MINIMIZING RISKS, MAXIMIZING FLEXIBILITY: A NEW APPROACH TO CREDIT DEFAULT SWAP REGULATION

*Alexander Charap**

2011 Elliot A. Spoon Business Law Writing Competition Winner

INTRODUCTION

The period between 1990 and 2000 was marked by a surge in financial innovation.[1] Over the course of the decade, pioneering investment analysts devised many of the complex financial products that market participants regard as commonplace today, including exchange-traded funds,[2]

---

* J.D. University of Michigan Law School, 2011. The author would like to thank his parents – Drs. Peter and Cynthia Charap – for their love and support as well as Professor Kyle Logue for his thoughtful comments on previous drafts. He would also like to thank the editorial staff at the JOURNAL OF BUSINESS AND SECURITIES LAW for the opportunity to publish this article.

1. DAVID T. LLEWELLYN, FINANCIAL INNOVATION AND THE ECONOMICS OF BANKING AND THE FINANCIAL SYSTEM, IN FINANCIAL INNOVATION IN RETAIL AND CORPORATE BANKING 1 (Luisa Anderloni, David T. Llewellyn & Reinhard H. Schmidt eds. 2009).

2. NEW FINANCIAL INSTRUMENTS AND INSTITUTIONS: OPPORTUNITIES AND POLICY CHALLENGES 13 (Yasuyuki Fuchita & Robert E. Litan eds., 2007).

commercial mortgage-backed securities,[3] and advanced risk assessment formulas.[4] However, according to former Federal Reserve Chairman Alan Greenspan, of all the financial developments of the 1990s, "by far the most significant event in finance [was] the extraordinary . . . expansion of financial derivatives."[5] Indeed, he considered the growth of the nascent derivatives market to be a triumph for efficient risk management and self-regulation.[6]

Despite his enthusiasm, Chairman Greenspan was worried about the long-term viability of the derivatives market.[7] In his view, attempts to regulate derivatives could smother the market.[8] In front of the Senate Committee on Agriculture, he testified that there was "no reason to question the underlying stability of the [over-the-counter derivatives] markets."[9] Rather, he pledged that "risks in the financial markets, including derivatives markets, are being regulated by private parties."[10] Others, however, were not so enthusiastic about the prospect of an unregulated derivatives market. Brooksley Born, the then-Chairwoman of the Commodity Futures Trading Commission ("CFTC") warned Congress about the "complexity of the derivatives marketplace, the fact that dealer activity tends to be concentrated in a relatively small number of large entities, the lack of transparency, and systemic risk."[11] Despite Born's warnings, lawmakers agreed with Chairman Greenspan. In 2000, Congress exempted most derivatives from federal regulation.[12]

The 2008 global financial crisis vindicated Chairwoman Born's calls for regulation: derivatives, in particular credit default swaps ("CDS"), are now widely considered to have contributed to and exacerbated the

---

3. Timothy J. Riddiough, *Forces Changing Real Estate for at Least a Little While: Market Structure and Growth Prospects of the Conduit-CMBS Market*, 17 REAL ESTATE FIN. 52 (2000), *available at* 2000 WLNR 259995.

4. Bethany McLean & Joe Nocera, ALL THE DEVILS ARE HERE: THE HIDDEN HISTORY OF THE FINANCIAL CRISIS 57 (2010).

5. Remarks by Chairman Alan Greenspan Before the Futures Industry Association, Board of Governors of the Federal Reserve System (March 19, 1999), http://www.federalreserve.gov/boarddocs/speeches/1999/19990319.htm.

6. *See* Tim Weithers, *Credit Derivatives, Macro Risks, Systemic Risks, 92* ECON. REV. (Fed. Reserve Bank of Atlanta) 43 (2007), *available at* 2007 WLNR 25909088; Jonathan Urban, *The Shadow Financial System*, 29 REV. BANKING & FIN. L. 49, 50-51 (2009).

7. *See* Urban, *supra* note 6, at 51.

8. *See* Urban, *supra* note 6, at 51; s*ee also Over-The-Counter Derivatives: Hearing Before the S. Comm. on Agric., Nutrition, and Forestry*, 105th Cong. 11 (1998) (statement of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System).

9. *See* Urban, *supra* note 6, at 51.

10. Urban, *supra* note 6, at 51.

11. Over-the-Counter Derivatives, 63 Fed. Reg. 26114, 26125 n. 86 (proposed May 12, 1998) (to be codified at 17 C.F.R. pt. 34, 35).

12. Urban, *supra* note 6, at 50-51.

meltdown.[13] Indeed, during the crisis, CDS engendered systemic risks that parties to contractual arrangements could not fully bear.[14] Such risks threatened not only the parties trading CDS, but the stability of the broader financial system as well.[15] In the wake of the crisis, even Alan Greenspan has backtracked.[16] He has acknowledged that the free market cannot effectively regulate CDS.[17]

Regulating the CDS markets will be difficult because of their complexity. Predictably, many proposals either do too little to reduce risk or alternatively restrict the contractual flexibility that efficient derivatives markets require. Incorporating some of the most promising features of the proposed systems, this article suggests a hybrid approach to regulating credit default swaps. Before proposing an alternative regulatory regime, however, this article outlines "the product" involved here, breaking down derivatives generally and then credit default swaps in particular. Second, this article outlines the two primary threats credit default swaps pose: counterparty risk and moral hazard. The second section also contextualizes the discussion by illustrating how credit derivatives contributed to the highly publicized collapses of AIG, Bear Stearns, Chrysler and others. In the third section, this article outlines several proposed approaches to regulating credit derivatives and then discusses each of their drawbacks. Such background is helpful since the approach this article suggests integrates many of the principles embedded in prior regulatory models.

The fourth and final section advocates a new approach to CDS regulation. The system aspires to reduce counterparty risk and moral hazard associated with CDS without compromising the risk management and investment features of the product. Specifically, the approach recommends that the power to regulate the over-the-counter ("OTC") CDS market should be devolved to the states. Meanwhile, the Securities and Exchange Commission ("SEC") and Commodity Futures Trading Commission would continue to supervise the exchange-traded credit derivatives market. This hybrid approach aims to minimize the primary risks associated with credit

---

13. *See* FINANCIAL CRISIS INQUIRY COMM'N, FINANCIAL CRISIS INQUIRY REPORT 50 (2011) ("A key OTC derivative in the financial crisis was the credit default swap (CDS), which offered the seller little potential upside at the relatively small risk of a potentially large downside.").

14. *Hearing to Review Proposed Legislation by the U.S. Dept. of the Treasury Regarding the Regulation of Over-The-Counter Derivatives Markets: Hearing Before the H. Comm. on Agric.,* 111th Cong. 163 (2009) (statement of Mary L. Schapiro, Chairman, SEC), *available at* http:// www.sec.gov/news/testimony/2009/ts092209mls.htm.

15. Hal S. Scott, *The Reduction of Systemic Risk in the United States Financial System,* 33 HARV. J. L. & PUB. POL'Y. 671, 673 (2010).

16. Brian Knowlton & Michael M. Grynbaum, *Greenspan 'Shocked' that Free Markets Are Flawe*d, N.Y. TIMES, Oct. 23, 2008, http://www.nytimes.com/2008/10/23/business/worldbusiness/23iht-gspan.4.17206624.html.

17. *Id.*

derivatives without imposing arbitrary categorical prohibitions or mandatory contract standardization.

I. THE PRODUCT

A. Derivatives

Contrary to popular perception, derivatives usage is not confined to complex financial services companies on Wall Street. Organizations of every size and purpose across the country and the globe employ derivatives.[18] Users range from hedge funds and other investment entities to insurance companies and even governments.[19] Large corporations are among the most dedicated derivatives purchasers: approximately ninety-four percent of the Fortune 500 use derivatives, typically to manage risk.[20] In fact, derivatives are so pervasive in the American economy that "their regulation has implications not only for Wall Street, but also for Main Street America and the international financial markets."[21]

What are derivatives? Although particular derivatives contracts can be complex, the concept of a derivative is quite simple as a general matter. Derivatives are financial instruments for which value is based on, or derived from, underlying assets.[22] Such assets, or "reference entities" can include mortgages, stocks, bonds and commodities, such as oil and silver. Derivatives allow parties to sell a counterparty exposure to the downside risk and upside value of an asset or product while retaining the asset or product itself.[23] For example, a home heating oil business may purchase a fixed-rate oil derivative contract from a bank to lock in heating oil prices at a particular rate. [24] In return for a fee, the bank will provide price protection to the business, reimbursing the business for any heating oil costs it must incur above a specified amount. [25] The bank then assumes the risk that home heating oil will increase in price, but will profit from the fees if heating oil

---

18. Colleen M. Baker, *Regulating the Invisible: The Case of Over-the-Counter Derivatives*, 85 NOTRE DAME L. REV. 1287, 1297 (2010).

19. *Id.*

20. *Id.*

21. *Id.*

22. Frank D'Souza, Nan S. Ellis, & Lisa M. Fairchild, *Illuminating The Need For Regulation In Dark Markets: Proposed Regulation of the OTC Derivatives Market*, 12 U. PA. J. BUS. L. 473, 474 (2010).

23. Nathaniel G. Dutt, *Current United States Credit Default Swap Regulatory Initiatives: A New World Standard or Just a Ploy?*, 16 ILSA J. INT'L & COMP. L. 169, 175 (2009).

24. Louise Story, *A Secretive Banking Elite Rules Trading in Derivatives*, N.Y. TIMES, Dec. 12, 2010, http://www.nytimes.com/2010/12/12/business/12advantage.html.

25. *Id.*

declines in price.[26] Therefore, the business can be confident that it will pay a stable rate.[27]

The result is that derivatives provide investors with efficient hedging mechanisms through which to transfer the market risk associated with directional price movements in a wide range of investments.[28] Significantly, however, derivatives decouple ownership of a security with exposure to its value. One may therefore buy and sell exposure to an asset's value *without actually owning the underlying asset*.[29] Thus, derivatives offer market participants an efficient, if circuitous way not only to hedge their exposure to an asset, but also to speculate that certain securities will rise or fall in value.[30]

Credit derivatives, the subject of this paper, are financial instruments for which value is based on debt products, such as loans.[31] Unlike other types of derivatives such as futures and options, credit derivatives are largely unregulated.[32] Credit default swaps, or CDS, are among the most actively traded credit derivatives[33] and pose a high degree of risk.[34] Specifically, a CDS is a bilateral derivative contract where the underlying asset is the credit or creditworthiness of a borrower.[35] CDS contracts resemble insurance contracts. The "protection buyer" makes periodic payments, much like premiums, to the "protection seller." If the underlying asset endures a "credit event," the protection seller is obligated to pay the protection buyer a specified amount.[36] Typical credit events include default of the underlying asset or a credit rating downgrade.[37]

A simple example illustrates how CDS transactions operate as efficient hedging vehicles. Suppose Local Bank Co. provides John T. Borrower with a $100 2 year loan at 8 percent annual interest. To hedge the credit risk that John may not repay the loan, Local Bank purchases a CDS from Morgan Stanley. Under the contract, Local will pay Morgan Stanley $2 per month in consideration for an agreement by Morgan Stanley to repay

---

26. *Id.*
27. *See id.*
28. D'Souza et al, *supra* note 22.
29. D'Souza et al, *supra* note 22.
30. Norman Menachem Feder, *Deconstructing Over-the-Counter Derivatives*, 2002 COLUM. BUS. L. REV. 677, 731 (2002).
31. SATYAJIT DAS, TRADERS, GUNS AND MONEY: KNOWNS AND UNKNOWNS IN THE DAZZLING WORLD OF DERIVATIVES 265 (2006).
32. Thomas Lee Hazen, *Filling a Regulatory Gap: It Is Time to Regulate Over-the-Counter Derivatives*, 13 N.C. BANKING INST. 123, 124 (2009).
33. *See* Kristin N. Johnson, *Things Fall Apart: Regulating the Credit Default Swap Commons*, 82 U. COLO. L. REV. 167, 196-197 (2011).
34. *Id.* at 206-10.
35. D'Souza et al., *supra* note 22, at 479.
36. *See* Merrill Lynch Int'l. v. XL Capital Assurance. Inc., 564 F.Supp.2d 298, 300 (S.D.N.Y. 2008).
37. *See id.*

John's loan or purchase John's loan for par value in the event of default. Local is now hedged against the risk of default. As long as Morgan Stanley performs on its contract, Local Bank will now presumably either reap a profit from John's repayments less $2 per month or, in the event of John's default, receive from Morgan Stanley the face value of its loan to John.

Parties do not only use CDS for the purposes of hedging their investments. CDS can also serve as vehicles through which to express an investment view. Note that if Smith Bank had extended John a loan instead of Local, Local could nevertheless purchase a CDS from Morgan Stanley on John's loan. Such an arrangement—where the protection buyer is not exposed to the underlying asset— is referred to colorfully as a "naked" CDS. Parties do not purchase naked CDS for the purposes of hedging against the risk of default because, by definition, they do not maintain any exposure to the asset. If they did, the CDS would not constitute a naked CDS. So, what is the purpose of a naked CDS if not to hedge? Assuming Local Bank is not exposed to the "reference entity" through any other investment, Local will only make money one way—if the "credit event" occurs. Therefore, just as an individual may short the shares of GM, Local will purchase a CDS as a vehicle through which to express a pessimistic investment view of John's ability to repay the loan. And, because an active secondary market exists for CDS, speculative investors can lock in their profits or minimize their losses by selling to a third party.

The benefits the market derives from CDS are not limited to hedging and speculating. Market participants external to the CDS contract benefit as well: broad CDS trading is an efficient price discovery mechanism for the referenced securities.[38] Arbitrage opportunities arise if the market price for CDS (i.e., the cost of purchasing protection against an underlying asset) is not proportional to the market price for the underlying asset. One would expect to see a negative correlation between the price of GM bonds and GM CDS: if GM reports bad news, rational investors will likely sell GM bonds and then purchase the CDS. If prices or credit ratings defy expectations, investors will rush to exploit the spread between the price of GM CDS and price of GM bonds,[39] increasing the likelihood that the bond prices, and equity prices for that matter, incorporate any negative news. Thus, while a credit rating agency may deem a bond AAA or BBB, CDS prices reveal what the market truly believes.

---

38. *See* Christopher Cox, *Swapping Secrecy for Transparency*, N.Y. TIMES, Oct. 19, 2008, http://www.nytimes.com/2008/10/19/opinion/19cox.html.

39. A rational investor will exploit the mispricing in the following manner: if GM announces bad news and the cost of CDS increases, but its bonds have remained relatively level in value, then the investor should expect the CDS to return to their original lower levels, or alternatively, should expect the bonds to decrease in price. The investor should therefore short the CDS and short the bonds.

B. The Derivatives Markets

The U.S. Treasury distinguishes between two categories of derivatives: exchange-traded derivatives and over-the-counter derivatives.[40] Exchange-traded derivatives are traded over a particular kind of regulated market called an exchange, where parties buy and sell standardized contracts the exchange has preauthorized.[41] The exchange acts as an intermediary for all transactions.[42] It also absorbs the risk that a counterparty may default, usually via an independent central settlement system called a clearinghouse.[43] The clearinghouse stands between the buyer and the seller, requiring parties to collateralize their obligations under derivatives trades.[44] The quality and quantity of the required collateral, otherwise known as margin, depends on the risk of the trade involved.[45] Exchanges provide additional protections as well. The centralized, electronic nature of the exchange provides for enhanced transparency and price disclosure.[46] If an investor trades via an exchange, "the price – and the commission, or fees – are known. Electronic trading has made this information available to anyone with a computer, while also increasing competition – and sharply lowering the cost of trading."[47] Exchanges are also typically regulated strictly and are governed by a host of rules about order placement, lending, settlement and custody.[48] Thus, exchanges shield counterparties as well as the market from risk.

Exchanges are not without their disadvantages. Products traded on exchanges, such as exchange-traded derivatives, sacrifice contractual flexibility for safety. Only standardized derivatives currently trade over exchanges.[49] Illiquid, customized derivatives typically do not trade over exchanges because they are not as widely-traded as standardized products and are therefore expensive for an exchange to carry.[50] Some sources estimate that 20 to 40% of CDS are too illiquid to be suitable for the exchange-traded market.[51] Consequently, derivatives available on an

---

40. U.S DEP'T OF THE TREASURY, DERIVATIVES, http://www.treasury.gov/resource-center/faqs/Markets/Pages/derivatives.aspx (last visited Apr. 10, 2010).

41. *See* Feder, *supra* note 30, at 734.

42. *See* Feder, *supra* note 30, at 734.

43. *See* Feder, *supra* note 30, at 734.

44. *See* Feder, *supra* note 30, at 734.

45. *See* Feder, *supra* note 30, at 734.

46. Alireza M. Gharagozlou, *Unregulable: Why Derivatives May Never Be Regulated*, 4 BROOK. J. CORP. FIN. & COM. L. 269, 290 (2010).

47. Louise Story, *A Secretive Banking Elite Rules Trading in Derivatives*, N.Y. TIMES, Dec. 11, 2010, http://www.nytimes.com/2010/12/12/business/12advantage.html.

48. YVES SMITH, ECONNED: HOW UNENLIGHTENED SELF INTEREST UNDERMINED DEMOCRACY AND CORRUPTED CAPITALISM 145 (2010).

49. Baker, *supra* note 18.

50. Feder, *supra* note 30.

51. Scott, *supra* note 15, at 689.

exchange reference a narrow menu of highly liquid underlying securities.[52] Exchanges also require market participants to adhere to preset contractual provisions establishing settlement dates and contract maturities.[53] Some exchanges even limit how much the price of certain derivatives can fluctuate on a given day.[54] Thus, while exchange-traded derivatives are typically priced efficiently, it can be difficult to find exchange-traded derivatives capable of hedging individualized risks in an optimal manner.[55]

While the exchange-traded market is standardized, regulated and transparent, the OTC market—where most credit derivatives trade[56]— is the opposite, namely flexible, unregulated and opaque.[57] OTC products are not traded on exchanges, so all orders do not arrive at one centralized location.[58] Rather, each broker-dealer provides participants with their own prices depending on various factors, such as "how much capital the firm gives the trader, and his view of the market."[59] Unlike exchange-traded derivatives, derivatives traded OTC are "made-to-order."[60] In the primary market, a typical OTC derivatives transaction involves a broker-dealer and a sophisticated investor, such as a hedge fund.[61] The hedge fund may want exposure to unique assets or securities that the standardized exchange-traded derivatives do not reference.[62] For a price, the broker-dealer may create a derivative contract tailored to the hedge fund's specifications. The parties may privately agree on terms without preauthorization from an exchange. The broker-dealer may then sell the other side of the derivative to a counterparty or warehouse the trades on its own books.[63] Because the opportunities for customization are endless, parties can hedge their risks more efficiently than would be possible through standardized exchange-traded securities.[64] Customization also allows speculative investors to express their view of assets more precisely.[65]

However, the OTC derivatives market is not without serious disadvantages. Indeed, OTC derivatives subject not only counterparties, but

---

52. Feder, *supra* note 30.
53. Feder, *supra* note 30, at 732.
54. Feder, *supra* note 30, at 732.
55. *See* Johnson, *supra* note 33, at 197-97 ("Credit default swap agreements are customized to address parties' specific risks and hedging interests.").
56. *See* Baker, *supra* note 18, at 1297-1298 ("Only 'standardized' derivatives can trade on exchanges. This currently means only the following types of derivative instruments: 'futures, options on futures, and options.'").
57. Feder, *supra* note 30, at 734.
58. Smith, *supra* note 48, at 146.
59. Smith, *supra* note 48, at 146.
60. Feder, *supra* note 30, at 734.
61. D'Souza et al., *supra* note 22, at 502-04.
62. D'Souza et al., *supra* note 22, at 502-04.
63. D'Souza et al., *supra* note 22, at 504.
64. D'Souza et al., *supra* note 22, at 504.
65. D'Souza et al., *supra* note 22, at 504.

all market participants to systemic risks.[66] In the exchange-traded market, clearinghouses absorb the risk that counterparties will not discharge their contractual obligations, otherwise known as counterparty risk.[67] By contrast, in the OTC market, the parties themselves absorb that risk. OTC derivatives are secured by whatever collateral requirements the contract sets forth, if any.[68] There is no obligation to reserve capital to protect against potential losses.[69] In addition, the ability of regulators to meddle in the OTC market is limited. [70] In smaller, less liquid over-the-counter markets, such as the market for customized CDS, this lack of regulation makes a big difference. As one commentator noted, "abuses in the Wild West of derivatives and over-the-counter markets, the purview of consenting adults, rarely comes to light."[71]

Despite its problems, OTC derivatives are an entrenched part of the financial system.[72] Most, though not all, CDS are traded OTC.[73] In addition, the external risks and interests that affect financial actors are so diverse that exchanges simply cannot meet the needs of many parties seeking to manage their risks.[74] "Off the rack" exchange-traded derivatives are simply too standardized to satisfy this demand. Unfortunately, although private contractual agreements can force parties to internalize some of the risks of trading derivatives OTC, the recent financial crisis clearly illustrated that systemic risks nevertheless remain.[75]

---

66. *See generally* SMITH, *supra* note 48, at 146-47; s*ee also* Johnson, *supra* note 33, at 206-10.

67. *See* Matthew Leising, *Fed Sets Deadline for Details on Backing Credit Swaps (Update 2)*, BLOOMBERG.COM, Oct. 28, 2008, http://www.bloomberg.com/apps/news?pid= newsarchive&sid=aCTW7d3Af.og.

68. SMITH, *supra* note 48, at 146.

69. Steve Kroft, *The Bet that Blew Up Wall Street* (CBS television broadcast Oct. 26, 2008), *available at* http://www.cbsnews.com/stories/2008/10/26/60minutes/main 4546199.shtml.

70. Jonathan Urban, *Regulation of Over-the-Counter Derivatives: The Ultimate Lesson of Regulatory Reform*, 29 REV. BANKING & FIN. L. 49, 50-51 (2009) (The "Futures Trading Practices Act" "The FTPA did not go as far as announcing that swap agreements are not futures contracts, but it did reassure the financial industry that the CFTC would not meddle in the OTC derivative market…Congress did not take measures to address the growing risks in the OTC derivatives market until the Commodity Futures Modernization Act in 2000 and, even then, the legislation merely clarified that nearly all OTC products would continue to be exempt from regulation.").

71. SMITH, *supra* note 48, at 146.

72. *See* Baker, *supra* note 18, at 1297.

73. *See* Patricia A. McCoy, Andrey D. Pavlov & Susan M. Wachter, *Systemic Risk Through Securitization: The Result of Deregulation and Regulatory Failure*, 41 CONN. L. REV. 1327, 1363 (2009).

74. Feder, *supra* note 30, at 735.

75. *See* McCoy et. al., *supra* note 73..

II. THE RISKS

Why should we care about the market for CDS? While the magnitude of the CDS market is impressive— the notional value of the CDS marketplace now stands at around $30 trillion[76]— the size of the market alone cannot justify the imposition of a new regulatory scheme. Note that the vast size of American International Group ("AIG"), a financial services conglomerate that nearly collapsed in 2008, is not a sufficient explanation for the counterparty risks inherent in its trading activities. If AIG lost a great deal of money trading common equity securities rather than CDS, a bailout would have likely been unnecessary. Indeed, the exchange or clearinghouse involved in the equities transactions would have required AIG to collateralize its bets regardless of its AAA rating, limiting the systemic risk posed by AIG's insolvency. CDS must be regulated not only because of their ubiquity and aggregate outstanding value, but also because of the systemic risks they pose. The two most significant risks CDS pose are counterparty risk and moral hazard.

A. Counterparty Risk

When retail investors weigh the risks of purchasing a financial instrument, they think about market risk. Market risk is the risk that the value of a security will decrease in value.[77] Counterparty risk, on the other hand, is the risk that a party on the opposite side of a transaction will become insolvent and will therefore be unable to discharge its contractual obligations.[78] Counterparty risk is particularly potent in the over-the-counter CDS market. Unlike investors in exchange-traded securities such as Exxon common stock, CDS parties in OTC transactions rely on each other to ensure performance as opposed to a centralized clearinghouse.[79] Such bilateral reliance exposes external participants in the market at-large to losses capable of destabilizing the financial system.[80] In other words, the

---

76. *See* Gary Gensler, Chairman, U.S. Commodity Futures Trading Comm'n, Keynote Address on OTC Derivatives Reform, Markit's Outlook for OTC Derivatives Markets Conference (March 9, 2010), *available at* http://www.ritholtz.com/blog/2010/03/cftc-chair-gary-gensler-on-otc-derivatives-reform/.

77. *See* Feder, *supra* note 30, at 722 ("Any party to an OTC derivatives contract faces the possibility that the value of the contract will change as market conditions vary.").

78. For an in depth discussion of counterparty risk, see generally JON GREGORY, COUNTERPARTY CREDIT RISK: THE NEW CHALLENGE FOR GLOBAL FINANCIAL MARKETS (2010).

79. Houman B. Shadab, *Counterparty Regulation and Its Limits: The Evolution of the Credit Default Swaps Market,* 54 N.Y.L. SCH. L. REV. 689, 693 (2010).

80. *See* VIRAL V. ACHARYA ET AL., ON THE FINANCIAL REGULATION OF INSURANCE COMPANIES 32 (2009), *available at* http://w4.stern.nyu.edu/salomon/docs/whitepaper.pdf ("The problem with OTC derivatives markets, like the ones A.I.G. participated in, is that

private costs of a large derivatives dealer's bankruptcy may not reflect the even greater social cost of its failure.[81]

The financial distress that swept up AIG in 2008 is instructive. In 2007, AIG was the largest U.S.-domiciled insurance company, with $1 trillion in assets and seventy million customers.[82] AIG's business, however, was not limited to selling traditional insurance.[83] AIG Financial Products ("AIGFP"), a subsidiary of AIG, engaged in the business of selling CDS protection. Between 2003 and 2007, AIGFP sold protection on $527 billion of structured debt products.[84] Many of these debt products derived their value from mortgage-backed securities.[85]

Although AIG's bank holding company was supervised by the Office of Thrift Supervision, a federal agency, and its insurance businesses were regulated by the New York State Insurance Department, AIGFP was regulated neither as a bank nor as an insurance company.[86] Regulators therefore could not force AIG to write capital requirements into its transactions. Many of AIGFP's counterparties did not request preliminary collateral constraints either.[87] Rather, they considered AIG's sparkling AAA credit rating a sufficient guarantee of timely payment, at least initially.[88]

Since most of the underlying debt products maintained positive yields through 2006, AIG earned a steady profit from the premium payments its counterparties paid.[89] In 2007, however, the market soured. Widespread defaults among mortgage bonds set off a precipitous drop in the reference entities AIG "insured."[90] Although AIG was not required to post collateral initially, the decreases in value obligated AIG to post "maintenance"

---

bilateral collateral and margin requirements in OTC trading do not take account of the counterparty risk externality that each trade imposes on the rest of the system.").

81. J. Christopher Kojima, *Product-Based Solutions to Financial Innovation: The Promise and Danger of Applying the Federal Securities Laws to OTC Derivatives*, 33 AM. BUS. L.J. 259, 281 (1995).

82. AIG, AIG ANNUAL REPORT 3 (Mar. 14, 2008), available at http://www.ezodproxy.com/aig/2008/ar2007/images/AIG_AR2007.pdf.

83. *See* MCLEAN & NOCERA, *supra* note 4, at 77.

84. AIG ANNUAL REPORT, *supra* note 82, at 122.

85. William K. Sjostrom, Jr., *The AIG Bailout*, 66 WASH. & LEE L. REV. 943, 954-55 (2009).

86. Jerome A. Madden, *A Weapon of Mass Destruction Strikes: Credit Default Swaps Bring Down AIG and Lehman Brothers*, 5 BUS. L. BRIEF 15, 16 (2008).

87. Houman B. Shadab, *Guilty By Association? Regulating Credit Default Swaps*, 4 ENTREPRENEURIAL BUS. L.J. 405, 446 (2010).

88. *Id.* at 449 ("AIGFP's counterparties did not require it to post collateral upon entering into the agreements. The counterparties relied upon the strength of AIGFP's insurance affiliates and AIG's (then) AAA credit rating: AIG fully guaranteed AIGFP's CDS obligations and allowed AIGFP to assume AIG's credit rating in negotiating the swaps.").

89. William K. Sjostrom, Jr., *The AIG Bailout*, 66 WASH. & LEE L. REV. 943, 957 (2009).

90. *Id.* at 959-61.

collateral.[91] By September 2008, these payments had eroded AIG's liquidity position such that AIG's own bonds were downgraded.[92] Unable to post approximately $32 billion in collateral obligations to CDS counterparties, AIG was poised to declare bankruptcy. The Federal Reserve, fearing that AIG's collapse would wreak widespread financial havoc, gave the insurer access to emergency lending facilities.[93] Had the federal government not backstopped AIG's commitments, it would have defaulted on $440 billion in CDS contracts.[94] Most observers believe AIG's failure would have been catastrophic.[95]

AIG's situation in late 2008 cuts to the core of the counterparty risk problem. Since AIG was interconnected with numerous large financial institutions, the effects of its failure would have rippled across the system.[96] First, capital requirements would have potentially forced banks exposed to AIG to rapidly unwind positions, depressing market prices. Note that international capital rules force banks to reserve capital against declines in the value of their assets and loan defaults.[97] Banks that purchase CDS receive relief from capital requirements because CDS theoretically transfer the risk of declining asset values and loan defaults.[98] However, the failure of a bank's CDS counterparty nullifies any balance sheet benefit. If AIG had failed, banks may have had to offload assets quickly at artificial, marked down prices to increase capital and meet other obligations.[99] Such instability plagued the markets after the collapse of Lehman Brothers. Rapid, high-volume sales of counterparty assets destabilized markets by depressing prices and reducing liquidity.[100] Note that an AIG-style economic breakdown could happen again. AIG's position as a highly interconnected firm is not unlike the positions of almost all the largest derivatives dealers today.[101]

---

91. MCLEAN & NOCERA, *supra* note 4, at 325.

92. Shadab, *supra* note 87, at 405.

93. Press Release, Federal Reserve (Sept. 16, 2008), *available at* http://www.federalreserve.gov/newsevents/press/other/20080916a.htm.

94. Madden, *supra* note 86, at 18.

95. Madden, *supra* note 86, at 18.

96. Acharya et. al., *supra* note 80, at 10.

97. *See generally* David Henry, Matthew Goldstein & Carol Matlack, *A Lethal Loophole at Europe's Banks*, BUSINESS WEEK, Oct. 27, 2008, *available at* http://www.thefreelibrary.com/+A+LETHAL+LOOPHOLE+AT+EUROPE'S+BANKS-a01611680111.

98. *Id.*

99. Matthew Karnitschnig, Liam Pleven & Leslie Scism, *U.S. Weighs Options to Ease Strain on AIG*, WALL ST. J., Nov. 7, 2008, at C1.

100. Madden, *supra* note 86, at 15.

101. Jeremy C. Kress, *Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity*, 48 HARV. J. ON LEGIS. 49, 55 (2011).

A second related systemic threat from counterparty risk in the CDS market results from the "daisy chain" effect.[102] Because CDS trade in an active secondary market, market participants may purchase CDS protection from one party while simultaneously selling protection to another party.[103] Morgan Stanley, for example, may sell CDS to Local Bank Co. on Local's loan to John, a small business owner. Morgan Stanley itself may then purchase protection against John's default from a hedge fund. Depending on the trading value of the CDS, Morgan Stanley may purchase this offsetting protection for two reasons: as a hedge against John's default or to lock in profits from its shrewd, prior sale to Local. The hedge fund then may sell its exposure to another party. If the CDS is liquid, parties may repeatedly conduct offsetting trades, creating a "daisy chain." Local Bank Co. buys CDS from Morgan Stanley, which buys the same CDS from a hedge fund and so on. Consider that the firm on the end of the chain is a net seller and must pay in the event of default.[104] Although the offsetting trades protects the value neutral parties in the center of the chain against *market* risk, all parties remain exposed to counterparty risk. If the net seller on the end fails, non-payment could force the second to last party into bankruptcy or forced asset sales.[105] The effects could reverberate on through the chain, destabilizing the entire market.[106]

What's more, counterparty risk is difficult for market participants to assess ex ante. Many parties use credit ratings to measure the likelihood that potential counterparties will be able to pay off its debts.[107] AIG's counterparties believed that AIG's then AAA status was indicative of its ability to pay off massively levered future bets.[108] Indeed, investors trusted that AIG would be able to pay its CDS contracts in the event of default. AIG, with its AAA credit rating, could therefore sell protection cheaper than

---

102. *See* McCoy et. al, *supra* note 75, at 1363 ("The central problem is that the CDS market creates daisy chains of counterparty liability, whereby one buyer relies on the solvency of its seller to cover the buyer's own CDS exposure to another buyer down the chain.").

103. *See, e.g.*, Gretchen Morgenson & Louise Story, *Testy Conflict With Goldman Helped Push A.I.G. to Precipice*, N.Y. TIMES, Feb. 7, 2010, http://www.nytimes.com/2010/02/07/business/07goldman.html.

104. Jane Baird, *CDS Counterparty Risk Rising But No Domino Effect*, REUTERS, Jan. 11, 2008, www.reuters.com/article/idUSL1142498520080111; Jeremy C. Kress, *Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity*, 48 HARV. J. ON LEGIS. 49, 57 (2011) ("When market participants are interconnected through overlapping CDS exposures, counterparty risk becomes a multilateral, rather than bilateral, concern.").

105. Baird, *supra* note 104.

106. Patricia A. McCoy, Andrey D. Pavlov & Susan M. Wachter, *Systemic Risk Through Securitization: The Result of Deregulation and Regulatory Failure*, 41 CONN. L. REV. 1327, 1363 (2009).

107. *Id.*

108. Frank Partnoy & David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1040 (2007).

riskier trading partners.[109] Although credit rating is generally a reliable proxy for financial durability, the nature of CDS renders them impervious to conventional counterparty risk management techniques, such as reliance on credit ratings.[110] When traded over-the-counter, CDS protection constitutes a promise to make an unsecured, difficult-to-quantify payment upon the default of a bond with no money down—a risky proposition for even the most reliable of debtors. And, since the OTC market is opaque, peering into the black box is difficult for rating agencies[111] and regulators[112] alike.

While it is true that a counterparty may base its collateral requirements on its own research rather than on credit ratings, one cannot expect consistent diligence from private parties.[113] This is especially true absent knowledge of the counterparty's counterparties.[114] Moreover, private party diligence is unlikely to account for the "'counterparty risk externality' that each trade imposes on the rest of the system."[115] Given the fickle nature of the market, predicting when economic circumstance will convert stable public companies like AIG into wards of the state is challenging and, over the long term, likely unachievable. Perhaps this is why AIG's savviest and most sophisticated counterparties hedged against the possibility of AIG itself failing.[116]

B. Moral Hazard

Counterparty risk is not the only unique systemic risk inherent in CDS. CDS also create perverse incentives for market participants to destroy social value for the purposes of receiving investment returns.[117] This risk is

---

109. William K. Sjostrom, Jr., *The AIG Bailout*, 66 WASH. & LEE L. REV. 943, 958 n.89 (2009) ("[O]ther things being equal, the higher the credit quality of a given protection seller relative to other protection sellers, the more it can charge for the protection it provides.").

110. Roger Lowenstein, *Triple-A Failure*, N.Y. TIMES MAG., Apr. 27, 2008, at 36.

111. *See* Carrick Mollenkamp, et al., *Behind AIG's Fall, Risk Models Failed to Pass Real-World Test*, WALL ST. J., Oct, 31, 2008, http://online.wsj.com/article/SB12253844 9722784635.html.

112. Damon Silvers & Heather Slavkin, *The Legacy of Deregulation and the Financial Crisis? Linkages Between Deregulation in Labor Markets, Housing Finance Markets, and the Broader Financial Markets*, 4 J. BUS. & TECH. L. 301, 338 (2009) ("Neither regulators nor the public have access to sufficient information to assess the risk within these assets or counterparty exposure arising from participating in these opaque markets."); Cox, *supra* note 38.

113. Baker, *supra* note 18, at 1326.

114. Baker, *supra* note 18, at 1326 ("But without understanding a counterparty's exposures to other counterparties, it is impossible for a OTC derivatives market participant to responsibly assess the counterparty credit risk it assumes.").

115. VIRAL V. ACHARYA ET AL., *supra* note 80.

116. *See* Mollenkamp, *supra* note 111.

117. Jonathan C. Lipson, *The Shadow Bankruptcy System*, 89 B.U. L. REV. 1609, 1655 (2009) ("An extreme example of hedging strategies that might harm debtors involves

known as moral hazard. Moral hazards arise in the CDS market when parties, as a result of their negative economic interest in a reference entity, may profit upon the occurrence of a specified "credit event." Such an opportunity to collect on a CDS contract may incentivize naked CDS parties to deliberately create the preconditions required for default or bankruptcy.

CDS present moral hazards in a number of distinct situations. Naked CDS create incentives for market participants to condition certain assets or firms for failure. For example, large market participants that own CDS on a company's debt may spread false rumors about a company for the purposes of triggering a credit event and collecting on the CDS contract.[118] Such behavior may undermine market confidence and discourage efficient capital allocation; the cause of the decline in the reference entity's value is exogenous manipulation rather than performance. Although the opacity of the CDS markets makes it difficult to determine the extent to which this strategy is employed, several observers believe it played a key role in the recent downfall of AIG, Bear Stearns and Lehman Brothers.[119] For example, George Soros has claimed that "AIG, Bear Stearns, Lehman Brothers and others were destroyed by bear raids in which the shorting of stocks and buying CDS mutually amplified and reinforced each other."[120] Investors may "[b]uy CDS low, push down the underlying (e.g., short it), and take a profit from both."[121]

That large, systemically important securities dealers were targeted should not come as a surprise. Such institutions are particularly vulnerable to bear raids.[122] Dealers like AIG, Bear Stearns and Lehman Brothers that absorb risk or act as market makers rely on market confidence.[123] Naked CDS linked to the debt of systemically important financial institutions may incentivize their owners to shake confidence in these institutions during periods of economic turbulence for the purposes of collecting on CDS contracts. [124] This moral hazard dilemma can contribute to the collapse of

---

credit default swaps ('CDSs'). As many have already observed, these instruments create a classic problem of moral hazard.").

118. *See generally* Arthur Kimball-Stanley, *Insurance and Credit Default Swaps; Should Like Things Be Treated Alike?*, 15 CONN. INS. L.J. 241, 254-57 (2008).

119. *See e.g.*, Kimball-Stanley, *supra* note 118, at 254-57.

120. George Soros, *One Way to Stop Bear Raids*, WALL ST. J., Mar. 23, 2009, http://www.georgesoros.com/articles-essays/entry/one_way_to_stop_bear_raids/.

121. Richard Portes, *Ban Naked CDS*, INTERNATIONAL CENTRE FOR FINANCIAL REGULATION, Mar. 15, 2010, http://www.icffr.org/getdoc/712ee2a9-890e-4f30-b8c4-652e1f40e1ce/Naked-CDS-Richard-Portes150310.aspx.

122. Ruth A. Hargens-Horvatich, Note, *The Long and Short of It: The Securities and Exchange Commission Should Reinstate a Price Restriction Test to Regulate Short-Selling*, 43 CREIGHTON L. REV. 593, 605 (2010).

123. Richard Swedberg, *The Structure of Confidence and the Collapse of Lehman Brothers*, 30 RES. IN THE SOC. OF ORG., 71, 72-73 (2010).

124. Soros, *supra* note 120.

systemically important financial institutions and exacerbate an economic crisis.[125]

Moral hazard does not arise from naked CDS transactions alone. Parties that maintain "net short" positions may also pose systemic risks. "Net short" positions are created when parties purchase CDS protection worth in excess of the value of their exposure to the underlying debt. In other words, the notional value of the CDS holdings exceeds the market value of the debt holdings in the reference entity.[126] For example, a party may own $100 worth of GM bonds as well as CDS linked to the GM bonds that will pay out $200 in the event GM defaults. "Net short" CDS investors hold investment positions that resemble those of "naked" CDS investors, the key difference being that the "net shorts" own the underlying reference entity and are therefore still to some extent exposed to its failure.

"Net short" investors present a special set of problems. Remember that CDS decouple economic interest and creditors' rights. Parties that own the underlying securities as well as the CDS may be perversely incentivized to undermine workout negotiations, loan modifications and bankruptcy proceedings.[127] Law professor turned SEC regulator Henry Hu has conducted extensive research into this phenomenon, which he has termed the "empty creditor" problem.[128] An empty creditor is an investor that holds contractual control over corporate debt, but by simultaneously holding credit default swaps, may benefit financially from default or insolvency.[129]

The divergence between economic interest and control rights presents a substantial conflict of interest. In such a situation, an empty creditor has incentives to exercise its control interest opportunistically in bad faith. The empty creditor may oppose refinancing and debt restructuring for the reference entity, [130] or attempt to push the reference entity into default by filing an involuntary bankruptcy petition.[131] In the event of bankruptcy, "the empty creditor may undermine proper reorganization, especially if his interests (or non-interests) are not fully disclosed to the bankruptcy court."[132] Indeed, efficient reorganization plans are potentially repugnant to

---

125. *Cf.* Soros, *supra* note 120.

126. Daniel Hemel, Comment, *Empty Creditors and Debt Exchanges*, 27 YALE J. ON REG. 159, 163 (2010).

127. *See* Henry T. C. Hu & Bernard S. Black, *Debt and Hybrid Decoupling: An Overview*, 1 M&A LAWYER 4, 4-10 (2008).

128. Henry T. C. Hu, *'Empty Creditors' and the Crisis*, WALL ST. J., Apr. 10, 2009, http://online.wsj.com/article/SB123933166470307811.html.

129. *Id.*

130. *Id.*; *see also* Henry T. C. Hu & Bernard Black, *The New Vote Buying: Empty Voting and Hidden (Morphable) Ownership*, 79 S. CAL. L. REV. 811, 818-19 (2006).

131. Hemel, *supra* note 126, at 164.

132. Hu, *supra* note 128.

empty creditors, raising the value of the bankrupt companies' bonds and reducing the value of their CDS.[133]

Empty creditors have been accused of driving a "long list of companies into bankruptcy."[134] Since 2009, the list includes AbitibiBowater, CIT Group, General Growth Properties, and LyondellBasell.[135] Similar conflicts of interest may have plunged Chrysler into bankruptcy as well. Reports about private funds pushing the car giant to the brink are instructive. In late April 2009, Chrysler's creditors struggled to approve a plan to furnish the weakened company with additional funding. The Wall Street Journal reported that

> bank-debt holders, many of them hedge funds or distressed debt funds, voted against the latest deal for various reasons, ranging from financial interests to philosophical ones. Some said their funds had bigger positions in Ford Motor Co. or General Motors Corp. and could benefit by a Chrysler bankruptcy and the production capacity that may eliminate. Some funds may also have credit-default swaps on Chrysler bank debt that pay out in the event of a bankruptcy.[136]

Although this may not be probative by itself, a number of other sources, including the Financial Times, also reported that CDS-related conflicts of interest may have impeded Chrysler's reorganization attempts.[137]

Journalists have also attributed the bankruptcy of Six Flags, Inc. to obstructionist creditors that held CDS on the amusement park company's bonds.[138] The company offered bondholders a chance to swap their debt holdings for 85% of the company's equity.[139] The debt-for-equity exchange represented the bondholders' last opportunity to rescue the company and their investment before the company declared bankruptcy.[140] Even though "most bondholders favored the debt-for-equity deal, one 'holdout' creditor— which the Washington Post identified as Fidelity Investments— stood in the way."[141] Fidelity had hedged its investment of $100 million in Six Flags bonds with CDS.[142] The CDS provided incentives for Fidelity to oppose the debt-for-equity swap.[143] Indeed, the credit event triggering

---

133. *See* Hemel, *supra* note 126, at 162-63.
134. Hemel, *supra* note 126, at 162-63.
135. Hemel, *supra* note 126, at 160-61.
136. Neil King Jr. & Jeffrey McCracken, *Chrysler Chapter 11 Is Imminent: Creditor Talks Collapse as Hedge Fund Balks Deal; Fiat Waiting In The Wings*, WALL ST. J., Apr. 30, 2009, http://online.wsj.com/article/SB124102375931669205.html.
137. *See e.g.*, Henny Sender, *CDS Blamed for Role in Bankruptcy Filings*, THE FIN. TIMES, Apr. 17, 2009.
138. *See* Hemel, *supra* note 126, at 160.
139. Hemel, *supra* note 126, at 159.
140. Hemel, *supra* note 126, at 159-60.
141. Hemel, *supra* note 126, at 159-60.
142. Hemel, *supra* note 126, at 159-60.
143. Hemel, *supra* note 126, at 159-60.

payment under Fidelity's CDS was formal bankruptcy rather than extrajudicial restructuring.[144] After failing to obtain the requisite support from the bondholders, Six Flags ultimately filed for bankruptcy and Fidelity's CDS were worth over $200 million.[145]

"Empty creditors" are also suspected of playing a role in the bankruptcy of Tower Automotive ("Tower"), a car parts manufacturer.[146] In 2004, Tower borrowed approximately $600 million dollars from J.P. Morgan Chase and Morgan Stanley.[147] But, as its liquidity weakened, Tower sought an additional loan to augment its capital supply.[148] Pursuant to the proposed loan agreement, J.P. Morgan and Morgan Stanley agreed to adjust their interest rate entitlements.[149] Hedge fund creditors, however, decided against the proposal and the loan agreement foundered. Tower filed for bankruptcy protection two months later.[150] "One widely rumored explanation," according to securities Professor Frank Partnoy, "is that in addition to their positions as financiers of Tower, the hedge funds also had shorted its stock—that is, they borrowed Tower stock and stood to profit if the value of the stock declined." [151] Similarly, during Adelphia Communication Corp.'s bankruptcy proceedings, "members of an ad hoc [creditors] committee made disclosures of their holdings but didn't mention short positions held by two members…Those investors, who weren't identified, stood to benefit if a restructuring was delayed or stymied. Sure enough, when a reorganization was proposed, they voted against it, according to the judge's account." [152]

Though the hedge funds engaged in traditional short selling rather than CDS buying, the Tower and Adelphia incidents illustrate the potential for misuse in the *naked* CDS market. [153] Determining the extent to which moral hazard affects naked CDS users is difficult given the opacity of the over-the-counter CDS market and the secrecy with which private funds operate. A Wall Street Journal report, however, gives reason to believe such bad faith behavior is increasing.[154]

Why does this behavior pose worrisome risks to the broader financial system? Because a gratuitous bankruptcy imposes a number of "deadweight

144. Hemel, *supra* note 126, at 159-60.

145. Hemel, *supra* note 126, at 159-60.

146. Frank Partnoy & David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1034 (2007).

147. *Id.*

148. *Id.*

149. *Id.*

150. *Id.*

151. *Id.*

152. Mike Spector & Tom McGinty, *Bankruptcy Court is the Latest Battleground for Traders,* WALL ST. J., Sept. 7, 2010, http://online.wsj.com/article/SB10001424052748703309704575413643530508422.html.

153. Frank & Skeel, *supra* note 108, at 1035.

154. Hu, *supra* note 128.

losses on society as a whole."[155] First, unnecessary bankruptcies can undermine investor confidence. Market participants may respond to the increased likelihood that the companies underlying their assets will become bankrupt by demanding excess premiums from potential targets. These premiums will essentially represent rents, extracting capital from society without providing any reciprocal benefit. Second, bankruptcy stigmatizes companies.[156] Potential customers may avoid purchasing products from an otherwise reputable company before, during or after bankruptcy proceedings.[157] Third, bankruptcy proceedings require parties to obtain specialized legal and financial experts.[158] Attorneys, accountants, expert witnesses and consultants may charge fees that add up into the tens of millions of dollars for a large bankruptcy. Finally, "time-consuming bankruptcy proceedings may divert the attention of corporate managers away from the day-to-day operation of the firm." [159] Altogether, a firm and its creditors may spend between 12.7% and 20.5% of the firm's pre-bankruptcy assets on costs related to bankruptcy.[160]

C. Schematic Diagram

To summarize the preceding sections, I have sketched a table below to illustrate which types of risks apply to the two different types of derivatives markets. The columns on the top specify the type of market, while the rows on the left side specify the type of CDS. The middle boxes show whether each situation poses a counterparty risk or a moral hazard risk.

	Over-the-Counter	Exchange
Net-Short CDS Positions	Counterparty & Moral Hazard	Moral Hazard
Net-Long or Neutral CDS Positions	Counterparty	Neither

155. Hemel, *supra* note 126, at 164.
156. Hemel, *supra* note 126, at 164.
157. Hemel, *supra* note 126, at 164 (citing Edward I. Altman, *A Further Empirical Investigation of the Bankruptcy Cost Question*, 39 J. FIN. 1067, 1070-72 (1984)).
158. Hemel, *supra* note 126, at 164.
159. Hemel, *supra* note 126, at 164
160. Hemel, *supra* note 126, at 164 (citing Ben Branch, *The Costs of Bankruptcy: A Review*, 11 INT'L REV. FIN. ANALYSIS 29, 54 (2002)).

III. PROPOSED APPROACHES TO REGULATING CREDIT DEFAULT SWAPS

How did we arrive at a point in 2007 where the $57.9 trillion notional market in CDS[161] operated in the absence of regulatory supervision and disclosure requirements? In 2000, Congress enacted the Commodity Futures Modernization Act ("CFMA") for the purposes of explicitly exempting OTC credit default swaps from federal regulation.[162] Instead, private legal agreements governed OTC CDS contract execution.[163]

According to at least three authors, Congress's decision to exempt CDS from regulation was premised on two beliefs: the belief "that the OTC derivatives market was too small to create any systemic risk"[164] and the belief "that investors would act to minimize their own risk, which would protect the broader financial system."[165] Both premises proved faulty. The size of the credit default swap market ballooned in the years following the enactment of the CFMA.[166] Further, contractual arrangements and credit ratings did not provide adequate protection against the risk to private parties, let alone the broader financial system.[167] Private contracts did not remedy the lack of transparency and adult supervision in the OTC market; counterparty risk and moral hazard, discussed above, were the results.

Many policy-makers and academics now acknowledge that credit default swaps, despite their importance to the global financial system, pose unacceptable systemic risks that must be regulated.[168] As mentioned above, even free-market enthusiast Alan Greenspan is calling for more stringent regulation of the derivatives market.[169] So far, many policymakers have endorsed commonsense ideas, such as implementing margin/capital requirements and bolstering public disclosure.[170] Predictably, however, opinions differ with respect to structural changes.[171] This section outlines

---

161. Bank for Int'l Settlements, Quarterly Review, A103 tbl.19 (June 2009), available at http://www.bis.org/statistics/derstats.html.

162. *See* Johnson, *supra* note 33, at 225.

163. Frank Partnoy, *ISDA, NASD, CFMA, and SDNY: The Four Horsemen of Derivative Regulation?* (U. of San Diego, Working Paper No. 39, 2002).

164. D'Souza et al., *supra* note 22, at 497.

165. D'Souza et al., *supra* note 22, at 497.

166. Peter S. Goodman, *Taking Hard New Look at a Greenspan Legacy*, N.Y. TIMES, Oct. 9, 2008, at A1.

167. D'Souza et al., *supra* note 22, at 497.

168. *See e.g.* FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES 50; Jeremy C. Kress, *Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity*, 48 HARV. J. ON LEGIS. 49, 57 (2011).

169. Goodman, *supra* note 166.

170. *See* Baker, *supra* note 18, at 1298 ("In fact, some calls for reform have suggested that all OTC derivatives should migrate to exchange trading.").

171. Noah L. Wynkoop, *The Unregulables? The Perilous Confluence of Hedge Funds and Credit Derivatives*, 76 FORDHAM L. REV. 3095, 3099 (2008).

and critiques two regulatory regimes for CDS: mandatory exchange-trading and the Dodd-Frank approach.

A. Mandatory Exchange-Trading

Some of Wall Street's harshest critics have proposed a prohibition on the OTC market for credit default swaps.[172] Such critics advocate for a system where all credit default swap contracts are executed via exchanges.[173] As mentioned above, exchanges are multilateral trading platforms accessible to virtually any market participant. The multilateral nature of exchange venues also improves pricing accuracy and provides deeper liquidity.[174] Parties submit their bid or ask price and receive immediate feedback. Market participants trading via exchanges can access publicly available pricing data, improving price discovery[175] and security valuation.[176]

Currently, the number of credit default swaps trading via exchanges is "negligible" because exchanges require participants to trade via standardized contracts.[177] Mandatory exchange advocates argue that a broad shift to exchanges would "provide a high level of transparency, enhance liquidity, ensure efficiency and risk reduction, and provide for an equitable access and treatment to market participants."[178] In other words, advocates of mandatory standardization claim that their proposal would reduce the systemic risks associated with CDS. These claims are valid. The exchange's clearinghouse would act as a central counterparty that implements margin requirements.[179] Thus, the clearinghouse, rather than the parties to the trade, would absorb the counterparty risk.[180] In addition, unlike the private and bilateral over-the-counter market, "information on trades made on exchanges are automatically captured and available to regulators in real-

172. Baker, *supra* note 18, at 1298 ("In fact, some calls for reform have suggested that all OTC derivatives should migrate to exchange trading.").

173. Edmund L. Andrews & Louise Story, *U.S. to Detail Plan to Rein in Finance World*, N.Y. TIMES, Mar. 26, 2009, at A1.

174. COMMITTEE OF EUROPEAN SECURITIES REGULATORS, STANDARDIZATION AND EXCHANGE TRADING OF OTC DERIVATIVES 17 (July 19, 2010), *www.cesr-eu.org/data/document/10_610.pdf.*

175. Cox, *supra* note 38.

176. COMMITTEE OF EUROPEAN SECURITIES REGULATORS, *supra* note 174.

177. COMMITTEE OF EUROPEAN SECURITIES REGULATORS, *supra* note 174, at 16.

178. COMMITTEE OF EUROPEAN SECURITIES REGULATORS, *supra* note 174, at 17.

179. Alain Sherter, *Why It's Crazy to Let Wall Street Control Derivative Exchanges*, BNET FINANCIAL FOLLY BLOG (June 28, 2010), http://www.bnet.com/blog/financial-business/why-it-8217s-crazy-to-let-wall-street-control-derivative-exchanges/6298.

180. Baker, *supra* note 18, at 1298.

time."[181] Because exchanges publicly disclose information regarding trading positions, moral hazards would be easier to discover.[182]

However, any benefits associated with a mandatory exchange-trading regime would likely be overwhelmed by the significant drawbacks. Parties trading over exchanges would be required to utilize standardized CDS contracts.[183] This precondition undermines one of the primary reasons the CDS market exists: tailored risk management. CDS buyers often enter the OTC marketplace to transfer default risk away from their balance sheets.[184] Such buyers can sell particularized risks to dealers for a premium, thereby stabilizing and perhaps reducing the costs of doing business.[185] However, standardized contracts cannot feasibly capture the full range of default risks an end-user may wish to hedge itself against.[186]

Consider the testimony of several Fortune 500 business leaders who have argued vehemently against mandatory standardization in testimony before Congress.[187] These firms claim that tailored credit support is crucial to

> efficiently managing their working capital. Cargill, 3M, and others argue that losing such flexibility would have a significant negative impact on their business operations because it would inefficiently reallocate substantial capital amounts necessary for managing their businesses. They argue that losing this flexibility would increase the overall cost of doing business. [188]

Indeed, David Dines, President of Cargill's Risk Management Division testified that the volatile economic environment would intensify the negative consequences of standardization. Specifically, Dines warned that "the imposition of mandatory clearing and mandatory margining of tailored hedges will have a significant drain on working capital at a time when capital is highly constrained and credit is in short supply."[189] Eliminating the OTC market would essentially signal the end of the market for particularized risks and optimally-customized CDS. Thus, the contractual inflexibility inherent in a mandatory exchange-trading regime may disincentivize market participation and increase the costs of doing

---

181. COMMITTEE OF EUROPEAN SECURITIES REGULATORS, *supra* note 174, at 18.

182. Frank Partnoy & David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1046-47 (2007); Hu, *supra* note 128.

183. Baker, *supra* note 18, at 1297.

184. Baker, *supra* note 18, at 1304-05.

185. *See* Baker, *supra* note 18, at 1304-05.

186. *See* Johnson, *supra* note 33, at 240 ("Credit default swap agreements are customized to address parties' specific risks and hedging interests.").

187. Baker, *supra* note 18, at 1304-05.

188. Baker, *supra* note 18, at 1304.

189. Testimony of David Dines, Before the Senate Agric. Comm. on Regulatory Reform and Derivatives Markets 2-3 (June 4, 2009).

business.[190] A better approach would address systemic risks posed by CDS at lower costs.

B. The Dodd-Frank Approach

On July 15, 2010, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") to overhaul the U.S. financial regulatory system.[191] Title VII of the bill regulates swaps such as CDS and their users.[192] Among other provisions, Title VII attacks the counterparty risk problem by (1) providing that certain parties and transactions must go through clearinghouses and trade over exchanges;[193] and (2) introducing minimum margin and capital requirements for certain systemically important derivatives market participants.[194] Though CDS will likely be exempt from the mandatory clearing and exchange-trading requirements, CDS market participants will generally be subject to capital and margin requirements. As such, the capital and margin requirements may address the counterparty risk problem inherent in over-the-counter CDS transactions.[195] Nonetheless, it is argued here that Dodd-Frank does not adequately respond to the second problem that plagues some CDS transactions: moral hazard.

1. *Dodd-Frank's Clearinghouse Provisions*

Section 723 of Dodd-Frank establishes mandatory clearing for a swap if two conditions are satisfied: regulated derivatives clearing organizations accept the particular type of swap for clearing and the SEC or CFTC requires that the swap be cleared.[196] The SEC and CFTC must evaluate the riskiness of all swaps and determine whether each swap should be cleared on the basis of a number of risk factors. For example, the Commissions must consider the "liquidity" and "notional exposures" of the particular swaps as well as the effect that mandatory clearing may have "on the mitigation of systemic risk."[197] If the clearinghouses accept CDS for clearing and regulators require that CDS be cleared, the CDS will also

190. *See id*.

191. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

192. *See id.* at § 721(a)(47) (definition of "swap").

193. *Id.* at § 723.

194. *Id.* at §§ 731, 764.

195. *See supra* Part IIa.

196. Dodd-Frank Wall Street Reform and Consumer Protection Act § 723(a)(3)(h)(1)(A) (It "shall be unlawful for any person to engage in a swap unless that person submits such swap for clearing to a derivatives clearing organization that is registered under this Act or a derivatives clearing organization that is exempt from registration under this Act if the swap is required to be cleared.").

197. *Id.* at § 723(a)(2)(h)(2).

become subject to the exchange-trading requirements of the Act.[198] As mentioned above, however, customized CDS likely cannot be traded via exchanges. Forcing parties that want to trade customized CDS to seek exemptions will increase the costs of these products and reduce the availability of CDS that reduce risk most efficiently. According to Bloomberg News, trading in CDS "has tumbled 40 to 60 percent from three years ago as banks prepare" for Dodd-Frank to take effect.[199] This drop may be a response to anticipated CDS standardization.

Though clearinghouses would likely reduce counterparty risk in the context of CDS transactions, the point may be moot: clearinghouses may not accept CDS for clearing.[200] As a general matter, clearinghouses reduce internal risks by matching like transactions.[201] They therefore prefer to clear transactions that are standardized and liquid.[202] However, as one author has observed, since "credit default swap agreements are customized to address parties' specific risks and hedging interests," "most credit default swap agreements may be too thinly traded or contain particularized terms that make them difficult to trade on a clearinghouse platform."[203] Note that the SEC and CFTC may not compel a clearinghouse to clear a swap if clearing the particular swap would jeopardize the financial stability of the clearinghouse. Therefore, if clearinghouses refuse to clear CDS, it is very likely they will escape the Dodd-Frank Act's clearing and exchange-trading provisions.

Additionally, CDS may escape the Act's clearing requirements through the "commercial risk" exception. Dodd-Frank carves out a significant exception to the mandatory clearing rules if one of the parties to the swap is using the swap to "hedge or mitigate commercial risk" and if at least one party to the contract is a non-financial entity.[204] An "end user" swap is defined as a swap obtained in order to mitigate "commercial risk" in which at least one party is a non-financial entity.[205] Regulators have yet to outline the contours of the exception, so it is unclear whether the exception captures CDS. However, fashioning an effective definition of "commercial risk" is likely unachievable. How can a regulator divine whether a corporation is engaging in a transaction to mitigate a corporate risk or

198. *Id.* at § 723(a)(3)(h)(8).

199. Shannon Harrington & Christine Harper, *Wall Street Shrinks From Credit Default Swaps Before Rules Hit*, BLOOMBERG, Nov. 29. 2010, *available at* http://www.bloomberg.com/news/2010-11-29/wall-street-shrinks-from-default-swaps-as-dodd-frank-rules-hit-speculators.html.

200. Johnson, *supra* note 33, at 240-42.

201. Johnson, *supra* note 33, at 240.

202. Johnson, *supra* note 33, at 240.

203. Johnson, *supra* note 33, at 240.

204. Kristin N. Johnson, *Things Fall Apart: Regulating the Credit Default Swap Commons*, 82 U. COLO. L. REV. 167, 240 (2011).

205. Johnson, *supra* note 33, at 240.

merely to speculate? If an agricultural company buys CDS on General Motors debt, that may not seem like a commercial risk to the inexpert. But, CDS on GM debt could serve as a reasonable hedge against the rise in the price of oil for its tractors. The point is that defining financial terms of art is tricky. Regulatory arbitrage and unintended exemptions may result.[206]

2. *Dodd-Frank's Capital and Margin Provisions*

Even if the exchange-trading and clearing rules do not apply to CDS because the clearinghouses reject CDS or because of the "commercial risk" exception, Dodd-Frank's capital and margin requirements will likely reduce much of the counterparty risk of CDS transactions. Specifically, Section 731[207] and Section 764[208] of Title VII require the SEC and CFTC as well as prudential regulators to impose capital and margin requirements on certain systematically important or risk-tolerant financial entities engaged in derivatives trading.[209] According to the Act, the capital and margin rules should "help ensure the safety and soundness" of certain systemically important derivatives market participants and "be appropriate for the risk associated with non-cleared" swaps held by such market participants.[210] In addition to the capital rules, regulators must put forth a set of rules for initial

206. *Cf.* Johnson, *supra* note 33, at 242 ("[P]rivate actors often adapt to regulation while it is in developmental stages and avoid the impact of the regulation by innovating forward.").

207. Dodd-Frank Wall Street Reform and Consumer Protection Act § 731.

208. *Id.* at § 764.

209. *See generally*, Dodd-Frank Wall Street Reform and Consumer Protection Act. The capital requirements in Section 731 and Section 764 apply to "swap dealers" and "major swap participants" (MSP). Section 721(a)(49) defines a "swap dealer" as any person who (1) "holds itself out as a dealer in swaps;" (2) "makes a market in swaps;" or (3) regularly enters into swap transactions for its own account. A "major swap participant" is defined under Section 721(a)(33) as a non-swap dealer (1) who has substantial swap positions (but not for the purposes of hedging against commercial risk); (2) whose swaps create systemically risky counterparty exposures; or (3) who is highly leveraged and maintains substantial swap positions. Thus, "major swap participants" (MSPs) resemble large swap purchasers as opposed to commercial swap sellers. The definitions become even more confusing when one discovers that Dodd-Frank also defines a "security-based swap dealer" and a "major security-based swap participant" pursuant to Section 721(a)(43) and Section 721(a)(32), respectively. Such entities are substantially similar to "swap dealers" and "major swap participants" with a few key exceptions—they trade in swaps that relate to securities rather than other investments and they fall under jurisdiction of the SEC rather than the CFTC. Consider the distinction between swap dealers and MSPs in context— large broker-dealers (i.e. J.P. Morgan) are more likely to count as swap dealers while hedge funds are more likely to qualify as MSPs.

210. Dodd-Frank Wall Street Reform and Consumer Protection Act § 731(e)(3), 764(e)(3).

and variation margins on all swaps that are not cleared by derivatives clearing organizations.[211]

The capital and margin requirements will likely reduce counterparty risk problems inherent in CDS transactions to a substantial degree. Recall that counterparty risk is the risk a party on the opposite side of a transaction will become insolvent and will therefore be unable to discharge its contractual obligations. Title VII attempts to moderate this risk by requiring the SEC, CFTC and certain prudential regulators to promulgate specific rules to ensure that swap participants are appropriately capitalized. Such rules represent a welcome departure from the "hands off" regulatory approaches of the late 1990s and early 2000s. [212]

3. *The Problem with Dodd-Frank: Moral Hazard*

Though the Dodd-Frank Act's capital requirements may well reduce counterparty risks associated with CDS traded over-the-counter, Dodd-Frank does not address a more subtle systemic risk: moral hazard. As discussed *supra*, moral hazards arise in the CDS market when market participants can profit upon the occurrence of insolvency or some other "credit event" as a result of their negative economic interest in a reference entity. Negative economic interests can create perverse incentives for market participants to destroy social value for the purposes of receiving investment returns.[213] Nothing within the Act appears to limit over-the-counter trading of "naked" and "net short" CDS positions. In addition, it remains unclear how efficiently federal regulators will be able to police that market. The proposal below suggests that lawmakers utilize common law insurance principles for the purposes of tackling the moral hazard problem embedded in some over-the-counter CDS transactions.

IV. THE PROPOSAL

Before discussing the alternative CDS regulatory regime proposed here, it may be helpful to take a step back and review the types of risks CDS impose. Credit default swaps generate two primary risks: counterparty risk and moral hazard. Counterparty risk, the risk that a counterparty will be

---

211. Initial margin is the collateral that a party provides at the time the party enters into the transaction. Variation margin is the additional margin a party must deposit if decreases in the value of the position render the initial margin insufficient. Both margin provisions are designed to ensure that trading positions are adequately collateralized.

212. *See* 1999 WLNR 2771947, *Capital Briefs: Regulators Would Leave OTC Derivatives Alone*, AMERICAN BANKER (Nov. 10 1999).

213. Jonathan C. Lipson, *The Shadow Bankruptcy System*, 89 B.U. L. REV. 1609, 1655 (2009) ("An extreme example of hedging strategies that might harm debtors involves credit default swaps ('CDSs'). As many have already observed, these instruments create a classic problem of moral hazard.").

unable to discharge its responsibilities under the CDS contract, is most prevalent in the over-the-counter market. Robust margin requirements in exchange-traded markets mitigate most of the counterparty risk. Moral hazard, the other type of systemic risk this paper addresses, is pervasive not so much in a particular market as it is among particular CDS trades, namely trades that leave the investor with a negative economic interest in the reference entity. Traders that own naked CDS or use CDS to "net short" the underlying asset will benefit when default or some other credit event strikes the reference entity.

Risks clearly accompany the over-the-counter market and net short CDS trading. However, there are benefits too.[214] Net short CDS trading creates the risk of moral hazard by decoupling economic exposure and ownership.[215] But, a net short CDS purchase is merely an expression of what one party believes the underlying security is worth. The trade in net short CDS provides an efficient price discovery mechanism for the referenced securities.[216] Similarly, although the OTC market provides few protections against systemic risk, the over-the-counter market, unlike exchanges, permit parties to tailor CDS contracts to create efficient hedges. The proposal outlined here strikes a compromise between reduction of systemic risks and efficient markets. The regulatory framework is best understood as two tiers: the first tier regulates the exchange-traded CDS market and the second tier regulates the over-the-counter CDS market.

A. The First Tier: Regulating CDS Traded Via Exchanges

The first tier of the regulatory scheme proposed here is relatively conventional. Parties wishing to trade CDS via exchanges, such as the New York Mercantile Exchange or the Intercontinental Exchange, [217] would be able to do so as before. Exchange-traded derivatives are well-regulated and are relatively uncontroversial from a public policy perspective.[218] Consistent with the regulatory scheme for other credit derivatives that reference "securities," the SEC would regulate the exchange-traded market for CDS, monitoring the market for fraud.[219] More importantly, however, are the counterparty protections that inhere in exchange-trading. The exchange's clearinghouse acts as the counterparty to each side in a derivatives trade.[220] In the event that Counterparty A defaults, the clearinghouse makes

214. Feder, *supra* note 30, at 735.
215. Hu, *supra* note 128.
216. *See* Cox, *supra* note 38.
217. Urban, *supra* note 70, at 50.
218. Baker, *supra* note 18, at 1298.
219. Note that the CFTC regulates derivatives whose value is dependent on non-securities, such as commodities. CDS, almost by definition, derive their value from securities.
220. Baker, *supra* note 18, at 1298.

Counterparty B whole. While it is true that trading parties are still exposed to counterparty risk arising out of the clearinghouse, clearinghouses generally implement rigorous risk management practices.[221] Such risk management practices include matching trades and margin requirements. As a result, exchanges minimize counterparty risks. In addition, exchange-traded markets are transparent.[222] Market participants have access to the positions of potential counterparties and can gauge their riskiness, allowing parties to avoid potential credit dangers. [223]

Because exchange-traded derivatives are well-regulated, the proposal would permit parties to trade speculative naked CDS over exchanges.[224] Net short and naked positions, however, pose systemic risks that exchange margin requirements do not address. Indeed, though the margin and capital requirements embedded in exchanges effectively combat counterparty risk, such requirements are not necessarily the antidote to moral hazard risk, which is an entirely different systemic risk. Moral hazard risk remains a problem whenever a contract separates ownership rights from economic interest, as is the case for (1) naked CDS and (2) net shorts.[225] Naked CDS holders present moral hazard risks when the underlying asset is the debt of large financial services corporations that rely on market confidence. Naked CDS holders may opportunistically disturb market confidence for the purpose of collecting on their CDS contracts.[226] Net shorts, who own the underlying asset unlike naked parties, present systemic risks when the referenced corporation approaches insolvency. Indeed, the "empty creditor" problem arises when insolvency looms.[227] Such a problem is the result of "net short" bondholders who may have control rights over the reference entity but may favor default because of their CDS holdings.[228] .Thus, a creditor may "simultaneously have control rights and incentives to cause the debtor firm's value to fall."[229]

Despite the risks, banning naked and net short CDS would be a mistake. Naked and net short CDS, though primarily speculative instruments, serve a valuable price discovery function.[230] Financial markets would be more inefficient absent naked CDS trading. Furthermore, banning

---

221. Baker, *supra* note 18, at 1298.

222. Baker, *supra* note 18, at 1326.

223. Baker, *supra* note 18, at 1326.

224. Of course, because exchanges only clear standardized CDS contracts, the naked CDS must be relatively liquid.

225. *See* Hu, *supra* note 128.

226. *See e.g.*, Kimball-Stanley, *supra* note 118, at 254-57.

227. Hu, *supra* note 128.

228. Hu & Black, *supra* note 130, at 818-19.

229. Hu, *supra* note 128.

230. *See* Hearing on Credit Default Swaps on Government Debt: Potential Implications of the Greek Debt Crisis Before the Subcomm. on Capital Markets of the H. Comm. on Financial Services, 111th Cong. (2010) (statement of Robert Johnson, Director of Global Finance, Roosevelt Institute).

them is unnecessary. Exchanges provide a solution in the form of market transparency. For example, exchanges make information regarding market participants' various trading positions publicly available. Revealing such information publicly would increase the costs of morally hazardous behavior associated with trading naked CDS in a number of situations.[231] A bankruptcy court, aware that a creditor has a net incentive to accelerate default and undermine appropriate reorganization, may properly assign more weight to other creditors' bankruptcy proposals.[232] During workout negotiations, creditors could use trading information to verify whether another creditor's obstructionism is in good faith. Public disclosure may also deter empty creditors from engaging in manipulation in the first place.[233] Indeed, empty creditors may fear the "reputational risks" associated with bad faith conduct.[234] Citigroup, for example, agreed to end its opposition to AbitibiBowater's debt restructuring plan in 2009 only after news reports cited the financial services giant as an empty creditor.[235] The firm incurred criticism and backed down.[236] In addition, enhanced disclosure would improve market regulation. Actors engaged in potentially illegal "bear raids" of the sort that allegedly contributed to the collapse of Bear Stearns[237] could no longer hide from regulators behind the over-the-counter veil.

Though exchanges serve an important role in the financial system, proposals that require all CDS, naked or otherwise, to trade over exchanges go too far. Exchanges require parties to utilize standardized contracts that cannot possibly capture the full range of default risks an end-user may wish to transact. Some sources estimate that 20 to 40% of CDS are too illiquid to be suitable for the exchange-traded market.[238] The OTC market allows buyers to sell particularized risks to dealers in exchange for premium payments. As such, buyers can hedge themselves against specific risks efficiently.[239] Market participants need an efficient, regulated over-the-counter market. The second tier of the proposal, outlined below, is designed to address this necessity.

---

231. Hu, *supra* note 128.

232. *Cf.* Hu, *supra* note 128; Baker, *supra* note 18, at 1331.

233. Hemel, *supra* note 126, at 164.

234. Hemel, *supra* note 126, at 164 (citing Henry T.C. Hu & Bernard Black, *Equity and Debt Decoupling and Empty Voting II: Importance and Extensions*, 156 U. PA. L. REV. 625, 694 (2008)).

235. Hemel, *supra* note 126, at 166 (citing Michael J. de la Merced & Geraldine Fabrikant, *Newsprint Firm Tries To Revamp Debt To Avoid Bankruptcy*, N.Y. TIMES, Mar. 20, 2009, at B3).

236. Hemel, *supra* note 126, at 166 (citing Michael J. de la Merced & Geraldine Fabrikant, *Newsprint Firm Tries To Revamp Debt To Avoid Bankruptcy*, N.Y. TIMES, Mar. 20, 2009, at B3).

237. *See* Soros, *supra* note 120.

238. Scott, *supra* note 15, at 689.

239. Urban, *supra* note 70, at 50.

B. The Second Tier: Regulating CDS Trading Over-The-Counter

In the second tier, the over-the-counter CDS market would be subject to the regulatory jurisdiction of state insurance departments. Specifically, the CDS seller's state insurance law and common law would govern the transaction. The purpose of this shift in jurisdictional authority is to efficiently limit counterparty risk and moral hazard, while allowing parties to trade customized CDS over-the-counter. State regulation of the OTC CDS market would achieve this aim without the fashioning of dramatic new regulatory requirements.

Consider the insurable interest requirement. The insurable interest requirement is a common law doctrine which dictates that an insured must derive a benefit, financial or otherwise, from the continued existence of the insured entity.[240] Absent an insurable interest, an insurance contract may be void.[241] One of the objectives of the insurable interest requirement is to reduce the incentive for insurance purchasers to intentionally destroy insured value for the purposes of collecting the resultant insurance proceeds.[242] Because CDS are not now regulated as insurance, however, no insurable interest requirement currently inheres.[243] In fact, the Dodd-Frank Act specifically states that swaps, including CDS, may not be regulated as insurance contracts pursuant to state insurance laws.[244] Therefore, CDS purchasers can "insure" financial products they do not themselves own.[245] If CDS were regulated as financial guaranty insurance or another type of insurance by state insurance departments, CDS would be subject to the common law insurable interest requirement. Requiring CDS to adhere to this rule would amount to a prohibition on the sale of naked CDS contracts on the OTC market because naked CDS contracts are, by definition, contracts where the CDS purchaser does not have an interest in the underlying reference entity.

A second, related reason for shifting jurisdiction for OTC CDS to the province of insurance law is the indemnity doctrine. The doctrine exists to prevent an insured from receiving more than the amount of his or her

240. *See, e.g.*, Conn. Mut. Life Ins. Co. v. Schaefer, 94 U.S. 457, 460 (1876); *see also* N.Y. INS. LAW § 3401 (McKinney 2009).

241. *See, e.g.*, Conn. Mut. Life Ins. Co. v. Schaefer, 94 U.S. 457, 460 (1876); *see also* N.Y. INS. LAW § 3401 (McKinney 2009).

242. Yves Smith, *So Why Hasn't the Credit Default Swaps Casino Been Shut Down?*, NAKED CAPITALISM BLOG, Mar. 1, 2010, http://www.nakedcapitalism.com/2010/03/so-why-hasnt-the-credit-default-swaps-casino-been-shut-down.html.

243. *Id.*

244. Dodd-Frank Wall Street Reform and Consumer Protection Act § 722(b), § 767.

245. Jerome A. Madden, *A Weapon of Mass Destruction Strikes: Credit Default Swaps Bring Down AIG and Lehman Brothers*, 2008 BUS. L. BRIEF 15, 15 (2008).

incurred losses covered by insurance.[246] The indemnity doctrine "was instituted to prevent using an insurance contract to create a negative economic interest in the insured entity."[247] Note that both the indemnity principle and the insurable interest requirement arise from the same basic public policy concern. Both doctrines are "directed toward combating moral hazard in the form of temptation to crime, or the tendency of the policy holder to destroy property in order to collect insurance."[248] Thus, insurance contracts may be void where the insured may profit from the destruction of the entity.[249] Despite their underlying similarities, their applications are fundamentally different. The indemnity principle is designed to address a loophole in the insurable interest requirement. Specifically, the indemnity doctrine provides protection against moral hazard in situations where there is a risk of moral hazard, but where the insurable interest requirement does not void the contract. Typically, such a situation will arise when the insured owns an interest in the insured entity, but will still profit from an event that impairs the entity.

In the context of CDS regulation, the indemnity principle complements the insurable interest requirement quite well. If applied to CDS in the OTC market, the insurable interest requirement would act to void *naked CDS contracts*. The indemnity doctrine would void *net short CDS contracts*, where the CDS holder owns the debt of the reference entity as well as the CDS, creating a negative economic interest. Such a situation raises the risk that an "empty creditor" may be perversely incentivized to undermine workout negotiations, loan modifications and bankruptcy proceedings.[250] Even though moral hazards arise in empty creditor situations, the insurable interest requirement may not be applicable because the CDS holder possesses an insurable interest— the underlying bonds. However, the indemnity doctrine would fill the gap and void the contract because the net short CDS investor would presumably profit from an entity's bankruptcy. Thus, the doctrine would prevent the net short CDS

246. JEFFREY STEMPEL, LAW OF INSURANCE CONTRACT DISPUTES, Vol 1. § 1.04 (2004); *See also* State Farm Fire & Cas. v. Griffin, 888 S.W.2d 150, 156 (Tex. App. Houston 1st Dist. 1994) ("an insurer cannot be required to pay its insured more than the amount of his actual loss"); St. Paul Fire and Marine Ins. v. Ins. Placement Facility of Pennsylvania, 687 F. Supp. 172, 175 (E.D. Pa. 1988) ("since the fire insurance is only a contract of indemnity and its object is not to permit a gain by the insured but only to compensate him for a loss, it is obvious that he cannot recover insurance in an amount greater than the loss which he sustained"); Braddock v. Memphis Fire Ins., 493 S.W.2d 453, 460 (Tenn. 1973) (insured was not entitled to policy benefits sought because it would allow insured to "reap a profit").

247. Kimball-Stanley, *supra* note 118, at 263.

248. ROY KREITNER, CALCULATING PROMISES: THE EMERGENCE OF MODERN AMERICAN CONTRACT DOCTRINE 130 (2007).

249. *Id.*

250. *See* Hu & Black, *supra* note 127, at 4-10.

holder from receiving insurance payments in excess of his or her exposure to the reference entity.

Why outlaw the sale of naked and net short CDS contracts that trade over-the-counter, while allowing them to trade over exchanges? The insurable interest requirement and the indemnity doctrine prevent trading in the opaque, over-the-counter market when the systemic risks are highest. Unlike vanilla (i.e. non-naked) CDS sales or naked/net short CDS purchased over an exchange, naked/net short CDS purchased over-the-counter present both moral hazard risks and counterparty risks. Moral hazard risk is a function of owning negative economic rights in the reference entity. Counterparty risk is a function of trading in the OTC market. The regulatory approach suggested here would only prohibit naked/net short CDS trading in the opaque and difficult-to-regulate OTC market. Parties could still trade naked/net short CDS over exchanges or non-naked CDS over-the-counter. Thus, the proposal would bar the riskiest CDS trades in the "darkest" markets. Acknowledging the price discovery benefits of naked/net short CDS trading, however, parties would be allowed to engage in these systemically risky trades on transparent exchanges. The regulatory structure thus achieves a balance. It targets the riskiest CDS trades conducted on the most opaque markets, while allowing such products to trade on easier-to-regulate markets.

Note that under the proposal proffered here, parties would only be foreclosed from trading naked/net short CDS over-the-counter. To the extent parties would want to take advantage of the market for customizable, non-naked CDS, they could still do so via the over-the-counter market. Parties may wish to trade non-naked CDS over-the-counter because exchanges require contracts to be standardized. But, because the proposal leaves the OTC market mostly intact, OTC counterparty risk, which this proposal has not yet addressed, remains a threat. The approach proffered here reduces counterparty risk by introducing insurance law capitalization requirements. Surplus requirements would protect CDS purchasers from the risk that the CDS seller will default on its obligation. CDS sellers would be required to hold a certain amount of the CDS premiums the buyer pays on its books to safeguard against insolvency. Such requirements are embedded in state insurance laws which would govern the OTC CDS market.[251]

The New York State Insurance Law's capitalization rules are instructive. Parties engaging in an insurance business must submit to these rules.[252] N.Y. INS. LAW § 6902 (a)(1) stipulates that "not less than sixty

---

251. *See* NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS, STATUTORY MINIMUM CAPITAL AND SURPLUS REQUIREMENTS, http://www.naic.org/documents/industry_ucaa_chart_min_capital_surplus.pdf (last visited Mar. 11, 2011).

252. *See, e.g.*, N.Y. INS. LAW § 4202 (McKinney 2009) (statute requiring high levels for life insurance companies).

percent of the amount of the required minimum capital or minimum surplus to policyholder investments shall consist of" highly liquid securities, such as United States national, state and municipal treasury bonds.[253] Such capital rules protected AIG's insurance policyholders from damage caused by its failed AIG Financial Products subsidiary.[254] Had the New York State Insurance Department been responsible for regulating AIGFP, perhaps a federal government bailout may not have been necessary.[255]

We have seen how private contracts cannot overcome counterparty risk. Indeed, assessing credit risk ex ante is very difficult and poses systemic externalities that are likely impervious to private solutions.[256] However, is the same true for *moral hazard*, the other type of risk discussed in this paper? At least one author has claimed that applying the insurable interest requirement to CDS is unnecessary because private contracts are capable of preventing the risks associated with moral hazard.[257] It is argued that "private contracts take [the moral hazard risk] problem into account without the need for a regulatory mandate…The buyers of credit derivative protection routinely hold the first-loss position so as to signal to sellers of protection that the bank buying protection has some skin in the game and will not engage in this kind of destructive behavior."[258]

The author's purported solution is well-conceived. However, absent external legal strictures, such as those embedded in state insurance laws, parties can easily circumvent a contractual first-loss provision. Private contracts cannot prevent a protection buyer from simply purchasing 100% of the value of the reference entity, plus an amount of protection equal to the "first-loss" contract penalty. Thus, if the contract states that the protection buyer must take the first 5% of losses, the buyer can evade the provision by buying protection worth 105% of the value of the reference entity. Such evasion would neuter any moral hazard-reducing elements of the first-loss provision. How would insurance law preserve the value of first-loss provisions? The insurance law indemnity doctrine holds that an insurer cannot be responsible for greater than 100% of the value of the

253. N.Y. INS. LAW § 6902(a)(1) (McKinney 2008).

254. *See* Letter from Eric Dinallo, Superintendent, N.Y. Insurance Dept., to Editor, Financial Times (Sept. 22, 2008) *available at* http://www.ft.com/cms/s/0/22008b4c-883f-11dd-b114-0000779fd18c.html#axzz16dmPFE9k.

255. *Id.* ("In fact, the events are a testament to exactly the opposite proposition – as AIG's insurance companies, subject to the rigours [sic] of strong state regulation, appear solvent. Indeed, the federal loan might not have been possible if not for the fact that the still solvent and valuable state-regulated insurance companies can be sold to repay it. AIG's problems arose from the parent and its financial services unit, which are not regulated by the states.").

256. Lowenstein, *supra* note 110.

257. M. Todd Henderson, *Credit Derivatives Are Not "Insurance,"*16 CONN. INS. L.J. 1, 35 (2009).

258. *Id.*

insured interest.[259] The doctrine would maintain the integrity of the first-loss provision by prohibiting the protection buyer for insuring the bond for more than it's worth.[260]

CONCLUSION

The goal of the regulatory framework proposed here is ambitious: regulate the systemic risks in the credit default swap market without constraining CDS market flexibility unduly. The proposal is designed to limit counterparty risk and moral hazard through bifurcation. The SEC and CFTC would retain jurisdiction over the exchange-traded market, while state insurance laws would govern the over-the-counter market. Such a system would enable market participants to continue to trade risky CDS as long as they did so outside the opaque confines of the OTC market. In addition, parties could trade customized CDS over-the-counter, subject to capitalization requirements embedded in state insurance laws. Although codifying this proposal into a workable legal structure at the federal level may be difficult, the effort is worth the legislative sweat. State insurance laws were explicitly designed to address the specific risks CDS pose. Lawmakers would be wise to rely on deep-rooted insurance law principles. With the passage of the Dodd-Frank Act, however, it appears that Congress is taking an alternative course: ignoring the moral hazard problems that CDS have caused and waiting for the consequences to unfurl.

259. KREITNER, *supra* note 248, at 130.
260. KREITNER, *supra* note 248, at 130.