

4.2. Derivatives in the Crisis and Financial Reform

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It is now the accepted wisdom that it was the non-transparent, poorly capitalized and almost wholly unregulated over-the-counter (“OTC”) derivatives that sparked the fuse that exploded highly vulnerable worldwide economic markets in the fall of 2008. Because tens of trillions of dollars of these products were pegged to the economic performance of an overheated and highly inflated housing market, the sudden collapse of that market triggered unfunded OTC derivative guarantees (e.g., in the form of credit default swaps) of the subprime housing market. In addition, the guarantors’ multi-trillion dollar interconnectedness with thousands of other OTC derivatives counterparties within the general OTC market as a whole (including interest rate, currency, foreign exchange, and energy derivatives) required taxpayers to plug the huge capital holes that would have caused the world’s economy to crater if thousands of counterparty obligations worth trillions of dollars defaulted. As it now stands, the world is in the midst of the worst financial crisis since the Great Depression, with no realistic end in sight of economic suffering and decay.

This entry explains the history of derivatives products, including the highly charged political events surrounding the deregulation of these huge financial markets, even in the face of mounting evidence of the danger that those unregulated instruments could cause the U.S. and world financial system. It then provides an overview of how recent U. S. Congressional OTC derivatives financial reform—Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (“the Dodd-Frank Act”)—is intended to mitigate those risks if properly implemented by U.S. financial regulators.

The History of Derivatives and Derivatives Market Regulation

The Early Derivatives Market. Beginning in 1865, farmers and grain merchants coalesced in Chicago to hedge price risk in corn, wheat and other grains in what are thought to be the earliest sustained derivatives transactions in this country. These kinds of derivatives have been historically referred to as futures contracts. The traditional futures contract is “an agreement between a seller and a buyer that the seller (called a short) will deliver to the buyer (called a long), at a price agreed to when the contract is first entered, and the buyer will accept and pay for, a specified quantity and grade of an identified commodity in the future” (Johnson and Hazen 2004, 25). While futures contracts were first developed for the agriculture sector, they expanded into metals and energy products, particularly in the 1980s and 1990s.

Since their creation, these markets were recognized as being subject to price distortion (*i.e.*, rather than providing hedging, they can cause payments of unnecessary and unexpected higher or lower spot prices) through excessive speculation, fraud, or manipulation. As one disgruntled farmer told the House Agriculture Committee in 1892: “[T]he man who managed or sold or owned those immense wheat fields has not as much to say with the regard to the price of the wheat than some young fellow who stands howling around the Chicago wheat pit could actually sell in a day” (Levy 2006, 307).

The Origins and Purposes of the Commodity Exchange Act. Because low farm prices wreaked financial havoc on America’s agriculture sector during the Depression, President Roosevelt recommended to Congress, as one of his earliest market reform proposals, legislation that became the Commodity Exchange Act of 1936. As would be expected of a market regulation bill that followed in the wake of the Securities Acts of 1933 and 1934, the contours of futures exchange regulation closely mirrored the regulation of the equities markets, *i.e.*, futures contracts were

required to be traded on publicly transparent and fully regulated exchanges supported by clearing mechanisms that ensure contractual commitments would be backed by adequate capital (Johnson and Hazen 2004, 146-47).

Under the CEA, regulated exchanges ensured that futures contracts were subject to: (1) public and transparent pricing based on market demand; (2) disclosure of the real trading parties in interest to the federal government; (3) regulation of intermediaries; *i.e.*, brokers and their employers; (4) stringent rules for customer protection; (5) self regulation by exchanges directly supervised by a federal regulator to detect unlawful trading activity; (6) prohibitions against fraud, market manipulation and excessive speculation; and (7) enforcement of all these requirements by the federal regulator, private individuals and the states through private rights of action and state *parens patriae* suits, respectively.

As an integral part of this regulatory format, futures contracts also had to be cleared, *i.e.*, a well capitalized and regulated intermediary institution was required to stand between the counterparties of a futures contract to ensure that commitments undertaken pursuant to those contracts were adequately capitalized through the collection of margin. Any contractual failure was guaranteed by the clearing facility, a financial commitment that served to ensure that the clearing facility had a great incentive to strictly enforce the capital adequacy of traders through highly disciplined assessment of the market price of the futures position and immediate collection of initial margin upon executing the futures trade and of variation margin as the contract price moves against a counterparty to the trade (Johnson and Hazen 2004, 318-27).

The Development and Characteristics of Swaps. By the 1980s, a variant of futures contracts was developed, commonly referred to as “swaps” (Johnson and Hazen 2004, 29-30). When first addressing “swaps” contracts, the Commodity Futures Trading Commission (CFTC)

defined them as “an agreement between two parties to exchange a series of cash flows measured by different interest rates, exchanges rates, or prices with payment calculated by reference to a principal base (notional amount)” (CFTC 1989, 30,695).

A classic example of an interest rate swap transaction is where one party to the agreement exchanges a floating interest rate obligation on an existing loan for a fixed rate obligation to be paid by a swaps dealer or by another counterparty to which the swap has been assigned by the swaps dealer. Usually, the person swapping the floating rate for a fixed rate is expecting (or hedging against the fact) that the fixed rate will be lower than the floating rate.

Swaps and the CEA’s Exchange Trading Requirement. After “swaps” contracts had been developed by the banks/dealers in the 1980s, with a simultaneous recognition that “swaps” contained all the features of a futures contract, the question arose whether swaps would be subject to the mandatory exchange trading requirement of the CEA. In 1989, the CFTC exempted swaps from the CEA exchange trading requirement—but stated that to avoid regulation, “swaps must be negotiated by the parties as to their material terms, based upon individualized credit determinations, and documented by the parties in an agreement or series of agreements that is not fully standardized” (CFTC 1989, 30,694). Another condition of the exchange trading exemption is that “[t]he swap must not be marketed to the public” (Johnson and Hazen 2004, 43).

Because the CEA provided no explicit provision authorizing the CFTC to grant an exemption, swaps dealers/banks contended that there was “uncertainty” as to the legal effect of that policy statement. Thus, Congress in 1992 authorized the CFTC to create exemptions from the CEA’s mandatory exchange trading requirement for, *inter alia*, “swaps agreements,” which

“are not part of a fungible class of agreements that are standardized as to their material economic terms...” (CEA 2010, sec. 4(c)(5)(b)).

In 1993, the CFTC adopted a rule providing an exception from the CEA’s exchange trading requirement for those swaps that were, *inter alia*, “not part of a fungible class of agreements that are standardized as to their material economic terms” (CFTC 2009, sec. 35.2(b)). Moreover, exempt swaps agreements were not to be “traded on or through a multilateral transaction execution facility” (CFTC 2009, sec. 35.2(d)). In laymen’s terms, “a multilateral transaction execution facility” consists of one party offering electronically a swaps agreement to many different other parties, rather than merely offering agreements on a bilateral or one-on-one basis.

The Standardization of Swaps Through the ISDA Master Agreement. Even before 1993, the International Swaps and Derivatives Association (known then as the International Swaps Dealers Association) created a Master Agreement and related schedule to govern the execution of a swap. The ISDA Master Agreement is 18 pages long with boilerplate language. It includes the fundamental provisions without which the swaps transaction could not be understood. Accompanying the Master Agreement is a 13-page “Schedule.” Accompanying the Schedule is a standardized ISDA Credit Support Annex, which is 16 pages long and, as with the previous documents, also includes copyrights in ISDA’s name on almost every page.

The CFTC’s May 1998 Concept Release. By 1998, the OTC derivatives market was growing at a rapid pace. As the CFTC noted that year, “the notional value of outstanding contracts in these instruments was \$28.733 trillion [in 1997], up 12.9% from year-end 1996, 62.2% from year-end 1995, and 154.2% from year-end 1994. ISDA’s 1996 market survey noted that there were 633,316 outstanding contracts in these instruments as of year-end 1996, up 47%

from year-end 1995, which in turn represented a 40.7% increase over year-end 1994. . . .” (CFTC 1998, 26,115).

These OTC derivatives were now, because of the ISDA Master Agreement, so standardized that they could be traded electronically on a multilateral basis, thereby exhibiting all of the trading characteristics of traditional exchange-traded standardized futures contracts. (CFTC 1998, 26,114).

On May 7, 1998, the CFTC promulgated a “concept release” on “OTC Derivatives,” finding that these standardized products were almost certainly subject to the mandatory exchange trading requirement (and therefore were trading in violation of law) and calling for public comment on the development of various alternative regulatory features that would create a section 4(c) exemption from the CEA’s mandatory exchange trading (CFTC 1998, 26,114).

Any new regulatory system would be applied “prospectively,” with the existing market retroactively sanctioned under the CEA (CFTC 1998, 26,114). The public was asked to answer a series of questions pertaining to what, *if any*, of the features of a fully regulated exchange trading requirement should be applied to the swaps market, *e.g.*, reporting and disclosure, capital adequacy, clearing, exchange trading, regulation of intermediaries, self regulation or application of anti-fraud and anti-manipulation principles. The CFTC expressly stated that it had no preconceived notion of the answer to these questions.

Pre-1998 Swaps Market Dysfunctions. The motivation for this May 1998 CFTC inquiry was the fact that unregulated swaps had caused so many financial calamities. In footnote 6 of the concept release, the CFTC cited a study listing “22 examples of significant losses in financial derivatives transactions [and] a 1997 GAO Report 4 (stating that the GAO identified 360 substantial end-user losses)” (CFTC 1998, 26, fn. 6).

One of the most prominent scandals deriving from swaps by May 1998 was the 1994 bankruptcy of Orange County, the largest municipal default in the Nation's history. Orange County was one of the country's wealthiest and fifth most populous counties. Having executed many poorly understood interest rate swaps, the county suddenly found itself facing massive debt as interest rates quickly rose. It lost approximately \$1.6 billion. Merrill Lynch agreed to pay \$400 million to Orange County to settle claims involving the derivatives that caused Orange County's bankruptcy (Baldassare 1998, 172).

Opposition to the CFTC Concept Release. The CFTC's sister agencies (the Treasury, the Fed, and the SEC) within the President's Working Group strongly opposed the CFTC's concept release inquiry (Frontline 2009). In response to a request from the remaining members of the President's Working Group on Financial Markets—issued on the very day the concept release was published—Congress eventually enacted a six-month statutory moratorium to the CFTC concept release (Congressional Record 2000, 10079).

The LTCM Crisis. However, in September 1998, Long-Term Capital Management (LTCM), which was up until that time the country's largest and most successful hedge fund, nearly collapsed from the loss over a period of weeks of \$4.6 billion (or about 90% of its capital) on losses from, *inter alia*, OTC derivatives positions. It was feared that LTCM's failure would have created failures of many of its OTC derivative counterparties and creditors, including some of the world's largest financial institutions. So concerned were those financial institutions about the systemic effect of LTCM's failure that, under the auspices of the New York Federal Reserve, on September 23, 1998 (with just about 48 hours of notice about LTCM's potential collapse), fourteen of those institutions contributed a total of \$3.6 billion to buy out the fund to keep it from failing (President's Working Group on Financial Markets 1999a, 10-17).

The President's Working Group's 1999 Report on LTCM. After a full day of hearings before the House Financial Services Committee on October 1, 1998, the President's Working Group was asked to prepare a report on the failure of LTCM and actions that might be recommended to prevent such a potentially systemic failure in the future. In April 1999, the PWG (1999a) issued that report. It noted that: "The near collapse of [LTCM] highlighted the possibility that problems at one financial institution could be transmitted to other institutions, and potentially pose risks to the financial system" (PWG 1999a, viii).

One of the major recommendations of the April 1999 PWG report was that the SEC, the CFTC and the Treasury receive expanded authority to require OTC derivative counterparties to provide credit risk information, recordkeeping and reporting and data on concentrations, trading strategies and risk models, as well as the ability to inspect risk management models (PWG 1999a, 39-40). Fed Chairman Greenspan declined to endorse this set of recommendations, but deferred to those regulators with supervisory authority (PWG 1999a, 39).

The Counterparty Risk Management Policy Group Report on the LTCM Crisis. Shortly after the LTCM episode, twelve of the world's largest banks formed the Counterparty Risk Management Policy Group (CRMPG) to conduct a self-study of practices that led to the LTCM crisis and to recommend self-regulatory practices that would prevent such an episode from reoccurring. In June 1999, CRMPG issued a detailed 57-page report, which acknowledged faulty supervision of OTC swaps desks within their institutions and promised a broad array of management practices, including improved supervision and reporting and market practices pertaining to OTC derivatives. Included within CRMPG's recommendations was a commitment to meet informally and periodically with their primary regulator to discuss OTC "market trends

and conditions,” including providing reports “detailing certain large exposure information on a consolidated basis group” (CRMPG 1999, 10–11).

Nonetheless, the major thrust of the CRMPG report was to oppose “new regulation.... It would be a mistake to attempt to codify risk management practices in that fashion.” (CRMPG 1999, 10–11). Not only were no new regulations promulgated (nor were the informal meetings with regulators initiated proposed by CRMPG ever initiated), by November 1999, the PWG (1999b; in a seeming reversal from its April 1999 Report) was recommending to Congress that financial OTC derivatives totally be deregulated, because regulation could discourage the growth of swaps markets and drive them elsewhere. “The central and key recommendation within the PWG 1999 Report was that Congress provide “[a]n exclusion from the CEA[“s regulatory requirements] for bilateral transactions between sophisticated counterparties (other than transactions that involve non-financial commodities with finite supplies)...” (PWG 1999b, 2).

The Commodity Futures Modernization Act of 2000’s Deregulation of Swaps.

Accordingly, on December 15, 2000, Congress passed and on December 21, 2000, President Clinton signed into law the Commodity Futures Modernization Act of 2000 (CFMA). The CFMA removed OTC derivatives transactions, including energy futures transactions, from all requirements of exchange trading and clearing under the CEA so long as the counterparties to the swap were “eligible contract participants.” Generally speaking, a counterparty to be an “eligible contract participant” had to have in excess of \$10 million in total assets with some limited exceptions allowing lesser amounts in the case of an individual using the swap for risk management purposes (Johnson and Hazen 2004, 328-29). The SEC was similarly barred from OTC derivatives oversight except for the limited fraud jurisdiction it maintained over securities-based swaps.

Recognizing that the deregulation of swaps would remove the Act's bar against excessive speculation in regulated exchange traded futures, the CFMA also expressly preempted state gaming and anti-bucket shop laws, which would have barred the otherwise unregulated speculative activity authorized by the CFMA (CEA 2009, sec. 16(e)(2)).

Finally, to ensure that not even the CFMA itself could be used as a basis to challenge the legality of a swap, the Act provides that “[n]o agreement, contract, or transaction between eligible contract participants...shall be void, voidable, or unenforceable...based *solely on the failure...to comply with...this Act...*” (CEA 2009, sec. 25(a)(4), emphasis added).

Conclusions about the Deregulatory Effect of the CFMA. In sum, what was then estimated to be this multi-trillion dollar OTC derivatives market was removed from almost all pertinent federal and state enforcement to which trading markets had been subject since the New Deal, as well as a central premise of the common law of contracts, *i.e.*, that illegal contracts are subject to a declaration of unenforceability. In effect, almost no law applied to this market.

Credit Default Swaps and the Economic Meltdown in the Fall of 2008

The Swaps Market in the Fall of 2008. In October 2008, the notional value of the unregulated OTC market was estimated to be in excess of \$600 trillion (Sheridan 2008). Included within that amount was estimated to somewhere between \$35-65 trillion in credit default swaps (CDSs) (Bank for International Settlements 2008, A108).

While the Federal Reserve has estimated generally that 3% of the notional amount of a swap is the amount at risk in swaps transactions, a credit default swap's insurance-like aspects mean that if a default is triggered, the entire amount of the sum guaranteed is at risk. While the Federal Reserve's 3% figure establishing amount at risk has been deemed by many to be far too low, combining even the *lower* figure for the value of outstanding CDS (\$35 trillion) in

September 2008 with Fed's 3% of the remaining notional value (\$565 trillion), the resulting amount at risk at the time of the meltdown (about \$55 trillion) almost equaled the world's GDP. Even using the most conservative figures for the sake of argument, \$55 trillion is a very large figure (Sirri 2008).

Widespread Recognition that CDS Played Key Role in the Meltdown. It is now almost universally accepted that the unregulated multi-trillion dollar OTC CDS market helped foment a mortgage crisis, then a credit crisis, and finally a “once-in-a-century” systemic financial crisis that, but for huge U.S. taxpayer interventions, would have in the fall of 2008 led the world economy into a devastating depression.

In warning Congress about badly needed financial regulatory reform efforts when it considered the TARP legislation in Senate hearings before the Senate Banking Committee in September 2008, then-SEC Chairman Christopher Cox called the CDS market a “regulatory black hole” in need of “immediate legislative action” (O’Harrow and Dennis 2008).¹ Former SEC Chairman Arthur Levitt and even former Fed Chair Alan Greenspan—both of whom supported the CFMA in 2000—have acknowledged that the deregulation of the CDS market contributed to the fall 2008 economic downfall (Goodman 2008).

How CDSs Were Used to Undermine the Subprime Market. The CDS market heightened substantially risks posed by securitization. In brief, the securitization of subprime mortgage loans evolved to embed simple mortgage-backed securities (“MBS”) within highly complex collateralized debt obligations (“CDOs”). These CDOs constituted the pulling together and dissection into “tranches” of huge numbers of MBS, theoretically designed to diversify and offer gradations of risk to those who wished to invest in subprime mortgages.

However, investors became unmoored from the essential risk underlying loans to non-credit worthy individuals by the continuous reframing of the form of risk (*e.g.*, from subprime mortgages to MBS to CDOs); the false assurances given by credit rating agencies that were misleadingly high evaluations of the CDOs; and, most importantly, by the purported “insurance” offered on CDOs in the form of CDSs as a seeming safety net to these risky investments (Greenberger 2010, 100-1).

How CDS Worked. The CDSs “swap” was the exchange by one counterparty of a “premium” for the other counterparty’s “guarantee” of the financial viability of a CDO. While CDSs have all the hallmarks of insurance, issuers of CDSs in the insurance industry, especially the bond insurers (“monolines”) enticed into underwriting CDSs, were urged by swaps dealers not to refer to it as “insurance” out of a fear that CDSs would be subject to insurance regulation by state insurance commissioners, which would have included, *inter alia*, strict capital adequacy requirements (U.S. Congress, Senate 2008).² By using the term “swaps,” CDSs fell into the regulatory “black hole” afforded by the CFMA’s “swaps” exclusion (section 2(g)) because no federal agency had direct supervision over, or even advance knowledge of, what went on in the private, bilateral world of “swaps” (Greenberger 2010, 100-1).

The Motivations for Underwriting Subprime CDS. The issuers of CDSs were almost certainly beguiled by the utopian view (supported by ill-considered mathematical algorithms) that housing prices would always go up. They believed that even a borrower who could not afford a mortgage at initial closing would soon be able to extract the constantly appreciating value in the residence to refinance and pay mortgage obligations. Under this utopian view, the writing of a CDS was deemed to be “risk free” with a goal of writing as many CDSs as possible

to develop what was considered to be the huge risk-free cash flow from the CDS “premiums” (Greenberger 2010, 102).

CDS Encourage Subprime Investments. Again, because there was thought to be insurance to place a floor under what certainly must have seemed to some investors a risky bet on the success of mortgages to non-credit-worthy lenders, that false confidence certainly fed the flames of investment in the subprime securitization process. In other words, each investment in a CDO was thought to be protected by insurance on that investment. Accordingly, there was a higher demand for the mortgages and mortgage-backed securities that fed the CDO. Because of the lack of transparency, regulators could not observe the phenomena that the CDS CDO frenzy was sparked by insurance that was not properly capitalized (Greenberger 2010, 101-2).

Naked CDS Encourages Widespread Betting on the Subprime Market. To make matters worse, CDSs were deemed to be so risk-free (and so much in demand) that financial institutions began to write “naked” CDSs, *i.e.*, offering the guarantee against default to investors who had *no* risk in any underlying mortgage backed instruments or CDOs (Kimball-Stanley 2008, 251-2); under state insurance law, this would be considered insuring someone else’s risk, which is flatly banned). Naked CDSs provided a method to “short” the mortgage lending market without any exposure to its risks. In other words, these instruments allowed speculators to place the perfectly logical bet for little consideration (*i.e.*, the relatively small premium) that those who could not afford mortgages would not pay them off.

The recent suit by the SEC against Goldman Sachs is highly instructive on this point even leaving to the side the question whether the bank committed fraud as the SEC alleges. The hedge fund manager, John Paulson, worked with Goldman Sachs (who according to the SEC charged Paulson a \$15 million fee) to select among a series of CDOs those tranches deemed

most likely to lose value. Paulson did not own those tranches. With Goldman's help, Paulson just wanted to find someone who would take the opposite end of his bet, *i.e.*, an institution that was prepared to bet that the tranches in question—not owned by any party to the bet—would survive by giving Paulson insurance against those tranches' failure (Field 2010). These instruments are called synthetic CDOs, which are composed of a series of naked CDS on the tranches identified.

Again, leaving aside the question of whether Goldman defrauded institutions into taking the opposite side of the Paulson bet, there is a fundamental question of moral hazard here. The transactions in question essentially involved the lawful betting of billions of dollars on a homeowner's potential default on a mortgage that was not owned by either party. Moreover, such arrangements had a profound effect on the American public and taxpayers, who became the lender of last resort to make the winning bettors whole.

The Taxpayer Is the Lender of Last Resort to the Bankrupt CDS Casino. In this case, Paulson won about \$1 billion betting that homeowners would default, while his counterparties lost the same amount taking the opposite side of the bet. Because these OTC transactions were not properly capitalized, the losing counterparties would have collapsed under the strain of paying these bets; in addition, because of interconnectedness among financial institutions, any single collapse of a major financial institution would have destabilized the worldwide economy. Only the intervention of taxpayers as the lender of last resort stemmed the onset of a worldwide depression.

The analysis surrounding this subject estimates that there may have been three to four times as many “naked” CDS instruments extant at the time of the meltdown than CDSs guaranteeing actual risk (Kopecki and Harrington 2009; U.S. Congress, Senate 2008). This means that to the extent that the guarantors of CDSs (*e.g.*, AIG) had to be rescued by the U.S.

taxpayer, the chances were very high that the “bail out” was of failed naked CDS bets that mortgages would be paid (prominent Members of Congress have maintained that the holders of bets that mortgages would fail have formed a strong political constituency against the “rescue” of subprime borrowers through the adjustment of mortgages to keep homeowners from defaulting; Grim 2009).

The fact that “naked” CDS and “synthetic” CDOs were nothing more than “bets” on the viability of the subprime market also demonstrates the importance of the CFMA expressly preempting state gaming and anti-bucket shop laws (Johnson and Hazen 2004, 975). Had those laws not been preempted, it is almost certain that at least some states would have banned these investments as unlicensed gambling or illegal bucket shops. An action of this sort by even a single state would have disrupted the “naked” CDS market throughout the country.

Interconnectedness: The Systemic Risk Derived from All Types of Swaps

Swaps Other Than CDS Have Caused Serious Financial Dislocations. While CDSs and synthetic CDOs almost certainly lit the fuse that led to the recent explosive financial destabilization, the remainder of the OTC market has historically led to other destabilizing events in the economy. These include the recent energy and food commodity bubble, the near failure of LTCM in 1998, the Orange County bankruptcy of 1994, and now, through cross currency swaps masking the full extent of sovereign debt, a causative factor of the European sovereign debt crisis (Greenberger 2008, 2-3; Greenberger 2009, 4-5; Story, Thomas, and Schwartz 2010).

Unregulated OTC Derivatives of All Kinds Cause “Too Big To Fail.” However, even if looking only at the financial crisis of 2007 and beyond, the remainder of the unregulated OTC derivatives market was central to the crisis’s causation. That is because the remainder of the OTC derivative market relates directly to the interconnectedness that made large financial

institutions “too big to fail,” and the prevention of a cascading collapse of the financial system therefore required calling upon the American taxpayer to bail out many of those huge financial entities (Greenberger 2008).

The Lehman Bankruptcy. As now can be seen from the Lehman bankruptcy proceedings, Lehman was a counterparty or guarantor of over 930,000 OTC derivatives. (Charles 2009, 16). To the extent that these contracts did not involve CDS, they certainly involved unregulated interest rate, currency, foreign exchange, and energy swaps. The Lehman liquidators are now embarked in a huge battle with Lehman’s OTC derivative counterparties, claiming that those counterparties have greatly exaggerated the value of amounts owed by Lehman pursuant to those derivatives (Murphy and Sakoui 2010).

AIG Interconnectedness. Of course, it was the very failure of Lehman, and the cascading adverse and substantial impacts its bankruptcy has caused, that led the Federal Reserve and the Treasury to alter course on the day after Lehman’s failure, and to prevent AIG’s bankruptcy and then to recommend the TARP bailout. Those actions revealed to the world the correlation between interconnectedness of unregulated OTC swaps transactions and the too big to fail doctrine (Congressional Oversight Panel 2010, 9).

All Swaps Are Masked By Opaque Accounting Principles. A final reason all derivatives—not just credit derivatives—played a role in the onset of the crisis is that they were by virtue of swaps dealer lobbying never properly accounted for on balance sheets. Because of a major lobbying effort by ISDA,

banks and corporations that trade swaps do not play by the same rules as other individuals and businesses. Banks are permitted to exclude their full exposure to swaps from their financial statements and instead report only the “fair value”

changes in those swaps over time. Such reporting is like an individual reporting only the change in their debt balances, instead of reporting the debts themselves.

(Partnoy and Turner 2010, 88)

Thus, prior to the meltdown, swaps of all kinds were masked by a double barrier of opacity, *i.e.*, not only were they private and bilateral, but they were even hidden on the balance sheets of those institutions most likely to suffer from their adverse impact. This kind of balance sheet opacity blinded regulators and market observers from the explosive and toxic nature of the contractual obligations embedded in swaps. And, when the crisis became full blown in September 2008, this opacity led both the extenders of credit and policy makers to fear the worst. As a result, bank lending froze up, causing the credit crisis.

Recent Financial Reform: The Dodd-Frank Act

On July 21, 2010, President Obama signed the Dodd-Frank Wall Street Reform and Consumer Protection Act into law (Dennis 2010). Title VII of that Act transforms the regulation of OTC derivatives by requiring that swaps be subject to clearing and exchange trading, capital and margin requirements, and increased recordkeeping and reporting. Thus, the legislation addresses several key problems described above, including lack of market transparency for regulators and counterparties and sufficient protections against risk through capital set-asides.

Definition of Swaps. The definition of “swap” in the Act is broad, encompassing any transaction that provides for the exchange of payments based on the value of one or more underlying financial interests of any kind, or dependent on the occurrence, nonoccurrence, or extent of occurrence of an event or contingency associated with a potential financial consequence (Dodd-Frank Act 2010, sec. 721(a)(21)(47)).

Swaps do not, however, include “any sale of a nonfinancial commodity or security for deferred shipment or delivery, *so long as the transaction is intended to be physically settled.*” (Dodd-Frank Act 2010, sec. 721(a)(21)(47)). Thus the Act is unambiguous that only physical commodities forward contracts that are intended to be settled will be excluded. In other words, financial instruments that call for physical settlement and commodities-based contracts that will not be settled will both be considered swaps and consequently regulated under the statute.

The idea of the Dodd-Frank definition of swaps is to capture swaps that are primarily used for speculation rather than for hedging risk in the actual exchange of physical commodities, *e.g.*, by farmers and food producers buying wheat and corn, or by oil producers and airlines buying fuel. Speculation can unmoor prices from market fundamentals such as supply and demand. Within the futures market, prices are usually determined by a healthy tension between commercial users, who want low prices, and producers, who want high ones. Speculators, however, are unconcerned about what a fair price for a commodity might be, but rather want prices to move dramatically in the direction of their bets (U.S. Congress, Senate 2009, 152–57; U.S. Congress, Senate 2007, 29). As a result, they can dilute the price-setting function of the derivatives market and have little incentive for discipline. Regulation of these participants, as opposed to commodities traders (who do have an incentive to set fair prices), is crucial to ensuring that pricing is related to market fundamentals.

Swap Dealers and Major Swap Participants. The Act first requires that all swap dealers and major swap participants register with the banking regulators, CFTC, and/or Securities and Exchange Commission (“SEC”) (Dodd-Frank Act 2010, sec. 731). A swap dealer is a person who (1) holds itself out as such, (2) makes a market in swaps, (3) regularly enters into swaps for its own account in the ordinary course of business, or (4) engages in activity generally

recognized in the trade as dealing in swaps. Major swap participants are entities that (1) maintain a substantial position in swaps, excluding transactions used to hedge commercial risk, (2) create substantial counterparty exposure that could undermine the banking system or financial markets, or (3) are highly leveraged, not subject to capital requirements, and maintain a substantial position in swaps (Dodd-Frank Act 2010, sec. 721(a)).

Registered swap dealers and major swap participants must disclose any material risks of swaps and any material incentives or conflicts of interests. In addition, they must meet capital and margin requirements and conform to business conduct rules, including those related to fraud and market manipulation, that are set by the agencies (clearing organizations and exchanges can supplement those requirements; Dodd-Frank Act 2010, secs. 731, 764). They must also conform to position limits on their trading volume in commodity swaps, which are set by exchanges within standards set by the agencies (Dodd-Frank Act 2010, secs. 737, 763(h)).

Clearing and Exchange-Trading of Swaps. The Act imposes clearing and exchange trading requirements on swap transactions. As noted above, because clearing facilities stand between the buyer and seller of a contract to guarantee each against failure of the other party, they have a strong incentive to establish and enforce the capital adequacy of traders, including through the collection of margins. Under the Act, the regulatory agencies decide whether specific types of swaps must be cleared, and designated clearing organizations (“DCOs”) must inform their regulatory agencies which types of swaps they plan to clear (Dodd-Frank Act 2010, secs. 723, 763).

DCOs must allow “non-discriminatory” access to clearing to their own members and other parties (Dodd-Frank Act 2010, sec. 732(a)(2)). Swaps that are required to be cleared must also be traded on a designated contract market, securities exchange, or swap execution facility

(“SEF”; Dodd-Frank Act 2010, secs. 723, 763). Importantly, where swaps are so non-standardized that no exchange will accept them, they do not have to be exchange traded, but they must still be cleared and are subject to capital and margin requirements (Dodd-Frank Act 2010, sec. 763).

In addition to mitigating risk through capital and margin requirements, clearing and exchange trading will improve the swaps market by bringing it into the light of day, so that transparency, rather than obfuscation, is the hallmark of how prices are set. Instead of prices being set by complex and misguided algorithms, they will be generated by actual negotiations and informed decision-making among parties who have access to information about similar transactions occurring throughout the swap market.

The “End-User” Exception. The Dodd-Frank Act contains a narrow end-user exception from clearing and exchange trading. End users are those businesses that actually buy commodities, and they often “rely on derivatives to hedge commodity price fluctuations and to insulate their businesses and consumers from risk” (Commodity Markets Oversight Coalition 2010). These businesses include, for example, airlines using swaps to hedge the purchase of fuel. During the legislative process leading to the Act, end users argued for an exception to the clearing and exchange trading requirements, because adhering to them would increase their costs and make tailoring swap contracts to their particular needs more difficult, an unnecessary cost because end users do not pose systemic risk (American Gas Association 2010; Coalition of Derivatives End Users 2009).

Dodd-Frank contains an exception from the clearing and exchange-trading requirements for parties that are not financial entities, are using swaps to hedge or mitigate commercial risk, and have notified the CFTC and/or SEC as to how they meet financial obligations of non-cleared

swaps. The exception does not cover swaps in which both parties are major swap participants, swap dealers, or other financial entities (Dodd-Frank Act 2010, secs. 723(a)(3), 763(a)).

Reinforcing the language of the Act itself, Senators Dodd and Lincoln (2010) have explicitly stated that regulators should not impose margin requirements on end users under the Act: “The legislation does not authorize the regulators to impose margin on end users.... If regulators raise the cost of end user transactions, they may create more risk.” The idea of the exception is to allow end users not to clear or exchange trade their swaps while limiting the exception so that banks and other financial entities cannot avoid doing so.

Reporting and Record Keeping Requirements. The Dodd-Frank Act imposes a real-time reporting requirement with respect to those swaps and security-based swaps that are subject to mandatory clearing and also with respect to those swaps and security-based swaps that are not subject to the mandatory clearing requirement but are cleared. In addition, swaps that are not accepted for clearing at a derivatives clearing organization must be reported to a registered swap data repository or, if no swap data repository will accept the report, to the regulators in a manner that does not disclose the business transactions and market positions of any person. The Act defines “real time public reporting” as public dissemination of data relating to a transaction, including price and volume, as soon as technologically practicable after the time at which the swap transaction has been executed (Dodd-Frank Act 2010, secs. 727, 763).

Specifically, Sections 727 and 763 authorize the CFTC and SEC to make swap transaction and pricing data available to the public in such form and at such times as are deemed appropriate to enhance price discovery. In light of this, CFTC Chairman Gensler (2010) recently stated that “[the CFTC] anticipate[s] rules in [data reporting] to require swap data repositories to perform their core function of collecting and maintaining swaps data and making it directly and

electronically available to regulators. . . . It will be important that swaps data be collected not only when the transaction occurs, but also for each lifecycle event and valuation over its duration.” Under these reporting requirements, prudential and market regulators will receive all relevant and necessary data in a timely manner, which, in turn, allow regulators to effectively exercise their enforcement authorities to properly monitor, supervise and regulate entities that could pose systemic risk to the U.S. financial system.

In addition to the reporting requirements, Sections 731 and 764 require that all registered swap dealers and major swap participants, including banks, maintain daily trading records of swaps and all related records and recorded communications, including electronic mail, instant messages, and recordings of telephone calls, for such period as may be required by the CFTC and SEC, by rule or regulation. Each registered swap dealer and major swap participant is required to maintain a complete audit trail for conducting comprehensive and accurate trade reconstructions (Dodd-Frank Act 2010, sec. 716).

The Push-Out and Volcker Rules. One of the more controversial provisions in the Dodd-Frank Act is the Lincoln or “Push-Out” Rule, which prohibits federal assistance to any bank operating a swap dealer. Federal assistance is defined broadly to include, *inter alia*, federal deposit insurance or access to the Federal Reserve’s discount window (Dodd-Frank Act 2010, sec. 716). Although the Push-Out Rule does not take effect for two years, its logical consequence will be to encourage banks to “push out” or divest their swap divisions, so that they can maintain access to federal banking resources.

Similarly, the Volcker Rule prohibits banks from engaging in proprietary trading (that is, trading that is on its own behalf and not a customer’s) or acquiring or retaining an interest in a hedge fund or private equity fund. While the Volcker Rule will not be implemented for at least

two years,³ the consequence is that these activities will also move from banks to other entities (Dodd-Frank Act 2010, sec. 619).

The transactions covered by the two rules will move from banks to more diverse areas of the market, including smaller institutions such as hedge funds or new smaller financial entities. As a result, the rules “will reduce the scale, complexity, and interconnectedness [of] banks [and] reduce the possibility that banks will be too big or too complex to resolve in an orderly manner should they fail” (U.S. Congress, Senate 2010, 9). In addition, they should reduce the impact of speculation on the markets. To the extent that smaller and more diverse entities engage in such speculation, they will have a smaller impact on prices, simply because they have less weight to throw around.

Both rules will also address the “moral hazard” problem associated with banks creating risky financial products and selling them to investors, while holding on to the other side of the bets to make profit at customers’ expense—as allegedly occurred with John Paulson and Goldman Sachs (Field 2010). Not only will banks not be able to “bet” against their customers, but they will not be able to bet on whether a homeowner will default on a mortgage not held by it. That is, banks will not be able to buy or sell insurance on assets they do not own.

State Gaming and Bucket-Shop Laws. A change that may expand state regulatory efforts is the elimination of the preemption of state gaming and bucket-shop laws for non-security-based swaps (sec. 749). This seems to leave room for state regulators to act under these laws for the first time. However, the preemption is retained for security-based swaps (Dodd-Frank Act 2010, sec. 767). Some observers suggest that this arrangement provides uncertainty about whether state gaming laws will apply (Gustini et al. 2010, 20).

Preemption of State Insurance Laws. In an immensely important change, the law explicitly preempts state insurance laws, stating that swaps “shall not be considered to be insurance” and “may not be regulated as an insurance contract under the law of any State” (Dodd-Frank Act 2010, secs. 722(b), 767). As noted above, swap dealers avoided calling swaps insurance to avoid state regulation. The current provision emerged doubtless because Eric Dinallo, in his then-capacity as New York Insurance Superintendent, seriously considered regulating CDS as insurance, and because the National Council of Insurance Legislators were working on a model code to regulate CDS as insurance (National Conference of Insurance Legislators 2009).

Viability. The law narrows but does not eliminate the CFMA provision that prohibited swaps contracts from being voided based only on their violation of the CEA. The new version reads that swaps and hybrid instruments between eligible contract participants are not “void, voidable, or unenforceable, and no party ... shall be entitled to rescind, or recover any payment ... under this section or any other provision of Federal or State law, based solely on the failure of the agreement, contract, or transaction (i) to meet the definition of a swap... or (ii) to be cleared...” (Dodd-Frank Act 2010, sec. 739). Thus, a contract could be voidable for other violations within the act—although clearing is certainly a central requirement, from which many others flow, including, for example, margin and capital requirements.

Resolution Authority. The financial regulation reform bill creates a resolution authority, known as the “Orderly Liquidation Authority,” which is designed to allow the complicated questions of the orderly unwinding of a “too-big-to-fail” institution to be handled administratively rather than in a bankruptcy proceeding (Dodd-Frank Act 2010, secs. 201-7). However, as Robert Johnson has recently made clear, the unwinding of the obligations of OTC

counterparties may, in the absence of OTC derivative reform, be far too complex, whether it is done by banking regulators or by a court. Johnson has concluded:

[W]hen a [too big to fail institution] is in trouble—and there are substantial holdings of complex and opaque derivatives on the balance sheets of all [such] firms—resolution authorities have difficulty unraveling the spider web of exposures and valuing them properly.... Unfortunately, it is easy to understand why resolution authorities could be induced to forebear rather than resolve [a too-big-to-fail institution] when they have no clarity about its structure and patterns of exposures. In such a circumstance, it may be easier to incur the risk that the insolvent [firm's] balance sheet should continue to deteriorate. (Johnson 2010, 123)

Conclusion

By officially removing the multi-trillion dollar swaps market from the traditional norms of market regulation in 2000, a highly speculative derivative bubble was created that was opaque to federal regulators and market observers alike. Thus, there were no capital adequacy protections, and the lack of oversight allowed trillions of dollars of financial commitments to be made with no assurance that those commitments could be fulfilled beyond the highly illusory AAA ratings of the counterparties in question.

Had the norms of market regulation been applicable, these swaps transactions would have been adequately capitalized by traditional clearing norms; and the dangers building up in these markets would otherwise have been observable by the transparency and price discipline that accompanies exchange trading.

The Dodd-Frank Act is intended place OTC derivatives under a regulatory framework not unlike those which have governed other financial practices, including securities and commodities trading, for decades. It will demand clearing and exchange trading, recordkeeping and reporting, and margin and capital requirements for standardized swaps. It provides federal and state mechanisms for enforcing these provisions. In so doing, the Act has the potential to keep another financial collapse like that of 2007 from occurring again.

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¹ “The regulatory black hole for credit-default swaps is one of the most significant issues we are confronting on the current credit crisis,” Cox said, ‘it requires immediate legislative action’ (O’Harrow and Dennis 2008).

² In his testimony, New York State Insurance Department Superintendent Eric Dinallo stated, “We engaged in the ultimate moral hazard... no one owned the downside of their underwriting decisions, because the banks passed it to the Wall Street, that securitized it; then investors bought it in the form of CDOs; and then they took out CDSs. And nowhere in that chain did anyone say, you must own that risk” (U.S. Congress, Senate 2008).

³ The Financial Stability Oversight Council will first conduct a six-month study, after which regulators will have nine months to write regulations; the provisions will take effect the earlier of 12 months after the agencies issue regulations or two year after enactment of Dodd-Frank, but banks will have a two-year transition period that can be extended by up to three years.