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## A Review Of Recent Derivatives Litigation

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# A Review Of Recent Derivatives Litigation

John D. Finnerty and Kishlaya Pathak

## **Abstract**

The global over-the-counter derivatives market exceeded \$33 trillion of gross market value as of year-end 2008, according to the Bank for International Settlements.<sup>1</sup> Recent headlines suggest that derivatives – specifically, credit default swaps – pose an enormous potential systemic risk and that they are one of the root causes of the current economic crisis.<sup>2</sup>

# A REVIEW OF RECENT DERIVATIVES LITIGATION

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## I. INTRODUCTION

The global over-the-counter derivatives market exceeded \$33 trillion of gross market value as of year-end 2008, according to the Bank for International Settlements.<sup>1</sup> Recent headlines suggest that derivatives – specifically, credit default swaps – pose an enormous potential systemic risk and that they are one of the root causes of the current economic crisis.<sup>2</sup> Warren Buffett, who leads a conglomerate—Berkshire Hathaway—which held \$63 billion of derivatives as of April

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1. See Mark Brown, *OTC Derivatives Volume Fell*, WALL ST. J., May 19, 2009, at C5. Gross market value is the cost of replacing existing OTC derivatives contracts. Market size is often stated in terms of notional value, but gross market value is a better measure of the level of risk in the derivatives market. The size of the market is as of December 31, 2008. Gross market value rose 66.5% in the second half of 2008 even though aggregate notional amount fell 13.4% (to \$592 trillion from \$684 trillion).

2. For example, the obligations associated with credit default swaps and other derivative positions that were not fully hedged have been held responsible for American International Group's financial distress. See Liam Pleven & Randall Smith, *Action on AIG Unit May Cost Taxpayers*, WALL ST. J., Apr. 13, 2009, at C1.

2010, has warned, “Derivatives are financial weapons of mass destruction.”<sup>3</sup> This remark suggests that these instruments should carry the warning,

“Improper use can be hazardous to your financial health.” Mounting concerns over derivatives have recently led the U.S. Treasury to propose a comprehensive regulatory framework to bring greater transparency to the derivatives market, restrict derivatives trading, and impose closer supervision on derivatives market participants to reduce systemic risk.<sup>4</sup> Importantly, the proposals call for amending the Commodity Exchange Act and the securities laws to “prevent market manipulation, fraud, and other market abuses.”<sup>5</sup>

Derivatives, when used properly, improve economic efficiency and allow companies to manage unwanted risk exposures. Allegations of derivatives abuse in recent litigation provide a stern reminder that substantial damage can occur when they are misapplied.<sup>6</sup> A review of court records highlights how important it is for market participants to understand these instruments before using them. Court records reveal that the complexity of derivatives often leads to misunderstandings and is sometimes exploited by unscrupulous financial promoters to take unfair advantage of unsophisticated or unsuspecting investors. The apparent investor acceptance of Bernard Madoff’s purported ‘split-strike’ strategy—in which the execution of stock call and put options supposedly enabled the fund to achieve superior risk-adjusted returns—

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3. Annual Letter to Shareholders from Warren Buffett, Chairman, Berkshire Hathaway, Inc., Feb. 21, 2003, at 15, *available at* <http://www.berkshirehathaway.com/letters/2002pdf.pdf>. *But see* Damien Paletta, *Democrats Deny Buffett on a Key Provision*, WALL ST. J., Apr. 27, 2010 (stating Buffett’s “Berkshire [Hathaway] has \$63 billion in derivatives contracts, and Mr. Buffett has boasted he holds very little collateral against these products”).

4. Press Release, U.S. Dep’t of the Treasury, *Regulatory Reform Over-the-Counter (OTC) Derivatives* (May 13, 2009), <http://www.ustreas.gov/press/releases/tg129.htm>; *see also* Sarah N. Lynch & Serena Ng, *U.S. Moves to Regulate Derivatives Trade*, WALL ST. J., May 14, 2009, at C1, C3. The regulatory proposals would require standardized OTC derivatives to be traded on regulated exchanges or electronic trading platforms and cleared through regulated centralized clearinghouses, impose greater record-keeping and trade reporting requirements on derivatives dealings, increase regulatory oversight of derivatives dealers with large counterparty exposures, and give regulators authority to establish limits on derivatives positions to control risk.

5. U.S. Dep’t of the Treasury, *supra* note 4.

6. The article updates an earlier article by one of the co-authors. *See* John D. Finnerty & Mark S. Brown, *An Overview of Derivatives Litigation, 1994 to 2000*, 7 FORDHAM J. CORP. & FIN. L. 131 (2001).

is a case in point.<sup>7</sup>

Derivatives are financial instruments whose value depends on the value of some underlying asset price, reference rate, or index.<sup>8</sup> They have been written on commodities, currencies, stocks, bonds, interest rates, credit spreads, assorted indexes, and other quantities. Both individuals and financial institutions use derivatives. They allow investors to assume or offload selected risks. The application of derivatives can range from outright, and perfectly legal, speculation to hedging. At the most basic level, derivatives channel risks from hedgers who wish to avoid them to speculators who are willing to bear them for a price.<sup>9</sup> Securities dealers have used financial derivatives to craft synthetic financial instruments which mimic the returns of investing in a particular asset without purchasing it. Synthetic derivatives are attractive when the market for the asset is illiquid and investing in it would, therefore, be very risky. Due to a combination of market volatility being magnified by the financial leverage inherent in derivative instruments, the increasing complexity of the newer derivative instruments, and the lack of sophistication on the part of many derivatives buyers and sellers, many derivatives users have failed to realize their goals. In some cases, investors have suffered large losses and have resorted to litigation to try to recoup these losses.<sup>10</sup>

This article describes derivatives, briefly explains how they can be used to improve market efficiency, and provides an overview of derivatives lawsuits filed, and regulatory enforcement actions taken, in the United States between 2001 and 2009. It classifies cases by type and number for each type of derivative instrument and summarizes the dominant trends. It also discusses several cases which highlight important legal and financial issues raised by recent derivatives

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7. Carole Bernard & Phelim Boyle, *Mr. Madoff's Amazing Returns: An Analysis of the Split-Strike Conversion Strategy*, 2 (U. of Waterloo Working Paper, 2009), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1371320](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1371320).

8. JOHN D. FINNERTY, *THE PRICEWATERHOUSECOOPERS CREDIT DERIVATIVES PRIMER* 3 (PricewaterhouseCoopers, New York 1998) [hereinafter FINNERTY PWC 1998].

9. A derivative transaction can also enable both parties to hedge their respective risk exposures, as for example, when a farm cooperative enters into a corn forward contract with a food processing firm calling for the future delivery of a stated number of bushels of corn at a specific price per bushel. Both the cooperative and the firm can benefit from the consequent reduction in their exposure to corn price risk.

10. John D. Finnerty & Mark S. Brown, *An Overview of Derivatives Litigation, 1994 to 2000*, 7 *FORDHAM J. CORP. & FIN. L.* 131, 132 (2001).

litigation.

## II. DESCRIPTION OF DERIVATIVE INSTRUMENTS

This section provides a brief description of the derivative instruments<sup>11</sup> covered in the rest of the article. It briefly explains how they can be used to improve market efficiency and also how they have been misused at times, which has led to litigation. It is important to appreciate that while derivative instruments may be used to reallocate risk between parties, they do not make risk go away. One party to a derivatives contract reduces (or hedges) its risk exposure by transferring it to the counterparty, who is presumably better able to manage this risk or is willing to bear it at lower cost than the party who transferred it. But the counterparty, to whom the risk is transferred, must figure out how to deal with it.<sup>12</sup>

### A. FORWARD CONTRACT

A forward contract<sup>13</sup> obligates the holder to buy a specified amount of a particular asset at a stated price on a particular date in the future. All these terms are fixed at the time the parties enter into the forward contract. The specified future price is called the exercise price. Fixing the exercise price eliminates each counterparty's unwanted price risk exposure. Forward contracts were written on commodities as early as the 1840s.<sup>14</sup> Most forward contracts are for commodities or currencies. Forward contracts are customized and are traded over-the-counter.

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11. FINNERTY PWC 1998, *supra* note 8; *see also* JOHN FINNERTY, STRUCTURING INSTRUMENTS TO ADJUST RISK EXPOSURE: THE ARITHMETIC OF FINANCIAL INSTRUMENTS 2 (PricewaterhouseCoopers, New York 1999) [hereinafter FINNERTY PWC 1999].

12. *See supra* note 9 and accompanying text. In the example discussed in footnote 9, where both parties to the derivative contract reduce their risk exposure, each party transfers unwanted risk to its counterparty. The farm cooperative transfers the risk of an unwanted decrease in the price it will receive for its corn, and the food processor transfers the risk of an unwanted increase in the price it will pay for the corn. The farm cooperative also forgoes the benefit of a price increase, and the food processor also forgoes the benefit of a price decrease as the price they pay for transferring the unwanted risk to the other party.

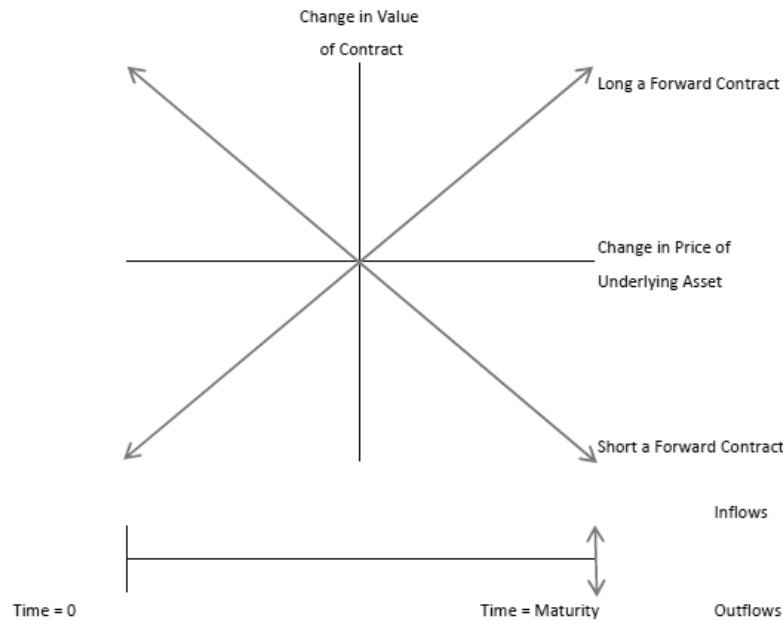
13. FINNERTY PWC 1999, *supra* note 11, at 2.

14. *Id.*

Customization enables them to be tailored to better suit the needs of the two counterparties.

Forward contracts are useful in eliminating price uncertainty because the two parties agree on the price at which the asset will change hands when the contract matures. If the market price at the time the contract matures is higher than the exercise price, then the buyer of the forward contract will realize a profit. But if the market price is less than the exercise price, then the buyer will realize a loss, as illustrated in Exhibit 1. The seller is in exactly the opposite position, realizing a profit when the market price is less than the exercise price and a loss when the market price exceeds the exercise price.

*Exhibit 1*  
*Payoff Profile of a Forward Contract*



**B. FUTURES CONTRACT**

A futures contract<sup>15</sup> is just like a forward contract except that it is a standardized, exchange-traded instrument. Futures contracts were

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15. *Id.* at 3.

developed in the 1860s to deal with the default risk inherent in forward contracts.<sup>16</sup> When the buyer or the seller under a forward contract faced a large potential loss, that party had an incentive not to perform and in many cases reneged on its obligation. To avoid this problem, trades involving futures contracts are settled through a clearinghouse, which guarantees the performance of the buyer and the seller who are the parties to each futures contract. The clearinghouse stands between the buyer and the seller as soon as the futures contract is entered into. The clearinghouse marks each party's position to market each day and requires the party with a loss to post sufficient collateral to guarantee its ability to settle the contract. Thus, unlike forward contracts, the gains and losses on futures contracts are realized daily.<sup>17</sup>

The payoff diagram for a futures contract looks just like the payoff diagram for a forward contract in Exhibit 1. Futures contracts have the advantages of being exchange-traded, which makes them more liquid than otherwise similar forward contracts. They are also free of default risk. Standardization means that there are usually well-accepted valuation models available for valuing standard contracts, which lessens the likelihood of valuation disputes. However, their standardization can limit their usefulness; as the parties will have to design a forward contract when they desire special features that are not available in the existing futures contracts.

The issue of whether a particular contract is a futures contract, a forward contract, or some other type of contract has arisen in disputes, such as *Olympic Natural Gas Co. v. Morgan Stanley Capital Group Inc.*, which is discussed later in the article.<sup>18</sup>

### C. OPTION CONTRACTS

An option contract<sup>19</sup> gives its holder the right (but not the obligation) to purchase or sell a specified underlying asset at a stated price (the exercise price or strike price) on or before a specified expiration date. A call option conveys the right to buy the specified

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16. *Id.* at 2.

17. For similar reasons, the U.S. Treasury has proposed the establishment of a centralized clearinghouse to clear all credit default swap transactions. See U.S. Dep't of the Treasury, *supra* note 4.

18. 294 F.3d 737 (5th Cir. 2002).

19. FINNERTY PWC 1999, *supra* note 11, at 4.

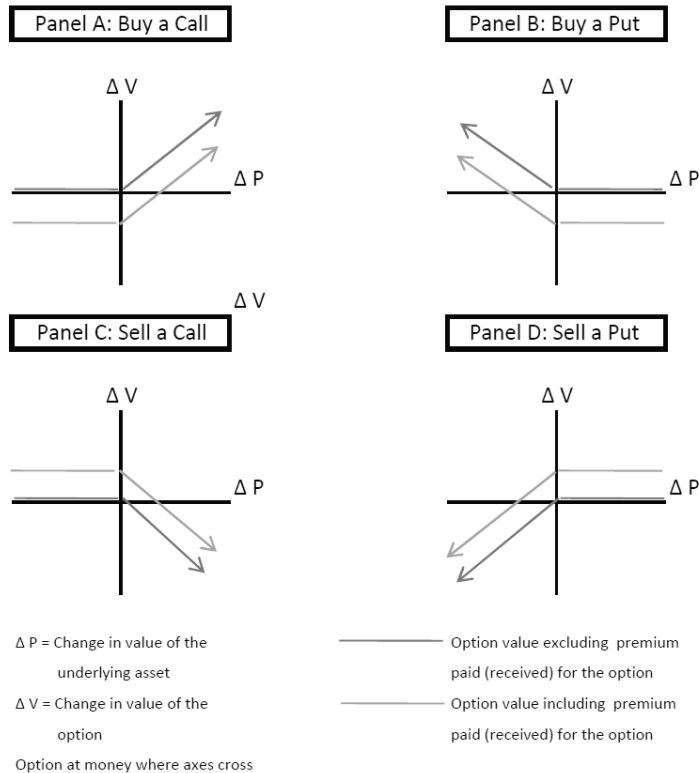


asset, and a put option conveys the right to sell the underlying asset. For example, a call option might give the holder the right to buy 100 shares of Exxon Mobil common stock at a price of \$40 per share anytime within the next six months. The holder will exercise the call option so long as the market price exceeds the specified strike price on the exercise date, in this case \$40 at the end of six months, and the holder of a put option will exercise when the strike price exceeds the market price on the exercise date. In either case, the option is said to be in-the-money. Conversely, an option is said to be out-of-the-money, when immediate exercise would not be profitable, and if the option has reached expiration, the holder will let it expire worthless.

Exhibit 2 illustrates the payoffs on call options and put options. When a market participant buys a call option, she receives a higher payoff on the exercise date the greater is the excess of the market price of the underlying asset above the exercise price. If the market price is below the exercise price on the exercise date, then the payoff is zero. When a market participant buys a put option, she receives a higher payoff on the exercise date the greater is the excess of the exercise price above the market price of the underlying asset. If the market price is above the exercise price on the exercise date, then the payoff is zero.

Exhibit 2 illustrates the option payoffs just before the options are set to expire. This value is referred to as an option's intrinsic value. Importantly, options also have a time value before they expire because changes in the underlying asset price before expiration could increase the expected payoff by rising (for a call option) or falling (for a put option). The remaining time value is greater the longer is the option's remaining time to expiration because the greater time to expiration allows for larger possible favorable price movements.

Exhibit 2  
Option Payoff Profiles



Call options are attractive to investors who expect the price of the underlying asset to rise. They pay a relatively small option premium to obtain the opportunity for a large potential gain depending on whether and how high the price of the underlying asset rises. This large potential for gain in relation to the price paid for the option is referred to as the leverage provided by the option.

A put option is attractive to investors who expect the price of an asset to fall. The put option provides a form of insurance because the holder will realize at least this price no matter how low the price of the underlying asset falls. One can think of conventional auto insurance as a form of put option: the car owner can put/sell what is left of her car to the insurer in return for the insured amount if the car is destroyed in an accident.<sup>20</sup>

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20. *Id.*

Warrants are call options that a firm issues. These options are exercisable for the firm's own common shares. Warrants are at the center of *R.A. Mackie & Co. v. PetroCorp Inc.*, in which it was alleged that an acquiring firm forced the premature exercise of the acquired firm's outstanding warrants and thereby deprived the warrant holders of the warrants' remaining time value.<sup>21</sup>

Employee stock options (ESOs) are call options that a firm writes on shares of its common stock, and issues to its employees.<sup>22</sup> Firms usually set the strike price equal to the market price of the firm's stock on the grant date. By selecting an earlier date on which the stock price was lower and treating that date as the grant date, a firm's executives convert an at-the-money call option into an in-the-money call option. Backdating increases the ESOs' value and benefits the employee at the expense of the firm. The scandal surrounding employee stock option backdating arose because the executives of hundreds of firms backdated their ESOs but concealed the backdating from their firms' shareholders.<sup>23</sup>

A call option and a put option can be combined to create what is known as a collar. For example, an investor who owns common shares can buy a put option to limit her downside risk to the strike price of the put option. She can sell a call option to pay for part of the cost of the put option. If the price of the call option equals the cost of the put option, the collar is called a zero-cost collar. The strike price of the call is higher than the strike price of the put. The investor gives up any appreciation above this strike price because the purchaser of the call option will exercise the call when the share price exceeds this threshold.<sup>24</sup>

Securities fraud often involves options. They are difficult to value because of their complexity. Most options trade in the over-the-counter market, rather than on an exchange. The lack of market prices makes it difficult to determine what they are worth. They employ leverage because the option premium is only a fraction of the price of the

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21. 329 F. Supp. 2d 477, 481-82 (S.D.N.Y. 2004).

22. John D. Finnerty, *Extending the Black-Scholes-Merton Model to Value Employee Stock Options*, 15 J. APPLIED FIN. 25, 25 (2005).

23. J.M. Bickley & G. Shorter. (2008). *Stock Options: The Backdating Issue* (RL33926). Washington, DC: Congressional Research Service.  
[http://digitalcommons.ilr.cornell.edu/key\\_workplace/504/](http://digitalcommons.ilr.cornell.edu/key_workplace/504/).

24. The Madoff Ponzi scheme involved an investment strategy that supposedly incorporated collars using S&P 100 Index put and call options. Bernard & Boyle, *supra* note 7, at 2. The scheme is described later in this article.

underlying instrument. Because of this leverage, options magnify the potential gain as compared to a direct investment in the underlying, but they also magnify the potential for loss because the entire investment in the option will be lost if it expires out-of-the-money.

The potential for large gains, complexity, and lack of market prices can attract disreputable promoters who offer investors structured investments that incorporate a complex option which seem to offer large potential returns. Fraud occurs when this investment is intentionally overpriced or its riskiness is misrepresented.

Options have also been involved in a number of tax shelter cases.<sup>25</sup> In many such cases, the potentially large payoffs on the options were neutralized by buying and simultaneously selling nearly identical call options that had only a very small difference in their strike prices.

#### D. SWAP CONTRACTS<sup>26</sup>

The two parties to a swap agreement exchange payment obligations tied to specified interest rates, exchange rates, asset prices, or indexes. Swaps are of several types - interest rate swaps and currency swaps being the most common. In a “plain vanilla” interest rate swap, two counterparties exchange interest payment obligations, with one agreeing to pay a fixed interest rate and the other a floating interest rate based on a stated notional principal amount. The floating rate is usually based on one of the London Interbank Offer Rates (LIBOR).<sup>27</sup> Principal is not exchanged, and the interest amounts due on each payment date are netted, which reduces default risk. Interest rate swaps have been the central issue in many cases, including *Lehman Brothers Commercial Corp. v. Minmetals International Non-Ferrous Metals Trading Co.*<sup>28</sup> and *In re Plastech Engineered Products, Inc.*,<sup>29</sup> which are discussed lat-

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25. See, e.g., *Denney v. Jenkins & Gilchrist*, 412 F. Supp. 2d 293, 296 (S.D.N.Y. 2005).

26. FINNERTY PWC 1999, *supra* note 11.

27. LIBOR are interest rates that are determined in the money market. Dollar and sterling LIBOR are determined in the London money market. They are the interest rates at which major banks lend one another funds denominated in a particular currency. LIBOR are quoted for various tenors, such overnight, one week, one month, three months, six months, and so on. Three-month LIBOR is most common in bank loans and interest rate swaps with payments made quarterly.

28. 179 F. Supp. 2d 159, 164 (S.D.N.Y. 2001).

29. 399 B.R. 1, 4-5 (Bankr. E.D. Mich. 2008).

er in the article.

In a “plain vanilla” currency swap, the cash flows are denominated in two different currencies. In effect, the two counterparties extend one another back-to-back loans, which are consolidated into a single transaction.<sup>30</sup> An asset swap involves an obligation to pay interest based on a specified fixed or floating interest rate in return for an obligation representing the total return on a specified reference asset or index.

Interest rate swaps are useful for hedging interest rate risk.<sup>31</sup> For example, suppose a corporation has floating rate debt outstanding but the treasurer is concerned that interest rates are quite likely to rise. She can have the corporation enter into a fixed-for-floating interest rate swap by agreeing to pay a stated fixed rate and to receive in return a series of payments based on a specified floating interest rate, as illustrated in Exhibit 3. The floating interest rate payments in the swap will fully offset the floating interest rate payments on the bank loan when the swap floating rate and the bank loan interest rate float off the same index. The corporation is left paying the fixed rate. Similarly, suppose an investor owns a fixed rate bond, expects interest rates to increase, but does not want to sell the bond. She can enter into a swap, agreeing to pay fixed rates in return for receiving floating rates in order to take advantage of the expected increase in interest rates.<sup>32</sup>

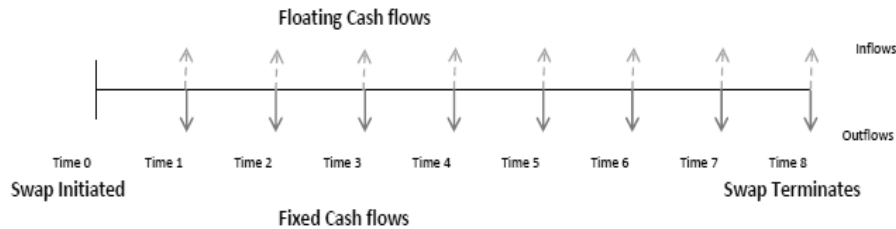
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30. Back-to-back loans (or parallel loans), which were developed in the 1960s, were the precursor to interest rate swaps. Financial engineers realized that the two back-to-back loans could be collapsed into a single instrument and given other desirable features, such as netting of periodic payments and basing the periodic payments on notional amounts, rather than exchanging principal, to reduce default risk.

31. FINNERTY PWC 1999, *supra* note 11.

32. This is the opposite of the payment pattern illustrated in Exhibit 3. Put somewhat differently, the counterparty to the corporation in the fixed-for-floating interest rate swap discussed earlier in the paragraph agrees to pay the stated floating rate and to receive in return a series of payments based on the stated fixed interest rate.

Exhibit 3  
*Cash Flows of a Pay-Fixed Interest Rate Swap*



Asset swaps are similar to interest rate swaps except that one of the payment streams is based on the total return on a specified asset. The asset swap is referred to as an equity swap when the specified asset is a stated number of shares of a particular firm's common stock. Total return is calculated as current payments, e.g., dividends, plus appreciation or minus depreciation in the market value of the underlying asset.<sup>33</sup> Asset swaps create the economic equivalent of borrowing funds to buy the asset, which is in effect, conveying ownership of a synthetic asset. Synthetic assets are attractive to investors who want to "own" the asset but either do not want to take physical possession of it or believe that their trading will have a large enough market impact that it will affect the price of the asset to their disadvantage.

Equity swaps are like interest rate swaps except that the total return on a specified equity instrument replaces the fixed interest rate payments as one leg of the swap. The floating rate leg, which is usually based on one of the LIBOR rates, remains the same. In a typical equity swap, the initial value of the equity instrument is the notional amount of the swap on which the periodic interest payments are calculated. The equity payment receiver receives cash dividends and any increase in the value of the equity instrument during the period but pays the counterparty the amount of any decrease in equity value during the period.<sup>34</sup> For example, if an investor wishes to realize the total return on 10,000 shares of a particular stock that is selling for \$30 per share, the investor can engage in a swap synthetically representing an underlying amounting to 10,000 shares of the stock. The notional principal is \$300,000. The

33. The total return receiver receives the periodic appreciation, e.g., the increase in the value of the shares, from the counterparty and pays the periodic depreciation, e.g., the decrease in the value of the shares, to the counterparty.

34. See Note, *Tax-Exempt Entities, Notional Principal Contracts, and the Unrelated Business Income Tax*, 105 HARV. L. REV. 1265, 1269 (1992).

investor would make quarterly payments to the counterparty on the \$300,000 notional principal at 3-month LIBOR. If the price of the stock fell \$5 during the quarter, the investor would pay the counterparty \$50,000, and if it rose \$5, the counterparty would pay her \$50,000. If the stock paid a \$1 cash dividend during the quarter, the counterparty would pay her \$10,000. Equity swaps were at the center of *Caiola v. Citibank*, which is discussed later in the article.<sup>35</sup>

#### E. THE FOUR BASIC BUILDING BLOCKS

Forward contracts, futures contracts, options, and swaps have been referred to as the four basic building blocks of derivative instruments.<sup>36</sup> They have the distinctive payment patterns described in the preceding paragraphs. The payment characteristics of these instruments are more closely related than might appear at first glance. A clever derivatives trader can use different derivative instruments almost interchangeably to achieve any particular payoff pattern.<sup>37</sup> The trader might do this because of a tax or regulatory advantage of one structure over another or to game the accounting regulations and achieve a more desired accounting treatment.<sup>38</sup> Exhibit 4 illustrates the relationship among the basic building blocks.

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35. 295 F.3d 312, 316-17 (2d Cir. 2002).

36. Charles W. Smithson, Clifford W. Smith, Jr. & D. Sykes Wilford, *MANAGING FINANCIAL RISK: A GUIDE TO DERIVATIVE PRODUCTS, FINANCIAL ENGINEERING, AND VALUE MAXIMIZATION* 42 (Irwin 1995).

37. *Id.* at 41.

38. At one time, swaps were especially popular because of a quirk in the accounting rules. "Swap contracts" could be kept off the firm's balance sheet so long as the value of the swap at initiation was zero, as was usually the case. This led to accounting abuses that eventually resulted in Statement of Financial Accounting Standards 133 ("FAS 133"). FAS 133 transformed the accounting for derivatives from a regime based largely on the form of the transaction to one based on the derivative instrument's true economic character.

*Exhibit 4*  
*Relationships Among the Four Basic Building Blocks*



The basic building blocks are used by derivatives dealers to craft more complex financial instruments that have more desirable payment patterns. The basic building blocks can be combined with conventional bonds to create new securities.<sup>39</sup> For example, combining a fixed-rate bond and an interest rate swap that pays fixed rates and receives floating rates creates what is known as an inverse floating rate note.<sup>40</sup>

The basic building blocks are also useful in analyzing complex contingent claims. Such instruments typically incorporate one or more of the basic building blocks. By comparing the payoffs of the complex contingent claim in different economic scenarios to the distinctive signatures of the basic building blocks, it is usually possible to reverse engineer the contingent claim and break it down into its constituent parts.

This process in turn aids in understanding how the instrument

39. FINNERTY PWC 1999, *supra* note 11.

40. *See id.* For example, combining an 8% bond and an interest rate swap that pays 7% and receives LIBOR creates a note that pays 15% - LIBOR. LIBOR is the London Inter Bank Offer Rate, which is the interest rate at which banks lend each other funds in the London money market. Some investors find such bonds attractive because the coupon varies inversely with interest rates, which causes the bonds to exhibit heightened interest rate sensitivity (duration).



works and suggests how to value it and how to hedge the risks inherent in it. For example, a callable corporate bond is a straight bond plus a bond call option. As a second example, a convertible bond is a straight bond plus the (conversion) option to exchange it for a stated number of shares of the bond issuer's common stock.

#### F. SYNTHETIC SECURITIES

A synthetic security is a contractual agreement between two parties, usually an investor and a financial institution, which is designed to replicate the total investment return of a particular physical security, such as share of common stock or a call option. For example, an equity swap provides the equity payment receiver with the same stream of returns she would receive if she owned the underlying common shares directly, and is therefore a synthetic share. The aggregate market value of the underlying asset at the inception of the synthetic transaction is the notional amount, and the investor is charged interest on this notional amount. Thus, the synthetic security represents a leveraged investment in the underlying physical security.

Trading in synthetic securities can be cheaper or less risky than trading the physical securities when the latter are thinly traded or maintaining open positions in them is expensive. Synthetic trading often avoids the need to post large amounts of margin capital and permits large positions to be opened and closed quickly with less market impact. *Caiola v. Citibank*, which is discussed later in the article, concerns a situation where an investor traded enormous numbers of shares and options on a particular stock, and synthetic transactions offered several advantages over physical transactions.<sup>41</sup> The advantages of synthetic equity transactions over physical transactions in avoiding the necessity of posting large amounts of margin, allowing positions to be established and unwound quickly, and permitting the effective purchase of large amounts of stock without affecting the market price were a central issue in *Caiola v. Citibank*.<sup>42</sup> However, the economic equivalence of synthetic and real assets can become problematic, as illustrated by *CSX v. Children's Investment Fund Management*, when circumstances cause the synthetic asset to convey beneficial (legal) ownership of the underlying asset.<sup>43</sup> This case is discussed later in the article.

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41. 295 F.3d at 312.

42. *Id.* at 316.

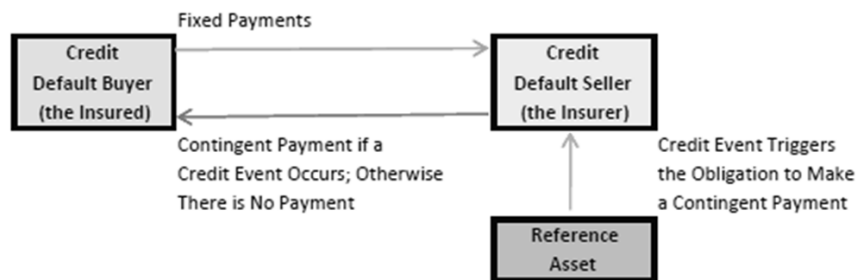
43. 562 F. Supp. 2d 511, 516 (S.D.N.Y. 2008).

### G. CREDIT DEFAULT SWAPS

A credit default swap<sup>44</sup> (“CDS”) promises to make a specified payment in the event a particular debt instrument experiences an event of default, such as a payment default or if the issuer files for bankruptcy protection. For example, a General Motors CDS might promise to pay the difference between the face amount and the market price of a particular GM bond if GM defaults on its debt. A CDS functions like a letter of credit, which is typically issued by a bank, or a surety bond, which is typically issued by an insurance company.<sup>45</sup>

A CDS is a form of insurance.<sup>46</sup> It enables the CDS buyer to insure against an event of default or some other specified credit event involving the specified underlying financial instrument. It requires a single upfront payment, or possibly a series of payments, in exchange for the counterparty’s obligation to make an insurance payment that is contingent upon the occurrence of any one of a specified set of possible credit events. This payment structure is illustrated in Exhibit 5. The insurer is exposed to the risk of default because it must pay off on the contract when a credit event occurs. When the CDS seller fails to reinsure this risk by entering into offsetting CDS or buying conventional reinsurance, it is exposed to a potentially large loss.

*Exhibit 5  
The Basic Structure of a Credit Default Swap*



American International Group’s financial distress has been attributed in part to the large amount of CDS contracts it apparently wrote on collateralized debt obligations, which were only partially

44. FINNERTY PWC 1998, *supra* note 8, at 15.

45. *Id.*

46. *Id.*

hedged, thus leaving it with a large net default risk exposure when this market collapsed in 2008.<sup>47</sup>

CDS contracts have been the subject of several lawsuits, for example, concerning whether an event of default has occurred.<sup>48</sup> They are likely to give rise to additional litigation because of the recent financial crisis. *The Hoosier Energy Rural Electricity Cooperative v. John Hancock Life Insurance Company*<sup>49</sup> and *Merrill Lynch v. XL Capital Assurance*<sup>50</sup> discussed later in the article, are but two recent examples.

#### H. COLLATERALIZED DEBT OBLIGATIONS

A collateralized debt obligation<sup>51</sup> ("CDO") is an asset-backed security that is backed either by bonds (collateralized bond obligation, or "CBO") or bank loans (collateralized loan obligation, or "CLO") or a combination of the two. A portfolio of fixed income assets is pooled and contributed to a special purpose vehicle ("SPV"), which is a separate legal entity, such as a trust. The trust issues multiple classes of debt instruments and at least one equity class. The pool of assets serves as collateral and the main source of cash flow for the several classes of debt securities the SPV issues. These CDO classes are prioritized as to their right to receive the cash flow from the underlying fixed income portfolio. This prioritization reallocates the default risk, or credit risk, on the underlying portfolio so that the most senior CDO class, which

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47. Plevin & Smith, *supra* note 2, at C1.

48. *See, e.g., AON Fin. Prods. v. Societe Generale*, 476 F.3d 90, 92-93 (2d Cir. 2007). In *AON*, plaintiffs brought suit for alleged breach of contract related to a credit default swap agreement between the parties. Plaintiffs asserted that a "credit event" occurred when a Philippine government agency defaulted on a surety bond. Defendant argued that the agency was not included in the definition of "Republic of Philippines," the reference entity of the parties' contract, and thus, the default was not a credit event. The number of disputes concerning whether an event of default has occurred diminished after the International Swap Dealers Association (ISDA) published a standard definition of "events of default." *See ISDA, 2003 ISDA Credit Derivatives Definitions 1, Exhibit A*, at 61 (2003).

49. *Hoosier Energy Rural Electricity Coop. v. John Hancock Life Ins. Co.*, 582 F.3d 721 (7th Cir. 2009).

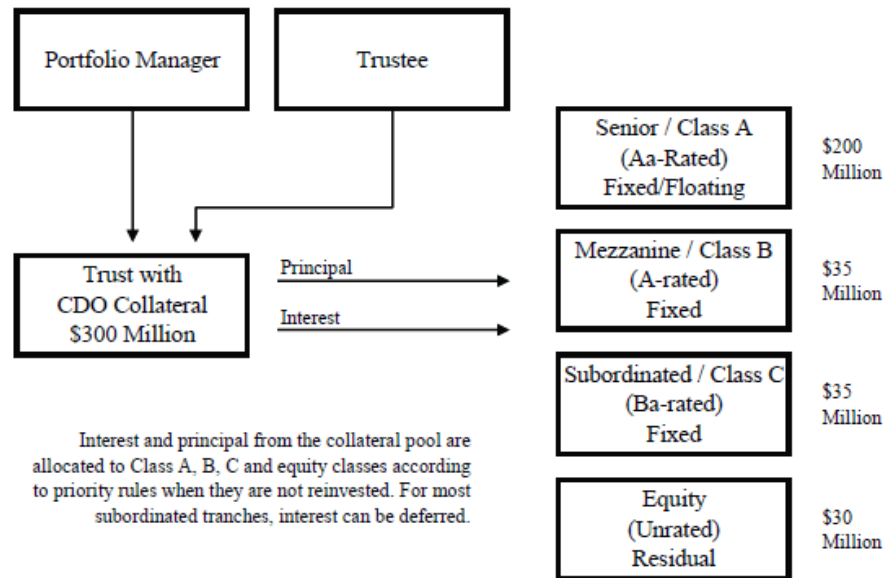
50. *Merrill Lynch Int'l v. XL Capital Assurance Inc.*, 564 F. Supp. 2d 298, 299-300 (S.D.N.Y. 2008).

51. John D. Finnerty, *Securities Innovation*, in *HANDBOOK OF FINANCE: FINANCIAL MARKETS AND INSTRUMENTS*, vol. I, ch. 7, 61 (Frank J. Fabozzi ed., John Wiley & Sons, Inc. 2008).

was often rated triple-A or double-A, has the least exposure to defaults on the underlying portfolio, and the most junior CDO class, which is an unrated equity class, has the greatest exposure.<sup>52</sup>

Exhibit 6 illustrates a typical cash flow CDO structure, which contains bonds, bank loans, or some combination of the two.<sup>53</sup> The senior tranche has the lowest exposure to default risk on the underlying collateral, and the equity class has the greatest exposure. Even the senior-most class can experience losses if the default rates on the underlying collateral are high enough and the junior tranches are not large enough to absorb fully the entire losses due to these defaults.

*Exhibit 6  
Illustration of a Cash Flow CDO Structure*



A series of cash allocation rules specify how to distribute the cash flows obtained from the underlying portfolio on each payment date among the various CDO classes/tranches of bonds with differing risk characteristics. The CDO collateral can range from high-yield bonds to

52. Hundreds of triple-A-rated senior classes were downgraded in 2008 as the rating agencies began to realize that the underlying collateral was experiencing much higher default rates than had previously been expected.

53. Synthetic CDOs contain credit default swaps and other financial instruments that synthetically replicate a portfolio of bonds and bank loans.

emerging market debt to corporate loans to mortgages. The methodology designed to channel cash flows depends upon the nature of the risk of the collateral and investor preferences. For instance, in the case of agency mortgages, prepayment and the consequent shortening of duration is the key issue. However, investors such as pension funds prefer long duration assets from the perspective of asset-liability management. Therefore, the structuring exercise focuses on designing different classes of derivative instruments that match the tolerances of investors for differing exposures to prepayment risk and to default risk. Similarly, certain investors are not permitted to purchase bonds that are rated below investment-grade.<sup>54</sup> In this case, the cash flow allocation rules prioritize the distribution of the cash flows, which can create one or more classes of higher-grade bonds from lower-grade collateral by reallocating the default risk appropriately.

It is important to appreciate that default risk is not eliminated; it is simply reallocated among the classes of derivative securities issued by the SPV. The senior SPV classes have less default risk than the underlying pool of assets, but the more junior SPV classes have more default risk. The most junior classes (subordinated and equity classes in Exhibit 6) bear disproportionately large default risk. If the underlying pool of assets has a high level of default risk, for example, because it contains subprime mortgages, then the opportunities for risk reallocation are consequently more limited, and recent experience indicates that even the senior-most SPV classes are likely to have a high degree of default risk.

CDOs have been at the heart of a number of disputes. Many CDOs have experienced unexpectedly high default rates, which have led to litigation. For example, *Metropolitan West Asset Management v. Shenkman Capital Management*, which is discussed later in the article, concerns a dispute over the liquidation of a CDO's collateral, which had fallen in value in response to the higher default rates to the point where the indenture gave the senior note holders the right to direct the trustee to liquidate the collateral.<sup>55</sup> CDO tranches are often insured by financial insurers, and problems with these insurance arrangements have triggered litigation. For example, *Merrill Lynch v. XL Capital Assurance*, which

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54. Bond ratings fall into several categories. The ratings from highest to lowest, according to Moody's Investors Service, are Aaa, Aa, A, Baa, Ba, B, Caa, Ca, C, and D. Baa and above are investment-grade, and Ba and below are speculative-grade.

55. No. 03 Civ. 5539 (NRB), 2005 U.S. Dist. LEXIS 17003, at \*1-5 (S.D.N.Y. Aug. 16, 2005).

is discussed later in the article, is an example of a case involving CDOs and CDS contracts referenced to one or more of the CDO tranches that a securities dealer had purchased to hedge the default risk inherent in various CDO tranches it was holding.<sup>56</sup>

Many very complex CDOs, and in particular CDOs structured around subprime mortgage collateral, experienced large losses during 2007 and 2008, which triggered lawsuits seeking recovery of investor losses asserting fraud and other allegations.

### III. OVERVIEW OF DERIVATIVES LITIGATION BASED ON THE TYPE OF DERIVATIVE INSTRUMENTS INVOLVED

This section provides an overview of federal derivatives litigation since 2001. We furnish a breakdown of the litigation between enforcement actions and court cases and also by type of derivative instrument and by type of underlying asset. We also provide a brief description of some representative cases to highlight the major legal and financial issues raised by derivatives litigation.

#### A. FREQUENCY OF LITIGATION AND ENFORCEMENT ACTIONS

Exhibit 7 provides an annual breakdown of federal enforcement actions and litigation in the federal courts relating to derivatives between 2001 and 2009. The enforcement actions consist of cases initiated by regulatory agencies, such as the Commodities Futures Trading Commission (the “CFTC”), the Securities and Exchange Commission (the “SEC”), the Department of Labor (the “DOL”), and the Justice Department. The federal litigation consists mainly of cases initiated by private litigants.

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56. 564 F. Supp. 2d 298 (S.D.N.Y. 2008).

Exhibit 7  
*Annual Breakdown of Litigation and Enforcement Actions*

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
Enforcement Action	2	6	5	6	7	21	15	15	13	90
Other	11	12	8	8	13	27	12	19	38	148
<b>Total</b>	13	18	13	14	20	48	27	34	51	238

A total of 238 derivatives-related cases consisting of ninety enforcement actions and 148 private cases were filed in the U.S. courts between 2001 and 2009. Enforcement actions averaged ten per year from 2001 to 2009. The number increased significantly in 2006 to peak at twenty-one, from a yearly mean of about five between 2001 and 2005. Private causes of action exhibit a similar pattern until 2006, cresting at twenty-seven that year, falling to just twelve in 2007, but then rising steadily thereafter and reaching thirty-eight in 2009. In 2006, the greatest number of cases involved options on currencies or options on commodities, with the plaintiffs typically alleging fraud or breach of contract. More recently, the greatest number of cases still involves options on currencies or commodities. However, cases involving mortgage-backed securities and collateralized debt obligations increased dramatically in 2009 as a result of the mortgage-backed and asset-backed securities market meltdowns beginning in 2007.

#### B. BREAKDOWN OF DERIVATIVES CASES BY JURISDICTION

Exhibit 8 furnishes a breakdown of federal derivatives litigation between 2001 and 2009 by federal circuit. The Second Circuit, which includes the state of New York, had the most cases filed during the 2001-2009 period. Of the 238 cases, eighty-four were filed in the Second Circuit, which accounted for more than one-third of all cases.

*Exhibit 8  
Annual Breakdown of Cases by Jurisdiction*

<b>Circuit</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>Total</b>
1	0	0	0	0	0	2	0	1	0	3
2	4	8	8	5	5	14	8	9	23	84
3	0	0	0	1	4	5	1	3	3	17
4	1	2	0	0	0	5	1	0	4	13
5	0	1	0	1	4	3	3	0	3	15
6	1	0	0	0	3	2	3	1	4	14
7	2	1	1	3	0	1	3	5	8	24
8	1	1	0	0	1	4	0	1	0	8
9	1	0	2	1	1	4	5	5	4	23
10	0	0	0	0	0	1	0	3	0	4
11	3	5	2	3	2	7	3	6	2	33
<b>Total</b>	13	18	13	14	20	48	27	34	51	238

This high proportion of cases in the Second Circuit is not surprising because securities and derivatives contracts typically specify New York law, and the major securities dealers are based in New York City. The Second Circuit remained the dominant jurisdiction for derivatives-related litigation each year during the nine-year period.

#### C. CASES BY TYPE OF DERIVATIVE INSTRUMENT

Exhibit 9 furnishes a breakdown of derivatives cases according to the type of derivative instrument that is the subject of the litigation. Options are the most common derivative instrument referenced in cases filed between 2001 and 2009, accounting for 46% of all the cases. Futures and forwards were the next most frequently cited instruments, representing 24% of all the derivatives-related litigation, followed by swaps with 18%. The number of options cases has remained high year after year. In 2009, options-related disputes were most common with fifteen filings, followed by futures and forwards with thirteen and eleven related to swaps. As noted earlier, the complexity of option contracts,



the apparent opportunity for large returns, and the lack of market prices for over-the-counter options combine to make these instruments ripe for fraud in the hands of disreputable promoters.

*Exhibit 9*  
*Annual Breakdown of Cases by Type of Derivative*

Derivative Instrument	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
CDO	0	0	2	2	0	2	0	1	8	15
Credit Default Swaps	1	1	0	0	0	1	1	2	6	12
Other Swaps	1	2	4	2	2	8	2	8	5	34
Options	6	8	4	5	13	33	15	17	15	116
MBS (CMO, IO, PO, etc)	2	0	0	0	0	1	0	0	6	9
Other Structured	0	0	0	0	0	0	1	1	1	3
Repo	0	1	0	0	0	0	0	2	2	5
Futures/Forwards	4	7	4	6	6	6	8	6	13	60
<b>Total</b>	14	19	14	15	21	51	27	37	56	254

The high numbers of options cases between 2005 and 2009 were due to a significant increase in litigation alleging fraud. The number of cases alleging fraud jumped to thirty-three in 2006 from just five in the immediately preceding four-year period. Most of these cases involved investment advisors allegedly misleading investors about the profitability of investment strategies utilizing options and misrepresenting potential investment results. Futures and forwards accounted for more derivatives cases than options between 1994 and 2000 because there were more cases involving commodities in that period. Commodities forwards and futures were involved in a high percentage of cases, especially CFTC enforcement actions.<sup>57</sup> Between 2001 and 2009, the mix of cases has shifted toward a higher percentage of stock options and currency options cases.

There were only twelve cases involving credit default swaps. However, these instruments are among the newer derivatives, and their use has rapidly grown.<sup>58</sup> There were six credit default swap cases filed

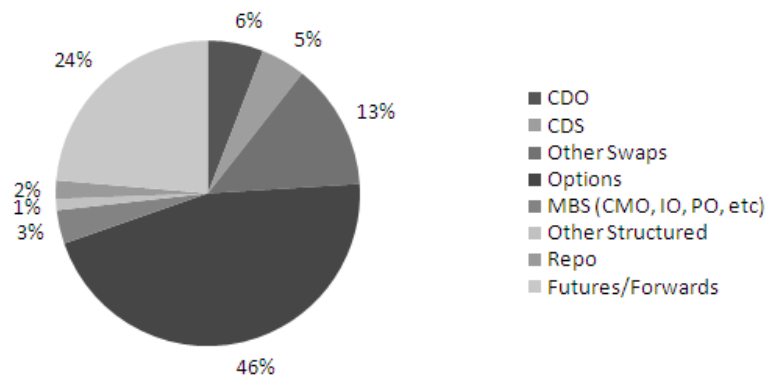
57. Finnerty & Brown, *supra* note 6, at 149-51.

58. CDS contracts were developed in the mid-1990s, which makes them newer than financial forwards and futures, options, and interest rate and currency swaps.

in 2009 alone. The depth and severity of the current credit crisis suggests that the number of credit derivative cases will increase within the next few years.

Exhibit 10 provides an overall breakdown of cases by derivative type for the nine-year period. The current economic crisis started when the mortgage-backed securities market suffered a meltdown in 2007. Securities dealers had aggressively securitized subprime mortgages and so-called Alt-A mortgages, which lenders extended based on minimal documentation, which were thus ripe for fraud. Many of these securitizations have exhibited very high default rates.<sup>59</sup> There were just nine cases involving mortgage-backed securities filed between 2001 and 2009. We expect that the mix of cases will shift toward CDS, CDO, and MBS over the next few years.

*Exhibit 10  
Overall Breakdown of Cases by Type of Derivatives*



#### D. CASES BY TYPE OF UNDERLYING ASSET

Exhibit 11 describes the mix of derivatives cases between 2001 and 2009 based on the type of underlying asset.<sup>60</sup> The most frequently referenced underlying asset is foreign exchange, which accounted for 31% of all the cases filed during the 2001-2009 period. Currency derivatives have been the source of some high-profile disputes.<sup>61</sup> These

59. See Fannie Mae, Quarterly Report (Form 10-Q) (Mar. 31, 2009).

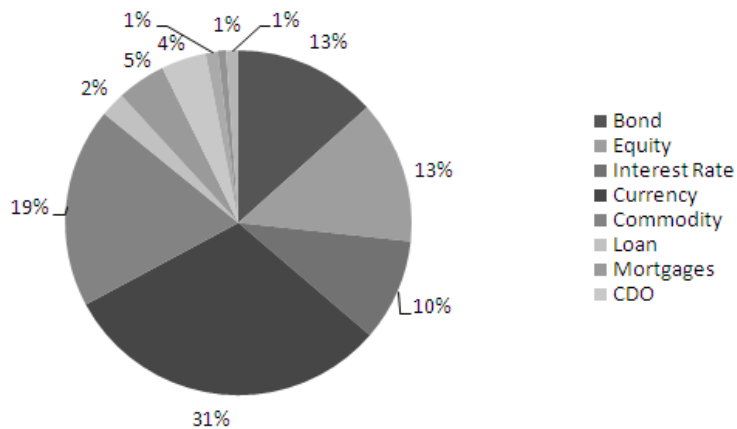
60. The number of underlying instruments exceeds the number of cases reported in Exhibit 9 because some derivatives cases reference more than one type of underlying asset.

61. See, e.g., *De Kwiatkowski v. Bear, Stearns & Co.*, 306 F.3d 1293, 1295-97 (2d

cases often involve either hedges that failed to perform as expected or currency speculation that resulted in unexpected losses that the speculator sought to void.

Ranking second, commodities were referenced in forty-nine cases, which represented 19% of all derivatives litigation. Cases involving currencies or commodities often allege fraud, and more specifically, the allegation that the securities dealer or the promoter misrepresented the trading strategies and/or overstated his investment results when he solicited funds from investors.<sup>62</sup>

*Exhibit 11*  
*Overall Breakdown of Cases by Type of Underlying*



Bonds and equities were the next most common underlying instrument, each accounting for 13% of all the cases filed. Interest rates ranked next with 10% of the cases.

Exhibit 12 provides a breakdown of cases by type of underlying asset during the nine-year period. The number of cases referencing bonds was evenly spread, averaging three per year, from 2001 to 2008, before jumping to eleven in 2009. Commodity and currency-related derivatives litigation jumped significantly to a peak in 2006 before tapering off in 2007 and 2008. There were only three cases referencing

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Cir. 2002).

62. See CHARLES W. SMITHSON, *MANAGING FINANCIAL RISK: 1996 YEARBOOK*, Ch. 4 (CIBC Wood Gundy 1996); see also CHARLES W. SMITHSON, *MANAGING FINANCIAL RISK: 1997 YEARBOOK*, Ch. 4 (CIBC Wood Gundy 1997).

mortgages from 2001 to 2008 but the number of such cases increased to nine in 2009. This trend is likely to continue over the next few years because of the lingering effects of the 2007 subprime mortgage debacle.

*Exhibit 12  
Annual Breakdown of Cases by Type of Underlying*

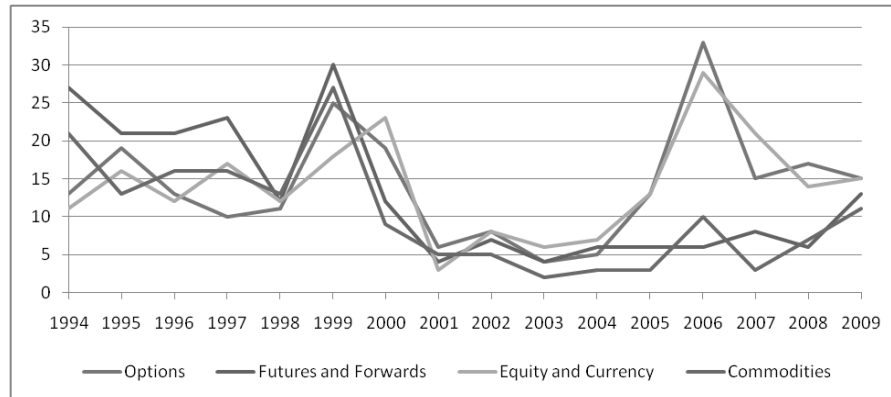
Underlying Asset	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Bond	3	3	1	2	0	7	4	4	11	35
Equity	3	3	1	2	2	7	7	3	7	35
Interest Rate	1	1	1	1	2	7	2	7	3	25
Currency	0	5	5	5	11	22	14	11	8	81
Commodity	5	5	2	3	3	10	3	7	11	49
Loan	0	0	1	1	0	1	0	1	2	6
Mortgages	2	0	0	0	0	1	0	0	9	12
CDO	0	0	0	0	0	0	0	1	10	11
Swaps	1	1	0	0	0	0	0	0	1	3
Volatility	0	0	0	0	0	0	0	0	2	2
ABS/MBS	0	0	0	0	0	0	0	0	3	3
<b>Total</b>	15	18	11	14	18	55	30	34	67	262

Exhibit 13 provides a longer-term perspective on the mix of cases based on the relationship between the type of derivative instrument and the nature of the underlying asset.<sup>63</sup>

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63. See Finnerty & Brown, *supra* note 6, at 134-36 (overview of derivative-related cases between 1994 and 2000).

*Exhibit 13*  
*Number of Cases by Type of Derivative and Underlying Asset:*  
*1994 to 2009*



Cases involving options on stocks or currencies and cases involving commodities forward or futures contracts occur in large numbers throughout the sixteen-year period. Options are complex instruments that entail leverage. When losses occur, this leverage tends to magnify them. The larger losses in turn make it more likely that the aggrieved party will litigate if the dispute cannot be resolved amicably.

#### E. REPRESENTATIVE CASES

Numerous cases in the period 2001-2009 revolved around the use of foreign currency options to allegedly create illegal tax shelters.<sup>64</sup> The typical transaction involved a bank or securities firm, a law firm, an accounting firm, and a wealthy individual seeking to avoid a large capital gains tax liability, for example, on the gain realized when shares of common stock of a previously closely held firm were sold in a public offering or a change-of-control transaction. The tax shelter entailed structuring a sequence of transactions designed to manufacture a large loss for income tax purposes, usually by exploiting a perceived loophole in the partnership tax rules. The bank or securities firm offered the derivative, the accounting firm structured the erstwhile tax shelter, and the law firm opined on the legality of the package.

These structures often entailed buying and selling foreign exchange call options (or put options) with roughly the same strike price. The

64. Alan L. Tucker, *Son of BOSS*, 15 J. of Derivatives 74, 82-83 (2008).

nearly identical strike prices meant that the option holder had very little risk and very little opportunity for profit. These options were transferred to a partnership soon after purchase. The tax basis of the partnership was increased by the amount paid to purchase the long option position, while not accounting for the obligation associated with the short option position. The partnership was subsequently dissolved, and the assets were distributed to the partners who reported a large capital loss for income tax purposes owing to their high tax basis in the partnership. Some of the tax structures<sup>65</sup> that fit this general form were marketed under the names BOSS (Bond and Options Sales Strategy), COBRA (Currency Options Bring Reward Alternatives), FLIP (Foreign Leveraged Investment Program), OPS (Option Participation Strategy), HOMER, BART etc.<sup>66</sup>

In a number of related cases, such as *Denney v. BDO Seidman* and *Denney v. Jenkins & Gilchrist, et al.*, the plaintiff taxpayers sued defendants Deutsche Bank, law firm Jenkins & Gilchrist, and tax and accounting experts BDO Seidman (“BDO”).<sup>67</sup> The tax strategy was developed by Jenkins & Gilchrist, and BDO marketed it to high-net-worth individuals. Jenkins & Gilchrist wrote the legal opinions asserting the legality of the tax shelter.<sup>68</sup> Plaintiffs opened accounts with Deutsche Bank to execute the option transactions based on BDO’s recommendation, Deutsche Bank’s assurances regarding the strategy, and Jenkins & Gilchrist’s tax opinion.<sup>69</sup>

In August 2000, the IRS published a notice stating that the COBRA structure was illegal because it lacked economic substance and warning that it had previously taken the position that similar tax shelters were not valid in another circular issued in December 1999.<sup>70</sup> Nonetheless, Jenkins & Gilchrist apparently continued to vouch for the legality of such deals.<sup>71</sup> The plaintiffs used the COBRA strategy to reduce their

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65. See The Johnson Law Firm, *Tax Shelter Abuse: Complaints and Lawsuits*, <http://www.taxsheltervictimslawfirm.com/> (last visited Mar. 31, 2010) (discussing various forms of tax shelters).

66. See Tax-News.com, Leroy Baker, *Tax Shelter Probe Sinks Esteemed US Law Firm*, [http://www.tax-news.com/archive/story/Tax\\_Shelter\\_Probe\\_Sinks\\_Esteemed\\_US\\_Law\\_Firm\\_xxxx26854.html](http://www.tax-news.com/archive/story/Tax_Shelter_Probe_Sinks_Esteemed_US_Law_Firm_xxxx26854.html) (last visited Mar. 31, 2010).

67. *Denney v. BDO Seidman, L.L.P.*, 412 F. 3d 58 (2d Cir. 2005); *Denney v. Jenkins & Gilchrist*, 412 F. Supp. 2d 293 (S.D.N.Y. 2005).

68. *BDO Seidman*, 412 F.3d 58.

69. *Id.*

70. *Id.*

71. *Denney v. Jenkins & Gilchrist*, 340 F. Supp. 2d 338, 342 (S.D.N.Y. 2004).

income taxes for 1999, 2000 and 2001.<sup>72</sup> Upon receiving notices from both the New York State Revenue Department and the IRS stating that their income tax returns had been selected for audit, the plaintiffs sued the defendants alleging several violations of the law, including unjust enrichment, breach of fiduciary duties, and negligent misrepresentation.<sup>73</sup>

Plaintiffs had allegedly entered into a consulting agreement with BDO to participate in the COBRA tax arrangement.<sup>74</sup> The district court held that the consulting agreement was just a “trick” to prevent the other parties from understanding the true nature of the relationship between the plaintiffs and BDO, and therefore was mutually fraudulent and void.<sup>75</sup> However, the court of appeals overturned the district court’s decision that the contracts were mutually fraudulent.<sup>76</sup>

Numerous other cases involved commodity futures or forward contracts. For example, *Olympic Natural Gas Co. v. Morgan Stanley Capital Group, Inc.* is a commodities dispute concerning settlement payments owed under natural gas contracts by a firm that filed for bankruptcy protection.<sup>77</sup> The bankruptcy trustee sought avoidance of payments made by the Olympic Natural Gas Co. and Olympic Gas Marketing, Inc. (collectively, “Olympic”) to Morgan Stanley Capital Group (“Morgan Stanley”). The trustee alleged that the payments could be avoided as preferential or fraudulent transfers. Morgan Stanley argued that the contracts in question were forward contracts, that the monies Olympic owed were “settlement payments” which it made to Morgan Stanley acting as a forward contract merchant, and that the payments were therefore exempt from avoidance attack.

There were two crucial issues before the court.<sup>78</sup> First, was Morgan Stanley a forward contract merchant? To settle that question, it was necessary to determine whether the contracts Olympic had entered into with Morgan Stanley were forward contracts. Second, it was necessary

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72. *Id.* at 342-43.

73. *See id.* at 340, 342.

74. *BDO Seidman*, 412 F.3d at 61-62 (citing *Denney v. Jenkins & Gilchrist*, 340 F. Supp. 2d 338, 341 & 343-45 (S.D.N.Y. 2004)). However, the BDO consulting agreement did not mention the COBRA strategy by name. 412 F. Supp. 2d at 301 & n.49.

75. *BDO Seidman*, 412 F.3d at 63 (citing *Denney v. Jenkins & Gilchrist*, 340 F. Supp. 2d 338, 346-47 & n.9).

76. *Id.* at 60-61.

77. *In re Olympic Nat. Gas Co. v. Morgan Stanley Capital Group*, 294 F.3d 737, 739-40 (5th Cir. 2002).

78. *Id.* at 740.

to determine whether the cash transfers were settlement payments under these contracts.

The disputed contracts outlined the terms of sales and purchases of natural gas between Olympic and Morgan Stanley. Each month the counterparties entered into a number of transactions with a single settlement date. The trustee claimed that the bankruptcy code divided the commodity world into three parts: (1) exchange-traded futures contracts; (2) off-exchange over-the-counter forwards; and (3) ordinary commodity contracts (commercial contracts for the supply of goods with a future delivery date).<sup>79</sup> The trustee alleged that Olympic's agreements with Morgan Stanley fell into the third category.<sup>80</sup> Morgan Stanley argued that the last two categories are the same and that the disputed contracts are forward contracts.<sup>81</sup>

The bankruptcy court and the district court sided with Morgan Stanley in determining that the commodity world was divided only into exchange-traded and over-the-counter markets and that the contracts in question were indeed valid forward contracts.<sup>82</sup> The courts ruled that Morgan Stanley was acting as a forward contract merchant when it entered into the disputed contracts and that the transfers in question were covered by the definition of settlement payments to close a forward contract. The appellate court upheld these rulings. Therefore, Olympic's payments to Morgan Stanley could not be avoided under the bankruptcy code.<sup>83</sup>

## VI. CREDIT DERIVATIVES CASES

This section discusses recent noteworthy credit derivatives cases. We believe that the current economic crisis is likely to spawn significant credit derivatives litigation because the credit market meltdown exposed flaws in many of these instruments and generated large losses that are likely to lead to litigation.

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79. *Id.*

80. *Id.*

81. *See id.* at 740-41.

82. *Id.* at 739-40.

83. *Id.* at 742.



## A. NATURE OF CREDIT DERIVATIVES CASES

Credit derivatives cases have assumed some prominence in the context of the current economic crisis. This crisis is due, at least in part, to a substantial recalibration of credit risk by capital market participants. CDS played a central role in this process. The CDS market grew rapidly beginning in 2000. The notional value outstanding of CDS contracts was U.S. \$57.4 trillion at the end of June 2008.<sup>84</sup> Similarly, CDO issuance expanded on the premise that it helped to better match issuance with investor risk tolerances.

As reported in Exhibit 9, a total of twenty-seven credit-related derivatives cases, fifteen involving CDOs and twelve involving CDS, were filed in the federal courts between 2001 and 2009. Due to the steep losses experienced by many CDO investors, an increase in litigation alleging misrepresentation of CDO investment risks can be expected in the future.

## B. REPRESENTATIVE CREDIT DERIVATIVES CASES

*Hoosier Energy Rural Electricity Cooperative v. John Hancock Life Insurance Company* is a complex dispute involving CDS contracts that resulted directly from the current credit crisis.<sup>85</sup> In 2002, plaintiff Hoosier Energy entered into a sale-in-lease-out (“SILO”) transaction involving an electric generating plant.<sup>86</sup> Hoosier Energy leased certain assets at its Merom power plant to John Hancock Life Insurance (“John Hancock”) for a term of sixty-three years (which exceeded their useful life) in return for a one-time payment of \$300 million.<sup>87</sup> John Hancock immediately leased these assets back to Hoosier Energy for a term of thirty years in return for periodic lease payments. Hoosier Energy retained close to \$20 million of the money received for the initial lease-out and deposited \$278 million with various Ambac entities, which committed to make regular lease payments on Hoosier Energy’s behalf

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84. Bank for Int’l Settlements, *Amounts Outstanding of Over-the-Counter (OTC) Derivatives*, BIS Q. REV. at A103 tbl. 19 (Dec. 2009) (statistical annex), available at <http://www.bis.org/statistics/otcder/dt1920a.pdf>.

85. See *Hoosier Energy Rural Elec. Coop. v. John Hancock Life Ins. Co.*, 588 F. Supp. 2d 919 (S.D. Ind. 2008).

86. *Id.* at 922.

87. *Id.*

to John Hancock.<sup>88</sup>

The SILO transaction was designed to allow John Hancock to claim to be the “owner” of the plant for tax purposes.<sup>89</sup> John Hancock would then be able to claim tens of millions of dollars of tax deductions, which Hoosier Energy could not use, because as an electricity cooperative, it operated near break-even in selling electricity to its members. However, Hoosier Energy made additional payments to Ambac entities, which made it virtually certain that Hoosier Energy would retain control of the Merom plant.<sup>90</sup> The IRS had begun disallowing income tax deductions to participants in SILO transactions around the time of the Hoosier Energy transaction.<sup>91</sup> The transaction allegedly lacked economic substance because Hoosier Energy would remain in control of the plant, and John Hancock would not have the rights, risks, and responsibilities normally associated with asset ownership.<sup>92</sup>

As a part of the transaction, Hoosier Energy was required to provide John Hancock with a CDS contract from Ambac to provide further assurances of timely lease payments. The CDS was intended to protect John Hancock if Hoosier Energy defaulted under the lease. If Hoosier Energy defaulted, John Hancock could demand a termination payment from Ambac. Ambac, in turn, purchased a closely matching CDS from Hoosier Energy, which would pay off if Hoosier Energy defaulted under the lease.<sup>93</sup>

John Hancock sought further protection by requiring that the party providing the CDS should have a credit rating no lower than “AA”. Consequently, if Ambac’s rating dropped below “AA”, then Hoosier Energy was obligated to replace Ambac with another insurer satisfying the “AA” requirement within sixty days. If Hoosier Energy failed to do so, John Hancock could declare an event of default and demand the termination payment from Ambac, and Ambac could demand a substantial payment from Hoosier Energy under the CDS. This compensation would amount to approximately \$121 million, as of the end of November 2008.<sup>94</sup>

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88. *Id.*

89. *Id.*

90. *Id.*

91. *Id.* at 923.

92. *See id.* at 924, 927-28.

93. *Id.* at 922.

94. *Hoosier Energy Rural Elec. Coop. v. John Hancock Life Ins. Co.*, No. 1:08-cv-1560-DFH-DML, 2008 U.S. Dist. LEXIS 100353, at \*2-3 (S.D. Ind. Dec. 11, 2008).

Global credit woes, and in particular, the subprime mortgage crisis, drove Ambac's credit rating down to "Aa3" in June 2008.<sup>95</sup> The credit crisis apparently made it impossible for Hoosier Energy to find a replacement for Ambac within the required sixty days.<sup>96</sup> Following a fifty-day extension, Hoosier Energy had lined up a replacement for Ambac but required an additional ninety days to close the transaction.<sup>97</sup> John Hancock refused to grant any further extension, declared an event of default, and demanded a \$120 million termination payment from Ambac.<sup>98</sup>

The termination payment by Ambac to John Hancock would have resulted in a similar obligation for Hoosier Energy, forcing it into bankruptcy.<sup>99</sup> The district court concluded that the bankruptcy filing would likely cause severe irreparable harm to Hoosier Energy.<sup>100</sup> In addition, the court found that Hoosier Energy had a meritorious argument that the CDS contracts were part of an allegedly abusive and essentially illegal SILO transaction that was devoid of any economic substance.<sup>101</sup> Last but not least, in the wake of the extraordinary credit crisis, the court also found that it was reasonably likely that Hoosier Energy would be able to assert temporary commercial impracticability with respect to its obligation to arrange for another CDS counterparty that met the "AA" threshold within the pre-agreed time interval, and that it should be entitled to more time.<sup>102</sup> Based on these facts, the district court granted Hoosier Energy's motion for a preliminary injunction to enjoin John Hancock and Ambac from asserting an event of default and demanding any termination payments.<sup>103</sup>

*Merrill Lynch v. XL Capital Assurance* is a case in which one credit derivative (a CDS) referenced another credit derivative (a CDO), highlighting the sort of complexities that are at the heart of the current problems plaguing the credit markets.<sup>104</sup> Plaintiff, Merrill Lynch

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95. See *Hoosier Energy Rural Elec. Coop.*, 588 F. Supp. 2d at 924.

96. By June 2008, only three of the thirteen financial guarantors tracked by Moody's and Standard & Poor's had a rating of "AA" or better. *Hoosier Energy Rural Elec. Coop.*, LEXIS 100353, at \*9.

97. *Id.* at \*11-\*12.

98. *Id.* at \*3.

99. *Id.* at \*13-\*16.

100. *Id.* at \*13.

101. *Hoosier Energy Rural Elec. Coop.*, 588 F. Supp. 2d at 926-28.

102. *Id.* at 930-32.

103. *Id.* at 935.

104. *Merrill Lynch Int'l v. XL Capital Assurance*, 564 F. Supp. 2d 298 (S.D.N.Y.

International (“MLI”), sued the bond insurer XL Capital Assurance Inc. (“XLCA”) to enforce seven credit default swaps with a notional amount of about \$ 3.1 billion. The reference obligations for these swaps were seven CDOs.

MLI owned both the A-1 and A-2 “super senior” tranches of the CDOs in question, but purchased insurance from XLCA only on the A-2 tranche.<sup>105</sup> In general, the seller of protection in the CDS gets voting rights only on the insured tranche, but in this case, XLCA obtained exclusive “controlling class” rights on both tranches.<sup>106</sup> Subsequently, MLI bought another CDS referencing the A-1 tranche of the same CDOs. Subsequently, MLI bought six additional CDSs referencing the same A-1 notes of six of the seven CDOs that were referenced in the XCLA swaps.<sup>107</sup> XLCA learned that S&P listed MBIA as the bond insurance provider for the six CDOs and that MBIA had instructed MLI how to exercise certain Class A-1 voting rights for the six CDOs. Based on this information, XLCA decided to terminate the swaps alleging that MLI had anticipatorily breached, or repudiated, six of the contracts by entering into CDSs with another guarantor referencing the same CDOs.<sup>108</sup> Additionally, XLCA tried to terminate a seventh CDS because MLI had allegedly failed to adequately assure XLCA of its intent to perform under this CDS contract.<sup>109</sup>

The district court found that the contractual language qualified MLI’s requirement to obey MBIA’s directions where these directions might conflict with meeting its obligations under the XLCA swap agreements.<sup>110</sup> Thus, XLCA was not justified in terminating the six CDSs where MBIA was also an insurer. Also, the court found that XLCA’s concerns about MLI’s possible nonperformance on the seventh swap were not valid because they were premised on an incorrect interpretation of MLI’s conduct on the other six CDS transactions.<sup>111</sup>

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2008).

105. *Id.* at 300.

106. *Id.*

107. *Id.* at 301.

108. *Id.* In general, the most senior class of CDO notes is the “controlling class.” It has the right to direct the CDO trustee to institute legal proceedings, and in the event of default, to terminate the collateral manager, accelerate note maturities, and order the liquidation of the trust’s collateral.

109. *Id.* at 302.

110. *Id.* at 304.

111. *Id.* at 306.

Consequently, the court ruled that XLCA's termination notices did not have any legal basis, and the CDS contracts remained in effect.<sup>112</sup>

## V. DERIVATIVES CASES BASED ON THE NATURE OF THE ALLEGATIONS

This section provides a breakdown of derivatives actions based on the nature of the allegations. We also describe some of the more noteworthy cases.

### A. DISTRIBUTION OF CASES BY TYPE OF ALLEGATION

Exhibit 14 shows the annual breakdown of derivatives-related litigation based on the nature of the allegations. Fraud, including securities fraud, was the prime allegation in derivatives litigation between 2001 and 2009. Fraud was alleged in 138 cases. Breach of contract was the next most frequent allegation; it was alleged in sixty-five instances. The percentage of cases alleging fraud peaked at 80% in 2007, while the percentage alleging breach of contract reached a peak of 35% in 2002. Of course, many complaints involve multiple allegations. The bulk of the options and futures cases surveyed involve alleged fraud by investment advisors who were soliciting investments on the basis of misrepresentations involving derivatives.

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112. *Id.*

Exhibit 14  
Annual Breakdown of Cases by Type of Allegation

Allegation	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Fraud	6	8	6	4	7	24	17	16	15	103
Securities Fraud	4	1	2	3	2	5	3	3	12	35
Civil Conspiracy	0	0	0	0	4	2	0	3	2	11
Breach of Contract	4	7	3	3	4	16	3	6	19	65
Breach of Fiduciary Duty	1	2	1	0	4	2	1	5	14	30
Good faith and Fair Dealing	0	1	0	0	2	5	0	1	3	12
Unjust Enrichment	0	0	0	0	5	1	0	1	7	14
Negligent Misrepresentation	0	1	0	0	4	2	0	3	8	18
Negligence	0	0	0	0	0	3	0	1	4	8
Illegal Tax Shelter	0	0	0	0	0	0	1	3	4	8
<b>Total</b>	15	20	12	10	32	60	25	42	88	304

The high percentage of fraud cases is not surprising because derivatives instruments are complex, and unscrupulous promoters often misrepresent their capabilities to induce investors into entering into transactions. This complexity facilitates their misuse because investors would be less likely to accept the misrepresentations if the contracts were simpler and therefore more easily understood.

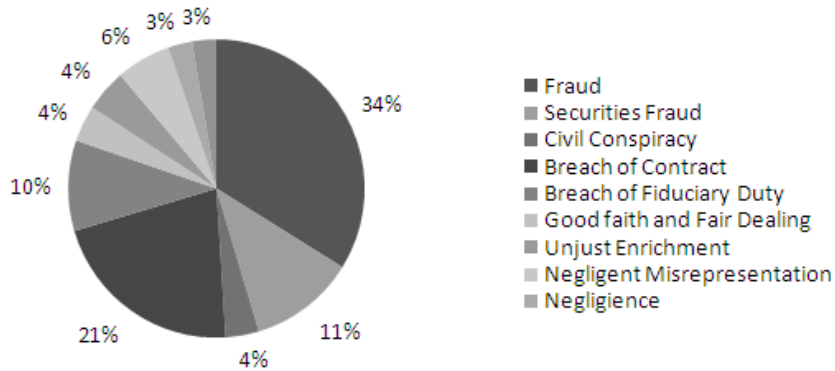
Exhibit 15 provides an overall breakdown of derivatives-related cases during the nine-year period based on the type of allegation. Fraud, at least partly, accounts for 34% of the cases and a total of 45% when securities fraud is included. Breach of contract at least partly accounts for 21%. The interest rate-swap and credit derivative disputes during this period were dominated by alleged breach of contract and other contractual issues, such as disagreements about the interpretation of covenants (*Metropolitan West Asset Management v. Shenkman Capital Management*, which is detailed later in the article<sup>113</sup>) and disputes regarding termination payments (*Hoosier Energy Rural Electricity Co-operative v. John Hancock Life Insurance Company*,<sup>114</sup> which was

113. 2005 U.S. Dist. LEXIS 17003 (S.D.N.Y. 2005).

114. No. 1:08-cv-1560-DFH-DML, 2008 U.S. Dist. LEXIS 100353 (S.D. Ind. Dec. 11, 2008).

discussed earlier in the article, and *In re: Plastech Engineered Products, Inc.*,<sup>115</sup> which is detailed later in the article). Payment disputes under interest rate swap contracts are often framed as breach of contract cases in which one party disputes the other party’s payment calculation.

*Exhibit 15*  
Overall Breakdown of Cases by Type of Allegation



### B. THE MADOFF PONZI SCHEME

The Madoff scandal provides a current example of how promoters can invoke supposedly sophisticated options strategies to carry out a fraudulent investment scheme. Bernard Madoff allegedly achieved stellar investment performance by utilizing a sophisticated “split-strike conversion strategy.”<sup>116</sup> This performance has been revealed to be nothing more than a multi-billion dollar Ponzi scheme. His largest fund reported consistently high returns with incredibly low volatility over nearly two decades, which he attributed to his strategy of coupling an investment in large cap stocks with the purchase and sale of S&P 100 Index options.<sup>117</sup> This “split-strike conversion strategy” investment scheme involved (a) buying a portfolio of common stocks that were supposed to replicate the performance of the S&P 100 Index plus (b) buying out-of-the-money S&P 100 Index put options plus (c) selling

115. 399 B.R. 1 (Bankr. E.D. Mich. 2008).

116. Bernard & Boyle, *supra* note 7, at 2. See also Stephen Gandel, *Wall Street’s Latest Downfall: Madoff Charged with Fraud*, TIME, Dec. 12, 2008, available at <http://www.time.com/time/business/article/0,8599,1866154,00.html>.

117. Gandel, *supra* note 116, at 2-3.

out-of-the-money S&P 100 Index call options.<sup>118</sup> The put options are supposed to protect the equity portfolio against downside risk. The premium received from selling the call options is designed to pay for the put options. Together they constitute a collar; however, referring to the strategy as a “split-strike conversion strategy” sounds more sophisticated than simply calling it a collar. As with any equity collar, the investor forgoes some of the upside (above the call option’s strike price) to eliminate some of the downside (below the put option’s strike price). While this strategy will certainly decrease volatility as compared to a strict buy-and-hold equity scheme, the rates of return claimed by Madoff’s funds were improbably stable.<sup>119</sup>

Exhibit 16 shows that one dollar invested in December 1990 with the Fairfield Sentry Ltd. hedge fund, which was one of Madoff’s largest feeder funds, would have grown almost linearly to about six dollars by October 2008. Fairfield Sentry claimed an average annual return of 10.59% between December 1990 and October 2008 with a standard deviation of just 2.45%.<sup>120</sup> This performance compares with a 9.64% average annual return and a 14.28% standard deviation of the S&P 500 during the same period.<sup>121</sup> Investment managers calculate the Sharpe ratio to express a portfolio’s rate of return in relation to the portfolio’s risk. It equals the difference between the portfolio’s rate of return and the return of a risk-free investment (i.e., the portion of the total return that compensates for the portfolio’s risk) divided by the standard deviation of the portfolio’s return (i.e., the portfolio’s risk).<sup>122</sup>

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118. Bernard & Boyle, *supra* note 7, at 2-3.

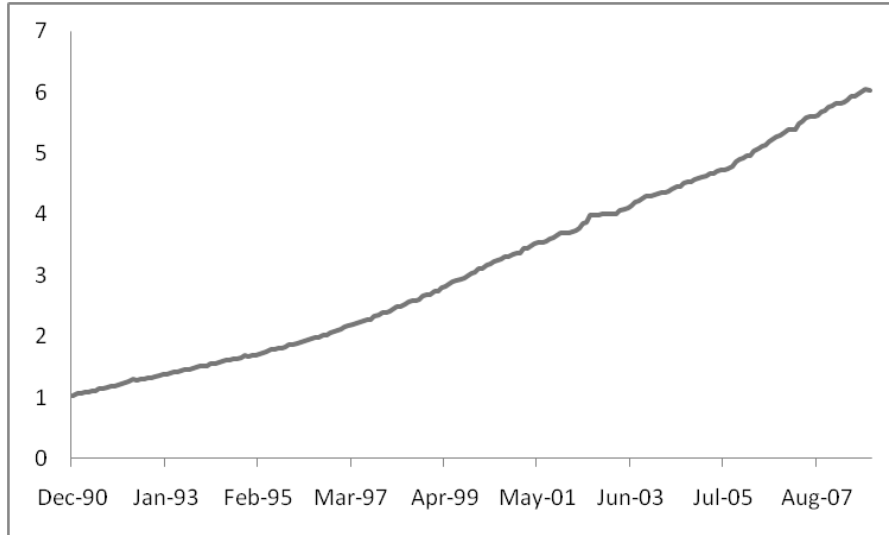
119. *Id.* at 3, 10.

120. *Id.* at 3.

121. *Id.* at 4.

122. William Sharpe, *The Sharpe Ratio*, J. of PORTFOLIO MGMT., 1994, at 49-58. The standard deviation of a portfolio’s rate of return is a standard measure of portfolio risk in the investment management field.



*Exhibit 16**Value of \$1 Invested in Fairfield Sentry: Dec. 1990 to Oct. 2008*

Source: Bernard and Boyle (2009)<sup>123</sup>

The higher the Sharpe ratio, the better is the strategy's rate of return in relation to its risk. Simulation results from strategies similar to those purportedly employed by Madoff run on data for the S&P from December 1990 to October 2008 indicate a best case annual Sharpe Ratio of 0.326 as compared to the 2.47 Sharpe Ratio claimed by Fairfield Sentry.<sup>124</sup>

In other words, Fairfield claimed a Sharpe Ratio for Madoff's strategy that was nearly eight times what could reasonably be expected. The returns Fairfield Sentry reported for Madoff's strategy implied a beta for the strategy of 0.06 and a correlation with the S&P 100 Index of only 0.3, both of which are improbably low.<sup>125</sup>

The obvious question is how could such a giant scheme continue for so long without detection? Apparently, there were several investment professionals whose warnings that the scheme was a massive fraud went unheeded.<sup>126</sup> In view of the improbability of achieving the

123. Bernard & Boyle, *supra* note 7, at 18-19.

124. *Id.* at 7.

125. *Id.* The Fairfield Sentry Ltd. hedge fund was one of the larger feeder funds for the Madoff funds.

126. Gregory Zuckerman, *Fees, Even Returns and Auditors All Raised Flags*, WALL ST. J., Dec. 13, 2008, at A7.

claimed returns, there certainly appears to have been a regulatory failure. In addition, we think that Madoff's wrapping the investment strategy in the cloak of a "nontraditional options strategy" gave it an aura of sophistication, which together with the apparently stable high rates of return, blinded investors to the possibility that it was all a sham.

### C. REPRESENTATIVE CASES

*CSX v. Children's Investment Fund Management* concerns the use of equity total return swaps by The Children's Investment Management Fund ("TCI"), 3G Fund L.P., and 3G Capital Partners L.P. ("3G") to create synthetic securities.<sup>127</sup> They allegedly did this to evade the reporting requirements of § 13(d) of the Securities Exchange Act of 1934.<sup>128</sup> CSX sued the defendants alleging a failure to file a 13(d) statement in a timely manner disclosing the formation of a group of investors whom it alleged had acted in concert to accumulate a large position in CSX common shares.<sup>129</sup> Additionally, the complaint alleged that the proxy statement did not disclose the group's beneficial ownership of shares referenced in the total return swaps.<sup>130</sup>

TCI and 3G reportedly considered CSX to be poorly managed and sought to profit from buying the company's equity and improving returns through shareholder activism.<sup>131</sup> Under the Williams Act, any accumulation of shares above 5% of the shares outstanding and/or the formation of groups for that purpose needs to be disclosed to the firm's shareholders.<sup>132</sup> TCI and 3G filed a proxy statement disclosing the formation of a group and reiterating their intention to propose nominees for election to the CSX board.<sup>133</sup> The group disclosed that it collectively held 8.7% of the shares outstanding and also that it had additional economic exposure to CSX common equity through total return swaps tied to the return on CSX stock. Under the swaps, TCI and 3G would make payments based on the London Interbank Offer Rate (LIBOR) and

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127. 562 F. Supp. 2d 511, 521-22 (S.D.N.Y. 2008).

128. *Id.* at 552.

129. *Id.* at 538.

130. CSX Corp., Information to Be Included in Statement Filed pursuant to Rule 13d-1(a) and Amendments thereto Filed pursuant to Rule 13d-2(a) (Form SC 13D), at 15, 17 (Dec. 19, 2007).

131. CSX, 562 F. Supp. 2d at 523, 530.

132. *Id.* at 538.

133. CSX Corp., *supra* note 130, at 14-15.

receive payments based on the dividends plus price appreciation minus price depreciation on a specified number of shares of CSX common stock. Deutsche Bank, the swap counterparty, had beneficial ownership of shares that was also disclosed in the proxy.<sup>134</sup>

The district court observed that while total return swaps do not directly confer beneficial ownership of the underlying assets (CSX common stock), it was evident that TCI had used the derivative contracts to avoid vesting of beneficial ownership and to evade the reporting requirements of the Securities Exchange Act.<sup>135</sup> In addition, the court concluded that the group knew that the investment banks that were the counterparties to the total return swaps would buy the underlying CSX shares to hedge their derivative positions. Thus, the court considered TCI to be the beneficial owner of the CSX shares bought by the swap counterparties. TCI and 3G would receive the benefit of any appreciation in CSX's stock price through the total return swaps, as though they had borrowed funds at LIBOR and purchased the shares directly. The court also found that TCI and 3G had formed a group earlier than they had disclosed. This ruling was based on the court's determination that group formation had to be viewed in the context of either a formal or an informal agreement to act together to further a common objective.<sup>136</sup>

In *Caiola v. Citibank*, Caiola, who was an equity trading client of Citibank, alleged securities fraud.<sup>137</sup> Caiola started trading equities in the mid-1980s through Citibank Private Bank ("Citibank"). He mainly traded Philip Morris ("PM") common stock. His PM stock positions ran into hundreds of thousands of shares and many millions of dollars, and he became one of Citibank's largest customers.<sup>138</sup> Caiola used put and call options to create collars to hedge the price risks of his stock holdings. The size of his trades grew to a level where the execution of physical transactions in PM stock and options could impact market prices and reveal his trading strategy to the market. To solve this problem, Citibank proposed synthetic positions in shares and options to Caiola in the form of equity swaps and cash-settled over-the-counter options, respectively.<sup>139</sup> On Citibank's advice, Caiola started trading

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134. *CSX*, 562 F. Supp. 2d at 537.

135. *Id.* at 517, 552.

136. *Id.* at 543, 552-53.

137. 295 F.3d 312, 312 (2d Cir. 2002).

138. *Id.* at 315.

139. *Id.* at 315-16.

total return swaps, which were coupled with synthetic options to limit the trading risks.<sup>140</sup> Citibank promised Caiola that it would control its own risks by delta hedging its net exposure to the synthetic equity and options positions.<sup>141</sup> Hedging in this manner would be much cheaper and have less market impact than executing physical trades for Caiola in the physical market.<sup>142</sup>

After Citibank's parent merged with Travelers Group, Inc., Salomon Smith Barney ("SSB") became involved in Caiola's synthetic trading. Caiola explained to Citibank that he wanted to continue his current relationship with Citibank and that he did not want to become a client of SSB.<sup>143</sup> He received assurances that his synthetic trading would not be impacted by SSB's involvement. However, starting in November 1998, without disclosing what it had done to Caiola, Citibank converted his portfolio from synthetic trading to physical trading, which involved purchasing the PM stock for Caiola's account.<sup>144</sup> In March 1999, SSB finally told Caiola that it was unwilling to bear the risks emanating from synthetic trading.<sup>145</sup>

Caiola discovered that Citibank had secretly and unilaterally switched from synthetic transactions coupled with delta hedging to simply executing massive physical trades for Caiola's account as early as November 1998.<sup>146</sup> As a result, Caiola then realized that he actually owned hundreds of thousands of shares of PM stock, which were unhedged and declining in value and which SSB was selling on his behalf.<sup>147</sup> He wrote options to try to recoup his losses and to profit from an anticipated eventual rebound in the share price. He alleged that this strategy failed because Citibank unilaterally terminated the synthetic trading, which cost him millions of dollars.

The district court ruled that Caiola's synthetic transactions were not "securities" under the Securities Exchange Act of 1934 and dismissed

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140. *Id.* at 316-17. Caiola's transactions were structured as "paired equity swaps," which ensured that his synthetic option positions would always hedge his equity swaps. This approach also simplified the dealer's hedging strategies as compared to duplicating Caiola's stock and option positions in the physical market because Citibank only had to hedge its net risk exposure.

141. *Id.* at 317.

142. *See id.* at 315-16.

143. *Id.* at 318.

144. *Id.*

145. *Id.* at 319.

146. *Id.*

147. *Id.*

the lawsuit because the plaintiff was therefore not the purchaser or seller of securities.<sup>148</sup> The appellate court overturned the district court's ruling.<sup>149</sup> It found that Caiola's cash-settled over-the-counter options were "securities."<sup>150</sup> It also found that Caiola had successfully pled securities fraud, ruling that once Citibank discussed its hedging strategy with Caiola, it had a duty to disclose it completely and accurately.<sup>151</sup>

The appellate decision is noteworthy because it applies the economic reality doctrine to test whether a financial instrument is a security.<sup>152</sup> The Supreme Court has stated that "in searching for the meaning and scope of the word 'security' . . . the emphasis should be on economic reality."<sup>153</sup> The definition of security is interpreted so as to "meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits."<sup>154</sup> The economic reality approach "permits the SEC and the courts sufficient flexibility to ensure that those who market investments are not able to escape the coverage of the Securities Acts by creating new instruments that would not be covered by a more determinate definition."<sup>155</sup>

*Lehman Brothers Commercial Corp. v. Minmetals International Non-Ferrous Metals Trading Co.* concerns a dispute involving foreign currency trading, interest rate swaps, and Thai baht-denominated negotiable certificates of deposit ("CDs").<sup>156</sup> Lehman Brothers sued Minmetals International Non-Ferrous Metals Trading Company and its parent China National Metals & Minerals Import & Export Corporation (collectively, "Minmetals") for breach of contract. Minmetals filed several counterclaims, including fraud, negligence, negligent misrepre-

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148. *Id.* at 319-20.

149. *Id.* at 331.

150. Options have been covered under section 10(b) of the Securities Exchange Act of 1934 since the 1934 Act was amended in 1982. Securities Exchange Act of 1934 Amendments of 1982, Pub. L. No. 97-303, 96 Stat. 1409 (1982). This provision covers both exchange-traded options and over-the-counter options. The appellate court also found that equity swaps are securities and are covered under Rule 10b-5 as a result of the Commodities Futures Modernization Act of 2000's (CFMA) amendments to section 10(b) of the Securities Exchange Act of 1934 in December 2000. Commodities Futures Modernization Act, Pub. L. No. 106-554, 114 Stat. 2763 (2000).

151. *Caiola*, 295 F. 3d at 331.

152. *See id.* at 325.

153. *United Hous. Found. v. Forman*, 421 U.S. 837, 848 (1975).

154. *SEC v. W. J. Howey Co.*, 328 U.S. 293, 299 (1946).

155. *Reves v. Ernst & Young*, 494 U.S. 56, 63 n.2 (1990).

156. 179 F. Supp. 2d 159 (S.D.N.Y. 2001) [hereinafter *Lehman Bros.* 2001].

sentation, and breach of fiduciary duty.<sup>157</sup>

Hu Xiangdong (“Hu”), an employee of Minmetals, conducted cash and derivatives trading with Lehman on margin. He lost substantial amounts on foreign exchange trading and swap transactions in the wake of steep rate hikes by the Fed in 1994.<sup>158</sup> Lehman issued margin calls totaling more than \$46 million. Hu agreed to a schedule of installment payments to meet the margin calls. Lehman received just one payment before Hu reneged on the rest of his commitments. Unable to reach Hu, Lehman contacted his boss, Cao Yongfang, who informed Lehman that the trading positions were unauthorized and refused to pay the amount due.<sup>159</sup> According to Minmetals, state-owned companies in China needed permission from the State Administration for Exchange Control (“SAEC”) to conduct foreign exchange trading and swap trading. Minmetals did not possess such a license and therefore, the contracts were supposedly illegal under Chinese law.<sup>160</sup> Lehman claimed that Chinese law was irrelevant since the parties had chosen Delaware law as the governing law under the terms of the contract.

The district court determined that it would follow and enforce the choice of law selection in the contractual documents.<sup>161</sup> The district court found that the transactions indeed transcended public policy boundaries in China and ruled that New York law does not ignore illegality in China.<sup>162</sup> Enforceability based on New York law boiled down to the question of whether Lehman was aware of the illegality under Chinese law and whether the choice-of-law provision was chosen to circumvent Chinese legal restrictions. Clearly, if Lehman had knowledge of Chinese laws, it would have been mindful of the fact that formal authorization was not possible for illegal acts. The court determined that whether Lehman chose the governing law to circumvent Chinese laws was a question of fact for a jury trial.

The court also determined that the defendant’s securities fraud claims relating to the interest rate swaps were not valid because these instruments are not securities under federal securities law. Additionally, the court held that the foreign exchange trades also did not qualify as

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157. *Id.* at 162.

158. *Lehman Bros. Commer. Corp. v. Minmetals Int'l Non-Ferrous Metals Trading Co.*, 179 F. Supp. 2d 118, 132 (S.D.N.Y. 2000).

159. *Id.* Hu confessed all of his unauthorized trading to Cao in July 1994.

160. *Id.* at 139.

161. *Id.* at 138.

162. *Id.*

securities under § 10(b) and that the fraud claims with reference to those transactions were not cognizable under state law.<sup>163</sup> Finally, the court found that negotiable CDs are securities<sup>164</sup> and that Lehman had failed to disclose the sizable risks inherent in the CDs before the trades occurred.<sup>165</sup> It ruled that whether securities fraud had occurred was a question of fact for a jury trial.<sup>166</sup>

*R.A. Mackie & Co. et al. v. PetroCorp Inc.* is a breach of contract dispute between warrant holders of Southern Mineral Corporation (“Southern Mineral”) and PetroCorp Inc. (“PC”), the corporate acquirer of Southern Mineral.<sup>167</sup> Purchasers of Southern Mineral’s Series B Perpetual Warrants brought suit against PC, as successor in interest, alleging breach of, and tortious interference with, the warrant agreement. They argued that the warrants were “perpetual” by their terms.<sup>168</sup> Under the terms of the merger agreement, warrant holders could receive the same merger consideration given to all other Southern Mineral shareholders only if they exercised their warrants for Southern Mineral’s stock prior to the merger closing date. Otherwise, the warrants would be redeemable for fifty cents each, which represents the amount by which Southern Mineral’s stock price in the merger (\$4.71) exceeded the warrant’s exercise price (\$4.21). Both alternatives conflicted with the perpetual nature of the warrants, and the plaintiffs claimed that the implied forced redemption breached the contract terms of the warrants by depriving them of the warrants’ remaining time value.<sup>169</sup>

One of the conditions in the merger agreement was that 85% of the outstanding warrants had to be exercised prior to the merger since PC was not keen to inherit these potentially dilutive instruments. PC proposed a merger structure that would ensure that no warrants would

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163. Lehman Bros. 2001, 179 F. Supp. 2d at 168.

164. *Id.* at 163-65. The court applied the three-part Howey test, which is the classic test for determining whether an agreement is an “investment contract” within the meaning of the Securities Acts. *See All Seasons Resorts v. Abrams*, 68 N.Y. 2d 81, 497 N.E.2d 33, 39 506 N.Y.S. 2d 10 (N.Y. 1986). The import of this ruling is that fully insured conventional CDs are not securities but negotiable CDs that have “gaps” in the protection afforded by bank regulations are securities.

165. Lehman Bros. 2001, 179 F. Supp. 2d at 168.

166. *Id.*

167. 329 F. Supp. 2d 477 (S.D.N.Y. 2004).

168. *Id.* at 482 (finding that the warrants could not be called, redeemed, or extinguished; perpetual warrants are very unusual; warrants almost always have a fixed expiration date).

169. *Id.* at 501-02.

remain outstanding following the merger.<sup>170</sup> Warrant holders contended that Southern Mineral knew of the perpetual nature of the contract but still went ahead with PC's demands in order to accomplish the merger.<sup>171</sup>

The district court ruled that PC did not uphold the warrant holders' right to convert their warrants into the merger consideration at the time of their choice and that the successor therefore interfered with their rights under the agreement.<sup>172</sup> It found that the perpetual nature of the warrants was breached by the Merger Agreement because the merger was structured to extinguish the warrants and that the warrant holders had their remaining time value taken away.<sup>173</sup> The court granted the plaintiff damages based on the fair value of the warrants calculated by applying the Black-Scholes-Merton model.<sup>174</sup> The court favored the model price over the market price for the warrants in holding that the prevailing market price was artificially depressed after the merger announcement on December 22, 2000 due to the news that the warrants would only be exchangeable for fifty cents each after the merger.<sup>175</sup>

In *Metropolitan West Asset Management v. Shenkman Capital Management*, Metropolitan West Asset Management ("MWAC"), a subordinated note holder, sued Shenkman Capital Management ("SCM"), the investment manager, and the trustee JPMorgan Chase ("JPMC") alleging breach of contract and gross negligence when the trustee of a collateralized bond obligation (CBO) investment fund ("Fund") liquidated a pool of high-yield bonds.<sup>176</sup> The dispute focused on the allegedly improper sale of certain distressed securities, which lowered the collateral ratios of the Fund. Sometime after the sale, the holders of the Class A Notes, the most senior class, voted to liquidate the Fund in May 2003. The entire proceeds of the sale went to the Class A Note owners. The plaintiff contended that since the sales of the distressed securities did not comply with the indenture, the subsequent liquidation without the consent of the subordinated note holders was

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170. *Id.* at 491.

171. *Id.* at 504.

172. *Id.* at 509.

173. *Id.* at 501-02.

174. Fischer Black & Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. POL. ECON. 637 (1973); Robert C. Merton, *Theory of Rational Option Pricing*, 4 BELL J. OF ECON. AND MGMT. SCI. 141 (1973).

175. *Mackie*, 329 F. Supp. 2d at 512-13.

176. 2005 U.S. Dist. LEXIS 17003 (S.D.N.Y. Aug. 16, 2005).



improper.<sup>177</sup>

The Fund started operation by issuing Class A, Class B, Class C, and Income Notes. The cash from the note offering was to be used to buy the collateral consisting largely of high yield and emerging market debt.<sup>178</sup> Subject to certain conditions, the indenture permitted and/or required SCM and JPMC to sell collateral considered “Credit Risk Securities,” “Defaulted Securities,” and “Equity Securities.”<sup>179</sup> SCM could direct JPMC to release from the lien and sell any Defaulted Security, Equity Security, or Credit Risk Security.<sup>180</sup> A Credit Risk Security (“CRS”) was defined as one that “in the Investment Manager’s sole judgment, has a significant risk of declining in credit quality and, with lapse of time, becoming a Defaulted Security.”<sup>181</sup> According to the indenture, a Defaulted Security was defined as one “with respect to which there has occurred and is continuing any default or event of default under the related Underlying Instrument which entitles the holders thereof, with the giving of notice or passage of time or both, to accelerate the maturity of all or a portion of the principal amount of such obligations.”<sup>182</sup> An Equity Security was defined as “any security that does not provide for periodic payments of interest at a stated coupon rate and repayment of principal at a stated maturity and any other security that is not eligible for purchase by the Issuer as a Collateral Debt Security.”<sup>183</sup> Collateral debt securities could be sold only during the interest-only period, and after such a sale, the investment manager had to exert reasonable efforts to purchase substitute securities with an aggregate principal balance equivalent to the disposal proceeds within twenty days.<sup>184</sup>

The disputing parties agreed that about \$8.5 million in face value of CRS sold for \$4 million in December 2002 did not comply with the indenture.<sup>185</sup> But they disagreed on whether the sale of \$66 million of defaulted securities was proper.<sup>186</sup> The plaintiff argued that the indenture required reasonable efforts on the part of the investment

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177. *Id.* at \*2.

178. *Id.* at \*6.

179. *Id.* at \*7.

180. *Id.*

181. *Id.* at \*8.

182. *Id.* at \*9-10.

183. *Id.* at \*10.

184. *Id.* at \*8.

185. *Id.* at \*18.

186. *Id.* at \*19.

manager to replace the sold defaulted security within a particular time period. In addition, another clause subjected any purchases to certain interest coverage tests. Reading the two points in tandem, the plaintiff contended that securities could not be sold if the interest coverage tests prohibited replenishment. However, the district court interpreted the contract language to mean that defaulted securities could be sold even at times when purchasing substitute securities was barred by the indenture.<sup>187</sup>

The critical issue before the district court concerned whether the improper disposal of the \$8.5 million of CRS was material to the liquidation decision.<sup>188</sup> According to the indenture, if the aggregate face value of all of the securities in the Fund's portfolio fell short of 110% of the aggregate face value of the outstanding Class A Notes, then Class A Note holders could proceed to liquidate the Fund without the junior note holders' consent. The court held that the sale of CRS, even if improperly executed, would have been immaterial to the senior note holders' decision to liquidate.<sup>189</sup> An additional \$66 million of defaulted securities were sold in 2002 and 2003. Even if the CRS had not been disposed of, the portfolio had lost more value since December 2002 when the event of default had been declared.<sup>190</sup> The court found that by March 2003, the Class A Note holders would have had the unilateral right to force the Fund to liquidate, concluded that the improper sale of the CRS did not cause any actual loss to the plaintiff, and dismissed the claims against SCM in their entirety.<sup>191</sup>

*In re Plastech Engineered Products, Inc.* is a bankruptcy case involving complex contractual issues related to an interest rate swap that a floating-rate borrower entered into to hedge its interest rate risk exposure on its secured bank debt.<sup>192</sup> Plastech Engineered Products ("Plastech"), an auto-parts supplier, filed for bankruptcy protection on February 1, 2008. About one year before filing its Chapter 11 petition, Plastech refinanced its floating-rate secured bank debt.<sup>193</sup> It entered into a First Lien Term Loan Credit and Guarantee Agreement ("Credit Agreement"), raising \$265 million from a syndicate of banks with

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187. *Id.* at \*31.

188. *Id.* at \*32-33.

189. *Id.* at \*36.

190. *Id.* at \*13, 35.

191. *Id.* at \*39-42.

192. *In re Plastech Eng'ered Prods. Inc.*, 399 B.R. 1 (Bankr. E.D. Mich. 2008).

193. *Id.* at 4.

Goldman Sachs serving as the lead arranger. Plastech granted the lenders a first lien on its fixed assets under the Pledge and Security Agreement (“Security Agreement”). A clause in the Credit Agreement required the borrower to hedge the interest rate risk on this debt. Plastech transacted a plain vanilla interest rate swap with Wachovia to satisfy this requirement. Wachovia was neither a lender nor a party to the Credit Agreement or the Security Agreement when it entered into the swap. According to the terms of the swap agreement, Plastech’s obligations to Wachovia were supposed to be secured claims ranking *pari passu* with the claims of the first lien secured lenders under the Credit Agreement.<sup>194</sup> When Plastech started experiencing financial difficulties, Wachovia declared an event of default under the swap agreement. Wachovia then terminated the swap prematurely and demanded a swap termination payment amounting to about \$22 million.<sup>195</sup>

The bankruptcy court determined that the monies Plastech owed Wachovia under the swap agreement would have qualified as a “First Lien Term Loan Obligation” under the Security Agreement only if the swap had been transacted with a lender under the Credit Agreement, that is, provided the swap counterparty was a lender at the time it entered into the swap agreement.<sup>196</sup> Since Wachovia was not a lender at the time it entered into the swap agreement, the obligations pertaining to the interest rate swap would not qualify as first lien-secured claims.<sup>197</sup> The bankruptcy court sustained the objection of the first lien term lenders to Wachovia’s entire secured claim except for \$1 million, which emanated from an assignment to Wachovia of \$1 million of first lien term loan debt owed under the Credit Agreement.<sup>198</sup>

## VI. CONCLUSIONS

Financial derivatives are more complex than stocks and bonds.

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194. *Id.* at 5. Unfortunately for Wachovia, this provision of the swap agreement was inconsistent with the terms of the Security Agreement, which would allow *pari passu* status under the latter agreement only if the swap counterparty was also a lender under the Credit Agreement at the time it entered into the swap, which Wachovia was not.

195. *Id.* at 7-8.

196. *Id.* at 17.

197. *Id.*

198. *Id.* at 19. Wachovia had purchased and taken an assignment of a \$1 million interest in the bank debt governed by the Credit Agreement.

Consequently, they are harder to understand and more difficult to value. In addition, these instruments can be used to gain leveraged exposure to specific risks, which magnifies potential gains and losses. These factors can combine to produce large losses for investors during periods of heightened market volatility. Lawsuits are often quick to follow as investors try to recoup their losses. In these court cases, investors often allege that the risks associated with the investment strategy and/or the profit potential were misrepresented by the investment advisor or that the risks were not explained at all when the fund manager solicited their funds. Fund managers also face breach of fiduciary duty claims for allegedly inappropriately using derivatives or for using these “risky” products in the first place. The rapid growth of the over-the-counter derivatives markets has opened the door for a number of fraud and breach-of-contract disputes because these markets do not provide transparent pricing. In the early phases of product development, financial engineers can fail to foresee and account for certain eventualities, and unscrupulous promoters can exploit investors’ lack of familiarity with the new instruments. In other cases, upon suffering huge losses, counterparties may seek to avoid losses by exploiting perceived contractual loopholes and refusing to pay, which inevitably triggers a lawsuit when the amount of the disputed payment is material to the other party.

The current financial crisis forcefully highlights an important general principle: extremely rapid growth in the market for a new security is often difficult to manage with potentially negative consequences for all parties involved. Over the last few years, while derivative product sophistication seemingly grew by leaps and bounds as the CDO and CDS products evolved and gained market acceptance, the risk management systems of banks, insurance companies, and broker-dealers and the oversight provided by their regulators failed to keep pace. Risks were diffused throughout the financial system but the amount of toxic assets on the balance sheets of regulated entities rose sharply until finally the credit markets seized up, and investors pulled back not only from the new markets but from all credit-sensitive markets until they could regain confidence in their ability to calibrate credit risk. The sheer magnitude of the financial sector write-downs suggests that many of the complex new securities were not very well understood even by those who structured them. The litigation that has ensued also suggests that this lack of understanding was compounded by a potentially severe agency problem that resulted from the failure of

market agents to explain the riskiness of the new securities to investors, or to alert investors to their inability to understand them.

With the credit crisis as a backdrop, the prognosis is for increased derivatives litigation involving complex structured products, as parties who believe they were damaged by the misuse or misrepresentation of these products seek redress through the courts or through the arbitration process. Other consequences include tighter regulatory oversight of the banks and insurers participating in derivatives markets and greater standardization of derivatives contracts with larger volumes transacted on exchanges. However, these trends do not portend boom times for structured product issuance anytime soon because market participants are likely to view the next round of innovative products with greater skepticism than they exhibited in the past - at least, one should hope so. If the litigation process helps curb the excesses that have been evident in the derivatives markets in recent years and encourages the proper use of these instruments, then everyone can benefit from the resulting improvement in market efficiency.