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# UNREGULABLE:

## WHY DERIVATIVES MAY NEVER BE REGULATED

*Alireza M. Gharagozlou\**

*In this Article I explore various methods of regulating financial derivative contracts, including (a) regulation by judicially created case law, (b) regulation as gambling, (c) regulation as insurance, (d) regulation as securities, (e) regulation via a clearinghouse and (f) oversight by a super financial regulator. After discussing the drawbacks of each approach, I conclude that derivatives may be beyond the reach of the law, and indeed may be a trend whose prevalence rises and falls based only on the zeitgeist of society.*

### INTRODUCTION

Derivatives are under severe scrutiny. They are thought to have caused catastrophic financial losses. Numerous law review articles have been published calling for the regulation of this “11-letter dirty word.”<sup>1</sup> Proposals include capital requirements,<sup>2</sup> the use of clearinghouses,<sup>3</sup> and heightened disclosure requirements.<sup>4</sup> The Treasury Secretary is shocked by the havoc caused by derivatives, stating that as a result of their use, “the world is now experiencing its worst financial crisis in 50 years.”<sup>5</sup> The Federal Reserve Chairman has never seen anything in his lifetime that compares to the terror of this crisis.<sup>6</sup> Financier George Soros has derided derivatives, claiming their instability will “destroy society.”<sup>7</sup> Michael Lewis, a Wall Street

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1. Desmond Eppel, Note, *Risky Business: Responding to OTC Derivative Crises*, 40 COLUM. J. TRANSNAT’L L. 677, 692 (2002).

Derivatives have become synonymous with risky finance in the minds of many members of the public, to the extent that a cynical wag has referred to derivatives as “the 11-letter dirty word.” Even sophisticated traders have been affected by the negative public perception, with the result that many prefer to avoid any discussion of their derivatives use.

*Id.*

2. See, e.g., Booth, *infra* note 9, at 507–08.

3. See, e.g., Markham, *infra* note 9, at 61–66.

4. See, e.g., Motes, *infra* note 9, at 614.

5. See Lewis, *infra* note 10.

6. *Id.*

7. See Partnoy, *infra* note 12.

muckraker and author of the book *Liar's Poker*, has written a long article describing how derivatives have destroyed Wall Street.<sup>8</sup>

But the previous paragraph does not refer to the financial crisis of 2009. The aforementioned law review articles were not written in the past year; they were written in the mid 1990s, after derivatives trading caused numerous financial catastrophes, including the collapse of Barings Bank and the bankruptcy of Orange County.<sup>9</sup> The statements of the Treasury Secretary and Federal Reserve Chairman were not made by Timothy Geithner and Ben Bernanke, but by Robert Rubin and Alan Greenspan in the late 1990s, after the collapse of Long Term Capital Management.<sup>10</sup> George Soros did not make the destabilizing claim in his widely read 2009 critique of derivatives;<sup>11</sup> he said it in 1997.<sup>12</sup> The Michael Lewis article does not refer to the one he wrote in 2008,<sup>13</sup> but rather the one he wrote in 1999.<sup>14</sup>

The controversy surrounding derivatives is not a new thing. Professionals have been wringing their hands over these instruments since their ascendance in the late 1980s.<sup>15</sup> It must be asked why derivatives are not regulated? How many massive financial collapses have to be attributed to these instruments before they are corralled? In this Article, I argue that derivatives may be beyond the reach of regulators. Because the decision to regulate is predicated, to a large extent, on the societal zeitgeist, and

8. See Lewis, *infra* note 10.

9. See, e.g., Brandon Becker & Jennifer Yoon, *Derivative Financial Losses*, 21 J. CORP. L. 215 (1996) (providing a detailed list of mid-1990s derivatives losses); Bryan H. Booth, *Prudence or Paranoia: Considering Stricter Regulation of the International Over-The-Counter Derivatives Market*, 5 DUKE J. COMP. & INT'L L. 499 (1995); Henry T.C. Hu, *Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Incrementalism*, 102 YALE L.J. 1457 (1993); Jerry W. Markham, "Confederate Bonds," "General Custer," and the Regulation of Derivative Financial Instruments, 25 SETON HALL L. REV. 1 (1994); Joseph L. Motes III, *A Primer on the Trade and Regulation of Derivative Instruments*, 49 SMU L. REV. 579 (1996); Lynn A. Stout, *Betting the Bank: How Derivatives Trading Under Conditions of Uncertainty Can Increase Risks and Erode Returns in Financial Markets*, 21 J. CORP. L. 53 (1996).

10. Michael Lewis, *How the Eggheads Cracked*, N.Y. TIMES MAG., Jan. 24, 1999, at SM24.

The most remarkable gurgling noises from last summer's panic came from the inner sanctums of finance. Treasury Secretary Robert Rubin said then that "the world is now experiencing its worst financial crisis in 50 years." . . . Alan Greenspan, the Federal Reserve Chairman, said that he had never seen anything in his lifetime that compared to the terror of August 1998.

*Id.*

11. See George Soros, *The Game Changer*, FIN. TIMES, Jan. 29, 2009, at 8.

12. Frank Partnoy, *Playing Roulette With the Global Economy*, N.Y. TIMES, Sept. 30, 1998, at A17 (quoting George Soros).

13. See Michael Lewis, *The End*, PORTFOLIO.COM, Nov. 11, 2008, <http://www.portfolio.com/news/markets/nationalnews/portfolio/2008/11/11/The-End-of-Wall-Street-Boom>.

14. Lewis, *supra* note 10.

15. Tracy Corrigan, *Survey of Derivatives*, FIN. TIMES, Oct. 20, 1993, at I ("ONLY three years into the decade, the 1990s are already being dubbed the decade of derivatives." (emphasis in original)).

because derivatives are contracts—a fundamental human activity—whose growth was fueled by popular demand, derivatives may not be regulable.”<sup>16</sup>

In Part I of this Article, I look at the reasons why case law cannot be an effective regulator. Parts II, III, and IV explore why derivatives cannot be regulated by calling them gambling, insurance, or securities. Part V explains why a clearinghouse solution would be equally ineffective. Finally, Part VI discusses the possibility of regulation by a new super financial regulator.

## I. USING THE COURTS AND CONTRACT CASE LAW TO REGULATE DERIVATIVES

The first thing to note about derivatives is that they are indisputably contracts.<sup>17</sup> They satisfy all of the common law requirements of contract

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16. Some commentators claim that derivatives were regulated prior to the passage of the Commodity Futures Modernization Act of 2000. *60 Minutes: Credit Default Swaps* (CBS television broadcast Oct. 27, 2008), available at <http://www.cbsnews.com/video/watch/?id=4546583n>.

However, this wasn't necessarily so: Prior to 2000, most derivatives were unregulated. See *The Commodities Futures Modernization Act of 2000: Hearing on S. 2697 Before the Comm. on Agriculture, Nutrition, and Forestry and the Comm. on Banking, Housing and Urban Affairs*, 106th Cong. 31 (2000) [hereinafter *Hearings on Commodities Act*] (comment of Lawrence Summers, Secretary, United States Department of the Treasury) (characterizing pre-CFMA derivatives regulation as an “an extremely remote risk [that a derivatives contract could be] . . . arbitrarily unwound [by regulators]”); Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling, and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375, 390 (2005); Allen D. Madison, *Derivatives Regulation in the Context of the Shingle Theory*, 1999 COLUM. BUS. L. REV. 271, 276 (1999) (“Indeed, most derivatives transactions fall into this category that is either devoid of regulation or subject to ill-defined regulation. These derivatives are called over-the-counter (‘OTC’) derivatives.”).

The [2000 Commodity Futures] Modernization Act sought to solidify changes that had been in the making for years. In the latter part of the twentieth century, there was erosion of the [Commodity Exchange Act's ability to regulate], due to increased use of forward contracts and swap transactions that were pigeon-holed into existing exemptions to the [Commodity Exchange Act].

Hazen, *supra*, at 390.

17. It is widely accepted that derivatives are contracts. See, e.g., JASON A. PEDERSEN, THE WALL STREET PRIMER: THE PLAYERS, DEALS, AND MECHANICS OF THE U.S. SECURITIES MARKET 203 (2009) (“[D]erivatives are contracts between two or more parties . . . .”); Bernard J. Karol, *An Overview of Derivatives as Risk Management Tools*, 1 STAN. J.L. BUS. & FIN. 195, 195 (1995) (“[D]erivatives’ . . . is generally used to describe contracts . . . .”). Further, many derivatives are documented using the ISDA Master Agreement. Bushan K. Jomadar, *The ISDA Master Agreement - The Rise and Fall of a Major Financial Instrument* 4-5 (Univ. of Westminster Sch. of Law, Working Paper, 2007), available at <http://ssrn.com/abstract=1326520>.

In the early days of the swaps market, active participants often developed their own in-house forms, with each differing from company to company. Lack of uniformity in definitions and basic terminology made negotiations difficult and time-consuming . . . .

. . . .

formation, such as offer, acceptance, consideration, statute of frauds, and so on.<sup>18</sup> So why not let the court system regulate them through case law in the same way they regulate other contracts?

#### A. DEFINITIONAL PROBLEM

The first challenge in regulating derivatives is definitional—when is a contract a derivative? In other words, which contracts are categorized as derivative contracts, requiring special regulation, and which are not? While there is no widely accepted definition of the term “derivative”, for illustrative purposes, the International Accounting Standards (IAS) definition is a good place to start. According to IAS No. 39, ¶ 9, a financial instrument or other contract<sup>19</sup> is considered a derivative if:

- (a) its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit ratings or credit index, or other variable, . . .
- (b) it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts . . . [that] have a similar response to changes in market factors; and
- (c) is settled at a future date.<sup>20</sup>

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The movement to develop standardized documents for general industry use received a major boost from the efforts of a small group of industry representatives who subsequently in 1985 organized themselves as ISDA . . . .

Today, in a typical derivatives transaction between a dealer and end-user, the dealer will provide its preferred form of master agreement (usually an ISDA agreement) to the counterparty soon after discussions have begun about a possible trade. The ISDA master agreement involves a preprinted master agreement (either local jurisdiction single currency or multicurrency-cross-border), a schedule, and a form of confirmation.

Generically, these three documents are often referred to together as an ISDA master. The schedule is used to make certain elections and any modifications (additions and deletions) to the standard terms in the preprinted form. Confirmations provide the specifics of each trade between the two parties. Together with various definitional booklets (incorporated by reference), these documents form a single agreement between the parties. If appropriate, credit support documents (guarantees and pledge agreements) are also annexed to the master agreement.

*Id.*

18. For the basic elements of contracts, see RESTATEMENT (SECOND) OF CONTRACTS (1981), § 17 (discussing the requirement of mutual assent and consideration for contract formation), § 22 (discussing how mutual assent can be satisfied by offer and acceptance), § 24 (defining offer), § 50 (defining acceptance), and § 110 (discussing the Statute of Frauds, which requires that certain contracts must be in writing to be enforceable).

19. The term “financial instrument” has a complex definition under accounting rules, but it includes contracts which give one the right to receive cash. FINANCIAL INSTRUMENTS: PRESENTATION, International Accounting Standard (IAS) No. 32, ¶ 11 (Int’l Accounting Standards Bd. 2008).

20. FINANCIAL INSTRUMENTS: RECOGNITION & MEASUREMENT, Int’l Accounting Standard (IAS) No. 39, ¶ 9 (Int’l Accounting Standards Bd. 2008). There is an additional qualifier to this

There are four general types of derivatives: (a) forward contracts—agreements to buy something at a specified price on a specified future date; (b) futures contracts—generic types of forward contracts executed at an exchange; (c) swap contracts—agreements to exchange future cash flows, where the amounts to be exchanged are based on a future variable; and (d) option contracts—agreements granting the holder the right, but not the obligation, to buy or sell something at a specified price on or before a specified future date.<sup>21</sup>

The above definition, however, may encompass every contract for which the remedy for nonperformance is monetary damages.<sup>22</sup> One could easily categorize every such contract in a contract law casebook as a derivative if they are defined as instruments whose value changes based upon a variable and which are settled at a future date.<sup>23</sup>

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definition in ¶ 9(a), which “provide[s] [that] in the case of a non-financial variable that the variable is not specific to a party to the contract . . . .” *Id.* However, this qualifier will be ignored, as it is only meant to exclude contracts already accounted for under IFRS 4 as insurance contracts. See IASPlus, Discussions at February 2007 ISAB Meeting (2007), <http://www.iasplus.com/ifric/ias39derivative.htm> (last visited Apr. 20, 2010) (summarizing the Board’s meeting). In general, the accounting community is struggling to define derivatives. See *infra* text accompanying note 23. In fact, the three element definition in IAS No. 39, ¶ 9 is incomplete because it excludes many of the exceptions listed in IAS No. 39. See, e.g., IAS No. 39, ¶ 2 (listing exceptions). For the purpose of this Article, I only mean to find a good starting point to illustrate the general problem in defining derivatives. See *infra* text accompanying note 23.

Furthermore, in this author’s opinion, IAS No. 39, ¶ 9(b), regarding initial investment requirements, is a vague and manipulable element that will be ignored for the purposes of this Article. In fact, there are derivative contracts that are designed to exactly mimic the initial investment and return of a stock or a bond. See Posting of Felix Salmon to Market Movers, <http://www.portfolio.com/views/blogs/market-movers/2008/11/28/understanding-synthetics> (Nov. 28, 2008, 14:20 EDT) (describing a typical synthetic transaction). To enter into this contract you pay the current price of the mimicked bond or stock, and in exchange you receive the exact same return as provided by the mimicked stock or bond. *Id.* These are called synthetic investments. *Id.*; see also *Hearings on Commodities Act*, *supra* note 16, at 14 (testimony of Lawrence Summers, Secretary, United States Department of the Treasury) (“[F]unctionally, through a total return swap, one can do something that is the equivalent of purchasing a share of stock.”).

21. See IAS Plus, Examples of Derivatives, <http://www.iasplus.com/standard/ias39.htm> (last visited Apr. 20, 2010) (summarizing IAS No. 39 and including additional information on derivatives and other financial instruments).

22. As opposed to non-monetary remedies, such as specific performance (i.e., requiring the other party to perform the act they were obligated to do under the contract). Please note, non-monetary remedies are a disfavored remedy and are only granted in rare circumstances. See, e.g., *Bowen v. Massachusetts*, 487 U.S. 879, 925 (1988) (“[E]ven though a plaintiff may often prefer a judicial order enjoining a harmful act or omission before it occurs, damages after the fact are considered an ‘adequate remedy’ in all but the most extraordinary cases.”). But see *DOUGLAS LAYCOCK, THE DEATH OF THE IRREPARABLE INJURY RULE 5–6* (1991) (arguing that courts grant non-monetary remedies more often than they did in the past).

23. IAS No. 39, ¶ 9. The accounting industry attempts to distinguish derivative from non-derivative contracts via the following language: “[Derivatives do not include] contracts that were entered into and continue to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the entity’s expected purchase, sale or usage requirements.” IAS No. 39, ¶ 5; see also DELOITTE TOUCHE TOHMATSU, FINANCIAL INSTRUMENTS: APPLYING IAS 32 AND IAS 39 32 (2001). Further, not every “contract that requires settlement at a future date in which neither party has performed” is a derivative. DELOITTE TOUCHE TOHMATSU, *supra*. “Normal

Take, for example, the famous contracts case of *Smith v. Hughes*.<sup>24</sup> Smith showed Hughes a sample of oats which Hughes mistakenly thought were oats fit for feeding a racehorse.<sup>25</sup> They entered into a contract for delivery of 40 quarters of such oats, at a set price.<sup>26</sup> After Smith delivered some of the oats, Hughes realized his mistake and refused to pay.<sup>27</sup> Because of the doctrine of caveat emptor, Hughes's mistake was immaterial, and so the contract gave Smith the right to recoup payment.<sup>28</sup>

This comports with the definition above. In Hughes's hands, the contract is worth nothing if Smith delivers oats that match the sample, but its value increases if Smith does not deliver the oats. In Smith's hands, the contract is worth nothing if Smith fails to make delivery, but its value increases if Smith does make delivery. Thus, the contract is an instrument whose value changes based upon a variable and which is settled at a future date.<sup>29</sup>

One could rewrite this contract using any number of derivative forms, but they would all have the same financial result. One can understand this contract as a forward—an agreement by Hughes to buy oats for a specified price on a future date. Alternatively, one can understand it as a swap—an agreement to exchange future cash flows. Hughes pays the purchase price in exchange for an amount which is the function of a variable—the variable being whether Smith delivers the oats. If delivery is made, Hughes gets zero. If delivery is not made, Hughes receives a sum of money in compensation. That sum of money could be the market value of oats on the delivery date, which Hughes could then use to purchase oats on the market. So, if they had agreed on a \$100 purchase price, Hughes would pay Smith \$100 on delivery. If the oats are not delivered, Smith would pay whatever extra Hughes requires to buy the oats on the market. If the open market oats cost \$110 on the delivery date, Smith would pay Hughes \$10.<sup>30</sup> Once one identifies the variables that trigger payment obligations under a contract, one can rewrite the contract as a derivative. Indeed, Hughes and Smith have the same intention as modern derivatives counterparties: the allocation of risk. Hughes transfers the risk of price increases to Smith, who, in exchange, transfers the risk of price decreases to Hughes.

If the courts were to create special rules for derivative contracts, how would they avoid applying those rules to other contracts? For example, the

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commitments to purchase and sell non-financial assets and regular-way purchase contracts that require delivery of a financial asset are not defined as derivatives under IAS 39." *Id.*

24. *Smith v. Hughes*, 6 L.R.Q.B. 597 (1871).

25. *Id.*

26. *Id.* at 597–98.

27. *Id.*

28. *Id.*

29. IAS No. 39, ¶ 9.

30. In the end Hughes would receive \$10 and then pay \$110 to purchase the oats on the market. The oats would cost him \$100, the originally agreed purchase price.

courts could refuse to enforce rights under a derivatives contract in which one has failed to previously set aside adequate capital to support one's obligations under the contract. The goal here would be to move such "freeloaders" out of the derivatives market by showing that courts will not enforce these types of contracts.<sup>31</sup> While this may be a sensible rule, it leaves open the question as to which types of contracts it would apply. Would all contracting parties now need to maintain capital to support their obligations?

Courts are currently struggling with this definitional problem. For example, in *CSX Corp. v. Children's Investment Fund Management*, Judge Kaplan stated that ownership of a total return swap derivative was equivalent to ownership of the underlying share for purposes of Securities and Exchange Commission (SEC) Rule 13d-3.<sup>32</sup> In that case, hedge funds purchased derivatives from brokers.<sup>33</sup> These derivatives mimicked the return of a stock.<sup>34</sup> The brokers then purchased that underlying stock to hedge their position.<sup>35</sup> When exercising their voting rights under the stock, the brokers were influenced by the hedge funds.<sup>36</sup> Thus, the hedge fund

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31. This author defines freeloaders as those who enter into derivatives contracts expecting to be paid if they win the bet, but who have neither the intention nor capital to pay if they lose. One might assume that freeloaders do not exist in a market because rational participants would not enter into a contract with a freeloader. In other words, before one enters into a contract they would make sure their counterparty has the capital to meet their obligations. However, there is controversy as to whether the market is able to set the correct capital requirements without government intervention. See Alan Greenspan, Chairman, Fed. Reserve, Remarks on Financial Derivatives Before the Futures Industry Association (Mar. 19, 1999), available at <http://www.federalreserve.gov/boarddocs/speeches/1999/19990319.htm>. But see Gary Gensler, Chairman, Commodities Futures Trading Comm'n, Remarks at the OTC Derivatives Reform Conference (Mar. 18, 2010), available at <http://www.cftc.gov/ucm/groups/public/@newsroom/documents/speechandtestimony/opagensler-35.pdf>. For example, Alan Greenspan believes capital requirements should be set by counterparties because capital requirements set by a regulator will be necessarily simplistic, thereby allowing sophisticated parties to manipulate them. Greenspan, *supra*.

Regulatory risk measurement schemes are simpler and much less accurate than banks' risk measurement models. Consequently, they provide banks with the motive and the opportunity to engage in regulatory arbitrage that seriously undermines the regulatory standard and frustrates the underlying safety and soundness objective. Specifically, they induce banks to reduce holdings of assets where risks and regulatory capital are overestimated by regulators and increase holdings of assets where risks are underestimated by regulators.

*Id.*

However, other regulators believe that the government needs to determine the amount of required capital. Gensler, *supra* ("Capital requirements are essential so that dealers – rather than the taxpayers – are on the hook for the risk they undertake in the derivatives markets.").

32. *CSX Corp. v. Children's Inv. Fund Mgmt. (UK) L.L.P.*, 562 F. Supp. 2d 511, 539–40 (S.D.N.Y. 2008), *aff'd*, 292 F. App'x 133 (2d Cir. 2008).

33. *Id.* at 531–32.

34. *Id.* at 524.

35. *Id.* at 521.

36. *Id.* at 526.



effectively owned the underlying share.<sup>37</sup> The hedge fund received the return of the underlying share, and effectively controlled how the share was voted.<sup>38</sup> For this reason, the court treated the hedge funds as owning the shares.<sup>39</sup>

Judge Kaplan has thus identified derivatives that require special regulation because they mimic stock ownership. It remains unclear, however, which contracts fall under Judge Kaplan's definition.<sup>40</sup> For example, what if the hedge funds sold a large number of "puts"<sup>41</sup> on the underlying shares, and these were sold to dealers, who, having avoided downside risk, purchased the underlying share and voted them based on instructions from the hedge fund? What if the hedge funds had purchased shares of an investment fund which held the underlying share, and again the investment fund voted the shares based on instructions from the hedge fund?<sup>42</sup> These questions illustrate the definitional problem. Furthermore,

37. *Id.* at 523–25.

38. *Id.* at 546.

39. *Id.* at 517.

40. Brief of Amici Curiae for International Swaps and Derivatives Ass'n, Inc. and Securities Industry and Financial Markets Ass'n at 3, *CSX Corp. v. Children's Inv. Fund Mgmt. (UK) L.L.P.*, 292 F. App'x 133 (2d Cir. 2008) (No. 08-3016) (arguing that Judge Kaplan's definition would create "substantial uncertainties for the equity derivatives and capital markets . . .").

41. A "put" is "[a]n option that conveys to its holder the right, but not the obligation, to sell a specific asset at a predetermined price until a certain date." DAVID L. SCOTT, *WALL STREET WORDS: AN A TO Z GUIDE TO INVESTMENT TERMS FOR TODAY'S INVESTOR* 295 (Houghton Mifflin Co. 3d ed. 2003) (1997).

42. This issue was recently litigated: In October 2008, Microchip Technology Inc. and ON Semiconductor Corp. offered to acquire the company Atmel. Jef Feeley & Phil Milford, *Atmel Defeats Court Challenge to 'Poison-Pill' Takeover Defense*, BLOOMBERG, May 20, 2009, <http://www.bloomberg.com/apps/news?pid=20601103&sid=ahGoAep3XKt8&refer=us>. However, "Atmel's board rejected that offer and amended the company's poison-pill plan to make it harder for potential suitors to use so-called derivative contracts to amass shares in a takeover fight." *Id.* Some of Atmel's shareholders, however, did not like this amendment. *Id.* On February 2, 2009, the shareholders sued for an injunction invalidating the new poison-pill language on the grounds that "the language of the Amendment regarding 'Derivatives Contracts' is unenforceably vague and the Individual Defendants' adoption of the Amendment constituted a breach of fiduciary duty." Atmel Corp., Current Report (Form 8-K), exhibit 99.2, at 4 (Nov. 17, 2009) [hereinafter Atmel 8-K].

One of the plaintiff's arguments was that it was unclear whether shares of an investment fund holding Atmel shares fell under this definition of derivative. See Defendants' Memorandum in Opposition to Motion for Injunctive Relief at 27, *In re Atmel Corp. S'holders Litig.*, No. 4161-CC (Del. Ch. Mar. 11, 2009) ("Equally unpersuasive is plaintiff's assertion that the definition of 'Derivatives Contract' is so vague as to potentially encompass an investment in a mutual fund or an exchange traded fund that holds Atmel common stock."). On May 19, 2009, the court ruled from the bench that the definition was not vague enough to meet the high standard of "fatally vague" required for an injunction. Akin, Gump, Strauss, Hauer & Feld L.L.P., *Corporate Alert: Top 10 Topics for Directors in 2010*, Dec. 21, 2009, at 1, 23 n.76, [http://www.akingump.com/files/upload/091218\\_Top\\_10\\_Topics\\_for\\_Directors\\_in\\_2010.pdf](http://www.akingump.com/files/upload/091218_Top_10_Topics_for_Directors_in_2010.pdf) [hereinafter Akin Gump]; see also Feeley & Milford, *supra*.

The judge, however, decided the case should proceed to trial regarding whether the language was vague enough to justify invalidating the amendment. Akin Gump, *supra*. A few months later Atmel settled the case, amending the poison pill language to narrow the definition of

here we are only trying to identify derivative contracts that equate to share ownership; imagine how hard it would be to identify contracts that are “derivatives” in general.

Possibly the most important thing to note about derivatives is that although they are characterized as unusual and bizarre creations,<sup>43</sup> they are simply contracts.<sup>44</sup> Parties enter into them for the same reason they have always entered into contracts—to allocate the risks posed by an uncertain future.<sup>45</sup>

## B. RESPONSIVENESS

Another problem with allowing the courts to regulate the derivatives industry is that courts do not act quickly.<sup>46</sup> Under the case law system, citizens may not know whether a derivative is legal until the arrangement sours and a party sues.<sup>47</sup> Only after a long appeals process may the question of a derivative’s legality be settled.<sup>48</sup> Furthermore, courts can only decide the cases before them.<sup>49</sup> They cannot monitor an entire industry and make changes on the fly.<sup>50</sup>

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derivative contracts to (a) exclude certain investment funds and (b) require that the contract make specific reference to the number of notional shares. *See* Atmel 8-K, *supra*, at 8–9.

43. Paul B. Farrell, *Derivatives Are the Kiss of Death*, MARKETWATCH.COM, Mar. 13, 2003, <http://www.marketwatch.com/story/derivatives-are-the-kiss-of-death> (stating “derivatives and their bizarre world”).

44. PEDERSEN, *supra* note 17; Karol, *supra* note 17.

45. *See* TOWNSEND WALKER, *MANAGING RISKS WITH DERIVATIVES* 4 (1996).

46. *See Hearings on Commodities Act*, *supra* note 16, at 24 (testimony of Lawrence Summers, Secretary, United States Department of the Treasury).

I basically share the impulses behind your question, Senator Kerrey. I do not think that waiting until particular lawsuits have wended their way through the courts is a good way to make public policy in this area. I think case-by-case litigation is probably, as a general proposition, a poor way to make public policy in this type of issue . . . .

*Id.* (responding to Sen. J. Robert Kerrey of Nebraska).

47. *See id.*

48. *See id.*

49. *See id.* at 25 (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System).

50. *Id.* The inability of courts to respond to a “rapidly evolving financial industry” is of particular concern. *Id.*

MR. GREENSPAN. Senator, I think, without commenting on the particular suit that you are raising, in this type of issue it is a mistake to leave it to the courts to decide. The reason basically is that what we are dealing with at this point is a changing economy and the changing necessary regulatory structure that would be required with it. . . .

. . . [I]t strikes me that it is terribly important when dealing with an issue such as this in a rapidly evolving financial industry that the Congress should address it from scratch in a sense, to take a look at it de novo and make judgments of an appropriate type to determine what is the structure because there is no way that the courts can do that; nor should they. They are there for a fundamentally different purpose and to abandon a decision of this nature to [the courts], in my judgment, is a mistake.

As described above, derivatives are contracts and the court system has the authority to regulate them.<sup>51</sup> While the judiciary could develop case law to address and fix the problems posed by derivatives, the courts are not ideally suited for this task.<sup>52</sup> But this is nothing new. There are many other types of contracts for which case law was deemed an insufficient regulator, such as gambling, insurance contracts, and securities.<sup>53</sup> Each of these approaches will be discussed next.

## II. REGULATING DERIVATIVES AS GAMBLING

The law has always struggled to distinguish legitimate risk taking from gambling. Because there is risk in every activity, every activity can be seen as a gamble. As such, society cannot ban all risk taking. At the same time, certain risk taking is considered harmful enough to be rightfully prohibited.<sup>54</sup> The question is where to draw the line? Generally, it is thought that society arrives at an answer through cultural negotiation.<sup>55</sup> There is no objective and timeless answer. Rather, society decides generation-by-generation, on a case-by-case basis, which risk taking behavior to prohibit and mark as “gambling” and which to allow.<sup>56</sup>

So, will contemporary society—which includes businesses—decide to categorize derivatives as a prohibited form of risk taking? The likelihood of that happening seems very slim. Today, large businesses use derivatives to hedge interest rates, currency, weather, and other risks.<sup>57</sup> This is thought to be beneficial because it allows them to focus on their core businesses.<sup>58</sup>

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SENATOR KERREY. I agree.

*Id.* (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System & Sen. J. Robert Kerrey of Nebraska).

51. *See supra* Part I.A.

52. *Hearings on Commodities Act*, *supra* note 16, at 25 (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System).

53. *See* RESTATEMENT (SECOND) OF CONTRACTS, *supra* note 18, § 178 cmt. a.

54. *See, e.g.*, CAL. BUS. & PROF. CODE § 19801 (West 2008) (“(a) State law prohibits commercially operated lotteries, banked or percentage games, and gambling machines [because] . . . (d) Unregulated gambling enterprises are inimical to the public health, safety, welfare, and good order.”).

For a compendium of state and federal gambling prohibitions, see National Gambling Impact Study Commission, Gambling Statutes Database, <http://govinfo.library.unt.edu/ngisc/reports/statutes.html> (last visited Apr. 9, 2010).

55. Roy Kreitner, *Speculations of Contract, or How Contract Law Stopped Worrying and Learned to Love Risk*, 100 COLUM. L. REV. 1096, 1137 (2000).

56. *Id.* (“[T]he conflict over what was gambling and what was allocation of risk was handled, and settled, not according to an analytical formula that successfully distinguished between them, but rather through a more complex and less decisive cultural negotiation and displacement of the question.”).

57. *See* Press Release, ISDA, Over 94% of the World's Largest Companies Use Derivatives to Help Manage Their Risks, According to ISDA Survey (Apr. 23, 2009), <http://www.isda.org/press/press042309der.pdf>.

58. *See generally* Jan Barton, *Does the Use of Financial Derivatives Affect Earnings Management Decisions?*, 76 ACCT. REV. 1 (2001).

Because derivatives are so engrained in modern business practice, it seems highly unlikely that society would prohibit them as gambling. The country went through a similar exercise in the 19th century, as it struggled to determine whether commodities trading constituted illegal gambling.<sup>59</sup> On the one hand, these contracts served the legitimate purpose of allowing producers to lock in prices.<sup>60</sup> On the other hand, some parties were using the contracts to speculate.<sup>61</sup> Ultimately, the country decided that commodity futures were too integral to commerce to be banned as gambling.<sup>62</sup>

But what about purely speculative derivatives (i.e., those entered into for reasons other than hedging)? What about the hedge fund who buys derivatives on energy, not to lock in prices for a key material used in manufacturing, but rather to speculate that energy will appreciate in value? What about the trader who buys credit default swap contracts on General Motors (GM), not because he holds GM bonds and wants to hedge his risk, but rather to speculate that GM will go out of business? Such speculators are not protecting against a business risk or any other risk to which they were previously exposed. They have no connection to the underlying assets—energy or GM’s profitability—except through the derivative. Thus, the argument that they need access to derivatives to manage their risks does not hold. Could society label that category of derivative transactions gambling?<sup>63</sup> This would be the equivalent of regulating derivatives as insurance, which is discussed next.

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59. See Kreitner, *supra* note 55, at 1102–13 (showing how between the late 1800s and the mid 1900s, such instruments went from being referred in court opinions as a “gigantic evil and blighting curse” to “necessary to the commerce of the people of the United States in their domestic interstate economy”) (quoting *Cothran v. Ellis*, 16 N.E. 646, 648 (Ill. 1888) and *Albers v. Lamson*, 42 N.E.2d 627, 630 (Ill. 1942)); see also J. Patrick Raines & Charles G. Leathers, *Financial Derivative Instruments and Social Ethics*, 13 J. BUS. ETHICS 197 (1994) (arguing that if the ethical precepts of the late 1800s prevailed today, modern derivative trading would be indicted as a form of gambling).

60. See Kreitner, *supra* note 55, at 1102–03 (discussing how people would enter into futures transactions to “prevent losses resulting from swing[s] in the price of the commodity”).

61. *Id.* at 1099–1102.

62. *Id.* at 1102–13.

63. Some commentators argue that these are the problematic derivatives that require regulation. See, e.g., James Rickards, *How Markets Attacked the Greek Piñata*, FIN. TIMES, Feb. 12, 2010, at 13.

For over 250 years, insurance markets have required buyers to have an insurable interest; another name for skin in the game. . . .

. . . .

. . . .

Until the [credit default swap] market is confined to buyers who have an underlying interest in the risk being covered, and sellers who are regulated as insurance companies with adequate reserves, this market will remain a reckless enterprise bent on arson.

*Id.*

### III. REGULATING DERIVATIVES AS INSURANCE

Insurance is a form of risk taking that society finds acceptable. Law distinguishes insurance from gambling by using the concept of “insurable interest.”<sup>64</sup> For an interest to be insurable “there must be some significant relationship between the insured and the person, the object, or the activity that is subject to the risks covered by the insurance arrangement.”<sup>65</sup> Without an insurable interest an insurance contract is void.<sup>66</sup>

Absent this requirement, insurance contracts could devolve into the sort of risk taking of which society disapproves. For example, before the insurable interest requirement was established, people would gamble on the lives of public figures and other events by purchasing insurance.<sup>67</sup> The requirement solved this problem as, for instance, a speculator could no longer purchase “graveyard” insurance on the life of a stranger she thought would pass away because she lacks an insurable interest in the stranger’s

64. ALAN I. WIDISS, *INSURANCE: MATERIALS ON FUNDAMENTAL PRINCIPLES, LEGAL DOCTRINES AND REGULATORY ACTS* 123 (1989); see also Franklin L. Best, Jr., *Defining Insurable Interests in Lives*, 22 *TORT TRIAL & INS. PRAC. L.J.* 104, 105 (1986).

65. *Id.* at 123.

66. 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).

No contract or policy of insurance on property made or issued in this state, or made or issued upon any property in this state, shall be enforceable except for the benefit of some person having an insurable interest in the property insured. In this article, “insurable interest” shall include any lawful and substantial economic interest in the safety or preservation of property from loss, destruction or pecuniary damage.

N.Y. INS. LAW § 3401.

67. VIVIANA A. ROTMAN ZELIZER, *MORALS AND MARKETS: THE DEVELOPMENT OF LIFE INSURANCE IN THE UNITED STATES* 68–69 (1979); Lorraine J. Daston, *The Domestication of Risk: Mathematical Probability and Insurance 1650–1830*, in 1 *THE PROBABILISTIC REVOLUTION: IDEAS IN HISTORY* 237, 244 (Lorenz Krüger et al. eds., 1990).

London underwriters issued policies on the lives of celebrities like Sir Robert Walpole, the success of battles, the succession of Louis XV’s mistresses, the outcome of sensational trials, the fate of 800 German immigrants who arrived in 1765 without food and shelter, and in short served as bookmakers for all and sundry bets.

Daston, *supra*, at 244.

In the minds of many, life insurance was simply a new speculative fund-raising device to substitute the floundering lotteries and the unsuccessful tontines. Its alleged lottery spirit became a major source of prejudice against it, forcing life insurance advocates to insist upon the differences between the two. . . .

The history of life insurance reinforced the credibility of these accusations. Early forms of life insurance were outright bets on human lives. . . . In eighteenth-century England, insurance and wagering went hand in hand, and it has been alleged that no form of gambling became “so varied, so universal, so wasteful or so demoralizing” as insurance.

ROTMAN ZELIZER, *supra*, at 68–69 (citation omitted).

life.<sup>68</sup> Furthermore, the insurable interest concept has the added benefit of dissuading policyholders from destroying the thing insured so as to collect the insurance proceeds.<sup>69</sup>

So would carrying this concept into derivatives regulation have prevented the financial crises allegedly caused by derivatives? The answer seems to be “No.” Many of the derivative contracts thought to be responsible for the recent crisis were held by parties with insurable interests.<sup>70</sup> For example, after weaving through the complicated Collateralized Debt Obligation (CDO) structure, one finds that the “super senior”<sup>71</sup> insurers, such as AIG,<sup>72</sup> were the only parties with naked exposure.<sup>73</sup> The intermediaries in between were doing “negative basis” trades in which they would both write protection and purchase offsetting protection at the same time.<sup>74</sup> Market intermediaries did not speculate on

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68. ROTMAN ZELIZER, *supra* note 67, at 70 (“Another form of gambling with life, known as ‘graveyard insurance,’ briefly flourished in the United States in the early 1880s with speculators insuring the lives of old people, preferably paupers who were likely to die soon.”).

69. *See, e.g.,* Teague-Strebeck Motors, Inc. v. Chrysler Ins. Co., 1999-NMCA-109, 127 N.M. 603, 613, 985 P.2d 1183, 1193 (N.M. Ct. App. 1999).

The second rationale—avoiding inducements to destruction of insured property—recognizes the problem of “moral hazard.” If one’s financial well-being would be enhanced by the loss of property rather than its preservation, there would be a temptation to destroy the property or, at least, to fail to take reasonable precautions to protect the property. This moral hazard arises whenever one can obtain insurance coverage on property for more than the property is worth to the insured. Given current societal attitudes toward gambling, the moral-hazard concern appears to be the stronger peg on which to hang the insurable-interest doctrine today.

*Id.*

Note, policyholders are also dissuaded from destroying property to collect the insurance proceeds by the “fortuitousness” requirement, which states that insurance is only paid for damage caused by a fortuitous event, and not for something intentionally inflicted. *Compagnie des Bauxites de Guinee v. Ins. Co. of N. Am.*, 724 F.2d 369, 371 (3d Cir. 1983).

70. *See* sources cited *infra* note 74.

71. “Super senior” refers to super senior tranche, which is defined “as the layer of credit risk senior to a risk layer that has been rated AAA by the credit rating agencies, or if the transaction is not rated, equivalent thereto.” William K. Sjostrom, Jr., *The AIG Bailout*, 66 WASH. & LEE L. REV. 943, 955 (2009) (citing AIG, 2007 ANNUAL REPORT (FORM 10-K) 11 (Feb. 27, 2008)).

But, note that this was arguably an illusory rating, as the practice of tranching could create AAA rated securities from low-rated assets. *Id.* at 955 n.73 (“[A] BBB-rated corporate bond portfolio could be tranching so that 90% of the debt securities would be rated AAA.” (citing ARVIND RAJAN ET AL., *THE STRUCTURED CREDIT HANDBOOK 2* (2007))).

72. “AIGFP’s CDS business consisted largely of selling protection on ‘super senior risk tranches of diversified pools of loans and debt securities.’” *Id.* at 952 (citing AIG, 2007 ANNUAL REPORT (FORM 10-K) 11 (2008), available at <http://idea.sec.gov/Archives/edgar/data/5272/000095012308002280/y44393e10vk.htm>).

73. *See* Exhibit 1; *see also* ISDA, AIG and Credit Default Swaps 1 (Nov. 2009) (unpublished discussion paper), [http://www.isda.org/c\\_and\\_a/pdf/ISDA-AIGandCDS.pdf](http://www.isda.org/c_and_a/pdf/ISDA-AIGandCDS.pdf) (“AIG was unique among large credit default swaps participants in that it ran a ‘one way’ book consisting almost entirely of sold protection; credit default swap dealers, in contrast, maintain ‘matched books’ that balance sold with bought protection so net exposure is low.”).

74. *See, e.g.,* Gretchen Morgenson & Louise Story, *Testy Conflict With Goldman Helped Push A.I.G. to Precipice*, N.Y. TIMES, Feb. 7, 2010, at A1, available at <http://www.nytimes.com>

the underlying risk, but rather made money by purchasing protection and then writing that same protection for a higher amount.<sup>75</sup>

This can best be illustrated via an example.<sup>76</sup> Imagine Sam wants to buy insurance on a bond he owns. This insurance would pay him any lost principal and interest payments if the bond defaults.<sup>77</sup> He goes to an insurance company and buys this coverage. This is fine, as Sam has an insurable interest in his bond.<sup>78</sup> After selling protection to Sam, the insurance company buys protection from a hedge fund to cover its position.<sup>79</sup> This is also fine because the insurance company has an insurable interest (its obligation to Sam).<sup>80</sup> This chain continues until there are ten

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/2010/02/07/business/07goldman.html (“In many of these deals, Goldman was trading for other parties and taking a fee. As the mortgage market declined, Goldman paid some of these parties while waiting for A.I.G. to meet its demands, the Goldman spokesman said.”); *see also* EUROPEAN UNION COMMITTEE, THE FUTURE OF EU FINANCIAL REGULATION (VOLUME II: EVIDENCE), Report, 2008-9, H.L. 106-II, at 2 [hereinafter EUROPEAN UNION TESTIMONY] (testimony of Lee C. Buchheit) (“Many institutions that operate in [the derivatives] market will run what they call matched books, which is to say that they will not pay protection on a certain debtor without trying to buy corresponding—congruent is the theory—protection from someone else”); Peter J. Wallison, *Everything You Wanted to Know about Credit Default Swaps—But Were Never Told*, FIN. SERVICES OUTLOOK (Am. Enter. Inst. for Pub. Policy Research, Washington, D.C.), Mar. 2008, at 1, 7, *available at* [http://www.aei.org/docLib/20090107\\_12DecFSOg.pdf](http://www.aei.org/docLib/20090107_12DecFSOg.pdf) (“Dealers typically carry matched books, which means that they hedge their risks by entering offsetting CDSs.”).

75. *See* Moorad Choudhry, *The Credit Default Swap Basis: Illustrating Positive & Negative Basis Arbitrage Trades*, YIELDCURVE.COM, July 2006, at 1, 7–12, [http://www.yieldcurve.com/Mktresearch/files/Choudhry\\_BasisTrade\\_Jul06\\_Logo.pdf](http://www.yieldcurve.com/Mktresearch/files/Choudhry_BasisTrade_Jul06_Logo.pdf) (“In the event of a negative basis condition, the potential arbitrage is to buy the basis, that is, to buy the bond and buy protection on the same reference name.”).

76. The example that follows is sometimes called a “daisy chain” of obligations. Wallison, *supra* note 74, at 3 (diagramming a similar example in Figure 1).

77. *Id.*

78. WIDISS, *supra* note 64 (Sam has a “significant relationship” with the bond because he owns it and thus will suffer a pecuniary loss if it defaults.).

79. *See* Wallison, *supra* note 74. When an insurance company buys coverage to protect against risk created by the prior issuance of insurance coverage, it is called “reinsurance.” Investopedia, Definition of Reinsurance, <http://www.investopedia.com/terms/r/reinsurance.asp> (last visited Apr. 21, 2010).

80. *See* WIDISS, *supra* note 64. The reader may wonder why Sam buys a bond and then buys insurance on that bond. Similarly, why does the insurance company both sell protection to Sam and buy that exact same protection from another party? The reason is that both Sam and the insurance company are selling protection for more than it cost to buy the protection, and thus making a profit on the spread. *See* Wallison, *supra* 74, at 3–4. To illustrate this, I have provided numerical examples below.

Imagine that XYZ company issues a one-year \$1 million bond paying 5% interest. To simplify the numbers, assume that both inflation and the risk-free rate of return are zero. So if Sam wants to attain a return above inflation, without any risk of loss, then he can only earn 0%. Now imagine that an insurance company will insure the bond for only 4% of the bond’s face value. Assume that Sam believes the insurance company has zero risk of defaulting. If Sam both invests in the bond and buys insurance on the bond, then he will earn a 1% risk-free return. At the end of the year, he is certain to receive \$1,050,000, and this only cost him \$1,040,000 (\$1 million for the bond plus \$40,000 for the insurance). Thus, Sam is left with what he believes is a risk-free \$10,000 profit, or 1% of the \$1 million he invested. Of course, this return is not risk-free because

such contracts. The parties involved are Sam, the insurance company, and nine hedge funds. If Sam's bond defaults, hedge fund 9 will pay hedge fund 8, which will pay hedge fund 7 and so forth down the line, all the way to the

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the insurance company may default, but Sam perceives it to be risk-free and so has reason to make the trade.

Another way to describe this is to state that Sam is buying a product and selling it for a higher price. This is no different than what one sees in other segments of the economy, from fruit stores buying strawberries from farms and selling them for a higher price to customers, to professional services firms buying employees' services and selling them for higher prices to their clients. So what product is being purchased and sold here? This product can be viewed as insurance on the company's operations. When Sam buys the company's bond, he is in effect insuring XYZ's operations for a fee. The fee—or "insurance premium"—Sam receives is the interest rate provided by the bond, and the amount of coverage he provides is the face value of the bond plus the fee. Sam is, therefore, providing \$1,050,000 of insurance on the company's operations, for a \$50,000 fee to be paid at the end of the year. If the company succeeds, Sam receives \$50,000 for the insurance he provided. If the company fails, Sam receives the \$50,000 fee and pays a claim of \$1,050,000 (he loses the \$1 million he paid for the bond). Playing with this perspective a bit more, when a business issues a bond they are in effect purchasing coverage on their operations for a fee. So from this perspective, Sam sold XYZ insurance for \$50,000, and then purchased that same insurance for \$40,000. Because Sam doesn't perceive any risk of default by the insurance company, he has locked in a \$10,000 profit. Then, perhaps, the insurance company will find someone willing to provide this coverage for only \$35,000. Now the insurance company will buy that coverage and lock in a perceived \$5,000 profit.

To carry this example further, imagine that a month after Sam buys coverage from the insurance company, XYZ's fortunes change. The XYZ bond now has a greater risk of default and the insurance company changes the price they charge to insure it. Now it requires \$80,000 for the coverage. This is the same coverage they previously sold to Sam for \$40,000, but now it costs more because circumstances have changed. At this time, another party is willing to sell coverage on the XYZ bond for only \$70,000. The insurance company will buy this coverage, even though they are paying \$70,000 for something they sold for only \$40,000 to Sam. This is because they believe the coverage should cost \$80,000, and so it makes sense to buy it for \$70,000.

The hypotheticals above are a few examples of situations in which a party has reason to buy and sell the exact same coverage. The above trades are sometimes called "negative basis" trades. MOORAD CHOUDHRY, *THE CREDIT DEFAULT SWAP BASIS* 132–37 (2006) (providing a detailed explanation of such trading).

This section ends with one last example, which may illustrate a cause of the financial crisis. Imagine that Sam buys a large pool of low-rated bonds (bonds with a relatively high likelihood of default). See Investopedia, *Definition of Bond Rating*, <http://www.investopedia.com/terms/b/bondrating.asp> (last visited Apr. 21, 2010). Next, imagine that Sam combines and then slices these bonds, and turns them into a new set of bonds that somehow have a higher rating than the bonds that went into his stew. See, e.g., RAJAN ET AL., *supra* note 71, at 2. Since these new bonds have a higher rating, it will cost less to insure them. To provide numbers, perhaps Sam is earning 12% (\$120,000) on these junk bonds, but insuring them for only 5% (\$50,000). Sam's financial engineering provided him a \$70,000 profit. How could Sam improve the credit rating assigned to bonds simply by combining them and then tranching them into a new set of bonds? This was a well reported phenomenon. *Id.* (discussing how BBB rated bonds could be combined and "tranching so that 90% of the [debt securities] constructed would likely be rated AAA"); Elliot Blair Smith, *Bringing Down Wall Street as Ratings Let Loose Subprime Scourge*, BLOOMBERG, Sept. 24, 2008, <http://www.bloomberg.com/apps/news?pid=20601109&sid=ah8391WTLP9s> ("S&P outlined the alchemy of structured finance in a March 2002 paper for clients entitled 'Global Cash Flow and Synthetic CDO Criteria.' . . . [T]he authors said 'the goal' was to create a capital structure with a higher credit rating than the underlying assets would qualify for without financial engineering.").



insurance company which pays Sam.<sup>81</sup> Since the intermediaries are both receiving payment and making an equivalent payment, they have no exposure.<sup>82</sup> The only party with naked exposure is the last party in the chain—hedge fund 9.<sup>83</sup>

Because there are now ten contracts, the total, or “notional,” amount of protection is now ten times that purchased originally by Sam.<sup>84</sup> This example illustrates how the notional value of outstanding derivative contracts can explode. And indeed, the total amount of risk has increased. Although the intermediaries have seemingly covered themselves by entering into offsetting positions, they are still exposed to the risk of their counterparty defaulting.<sup>85</sup> Imagine that every third person in this chain is Lehman Brothers (Lehman), and the same economic forces that caused the underlying bond to default also caused Lehman to go out of business.<sup>86</sup>

81. See Wallison, *supra* note 74, at 4.

82. See *id.*

83. *Id.* A real world chain may be one where a hedge fund buys the bond, and then purchases coverage from an investment bank, who then buys coverage from an insurance company. But for the purposes of this section, the identity of the parties does not matter. This example seeks only to illustrate a chain of parties buying and selling protection.

84. Wallison, *supra* note 74, at 3 (“The amount of protection . . . purchas[ed] is called the ‘notional amount.’”). But see *Enhancing Investor Protection and the Regulation of Securities Markets: Hearing Before the Comm. On Banking, Housing, and Urban Affairs*, 111th Cong. (2009) [hereinafter *Hearings on Investor Protection*] (statement of Robert Pickel, Executive Director and Chief Executive Officer, International Swaps and Derivatives Association).

While using notional amount as a measurement tool for the size of the privately negotiated derivatives business has its benefits, it also has a major drawback. Notional amount greatly overstates the actual exposure represented by the CDS business. One reason for this is because a seller of protection often seeks to hedge its risk by entering into offsetting transactions. Using the example above, if the counterparty that sold \$10 million of protection wished to hedge its risk and buy protection, it too would enter into a \$10 million CDS contract. Thus, there are now two CDS contracts outstanding with a total notional amount of \$20 million. The reality is, however, that only \$10 million is at risk.

*Hearings on Investor Protection, supra*, at 130.

85. Wallison, *supra* note 74, at 3 (“[E]ach of the parties in the chain has two distinct risks—that its counterparty will be unable to perform its obligation either *before or after* A defaults.”).

86. EUROPEAN UNION TESTIMONY, *supra* note 74, at 2 (testimony of Lee C. Buchheit).

**Q5 Lord Browne of Madingley:** Going back to credit default swaps, did they contribute to the financial crisis that we have today? If so, in what way?

**Mr. Buchheit:** They contributed in this sense. First, they did not cause it, by any means. If you think about the risks of a credit default swap, the first risk is that the underlying borrower goes into default, and that is, of course, the risk that the seller takes. But there is a second risk. Many institutions that operate in this market will run what they call matched books, which is to say that they will not pay protection on a certain debtor without trying to buy corresponding—congruent is the theory—protection from someone else. Therefore, at any given time, the prospect that the underlying borrower may not perform has been hedged, because it is true they will pay out to their buyer but they will collect from their seller. *The fly in the buttermilk as it relates to that scenario is one in which the institution for whom they have bought this offsetting protection itself*

Three parties in this chain were relying on Lehman for coverage, but they now have to take a loss. Restating the payment chain under this scenario, hedge fund 9 pays hedge fund 8, which pays hedge fund 7 (Lehman), but then Lehman doesn't pay hedge fund 6. This causes a loss to hedge fund 6. Hedge fund 6 still has to pay hedge fund 5, which pays hedge fund 4 (Lehman), but again Lehman doesn't pay hedge fund 3, causing another loss. Then, hedge fund 3 pays hedge fund 2, which pays hedge fund 1 (Lehman), but Lehman does not pay the insurance company, causing the insurance company a loss. Originally, only one person, Sam, would have taken the loss as a result of the bond defaulting, but now three parties will take losses.<sup>87</sup>

Since all the parties above had an insurable interest, requiring one would not have solved the problem. If such trading was, in fact, responsible for the financial crisis, an insurable interest requirement would not have prevented it. In fact, some of the key culprits, the monoline insurers, participated in the market by writing financial guaranty insurance contracts.<sup>88</sup>

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*goes bankrupt, and then you have a situation in which a matched book suddenly becomes unmatched. This was, of course, one of the consequences of the failure of Lehman or the failure of any large institution that does business in this. Even though you may have been scrupulous in ensuring that the sale and purchase of credit default swap protection was utterly congruent—congruent in terms of its term, the reference entity, the deliverable obligations, the credit events—that all of that contractual material was absolutely congruent—one morning you wake up to find that the seller to you had disappeared from the scene and therefore you are now exposed on one side of the aspect.*

*Id.* at 2–3 (emphasis added).

87. A clearinghouse system would solve this problem, but may create equally insuperable obstacles. *See infra* text accompanying note 109.

88. *See, e.g., Buddy, Could You Spare Us \$15 Billion?; Bond Insurers*, THE ECONOMIST, Jan. 26, 2008, at 82.

Though themselves no giants, monolines have guaranteed a whopping \$2.4 trillion of outstanding debt. The two largest, MBIA and Ambac, cut their teeth “wrapping” municipal bonds, in effect, renting their AAA rating to the securities for a fee. For a long time this business, though staid, was nicely profitable.

But, as competition grew, the monolines—with two honourable exceptions, FSA and Assured Guaranty—were seduced by the higher returns of structured finance, especially the stuff involving subprime mortgages . . . . As mortgage delinquencies rose, so did paper losses. Ambac and MBIA wrote assets down by a combined \$8.5 billion in the past quarter.

*Id.*

Monoline insurers are insurance companies that insure only financial products. Investopedia, Definition of Monoline Insurance Company, <http://www.investopedia.com/terms/m/monolineinsurance.asp> (last visited Apr. 21, 2010). The name “monoline” comes from the fact that they can only insure one line of business. *See* N.Y. INS. LAW § 6902(a)(1) (McKinney 2008) (“[A] corporation organized for the purpose of transacting financial guaranty insurance may . . . be licensed to transact only the following additional kinds of insurance . . . [residual value insurance, surety insurance, and credit insurance] . . .”).

It would be helpful, at this time, to summarize the preceding two sections. Part II discussed how one cannot ban derivatives used by businesses to hedge their operational risks. But this does not explain why one cannot stop speculators from entering into derivative arrangements. Part III proceeded to discuss how many of the trades thought to be the work of speculators are, in fact, done by parties who are not speculating on the underlying risk. Thus, the main tool for regulating speculators, the insurable interest requirement, would not diminish such trading. But this still does not address speculators—those who are not protecting against a business risk, and who have no insurable interest. Is there any reason not to ban them from the derivatives market? While this Article will not address the question exhaustively, a few problems are apparent from the outset. First, it will be difficult to carve out this sub-group. The term insurable interest is vague.<sup>89</sup> The business exposure requirement is similarly indistinct.<sup>90</sup> Second, and possibly more importantly, such speculators are thought to be necessary to a well-functioning market.<sup>91</sup> They add liquidity to the

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Please note that New York State recently debated whether to disallow their insurance companies from insuring some structured bonds. *The New York State Insurance Department's Regulatory Role in Light of Bond Insurance Crisis: Before the New York State Assembly*, 2008 Leg., 231st Sess. (2008) (statement of Eric Danillo, Superintendent of Insurance), <http://www.ins.state.ny.us/speeches/pdf/dinallo03-14-08.pdf>.

The CDO squared bonds are made up of middle or mezzanine tranches of the CDO asset-backed securities and are also sold in tranches. . . . At this point there have been two levels of tranching, and it becomes much more difficult to accurately determine the risk of these securities.

We are considering whether bond insurers should be prohibited from guaranteeing CDO squareds.

*Id.*

89. GRAYDON S. STARING & CHRISTOPHER P. STARING, LAW OF REINSURANCE § 6:1 (Supp. 2009) (“In limited space we can talk around insurable interest but never talk it through. A standard text confesses that ‘[i]t is very difficult to give any definition of an insurable interest,’ and then discusses it for about 70 pages.” (citation omitted)).

90. Although it is not clear how such a standard would be applied in regulating derivatives, other areas of the law generally read business purpose very broadly. See Stephen M. Bainbridge, *The Business Judgment Rule as Abstention Doctrine*, 57 VAND. L. REV. 83, 88–90 (2004). For example, under the “business judgment rule” doctrine, a corporation’s board of directors is given tremendous leeway in determining whether a decision has a business purpose. *Id.*

[I]f the business judgment rule does anything, it insulates directors from liability for negligence. The rule does so by providing a presumption that the directors or officers “of a corporation acted on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the company.” As a result, even clear mistakes of judgment will not result in personal liability.

*Id.* at 88–89 (citations omitted).

91. See *Ending Excessive Speculation in Commodity Markets: Legislative Options: Hearing Before the Sen. Comm. on Homeland Security & Governmental Affairs*, 110th Cong. (2008) (unpublished prepared statement of James J. Angel, Ph.D.).

marketplace, accept risks that no one else may be willing to accept, and add to the information content of the marketplace.<sup>92</sup>

#### IV. REGULATING DERIVATIVES AS SECURITIES

After the Great Depression, policymakers debated two different approaches to securities regulation.<sup>93</sup> The first approach, merit regulation, would have had a regulator review the substance of every security offering and decide which ones would be allowed or prohibited.<sup>94</sup> The idea was that the regulator would know which were good investments and which were not.<sup>95</sup> Under the second approach, disclosure regulation, the regulator did not care about the substance of the investment,<sup>96</sup> but only whether sufficient information was disclosed such that the other party could make an informed decision on the investment's merits. The nation ultimately chose disclosure-based regulation,<sup>97</sup> believing that "sunlight is the best disinfectant."<sup>98</sup>

But was lack of disclosure the root problem in the current crisis? It is hard to imagine an investment firm's highly educated and talented professionals claiming that they were misled or deceived. They were sophisticated enough to know what questions to ask their counterparties. The problem was not a lack of information.<sup>99</sup>

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**First, speculators add liquidity to the market.** Their willingness to buy or sell based only on price makes it much easier and cheaper for hedgers to hedge when they need to. When the order from a pure hedger arrives at the market, chances are there is not an exactly opposite counter-order from another hedger waiting to trade with it. For example, when the farmer goes to sell wheat in advance with a futures contract, chances are there is not a buy order waiting there from a flour mill. The speculators help to fill in the gaps. They profit by providing a smoothing service . . . .

**Second, speculators bring risk-bearing capacity to the markets . . . .**

. . . .

**Third, speculators bring their information to the market.**

*Id.* (emphasis in original).

92. *Id.*

93. Hazen, *supra* note 16, at 382 ("Congress debated but rejected a merit approach to regulation that would examine the substance of the investment product being offered and sold.").

94. *Id.* at 382–83 n.19 ("Merit regulation is a regulatory system under which a securities administrator has the power to evaluate the merits of an investment before allowing it to be sold.").

95. *See id.* at 383.

96. Paula J. Dalley, *The Use and Misuse of Disclosure as a Regulatory System*, 34 FLA. ST. U. L. REV. 1089, 1098 (2007).

97. *See* Securities Act of 1933, ch. 38, 48 Stat. 74 (codified as amended at 15 U.S.C. §§ 77a–77aa (2006)).

98. Hazen, *supra* note 16, at 383 (quoting LOUIS D. BRANDEIS, *OTHER PEOPLE'S MONEY* ch. 5 (1914) ("The focus of disclosure was based on the determination that 'sunlight is the best disinfectant.'")).

99. *See* Markham, *supra* note 9, at 41 ("[T]he SEC style regulation for broker-dealers that deal with the public seems unnecessary. Institutional investors simply do not need such a protective

While there may be no benefit to regulating the information coming from derivative counterparties, what about the information from independent third parties, such as rating agencies? Rating agencies have taken a lot of the blame for the current crisis.<sup>100</sup> The rating industry suffers from a systemic flaw: agencies can make more money by copying each other's ratings than by making accurate ratings.<sup>101</sup> There are also a host of other concerns including conflicts of interest and poor methodologies.<sup>102</sup> The SEC could address these problems by regulating third party rating agencies. In this author's opinion, the only way to regulate the agencies effectively would be to judge the merits of the ratings themselves. So long as regulators do not judge their ratings, they can shield themselves by copying each other and pointing to the lack of an opposing viewpoint. However, judging the merit of a rating means determining the merit of the underlying investment, effectively turning the SEC into a merit-based

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and expensive regulatory shield. They have the ability to manage their own risks. A different regulatory model, therefore, appears appropriate.”).

100. See, e.g., Posting of Cyrus Sanati to DealBook Blog, <http://dealbook.blogs.nytimes.com/2009/02/12/greenspan-says-he-was-mystified-by-subprime-market/> (Feb. 12, 2009, 07:50 EST) (New York Times website blog edited by Andrew Ross Sorkin) (“Mr. Greenspan also lays the blame on the ratings agencies and the people that trusted their judgment for the proliferation of the mortgage derivatives that were a major part of the current financial crisis.”).

101. Robert C. Merton & Zvi Bodie, *On the Management of Financial Guarantees*, FIN. MGM'T, Winter 1992, at 87, 93 n.21.

Even with the so-called “reputation” effect, the incentives of the rating agencies can be such that it may be more important to them to produce essentially the same forecasts (ratings) as their competitors than to be accurate in their forecasts. . . . [A] rating agency that produces a correct prediction when its competitors are wrong may stand to gain less than it stands to lose by producing an incorrect prediction when its competitors are right.

*Id.* at 93 (analogizing to herding behavior studies done by Bengt Holmstrom & Joan Ricart i Costa, *Managerial Incentives and Capital Management*, 101 Q.J. ECON. 835, 835–60 (1986) and David S. Scharfstein & Jeremy C. Stein, *Herd Behavior and Investment*, 80 AM. ECON. REV. 465, 465–79 (1990)); see also Elliot Blair Smith, ‘Race to Bottom’ at Moody’s, *S&P Secured Subprime’s Boom, Bust*, BLOOMBERG, Sept. 25, 2008, [http://www.bloomberg.com/apps/news?pid=20601109&sid=ax3vfya\\_Vtdo#](http://www.bloomberg.com/apps/news?pid=20601109&sid=ax3vfya_Vtdo#).

In August 2004, Moody’s Corp. unveiled a new credit-rating model that Wall Street banks used to sow the seeds of their own demise. The formula allowed securities firms to sell more top-rated, subprime mortgage-backed bonds than ever before.

A week later, Standard & Poor’s moved to revise its own methods. An S&P executive urged colleagues to adjust rating requirements for securities backed by commercial properties because of the “threat of losing deals.”

Smith, *supra*.

102. Roger Lowenstein, *Triple-A Failure*, N.Y. TIMES MAG., Apr. 27, 2008, at 36 (providing an exhaustive critique of the ratings industry, from their alleged conflicts of interest, to their excessive use of inaccurate models).

regulator. As described earlier, this was not a role envisioned for the SEC.<sup>103</sup>

## V. USING A CLEARINGHOUSE

One proposed solution to the problem of derivatives is to require all such contracts to be executed at a clearinghouse.<sup>104</sup> A clearinghouse would work as follows: As soon as two parties enter into a derivatives contract, a new counterparty (the clearinghouse) would interject itself between them. The two parties would no longer have a contract with each other, but rather each would have a contract with the clearinghouse.<sup>105</sup> The clearinghouse's credit would be backed by its members.<sup>106</sup>

One of the biggest benefits of the clearinghouse is that its netting feature would solve the problem in the example described in Part III.<sup>107</sup> In that example, Sam, the insurance company, and hedge funds repeatedly wrote coverage and purchased offsetting coverage, which increased the

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103. Hazen, *supra* note 16, at 382–83. However, it should be noted that Europe has experimented with new ways of regulating agencies and became “the world’s most stringent regulator” of such agencies. Knowledge@Wharton.com, *Reforming the Ratings Agencies: Will the U.S. Follow Europe’s Tougher Rules?*, May 27, 2009, <http://knowledge.wharton.upenn.edu/article.cfm?articleid=2242>.

[N]ew EU regulations require credit rating agencies operating in Europe to register with the Committee of European Securities Regulators (CESR) and comply with rigorous rules . . . which state that the agencies:

May not provide advisory services.

Must disclose the models, methodologies and key assumptions upon which ratings are based.

Must differentiate the ratings of complex products with a specific symbol.

Must publish an annual transparency report.

Must have at least two directors on their boards whose salary does not depend on the ratings agency's business performance.

Must create an internal function to review the quality of their ratings.

*Id.*

104. Edmund L. Andrews & Louise Story, *U.S. to Detail Plan to Rein in Finance World*, N.Y. TIMES, Mar. 26, 2009, at A1 (“The administration would require that all standardized derivatives be traded through a regulated clearinghouse.”).

105. Craig Pirrong, *The Clearinghouse Cure*, REG. MAG., Winter 2008–09, at 44, 46, available at <http://www.cato.org/pubs/regulation/regv31n4/v31n4-1.pdf>.

Once the details of the contract between S and B are confirmed by the clearinghouse, the clearinghouse creates a contract to buy from S and a contract to sell to B. S still has a contract to sell, and B has a contract to buy, but the clearinghouse is substituted as the counterparty to each contract.

*Id.* at 46.

106. *Id.* at 46 (“The clearing members provide the financial resources for the clearinghouse to cover the losses that result from a default of another member.”).

107. See *infra* text accompanying note 109 (further discussing netting).

notional value of outstanding contracts and thus the risk.<sup>108</sup> A clearinghouse would cure this problem.<sup>109</sup> Another benefit is greater transparency. Since all derivatives trades would have to be conducted via the clearinghouse, the regulator would see all derivative contracts entered into.<sup>110</sup>

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108. See *supra* text accompanying note 84.

109. Pirrong, *supra* note 105, at 46–47. Continuing from the hypothetical in the text accompanying note 87, which described a daisy chain: If a clearinghouse were used, then immediately after Sam buys coverage from the insurance company, Sam's contract with the insurance company would be replaced with a contract with the clearinghouse, which would now be responsible for paying Sam if his bond defaults. *Id.* at 45–46. If the bond defaults, the clearinghouse would pay Sam and then recoup payment from the insurance company. *Id.*

If, before the bond defaulted, the insurance company purchased coverage from a hedge fund, again the clearinghouse would interject. See *id.* The insurance company would then have two contracts with the clearinghouse. Now, if the bond defaults, the clearinghouse would pay Sam, recoup payment from the insurance company, pay the insurance company, and then recoup payment from the hedge fund. Since upon default, the clearinghouse's exchange with the insurance company would net to zero, the insurance company drops out of the picture. See *id.* at 47 (discussing netting transactions). Similarly, if the hedge fund purchased protection from another party, the hedge fund would drop out. *Id.* Thus, no matter how many times the protection is sold, there are still only two parties with any obligation: the clearinghouse and the final seller of protection. *Id.* Compare this to the example provided earlier, where there were ten parties with an obligation to pay. See *supra* text accompanying note 87.

But some commentators argue that such netting does not in fact reduce total risk in the market. Pirrong, *supra* note 105, at 49. As applied to the example above, they would note that although the clearinghouse prevented Lehman's downfall from causing losses to the parties in the chain, Lehman's downfall still caused losses to some other party. See *id.* In other words, when Lehman's contracts with the clearinghouse drop out, it would replace these contracts with new contracts of the same magnitude. *Id.*

The reduction in replacement losses incurred by derivatives counterparties incurred in the event of a dealer default as the result of netting is widely touted as a source of reduced systemic risk. . . . [B]ut recall that this is due to the fact that netting transfers wealth in the event of a default from the bankrupt dealer's other creditors . . . . [T]he existence of [central clearing] does not affect the total losses from a default, but just the distribution of those losses. The systemic effect of this redistribution is ambiguous.

*Id.*

110. At this point I would like to add some precision to the terminology and distinguish between an exchange and a clearinghouse.

An exchange is essentially a place (physical or virtual) where members of the exchange enter into the contracts or exchange (trade) contracts previously entered into. Jerry W. Markham & Daniel J. Harty, *For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs*, 33 J. CORP. L. 865, 867–87 (2008) (describing the history of financial exchanges in the United States). However, the central clearing and novation features described in note 105 are provided by a clearinghouse. See Pirrong, *supra* note 105, at 45–46. In addition, the exchange and clearinghouse can be separate entities. BANK FOR INT'L SETTLEMENTS, CLEARING ARRANGEMENTS FOR EXCHANGE-TRADED DERIVATIVES 1 (1997) [hereinafter CLEARING ARRANGEMENTS REPORT] (“An exchange's clearing house may be a department of the exchange or a separate legal entity. In several cases a single clearing house provides clearing services to more than one exchange.”); see also Randall S. Kroszner, Governor, Bd. of Governors of the Fed. Reserve, Remarks at the European Central Bank and Federal Reserve Bank of Chicago Joint Conference on Issues Related to Central Counterparty Clearing (Apr. 6, 2009) (explaining that exchanges often “engage unaffiliated [clearinghouses] to clear their trades”). The terms “exchange” and “clearinghouse” are often used interchangeably, although they are distinguishable, because most derivatives exchanges use a clearinghouse that clears most of the

The problem is that derivatives trading exchanges already exist that employ clearinghouses to do the exact same thing.<sup>111</sup> They are not used, however, because some derivatives are so customized that the clearinghouse refuses to accept the contract.<sup>112</sup> A critical component of the clearinghouse concept is the fungibility of the traded contracts, which “allows the clearinghouse to net out its risks from offsetting contracts.”<sup>113</sup> If a contract is too unique, the clearinghouse will be unable to net its risk.<sup>114</sup> Therefore, a clearinghouse will reject deals that are too unique.<sup>115</sup> In addition, the clearinghouse may reject a deal simply because it dislikes its substance or one of the parties involved.<sup>116</sup>

If the clearinghouse turns down some derivatives contracts, would the counterparties give up on the deal? These are two willing parties who want to enter into a contract, but government regulation will not let them.

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exchange’s contracts. See CLEARING ARRANGEMENTS REPORT, *supra*, at 1. (“In all but a very few cases the clearing house acts as the central counterparty to all trades on the exchange.”).

This distinction is noted to highlight that a clearinghouse is not necessary if the goal is only to keep track of derivatives. That goal could be accomplished by requiring all derivatives to be entered into on a monitored exchange, whether the derivatives are cleared or not. Alternatively, the goal can be achieved by requiring all derivatives contracts to be reported to the government, regardless of whether they were entered into on an exchange or cleared, or neither. See, e.g., Press Release, Dep’t of Treasury, Regulatory Reform Over-The-Counter (OTC) Derivatives (May 13, 2009), <http://www.treas.gov/press/releases/tg129.htm> (proposing regulatory “[r]equirements for all trades not cleared by CCPs to be reported to a regulated trade repository” and to make data available to the public and federal regulators).

111. Pirrong, *supra* note 105, at 45 (“Clearing houses have been a part of the derivatives landscape for well over a century. The Minneapolis Grain Exchange established the first modern clearing house for futures in 1891, and other futures exchanges in the United States adopted clearing in the years between 1891 and 1925.”); see also Memorandum from Shearman & Sterling to Clients, Ice Launches Credit Default Swap Clearinghouse (Mar. 12, 2009), <http://www.shearman.com/fia-031209-ice-launches-credit-default-swap-clearinghouse>.

112. Kroszner, *supra* note 110 (explaining “not all OTC derivatives are sufficiently standardized to be cleared”); see also Glenn Somerville & Charles Abbott, *Geithner Sees Case for Some Derivatives Exemptions*, REUTERS, Dec. 2, 2009, <http://www.reuters.com/article/idUSTRE5B133C20091202> (“Some derivative products are traded on exchanges and centrally cleared while other, customized transactions are made over-the-counter or between individual parties, and are not centrally cleared . . . .”) (“We . . . should require that regulators carefully police any attempts by market participants to use spurious customization to avoid central clearing,” Geithner said.”).

113. Markham, *supra* note 9, at 63 (“The problem is that it is difficult to create a clearinghouse for over-the-counter derivatives. A critical component of the clearinghouse concept is the fungibility of the exchange traded contracts.”); see also Daniela Russo et al., *The Evolution of Clearing and Central Counterparty Services for Exchange Traded Derivatives in the United States and Europe: A Comparison* 11 (European Central Bank Research Paper Series, Occasional Paper No. 5, 2002), available at [http://ssrn.com/abstract\\_id=748968](http://ssrn.com/abstract_id=748968) (“[W]here fungibility of contracts exists across exchanges, as is the case in US markets for options on equities, the clearing of those markets by a single clearing house is workable.”).

114. See Pirrong, *supra* note 105, at 49.

115. See *id.*

116. Members are required to meet collateral and creditworthiness requirements, so not everyone will be allowed to join a clearinghouse. See *id.* at 46 (“The clearing house’s guarantee extends only to its members; non-member customers have to trade through members, who guarantee the contracts.”).



However, since business entities and capital are both highly mobile,<sup>117</sup> they can always choose to make the deal in a country that will honor it.<sup>118</sup> This has happened before. In the early 1990s, Japan tried to restrict futures and Over-the-Counter (OTC) derivatives, which led to the futures market relocating to Singapore, and the OTC market moving to New York and London.<sup>119</sup> This could happen again, with derivatives trading leaving the United States in search of more hands-off regimes.<sup>120</sup>

At the opposite end of the spectrum, if the clearinghouse chooses to accept every derivatives contract, even those that seem like a terrible idea, then it could turn into a concentrated center of risk.<sup>121</sup> This risk could

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117. See Reuven S. Avi-Yonah, *Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State*, 113 HARV. L. REV. 1573, 1575 (2000) (“This increased mobility of capital is the result of such technological advances as the electronic transfer of funds and the relaxation of exchange controls.”).

118. *Hearings on Commodities Act*, *supra* note 16, at 29 (testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System) (“[I]f the Congress cannot work it out, foreigners will. It is not a question of whether or not there will be single-stock futures out there it is only: traded where?”).

[T]he failure to pass this bill would create a situation where derivatives contracts entered into in the United States would be subject to more risk, to be sure, an extremely remote risk, but more risk of being arbitrarily unwound because of a regulatory action than in Europe.

And in a world where it is easy to change the location at which contracts are booked, that residual uncertainty could become an important feature of competitive disadvantage.

*Id.* at 31 (testimony of Lawrence Summers, Secretary, United States Department of the Treasury).

119. Booth, *supra* note 9, at 523 (“When Japan tried to restrict both listed futures and OTC derivatives tied to the Tokyo stock exchange, the futures business moved to Singapore and the OTC business moved to New York and London.”).

120. It should be noted that Europe does not seem to favor stricter regulation of derivatives. See generally Helen Bartholomew, *Regulatory Divergence*, INT’L FINANCING REV., Sept. 26, 2009, <http://www.ifre.com/story.asp?sectioncode=&sectioncode=310771>. “Attitudes to derivatives reform either side of the Atlantic appear to be diverging. While US regulators last week pushed for more stringent rules than those set out in the Treasury Bill, officials in Europe seem to be playing down broad-brush regulation in favour of a more piecemeal approach.” *Id.* But see Huw Jones et al., *EU Executive Mulls Ban on Naked CDS Selling*, REUTERS, Mar. 9, 2010, <http://in.reuters.com/article/businessNews/idINIndia-46779120100310> (describing how the European Commission considered a ban on some derivative contracts, as a regulatory response to the Greek financial crisis of 2010); Stevenson Jacobs, *Curbing Derivatives Might Hurt, Not Help, Greece*, ASSOCIATED PRESS, Mar. 9, 2010, <http://www.dailyfinance.com/article/curbing-derivatives-might-hurt-not-help/944509> (arguing that criticism of derivatives is misplaced, because they were not responsible for the Greek crisis and in fact helped Greece reduce its borrowing costs).

121. Posting of Kim Dixon & Karen Brettell to Financial Regulatory Forum, <http://blogs.reuters.com/financial-regulatory-forum/2009/11/04/uss-frank-wants-seccftc-to-decide-on-swaps-clearing/> (Nov. 4, 2009, 10:07 EST).

“There’s a fairly significant risk that if a regulator decides they have to clear something and can set capital or otherwise determine how to appropriately clear a product, we have succeeded in just pushing risk to clearing corporations and raised the risk that they

become so large that even the combined creditworthiness of its members will not be enough to cover the bets.<sup>122</sup> This would function, then, to simply mimic the kind of enormous risk that led to the 2009 crisis, when the highly margined financial industry was unable to cover its exposure and had to ask the government for a bailout.<sup>123</sup>

## VI. USING A SUPER FINANCIAL REGULATOR

One other proposal is for a super financial regulator.<sup>124</sup> This governmental division would collect real-time data on every financial transaction performed by every entity. It would analyze this information, and spot and correct problems. Something like this was proposed by Treasury Secretary Paulson in 2008.<sup>125</sup> While it is conceivable that such an approach could work, it is hard to imagine any governmental agency successfully handling such an enormous task.

## CONCLUSION

Derivatives are contracts entered into by willing and informed parties, for the age-old purpose of risk allocation. Parties have entered into such

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may not have adequate capital,” said Paul Forrester, partner at law firm Mayer Brown in Chicago.

“That’s a potentially larger problem than the one we’re trying to solve,” he said.

*Id.*

122. *Id.*

123. Pirrong, *supra* note 105, at 49.

Consider the following thought experiment: What would have happened if, in September 2008, credit derivatives had been cleared and AIG was a member of the clearinghouse, or was not a member but had all its positions guaranteed by members? When the firm suffered losses on its CDS positions that threatened its viability, the government swooped in and imposed a bailout package. How would clearing have made any difference? An AIG default would have imposed huge losses on the clearinghouse, and hence on its members — other big financial intermediaries. Such a large default would have threatened the viability of the clearinghouse and its members, and government intervention would almost certainly have occurred.

*Id.*

124. See generally DEP’T OF THE TREASURY, DEPARTMENT OF THE TREASURY BLUEPRINT FOR A MODERNIZED FINANCIAL REGULATORY STRUCTURE 13–22 (2008), <http://www.treas.gov/press/releases/reports/Blueprint.pdf> (proposing the elimination of all prior financial regulation in favor of three new regulatory bodies, a prudential regulator to address problems specific to explicit government guarantees (such as deposit insurance), a business conduct regulator to regulate business practices (for example, to ensure consumer protection standards) and a market stability regulator to address the market overall (the super financial regulator)).

125. *Id.* at 15 (“In terms of its recast regulatory role focusing on systemic risk, the Federal Reserve should have the responsibility and authority to gather appropriate information, disclose information, collaborate with the other regulators on rule writing, and take corrective actions when necessary in the interest of overall financial market stability.”).

arrangements in one form or another for millennia.<sup>126</sup> The late 20th century saw a greater demand for optimal risk allocation and the financial industry satisfied this demand by writing the contracts, many of which are now known as derivatives. This effort has proven to be a rocky one with derivatives thought to be responsible for numerous financial crises over the past two decades.<sup>127</sup> There is, however, very little the law can do about this problem. The desire to allocate risk by contract has always been a part of human culture, and its prevalence rises and falls based only on the spirit of the time.

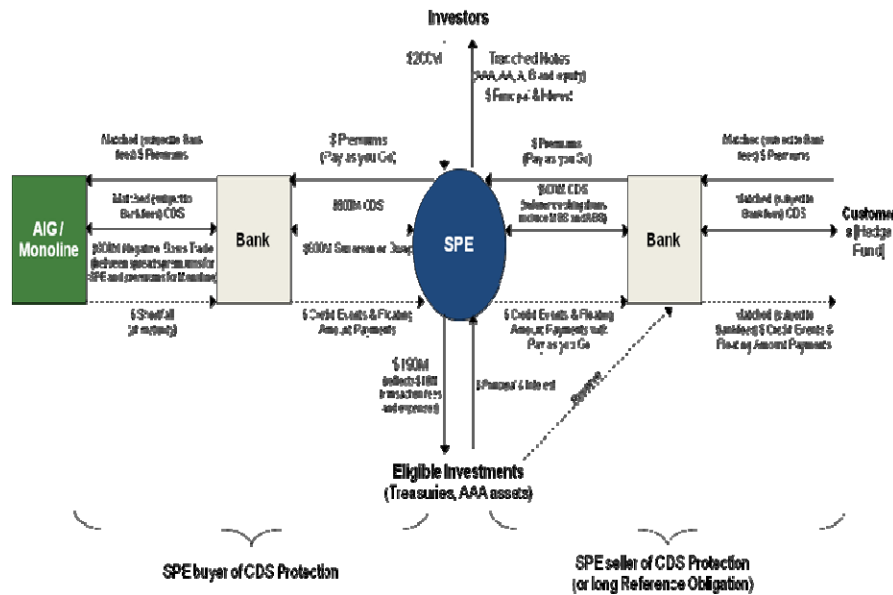
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126. DON M. CHANCE, *ESSAYS IN DERIVATIVES: RISK-TRANSFER TOOLS AND TOPICS MADE EASY* 7 (2008).

To start we need to go back to the Bible. In Genesis Chapter 29, [around the year] 1700 BC, Jacob purchased an option costing him seven years of labor that granted him the right to marry Laban's daughter Rachel. . . . Around 580 BC, Thales the Milesian purchased options on olive presses and made a fortune off a bumper crop in olives.

*Id.*

127. See Eric Ghysels & Junghoon Seon, *The Asian Financial Crisis: The Role of Derivative Securities Trading and Foreign Investors in Korea*, 24 J. INT'L MONEY & FIN. 607, 607 (discussing the role of derivatives in causing the 1997 Asian Financial Crisis); see also David Barboza & Jeff Gerth, *Long-Term Capital Bailout Prompts Calls for Action*, N.Y. TIMES, Dec. 15, 1998, at C1 (discussing the role of derivatives in the near collapse and government bailout of Long Term Capital Management in 1998); Stephen Labaton & Jackie Calmes, *Obama Proposes a First Overhaul of Finance Rules*, N.Y. TIMES, May 14, 2009, at A1 (discussing the role of derivatives in the 2008–09 financial crisis); Alan Friedman, *A \$27 Billion Bet on Tokyo Stocks Shuts Down Barings: Bank's Failure Spurs Calls for Tighter Rules*, INT'L HERALD TRIB., Feb. 28, 1995, at 1 (discussing the role of derivatives in the 1995 collapse of Barings Bank); Thomas F. Siems, *10 Myths About Financial Derivatives*, POL'Y ANALYSIS, Sept. 11, 1997, No. 283, <http://www.cato.org/pubs/pas/pa-283.html> (discussing the role of financial derivatives in the 1994 bankruptcy of Orange County, California).

**Exhibit 1****Synthetic CDO<sup>128</sup>**

128. This diagram was taken from a presentation on derivatives in the Spring of 2009 at New York University School of Law, by professors James B. Carlson and Joel S. Telpner.