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Risk Distribution in the Capital Markets: Credit Default Swaps, Insurance and a Theory of Demarcation

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RISK DISTRIBUTION IN THE CAPITAL MARKETS:
CREDIT DEFAULT SWAPS, INSURANCE AND A
THEORY OF DEMARCATION

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Goldman [Sachs] should matter to outsiders . . . because it stands at the centre of a two-decade-long transformation of the financial markets and a new approach to risk. Business risks that were once seen as a lumpy fact of life are now routinely sliced up and packaged into combinations that generally suit issuers and investors alike. At the heart of this change has been the development of huge markets in swaps, derivatives and other complex and often opaque instruments that allow the transfer of risk from one party to another. From small beginnings in 1987, the face value of contracts in interest-rate and currency derivatives is now more than \$200 trillion[,] 16 times America's GDP. A further \$17 trillion is outstanding in (even newer) credit-default swaps, which allow bond investors to lay off the risk of issuers defaulting.¹

I. INTRODUCTION

Heralded as the “debutante of the suretyship world (pure as the wind-driven snow and virtually unsullied by the foul touch of litigation),” credit default swaps (CDS) have transformed banking.² Lenders who once found themselves stuck with bundles of indivisible, illiquid risks can now carve out and hedge credit exposure to individual borrowers. And they do it on a massive scale. As last reported by FitchRatings, the notional amount of outstanding CDS stood at \$3.5 trillion, representing two-thirds of the entire credit derivatives market and an 86% increase from the prior year's total of \$2.8 trillion.³ Yet despite such rapid growth, use of credit derivatives was too small to be either noticed or recorded at any significant levels in 1996.⁴

1. *On Top of the World: In Its Taste for Risk, the World's Leading Investment Bank Epitomises the Modern Financial System*, THE ECONOMIST, Apr. 29, 2006, at 11.

2. Robert D. Aicher et al., *Credit Enhancement: Letters of Credit, Guaranties, Insurance and Swaps (The Clash of Cultures)*, 59 BUS. LAW. 897, 898 (2004). For lack of a more elegant formulation, “CDS” will be used (1) as a noun to refer to “credit default swap” (singular) and “credit default swaps” (plural), and (2) as an adjective to refer to the markets, contracts and other entities that are related to credit default swaps.

3. FitchRatings, *Global Credit Derivatives Survey: Single-Name CDS Fuel Growth* (2004), available at <http://www.fitchratings.com> (requires login) (hereinafter FITCHRATINGS REPORT 2004); FitchRatings, *Global Credit Derivatives Survey: Risk Dispersion Accelerates* (2005), available at <http://www.fitchratings.com> (requires login) (hereinafter FITCHRATINGS REPORT 2005).

4. Comptroller of the Currency, *OCC Bank Derivatives Report: Third Quarter 2005* (2005), available at <http://www.occ.treas.gov/deriv/deriv.htm> (hereinafter OCC

As one would expect of a market that has gone from cradle to world phenomenon in less than a decade, CDS have attracted both supporters and detractors. Proponents extol the ability of CDS to spread risk and increase liquidity across credit markets, allowing participants to actively manage and protect credit portfolios.⁵ Sensational critics warn that a spike in interest rates could trigger a “derivatives tsunami” that would bring all of the major banks to their knees and cause a “blowup” in world credit markets.⁶ Experience in the past few years has shown that, if used responsibly, CDS have the ability to yield all of the promised benefits with few—if any—of the predicted catastrophes.⁷ Between the

REPORT 3Q 2005).

5. See, e.g., FitchRatings, Global Credit Derivatives Survey: A Qualified Success (2003), available at <http://www.fitchratings.com> (requires login) (hereinafter FITCH RATINGS REPORT 2003); JOHN C. HULL, OPTIONS, FUTURES, AND OTHER DERIVATIVES 507 (6th ed. 2005).

6. Mara Der Hovanesian et al., *Taking Risk to the Extreme: Will Derivatives Cause a Major Blowup in the World's Credit Markets?*, BUSINESS WEEK, May 23, 2005, at 96. It is worth noting that many of the apocalyptic articles about CDS came following the downgrading of GM debt in April 2005. Responding to the doom-and-gloom contingent, *Global Finance* reported in September 2005 that the CDS market was far more efficient at absorbing large financial shocks than anyone could have expected:

There had been concerns that growth in credit derivatives volume, much of which comes from credit default swaps, could be stalled by concerns about involvement in the market following the downgrade of Ford and General Motors in April and the resultant problems in the credit market. However, the credit derivatives market appears to have been strengthened by the experience, and new entrants—largely pension funds and other institutional investors—have kept their nerve as the market has recovered.

Laurence Neville, *Credit Derivatives Market Primed to Explode*, GLOBAL FINANCE MAGAZINE, Jan. 1, 2006, at 8.

7. See, e.g., Fitch Ratings Report 2003, *supra* note 5, at 4-5; Fitch Ratings Report 2005, *supra* note 3; Neville, *Credit Derivatives Market Primed to Explode*, *supra* note 5, at 8. Early in 2006, the *Financial Times* reported the incident of a twenty-six-year-old CDS trader at Deutsche Bank in London, who had misstated his position by £30 million (\$53 million). Paul J. Davies, *Deutsche Trader Was “High-Flyer,”* FIN. TIMES, Jan. 9, 2006. While noting that gross trader slipups and cover-ups naturally raise the specter of the Barings collapse, the *Financial Times* rightly concluded that such incidents simply show that managers must “get to grips with the complexities of the new markets. The age-old adage about investing only in what you understand still works. There is no substitute for . . . understanding the products on which [derivatives] are based, [their] potential volatility and how the instruments should be valued.” *Back to Basics for Derivatives Traders: There Is No Substitute for Fundamental Analysis in Credit Markets*, FIN. TIMES Jan. 12, 2006, at 18.

disparagers and the defenders of CDS stand the regulators. But who are the regulators of CDS markets, and what law applies?

Since CDS are traded entirely over-the-counter (OTC), one could argue that the true regulators are market participants themselves. Banded together as members of the International Swaps and Derivatives Association (ISDA), derivatives markets participants have created a system of documenting and amending trade relationships that is both flexible and robust. Most members of ISDA are banks or groups of banks. Some outside regulators, however, worry that CDS markets are growing too quickly for any bank or group of banks to control.⁸

In judging who has authority to step in and govern various aspects of CDS trading, one confronts a crowd of would-be regulators. The CFTC, SEC, Fed, state insurance regulators, and both state and federal courts all have spheres of competence that, depending on circumstances, may or may not affect CDS trading. Letters of guarantee and other analogous surety instruments require their users to focus on merely one body of statutory law—e.g., Article 5 of the Uniform Commercial Code—and its applicable case precedents; CDS, on the other hand, demand that their users at least take account of (and perhaps apply) commodities, securities, banking, and insurance regulation, as well as all applicable case law.

Where commodities regulation is concerned, CDS enjoy a blanket exemption under the Commodities Exchange Act.⁹ The Commodities Exchange Act (the “Act”) includes in its definition of “excluded commodity” any “credit risk or measure.”¹⁰ Building on this definition in a section on “excluded derivative transactions,” the Act notes that its terms do not apply to any agreement in an excluded commodity where such agreements are executed between eligible participants—financial institutions, regulated insurance companies, and most investment companies—off of a registered exchange.¹¹ Similar provisions apply to “excluded swap transactions.”¹² The combined effect of these provisions provides complete exemption from CFTC supervision for the

8. See, e.g., Hamish Risk, *Credit Derivatives Market Expands to \$17.3 Trillion* (2006) available at <http://www.bloomberg.com/apps/news?pid=10000103&sid=a9mg9712QnRU&refer=us>.

9. 7 U.S.C. §§ 1-27 (2000).

10. *Id.* at § 1a(13).

11. *Id.* at § 2(d).

12. *Id.* at § 2(g).

users of CDS.¹³

Although the regulatory landscape is somewhat more complicated in the securities context, the result is the same: general exemption. Both the Securities Acts of 1933 and 1934 exclude from the purview of regulated securities all security-based and non-security-based swap agreements, as defined in the Gramm-Leach-Bliley Act.¹⁴ Under the Gramm-Leach-Bliley Act, if a CDS relates only to loan and other debt obligations—which is often the case—then it qualifies as a “non-security-based swap agreement.”¹⁵ Further, as long as CDS are drafted to avoid (1) being characterized as contingent options on debt securities and (2) physical delivery of securities, then they will fall under the exemption for security-based swap agreements.¹⁶ Thus, the securities regulations collectively work to exempt CDS from SEC registration and reporting requirements.¹⁷

In banking regulation, the U.S. Office of the Comptroller of the Currency has declared generally: “National banks may enter into credit derivative transactions. A national bank may use debt securities that are not investment grade debt securities or the credit equivalents thereof, to hedge bank permissible derivative, including credit derivative, transactions.”¹⁸ On a day-to-day level, the Federal Reserve monitors banks’ CDS trading activities to ensure that traders are properly documenting transactions and that other applicable best practices are being observed.¹⁹ Although crucial as referees in daily trading, Federal

13. Although CDS are OTC products, the *Financial Times* has reported Eurex and the Chicago Mercantile Exchange are currently competing to be the first exchange to introduce a credit derivatives futures product. Doug Cameron, *Eurex Targets Credit Derivatives Market*, FIN TIMES, Mar. 19, 2006. Such products, which would be linked to credit derivatives indexes, could possibly trigger a reevaluation, or at least a greater clarification, of the place of credit derivatives as they relate to the Commodities Exchange Act. Whatever the outcome of such reevaluation, the exempt status of OTC CDS as financial instruments would surely go unmodified.

14. Securities Act of 1933 § 2A(a)-(b), 15 U.S.C. § 77b-1 (2000); Securities Exchange Act of 1934 § 3A(a)-(b), 15 U.S.C. § 78c-1 (2000).

15. Gramm-Leach-Bliley Act § 206C, 15 U.S.C. § 78c (2000).

16. *Id.* §§ 206A(a)(3), (b)(1)-(4), 206B.

17. Despite this general exemption, the prohibitions on fraud, insider trading and manipulation under the Securities and Securities Exchange acts still apply. See Securities Act of 1933, *supra* note 14, § 17(a); Securities Exchange Act of 1934, *supra* note 14, §§ 9(a), 10(b), 15(c)(1), 16(a), 16(b), 20(d).

18. OFFICE OF THE COMPTROLLER OF THE CURRENCY, ACTIVITIES PERMISSIBLE FOR A NATIONAL BANK 38 (2005).

19. See, e.g., Risk, *supra* note 8. Commenting on the Fed’s efforts to monitor

Banking Regulators and their work do not stand to fundamentally regulate the substance of CDS trading going into the future.

As for judicial regulation, the claim that CDS are “virtually unsullied by the foul touch of litigation” bears out in practice. In its 2005 CDS survey, FitchRatings reported that in 2004 only 8% of credit events involved any form of dispute, down from 14% in 2003.²⁰ Of the credit events that involved disputes, “the vast majority . . . have been settled or are being resolved without litigation.”²¹ And for good reason. ISDA and its members have a vested interest in shaping the definitions used under the ISDA Master Agreement. The biggest cases involving CDS have involved questions as to how to interpret terms related to sovereign restructuring under the Master Agreement.²² Mitu Gulati and Stephen Choi relate that in the most prominent of these recent cases, ISDA moved to revise its definitions, create sovereign debt analysis subcommittees, and respond to lawyer recommendations before the ink had even dried on the opinion.²³ Although their full effect is yet to be seen, ISDA’s most recent 2003 Credit Definitions will likely serve to further reduce the incidence of CDS disputes—keeping the market “pure as the wind-driven snow.”

While CDS regulation has crystallized in SEC, CFTC, Fed, court and ISDA-dictated law since trading took off in the late 1990s, the state of insurance regulation remains unsettled in many places. At bottom, the issue for state insurance regulators is whether credit default swaps, as instruments that distribute risk for a fee, should qualify as capital markets products that escape regulation under state law. To many market observers, the answer is a resounding yes.

New York updated its insurance laws to exclude CDS in 2004 (making explicit mention of ISDA’s Credit Derivatives Definitions), but many states have followed suit.²⁴ Introducing more confusion, the

CDS trading, Bloomberg reports: “The Federal Reserve Bank of New York has demanded action to tackle a backlog of contracts left unsigned for months on concern the undocumented transactions threaten the stability of the financial system.” *Id.*

20. FITCHRATINGS REPORT 2005, *supra* note 3, at 9-10.

21. *Id.* at 10.

22. See, e.g., *Eternity Global Master Fund Ltd. v. Morgan Guar. Trust Co.*, 375 F.3d 168 (2d Cir. 2004); *Aon Fin. Prod. v. Societe Generale*, No. 00 Civ. 5863GBD, 2005 WL 427535 (S.D.N.Y. 2005).

23. Stephen J. Choi & G. Mitu Gulati, *Contract as Statute*, 104 MICH. L. REV. 1129, 1144 (2006).

24. N.Y. INS. LAW § 6901(j-1) (2005); 2004 N.Y. Sess. Laws Ch. 605 (S. 6679-A) (approved and effective Oct. 19, 2004). Colorado’s insurance statute, to cite one

National Association of Insurance Commissioners has issued guidelines, and defined insurance in such a way that CDS clearly qualify as insurance contracts. Responding to the uncertainty, practitioners and ISDA have pointed to the “insurable interest” and “indemnification” requirements of most state insurance regimes to say that CDS are capital markets products that should not be subject to regulation under state law. While these two concepts wield notable power in the argument over whether CDS are insurance, they do not wholly explain why and how the two regimes differ from one another. Absent a comprehensive theory to demonstrate how and why credit default swaps are capital market products that transcend state insurance regulation, state regulators will legislate in light of guidance that suggests otherwise.

The aim of this article is to develop an explanatory theory of why CDS are not insurance. Section II gives a brief overview of the function and use of CDS and ISDA in today’s derivatives markets. Building from this account, Section III will first review the development of insurance laws as they pertain to CDS in the State of New York, then explain and evaluate the approach of the National Association of Insurance Commissioners to derivatives whose function centers around fee-based risk distribution. Finally, Section III develops a comprehensive comparison of CDS and insurance at both the contractual level and a wider market level. Having stated a theory of how CDS differ from insurance, this paper will set forth conclusions.

II. THE FUNCTION AND USE OF CREDIT DEFAULT SWAPS

A. Using Credit Default Swaps to Hedge Credit Risk

As banks enter into lending and other debt arrangements, they receive bundles of different risks. Among the possible risks that can arise in lending arrangements are: interest-rate/market risk (possibility that market interest rates will unexpectedly shift during the term of the agreement), liquidity risk (inability to buy or sell an instrument without

example, states: “‘Insurance’ means a contract whereby one, for consideration, undertakes to indemnify another or to pay a specified or ascertainable amount or benefit upon determinable risk contingencies, and includes annuities.” Colo. Rev. Stat. § 10-1-102(7) (2004). CDS could easily fit this vague statutory outline. For more examples of state insurance statutes, see NAT’L ASS’N OF INS. COMM’RS, DEFINITION OF INSURANCE WORKING GROUP WHITE PAPER 2-4 (2000) (hereinafter NAIC DEFINITION OF INSURANCE WHITE PAPER).

adversely affecting price), and credit risk (risk that the note issuer will default).²⁵ Although banks receive market-driven compensation for assuming such risks, they might—depending on the diversity of their portfolios—desire to keep liquidity and interest rate risks, but trade credit risk. They also might wish to diminish their Basle-dictated capital reserve requirements by unloading some of the risks on their balance sheets. CDS facilitate this type of risk trading.²⁶

The following example illustrates how a CDS agreement might be structured.²⁷ Borrower writes a \$50 million note to Bank. Desiring to reduce its exposure to Borrower, Bank finds a credit protection seller and enters into a three-year CDS as the credit protection buyer with the notional amount of the contract set equal to the note's face value. The bank/protection buyer commits to annually pay a small percentage of the notional amount (spread) to the protection seller either until the maturity of the CDS or until a specified event of default (credit event) occurs. The protection seller's obligation can be defined in one of two ways. Upon occurrence of a credit event, a CDS contract can obligate the protection seller to either (1) physically settle the CDS by taking delivery of the defaulted note in exchange for its face value, or (2) cash settle the note. Where a CDS is cash settled, the parties can designate an independent agent to poll other market participants to decide what the recovery value of the note would be, and the protection seller must then pay the protection buyer the difference between the notional amount and the recovery value.²⁸

This simple arrangement raises two important issues, the first relating to a definition of a credit event and a second concerning the protection buyer's loss. First, the parties define the credit event in relation to a "reference entity," which may or may not be the party that

25. See, e.g., ANTULIO N. BOMFIM, UNDERSTANDING CREDIT DERIVATIVES AND RELATED INSTRUMENTS 3-5 (2005).

26. For more on the Basle accords and their relation to capital adequacy requirements under U.S. law, see Heath Price Tarbert, *Are International Capital Adequacy Rules Adequate? The Basle Accord and Beyond*, 148 U. PA. L. REV. 1771 (2000); Barbara C. Matthews, *Capital Adequacy, Netting, and Derivatives*, 2 STAN. J.L. BUS. & FIN. 167 (1995); Heath Price Tarbert, *Rethinking Capital Adequacy: The Basle Accord and the New Framework*, 56 BUS. LAW. 767 (2001).

27. See, e.g., BOMFIM, *supra* note 25, at 68-69; HULL, *supra* note 5, at 507-09.

28. See, e.g., BOMFIM, *supra* note 25, at 69; HULL, *supra* note 5, at 508. Antulio Bomfim notes that, "Cash settlement is more common in Europe than in the United States, where, by far, the majority of CDS are physically settled." BOMFIM, *supra* note 25, at 69.

exposes the protection buyer to credit risk. If the protection buyer is exposed to the credit risk of a corporation, then the credit event can often be defined in terms of the corporation's bankruptcy, failure to pay, restructuring of debt, acceleration, or downgrading by a credit-rating agency (see fig. 1). Complications can arise, however, when the credit risk to be hedged flows from sovereign debt, cash or synthetic CDOs,²⁹ or an SPV. For example, sovereigns and trusts do not declare bankruptcy like corporations do; they are likely to have different or more complicated debt structures, and changes in their credit standing may not be as easy to discern. As a result, the parties to a CDS can designate a wholly different reference entity—portfolio of sovereign bonds, a bond futures index, etc.—that better suits their purposes (see fig. 2). Figures 1 and 2 show stylized examples of both types of CDS transactions.

The second related issue to note in this context is that the protection buyer need not evidence actual loss to claim under a credit default swap. The sole trigger for the protection seller's performance is the credit event. Another way of expressing the same observation is to point out that the protection-buyer does not even need to own the reference obligation to claim under a CDS.³⁰

The CDS market has become so thick for top reference entities—which include both corporations such as Ford and Fannie Mae and sovereigns such as Brazil and France—that market makers have arisen who continually quote both bid spreads (as protection buyers) and ask spreads (as protection-sellers). Indices in both North America (Dow Jones CDX) and Europe (iTraxx) track credit default spreads for the top 125 investment-grade companies on each continent.³¹ The price discovery provided by such indices facilitates the quick and easy sale of CDS portfolios, making the CDS market much more liquid than it would otherwise be.

29. For an explanation of CDOs and their relation to CDS, see BOMFIM, *supra* note 25, at 133-43; HULL, *supra* note 5, at 516-18.

30. See, e.g., David Z. Nirenberg & Richard J. Hoffman, *Are Credit Default Swaps Insurance?* 3 DERIVATIVES REP. 7 (Dec. 2001).

31. See HULL, *supra* note 5, at 510; FITCH RATINGS REPORT 2005, *supra* note 3, at 9.

FIGURE 1
STRAIGHTFORWARD CREDIT DEFAULT SWAP

FIGURE 2
VARIATION CREDIT DEFAULT SWAP

B. Function of ISDA and the ISDA Master Agreement

The organizations that deal in privately negotiated, OTC derivatives belong to the International Swaps and Derivatives Association (ISDA). ISDA currently numbers over 670 member institutions in over fifty countries.³² Chartered in 1985, ISDA emerged as an organization whose mission was to create and promote standardized documentation for derivatives at a time when even simple derivatives transactions had high transaction costs.³³ The first widely used ISDA documentation was the 1987 Master Agreement, with subsequent versions released in 1992 and 2002.³⁴ The Master Agreements set forth standardized, market-driven terms regulating general obligations of the parties, events of default, netting, early termination, transfer, currency provisions, and definitions.³⁵ If parties desire to modify any default provisions in the Master Agreement for their transaction, they may do so in an amending document called a "Schedule."³⁶ The Master Agreement and Schedule, in turn, are given effect in "confirmations," which are documents that serve as evidence of individual transactions under a Master Agreement.³⁷ A typical confirmation in a CDS trade sets forth all

32. See, e.g., Letter from Thomas Prevost, Chair, ISDA North America Tax Committee, and Robert Pickel, Executive Director, ISDA, to the Internal Rev. Serv. 2 (Mar. 7, 2006), available at <http://www.isda.org/>; cf. Sean M. Flanagan, *The Rise of a Trade Association: Group Interactions Within the International Swaps and Derivatives Association*, 6 HARV. NEGOT. L. REV. 211, 228 (2001). Flanagan relates:

[ISDA's] Primary Membership is composed of dealers and encompasses banks, securities companies, and large corporations from over thirty countries, including institutions such as Barclays; Chase Manhattan Bank; Credit Suisse First Boston International; Deutsche Bank AG; Enron Corporation; Sumitomo Bank Capital Markets, Inc.; and Merrill Lynch & Co., Inc. The Associate Membership includes diverse professional firms and corporations such as Allen & Overy; the Chicago Mercantile Exchange; Cravath, Swaine & Moore; Euroclear; KPMG Peat Marwick, L.L.P.; Standard & Poor's; and QT Software AG. *Id.*

33. See About ISDA, http://www.isda.org/www_nav.html (last visited Mar. 23, 2006); cf. Flanagan, *supra* note 32, at 227–38.

34. See ISDA Opinions and Documentation, <http://www.isda.org/docproj/ncdproj.html> (last visited Mar. 21, 2006).

35. See INT'L SWAPS & DERIVATIVES ASS'N, 2002 MASTER AGREEMENT (2002) [hereinafter ISDA MASTER AGREEMENT]; INT'L SWAP DEALERS ASS'N, ISDA MASTER AGREEMENT (1992).

36. See INT'L SWAPS & DERIVATIVES ASS'N, ISDA SCHEDULE TO THE 2002 MASTER AGREEMENT (2002); INT'L SWAPS & DERIVATIVES ASS'N, ISDA SCHEDULE TO THE MASTER AGREEMENT (1992).

37. INT'L SWAPS AND DERIVATIVES ASS'N, 2003 ISDA CREDIT DERIVATIVES

material terms, including reference entity, payment structure, credit events, settlement terms, and term of the agreement.³⁸

One of the key benefits of using the ISDA Master Agreement is that, once in place between two parties, all transactions entered into under the Master Agreement constitute a single agreement.³⁹ An end-user corporation and a swap dealer may exchange large numbers of confirmations over the course of several years, resulting in hundreds of simultaneous swaps between the parties. Without a master agreement, these swaps would require that the two parties exchange hundreds of payments at each swap payment date. The terms of the ISDA Master Agreement, however, can provide for netting the payments among all transactions made under the agreement between the parties (called “cross-transaction payment netting”). This reduces transaction costs since numerous swap payments are incorporated into a single payment.⁴⁰

Adding to the payment netting regime, the ISDA Master Agreement also provides for “close-out netting” that applies when one party to a transaction defaults or declares bankruptcy.⁴¹ Close-out netting allows the non-defaulting party to “calculate a single settlement amount by offsetting its scheduled future payment and delivery obligations to the bankrupt party against the bankrupt party’s obligations to it.”⁴² The practical benefit of a close-out netting arrangement is that it precludes a trustee or liquidator in bankruptcy from “cherry picking”—i.e., repudiating all trades that are out of the money for the bankrupt estate while insisting on performance of all trades that accrue to the estate’s benefit.⁴³

DEFINITIONS 1, Exhibit A, at 61 (2003) [hereinafter ISDA CREDIT DEFINITIONS]; see also Flanagan, *supra* note 32, at 230.

38. ISDA CREDIT DEFINITIONS, *supra* note 37, Exhibit A, at 61-70. Like similar confirmations in other derivatives transactions, CDS confirmations provide that: “This Confirmation supplements, forms part of, and is subject to, the ISDA Master Agreement . . . between you and us. All provisions contained in the Agreement govern this Confirmation except as expressly modified below.” *Id.* at 61.

39. ISDA MASTER AGREEMENT, *supra* note 35, § 1(c), at 1 (“All Transactions are entered into in reliance on the fact that this Master Agreement and all Confirmations form a single agreement between the parties . . . and the parties would not otherwise enter into any Transactions.”).

40. Flanagan, *supra* note 32, at 230-31.

41. See ISDA MASTER AGREEMENT, *supra* note 35, at 11-15.

42. Flanagan, *supra* note 32, at 231.

43. S. Rory Derham, *Set-off and Netting of Foreign Exchange Contracts in the*

To the extent that CDS trades are documented under ISDA Master Agreements, the single-agreement, cross-payment netting, and close-out netting structures apply across CDS markets. The usefulness of such arrangements becomes clear when one considers the fallout of Barings, Drexel-Burnham, or Enron-like bankruptcies, where the bankrupt party potentially has long and short positions in dozens of CDS transactions with multiple counterparties. Without a master agreement, each trade would have to be individually reckoned with the risk, which a trustee would be able to repudiate trades that did not accrue to the bankrupt's benefit. With a master agreement in place, all CDS trades executed with each party under a Master Agreement can be assessed as a net amount under the established close-out netting mechanism.

ISDA performs another vital function for CDS—and other derivatives—markets through its publication of protocols.⁴⁴ ISDA protocols are ISDA-written contract amendments that allow all Master Agreement adherents to respond in a unified way to market disturbances. For CDS markets, ISDA's CDS Index Protocols are particularly important. In normal circumstances, when a protection buyer and protection seller trade CDS on a company that is listed on a credit derivatives index, the index provides a price-discovery function that allows the parties to determine what spread is appropriate and how to settle their trade. However, the bankruptcy filing of an index-listed company throws trading into chaos. In response, an ISDA CDS Index Protocol "gives market participants a way to settle trades based on such indexes, by amending the documentation for such trades from physical to cash settlement and participating in an auction to determine the final price for . . . bonds" of the bankrupt company.⁴⁵ All affected parties who send ISDA an adherence letter can take advantage of the unified response, giving all adhering parties equal footing in dealing with the bankrupt reference entity.

Liquidation of a Counterparty: Part 2, Netting, 1991 J. BUS. L. 536, 537 (1991).

44. See http://www.isda.org/protocol/prot_nav.html (last visited May 9, 2006).

45. Christopher Faille, *ISDA Publishes Protocol for Dana*, HEDGEWORLD DAILY NEWS, Mar. 16, 2006, available at 2006 WLNR 4426607; see also INT'L SWAPS AND DERIVATIVES ASS'N, 2006 DANA CDS INDEX PROTOCOL (2006).

III. CREDIT DEFAULT SWAPS AND INSURANCE REGULATION

A. Credit Default Swaps and New York Insurance Regulation

From their inception, CDS have provoked observers to ask whether they should be classified as insurance. Their general form and function reflect many basic insurance arrangements.⁴⁶ The *New Oxford American Dictionary* defines insurance as “a practice or arrangement by which a company . . . provides a guarantee of compensation for specified loss . . . in return for payment of a premium” and, even more simply, as “a thing providing protection against a possible eventuality.”⁴⁷ Under both of these matching definitions, CDS look and feel like textbook insurance contracts. Since insurance is an area of state regulation, one must look to state statutes to determine whether or not CDS receive insurance classification.

Until a short time ago it was unclear that CDS were not insurance contracts under New York law, which provides that:

‘Insurance contract’ means any agreement or other transaction whereby one party, the ‘insurer,’ is obligated to confer benefit of pecuniary value upon another party, the ‘insured’ or ‘beneficiary,’ dependent upon the happening of a fortuitous event in which the insured or beneficiary has, or is expected to have at the time of such happening, a material interest which will be adversely affected by the happening of such event.⁴⁸

Providing further guidance, New York law defines “fortuitous event” as “any occurrence or failure to occur which is, or is assumed by the parties to be, to a substantial extent beyond the control of either party.”⁴⁹ Viewed on their face, these statutes define insurance contracts such that CDS—at least those with exogenous credit events—could be subject to insurance regulation, possibly making protection sellers civilly and even criminally liable for “doing an insurance business” without the proper license.⁵⁰

46. See, e.g., BOMFIM, *supra* note 25, at 68 (observing that “a credit default swap shares many similarities with traditional insurance products”).

47. NEW OXFORD AMERICAN DICTIONARY (2d ed., 2005).

48. N.Y. INS. LAW § 1101(a)(1) (2000); *cf. id.* § 107(a)(27).

49. *Id.* § 1101(a)(2).

50. See, e.g., *id.* § 1101(b); Nirenberg & Hoffman, *supra* note 30, at 8–10. Commenting on legal liability for selling insurance without a license, Nirenberg and Hoffman explain:

Concerned legal practitioners reacted to such provisions by stressing that the objectives of, and parties involved in, CDS transactions should preclude them from being regulated as insurance.⁵¹ New York practitioners David Nirenberg and Richard Hoffman applied this line of reasoning in a 2001 Derivatives Report article, and argued that the state regulates insurance to preserve its “natural interest in the safety and health of its inhabitants.”⁵² This organic instinct does not apply to CDS markets and their refined practitioners. The state and its citizens do not care when a credit event occurs in relation to a basket of securities or a reference obligor.⁵³ Confirming this point, the authors relate that “88% of the protection buyers and 86% of protection sellers . . . [a]re banks, securities firms, and insurance companies—hardly a group requiring protection. In fact, virtually 100% of both the protection buyers and sellers are institutional investors, with the public having no exposure, or virtually none, to these contracts.”⁵⁴ Extending this line of reasoning, Nirenberg and Hoffman point out that neither the SEC nor CFTC—which have established exceptions for experienced buyers—apply the workings of securities and commodities laws to CDS markets.⁵⁵

Beyond the sophistication of parties who trade CDS, fundamental objectives of many CDS transactions set them apart from garden-variety insurance contracts. The ability in CDS, to both separate actual loss from amount recovered and dissociate reference entities from sources of credit exposure, reveals a very different game from the insurance world, where one is expected to receive compensation in direct proportion to demonstrable loss that is tied to an “insurable interest.”⁵⁶ Concluding, Nirenberg and Hoffman underscore that these added features, when given prominent place in CDS agreements, allow hedging activities that

For example, New York insurance law provides that any violation of the insurance code would be a misdemeanor and subject the violator to a fine of \$1,000 for the first violation and \$2,500 for each subsequent violation. The state of Delaware could even require a Delaware corporation to forfeit its charter if it is found to be conducting an insurance business without a license. Thus, if credit default swaps are deemed insurance by an insurance regulator, a protection seller could be subject to criminal prosecution, substantial fines, and forfeiture of its corporate charter unless it maintained the requisite licenses.

Nirenberg & Hoffman, *supra* note 30, at 8.

51. Nirenberg & Hoffman, *supra* note 30, at 15.

52. *Id.*

53. *Id.*

54. *Id.*

55. *Id.* at 16.

56. *Id.* at 13-14.

give flexibility beyond mere loss compensation and—hopefully—forestall efforts to label CDS as a form of insurance.⁵⁷

In late 2004, an amendment to New York's insurance laws permanently quelled the worries of those who feared insurance treatment for CDS. In an addition to Article 69 on financial guarantee insurance corporations, the New York Senate and Assembly defined CDS as:

An agreement referencing the credit derivative definitions published from time to time by the International Swap and Derivatives Association, Inc. or otherwise acceptable to the superintendent, pursuant to which a party agrees to compensate another party in the event of a payment default by, insolvency of, or other adverse credit event in respect of, an issuer of a specified security or other obligation; *provided that such agreement does not constitute an insurance contract and the making of such credit default swap does not constitute the doing of an insurance business.*⁵⁸

Sidestepping the issue of how or why CDS differ from insurance contracts, the statute simply makes clear that the two are not synonymous; indeed, to be classified as insurance contracts is to lose status as CDS. And so one is left to ask whether CDS and insurance are independent merely as a per se rule under New York law or whether there exists a fundamental difference between the two instruments.

B. Introduction to the National Association of Insurance Commissioners' Draft White Paper and Its Relation to Credit Default Swaps

Although New York has distinguished CDS from insurance, the National Association of Insurance Commissioners (NAIC) issued a Draft White Paper in 2003 that—despite being aimed at weather derivatives—has important consequences for the question of whether state regulators might be willing to view CDS as insurance.⁵⁹ The NAIC's approach merits attention because, as a body composed of all of the state's insurance commissioners that has met regularly for over 130

57. *Id.* at 16.

58. N.Y. INS. LAW § 6901(j-1) (2005) (italics added); 2004 N.Y. Sess. Laws Ch. 605 (S. 6679-A) (approved and effective Oct. 19, 2004).

59. Prop. and Cas. Ins. Comm., Weather Financial Instruments (Temperature): Insurance or Capital Markets Products? (Nat'l Ass'n of Ins. Comm'rs Draft White Paper, Sept. 2, 2003), available at http://www.naic.org/documents/committees_papers_weather_insurance.pdf (hereinafter Draft White Paper).

years, its suggestions often find its way into state law.⁶⁰

The Draft White Paper addresses the nascent weather derivatives market, which the NAIC concludes should be regulated as insurance.⁶¹ In support of this conclusion the NAIC forwards two main rationales. Its first rationale focuses on the fact that the purpose of weather derivatives, like weather insurance contracts, is risk transfer from one entity to another for a fee. It all started innocently enough, energy providers trying to hedge the risk of low demand for natural gas and heating oil in mild weather and the high cost of buying such products in the open market when demand outstripped supply in extremely cold weather.⁶² But according to the NAIC, energy providers quickly began entering into weather-related energy “trades” on products unrelated to their core interests.⁶³ Insurance and reinsurance companies then entered the fray, participating in trades with the energy providers who became “professional acceptors of risk transfers from other entities.”⁶⁴ NAIC explains that “[g]enerally, businesses that are involved in accepting risk transfers for a fee are known as insurers and the fee paid by the entity seeking to transfer its risk is known as premium.”⁶⁵

Placing this formulation of the NAIC’s chief rationale in a means-versus-ends context, the NAIC is essentially saying that the means utilized for obtaining risk transfer do not matter. If your end-goal is to transfer and distribute risk for a fee, you are trading insurance products. A salient comparison in this regard might be to sham transactions in the tax context—a sham being any transaction that has no legitimate business purpose other than to avoid taxation.⁶⁶ In like manner, the

60. See, e.g., Eric C. Nordman, *The Early History of the NAIC*, 19 J. INS. REG. 164 (2000) (discussing the origins of the NAIC in May 1871); *A Special Issue at the Dawn of the New Millennium of Insurance Regulation*, Editor’s Perspective, 19 J. INS. REG. 159, 161 (2000) (stating that, “[t]he NAIC has become a *de facto* central authority”).

61. See *supra* note 59, at 2, 8. Weather derivatives, like CDS, emerged as major capital markets products in the mid-1990s. Although the Draft White Paper does not draw such a distinction it is clear that the NAIC is addressing OTC weather and energy derivatives and not exchange-traded derivatives.

62. *Id.* at 6.

63. *Id.*

64. *Id.*

65. *Id.*

66. See, e.g., *Gregory v. Helvering*, 293 U.S. 465 (1935). *Gregory v. Helvering* is a classic “sham” case in which taxpayer intended to effect a distribution of shares and simultaneously avoid double taxation of the distribution. To accomplish this end, the

NAIC seems to argue that the transaction documents involved in weather derivatives are merely a charade aimed at escaping regulation under state insurance regimes. Driving its point home, the NAIC gives the following table comparing weather insurance and weather derivatives.

NAIC COMPARISON OF WEATHER INSURANCE AND WEATHER DERIVATIVES

SUBJECT	WEATHER INSURANCE PRODUCTS	WEATHER DERIVATIVES
Who is covered?	Named Insured	Transaction Purchaser
When does coverage apply?	Policy Period	Protection Period (also called an Effective Date and Termination Date)
What is the maximum amount that will be paid?	Coverage Limits	Limit of Payout
What is the event that causes a loss?	Weather Peril Insured Against (Temperature, Rain or Snow)	Weather Peril of Rain, Snow or Temperature
How much does it cost?	Premium	Premium or fees
What is the neutral source of trigger of coverage?	Agreed upon U.S. Weather Reporting Station	Agreed upon U.S. Weather Reporting Station
What is the threshold for determining that a loss has occurred?	Trigger of Coverage or Claim	Strike Amount or Attachment
What document is provided to the purchaser?	Insurance Policy	Transaction
Settlement Provisions	Valued at	Value at Risk

In establishing its second rationale, the NAIC reports that “these energy traders might have artificially inflated the indexes used to establish the price of natural gas.”⁶⁷ Offering no explanation of how the profit motive of energy traders is linked to high natural gas prices or theory of how traders could use weather derivatives to fix such prices,

taxpayer structured her deal as a corporate reorganization. Commenting on taxpayer’s strategy, the Supreme Court said: “No doubt, a new and valid corporation was created. But that corporation was nothing more than a contrivance to the end [of tax avoidance]. It was brought into existence for no other purpose; it performed, as it was intended from the beginning it should perform, no other function.” *Helvering*, 293 U.S. at 469.

67. *Id.* at 8.

the NAIC quickly concludes that if weather and energy derivatives were “monitored as insurance products, it is likely that the regulatory scrutiny involved would help minimize the likelihood that the price manipulation would occur.”⁶⁸ The NAIC stresses that not only would manipulation be reduced, but state regulators could then review such contracts for “fair treatment,” lack of “excessive” or “unfairly discriminatory” rates, and solvency of the counterparties. Even if one conceded that weather derivatives bore some relation to price manipulation and that state insurance regulators could combat price fixing, the NAIC’s ad hoc reasoning does not explain why energy traders—and, *a fortiori*, insurance or reinsurance companies—lack powers of bargaining, analysis, and negotiation to such an extent that state regulators would have to ensure fair treatment.

Six months after the NAIC released its Draft White Paper, ISDA and The Bond Market Association issued separate responses, both of which discredited the NAIC’s approach in the Draft White Paper and urged its rejection.⁶⁹ Fundamentally, ISDA argues that weather derivatives are not insurance because they do not comport with the “insurable interest” and “loss indemnification” elements inherent in all insurance contracts. Moreover, instead of simply spreading risk among a population of insurance policy holders, weather derivatives “reduce risk through trading—matching counterparties with complementary and offsetting risk profiles.”⁷⁰ Last, ISDA argues that the weather derivatives market has been tinged by no scandal worthy of regulation (despite the vague NAIC argument to the contrary). The Bond Market Association echoed ISDA’s sentiments,⁷¹ and both organizations echoed, to some extent, the approach advocated by the Office of General Counsel of the New York Insurance department:

68. *Id.*

69. Letter from Robert G. Pickel, Executive Director and CEO, ISDA, to Ernst N. Csiszar, President, NAIC and Robert Esson, Senior Manager, Global Insurance Markets, NAIC (Feb. 23, 2004), *available at* <http://www.isda.org> [hereinafter ISDA Letter to NAIC]; Letter from Michele C. David, Vice President and Asst. General Counsel, The Bond Market Ass’n, to Robert Esson, Senior Manager, Global Insurance Markets, NAIC, and Ernst N. Csiszar, President, NAIC (Mar. 2, 2004), *available at* http://www.bondmarkets.com/regulatory/comment_letter_to_naic_on_risk-linked.pdf (hereinafter Bond Market Ass’n Letter to NAIC).

70. ISDA Letter to NAIC, *supra* note 69, at 7.

71. Bond Market Ass’n Letter to NAIC, *supra* note 69, at 1-2.

Weather derivatives do not constitute insurance contracts under Section 1101(a) of the New York Insurance Law because the terms of the instrument do not provide that, in addition to or as part of the triggering event, payment to the purchaser is dependent upon that party suffering a loss. Under such instruments, the issuer is obligated to pay the purchaser whether or not that purchaser suffers a loss. Neither the amount of the payment nor the trigger itself in the weather derivative bears a relationship to the purchaser's loss. Absent such obligations, the instrument is not an insurance contract.⁷²

As noted, the debate surrounding the NAIC Draft White Paper is limited explicitly to weather and energy derivatives. How do CDS fit into this debate? In its response to the Draft White Paper, ISDA additionally cautions that the NAIC, in demolishing customary notions of insurance, gives “no replacement criteria to distinguish insurance from the many other varieties of risk management contracts. The Draft White Paper’s logic could extend to a broad array of derivatives and would create substantial and disruptive regulatory uncertainty.”⁷³ ISDA’s concern applies more urgently in CDS than most derivative contexts.

Both of the NAIC’s arguments in favor of making insurance regulation apply to weather derivatives pertain to CDS with equal force. Looking at the first NAIC rationale, credit protection sellers are “involved in accepting risk transfers for a fee,”⁷⁴ which makes them insurers. The spread paid by protection buyers is nothing more than an insurance premium. Abstracting away from the second NAIC rationale, the mere “likelihood” of some catastrophe caused by derivatives posing as insurance is reason enough to step in and regulate so that the “insuring public [will not miss out] on many . . . market regulatory benefits that state insurance regulation provides.”⁷⁵ The doomsayers among CDS market observers predicted that “derivatives tsunamis” and credit-market “blowups” could give NAIC-minded regulators ample reasons to step in and govern.⁷⁶

72. 2000 Inf. OGC Op. N.Y. Dept. Ins. 26, *available at* <http://www.ins.state.ny.us/rg000205.htm>.

73. Letter from Robert G. Pickel, Executive Director and CEO, to Ernst N. Csiszar, President of NAIC, and Robert Esson, Senior Manager, Global Insurance Markets, NAIC, *supra* note 69, at 2.

74. Draft White Paper, *supra* note 59, at 6.

75. *Id.* at 8.

76. *See, e.g.,* Der Hovanesian et al., *supra* note 6.

Thus, NAIC reasoning leads to the conclusion that CDS must be regulated as insurance. By contrast, opponents of such reasoning, which includes ISDA and NY, insist that CDS and other derivatives possess both formal and substantive characteristics that should prevent them from being regulated as insurance. Is the dispute simply a spitting match, or does one side have the better argument?

C. Robust Theory of Credit Default Swaps as Capital Markets Products

Despite the similarities between CDS and insurance contracts, it is clear that there are significant differences between the two. NAIC-minded regulators argue that the differences are merely cosmetic and that the ISDA system of documentation merely embellishes classic fee-based risk distribution, which is the foundation of every insurance contract. The following analysis will address such arguments on two levels. First, the argument that CDS are essentially the same as insurance contracts will be assessed at the contract level, and the divergences between the two will be noted, catalogued, and integrated to illustrate how CDS differ from insurance contracts. Second, the notion that CDS should be subject to insurance regulation will be evaluated at a market level. Although CDS work to spread risks among participants, the mechanism and the purpose of its risk distribution are different from their counterparts in insurance markets. These differences will be taken and combined to state how CDS markets differ from insurance markets.

I. Credit Default Swaps as Capital Market Products: Contract Analysis

In order to identify some bright-line rules that separate insurance and CDS, commentators quickly point to the insurance law principles of indemnity and insurable interest.⁷⁷ Although these two concepts substantially explain how CDS differ from insurance instruments, they do not fully account for all of the differences that set the two regimes apart. To apply these principles and put them in their proper setting, it will help to start with a fundamental observation and then to allow questions that guide analysis. At bottom, both insurance products and CDS are arrangements based on contracts. Working from this kernel of similarity, six questions will develop the present analysis into an

77. See, e.g., Nirenberg & Hoffman, *supra* note 30, at 13-15; Letter from Robert G. Pickel, Executive Director and CEO, to Ernst N. Csiszar, President of NAIC, and Robert Esson, Senior Manager, Global Insurance Markets, NAIC, *supra* note 69, at 2-6.

explanatory theory: (a) Who can enter into the contract? (b) To what property can the contract extend coverage? (c) To what extent can the purchaser transfer the contract? (d) What events and subsequent action warrant a claim under the contract? (e) How does the contract measure recovery? (f) How do the parties settle a contract?

The evaluation that follows will treat each of these questions in turn, comparing and contrasting the results that each yields when applied to insurance and CDS regimes.

a. Who Can Enter Into the Contract?

Any person who has a legitimate economic interest in preserving property from loss, destruction, or pecuniary damage can enter into an insurance contract.⁷⁸ To have such an interest is, in fact, to have an “insurable interest.”⁷⁹ Failure of this interest will almost certainly mean either that an insurance contract never existed in the first place or that recovery will be denied.⁸⁰

By contrast, the only prerequisite to entering into CDS is that the participants be “eligible” parties under the appropriate federal acts (a hurdle aimed at keeping inexperienced and undercapitalized parties away from trading).⁸¹ Assuming that CDS participants are major financial institutions, which is persistently the case, they do not need to hold any interest in preserving property from loss.⁸² A protection buyer might have an interest in protecting a loan portfolio from loss; it could, however, simply feel exposed to a given market due to various factors and wish to buy protection despite not owning any insurable asset. Either way, CDS can be used to hedge risk.

78. See, e.g., Robert E. Keeton & Alan I. Widiss, *Insurance Law: A Guide to Fundamental Principles, Legal Doctrines and Commercial Practices* § 3.4(a)(1)–(5), at 164–72 (practitioner’s ed. 1988); *id.* § 3.3(b)(2), at 153. The use of “legitimate” in this context means “legal” or “lawful.” The authors comment that a lawful interest “is not, for example, an interest that exists only because of an expectation of profit from illegal activity (such as an interest in contraband liquor).” *Id.* § 3.4(a)(5), at 169.

79. *Id.* § 3.4(a)(1), at 164–65.

80. See *id.*; Kenneth S. Abraham, *Distributing Risk: Insurance, Legal Theory, and Public Policy* 35 (Yale University Press 1986).

81. See, e.g., Commodities Exchange Act, 7 U.S.C. §§ 1(a)(12), 2(d).

82. See, e.g., Nirenberg & Hoffman, *supra* note 30, at 13–14.

b. To What Property Can The Contract Extend?

Insurance contracts cover only risk of loss arising out of property in which the insured has an insurable interest.⁸³ In other words, insurers cover property that the insured has incentive to protect from loss and damage. Insurance authorities Robert Keeton and Kenneth Abraham both explain that this requirement works at the contract level to mitigate moral hazard, which accompanies insurance contracts because “insureds sometimes have more information about their expected loss than insurers. Certainly because insureds can control their own behavior, they have it within their power to act inconsistently with insurer’s interests by taking less care that they would were they not insured.”⁸⁴ By requiring the insured’s vested economic interest in covered property, insurers can be more certain that loss will be caused by statistically predictable exogenous events rather than events within the insured’s control.

Since they do not have an “insurable interest” aspect, CDS allow protection buyers to hedge exposure to credit risk regardless of its source, even permitting speculative use unrelated to any actual risk.⁸⁵ The 2003 ISDA Credit Derivatives Definitions and Confirmation do not require contracting parties to designate property in which protection buyers have an insurable interest; instead, the confirmation directs parties to designate a “reference entity.”⁸⁶ The reference entity can be any corporation, index, fund or other benchmark that the parties designate. This allows the parties to dissociate the reference entity from the protection buyer’s source of actual credit exposure (an ability that would vitiate an insurance contract).

Information asymmetries occur in both insurance contracts and CDS, albeit causing a different effect. Just as the insurer knows that its

83. See, e.g., Keeton & Widiss, *supra* note 78, § 3.4(a)(1)-(5), at 164-72.

84. Abraham, *supra* note 80, at 35; see Keeton & Widiss, *supra* note 78, § 6.6(e)(3), at 700-01; see also *id.* § 3.1(c), at 136-39.

85. In its 2005 CDS report, FitchRatings reveals that “[r]espondents identified the following three factors as the principal driving forces for using CDS: trading, credit risk portfolio management, and alternative investment class.” FitchRatings Report 2005, *supra* note 3, at 7. In contrast, the authors note that speculation and wagering were absolutely inimical to the historical purposes of insurance law. See Keeton & Widiss, *supra* note 78, § 3.1(c), at 136-39. This sets insurance contracts even further apart from CDS as instruments for distributing risk.

86. ISDA Credit Definitions, *supra* note 37, § 2.1, § 2.3, at 6, 9, Exhibit A, at 61-62.

insured has superior knowledge as to potential loss, protection sellers likewise worry about the possibility that the protection buyer has better information on the credit risk involved in the trade. But insurers and protection sellers worry about these asymmetries for different reasons. The insurer's information asymmetry is problematic because of its relation to moral hazard (to the likelihood that the insured will fail to exercise due care), thus causing a higher chance that the insurer will be required to make payment. A credit protection seller is not worried about moral hazard. It is worried that that potential information asymmetry will result in an inaccurate spread, which could spoil either the risk neutrality of the hedge that has been put in place or the expected return from CDS used as investments.

c. To What Extent Can the Purchaser Transfer the Contract?

In addition to the "insurable interest doctrine," another key insurance law axiom dictates that "insurance is a personal contract."⁸⁷ Explaining this doctrine, one state supreme court explained that "the identity of the insured is a matter of importance to the insurance company."⁸⁸ Insurance companies use information on the identities of those whom they insure to effectively assess and distribute risk. If the identity of the insured changes, the risk profile of the insurance contract also changes. As a result, the doctrine of "insurance as personal contract" and its effects generally work to restrict the ability of insureds to transfer their interest in an insurance contract.⁸⁹ Although the insured's interests under a contract can be transferred, this typically requires securing the approval of the insurer and, depending on the type of insurance transaction, occurs rarely.⁹⁰

To illustrate this point, one can imagine two neighbors, each of whom drives a BMW 525 sedan made in 2006 with standard specifications. Neighbor A is twenty-one years old. He received the BMW from his father as a birthday present and has received two speeding tickets in the last six months. He attends a local community college and receives barely adequate grades. Neighbor B is fifty years old. He has worked at the same accounting firm for the last twenty-five

87. Keeton & Widiss, *supra* note 78, § 3.1(d)(2), at 140.

88. *Id.* at 140 n.5 (citing *McHugh v. Manhattan Fire and Marine Ins. Co.*, 109 N.W.2d 842, 844 (1961)).

89. *Id.* § 4.2(e), at 316.

90. *Id.*

years and has never received a speeding ticket. If B decided that he was done driving and wanted to transfer his insurance policy to A, one imagines that the insurer would not allow the transfer (and if it did, A would certainly not pay the same premium that B paid).

In CDS, the protection seller is less concerned with the identity of the protection buyer than it is with the spread that the protection buyer pays. This is not to say that the protection seller is completely indifferent to its counterparty risk; it is instead to underscore the fact that the accuracy of the CDS spread, as opposed to the counterparty's identity, will be the metric that determines how well the CDS works to diffuse credit risk. Moreover, since information on the top reference entities is so plentiful, accurate CDS spreads give great liquidity to the CDS market and facilitate easy trading.⁹¹ To transfer interests under a CDS agreement or portfolio to another party, the parties enter into a novation transaction, which is documented in its own confirmation.⁹²

The difference between CDS contract transferability and insurance policy transferability underscores another vital difference between the two systems: the relative bargaining power of the parties. Insurers, to a large extent, are able to dictate the terms of insurance policies to their purchasing counterparties.⁹³ The bargaining relationship between insurer and insured is asymmetrically skewed toward the insurer. In CDS, the protection buyer and protection seller co-negotiate the agreement that eventually gets memorialized in a Confirmation. Unlike an insurance contract, the buyer is just as likely and able to transfer its interest in a CDS contract as a seller—bilateral novation is the only hurdle. In CDS trades, the relationship between protection buyer and protection seller is symmetrical.

d. What Events and Subsequent Action Warrant a Claim Under the Contract?

Once a purchaser has entered into either an insurance contract or a

91. See, e.g., Hull, *supra* note 5, at 510 (commenting that “[i]n addition to monitoring credit spreads, indices provide a way market participants can easily buy or sell a portfolio of credit default swaps”).

92. ISDA Credit Definitions, *supra* note 37, Exhibit F, at 77. In general, transfer of interests in an OTC derivatives transaction is governed by Section 7 of the ISDA Master Agreement, which can be instantiated by the CDS Novation Confirmation. See ISDA Master Agreement, *supra* note 35, § 7, at 15.

93. See Abraham, *supra* note 80, at 32-34.

CDS, it performs under the contract by paying periodic premiums until events occur that trigger obligations on the part of the insurer or protection seller. In an insurance contract, a loss- or damage-causing insured event will trigger the insured's duty to inform insurer of the loss or damage.⁹⁴ Analogously, in the Confirmation filled out pursuant to a CDS trade, the buyer and seller designate which "credit events" will apply to their trade.⁹⁵ A credit event can be the reference entity's bankruptcy, failure to pay, obligation default, obligation acceleration, restructuring, or other event.⁹⁶ Unlike the loss required in the insurance context, a credit event does not have to affect the protection buyer directly or cause damage (although it could).

When an insured suffers a loss, the loss triggers a number of documents that flow between the insured and the insurer. The insured must promptly submit both a "notice of loss," and "proof of loss."⁹⁷ Failure to submit either document can result in denial of coverage.⁹⁸ In response to the insured's filings, the insurer gives the insured "all documents which the insured receives in the event a suit is filed against the insured."⁹⁹

In CDS transactions, where the provable loss requirement does not exist, a successful claim on occurrence of a credit event requires only one document: a Credit Event Notice.¹⁰⁰ The Credit Event Notice, making reference to publicly available information that is laid out in a prior confirmation, simply states that "a Credit Event occurred with respect to the Reference Entity" and gives a brief description of the event.¹⁰¹ In response to the Credit Event Notice, the protection buyer and seller perform under the terms of the CDS confirmation.

e. How Does the Contract Measure Recovery?

When an insured suffers a protected loss under an insurance policy, her recovery can be measured in one of three ways. Typically, insurers cover property to the extent of its "actual cash value," which is usually

94. See Keeton & Widiss, *supra* note 78, § 7.2(a), (c), at 749, 58-59.

95. ISDA Credit Definitions, *supra* note 37, Exhibit A, at 64.

96. *Id.* at 64-65.

97. *Id.* at 749, 58-59.

98. *Id.* § 7.2(c), at 759.

99. *Id.* § 7.2(a), at 749.

100. See ISDA Credit Definitions, *supra* note 37, Exhibit B, at 71.

101. *Id.*

measured against its fair market value.¹⁰² Where objects do not have a fair market value that can be readily ascertained, insurance policies measure recovery either by its replacement value or by the original price paid for it by the insured.¹⁰³ Regardless of whether recovery is measured in terms of actual cash value, replacement value, or original price paid, the principle of indemnity caps recovery in order to prevent net gain to the insured.¹⁰⁴ Indeed, the entire insurance system is based on the notion that “the amount of insurance benefits paid when a loss is sustained by an insured is not to exceed the economic measure of the loss.”¹⁰⁵ In other words, without demonstrable loss there can be no recovery under a contract by any measure and the amount recovered can never exceed the loss.

The framework for CDS transactions and the ISDA documentation that accompanies it does not measure recovery against actual loss. Instead, ISDA and CDS documents define recovery in terms of a reference entity, settlement terms, settlement method, valuation metrics, and deliverable obligations negotiated by the protection buyer and seller as expressed in a confirmation.¹⁰⁶ Under this mechanism, the amount that a protection seller pays out upon a credit event may bear little or no relation to the protection buyer’s loss (assuming that the buyer even sustained a loss).¹⁰⁷ Thus, the measure of recovery under CDS does not preserve the principle of indemnity.

f. How Do the Parties Settle a Contract?

Although the tort litigation process in some insurance cases can adjust the exact route of payment from an insurer to its insured, the general rule is that insurer pays the insured a cash sum for its loss according the measure of loss prescribed in the insurance policy. In CDS, the parties can designate either cash settlement or physical settlement. Explaining the cheapest-to-deliver bond rule in the context of CDS physical settlement, David Nirenberg comments:

102. See Keeton & Widiss, *supra* note 78, § 3.9(a), at 208.

103. *Id.* at 209.

104. *Id.* § 3.6(a), at 191-92.

105. *Id.* § 3.1(a), at 135.

106. See ISDA Credit Definitions, *supra* note 37, Exhibit A, at 62-69.

107. See Nirenberg & Hoffman, *supra* note 30, at 14.

In some credit default swaps, the protection buyer can deliver any obligation of a reference entity rather than the reference obligation. This would be like insuring a late-model luxury vehicle and, on an insurable event in which the vehicle is significantly damaged, the insured gets to keep the damaged luxury vehicle and delivers an old rusted-out, high-mileage, low-end model of the same manufacturer to the insurer while the company delivers the luxury vehicle's replacement value. This does not comport with traditional concepts of insurance.¹⁰⁸

Thus, the process of physical settlement—especially where a cheapest-to-deliver rule applies—radically differentiates CDS settlement from insurance settlement. But what about cash settlement under CDS? When CDS counterparties opt for cash settlement, they designate a “calculation agent” in their confirmation.¹⁰⁹ As the amount due under a cash-settled arrangement comes due, the calculation agent's task is to “poll market participants to determine the value of the defaulted assets, and the protection seller is liable for the difference between face and recovery values.”¹¹⁰ Whereas the claims assessor under an insurance contract is an agent of the insurer, the calculation agent is a designee of both parties, which underscores the symmetrical relationship between the protection buyer and the protection seller.

While the possibility of physical settlement and a dual-appointed calculation agent distinguish the CDS settlement process, the starkest differences between insurance and CDS settlement processes arise in consideration of the ISDA Master Agreement's “one agreement,” “cross-payment netting,” and “close-out netting” provisions.¹¹¹ Since insurance is inherently a “personal contract,” it is often overlooked but nonetheless vital that each contract is separate and requires separate settlement. Not so for CDS. Where two parties execute a string of separate CDS under an ISDA Master Agreement, each with its own confirmation, then all of the trades “form a single agreement between the parties . . . and the parties would not otherwise enter into any [t]ransactions.”¹¹² As a result of this contractual device, the parties can elect to apply cross-payment netting to their CDS. To illustrate this, one can imagine two banks that have entered into dozens of CDS with one

108. *Id.*

109. ISDA Credit Definitions, *supra* note 37, Exhibit A, at 62.

110. *See* Bomfin, *supra* note 25, at 69.

111. ISDA Master Agreement, *supra* note 35, §§ 1(c), 2(c), 6, at 1, 2, 11-12.

112. *Id.* § 1(c), at 1.

another, each bank holding both long and short positions. One bank wishes to transfer all of its trades to another counterparty and the other bank agrees to the novation transaction. Instead of individually reckoning the balance on each trade, paying piecemeal, the banks can calculate the net amount owing under all trades and settle the accounts in one net payment.

The one-agreement, cross-payment mechanism—perhaps more than any other aspect indigenous to CDS—represents how far the derivatives regime is from an insurance model. Everything about insurance—insurable interest, indemnification, personal contract—militates against the notion of a net amount that could be paid out on multiple contracts in absence of any demonstrable loss.

2. Credit Default Swaps as Capital Markets Products: Market Analysis

The foregoing analysis demonstrates elemental differences between CDS and insurance at the contract level. As patterns emerge from the interplay between these contract-level distinctions, a broader perspective on the market differences between CDS and insurance emerges. Two main differences come to the fore: (1) risk classes versus credit spread as the means of neutralizing risk and (2) (cross-buyer) liquidity.

Hundreds of millions of “personal contracts” constitute the insurance world—contracts in which “the identity of the insured is a matter of importance to the insurance company.”¹¹³ The insured’s identity—and more specifically the property in which the insured has an interest subject to the insurer’s indemnity—matters so much because it is the best single indicator of the probability that the insurer will have to make payment under the insurance contract. Responding to this reality, insurers specialize in categorizing and quantifying identity-related risks to maintain a profit-preserving ratio of policies to claims. Commenting on insurers’ efforts to categorize, Kenneth Abraham explains that the most effective tool for minimizing the effects of moral hazard, preserving a steady return, and distributing risk:

[I]s to create risk classes and to vary the prices charged for coverage, depending on the expected loss of each class of insureds. The more accurate and detailed this risk classification, the greater its influence

113. Keeton & Widiss, *supra* note 78, § 3.1(d)(2), at 140 n.5 (citing *McHugh v. Manhattan Fire and Marine Insurance Co.*, 363 Mich. 324, 328, 109 N.W.2d 842, 844 (1961)).

on the allocation between loss prevention and insurance In constructing risk classes, the insurer's goal is to determine the expected loss of each insured and to place insureds with expected similar losses into the same class, so that each may be charged the same rate.¹¹⁴

By creating classes of insureds that correspond to individual risk profiles, the insurance market is able to efficiently spread catastrophic risk across the full spectrum of policyholders. In contrast, derivatives “reduce risk through trading—matching counterparties with complementary and offsetting risk profiles.”¹¹⁵ In the world of CDS, the one element that allows parties to trade and match offsetting risk profiles is the credit spread. Whereas insurance companies group policyholders based on real-world, historical data, CDS credit spreads are calculated based on a risk-neutral model of evaluating the default probabilities of individual reference entities.¹¹⁶ This risk-neutral valuation model places CDS in the same company as options, forwards, and other derivatives that are clearly recognized as capital market products despite their added ability to spread and hedge risk.

The other feature that strongly differentiates the CDS market from the market for insurance policies is the existence of credit indices. In insurance markets, insurers have the ability to trade, transfer and securitize policies amongst themselves; policyholders, however (as their name would suggest), simply hold policies. Policyholders generally cannot transfer their interests; to the extent that they can, they cannot do it in a way nor on a scale that would give rise to a market. As a result, insurance markets (at least on the policyholder side) possess no instrument allowing for price discovery, which would increase liquidity.

In CDS markets, the rise of Dow Jones CDX and iTraxx has created an enormous amount of liquidity. As noted, market makers are able to quote long and short spreads for CDS at practically all times, allowing both protection buyers and protection sellers to constantly evaluate the value of their trades and transfer if desired. This development, more than perhaps any other that has been mentioned, firmly marks CDS as capital markets products.

114. Abraham, *supra* note 80, at 15, 68.

115. Letter from Robert G. Pickel, Executive Director and CEO, to Ernst N. Csiszar, President of NAIC, and Robert Esson, Senior Manager, Global Insurance Markets, NAIC, *supra* note 69, at 7.

116. See Hull, *supra* note 5, at 244-47, 468-89, 510-13.

One last brief observation on how CDS markets differ from insurance markets merits recognition. In assessing CDS, state insurance regulators must keep in mind that CDS are not products which can be purchased by the general populace. As already noted multiple times, the Commodities Futures Modernization Act of 2000 amended the Commodities Exchange Act to limit the field of prospective CDS buyers—only “eligible contract participants” need apply. As long as CDS trades take place between eligible contract participants, Congress has generally prohibited the SEC and CFTC from regulating CDS. David Nirenberg and Richard Hoffman rightly conclude: “If Congress has determined that no regulation of these products is appropriate, it would seem inappropriate for a state to determine that there is a compelling state interest in regulating them to protect its citizens.”¹¹⁷

3. Credit Default Swaps as Capital Markets Products: A Theory

And so it comes time to state a theory. The table below summarizes and compares the contract and market differences between insurance and CDS.

SUMMARY COMPARISON OF CREDIT DEFAULT SWAPS AND INSURANCE

INQUIRY	INSURANCE	CDS
WHO CAN ENTER INTO THE CONTRACT?	Any person possessing an economic interest in preserving property from loss, destruction, or pecuniary damage	Any bank, insurance company, corporation or other eligible party under the Commodities Exchange Act
CONTRACTING PARTY MUST POSSESS INSURABLE INTEREST?	Yes	No
ELIGIBILITY UNDER FEDERAL LAW?	No	Yes

117. Nirenberg & Hoffman, *supra* note 30, at 16.

INQUIRY	INSURANCE	CDS
TO WHAT PROPERTY CAN THE CONTRACT EXTEND COVERAGE?	Property that someone has incentive to protect from risk of loss, destruction, or pecuniary damage	Reference entity
PROPERTY SUBJECT TO INSURABLE INTEREST?	Yes	No
TO WHAT EXTENT CAN THE PURCHASER TRANSFER THE CONTRACT?	Limited ability to transfer, subject to insurer's approval	Easily transferable upon novation by the parties
PARTY SYMMETRY?	No, asymmetrical relation between insured and insurer, skewed toward insurer	Yes, symmetrical relation between protection buyer and protection seller
WHAT EVENT INITIATES A CLAIM FOR RECOVERY UNDER THE CONTRACT?	Event inflicting loss, destruction, or pecuniary damage on covered property	Credit event as specified in ISDA confirmation
REQUIREMENT OF ACTUAL LOSS?	Yes	No
ASSUMING OCCURRENCE OF A RECOVERY EVENT, WHAT DOCUMENTS MUST BE PRESENTED TO CLAIM?	(1) Notice of loss (2) Proof of loss	Credit Event Notice
HOW DOES THE CONTRACT MEASURE RECOVERY?	Actual cash value, original price paid, or replacement value	In relation to reference entity, settlement terms, settlement method, valuation metrics, and deliverable obligations
RECOVERY CAPPED AT ACTUAL LOSS (PRINCIPLE OF INDEMNITY APPLIES)?	Yes	No

INQUIRY	INSURANCE	CDS
HOW DO THE PARTIES SETTLE A CONTRACT?	Cash settlement	Cash settlement or physical settlement
POSSIBILITY OF PHYSICAL SETTLEMENT?	No	Yes
CHEAPEST-TO-DELIVER OPTION?	No	Yes
MANY CONTRACTS, ONE AGREEMENT?	No	Yes
CROSS-PAYMENT AND CLOSE-OUT NETTING?	No	Yes
WHAT MECHANISM IS USED TO VALUE RISK AT A MARKET LEVEL?	Creation of risk classes and variation of the prices charged for coverage based on class	Risk-neutral evaluation of reference entity default probabilities
MARKET MAKERS AND INDICES THAT SERVE BOTH BUYERS AND SELLERS?	No	Yes

In considering the weight of these various differences, stating a theory is straightforward. In stating the theory's propositions, the jargon of insurance law will be avoided to the extent possible. The propositions below are disjunctive; failure under any of them means that the contract involved is not insurance. Any CDS trade will fulfill at least one of the following propositions.

Proposition 1: Where a party enters into a contract for contingent recovery possessing no economic interest in protecting the covered property from loss or damage, the contract is not insurance.

Proposition 2: When the contract for recovery fails to reference property that the purchasing party has economic incentive to protect from loss or damage, the contract is not insurance.

Proposition 3: When recovery under a contract can be had without substantiating any actual loss or damage, the contract is not insurance.

Proposition 4: Where a party can recover under a contract an amount that exceeds expenses caused by loss or damage, the contract is not insurance.

Proposition 5: Where a contract for recovery allows physical settlement, the contract is not insurance.

Proposition 6: Where a contract for recovery provides for cross-payment netting under a master agreement, the contract is not insurance.

IV. CONCLUSION: FEE-BASED RISK DISTRIBUTION IN THE CAPITAL MARKETS

The capital markets always have been and always will be a vehicle for efficiently distributing risk. Many financial instruments regulated under Federal securities and commodities laws allow their users to fulfill functions that resemble the general mechanism of an insurance contract. However, not every contract that allows for fee-based distribution of risk should also be subject to regulation under state insurance laws. Weather derivatives represent one such instrument; CDS represent another. While insurance companies target individual consumers—meriting efforts by the state ensure fair conditions for consumers—CDS transactions take place exclusively between banks and other sophisticated parties. In considering whether CDS should be regulated as insurance contracts under state law, state insurance regulators must recognize the insoluble differences between the two groups of instruments. CDS are not insurance.