institutions. Despite this, about 57 percent of the total notional/contract amount of derivatives held by these 12 institutions was in futures and forwards, while 27 percent was in swaps and 15 percent in options. This distribution was due in large part to the fact that most of the derivatives held by the institutions in our sample were used for dealing and/or trading purposes.

**Appendix VII
Derivatives Activities of 12 Banks and Thrifts**

As figure VII.4 shows, interest rate swaps were clearly the predominant derivative instruments that these institutions used specifically for hedging purposes.

Figure VII.4: Notional/Contract Amount of Hedging Derivatives by Type of Contract, as of December 31, 1993



Source: GAO analysis based on reviews of bank and thrift examination reports and workpapers, internal and external financial reports, and discussions with bank and thrift examiners and management.

The widespread use of interest rate swaps for hedging is not surprising because insured depository institutions are inherently vulnerable to changes in interest rates, and swaps can be customized to enable the institutions to better match the interest rate sensitivity of their assets to their liabilities. As a group, 54 percent of these institutions' hedging instruments were interest rate swaps, followed by interest rate futures at

31 percent. In contrast, foreign exchange futures and forwards together accounted for almost half of the total derivative instruments used for dealing and trading purposes. Overall, 99 percent of the hedging instruments that the institutions in our sample used were interest rate instruments, while instruments used for dealing and proprietary trading were about evenly split between interest rate and foreign exchange rate products.

Hedging Strategies

The institutions we reviewed used a variety of hedging strategies to manage their interest rate risk. Each institution's specific strategy was unique because of factors such as the size and type of the institution, the nature and mix of its assets and liabilities, and its management's tolerance for risk and anticipation of market movements.

Risk-Adjusting Strategies

Seven of the institutions we reviewed used a risk-management strategy based on adjusting, but not necessarily reducing, their interest rate risk exposure. In general, these institutions had limits on the maximum acceptable level of risk; however, their managements were free to adjust risk up or down within these limits. In some cases, institutions' strategies were built largely upon speculation about anticipated market movements. Following are selected examples of institutions using risk-adjusting strategies.

Example 1

One institution used deferral hedge accounting for all of its derivatives, even though its strategy for these derivatives was primarily speculative. The institution was engaged in swaps that required it to make interest payments based on a variable, or floating, interest rate and receive payments based on a fixed interest rate. These swaps, which were entered into in 1992 and 1993, were not being used to hedge particular assets or liabilities but as a means of generating income at a time of declining interest rates. These swaps were quite profitable for the institution at a time when interest rates were falling, because they yielded a fixed return while the payment obligation, which was based on a floating interest rate, declined as interest rates declined.

In anticipation of interest rates rising, the institution entered into caps and collars to protect its swap positions.² However, these caps and collars were not to become effective until 1995, leaving 1994 exposed. As rates increased faster than expected in 1994, the institution terminated some of its existing swaps and began investing in swaps that required the institution to make fixed rate interest payments while receiving floating rate interest payments in order to limit its losses. Although the institution greatly increased its investment in derivatives in 1994, the fair value of its portfolio greatly decreased. On the basis of our review of the institution's annual report footnote disclosures, the estimated fair value of its derivatives fell during 1994 from a positive position at the beginning of the year to a negative position by the end of the year. As the institution used deferral hedge accounting on these instruments, this decline in value was deferred and not recorded in its 1994 financial statements.

Example 2

This institution categorized the majority of its derivatives as hedging instruments. However, upon closer examination it appeared that virtually all of the hedging derivatives were being used to circumvent compliance with SFAS No. 115, which specifies the accounting treatment for certain security investments. Although the institution's purpose for engaging in these swaps was not speculative, we believe it was still an inappropriate use of hedge accounting, since the institution had no intent to neutralize its interest rate risk exposure.

This institution had a portfolio of fixed income securities that it classified as available-for-sale (AFS). Under SFAS No. 115, such securities are required to be measured at fair value, with unrealized holding gains and losses reported in shareholders' equity. In late 1993, after SFAS No. 115 was issued, this institution began implementing a series of swaps that required the institution to make interest payments based on a fixed interest rate and receive payments based on a floating interest rate. Institution management stated these original swaps were being used to hedge the AFS securities, and thus the institution used hedge accounting for these swaps. Since SFAS No. 115 requires AFS securities to be marked to market value through equity, the swaps were also recorded in this manner under SFAS No. 80. By doing so, the changes in the market value of the AFS portfolio

²Caps, floors, and collars are interest rate options that function to protect the entity from interest rate fluctuations, although they may also be used for speculation. A purchased cap protects the holder from rate increases above the cap rate, and a purchased floor protects the holder from rate decreases. A collar is the equivalent of purchasing a cap and selling a floor, which allows an entity to protect against rising rates while reducing the cost of buying the cap by the premium the entity receives from selling the floor.

were netted against the offsetting changes in the market value of the swaps, resulting in little net balance sheet impact.

The institution also entered into a series of offsetting swaps—in some cases, simultaneously with the original swaps described earlier—on which it was required to make interest payments based on a floating interest rate and receive fixed rate interest payments. However, it did not value these offsetting swaps at fair value and, therefore, did not recognize the related gains and losses. Although economically the institution was in virtually the same position it would have been had it not entered into the original and the offsetting swaps, the net accounting effect was to defer recognition of the gains or losses on the AFS securities, thereby circumventing SFAS No. 115. This was because the original swaps were marked to market value, with the resulting gains and losses recorded in the period incurred, while the gains and losses on the offsetting swaps were deferred. According to information from the institution's 1994 annual report,³ the estimated fair value of these offsetting swaps declined in 1994 to a negative fair value. Since this decline in value was deferred, it was not reflected in the bank's financial statements.

Example 3

In this example, the institution's hedging portfolio included interest rate swaps, options (caps and floors), and futures. At the time of our review, the institution's assets were repricing faster than its liabilities, making it asset-sensitive.⁴ Instead of using derivatives with the goal of eliminating the mismatch as much as possible, management opted instead to adjust the institution's interest rate risk profile to create a liability-sensitive position in order to take advantage of declining interest rates. Management explained that it allowed the institution's interest rate risk exposure to be adjusted up or down within a defined "band of risk." Management was not required to neutralize risk but was allowed to adjust it depending on anticipated market movements as long as the institution's overall risk exposure remained within this band. Specifically, it could adjust risk up or down provided its overall interest rate risk exposure did not exceed a 5-percent negative impact on net interest income over 12 months for a 100-basis point movement in interest rates. This is an

³All of the institutions discussed in our examples, except example 1, consolidated their financial statements into the annual reports of their respective bank holding companies.

⁴For a given asset or liability, the repricing date is the next date on which its rate could be reset or when the item would mature. When more assets than liabilities reprice within a given period, the entity is said to be asset-sensitive because the assets are more vulnerable to changes in interest rates than the liabilities. This situation generally presents an opportunity to earn more net interest income in a rising interest rate environment. Conversely, when more liabilities than assets reprice within a given period, a liability-sensitive position results, which would generally be beneficial in a declining interest rate environment.

example of using derivatives to adjust interest rate risk rather than to attempt to eliminate it.

To create the liability-sensitive position, the institution primarily used interest rate swaps that required it to make interest payments based on a floating interest rate and receive payments based on a fixed interest rate, similar to the institution in example 1. Although the institution's policy required designating these swaps against specific asset and liability groups for hedge accounting purposes, on an overall enterprise basis these swaps were actually being used to create a planned asset/liability imbalance toward a liability-sensitive position.⁵ The estimated fair value of hedging derivatives declined from a positive value at the end of 1993 to a negative value at the end of 1994. This decline was deferred and not reflected in the institution's financial statements. A portion of this amount relates to the imbalance position and, therefore, was inappropriately deferred.

Example 4

This institution's overall hedging objective was to limit its interest rate risk exposure while allowing for imbalances that could enable it to profit from favorable market conditions. For example, in 1993 the institution purposely maintained a pricing imbalance between its assets and liabilities in order to benefit from a declining interest rate environment. Similar to the institution in example 3, this institution also adjusted risk within specified limits. Its allowable risk-adjusting activities were controlled by limits on net interest revenue at risk and market value sensitivity limits based on various interest rate scenarios. The institution's controller stated this allowed the institution to take advantage of rising and falling interest rates; however, he acknowledged that there is no clear definition as to when a strategy moves from being one of managing risk to one of speculation. This institution disclosed in its 1994 annual report a decline in the market value of its interest rate hedging derivatives. Since deferral hedge accounting was being applied, this decline was not reflected in the bank's financial results. A portion of this deferred amount related to the imbalance position and, therefore, was inappropriately deferred.

Risk-Reducing Strategies

Five of the institutions we reviewed used risk-reducing hedging strategies. The primary goal of these institutions' strategies was to reduce overall interest rate risk exposure. As a result, these institutions' strategies tended to be more conservative than the risk-adjusting strategies institutions used and followed more closely the hedging criteria specified in SFAS No. 80.

⁵This type of overall adjustment of risk is referred to as macrohedging, in contrast to microhedging, which requires designating the hedging instrument against a specific asset or liability or group of similar assets or liabilities.

Such risk-reducing strategies demonstrate that, when used properly, derivatives are a very useful and viable means of protecting an institution's exposure to interest rate risk. Following are two examples of these strategies.

Example 5

This institution's balance sheet was primarily naturally hedged; that is, the interest rate risk of the assets offset the corresponding interest rate risk of the liabilities. As a result, it did not need to use derivatives extensively for hedging. Its hedging derivatives included interest rate swaps that required the institution to pay interest based on a fixed rate and receive interest payments based on a floating interest rate. These swaps were being used to hedge a portfolio of municipal securities. The rest of the swaps were primarily basis swaps, which required a floating rate interest payment while receiving a different, floating rate interest payment. These were entered into in 1993 primarily to hedge specific prime based loans.

Example 6

Over 80 percent of this institution's hedging instruments were interest rate futures, with the remainder primarily interest rate swaps. Bank management stated its strategy was one of "risk elimination," as it had experienced financial difficulties in the past and had made a conscious decision to maintain a very conservative, controlled hedging environment.

This institution used both micro- and macrohedges for risk reduction. It placed microhedges on all individual loans (assets) over a pre-established threshold as they were made. All remaining loans were then consolidated and hedged weekly. Then, the total asset/liability pricing mismatch was calculated and hedged monthly. Although this institution used a combination of micro- and macrohedges, the macrohedges were of discrete segments of the portfolio since most of the large items were already hedged before the monthly mismatch was calculated and, therefore, the monthly mismatch was relatively small. This institution maintained a very active yet controlled hedging program that it said allowed it to successfully neutralize its exposure to interest rate risk.

Hedge Criteria

As mentioned in chapter 5, most institutions used SFAS No. 52 and SFAS No. 80 by analogy in formulating their own hedge criteria for derivatives, even though these standards specifically apply only to foreign currency transactions and futures contracts, respectively. Despite their common basis in these standards, the institutions we reviewed varied in their views and practices on what types of transactions and strategies should be allowed to qualify for deferral hedge accounting.

Macro- Versus Microhedges

One view is that qualifying derivatives should be linked to particular assets or liabilities, such as to residential mortgage loans or variable rate deposits. Such a direct linkage between the hedging instrument and the hedged item, which we refer to as a microhedge, requires an entity to identify, designate, and hedge specific items that it has identified as exposing the entity to interest rate risk. Others maintain that the hedge contracts need not necessarily be related to identifiable assets or obligations but instead should be considered “macrohedges” of the entity’s net exposure. Both SFAS No. 52 and SFAS No. 80 require designation of the hedge.

In developing SFAS No. 80, FASB concluded that, with respect to futures contracts, hedge accounting should not be permitted for macrohedges because without direct linkage there is no objective method of gauging the effectiveness of the hedging instruments or ultimately recognizing the hedge results in income. The 12 institutions we reviewed varied widely in their use of micro- and macrohedges. While four institutions used solely microhedges in their hedging programs, one used solely macrohedges, and seven used a combination of micro- and macrohedges. Although management at some of these institutions stated they were required to link the derivatives to specific items in order to qualify for hedge accounting treatment and did so for accounting purposes, the derivatives were not being used to hedge the identified assets and liabilities but instead were being used to hedge a net exposure on a macro basis.

Correlation

SFAS No. 80 requires that at the inception of the hedge and throughout the hedge period, high correlation between changes in the market values of the futures instrument and the hedged item shall be probable so that the results of price or interest rate changes on the hedging instrument will substantially offset those of the hedged item. If high correlation has not occurred, the entity must cease accounting for the contract as a hedge and recognize a gain or loss for the amount that has not been offset. Similarly, SFAS No. 52 requires the designated foreign currency transaction to be effective as a hedge of a specific foreign currency commitment. However, neither SFAS No. 52 nor SFAS No. 80 specifies how correlation or effectiveness is to be determined or the level or degree of correlation required. As a result, the 12 institutions we reviewed used a variety of different measures and criteria for determining correlation. For example, one institution simply tracked changes in the associated interest rate indexes, which can be done without specific identification of assets and liabilities, while others used various calculations depending on the type of

derivative product used. Some examined effectiveness monthly, others quarterly, still others semiannually. Management at one institution stated that since swaps are synthetic instruments, they do not have to meet any correlation tests.

One objective of an ongoing test of correlation like that in SFAS No. 80 is to avoid a buildup of deferred hedging losses (or gains) that are not counterbalanced with unrealized gains (or losses). Another objective is to determine which hedges should be afforded hedge accounting treatment. However, without reliable and consistent standards for measuring correlation, these objectives may not be met. The institution management we interviewed were mixed in their desire for more definitive correlation guidance in any future hedge accounting standards. Although some stated they felt more specific correlation guidance was needed, they also said they feared such guidance might be too restrictive and not allow the flexibility needed to adjust to each institution's own unique situation. Management at another institution added that although correlation guidance was needed, poor guidance would be worse than no guidance at all. For example, management stated that a minimum correlation requirement, such as 80-percent correlation, without good guidance on how to calculate it would be worse than no such requirement at all.

Anticipated Transactions

One of the significant inconsistencies between SFAS No. 52 and SFAS No. 80 is in the allowed use of hedge accounting for anticipated transactions. As discussed in appendix VI, SFAS No. 52 only allows hedging against firm commitments, which it defines as agreements that are usually legally enforceable and for which performance is probable because of sufficiently large disincentives for nonperformance. However, SFAS No. 80 allows the use of hedge accounting, subject to certain criteria, for instruments designated against anticipated transactions.⁶ It defines anticipated transactions as those an entity expects, but is not obligated, to carry out in the normal course of business. For example, a bank may anticipate issuing certificates of deposit to replace certificates that will mature at a future date. SFAS No. 119—which specifies disclosure requirements—further adds to the conflict by defining anticipated transactions to include both firm commitments and forecasted transactions for which no firm commitment exists.

⁶Under SFAS No. 80, hedge accounting treatment is allowed for hedges of anticipated transactions provided the instruments meet the hedge criteria, the significant characteristics and expected terms of the anticipated transaction are identified, and the likelihood of the anticipated transaction occurring is probable.

In practice, the results of applying the criteria of SFAS No. 80 for hedges of anticipated transactions have been mixed. Disputes have arisen about how well the characteristics and terms of certain anticipated transactions have been and possibly can be identified in advance. Others blamed the vague criteria for leading to cases of inappropriate deferral of losses pending transactions that never occurred or proved insufficiently profitable to offset the deferred hedging loss.

At the 12 institutions we reviewed, management at half of the institutions stated they did not hedge anticipated transactions, while three said they did so on occasion, and three said they did so regularly. However, part of the variance in their responses may be due to the difficulty of defining an anticipated transaction. For example, management at one institution viewed anticipated transactions very broadly and stated virtually all of its hedging was anticipatory. Management stated that hedges of deposits are anticipatory because of assumptions that the deposits will remain with the institution. At the same time, they stated that hedges of loans are anticipatory because of assumptions that new loans will be generated to offset loan payoffs and prepayments. However, other institutions used derivatives to hedge similar assets and liabilities and did not consider any of them to be anticipatory.

Voluntary Disclosure of the 15 Major U.S. Derivatives Dealers in 1994 Annual Reports

We reviewed the annual reports of the 15 major U.S. derivatives dealers for fiscal year 1994 to compare their disclosure practices. As noted in the text, these 15 firms included 7 banks, 5 securities firms, and 3 insurance companies. We generally found that the banks' disclosures were more extensive than those of securities firms and insurance company dealers. The results are summarized in table VIII.1.

We found that eight of the firms disclosed their internal estimates of their value at risk in their derivatives trading activities. Value at risk is the amount by which an institution's derivatives trading portfolio could decline due to general market movements over a given holding period, measured with a specified confidence level. This group included all seven of the banks, one of the three insurance companies, and none of the securities firms. These eight firms also disclosed the holding periods and confidence levels that defined their value-at-risk estimates, which may help users of annual reports assess these figures. However, because these parameters varied from firm to firm, they are not comparable among firms. Of the eight firms that disclosed their value-at-risk estimates, six provided information on their full trading activities, covering not only their exposure to losses on derivatives trading but also losses on trading of securities. It should be noted, however, that value at risk is not a measure of the largest possible market risk loss the firm could face in its trading activities. It is only a measure of the expected maximum loss at the specified confidence level. Largest potential losses are better estimated not by value at risk but by stress tests. None of the major dealers disclosed the results of their stress tests for their trading activities.

Six of the firms (four of the banks, one securities firm, and one insurance company) revealed their actual gains and losses on their trading activities, either as absolute dollar amounts or in comparison to the firms' value-at-risk estimates. We counted only those firms that disclosed daily or weekly information, that is, information that is not mandatory and that is measured on a basis comparable to value at risk. Mandatory reporting of quarterly or annual trading revenues did not merit a "yes" entry in table VIII.1.

**Appendix VIII
Voluntary Disclosure of the 15 Major U.S.
Derivatives Dealers in 1994 Annual Reports**

Table VIII.1: Voluntary Annual Report Disclosure

Institution	Market risk in trading activity		Credit exposure on derivatives	
	Value at risk ^a	Actual gains and losses ^b	Potential future exposure ^c	Breakdown by credit quality ^d
BankAmerica Corp.	yes	no	no	yes
Bankers Trust New York Corp.	yes	yes	no	yes
The Chase Manhattan Corp.	yes	yes	no	no
Chemical Banking Corp.	yes	yes	no	no
Citicorp	yes	no	yes	yes
First Chicago Corp.	yes	no	yes	no
J.P. Morgan & Co., Inc.	yes	yes	no	yes
The Goldman Sachs Group, L. P.	no	no	no	no
Lehman Bros.	no	no	no	yes
Merrill Lynch & Co., Inc.	no	yes	no	yes
Morgan Stanley Group, Inc.	no	no	no	yes
Salomon, Inc.	no	no	no	yes
American International Group, Inc.	no	no	no	yes
General Re Corp.	yes	yes	no	no
The Prudential Insurance Company of America	no	no	no	yes

^aWe entered a "yes" only if the firm provided quantitative information on its exposure to losses on its trading risk. The information was either in absolute dollar amounts or stated as a dollar amount that was not exceeded, or as a percentage of equity, allowing the reader to calculate a dollar amount.

^bWe entered a "yes" only if the firm provided very specific information; for example, monthly averages of daily figures, weekly figures, or if it stated that losses did not exceed the quantified value at risk.

^cA "yes" was entered if the firm presented its own estimate of this item. U.S. bank call reports to the regulators contain a measure of this, but it is merely the application of a regulatory formula, not the bank's own estimation.

^dThe firms grouped this information according to equivalent credit ratings used by the major rating agencies. However, the counterparties did not necessarily have these ratings from the rating agencies themselves, because the ratings were the internal assessments of the reporting dealers.

Source: 1994 annual reports.

Public companies in the United States are required to report their current credit exposure on derivatives contracts. However, this credit exposure

Appendix VIII
Voluntary Disclosure of the 15 Major U.S.
Derivatives Dealers in 1994 Annual Reports

could increase in the future if market rates or prices moved in a way that increased expected payments from the derivatives counterparties to the firms. Of the 15 major dealers, only 2 (both of them banks) disclosed their estimates of the potential future credit exposure on their derivatives contracts.

Credit exposure on derivatives, just as on traditional loans, poses a risk of loss that varies depending on the soundness of the counterparty. Ten of the major derivatives dealers provided at least some information on the creditworthiness of their derivatives counterparties. This group included four of the banks, four of the five securities firms, and two of the three insurance companies. In some cases this was simply a statement of the portion of the counterparties that were equivalent to “investment grade,” and others provided a more detailed breakdown. No firm disclosed its exposure to individual counterparties.

Description of FASB's Proposed Standard

In June 1996, FASB issued an exposure draft of a proposed standard, Accounting for Derivative and Similar Financial Instruments and for Hedging Activities. The proposed standard applies to traditional derivatives, such as futures, forwards, options, and swaps, as well as certain financial instruments that do not meet the definition of a derivative but have characteristics similar to those of derivatives, such as leveraged instruments.¹ Throughout the proposed standard, both derivative financial instruments and similar instruments included in the statement are referred to collectively as derivatives, and the proposed standard's requirements would apply to both.

Under the proposed standard, which would be effective for fiscal years beginning after December 15, 1997, all derivatives would be recognized as either assets or liabilities in the balance sheet and measured at fair value. The accounting for gains and losses resulting from changes in the fair value of a derivative would depend on the intended use of the derivative and resulting designation. All derivatives would fall into one of the following four categories for purposes of determining the accounting method for the gains and losses:

(1) Fair value hedge: For a derivative designated as a hedge of the institution's exposure to changes in the fair value of an asset, liability, or firm commitment,² the gain or loss would be recognized in earnings in the period of change together with the offsetting loss or gain on the hedged item. Gains or losses on the hedged item would be recognized in the period of change only to the extent of offsetting losses or gains on the derivative.

(2) Cash flow hedge: For a derivative designated as a hedge of the exposure to variable cash flows of a forecasted transaction,³ the gain or loss would be reported as a component of "other comprehensive income" (component of equity) until the projected date of the forecasted

¹As part of its proposed standard, FASB developed a working definition of a derivative financial instrument, including the characteristics of such instruments. Of note, FASB has also included nonfinancial commodity-based instruments in the definition, which FASB had not considered as financial instruments in the past.

²A firm commitment is a contract that obligates two unrelated parties to make an exchange and specifies the price and quantity to be exchanged.

³A forecasted transaction is one that the entity anticipates but is not obligated to carry out, such as future sales or the anticipated acquisition of inventory.

transaction.⁴ On that date, the entity would recognize in earnings the accumulated "other comprehensive income" for that derivative.

(3) Foreign net investment hedge: For a derivative designated as a hedge of the foreign currency exposure of a net investment in a foreign operation,⁵ the portion of the change in fair value equivalent to a foreign currency transaction gain or loss would be reported in "other comprehensive income," together with the offsetting cumulative translation adjustment resulting from the exposure per SFAS 52. Any remaining change in fair value would be recognized in earnings.

(4) Nonhedge: For a derivative not designated as a hedge, the gain or loss would be recognized in earnings in the period of change.

The proposed standard lays out the specific hedge criteria that must be met in order for a derivative instrument to qualify for designation as a fair value or cash flow hedge. The common hedge criteria for these two types of hedges require that at inception of the hedge, there must be formal documentation of the hedging instrument, the hedged item, and the risk being hedged; the use of the derivative must be consistent with the entity's established policy for risk management; and the hedging instrument may not be a net written option.⁶ Furthermore, the combination of a net written option and any other nonoption derivative cannot be designated as a hedging instrument. To qualify as a fair value hedge, the following additional criteria must also be met:

- The hedged asset, liability, or firm commitment is specifically identified as a single asset or liability, or a portfolio of similar items sharing common characteristics, or a specific proportion thereof.
- The hedged item has a reliably measurable fair value, and substantial changes in the fair value of the derivative are expected, both at inception and on an ongoing basis, to offset substantially the changes in the fair value of the hedged item that are attributable to the risk being hedged.

⁴FASB also issued an exposure draft of another proposed standard, Reporting Comprehensive Income, in June 1996. The specific reporting requirements for derivatives hedging gains and losses in comprehensive income would be determined by this proposed standard.

⁵For foreign net investment hedges, an entity may designate a foreign currency-denominated nonderivative financial instrument (in addition to those nonderivative leveraged instruments included in the scope of this proposed standard) as a hedge of the foreign currency exposure of a net investment in a foreign operation.

⁶The proposed standard states that a combination of options entered into contemporaneously (for example, a collar), whether freestanding or embedded in a derivative, shall be considered a net written option if either at inception or over the life of the contract a net premium is received in cash or as a favorable rate or term.

- The hedged item individually presents an exposure to price changes that could affect reported earnings and can be allocated any general reserves, deferred fees or costs, or purchase premiums or discounts established for a group of items of which the hedged item is a part.
- The hedged item is not (1) a debt security that is classified as held-to-maturity in accordance with SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities; (2) oil or gas in the ground, unmined mineral ore, an agricultural product in the process of growing, or similar item; (3) an intangible asset; (4) an investment accounted for by the equity method; (5) mortgage servicing rights that have not been recognized as assets in accordance with SFAS No. 122, Accounting for Mortgage Servicing Rights; (6) a lease, as defined in SFAS No. 13, Accounting for Leases; or (7) a liability for insurance contracts written.
- At inception, any variable cash flows related to the hedged item are not being hedged as a cash flow hedge.

To qualify as a cash flow hedge, the common criteria and the following additional criteria must be met:

- The forecasted exposure is a transaction (an external event involving the transfer of value between two or more entities), probable, part of an established business activity, and presents an exposure to price changes that could affect reported earnings.
- Both at inception and on an ongoing basis, the derivative financial instrument is expected to have cumulative net cash flows that will offset substantially the changes in cash flows of the hedged forecasted transaction attributable to the risk being hedged. In addition, the contractual maturity or repricing date of the derivative is on or about the same date as the projected date of the forecasted transaction.
- The forecasted transaction is not the acquisition of an asset or incurrence of a liability that will be measured at fair value subsequent to acquisition or incurrence with changes in fair value reported in earnings.
- At inception, the variable cash flows being hedged do not relate to an item being hedged as a fair value hedge.

The proposed standard also includes specific disclosure requirements for derivatives and similar financial instruments. For all derivatives, each entity is required to distinguish between derivatives designated as fair value hedges, cash flow hedges, hedges of the foreign currency exposure of a net investment in a foreign operation, and all other derivatives. It must disclose

- its objectives for holding or issuing the instruments,
- the context needed to understand those objectives,
- its strategies for achieving those objectives, and
- the face or contract amount of the derivatives when necessary to understand the objectives.

For derivatives designated as hedges, the entity must provide

(1) a description of its risk-management policy for such hedges, including a description of the items whose risks are being hedged and the classes of derivatives used to hedge those risks;

(2) the amount of gains or losses on the derivatives and the items being hedged that were recognized in earnings during the reporting period, and a description of where those gains and losses and the related hedged items (if applicable) are reported in the financial statements; and

(3) the cumulative amount of unamortized derivatives gains or losses that have not yet been recognized in earnings and a description of where they are reported in the financial statements.

In addition, for fair value hedges the entity must also disclose the amount of gains and losses recognized in earnings when performance under a hedged firm commitment is no longer probable. For cash flow hedges, the entity must also disclose the designated reporting periods in which the forecasted transactions are expected to occur and the deferred amounts to be recognized in earnings.

For derivatives not designated as hedges, the entity must disclose (1) a description of the purpose of the activity; and (2) the amount of gains and losses on the derivatives arising from the activity during the reporting period disaggregated by class, business activity, risk, or other category consistent with the management of that activity, and a description of where those gains and losses are reported in the financial statements. If the disaggregation is other than by class, the entity shall also describe for each category the classes of derivatives from which the gains and losses arose.

The proposed standard amends SFAS Nos. 52 and 107; supersedes SFAS Nos. 80, 105, and 119; and modifies or nullifies related EITF consensus positions as follows:

- SFAS No. 52, Foreign Currency Translation, is amended primarily to eliminate duplicate coverage of foreign currency derivatives between the two Statements, eliminate the allowability of deferral hedge accounting, and update the definition of derivatives consistent with the definition provided for in the proposed standard.
- SFAS No. 107, Disclosures About Fair Value of Financial Instruments, is amended primarily to include commodity-based contracts in the definition of derivatives, update the definition of fair value, and incorporate portions of SFAS Nos. 105 and 119—which are superseded—into the proposed standard. Specifically, requirements for disclosure about concentrations of credit risk are incorporated from SFAS No. 105, and encouraged disclosure about market risk of all financial instruments is incorporated from SFAS No. 119 into the proposed standard.

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