

2000

Credit Derivatives: An Overview of Regulatory Initiatives in the United States and Europe

Andre Scheerer

Follow this and additional works at: <https://ir.lawnet.fordham.edu/jcfl>



Part of the [Banking and Finance Law Commons](#), and the [Business Organizations Law Commons](#)

Recommended Citation

Andre Scheerer, *Credit Derivatives: An Overview of Regulatory Initiatives in the United States and Europe*, 5 Fordham J. Corp. & Fin. L. 149 (2000).

Available at: <https://ir.lawnet.fordham.edu/jcfl/vol5/iss1/2>

This Article is brought to you for free and open access by FLASH: The Fordham Law Archive of Scholarship and History. It has been accepted for inclusion in Fordham Journal of Corporate & Financial Law by an authorized editor of FLASH: The Fordham Law Archive of Scholarship and History. For more information, please contact tmelnick@law.fordham.edu.

ARTICLE

CREDIT DERIVATIVES: AN OVERVIEW OF REGULATORY INITIATIVES IN THE UNITED STATES AND EUROPE

*by André Scheerer**

Introduction.....	150
I. Common Forms Of Credit Derivatives.....	155
A. Credit Swaps	156
1. Credit Default Swaps	156
2. Total Rate-Of-Return Swaps	157
B. Credit Options and Credit Embedded Securities	159
1. Credit Default Options	159
2. Credit Embedded Securities.....	160
II. Risks And Risk Management Of Credit Derivatives.....	161
A. Risks for End-Users	162
1. Credit Risk.....	163
2. Transaction Risk	167
3. Liquidity Risk.....	167
4. Compliance (or Legal) Risk	168
5. Strategic Risk	170
6. Operational Risk.....	170
B. Risks for Dealers.....	171
1. Market Risk.....	171
2. Reputation Risk.....	173
C. Standardized Documentation.....	173

* *Rechtsanwalt* (Germany) and LL.M., Fordham University School of Law. The author is an Associate in the Structured Finance Group of Fried, Frank, Harris, Shriver & Jacobson, New York, NY. Prior to his graduate law studies at Fordham University, the author was an Associate at Morgan, Lewis & Bockius LLP in Frankfurt, Germany. The author has six years of experience in risk management at Bayerische Vereinsbank AG, which is now HypoVereinsbank AG.

III. Regulatory Initiatives by Federal Banking Agencies.....	175
A. Regulatory Capital Treatment	176
1. General Risk-Based Capital Rules for Derivatives.....	177
2. Application of the Risk-Based Capital Standards to Credit Derivatives.....	179
B. Disclosure and Reporting Requirements.....	186
1. Recommendations by the Basel Committee and IOSCO 186	
2. Accounting Standards: FAS 133	188
3. Regulatory Reporting Requirements: Call Reports.....	191
C. Lending Limits	192
IV. View to Regulation of Credit Derivatives in Germany, the U.K., and France.....	194
A. Regulatory Capital Treatment and Large Exposure and Million Loans Reporting in Germany	194
B. Regulatory Capital Treatment and Large Exposures Reporting in the United Kingdom.....	198
C. Regulatory Capital Treatment in France	199
Conclusion	201

INTRODUCTION

Credit derivatives are often described as “synthetic loans,” a name which unfortunately too narrowly reflects their common use and enormous potential. From a functional perspective, credit derivatives are “sophisticated financial instruments that enable the unbundling and intermediation of credit risk.”¹ They can be used to assume or lay off credit risk, in full or to a limited extent.² A risk

1. William F. Kroener III, *Select Banking Topics of Current Importance: The FDIC Perspective*, in *BANKING AND COMMERCIAL LENDING LAW* 217, 248 (ALI-ABA Course of Study Series SB 74, 1997) (discussing legal and regulatory issues surrounding credit derivatives).

2. See FDIC, *FIL-62-96, SUPERVISORY GUIDANCE FOR CREDIT DERIVATIVES* (Aug. 19, 1996) (financial institution letter to bank examiners) available in 1996 WL 490711, *1 [hereinafter *FDIC FIL-62-96*] (describing credit derivatives as “financial instruments used to assume or lay off credit risk, sometimes to only a limited extent.”); Kroener, *supra* note 1, at 248 (noting that the “payout” under credit risk derivative agreements is linked to “some credit

seller, the party seeking credit risk protection, may use credit derivatives to i) reduce exposure while maintaining relationships that may be endangered by selling its loans, ii) reduce or diversify illiquid exposures, or iii) reduce exposure while avoiding adverse tax or accounting treatment. A risk buyer, the party assuming credit risk, may want to i) diversify credit exposures, ii) get access to credit markets which are otherwise restricted by corporate statute or off-limits by regulation, or iii) arbitrage pricing discrepancies resulting from perceived mispricing between bank loans and the subordinated debt of the same issuer.

From a more transactional perspective, credit derivatives are financial contracts outlining an exchange of payments in which at least one of the cash flows is linked to the performance of a specified underlying credit sensitive asset. Reference assets may include "bank loans, corporate debt, trade receivables, emerging market and municipal debt, and convertible securities, as well as the credit exposure generated from other derivatives-linked activities"³ Parties to these contracts include commercial banks, insurance companies, corporations, money managers, mutual funds, hedge funds, and pension funds.⁴

The market for credit derivatives originated in the early 1990s.⁵ Market participants are uncertain whether credit derivatives were first introduced in London or New York, although London is said

default event or other measure of creditworthiness.").

3. Gregg Whittaker & Joyce Frost, *An Introduction To Credit Derivatives*, J. LENDING & CREDIT RISK MGMT., May 1997, at 15. See FDIC FIL-62-96, *supra* note 2, at *7 (noting that credit risk exposure resulting from the extension of credit protection through credit derivatives is often hedged in so called "back-to-back" transactions by means of credit derivatives).

4. See Whittaker & Frost, *supra* note 3, at 17 ("The universe of potential users of credit derivatives is as vast as the number of institutions that are exposed to or that seek exposure to credit risk.").

5. See Ronit Ghose, *Market Monitor, Credit Derivatives, Trading Book or Banking Book?*, EUROMONEY MAG., Feb. 15, 1997, at 16 (suggesting that the credit default derivative was born in New York in 1992). Although London is said to be the leading market for credit derivatives today, the largest U.S. commercial banks and trust companies are among the most important market players. See *id.* at 16.

to have taken the worldwide lead in this market segment.⁶ By 1998, most of the activity was concentrated among a handful of major U.S. banks, whereas regional bank participation was more irregular.⁷

The first real test for credit derivatives came in late 1997 with the Asian financial crisis, when the first large-scale credit derivative-related losses occurred.⁸ Credit derivatives, however, performed more efficiently in the Asian crisis than the underlying bond market.⁹ Between December 1997 and January 1998, credit derivatives allowed investors to recover at least \$800 million from the Korean Development Bank and the Industrial Finance Corporation of Thailand.¹⁰ In 1998, the Russian financial markets reached an even deeper dimension of turmoil, and, as a result, credit derivatives faced a more intense stress test there. Credit derivatives that were purchased to insure against the ruble's devaluation and default by the Russian government were at issue in a number of legal challenges over unpaid forward currency

6. See, e.g., *id.* (stating that the credit derivative was born in New York, but London has the largest market); Joseph Asher, *Credit Derivatives: A Red-Hot Growth Area*, A.B.A. BANKING J., Aug. 1, 1998, at 33 (noting that London remains a major market).

7. See Asher, *supra* note 6, at 33 (noting that the largest U.S. commercial banks and trusts companies are important market participants). J.P. Morgan reportedly held the market lead among U.S. financial institutions in credit derivatives by mid-1998, followed by, among others, Nationsbank, Bank of America and Bankers Trust. See *id.*

8. See *Credit Derivatives—Getting Hooked On Credit Derivatives*, EUROMONEY MAG., Feb. 10, 1999, at 31 (noting the situation among German banks in the aftermath of the meltdown of Asian financial markets in late 1997, and the heavy losses suffered from credit derivatives in risky emerging-market debt). One example is German Landesbanken, which “diversified loan portfolios which concentrated on regional and public-sector borrowers into . . . emerging-market debt” in Asia and had to take heavy losses. *Id.*

9. See William F. Kroener III, *Select Banking Topics of Current Importance: The FDIC Perspective*, in BANKING AND COMMERCIAL LENDING LAW 1, 41 (ALI-ABA Course of Study Series SB78, 1998) (discussing historical performance).

10. See *id.* (noting that such a recovery was possible because of early redemption provisions, which were triggered when credit rating agencies lowered these countries' sovereign ratings).

contracts.¹¹

Underscoring the solid performance of credit derivatives through these recent crises, the market for credit risk derivatives is growing at a phenomenal rate. In the first quarter of 1999, the volume of notional amounts of credit derivatives in the U.S. hit a new record of \$191 billion.¹² The largest current and potential consumers of credit derivatives are commercial banks which use them mainly for risk management purposes. Bankers are using credit derivatives to help redesign their portfolios so as to diversify, reduce borrower risk, and lay off undesirable concentrations of credit risk.¹³ Investment firms that hold large amounts of illiquid corporate bonds and sovereign debt of developing countries can use credit derivatives to transfer default risk without selling the

11. See John Finnerty, *Comment: Russian Settlements Will Put Credit Derivatives To The Test*, AM. BANKER, Dec. 4, 1998, at 21 (reporting that as much as \$10 billion dollars of credit derivative agreements are pending in legal disputes). In Russia, credit derivatives were basically used in two structures: credit swaps, which “let Western investors get the higher returns on Russian bonds while insulating themselves from the risk of a government default,” and as structured notes, combining a credit swap with a conventional bond or note, where “the credit swap pays off by reducing the amount the issuer of the note must repay.” *Id.*

12. See OCC, BANK DERIVATIVES REPORT FIRST QUARTER 1999 1, 3 (1999) available at <<http://www.occ.treas.gov/ftp/deriv/dq199.pdf>> (visited April 15, 2000). The OCC began tracking the volume of credit derivatives in the fourth quarter of 1997 when notional amounts of credit derivatives engaged in by U.S. financial institutions amounted to \$55 billion. See OCC, *Bank Trading Revenue Increases 77% to Record \$3.6 Billion for 1st Quarter*, June 24, 1999, available in 1999 WL 476115, at *1. Reliable data on credit derivatives activities first became available to the federal banking supervisors in the fourth quarter of 1997 as a result of the Revisions to the Reports of Condition and Income (Call Reports) for 1997 in December 1996, which required banks to include qualitative and quantitative information in the quarterly year reports. See FDIC, REVISIONS TO THE REPORTS OF CONDITION AND INCOME (CALL REPORTS) FOR 1997 (1996), in FDIC, FIL-109-96, BANK REPORTS (1996) available at <<http://www.fdic.gov/news/news/financial/1996/fil196109.html>> (visited April 15, 2000); *infra* notes 181-189 & accompanying text (discussing reporting requirements under the Revisions).

13. See Carol M. Beaumier, *Active Credit Portfolio Management May Avert Serious Loan Problems*, BANKING POL’Y REP., Dec. 1, 1997, at 1 (commenting on the usefulness of credit derivatives in modern active portfolio management).

underlying assets.¹⁴ For the same reasons, credit derivatives are becoming more popular among insurance companies.¹⁵ With this increased activity, national banking regulators and supervisors as well as international banking authorities have come to appreciate the benefits of prudently used credit derivatives to manage and mitigate credit and counterparty risk.¹⁶

Counterparties to credit derivative agreements continue to face problems which are typical of innovative financial products, mainly i) a lack of effective standard legal documentation, ii) legal uncertainty regarding the enforceability and validity of legal obligations under credit derivative agreements, iii) inconsistencies

14. See Sangkyun Park, *Credit Risk*, A.B.A. BANKING J., Aug. 1, 1998, at 30.

15. See *id.*

16. See, e.g. Susan M. Phillips, Remarks Before the International Swaps and Derivatives Association 13th Annual General Meeting in Rome, Italy (Mar. 26, 1998), available in 1998 WL 136504, at *2 (acknowledging the "enormous" potential of credit derivatives because of their utility in adjusting credit exposures or diversifying industry or geographic concentrations); BASEL COMM. BANKING SUPERVISION [hereinafter BASEL COMM.], A NEW CAPITAL ADEQUACY FRAMEWORK 41-42 (1999), available in <<http://www.bis.org/publ/index.htm>> (visited Apr. 15, 2000) [hereinafter BASEL CAPITAL ADEQUACY FRAMEWORK] (discussing the implications of credit derivatives as a technique for credit risk mitigation).

As the incidence of credit derivative agreements has increased, U.S. agencies with bank supervision powers have issued specific guidance on the subject. See, e.g., BD. GOVS. FED. RES. SYSTEM, DIV. BANKING & SUPERVISION, SR 96-17 (Aug. 12, 1996), available at <<http://www.federalreserve.gov/boarddocs/SRLETTERS/1996/sr9617.htm>> (visited April 15, 2000) [hereinafter FRB SR 96-17]; FIL-62-96, *supra* note 2 (providing preliminary examination guidance for the supervisory analysis and treatment of credit derivatives at insured financial institutions); OFFICE OF THE COMPTROLLER OF THE CURRENCY [hereinafter OCC], OCC 96-43, CREDIT DERIVATIVES: GUIDELINES FOR NAT'L BANKS [hereinafter OCC 96-43], available in 1996 WL 479141. Quasi-governmental authorities such as the International Organization of Securities Commissions ("IOSCO") and the Basel Committee have also issued relevant guidance, recognizing credit derivatives as modern sophisticated risk management tools. See IOSCO TECHNICAL COMM. & BASEL COMM., FRAMEWORK FOR SUPERVISORY INFORMATION ABOUT DERIVATIVES AND TRADING ACTIVITIES 8-12 (1998) available in <<http://www.iosco.org/iosco.html>> (visited Apr. 15, 2000) [hereinafter FRAMEWORK] (providing guidance on credit derivatives in light of the importance that banking supervisors improve their understanding of them given the expansion of this market).

between the credit derivative agreement and the underlying asset agreement, which often render credit derivatives credit risk protection mechanisms obsolete, iv) lack of publicly available market and product relevant information and lack of market transparency, and v) legal uncertainty regarding enforceability of closeout-netting provisions and the apparent problem of pricing credit risk.

This Article has three main purposes. The first is to introduce some of the primary forms and uses of credit derivatives, as set forth in Part I below. Part II is dedicated to analyzing the risks to financial institutions which transact in credit derivatives, and providing an overview of appropriate risk management techniques raised by governmental and quasi-governmental supervisory bodies. Finally, Part III and IV provide an overview of the regulatory initiatives and framework applicable to credit derivatives in the United States, the United Kingdom, Germany, and France. Because the U.S. framework is relatively complex, it is considered in much greater detail.

I. COMMON FORMS OF CREDIT DERIVATIVES

It is difficult to identify all the different types of credit derivative transactions. Despite the availability of standardized master agreements for some credit derivative products, a large number of transactions are still negotiated without standardized documentation.¹⁷ Limited market transparency and limited availability of public information on credit derivative transactions make it difficult to keep track of their numerous individualized variations, much less agree upon an appropriate price.¹⁸

17. See generally Finnerty, *supra* note 11 (commenting on the need for standardized documentation in credit swaps). "Nonstandard language is the norm in many Russian-risk credit derivative agreements." *Id.*

18. See Phillips, *supra* note 16, at *2 (commenting on the difficulty of impediment of data availability and of pricing credit risk); Park, *supra* note 14, at 30 ("[P]ricing credit derivatives involves unusual difficulties because their value depends on the default probability that is oftentimes private information."); Whittaker & Frost, *supra* note 3 at 24 (noting that lack of a credible information structure is an impediment to the complete development of credit derivatives).

Nevertheless, all have the same unifying feature of a “transfer from one party to another of credit risk associated with one or more specific debt obligations” of a reference asset.¹⁹ Currently, there are three basic categories of credit derivatives: credit swaps, credit options and credit embedded securities.²⁰

A. Credit Swaps

A credit swap is used to transfer credit risk. The two basic types of credit swaps are credit default swaps (“CDS”) and total rate-of-return (“TROR”) swaps.²¹ Both are briefly outlined below.

1. Credit Default Swaps

The purpose of a CDS is to provide credit protection against credit losses associated with a default on a specified underlying asset. Typically, the underlying or reference asset is some form of credit (e.g., a single credit or the first to default in a basket of credits), extended by the party seeking protection (the “beneficiary”) against a default of its debtor, a third party. The beneficiary swaps the credit risk with a provider of credit protection (the “guarantor”). The transaction is similar to a guarantee or a standby letter of credit: the beneficiary typically agrees to pay the guarantor a quarterly or annual fee amounting to a certain number of basis points on the par value of the reference asset. In return, the guarantor agrees to pay the beneficiary an

19. See Bruce Kayle, *Will the Real Lender Please Stand Up? The Federal Income Tax Treatment Of Credit Derivative Transactions*, 50 TAX LAW. 569, 571 (1997) (“[T]he variations in transactions called credit derivatives are sufficient as to make misleading, particularly from the perspective of tax analysis, the use of a single term to describe them all.”).

20. See Kroener, *supra* note 1, at 249 (describing common forms of credit derivatives). So-called “credit-linked structured notes” are a common example of credit embedded securities. See *id.*

21. See Kayle, *supra* note 19, at 571-79 (discussing typical credit derivative transactions). Federal banking regulators described credit derivatives in substantially similar terms in their 1996 guidance documents. See FDIC FIL-62-96, *supra* note 16, at *5-6; OCC 96-43, *supra* note 2, at *1-2; FRB SR 96-17, *supra* note 16.

agreed upon, market-based, post-default amount, or a predetermined fixed percentage of the value of the reference asset contingent on the occurrence of a default.

The guarantor makes no payment until there is a default as defined in the CDS contract which may include, for example, a bankruptcy, cross-acceleration, downgrade of the reference asset or its issuer, repudiation or moratorium, restructuring or payment default.²² The event of default must be publicly verifiable. In some instances, the guarantor is not obliged to make any payments to the beneficiary until a pre-established amount of loss has been exceeded in conjunction with a default event (i.e. the “materiality threshold”).²³ The amount owed by the guarantor is the difference between the reference asset’s initial principal (or notional) amount and the actual market value of the defaulted reference asset, or a predetermined amount, or a percentage of the reference asset. Alternatively, the guarantor may purchase the underlying asset from the beneficiary.²⁴

2. Total Rate-Of-Return Swaps

In a TROR swap, the beneficiary agrees to pay the guarantor the total return on the reference asset, consisting of all contractual payments as well as any appreciation in the market value of the

22. See, e.g., INT’L SWAPS & DERIVATIVES ASSN. [hereinafter ISDA], 1999 ISDA CREDIT DERIVATIVES DEFINITIONS 16-18 (1999) [hereinafter ISDA DEFINITIONS] (on file with the *Fordham Journal of Corporate & Financial Law*) (defining “Credit Events” (events of default) for purposes of ISDA confirmation forms for credit derivative transactions). The definitions and provisions of the ISDA DEFINITIONS are incorporated into these confirmation forms. See, e.g., ISDA, SHORT FORM CONFIRMATION FOR USE WITH 1999 ISDA CREDIT DERIVATIVES DEFINITIONS (1999), available in <<http://www.isda.org/c1.html>> (visited Apr. 15, 2000).

23. For example, the materiality threshold in the ISDA Short Form Confirmation is reflected in the “Default Requirement” or the “Payment Requirement” incorporated into certain “Credit Events” pursuant to the ISDA Definitions. See sources cited *supra* note 22.

24. See FDIC FIL-62-96, *supra* note 2, at *5 (noting that the guarantor may purchase the underlying defaulted asset and pursue a workout with the borrower directly).

reference asset.²⁵ On a loan or security, for example, the total return includes the interest plus fees, less the difference between the final price and the original price. Typically, the guarantor agrees to pay a reference interest rate (e.g., LIBOR)²⁶ plus a spread and any depreciation of the market value of the reference asset to the beneficiary. The change in amortized value of the underlying asset is calculated upon default or maturity of the TROR and at each payment exchange as the difference between the notional principal balance of the reference asset and the dealer price.²⁷ The dealer price may be determined either by referring to a market quotation source, if available, or by polling a group of dealers. This price reflects changes in the credit profile of the reference obligor and reference asset. To the extent that the notional amount of the contract exceeds the dealer price, the guarantor must pay the difference to the beneficiary and absorb any loss resulting from a decline in the credit quality of the reference asset.²⁸

While no principal amounts are exchanged and no physical change of ownership occurs, the TROR swap allows participants effectively to “go long” or to “short” the underlying asset.²⁹ Although the hedger has transferred the risk of the asset without transferring the asset itself, it retains the customer relationship and must continue to fund the earning assets.³⁰ As such, a TROR swap can be considered a synthetic asset transferring the total economic performance of an asset for the term of the transaction.³¹ The maturity of the TROR swap need not match that of the reference asset, and the swap can typically be terminated at any time. As

25. See *id.* at *6 (describing a TROR swap); FRB SR 96-17, *supra* note 16 app. (describing TROR swaps).

26. LIBOR refers to “London Interbank Offered Rate,” the “rate that most creditworthy international banks dealing in eurodollars charge each other for large loans.” BARRON’S DICTIONARY OF FIN. & INV. TERMS 334 (5th ed. 1998).

27. See FDIC FIL-62-96, *supra* note 2, at *6 (describing the calculation of depreciation or appreciation in the amortized value of the reference asset).

28. See *id.*

29. See OCC 96-43, *supra* note 16, at *2 (noting that in a TROR swap the underlying reference asset typically remains with the party seeking credit risk protection).

30. See *id.*

31. See Whittaker & Frost, *supra* note 3, at 17 (identifying a TROR swap as a “synthetic asset”).

with a CDS, the guarantor may have the option of purchasing the reference asset.

B. Credit Options and Credit Embedded Securities

In addition to credit swaps, the two other main categories of credit derivatives are credit options and credit embedded securities. Credit options typically take the form of Credit Default Options ("CDO"). The basic form of a credit embedded security is the Credit Linked Structured Note ("CLSN").³² Both CDOs and CLSNs are briefly described below.

1. Credit Default Options

The basic form of a CDO permits the purchaser to either invest in the reference asset or to hedge against credit default events with respect to the reference asset. A CDO is typically a privately negotiated, over-the-counter ("OTC") option contract. A credit call option gives the purchaser the right, but not the obligation, to purchase the reference asset (e.g., a loan, security, or credit spread) at a predetermined price for a pre-specified period of time or on a specified exercise date.³³ A credit put option gives the purchaser the right, but not the obligation, to sell the reference asset at a predetermined price for a pre-specified period of time or on a specified exercise date.³⁴ A CDO typically is settled by

32. See *id. passim* (describing credit options and other typical credit derivative structures); OCC 96-43, *supra* note 16, at *4 (describing credit-linked notes).

33. See Whittaker & Frost, *supra* note 3, at 19-20 (describing credit call options).

34. See *id.* at 19. See also Shaun Rai Hal Holappa, J. LENDING & CREDIT RISK MANAGEMENT, May, 1997, at 26, 31 & 33 (describing the difference between a CDO and a credit spread option). A credit spread option may be cash settled: the option seller agrees to pay a final amount which is the greater of zero, or the difference between the spread over a reference interest rate (e.g., LIBOR) of a reference asset on a particular trade date and the spread over a reference interest rate of the reference asset on the exercise date. In case of physical settlement, the option buyer puts the reference asset to the option seller at par. See *id.*

physical delivery of the reference asset.³⁵

2. Credit Embedded Securities

There are many variations of credit embedded securities. The common thread among them is the link between return and credit-related performance of the underlying or reference asset. A CLSN, the basic form of credit embedded securities, is a loan or security issued by an investment grade entity or a bankruptcy-remote special purpose vehicle, such as a trust, that has a fixed or floating rate coupon and a highly structured maturity payment provision.³⁶ The note represents a synthetic corporate bond or loan, because a credit derivative (credit default or TROR swap) is embedded in the structure.³⁷ Depending upon the performance of a specified reference asset and the type of derivative embedded in the note, the note may not be redeemable at par value. CLSNs have principal (par value) at risk depending upon the performance of the reference asset, in addition to the performance of the issuer.³⁸ For example, the investor in a CLSN with an embedded

35. See *id.* at 29 (discussing various credit events that trigger the exercise of a CDO).

36. See OCC 96-43, *supra* note 16, at *2 (describing credit-linked note structures).

37. See *id.* (discussing the difference between credit-linked notes and common structured notes, which have more principal at risk based upon changes in financial market rates, rather than the performance of a referenced asset).

38. See Whittaker & Frost, *supra* note 3, at 18-19 (describing the Chase Secured Loan Trust Notes ("CSLT"), a typical CLSN structure). The authors write:

The CSLT is an investment-grade debt security of a trust entity that provides high yields and leveraged upside and limited downside returns relative to a diversified bank loan portfolio. The trust uses the note proceeds to purchase Treasury securities that are then used to collateralize the effective purchase of bank loans. From an economic perspective, the note holders are long [on] both the Treasuries and the underlying bank loans. The collateralization may be as low as 14%, allowing investors to achieve an upside leverage of up to 7-to-1, with yields topping 15% per annum. However there are no margin calls with a CSLT, so the investor can lose no more than the initial investment amount.

Id. at 18.

The authors give the following example suggesting the effectiveness of credit

CDS may receive only sixty percent of the original par value if a reference credit defaults.

Investors in CLSNs assume the credit risk of both the reference credit and the underlying collateral. The trust is generally collateralized with high-quality assets to assure payment of contractual amounts due. CLSN may contain leverage that can magnify the risk and return profile of the asset.³⁹

II. RISKS AND RISK MANAGEMENT OF CREDIT DERIVATIVES

For the last several years, the federal bank regulators in the United States, principally the Federal Reserve and the Comptroller of the Currency ("OCC"), have promoted the importance of risk management. Inherent in the concept of risk management is the notion that to manage risk effectively, institutions must make conscious decisions about which risks to accept, reject, or transfer. For those risks accepted, the institution must then determine the required risk reward or price.⁴⁰ Successfully managing these risks means fully knowing the risks to which one is exposed.

From a supervisory perspective, the OCC, for example, focused in its initial guidance on seven risks associated with credit derivatives: credit, transaction, liquidity, compliance, strategic,

linked structured notes for yield enhancement purposes:

A bank purchases a \$14.3 million note, issued by a trust, which uses the note proceeds to purchase Treasury notes (T-notes) yielding 6.5%. The T-notes are then pledged to the creditor as collateral for a swap paying the total return on a \$100 million loan portfolio that yields LIBOR plus 250 basis points assuming seven times leverage. As consideration, the trust makes a swap payment of LIBOR plus 100 basis points to the creditor. The swap spread of 150 basis points on \$100 million notional is leveraged seven times to 10.5% in respect to the note holder's \$14.3 million investment. Add to this the 6.5% T-note yield, and the CSLT generates a yield of 17%.

Id. at 19.

39. See OCC 96-43, *supra* note 16, at *2 (warning investors of increased risks inherent in CLSNs).

40. See Beaumier, *supra* note 13, at 16 (discussing aspects of modern credit portfolio management, including the importance of portfolio planning and the establishment of performance and compensation schemes that complement an institution's credit risk management goals).

price (or market), and reputation risk.⁴¹ Since the initial guidance by federal banking supervisors on credit derivatives, the list of risks generally associated with OTC derivatives, which is similarly applicable to credit derivatives, has been extended to include interconnection (or interrelation) risk and operational risk. Additionally, after the near-failure of Long-Term Capital Management in 1998, the awareness of systemic risk has increased. Other risks that may affect OTC derivative transactions are interest rate and foreign exchange risk.

Which of these risks are inherent to a particular credit derivative transaction depends on its individual structuring and must be determined on a case-by-case basis. Federal banking regulators have stressed the importance of analyzing the risks incurred by financial institutions in carrying credit derivatives, and in having appropriately sound risk management policies and procedures in place, including adequate internal controls.⁴²

A. Risks for End-Users

The primary risks for end-users associated with credit derivatives are credit, transaction, liquidity, compliance and strategic risks. The OCC defines risk generally as the potential that events, expected or unanticipated, may have an adverse impact on the bank's capital or earnings.⁴³

41. See OCC 96-43, *supra* note 16, at *4-8 (discussing risks associated with credit derivatives both for end-users and dealer banks).

42. See, e.g., Ricki Helfer, Chairman, FDIC, Remarks Before a Symposium on Credit Derivatives Sponsored by the FDIC in Arlington, Virginia (Apr. 4, 1997), available at <<http://www.fdic.gov/news/news/speeches/archives/1997/sp4april97.html>> (visited Apr. 15, 2000) (stating that use of credit derivatives has given rise to concerns at federal bank regulatory agencies); BD. GOVS. FED. RES. SYSTEM, DIV. BANKING & SUPERVISION, SR 97-21, RISK MANAGEMENT AND CAPITAL ADEQUACY OF EXPOSURES FROM SECONDARY MARKET ACTIVITIES (July 11, 1997), available at <<http://www.bog.frb.fed.us/boarddocs/SRLETTERS/1997/sr9721.htm>> (visited Apr. 15, 2000) (noting that banks are explicitly required to incorporate the full range of risks of their secondary market credit activities, including credit derivative activities, into their overall risk management systems).

43. See OCC 96-43, *supra* note 16, at *4 (describing risk). The OCC notes that these risks are not normally exclusive and that any product or service may

1. Credit Risk

Credit risk is the risk that a loss will be incurred if a counterparty defaults on a credit derivatives contract.⁴⁴ All credit derivative transactions expose a bank to credit risk. Federal banking regulators have stressed over the last several years that credit risk management of OTC derivatives should parallel the prudent controls expected in traditional lending activities.⁴⁵ The credit quality of both the reference asset and the counterparty are the principal determinants of credit risk.⁴⁶ Generally, for the seller of credit protection, the primary credit risk is from a reference credit, similar to loan participations, letters of credit, and off-balance sheet guarantees. For the purchaser of credit protection, the credit risk is exposure to the counterparty to the credit derivative contract, as well as the reference asset if the asset is owned by the purchaser.⁴⁷ The beneficiary suffers a loss when the reference credit and the counterparty default on their obligations. In some cases, such as TRORs, both the guarantor and the beneficiary are exposed to the credit risk of the counterparty. For banks, however, acting as dealers and having matching offsetting positions, the counterparty risk could be the primary risk to which

expose the bank to multiple risks. *See id.*

44. *See* GLOBAL DERIVATIVES STUDY GROUP, GROUP OF THIRTY, DERIVATIVES: PRACTICES AND PRINCIPLES 48 (1993) [hereinafter GROUP OF THIRTY REPORT] (defining credit risk inherent in derivatives transactions). The risk management principles regarding OTC derivatives, which have evolved over the years, are to a great extent equally applicable to credit derivatives transactions. *See id.*

45. *See, e.g.,* OCC, BANKING CIRC. BC-277, RISK MANAGEMENT OF FINANCIAL DERIVATIVES 16 (1993), available in 1993 WL 640326, at *16 [hereinafter OCC BC-277] (explaining that policies and procedures should be formalized and should address relevant concerns of risk management such as counterparty exposures, concentration limits, etc.). Since its issuance, OCC BC-277 has been followed by numerous supervisory letters and circulars on the same and related issues.

46. *See* OCC 96-43, *supra* note 16, at *5 (describing relevant credit exposures inherent in credit derivatives transactions).

47. *See id.* at *3 (noting that matching offsetting positions may reduce credit risk resulting from the reference asset, while exposing the dealer bank to additional counterparty risk from the hedging counterparty).

the dealer banks are exposed from credit derivative transactions.⁴⁸

Since the market disruptions in 1997 and 1998, both banking supervisors and regulators as well as market participants have focused on the importance of counterparty risk management, especially in the context of reducing systemic risk.⁴⁹ It is generally recommended that counterparty credit risk be controlled through a formal and independent credit process. Nonperforming contracts should be treated consistently with an institution's policy for nonperforming loans.⁵⁰

U.S. and international banking regulators have identified credit risk as the most significant risk associated with the financial derivatives activities of banks. In its latest consultative paper directed to banking regulators and supervisors, the Basel Committee on Banking Supervision⁵¹ proposed common standards for prudent management of credit risk by banks.⁵² These standards

48. See FDIC FIL-62-96, *supra* note 2, at *3 (describing the credit risk exposure of the beneficiary of credit protection).

49. In early 1999 the Counterparty Risk Management Policy Group [hereinafter CRMPG], with the endorsement of Federal Reserve Bank Chairman Alan Greenspan, Securities and Exchange Commission Chairman Arthur Levitt, and Secretary of the Treasury Robert Rubin, was formed from 12 major commercial and investment banks to perform a study and issue a report on enhanced strong practices in counterparty credit and market risk management. See CRMPG, IMPROVING COUNTERPARTY RISK MANAGEMENT PRACTICES 2 (1999) [hereinafter CRMPG REPORT] (on file with the *Fordham Journal of Corporate & Financial Law*).

50. See OCC 96-43, *supra* note 16, at *7 (advising credit analysts to review both derivatives counterparties and reference credits).

51. See *infra* note 98.

52. See BASEL COMM., PRINCIPLES FOR THE MANAGEMENT OF CREDIT RISK 14 (1999), available in <<http://www.bis.org/publ/index.htm>> (visited Apr. 15, 2000) [hereinafter BASEL CREDIT RISK PRINCIPLES] (proposing adoption of a "more consistent and economic approach to credit risk mitigation techniques, covering credit derivatives [and other techniques].").

Risks inherent in OTC-derivatives activities and their proper management have been described in great detail by various banking and securities regulators and supervisors and in reports issued by industry participants. See generally CRMPG REPORT, *supra* note 49, at 12-37; OCC BC-277, *supra* note 45, at *13-28; DERIVATIVES POL'Y GROUP, FRAMEWORK FOR VOLUNTARY OVERSIGHT—A FRAMEWORK FOR VOLUNTARY OVERSIGHT OF THE OTC DERIVATIVES ACTIVITIES OF SECURITIES FIRM AFFILIATES TO PROMOTE CONFIDENCE AND

would require that, before banks engage in credit derivative activities, they must establish an appropriate credit risk environment, where the board of directors has the responsibility for approving and reviewing the bank's credit risk strategy and policies. Moreover, senior management should be responsible for implementing the credit risk strategy and developing policies and procedures for identifying, measuring, monitoring and controlling credit risk inherent in all products and activities. Second, banks should operate under a sound, well-defined credit granting process and establish overall credit limits. Banks must have a clearly-established process in place for approving new credit as well as for the extension of existing credit, whereby all extensions must be made at an arm's-length basis. Third, banks should maintain an appropriate credit administration, measurement, and monitoring process, whereby they are encouraged to develop and utilize internal risk rating systems in managing credit risk. Banks must also ensure that they have the information systems and analytical techniques in place to enable management to measure and monitor credit risk inherent in all on- and off-balance sheet activities. Fourth, banks would be required to ensure adequate controls over credit risk, and to establish a system of independent, ongoing credit review, the results of which should be communicated directly to the board of directors and senior management. Banks must ensure that the credit-granting function in this respect is properly managed and that credit exposures are within levels consistent with prudential standards and internal limits.⁵³

The Basel Committee on Banking Supervision and the Technical Committee of the International Organization of Securities Commissions (IOSCO)⁵⁴ have suggested that the

STABILITY IN FINANCIAL MARKETS 13-26 (1995); GROUP OF THIRTY REPORT, *supra* note 45, at 43-54; TREASURY MANAGEMENT ASSOCIATION, VOLUNTARY PRINCIPLES AND PRACTICES GUIDELINE FOR END-USERS OF DERIVATIVES 72 (1995).

53. See BASEL CREDIT RISK PRINCIPLES, *supra* note 52, at 9-13 (discussing principles for sound credit granting processes).

54. The Technical Committee of IOSCO is a committee of the supervisory authorities for securities firms in major industrialized countries. It consists of senior representatives of the securities regulators from Australia, France,

notional amount of derivative contracts does not reflect the actual counterparty risk, and that credit risk for a derivative contract is therefore best broken into two components: i) "current credit exposure to the counterparty" and ii) "potential credit exposure that may result from changes in the market value underlying the derivative contract."⁵⁵ The report notes that organizations are increasingly using credit derivatives to adjust their credit risk exposures, and stresses that banking supervisors should be aware of the impact of credit derivatives on their overall credit risk exposure.⁵⁶ Credit risk exposure should also take into account credit derivatives as well as off-balance sheet credit instruments such as standby letters of credit.⁵⁷

Before entering into a credit derivative transaction as the buyer of protection, a bank should evaluate the financial condition of the provider of the credit protection, and the seller of credit protection should likewise conduct a complete review of the reference asset.⁵⁸ The buyer of the credit protection should continually monitor the condition of their counterparties to the credit derivative transaction.⁵⁹ Banks engaged in credit derivative activities should, if appropriate, incorporate exposure from credit derivatives into their Allowance for Loan and Lease Losses (ALLL), and maintain an ALLL at a level that is adequate to absorb estimated losses associated with credit derivatives, as they

Germany, Hong Kong, Italy, Japan, Mexico, the Netherlands, Ontario, Quebec, Spain, Sweden, Switzerland, the United Kingdom, and the United States. See IOSCO, *Members of the Technical Committee* (visited Apr. 15, 2000) <<http://www.iosco.org/iosco.html>> (Membership Lists).

55. FRAMEWORK, *supra* note 16, para. 25.

56. *Id.* para. 26. A significant risk inherent in credit risk is concentration risk, or large concentrations of credit exposure to individual borrowers in specific geographic areas or specific industries. See *id.* para. 34. Federal banking agencies have advised that since nongovernmental guarantees do not reduce credit concentrations, a credit derivative will increase the beneficiary's concentration exposure to the guarantor, or provider of credit protection, without reducing concentration risk of the underlying borrower. See FDIC FIL-62-96, *supra* note 2, at *8.

57. See FRAMEWORK, *supra* note 16, para. 26.

58. See OCC 96-43, *supra* note 16, at 7 (outlining recommendations for buyers and sellers of credit derivatives).

59. See *id.*

are generally required to do for credit losses associated with the loan and lease portfolio.⁶⁰

2. Transaction Risk

Transaction risk is “the risk to earnings or capital arising from problems with service or product delivery.”⁶¹ Transaction risk occurs when participants to a credit derivative transaction do not fully understand the contract features and the scope and degree of risk transference in a credit derivative product. In contrast to traditional credit enhancement such as letters of credit, the degree of risk transference in a credit derivative depends on the particular design of the product. Bank management should, therefore, fully understand how the product works and the variables and features that determine its performance.⁶²

3. Liquidity Risk

Liquidity risk is “the risk to earnings or capital arising from a bank’s inability to meet its obligations when they come due.”⁶³ As with cash instruments, there are two basic types of liquidity risk that can be associated with derivative instruments: market (or asset) liquidity risk and funding (or cash flow) liquidity risk.⁶⁴ Funding liquidity risk is the risk of one’s inability to fund positions held and to meet, when due, the cash and collateral demands of counterparties, other credit providers, and investors.⁶⁵ Market liquidity risk is the risk of one’s inability to liquidate positions in various asset markets, which ultimately impacts the ability to

60. See FDIC FIL-62-96, *supra* note 2, at 9 (suggesting such treatment is appropriate).

61. OCC 96-43, *supra* note 16, at 8.

62. See OCC BC-277, *supra* note 45, at *7 (noting that bank directors and senior management must understand the potential risk exposure and appropriateness of the business transaction).

63. OCC 96-43, *supra* note 16, at *9.

64. See FRAMEWORK, *supra* note 16, para. 39. See also CRMPG Report, *supra* note 49, at 20.

65. See CRMPG Report, *supra* note 49, at 20.

manage and hedge market risks and to satisfy any shortfall on the funding side.⁶⁶ End-users typically measure liquidity risk by considering funding and cash flow liquidity risk, while dealers measure liquidity risk by considering both funding liquidity risk and market (or asset) liquidity risk.⁶⁷ Dealers should note, however, that the two risks, though separate, are interrelated.⁶⁸ According to the Counterparty Risk Management Group, “[t]he viability of a financial intermediary or large trading counterparty could be compromised by poor management of its liquidity risk, even if it is solvent on a mark-to-market basis or its leverage is relatively modest.”⁶⁹ Banks engaging in credit derivatives transactions should therefore incorporate the impact of these activities on their cash flows into regular liquidity planning and monitoring systems.⁷⁰

4. Compliance (or Legal) Risk

Compliance (or legal) risk is the risk of a loss because a contract cannot be enforced. This includes risks arising from violations of, or non-compliance with, laws, rules, and regulations, insufficient capacity or authority of a counterparty (*ultra vires*), uncertain legality and unenforceability of contracts in bankruptcy or insolvency, and insufficient documentation.⁷¹ The possibility

66. *See Id.*

67. *See* OCC 96-43, *supra* note 16, at *9.

68. *See* CRMPG REPORT, *supra* note 49, at 20 (discussing the interrelation between funding liquidity and market liquidity risk).

69. *Id.* The report suggests the importance of understanding the effects of leverage in part through the measurement of liquidity risk, and also contains a description of the interrelated criteria of leverage: “Leverage is generally considered to exist when: (a) an institution’s financial assets exceed its capital; (b) an institution is exposed to the change in value of a position beyond the amount, if any, initially paid for the position; or (c) an institution owns a position with ‘embedded leverage,’ i.e., a position with a price volatility exceeding that of the underlying market factor.” *Id.* at 16.

70. *See* OCC 96-43, *supra* note 16, at *9 (suggesting that for both dealers and end-users, cash-flow projections should incorporate all significant sources and uses of cash and collateral).

71. *See id.* at *12 (encouraging participants in credit derivatives transactions to use standardized documentation to reduce legal risk).

that a counterparty might be legally incapable of entering into the contract, or that an entire class of contracts may become declared illegal or unenforceable, will significantly increase compliance risk.⁷²

Before engaging in credit derivatives transactions, a bank should confirm that it and its counterparties have the necessary legal and regulatory authority to engage in the transactions. In order to ensure that the transaction complies with applicable laws, the bank should closely evaluate the legal documentation underlying the transaction. Legal counsel should evaluate the legal documentation of the credit derivative transaction, review the documentation of the underlying or reference asset, and determine that no discrepancies exist between the terms of the different referenced transactions. Both end-users and dealers must ensure that agreements are documented properly and are legally enforceable.⁷³ Participants must ensure that contract documentation is “timely executed and maintained.”⁷⁴ To reduce legal risk, end-users and dealers should use, to the greatest extent practicable, standardized master agreements that apply to multiple transactions. This is in order to provide standardized terms

72. See GROUP OF THIRTY REPORT, *supra* note 44, at 51 (advising that legal counsel review contract terms to determine their legality and enforceability). For example, gaming and so called “Bucket Shop” laws might render agreements legally unenforceable.

Legal uncertainty remains in the U.S. whether certain types of privately negotiated credit derivatives could be considered illegal off-exchange futures contracts under the Commodity Exchange Act (CEA), 7 U.S.C. § 6 (1994), and therefore be unenforceable when challenged. Issues relating to the remaining legal uncertainty of OTC derivatives in the U.S. under the CEA have been discussed in great detail by Federal Agencies. See, e.g., U.S. GEN. ACCT. OFFICE, GGD-99-74, REPORT TO CONGRESSIONAL COMMITTEES, THE COMMODITY EXCHANGE ACT—ISSUES RELATED TO THE COMMODITY FUTURES TRADING COMMISSION’S REAUTHORIZATION (1999) (on file with the *Fordham Journal of Corporate & Financial Law*); THE PRESIDENT’S WORKING GROUP ON FINANCIAL MARKETS, OVER-THE COUNTER DERIVATIVES MARKETS AND THE COMMODITY EXCHANGE ACT (1999), available at <<http://www.ustreas.gov/press/releases/docs/otcact.pdf>> (visited Apr. 15, 2000).

73. See Treasury Management Association, *supra* note 52, at 8 (discussing good practices for maintaining and monitoring documentation).

74. *Id.*

governing the transactions and to provide for netting and close-out netting of credit exposures and payment obligations.⁷⁵

5. Strategic Risk

Strategic risk is the risk to earnings or capital arising from adverse business decisions or improper implementation of those decisions. Banks that plan to engage in the business of credit derivatives should ensure that the activity "is consistent with the overall business strategies and credit risk policies approved by the board of directors."⁷⁶ The decision to use credit derivatives to manage credit portfolios, to enhance yields, and to use them for arbitrage purposes represents a strategic management decision, which is generally reserved for senior management and the board of directors.

6. Operational Risk

Operational risk is the risk of losses occurring as a result of inadequate systems and controls, human error, or management failure.⁷⁷ The complexity of derivatives requires "special emphasis on maintaining adequate human and systems controls to validate and monitor the transactions of end-users and positions of dealers."⁷⁸ Appropriate internal controls should include: (i) oversight of informed and involved senior management and the board of directors, (ii) documentation of policies and procedures, listing approved activities and establishing limits and exceptions, credit controls, and management reports, (iii) independent risk

75. See BD. GOVS. FED. RES. BANK, GUIDELINES OF THE FEDERAL RESERVE, PRINCIPLES AND PRACTICES FOR WHOLESALE FINANCIAL MARKET TRANSACTIONS 10 (1999) (on file with the *Fordham Journal of Corporate & Financial Law*) (emphasizing the importance of standardized documentation).

Participants should use one master agreement with each counterparty. See GROUP OF THIRTY REPORT, *supra* note 44, at 16 (suggesting that the use of one master agreement between two parties reduces legal risk to the greatest possible extent).

76. OCC 96-43, *supra* note 16, at *11.

77. See GROUP OF THIRTY REPORT, *supra* note 44, at 50 (defining operational risk).

78. *Id.*

management function (which, as mentioned above, is analogous to credit review and asset or liability committees) that provides senior management validation of results and utilization of limits, (iv) independent internal audits which verify adherence to the firm's policies and procedures, (v) a back office with the technology and systems for handling confirmations, documentation, payments, and accounting, and (vi) a system of independent checks and balances throughout the transaction process from front-office initiation of a transaction to final payment settlement.⁷⁹

B. Risks for Dealers

In addition to the risks described above, for dealers in credit derivatives the risk spectrum also includes price (or market) risk and reputation risk.⁸⁰

1. Market Risk

The OCC defines market risk as "the exposure arising from adverse changes in the market value (the price) of an instrument or portfolio of instruments."⁸¹ In the market for credit derivatives, some participants will enter into credit derivative activities as end-users, while others will act as dealers who will both buy and sell credit protection on the same or similar underlying reference assets.⁸² Dealers and active position-takers are exposed to market risk because these institutions generally take positions with the expectation of profiting from price movements. To the extent that end-users enter into credit derivative activities for short term investment purposes or to manage earnings, they are also exposed

79. See *id.* (outlining the main types of internal controls).

80. See OCC 96-43, *supra* note 16, at *6 (describing risks to dealer banks).

81. OCC, RISK MANAGEMENT OF FINANCIAL DERIVATIVES, COMPTROLLER'S HANDBOOK (1994), in *Materials Submitted by Jonathan H. Rushdoony, District Council, Office of the Comptroller of the Currency, Administrator of National Banks*, in FINANCIAL SERVICES LITIGATION 1996, at 9, 24 (PLI Corp. L. & Prac. Course Handbook Series No. 935, 1996).

82. See OCC 96-43, *supra* note 16, at *10 (describing sound policies to manage market risk).

to market risk.⁸³ Market risk can be best broken into two groups: (i) general market risk, which refers to changes in the market value of on-balance sheet and off-balance sheet items due to broad market movements, and (ii) specific market risk, which refers to changes in the market value of individual positions due to factors other than broad market movements, such as the credit risk of an instrument's issuer.⁸⁴

Dealers in credit derivatives should have sound policies, procedures, and systems to ensure that exposures are measured in a timely fashion and are within senior management and board-approved risk limits.⁸⁵ Their risk management systems should include stress testing to evaluate the institution's exposure in a highly stressed market scenario.⁸⁶ Dealers should also mark their credit derivatives positions to market, on at least a daily basis, for risk management purposes.⁸⁷ This calculation should use a consistent measure and be compared to market risk limits. Generally, market risk is best measured as "value-at-risk" ("VAR") using a probability analysis based upon a common confidence interval (e.g., two standard deviations) and time

83. See *id.* (describing exposure to market risk by dealer banks and end-users). See also AMENDMENT TO THE CAPITAL ACCORD TO INCORPORATE MARKET RISKS (Basel Comm. 1996), *amending* INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS 1 (Basel Comm. 1988) [hereinafter BASEL CAPITAL ACCORD]. Both documents are available in <<http://www.bis.org/publ/index.htm>> (visited Apr. 15, 2000).

84. See Risk-Based Capital Standard: Market Risk, 61 Fed. Reg. 47,358, 47,358 n.2 (Sept. 6, 1996) (codified as amended at 12 C.F.R. pt. 3, 208, 225 & 325) [hereinafter Capital Standard].

85. See GROUP OF THIRTY REPORT, *supra* note 44, at 10 (recommending that dealer banks calculate daily their market risk and match it to market risk limits).

86. See OCC 96-43, *supra* note 16, at *9 (describing risk measurement standards for dealer banks); OCC BC-277, *supra* note 45, at *11 (describing credit risk measurement practices). See also CRMPG REPORT, *supra* note 44 (recommending that institutions, when stress testing, should estimate both market and credit risks). The Report advises that such tests should assess: (a) concentration risk both to a single counterparty and to groups of counterparties; (b) correlation risk among both market risk factors and credit risk factors; and (c) the risk that liquidating positions could move the market. See *id.*

87. See GROUP OF THIRTY REPORT, *supra* note 44, at 9 (describing valuation and market risk management practices).

horizon (e.g., a one-day exposure).⁸⁸ For risk management purposes, such as establishing internal limits, dealers should consider that liquidity in credit derivatives markets is still limited due to the lack of a deep dealer market, which may make it difficult to price transactions and hedge cash flow exposures on a timely basis.⁸⁹

2. Reputation Risk

Reputation risk is the risk arising from negative public opinion. Dealer banks that enter into transactions with counterparties that do not fully understand the terms and risks of the transactions may become exposed to litigation or financial loss that could damage the institution's name.⁹⁰

C. Standardized Documentation

Privately negotiated derivative transactions, including credit derivatives, are generally documented in standard master agreements. The purpose of master agreements is to provide for standard contract forms "applicable as a base structure for virtually any OTC derivative product."⁹¹ Standard documentation for derivatives activities has been available in the industry since the late 1980s. Various industry groups have issued standard master agreements.⁹²

88. See *id.* at 10 (describing market risk measurement techniques). See also Capital Standard, 61 Fed. Reg. at 47,367-68 (discussing regulatory capital treatment of credit derivatives and the use of internal risk measurement systems to measure market risk and to calculate value-at-risk (VAR) capital charges).

89. See OCC 96-43, *supra* note 16, at *11 (describing dealer banks' vulnerability to high volatilities and market risk management practices).

90. See *id.* (defining reputational risk for supervisory purposes).

91. Clarence B. Manning, *A Derivatives Primer For Corporate Counsel, Or Do You Know What Your Treasurer Is Doing?*, ACCA DOCKET, Mar./Apr. 1995, at 16 (1995).

92. For example, the Foreign Exchange Committee of the Federal Reserve Bank of New York, in association with the British Bankers' Association, the Canadian Foreign Exchange Committee, and the Tokyo Foreign Exchange Market Practices Committee, has published the International Foreign Exchange

Standardized and generally accepted documentation is useful and important in various ways. It can reduce legal risk, especially in cross-border transactions, by providing clear and precise terminology and definitions and by reducing the risk of incompatibility of laws of different jurisdictions. Additionally, such documentation enhances market transparency by reducing a confusing variety of documentation. Master agreements are generally perceived as an effective tool to better manage credit risk, which allows for acceleration and close-out netting in the event of default.⁹³

The credit derivative market is still relatively new and limited compared to more traditional derivative activities. The International Swaps and Derivatives Association (ISDA), which is considered a leader in developing master agreements for derivatives, has developed standard documentation for some types of credit derivatives.⁹⁴ The 1992 ISDA Master Agreements have been amended to cover credit default swap transactions.⁹⁵ Further, in reaction to controversies in Russia and Korea arising from the

and Options Master Agreement ("FEOMA"); the International Foreign Exchange Master Agreement ("IFEMA"); and the International Currency Options Market Master Agreement ("ICOM").

93. See Phillips, *supra* note 16, at *2 (noting the importance of infrastructure developments and the International Swap and Derivative Association's (ISDA) contribution to that area).

94. See Daniel P. Cunningham & Thomas J. Werlen, *The Model Netting Act: A Solution For Insolvency Uncertainty*, FUTURES & DERIVATIVES L. REP., Nov. 1996, at 7 (recognizing the conclusions reached by the ISDA on the enforceability of the close-out netting provisions of the ISDA Master Agreement, which has led to its increased use). The authors note that the ISDA obtained legal opinions which confirmed that key jurisdictions will support the netting of trades carried out under ISDA's forms in the event of a counterparty's insolvency. However, netting legislation enacted before credit derivatives appeared may not embrace close-out netting. See *id.*

There is also some doubt whether close-out netting agreements in credit derivative transactions would be respected under the Bankruptcy Code, 11 U.S.C. §§ 101-1330 (1994 & Supp. I 1995). The Code, in its current version, does not address credit derivatives expressly.

95. The 1992 ISDA Master Agreements include the ISDA Master Agreement (Multicurrency-Cross Border) and the 1992 ISDA Master Agreement (Local Currency-Single Jurisdiction). See ISDA, *Guide to ISDA Publications* (last visited Apr. 15, 2000) <<http://www.isda.org/c1.html>>.

dispute resolution, delivery, notice, and credit event provisions, ISDA, in its Long Form Confirmation, amended the form to prevent future related uncertainties. Standard confirmation documents reduce the legal risk of unenforceability of oral contracts under the Statute of Frauds, where a recorded telephone conversation may be insufficient evidence of a contract.⁹⁵

The latest publication by ISDA is the 1999 Credit Derivatives Definitions, which was incorporated into the 1999 Confirmation Short Form.⁹⁷ The 1999 Credit Derivatives Definitions are intended to primarily apply to contracts between credit default swap parties written under ISDA Master Agreements. The definitions apply to both sovereign and non-sovereign transactions. ISDA is currently working on definitions for total rate of return swaps and third party dispute resolution mechanisms for all types of credit derivatives.

III. REGULATORY INITIATIVES BY FEDERAL BANKING AGENCIES

From a regulatory perspective, federal banking agencies have focused their interest on three main elements that are considered proper means of supervising and regulating the OTC derivatives market, including credit derivatives, and its participants. These are (i) risk management, with a major emphasis on credit risk management, (ii) capital adequacy and regulatory capital, and (iii) disclosure.⁹⁸ The principles of sound risk management techniques

96. See Warren N. Davis & Kevin I. MacKenzie, *Concerns Of End-Users Of Derivatives*, in *SWAPS AND OTHER DERIVATIVES IN 1996*, at 681, 683 (P.L.I. Corp. L. and Prac. Course Handbook Series No. 959, 1996) (noting that “[e]nd-users should . . . be aware that under the N.Y. General Obligations Law, a recorded telephone conversation may [but will not in all cases] provide sufficient evidence of a contract.”).

97. See *supra* note 22 (discussing ISDA DEFINITIONS).

98. See *OCC Plans Additional Guidance on Bank's Use of Financial Derivatives*, 66 Banking Rep. (BNA) 627, Apr. 15, 1996 (quoting remarks by senior OCC officials that the OCC focuses on three areas in the derivatives area: risk management, information reporting, and capital adequacy). According to the OCC, all of these areas are interrelated and must be viewed as a whole. See *id.* See also Chester B. Feldberg, Executive Vice President, Banking Supervision Group, N.Y. Fed. Res. Bank, Remarks Before a Conference of the Federal

for financial institutions transacting in credit derivatives have been described in Part II of this article. Federal banking agencies have, thus far, confined themselves to advising financial institutions on risk management of OTC derivatives and related issues rather than imposing regulatory duties and obligations upon them. These agencies have in the past relied on competition in the marketplace for the success of market participants' joint efforts and ongoing initiatives for voluntary oversight in the business of OTC derivatives. This includes credit derivatives, and the promotion of "best practices" among market participants to enhance soundness and market transparency. In the area of capital adequacy, regulatory capital, and disclosure, however, the federal banking agencies have not relied on self-regulation, and have therefore issued mandatory rules.

A. Regulatory Capital Treatment

Since the early 1980s, international banking supervisors have pooled their efforts to strengthen the soundness and stability of the international banking system. The first major success in the development of risk-based capital rules for banking institutions was achieved with the 1988 Basel Capital Accord, which outlines the basic approach for modern regulatory capital treatment.⁹⁹ The

Reserve Bank, the Bank of England and the Bank of Japan, New York City, N.Y., Feb. 24, 1998 (stressing the focus on regulatory capital standards and noting that credit risk is the number one risk for banks and highlighting the significance of risk management and the impact of credit derivatives) (on file with author); James Garner & James L. Gertie, *Regulatory Perspective From The Federal Reserve and Bank of Boston*, J. LENDING & CREDIT RISK MGMT., Jan. 1, 1997, at 22 (outlining the Federal Reserve System practices of supervision by risk and implementation of risk-focused examinations, and noting that the greater verification of risk management processes will result in less transaction testing by examiners); Ricki Helfer, Chairman, F.D.I.C., Remarks Before a Symposium on Credit Derivatives by the FDIC, Arlington, Va., Apr. 4, 1997 (stressing the importance of sound risk management policies and procedures and the importance of appropriate capital requirements); Laura Mandaro, *Regulatory Compliance Watch*, AM. BANKER, Mar. 9, 1998, at 10 (noting that banking supervisors recognize the improvements in risk management by banks).

99. See BASEL CAPITAL ACCORD, *supra* note 83. The Basel Committee on Banking Supervision is comprised of representatives of the central banks and

purpose of the Basel Capital Accord was to establish international minimum capital requirements which assess capital in relation to on- and off-balance sheet credit risk categories, and require banking institutions to achieve and maintain a minimum risk-weighted capital ratio of no less than eight percent. The provisions of the Basel Capital Accord were implemented by federal banking agencies in 1989.¹⁰⁰ Thus, financial institutions have been required to hold capital to support their on- and off-balance sheet risk exposures. Since then, the Basel Capital Accord has been amended, expanded, and refined in various ways to better reflect and incorporate risk exposure of banks, including risks inherent in derivative activities. These amendments have been widely adopted by federal banking agencies.

1. General Risk-Based Capital Rules for Derivatives

The federal banking agency rules on risk-based capital treatment of OTC derivatives have been amended several times since their original implementation in 1989. In 1995, for example, the federal banking agencies and the Department of the Treasury amended their risk-based capital standards to implement revisions to the Basel Capital Accord that revise and expand the set of conversion factors used to calculate the potential future exposure of derivative contracts.¹⁰¹ The revisions also recognized the effects of netting arrangements in the calculation of potential future exposure for derivative contracts subject to qualifying bilateral netting arrangements.¹⁰²

In 1996, the agencies issued revisions to the standards to

supervisory authorities of twelve countries: Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, the United Kingdom, the United States, and Luxembourg. The Committee meets at the Bank for International Settlements (BIS), in Basel, Switzerland.

100. See Kroener, *supra* note 1, at 241 (citing 60 Fed. Reg. 3227 (1995)). Minimum capital requirements and procedures are codified at 12 C.F.R. pt. 3, 208, 225 & 325 (1999).

101. See Risk-Based Capital Standards: Derivative Transactions, 60 Fed. Reg. 46,170, 46,170 (1995) (codified at 12 C.F.R. pt. 3, 208, 225 & 325).

102. See *id.* at 46,170.

incorporate a measure for market risk arising from derivative trading activities.¹⁰³ The revision is based upon the January 1996 amendments to the Basel Committee's Capital Accord.¹⁰⁴ Under the revision, a bank must hold capital to support the general market risk and specific risk associated with its trading activities.¹⁰⁵ Banks with significant trading activities that cause exposure to market risk must maintain adequate capital against that exposure.¹⁰⁶ In order to calculate risk-based capital for market risk, a bank must first determine its adjusted risk-weighted assets (its risk-weighted assets minus the risk-weighted amounts of the covered positions).¹⁰⁷ In another step, the bank must calculate its measure for market risk, which is the sum of the VAR-based capital charge, a specific add-on (for specific market risk), and, at the time, any *de minimis* charges.¹⁰⁸ Banks complying with the qualitative and quantitative requirements may use internal models to calculate VAR on a daily basis.¹⁰⁹ Furthermore, a bank using

103. Risk-Based Capital Standards: Market Risk, 61 Fed. Reg. 47,358 (1996) (codified at 12 C.F.R. pt. 3, 208, 225 & 325).

104. *See id.* at 47,358 (implementing BASEL COMM., AMENDMENT TO THE CAPITAL ACCORD TO INCORPORATE MARKET RISKS (1996) available in <<http://www.bis.org/publ/index.htm>> (visited Apr. 15, 2000) [hereinafter MARKET RISK AMENDMENT]). The MARKET RISK AMENDMENT introduced a measurement for market risk in terms of general and specific market risk arising from trading activities. *See id.* at 47,358, 47,361. Qualifying financial institutions, upon approval by the bank's supervisory authority, are permitted to calculate specific risk using an internal model, rather than being subject to a standard specific risk capital charge. *See id.* at 47,361. The rule includes qualitative as well as quantitative criteria for internal models. *See id.* at 47,363-64. Only those banks whose internal models are in full compliance with the qualitative and quantitative criteria are eligible for application of the minimum multiplication factor to establish the specific market risk capital charge. *See id.* at 47,361-62.

105. *See id.* at 47,358.

106. *See id.* at 47,359. The federal banking agencies defined significant trading activities as including any bank whose trading activity on a worldwide consolidated basis equals 10 percent or more of its total assets, or equals \$1 billion or more. *See id.* at 47,361-2 & n.8.

107. *See id.* at 47,362.

108. *See id.* at 47,362 & n.9.

109. *See id.* at 47,363-64 (describing adequate internal models). Qualitative requirements provide, for example, that a bank's risk control must be independent, and report directly to senior management. *See id.* at 47,363. A

internal models must do “backtesting,” by which a bank compares each of its most recent 250 business days’ actual net trading profit or loss with the corresponding daily VAR measures generated for internal risk measurement purposes.¹¹⁰

Another significant amendment to the risk-based capital rules was implemented in 1997.¹¹¹ The federal banking agencies amended their risk-based capital standards for market risk applicable to banks with significant trading activities to eliminate the requirement that when an institution measures specific risk using its internal model, the total capital charge for specific risk must equal at least fifty percent of the standard specific risk capital charge.¹¹²

2. Application of the Risk-Based Capital Standards to Credit Derivatives

In their preliminary guidance for the supervisory review of credit derivatives, issued in August 1996, the federal banking agencies declared the risk-based capital rules generally applicable to credit derivatives.¹¹³ Banks must incorporate credit derivatives

bank’s internal risk measurement model must be integrated into its daily management process. A bank’s policies and procedures must include stress testing and backtesting, and it must conduct independent reviews of risk measurement and management systems at least annually. *See id.* at 47,364. Quantitative requirements provide, for example, that VAR must be calculated daily on a 99%, one-tailed confidence level, with a price shock equivalent to a ten-business day movement in prices and rates. *See id.*

110. *See id.*

111. Risk-Based Capital Standards: Market Risk, 62 Fed. Reg. 68,064 (1998) (codified at 12 C.F.R. pt. 3, 208, 225 & 325 as amended by 64 Fed. Reg. 19,034 (1999)).

112. *See id.* at 68,065. These amendments incorporate the Basel Committee’s determination, that, since the Committee had adopted its market risk amendment, many institutions have significantly improved their risk modeling techniques, and, in particular, their modeling of specific risk. *See id.* at 68,064. Thus, the use of the minimum specific risk charge and the burden of a separate calculation can be eliminated. *See id.* at n.2.

113. FDIC FIL-62-96, *supra* note 2, at *6; FRB SR 96-17, *supra* note 16, at 6-7; OCC 96-43, *supra* note 16, at *9.

into their risk-based capital computations.¹¹⁴ Risk-based capital treatment of credit derivatives must be determined on a case-by-case basis, as some of the credit derivatives are functionally equivalent to standby letters of credit or guarantees, while other forms might be treated as interest rate, equity, or other commodity derivatives.¹¹⁵ Therefore, guarantor banks are advised to “hold capital and reserves against their risk exposure to the reference asset.”¹¹⁶ An exception to this broad principle is made where the credit derivative contract incorporates periodic payments for depreciation or appreciation, which is true for most TROR swaps.¹¹⁷ The seller of credit protection can deduct the amount of depreciation paid to the beneficiary from the notional amount of the contract to determine the amount of reference exposure subject to a capital charge.¹¹⁸ In the case of TROR swaps, the provider of credit protection is also exposed to the credit risk of the counterparty, which is measured as “the replacement cost of the credit derivative transaction plus an add-on [factor] for the potential future exposure of the credit derivative to market price changes.”¹¹⁹

For purposes of risk-based capital charges, credit derivatives are generally treated as off-balance sheet direct credit substitutes.¹²⁰ One hundred percent of the notional amount of the contract is used to determine the credit equivalent amount to be included in risk weighted assets of the provider of credit protection.¹²¹ The provider’s credit exposure is assigned to the same risk [weight] category that is appropriate for the obligor of the reference asset or any collateral.¹²² The unamortized portion of a reference asset with

114. See OCC 96-43, *supra* note 16, at *9.

115. See *id.*

116. FRB SR 96-17, *supra* note 16, at 2.

117. See *id.*

118. See *id.*

119. *Id.*

120. See *id.* at 6.

121. See *id.* (“The notional amount of the contract should be converted at 100 percent to determine the credit equivalent amount . . .”).

122. See *id.* Banks are required to maintain different capital for different classes of assets in accordance with certain risk categories. Regulatory capital is calculated as an absolute amount of capital as a percentage of assets, with such

effective credit protection may, under certain circumstances, be assigned to the risk category appropriate to the guarantor.¹²³

Whether the credit derivative is considered an eligible guarantee for purposes of risk-based capital depends upon the degree of credit protection actually provided, which must be determined on a case-by-case basis. A “back-to-back” position, whereby the guarantor enters into an offsetting credit derivative transaction with another counterparty, may be used to mitigate assumed credit risk.¹²⁴ These banks may treat the first credit derivative as guaranteed through the offsetting credit derivative arrangement, thus availing the hedged credit derivative of the risk category of the counterparty to the offsetting position.¹²⁵

On June 13, 1997, the Federal Reserve Board issued a supervisory letter explaining how credit derivatives held in trading accounts of banks with significant trading in derivatives will be treated for regulatory capital purposes.¹²⁶ Banks should apply the same market risk capital rules as those currently used by banks with significant credit derivative trading activities. Dealer banks’ risk models must focus on the three risk elements inherent in credit derivatives: counterparty credit risk, general market risk, and specific market risk.¹²⁷ These three risk elements correspond to three types of open positions:

- (i) *Matched positions*, which are a set of long and short positions in identical credit derivative structures over

assets being translated into risk categories (i.s., 20%, 100%) to be included in risk weighted assets for the determination of regulatory capital for these assets.

123. *See id.* The official guidance gives an example of the 20% risk category if the guarantor is an OECD bank. *See id.*; FDIC FIL-62-96, *supra* note 2, at *7.

124. *See* FRB SR 96-17, *supra* note 16, at 6.

125. *See id.* The Federal Reserve has set out examples of certain transaction structures which require more specific capital treatment in its 1996 guidance. *See id.*

126. BD. GOVS. FED. RES. SYSTEM, DIV. BANKING & SUPERVISION, SR 97-18, APPLICATION OF MARKET RISK CAPITAL REQUIREMENTS TO CREDIT DERIVATIVES (June 13, 1997), available at <<http://www.bog.frb.fed.us/boarddocs/SRLETTERS/1997/sr9718.htm>> (visited Apr. 15, 2000) [hereinafter FRB SR 97-18].

127. *See id.* tbl.1, at 2 (defining types of risk exposure from credit derivatives in the trading book).

identical maturities referencing identical assets, and involve counterparty credit risk,¹²⁸

- (ii) *Offsetting positions*, which are a set of long and short credit derivative positions in reference assets of the same obligor with the same level of seniority in bankruptcy and involve counterparty credit risk and some general market risk and some specific risk;¹²⁹ and
- (iii) *Open positions*, which are a set of positions that do not qualify as matched or offsetting positions, and involve counterparty credit risk, general market risk, and specific risk.¹³⁰

Dealer banks must use their internal models to measure their daily VAR.¹³¹ The counterparty risk factor in these internal models is calculated by “summing the mark-to-market value of the credit derivative and an add-on factor representing potential future credit exposure.”¹³² Investment grade credit derivatives, or credit derivatives where the reference asset is unrated but well-secured by high-quality collateral, qualify for lower add-on factors (equity add-on factors). Credit derivatives for which the reference asset is either below investment grade, or is unrated and unsecured, qualify for commodity add-on factors for purposes of calculating the risk-based capital charges.¹³³

Since their initial guidance on credit derivatives and their regulatory capital treatment by banks in 1996, federal banking agencies have recognized the risk mitigating effects of certain credit derivatives that effectively transfer credit risk, affording them preferential risk-based capital treatment.¹³⁴ On November 15, 1999, the OCC and the Federal Reserve issued a joint statement and rules addressing the risk-based capital treatment of certain

128. *See id.* tbl.2, at 3.

129. *See id.*

130. *See id.*

131. *See supra* notes 109-9 and accompanying text.

132. FRB SR 97-18, *supra* note 126, at 4.

133. *See id.*

134. *See, e.g.,* FDIC FIL-62-96, *supra* note 2, at *7 (allowing banks, buying such credit protection, to assign the portion of the underlying asset for which credit protection has been acquired to the risk category appropriate to the guarantor); FRB 96-17, *supra* note 16, app.

synthetic securitization transactions involving credit derivatives.¹³⁵ In the statement, they note that credit derivatives are now being used to synthetically replicate collateralized loan obligations (CLOs).¹³⁶ Banks can use CLOs and their synthetic variants to manage their balance sheets and, in some instances, transfer credit risk to the capital markets.

A CLO is an "asset backed security that is usually supported by a variety of assets, including whole commercial loans, revolving credit facilities, letters of credit, bankers' acceptances, or other asset-backed securities."¹³⁷ The difference between CLSNs and more traditional CLOs is that rather than transferring the underlying assets to the SPV, the sponsoring bank issues credit-linked structured notes to the SPV individually referencing the payment obligation of a particular company or the "reference obligor."¹³⁸ Under a typical credit-linked structured note transaction, the notional amount of the issued credit-linked structured note equals the dollar amount of the reference asset that the sponsor was hedging on its balance sheet.¹³⁹ These structures generally use credit default swaps to transfer credit risk and create different levels of risk exposure, but do not hedge the entire notional amount of the overall reference portfolio.¹⁴⁰ The underlying assets that comprise the reference portfolio remain in

135. OCC & BD. GOVS. FED. RES. BANK, CAPITAL INTERPRETATIONS—SYNTHETIC COLLATERALIZED LOAN OBLIGATIONS (NOV. 15, 1999), in OCC, OCC BULLETIN 99-43, RISK BASED CAPITAL INTERPRETATIONS—CREDIT DERIVATIVES (NOV. 15, 1999), available at <<http://www.occ.treas.gov/ftp/bulletin/99-43a.pdf>> (visited May 24, 2000) [hereinafter OCC 99-43].

136. See *id.* at 1.

137. *Id.* The joint statement further notes:

In a typical CLO transaction, the sponsoring [risk selling] banking organization transfers the loans and other assets to a bankruptcy-remote special purpose vehicle (SPV), which then issues asset-backed securities consisting of one or more classes of debt. This type of transaction represents a so-called "cash flow CLO," which enables the sponsoring institution to reduce its leverage and risk-based capital requirements, improve its liquidity, and manage credit concentrations.

Id.

138. See *id.* at 2.

139. See *id.*

140. See *id.*

the institution's banking book, and the credit risk is usually transferred into the SPV through credit default swaps or credit-linked structured notes. In contrast, under a typical CLO structure, the assets are actually transferred into the SPV.¹⁴¹ Therefore, CLSNs can be considered "synthetic CLOs."

The joint statement notes that the Basel Capital Accord, in its current form, does not contemplate transactions such as securitizations or synthetically-created securitizations in the context of risk-based capital guidelines.¹⁴² The agencies suggest that synthetic CLOs have become popular in recent years because they "more closely align the sponsoring institution's regulatory capital requirements with the economic capital required by the market."¹⁴³ Thus, for purposes of calculating leverage and risk-based capital ratios, the agencies have set forth three types of CLO transactions which are afforded different risk-based capital requirements, depending on the degree of risk transference. The first type is where the "sponsoring bank, through a synthetic CLO, hedges the entire notional amount of a reference asset portfolio."¹⁴⁴ The second is a transaction in which the sponsoring bank hedges only "a portion of the reference portfolio and retains a high quality senior risk position that absorbs only those credit losses in excess of the junior loss positions."¹⁴⁵ The third type of transaction involves the bank retaining "a subordinated position that absorbs first losses in a reference portfolio."¹⁴⁶

This guidance, though recent and fairly comprehensive, will be short-lived. In June 1999, the Basel Committee issued its first public guidance recognizing that the recent development of credit risk mitigating techniques such as credit derivatives has enabled

141. *See id.*

142. *See id.* (discussing regulatory capital treatment of synthetic CLOs). The agencies note that "[u]nder the current risk-based capital guidelines, corporate credits are assigned to the 100 percent risk category and are assessed 8 percent capital," however, for these kinds of high quality investment grade exposures, "the 8 percent capital requirement may exceed the economic capital that a bank sets aside to cover the credit risk of the transaction." *Id.*

143. *Id.*

144. *Id.* at 3.

145. *Id.*

146. *Id.*

banks to substantially improve their risk management.¹⁴⁷ The Capital Accord, however, has not favored the development of specific forms of credit risk mitigation since it places restrictions on both the type of hedges acceptable for receiving capital reduction and the amount of capital relief. The Committee's proposal seeks a more consistent and economic approach to credit risk mitigating techniques, covering credit derivatives, collateral, guarantees, and on-balance sheet netting.¹⁴⁸ These proposed amendments will more accurately reflect the positive impacts of modern innovative risk mitigating techniques in the management of credit portfolios, such as credit derivatives.

The comment period for the Basel Committee's proposal ended on March 31, 2000.¹⁴⁹ Anticipating new amendments, the Federal Reserve and the OCC released a new notice of proposed joint rulemaking on March 8, 2000 for public comment.¹⁵⁰ This proposal, if adopted, will lead to a changed regulatory capital treatment of credit derivatives embedded in or issued as part of a synthetic securitization, such as credit default swaps and credit-linked structured notes. Under the proposed rule, such derivatives might qualify as a recourse arrangement or a direct credit substitute, which are frequently associated with asset securitizations.¹⁵¹ The proposal may result in increased risk-based capital charges, depending on the amount of credit risk exposure from such a credit derivative.¹⁵²

147. See BASEL CAPITAL ADEQUACY FRAMEWORK, *supra* note 16 at 14.

148. See *id.* at 41–48 (discussing the effects of risk mitigating techniques).

149. See *id.* at 7.

150. Risk-Based Capital Standards—Recourse and Direct Credit Substitutes, Part II, 65 Fed. Reg. 12,320 (Dep't Treasury, Bd. Govs. Fed. Reserve System, FDIC & OCC 2000) (to be codified at 12 C.F.R. pt. 3, 208, 225, 325 & 567).

151. See *id.* at 12,323.

152. The proposed rules vary the capital requirements for positions in securitized transactions according to their relative risk exposure, using credit ratings from nationally recognized statistical rating organizations and agencies. See *id.* at 12,323. The rules would permit the limited use of a banking organization's "qualifying" internal risk rating systems to determine the capital treatment for certain unrated direct credit substitutes. The proposing agencies note that the ratings based approach applies to rated instruments such as credit-linked structured notes. See *id.* at 12,232–24.

B. Disclosure and Reporting Requirements

As previously mentioned, national and foreign banking and securities supervisors and regulators have identified public disclosure and reporting by market participants as one of the three basic pillars of their approach to supervising and regulating financial derivatives markets and their players.¹⁵³ Public disclosure is aimed at promoting safety and soundness of financial derivatives markets by increasing market transparency and thereby reducing systemic risk.¹⁵⁴ Regulatory reporting requirements enhance the ability of industry regulators and supervisors to understand how these activities affect the overall risk profile and profitability of banks and securities firms.¹⁵⁵

1. Recommendations by the Basel Committee and IOSCO

The Basel Committee and IOSCO recommend that banks engaging in credit derivative activities should provide financial statement users with a clear picture of their trading and derivatives activities.¹⁵⁶ They should disclose meaningful summary information, both qualitative and quantitative, on the scope and nature of their trading and derivatives activities and disclose how these activities contribute to their earnings profile.¹⁵⁷ Qualitative

153. See *supra* note 98 and accompanying text.

154. Various reports issued by private groups of market participants which promote the voluntary market oversight of OTC derivatives activities emphasize the importance of public disclosure and reporting. See, e.g., GROUP OF THIRTY REPORT, *supra* note 44, at 21, 61-62 (discussing the importance of disclosure and its relation to systemic risk); IOSCO TECHNICAL COMM. & BASEL COMM., RECOMMENDATIONS FOR PUBLIC DISCLOSURE OF TRADING AND DERIVATIVES ACTIVITIES OF BANKS AND SECURITIES FIRMS 5 (1999) available at <<http://www.bis.org/publ/index.htm>> (visited Apr. 15, 2000) [hereinafter RECOMMENDATIONS FOR PUBLIC DISCLOSURE 1999] (emphasizing the importance of meaningful disclosure).

155. See FRAMEWORK, *supra* note 16, at 4 (describing the significance of disclosure for risk assessment of banks). Since this first joint report in 1995, the Basel Committee and IOSCO have released annual reports on the subject.

156. See RECOMMENDATIONS FOR PUBLIC DISCLOSURE 1999, *supra* note 154, at 3, 20 (suggesting that meaningful information comprises not only qualitative but also quantitative information).

157. See *id.* at 15 (noting that users of financial statements and schedules

information about credit risk should summarize the institutions' policies for identifying, measuring, and managing credit risk. For example, institutions that use credit derivatives should address their mechanisms to reduce credit exposure and discuss how they are used.¹⁵⁸ These institutions should also disclose information on how they affect the institutions' recognition and measurement of losses.¹⁵⁹ Quantitative information about credit derivatives should disclose the notional amount of credit derivatives distinguished by the protection sold or purchased, and by the type of instrument used (e.g., total rate of return swap, credit default swap, or other credit derivative).

If credit derivatives would have a material effect on credit risk concentrations, an institution should also consider disclosing credit derivative exposure by reference asset illustrating their effect. It should disclose information produced by its internal risk measurement systems on their risk exposures and their actual performance in managing these exposures.¹⁶⁰ The Basel Committee and IOSCO recommend that bank supervisors seek to ensure both qualitative and quantitative information on their derivative activities covering four broad areas: (i) credit risk; (ii) liquidity risk; (iii) market risk; and (iv) earnings.¹⁶¹

“need qualitative information to have the appropriate perspective necessary to understand the numbers reported [therein].”). “Qualitative disclosures provide management with an opportunity to elaborate on and provide depth to the quantitative disclosures provided in the annual report.” *Id.*

158. *See id.* at 22-23 (recommending disclosure by type of instrument, notional amount, and protection sold or bought).

159. *See* BASEL COMM. ON BANKING SUPERVISION, SOUND PRACTICES FOR LOAN ACCOUNTING AND DISCLOSURE 33-34 (1999) (advising disclosure of risk-mitigating practices and policies).

160. *See* RECOMMENDATIONS FOR PUBLIC DISCLOSURE 1999, *supra* note 154, at 14 (stating that linking public disclosure to internal risk management process helps ensure that disclosure keeps pace with innovations in risk measurement and management techniques).

161. *See supra* note 16, at 6, 8-41 (outlining standards of disclosure of qualitative and quantitative information).

2. Accounting Standards: FAS 133

On June 15, 1998, the Financial Accounting Standards Board (FASB) issued Financial Accounting Standard No. 133, "Accounting for Derivative Instruments and Hedging Activities" (FAS 133).¹⁶² FAS 133 was originally required for fiscal years beginning after June 15, 1999, but has since been deferred to become effective for fiscal years beginning after June 15, 2000.¹⁶³ For institutions with their fiscal years starting on January 1, FAS 133 will become effective beginning January 1, 2001.¹⁶⁴

Under the current rules, companies that issued or held derivatives are required to differentiate in their disclosures between derivatives used for trading purposes and those used for risk management or other end-user reasons.¹⁶⁵ Until the adoption of FAS 133, institutions are not subject to mandatory accounting rules regarding their derivatives activities. Financial Accounting Standard No. 119 (FAS 119), which FAS 133 will replace, requires firms only to disclose their objectives in using derivatives and strategies for achieving those objectives.¹⁶⁶ Firms are also required to describe how they reported derivatives in their financial statements and give details about gains and losses being deferred. End-users and dealers are required to report derivatives at fair value, which is marked-to-market. Under FAS 133, however, all derivatives, including credit derivatives, must be reported as either assets or liabilities on the balance sheet and must be carried at fair

162. ACCOUNTING FOR DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES, Statement of Financial Accounting Standards No. 133 (Financial Accounting Standards Bd. 1998) [hereinafter FAS 133].

163. See ACCOUNTING FOR DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES—DEFERRAL OF THE EFFECTIVE DATE OF FASB STATEMENT NO. 133—AN AMENDMENT OF FASB STATEMENT NO. 133, Statement of Financial Accounting Standards No. 137 (Financial Accounting Standards Bd. 1998).

164. See *id.*

165. See Disclosure About Derivative Financial Instruments and Fair Value of Financial Instruments, Statement of Financial Accounting Standards No. 119 (Financial Accounting Standards Bd. 1994) [hereinafter FAS 119].

166. Gerald A. Edwards, Jr. & Gregory E. Eller, *Overview of Derivatives Disclosures by Major U.S. Banks*, 81 FED. RES. BULL. 817, 823 (Bd. of Govs. of the Fed. Res. Bank 1995) (discussing accounting standards under FAS-119).

value.¹⁶⁷ The new accounting standard significantly changes the accounting for derivatives used for hedging purposes and for financial instruments with certain types of embedded derivatives.¹⁶⁸

An institution, for example, may elect to use "hedge accounting," which is a special accounting treatment designed to enable an institution to recognize related fair value gains and losses simultaneously in income.¹⁶⁹ FAS 133 establishes three new classifications of hedges, each subject to its own accounting treatment.¹⁷⁰ Based on certain qualifying criteria, a derivative may be designated as a "fair value hedge,"¹⁷¹ a "cash flow hedge,"¹⁷² or a

167. See FAS 133, *supra* note 162; OCC, OCC No. 98-45, ACCOUNTING FOR DERIVATIVES AND HEDGING ACTIVITIES (1998), available in 1998 WL 733215 *1 [hereinafter OCC 98-45] (describing the new accounting standards).

168. *But see* FDIC, FIL-3-99, REGULATORY REPORTING AND CAPITAL GUIDANCE ON THE FINANCIAL ACCOUNTING STANDARDS BOARD'S STATEMENT NO. 133—DERIVATIVES AND HEDGING (1999) available in 1999 WL 20267 *2 [hereinafter FDIC FIL 3-99] (emphasizing that under the new accounting standards the existing risk-based capital treatment for derivatives remains in effect). According to the FDIC, recording a derivative on the balance sheet under FAS-133 will not change the risk-weighted asset amount for that derivative. See *id.* The FDIC recognizes, however, that the on-balance sheet reporting of derivatives may affect the total assets of institutions with derivatives, and directly affect the institution's leverage and regulatory capital ratios. See *id.*

169. See OCC 98-45, *supra* note 167, at *2 & n.2.

170. See *id.* at *1-2 (discussing fair value, cash-flow and foreign currency hedges and their accounting treatment).

171. A fair value hedge seeks to offset the risk resulting from changes in the fair value of a recorded asset, liability, or unrecognized firm commitment (a binding agreement to enter into a transaction with an unrelated party). See OCC *id.* at *1. Under a fair value hedge, the change in fair value (gain or loss) on the derivative is recognized in net income together with any offsetting change in the fair value of the hedged item. The effect is that changes in fair value on both the hedged item and hedging instrument are recognized in the same period and any ineffectiveness of the hedge is reflected in net income. See FDIC FIL-3-99, *supra* note 168, at *3.

172. A cash flow hedge seeks to offset risk resulting from changes in the amount of future cash flows (e.g., interest payment on debt or interest income on loans) or forecasted transaction. Under FAS 133, all hedges of anticipated transactions are considered cash flow hedges. See FDIC FIL-3-99, *supra* note 168, at *4. In a cash flow hedge, to the extent the hedge is effective, the gain or loss on the derivative is not initially reported in net income, but instead in a separate

“foreign currency hedge,”¹⁷³ such that the accounting treatment for changes in fair value (i.e. gains or losses) depends on the derivative’s intended use and its resulting designation.¹⁷⁴ Any ineffectiveness in a hedge strategy must be recognized in income during the current accounting period.¹⁷⁵

Under FAS 133, all derivatives with hedge accounting treatment must be linked by transaction to the specific assets, liabilities, firm commitments, or forecasted transactions that are being hedged.¹⁷⁶ Therefore, hedge accounting is not applicable to derivatives that are used to hedge diverse groups of assets and liabilities.¹⁷⁷ In addition, FAS 133 requires that institutions separately account for certain types of embedded derivatives. This has an important impact on synthetic securitizations.¹⁷⁸ Unless they are “clearly and closely related to the economic characteristics and risks of the instruments in which they reside,” embedded derivatives must be reported separately on the balance sheet from their host instruments.¹⁷⁹ FAS-133 indicates that if a derivative

component of equity capital (referred to as “accumulated other comprehensive income” in FAS 133). See FDIC, FIL-4-99, REVISIONS TO THE REPORTS OF CONDITION AND INCOME (CALL REPORT) FOR 1999 BANK REPORTS (1999) available in 1999 WL 22657, at *3. The gain or loss will subsequently be recognized in net income in the period or periods when the transaction being hedged affects net income. The ineffective portion of the cash flow hedge is reported in net income immediately. See *id.*

173. A foreign currency hedge seeks to offset the risk resulting from changes in foreign currency values. If specified criteria are met, an institution can use a derivative in a foreign currency fair value hedge or cash flow hedge. See OCC 98-45, *supra* note 167, at *2. The accounting for a foreign currency hedge depends on the transaction, but generally will be treated like a fair value hedge or a cash flow hedge. See FDIC, ATTACHMENT PR-92-98, INTERIM GUIDANCE ON THE REGULATORY REPORTING AND CAPITAL TREATMENT FOR DERIVATIVES (1998) [hereinafter INTERIM GUIDANCE] in FDIC FIL-3-99, *supra* note 168, at *4.

174. See OCC 98-45, *supra* note 167, at *1-2.

175. See *id.* at *1. Derivatives which are used for trading or do not qualify as hedges continue to be marked at fair value, so that changes in fair value are recognized in the current period’s net income. See FDIC FIL-3-99, *supra* note 168, at *3.

176. See OCC 98-45, *supra* note 167, at *2.

177. See *id.*

178. See INTERIM GUIDANCE, in FDIC FIL-3-99, *supra* note 168, at *4.

179. *Id.* FAS 133 provides guidance on determining whether an embedded

cannot be reliably measured (which may be the case for complex embedded derivatives such as certain credit-linked note structures), the entire instrument should be marked-to-market with changes in fair value recognized in net income.¹⁸⁰

3. Regulatory Reporting Requirements: Call Reports

In their initial guidance on credit derivatives in August 1996, the federal banking agencies each required banks engaged in credit derivative activities to report credit derivatives in the Reports of Condition and Income, generally referred to as "Call Reports."¹⁸¹ On December 31, 1996, the FDIC issued revisions to the Call Reports for 1997 introducing credit derivatives as new items to be included in the reports by banks.¹⁸² Banks that extend credit protection through credit derivatives are required to include the notional amount of all credit derivatives and the credit equivalent amounts of these contracts on which the reporting bank is the guarantor.¹⁸³ Beneficiary banks that purchase credit protection through a credit derivative transaction must report the notional amounts of all credit derivatives on which the bank is the beneficiary.¹⁸⁴ In addition, beneficiary institutions must continue to report the amount and nature of the underlying asset for regulatory reporting purposes, without regard to the credit derivative transaction.¹⁸⁵

derivative is "clearly and closely" related and various examples of financial instruments that would be considered to have embedded derivatives, including some structured notes that banks often hold in their investment portfolios. See FAS 133, *supra* note 162.

180. See OCC 98-45, *supra* note 167 at *3.

181. See FDIC FIL-62-96, *supra* note 2, at *10; FRB SR 96-17, *supra* note 16, app.; OCC 96-43, *supra* note 16, at *9.

182. FDIC, REVISIONS TO THE REPORTS OF CONDITION AND INCOME (CALL REPORTS) FOR 1997 (1996), in FDIC, FIL-109-96, BANK REPORTS (1996) available at <<http://www.fdic.gov/news/news/financial/1996/fil96109.pdf>> (visited Apr. 15, 2000).

183. *Id.* at 19-20.

184. *Id.* at 20.

185. See FRB SR 96-17, *supra* note 16, app.; FDIC FIL-62-96, *supra* note 2, at *10. Underlying assets continue to be reported in the category appropriate for

The implementation of FAS 133 requires institutions to include changes in fair value of certain derivatives in net income. Under FAS 133, the effective portion of the change in the fair value of derivatives used in certain types of hedges (cash flow hedges) is excluded from net income and reflected on the balance sheet in a separate component of equity, referred to as "accumulated other comprehensive income."¹⁸⁶ The FDIC requires banks to report these accumulated changes in fair value on the same Call Report.¹⁸⁷ Banks must also report the year-to-date change in these accumulated net gains (or losses).¹⁸⁸ Derivatives held for purposes other than trading must be reported at fair value as appropriate.¹⁸⁹

C. Lending Limits

Certain OCC regulations provide for lending limits applicable to bank loans.¹⁹⁰ Under the current provisions it is not clear whether a party buying credit protection through a credit derivative is a "borrower" within the meaning of 12 C.F.R. § 32.2 (a), thus subjecting the transaction to the mandatory lending limits.¹⁹¹ A party may be deemed a borrower if it receives a direct benefit from a loan or extension of credit, or where a common enterprise between that party and another borrower is deemed to exist.¹⁹² Federal regulators and banking agencies have not issued guidance on the issue of mandatory lending limits for banks

that transaction and obligor. See FRB SR 96-17, *supra* note 16, app.

186. See INTERIM GUIDANCE, in FDIC FIL-3-99, *supra* note 168, at *4.

187. See *id.* at *4.

188. See FDIC, REVISIONS TO THE REPORTS OF CONDITION AND INCOME (CALL REPORTS) FOR 1999 (1999), in FDIC, FIL-4-99, BANK REPORTS (1999) available in 1999 WL 22657, at *3.

189. See *id.* at *4.

190. See 12 C.F.R. pt. 32 (1999).

191. Under 12 C.F.R. § 32.2, a "borrower" is a party that is either "named as a borrower or debtor in a loan extension of credit," or is deemed to be a borrower because it i) receives a "direct benefit" from a loan or extension of credit, or ii) a "common enterprise" is deemed to exist between the parties. *Id.* §§ 32.2(a), 32.5(a)-(c).

192. See *id.* § 32.5(a)-(c).

providing credit protection through credit derivatives.¹⁹³

Federal banking agencies have, however, emphasized that entering into a credit derivative transaction as a provider of credit protection is similar to providing a letter of credit or granting a loan.¹⁹⁴ A bank providing credit protection through a credit derivative may become exposed to the same credit risk of the reference asset as if the asset were on its own balance sheet.¹⁹⁵ When evaluating concentrations of credit risk, banks are required to consider this exposure as if it were a letter of credit or other off-balance sheet guarantee.¹⁹⁶

Credit derivatives could be deemed loans or extensions of credit under 12 C.F.R. § 32.2(f)(1), which include “contractual commitment[s] to advance funds,” such as a bank’s obligation to guarantee or act as surety for the benefit of a person, or to advance funds under a standby letter of credit, “or other similar arrangement.”¹⁹⁷ 12 C.F.R. § 32.2(p) defines a standby letter of credit as “any letter of credit, or similar arrangement, that represents an obligation to the beneficiary on the part of the issuer”¹⁹⁸

Given their similarity to guarantees and standby letters of credit, one could reasonably consider credit derivative agreements as “similar arrangements,” that would fall under §32.2(f)(1), thereby subjecting a bank providing credit protection to the statutory lending limits. Future official guidance should address whether credit derivatives must be deemed a “guarantee” or “standby letter of credit” or “similar arrangement” within the meaning of 12 C.F.R. §§ 32.2 and 32.3.

193. See Kroener, *supra* note 1, at *255 (noting that this unresolved issue may be addressed in the future).

194. See FDIC FIL-62-96, *supra* note 2, at *2; FRB SR 96-17, *supra* note 16, at 2 (both stating that “for supervisory purposes, the [credit risk] exposure generally should be treated as if it were a letter of credit or other off-balance sheet guarantee.”).

195. See FDIC FIL-62-96, *supra* note 2, at *2.

196. See *supra* note 194.

197. 12 C.F.R. § 32.2 (f)(1).

198. 12 C.F.R. § 32.2 (p).

IV. VIEW TO REGULATION OF CREDIT DERIVATIVES IN GERMANY,
THE U.K., AND FRANCE

A major concern of financial institutions when entering into credit derivative transactions is the capital implications that come along with it. In some markets outside the United States, banks cannot be sure of the regulatory capital treatment of such transactions by national regulators and banking supervisory authorities before entering the transaction.¹⁹⁹ So far, in Europe, only Germany, France, and the United Kingdom have introduced regulatory capital frameworks. In these countries, credit derivatives are often subject to “large exposure regimes” and “million loans reporting regimes.”²⁰⁰ This Part offers a brief outline of the rules governing credit derivatives in Germany, France and the United Kingdom.

*A. Regulatory Capital Treatment and Large Exposure
and Million Loans Reporting in Germany*

In Germany, the banking supervisory authority Bundesaufsichtsamt für das Kreditwesen (BAKred) issued comprehensive rules for credit derivatives in June 1999 with respect to their regulatory capital treatment and reporting under the “large exposure” regime and the “million loans” reporting regime.²⁰¹ The regulations applicable to credit derivatives are

199. *Credit Derivatives—Getting Hooked On Credit Derivatives*, EUROMONEY MAG., Feb. 10, 1999, at 31 (noting that in some markets “banks cannot be sure of the capital implications until they try a deal.”).

200. “Million loan reporting regime” refers to a set of laws that require reporting of loans exceeding certain nominal amounts. For example, in Germany under the Großkredit und Millionenkreditverordnung (GroMiKV) [Regulation Governing Large Exposures and Million Loans Reporting], certain loans exceeding one million deutsche marks must be reported to the German banking supervisory authority Bundesaufsichtsamt für das Kreditwesen (BAKred).

A “large exposure regime” refers to a set of laws that require reporting of certain loans that exceed a threshold exposure.

201. Bundesaufsichtsamt für das Kreditwesen (BAKred), CIRCULAR 10/99, TREATMENT OF CREDIT DERIVATIVES IN PRINCIPLE I ACCORDING TO SECTIONS 10, 10A OF THE GERMAN BANKING ACT (GESETZ ÜBER DAS KREDITWESEN – KWG), AND UNDER THE LARGE EXPOSURES AND MILLION LOAN REPORTING

based on the current European and international supervisory framework.²⁰² The framework is centered on the principle of counting each risk asset on an individual basis.²⁰³ Risk-reducing effects are not considered beyond a certain level inherent in the current capital requirements. If the risk structure of individual institutions deteriorates noticeably due to a concentration of credit risk, higher capital requirements may be imposed.²⁰⁴

A credit derivative must be allocated to an institution's trading book or its banking book, depending on its legal classification.²⁰⁵ An allocation to the trading book is only possible for those credit swaps that meet the definition of derivatives as provided in section 1 (11) German Banking Act (KWG).²⁰⁶ These are derivatives with reference assets which are securities or money market instruments, or are claims meeting the requirements for inclusion in the trading book according to KWG section 1 (12): those held with a view to resale for profit and are marked to market on a daily basis.²⁰⁷

The risk mitigating effects of credit derivatives are only recognized for regulatory capital treatment as risk weighted assets if the terms of the credit derivative lead to an adequate transfer of credit risks. When weighing the protected risk assets or market risk positions of the beneficiary, a general requirement for recognition of risk-reducing effects is that the credit or market risks are transferred to the protection seller in a "verifiable and effective manner," such that the important factors for valuation of

REGIME (Berlin, 1999) translated at <http://www.bakred.de/texte/rundschr/rs10_99e.htm> (visited May 25, 2000) (unofficial translation) [hereinafter CIRCULAR 10/99].

202. See generally EEC SOLVENCY RATIO DIRECTIVE, Council Directive No. 89/647, O.J. L 386/14 (1989); EEC CAPITAL ADEQUACY DIRECTIVE, Council Directive No. 93/6, O.J. L 141/1 (1993); BASEL CAPITAL ACCORD (as amended), *supra* note 83.

203. See CIRCULAR 10/99, *supra* note 201, pt. I.

204. See *id.*

205. Banking book assets refers to those assets which are held for investment and are generally eligible for regulatory capital relief. Assets purchased for resale are to be held in the trading book, and are not eligible for such treatment.

206. See CIRCULAR 10/99, *supra* note 201, pt. III.

207. See *id.* pt. III.

the protected asset (e.g., political risks) are considered in the specification of the credit event.²⁰⁸ At minimum, the insolvency of the reference debtor must be assigned as a credit event.²⁰⁹ There are also certain minimum qualitative requirements for comprehensive supporting documentation.²¹⁰

Depending on the specification of the credit event, risk mitigating effects are recognized if the reference asset and the asset to be protected are identical with respect to credit risk and market risk.²¹¹ For credit derivatives assigned to the banking book, a risk asset is recognized as secured only if the reference asset underlying the derivative (i) is owned by the same person as the risk asset in question, (ii) may not have priority over this risk asset in case of the debtors insolvency, and (iii) is linked with the risk asset by corresponding contractual clauses with regard to the triggering credit event.²¹²

To be recognized for regulatory capital purposes, the risk asset to be protected must generally be secured by a credit derivative for its entire residual maturity.²¹³ In the case of maturity mismatches between the underlying asset to be protected and the credit derivative, the credit risk for the unprotected future period remains with the protection buyer and does not lead to capital relief.²¹⁴ A securing effect in this case is only recognized for the period over which the underlying risk asset is protected, provided that the credit derivative has a residual maturity of at least one year.²¹⁵ Otherwise, no capital relief is available.²¹⁶

For credit derivatives assigned to the trading book, capital charges are generally calculated for general and specific market risk on the basis of fair value positions which are marked-to-

208. *See id.* pt. IV.1.1.

209. *See id.*

210. *See id.* (providing a detailed description of the requirements).

211. *See id.* pt. IV.1.2.

212. *See id.* pt. IV.1.2.1.

213. *See id.* pt. IV.1.3. (describing criteria for banking book assignment of credit derivatives).

214. *See id.*

215. *See id.*

216. *See id.*

market.²¹⁷ If specific conditions are met, offsetting positions may be considered for risk weighting purposes.²¹⁸ Generally, no additional consideration of the counterparty risk is required for credit derivatives held in the banking book, except for TROR swaps.²¹⁹ In the case of credit derivatives held in the trading book, both the seller and the buyer of credit protection will be affected to varying degrees by counterparty failure, depending on the particular transaction structure. Both sides, therefore, typically weigh their counterparty risk for credit derivatives held in trading books.²²⁰

Under “large exposure” provisions, a beneficiary of credit protection must not charge beyond its maximum legal exposure limits.²²¹ For the guarantor there are two exposures resulting from a TROR swap. One exposure is to the beneficiary, and one to the debtor of the reference asset. The guarantor must charge its “large exposure” limits in respect of both counterparties accordingly.²²²

Under “million loans” reporting provisions, the beneficiary must fully report the loan protected by a credit derivative. For the beneficiary, a credit derivative transaction is not considered a loan under the “million loans” reporting regime, and therefore is not reportable.²²³ The exposure to the guarantor from a TROR or CDS must be reported to the same extent that it is reportable under the “large exposure” regime. Similar to the “large exposure” reporting, the guarantor of a TROR or CDS must report exposures to the beneficiary as well as to the reference debtor.²²⁴

217. *See id.* pt. IV.1.2.2.

218. *See id.*

219. *See id.* pt. IV.4.1 (noting that a TROR swap “from which the protection buyer receives periodic payments must be allocated as swap to the risk assets, taking account of the counterparty risk.”). *Id.*

220. *See id.* pt. IV.4.2.1.

221. *See id.* Various exceptions apply, depending on the type of credit derivative.

222. *See id.* pt. V.1.1.2.

223. *See id.* pt. V.2.2. (outlining the “million loans” reporting requirements.)

224. *See id.*

B. Regulatory Capital Treatment and Large Exposures Reporting
in the United Kingdom

The Bank of England Act 1998 became effective on June 1, 1999, transferring responsibility for banking supervision in the United Kingdom from the Bank of England to the Financial Services Authority (FSA).²²⁵ On June 30, 1998, the FSA introduced comprehensive rules for regulatory capital treatment and “large exposure” reporting of credit derivatives in its Guide to Banking Supervisory Policy (the “Guide”).²²⁶ The rules and principles, applicable to credit derivatives, differ in some respects from those issued by the BAKred outlined above, specifically in establishing risk weights for capital charges.

Under the FSA rules, credit derivatives must meet certain standard criteria applied to other financial instruments in order to be eligible for a bank’s trading book. These standard criteria include the bank’s ability to mark-to-market positions on a daily basis, and demonstration of trading intent.²²⁷ Credit derivatives not included in the trading book must be assigned to the banking book.²²⁸

The rules provide a detailed description of the qualitative requirements for recognition of effective risk transfer from the beneficiary to the guarantor of credit derivatives held in the banking book, or for banks that sell credit risk in the trading book. For credit derivatives held in the banking book, the guarantor of a CDS or TROR swap acquires exposure to the reference asset only. This is recorded as a direct credit substitute, weighted according to the risk weight of the reference asset.²²⁹ With respect to a credit linked note, the bank providing credit protection acquires exposure

225. Bank of England Act 1998, ch. 11 § 21.

226. FINANCIAL SERVICES AUTHORITY [hereinafter FSA], GUIDE TO BANKING SUPERVISORY POLICY, available at <<http://www.fsa.gov.uk/pubs/supervisor/>> (last visited April 15, 2000).

227. See *id.* at ch. Credit Derivatives § 4.

228. See *id.*

229. See *id.* at ch. Credit Derivatives § 6.2.

to the reference asset, and also to the credit derivative counterparty.²³⁰ This exposure is recorded at the higher of the risk weights of the reference obligor and the counterparty.²³¹

Section Four of the Guide's Supervisory Chapter on Credit Derivatives sets out the capital treatment applicable to credit derivatives in the trading book.²³² Section Seven provides detailed rules regarding the treatment of specific, general market, and counterparty risk exposure from various types of credit derivatives held in the trading book.²³³ In the banking book, protection bought using a credit spread option is ignored for capital purposes.²³⁴ Protection sold using credit spread options must be recorded as a direct credit substitute.²³⁵ Depending on the risk effectively transferred, banks are subject to "large exposures" reporting for credit derivatives and the underlying assets.²³⁶

C. Regulatory Capital Treatment in France

In April 1998, the French banking supervisory authority, Commission Bancaire, issued interim rules on the prudential treatment of credit derivatives.²³⁷ Under the interim rules, credit derivatives will be allocated to the trading book if the instruments are held with an intention to sell, and are tradable instruments marked-to-market on a daily basis.²³⁸ Institutions engaging in

230. *See id.*

231. *See id.*

232. *Id.* at ch. Credit Derivatives § 4.

233. *Id.* at ch. Credit Derivatives § 7.

234. *See id.* at ch. Credit Derivatives § 8.2.1 (noting that capital reduction is not available to the purchaser of a credit spread option).

235. *See id.* at ch. Credit Derivatives § 8.2.2.

236. *See id.* at ch. Credit Derivatives § 10 (discussing the factors determining large exposures reporting requirements for credit derivatives and underlying assets).

237. Secrétariat Général de la Commission Bancaire, *Traitement Prudentiel Des Instruments Dérivés De Crédit* [*Prudential Treatment of Credit Derivative Instruments*] (April 1998) available at <<http://www.banque-france.fr/fr/infobafi/cb/6c.htm>> (visited Apr. 15, 2000).

238. *See Critères de Classement des Dérivés de Crédit Dans les Portefeuilles Bancaire ou de Négociation* [*Criteria for Assignment of Credit Derivatives to the*

credit derivative activities must have sufficient expertise on the derivatives markets, and must have sufficient valuation models in place as well as access to the relevant market and information networks.²³⁹

The credit protection guarantor reports the exposure as a direct credit substitute weighted according to the risk weight of the underlying asset.²⁴⁰ For the beneficiary, the capital charges may be reduced if the institution providing the credit protection is a bank, or an investment firm registered either in France or any other country of the European Economic Area (EEA).²⁴¹ Where the residual maturity of the credit derivative is less than one year, the risk mitigating effect will not be recognized for regulatory capital purposes.²⁴² In the case of maturity mismatches between the credit derivative and the protected underlying asset, risk mitigating effects will only be recognized for the time of effective credit protection.²⁴³

For credit derivatives held in the trading book, the guarantor is subject to capital charges for general and specific market risk.²⁴⁴ The beneficiary of a credit derivative held in the trading book is generally not eligible for reduced capital charges.²⁴⁵ Under certain credit derivative transactions, both the seller and the buyer of credit protection may be subject to counterparty risk and therefore subject to additional capital charges (“add-ons”).²⁴⁶

Trading or Banking Book], in *Prudential Treatment of Credit Derivative Instruments*, *supra* note 237.

239. *See id.*

240. *See Traitement des Dérivés de Crédit Dans le Portefeuille Bancaire [Capital Treatment of Credit Derivatives in the Banking Book]*, in *Prudential Treatment of Credit Derivative Instruments*, *supra* note 237 (discussing reduced capital charges for credit derivatives in the banking book).

241. *See id.*

242. *See id.* (requiring a residential maturity of more than one year for eligibility for reduced capital charges).

243. *See id.*

244. *See Traitement des Dérivés de Crédit Dans le Portefeuille de Négociation [Capital Treatment of Credit Derivatives in the Trading Book]*, *supra* note 237.

245. *See id.*

246. *See id.* (requiring “add-ons” as special capital charges for specific market risk of credit derivatives held in the trading book).

CONCLUSION

Until recently, credit derivatives, as financial instruments, and dealer banks remained largely unregulated in the United States unless the credit derivative was deemed a security or a commodity futures contract, and thus subject to regulation under the securities laws and the Commodities Exchange Act, respectively. Now, banks' derivatives activities, including credit derivative activities are subject to supervision by federal banking supervisors. Supervisory agencies have primarily focused on risk management, regulatory capital treatment, public disclosure, and regulatory reporting as adequate elements of effective supervision of banks engaged in credit derivative activities. Both dealers and end-users in the United States must integrate credit derivatives into their internal risk management processes, and banks must be aware of the regulatory capital implications before entering into credit derivative activities.

Some European jurisdictions have introduced risk-based capital rules for credit derivatives, but only a few stand out. The FSA, in the United Kingdom, and the BAKred, in Germany, have each issued a set of fairly comprehensive, efficient rules and guidance governing regulatory capital treatment of credit derivatives. In France, so far only preliminary guidance has been issued specifically dealing with credit derivatives.

The U.S. capital regulatory regime is rather complex in comparison to its European counterparts. The guidance on credit derivatives that has been issued over the last few years has been timely, but is generally the product of a specific transactional approach in response to the rapidly increasing popularity of these instruments. Moreover, this guidance can be difficult to track, since it is issued by numerous agencies and supervisors that make up the total bank regulatory system in the United States.

In the area of accounting standards, however, the United States has become a trendsetter. FAS-133 requires financial derivatives as credit derivatives to be reported on-balance sheet. One may have reasonable doubt, whether other jurisdictions will promptly follow the American example. In the context of disclosure, banks in the United States as well as other jurisdictions

are subject to regulatory reporting requirements in relation to their credit derivatives activities.

The long list of issues which remain unresolved includes, in the United States and in most other jurisdictions, statutory lending limits and their application to credit derivatives. A number of other issues remain, such as whether under the U.S. Bankruptcy Code bilateral netting and close-out netting agreements, as frequently used in standardized credit derivative documentation, would be recognized in case of counterparty insolvency. Also, in the United States, the potential application of the Commodities Exchange Act to certain credit derivative transactions continues to impose a serious threat to the enforceability of credit derivative agreements.²⁴⁷ These unresolved issues add to the problem of compliance risk in credit derivatives transactions.

In general, reliable standardized documentation is still not available to cover all common forms of credit derivative transactions. In the absence of a deep dealer market, liquidity for credit derivative products remains very limited, which also limits access to credit derivatives. This is a serious limitation for providers of credit protection for back-to-back hedges. For this reason, as well for the lack of market transparency, pricing of credit derivatives remains an uneasy task where the credit and counterparty risk involved in a particular deal very often appears to be the sole factor of measurement.

Credit derivatives can be a meaningful tool for portfolio and risk managers. Their potential for broad use is great and not just

247. Congress enacted legislation H.R.5660 to eliminate the legal uncertainty regarding the enforceability of over-the-counter derivatives and certain swaps under the Commodity Exchange Act (CEA) and possible jurisdiction of the Commodities and Futures Trading Commission (CFTC) over these financial products. Under the act, over-the-counter derivatives offered by banks and traded by sophisticated users are exempt from the jurisdiction and regulation of the CFTC under the CEA and the Securities and Exchange Commission (SEC) under the Securities laws. The legislation clarifies, that securities based swap agreements are not considered securities under the Securities laws, and thus, not subject to SEC regulation. The Consolidated Appropriations Act 2001, H.R. 4577, which incorporates the Commodity Futures Modernization Act, H.R. 5660 by reference, became Public Law No: 106-554 on December 21, 2000. *See id*, at Library of Congress website <<http://thomas.loc.gov/cgi-bin/bdquery/z?d106:hr.4577:@@X>>.

limited to a handful of big money center banks. Regulators and supervisory agencies in the United States and abroad seem to favor an oversight approach rather than heavy-handed regulation of the emerging credit derivatives industry. Still, since credit derivatives are some of the most promising risk management instruments since the origination of financial derivatives, market participants, through voluntary market oversight initiatives, share responsibility to maintain and improve the infrastructure for them.

Notes & Observations